Secretary's Advisory Committee on Animal Health
(SACAH)
Thursday, January 21, 2011
9:00 AM-5:00 PM
Washington, DC

Opening Remarks:

Michael Doerrer: Thank you. Well thank you everybody for coming back for Day 2. We have a packed agenda again today. And Neil Hammerschmidt emailed me and said that he is going to be in the building if anyone wants to talk more about traceability. I told him that I thought the committee had its fill yesterday. But if anyone wants to talk more about that, let me know.

We're going to start out talking about aquaculture and the national aquatic animal health plan. And then we move into a series of other topics that various committee members requested to hear about: one health, our veterinary services 2015 strategic planning initiative, comprehensive surveillance and emergency response and preparedness. So it should be a full day.

And we have time built in to each agenda item for deliberation and discussion on questions and answers. So hopefully it'll go smoothly.

Don and Judith, do you have any words to start us off this morning?

Don Hoenig: Yes, just briefly. I think, you know, as you've seen the agenda is pretty packed. As Michael said, they're all topics that the committee suggested and as we know we need to probably come to some resolution on the traceability issue at some point in the near future.

But as time goes on there's more opportunity for this committee to discuss other topics. Have a - continue to bring forth whatever issues are of importance to members of the committee so don't feel inhibited by doing that.

I was on the previous committee in 2006 and 2007 and if you get a chance and can look at their report just see that they were - they had quite a few recommendations. How many of them got acted upon or implemented, I'm not sure. I haven't checked on that in a couple of years.

But previous committees were not shy about putting forth recommendations so I don't think this committee should be either. It's an advisory committee and it's here to do that. Give input to the secretary on animal health so just keep that in the back of your mind at all times.

I hope everybody had a good night last night. I had something for dinner that I've never had in my life which was sweet bread, which I think I'd remember what they are but it was very good.

Michael Doerrer: All right, as we get started out remind everybody please use coasters. No spilling on the table, please. John will get in trouble. And also please if you have a cell phone or a blackberry, any sort of electronic device please turn it off and especially keep it away from the mic.

And as a reminder, these mics are very sensitive. Please be sure to have them turned on when you want to talk and you don't have to talk into them. You can stay far away and we can hear you just fine. And again, they're not for our benefit in the room, they're for the benefit of a recording and the transcription.

So as we get started we'll do a recap of Day 1. Our facilitators, Jan and (Kim) will take us through that.

Kim Ogle: That's right. And I wanted to welcome members of the public that are joining us for the first time today. Looks like we had some new faces, so welcome. And so I'll just do a little housekeeping for those that are new today.

If you would like to use the restroom, the men's rooms are to the left of hallway and the ladies room is to the right. And for lunch you can access the café at the basement level of this building or leave the building and go through security to come back.

And today the committee is on their own. They can certainly go to - excuse me. Oh you have the Lincoln dining room again? Okay. Well, you're welcome to go to the Lincoln dining room again. That's really nice. Two days in a row, that's quite an honor.

I'm going to turn the mic over to my colleague, Jan Grimes, and she's going to give you a recap of yesterday's meeting.

Recap of Day 1:

Jan Grimes: Talk. It's static electricity. But no snow so we have to be grateful for everything that we get.

Good morning. I just told Kim and RJ and Michael that they're doing such a great job, I'm almost ready to go back to Riverdale because I don't think I'm needed here. So I said, "Well let me do the recap at least so I feel useful."

So yesterday we spent a great deal of time talking about the traceability framework…the proposed framework that's going to be coming out in April. There were lots of nuances and Neil did a great job sort of going through the critical parts of it: performance elements, performance standards, you know, how this possibly would work in a very broad way.

But one of the things that we know we want to get from you folks in the long run is time for you to really reflect and say what information do you still need over the next couple of weeks to make some really useful comments about the feasibility, the workability of the framework at this point. And then what are the biggest obstacles that you see to implementing components of it.

And I think that's the work that's really left to you guys to roll up your sleeves in the most immediate future to help advise USDA about how we can make this thing successful.

Some of the things that we heard yesterday in terms of show stoppers there was some conversation about the tier system that's been proposed in terms of low performing states, for example. Or lower graded states, if you will, how will they end up - will it be fair to the producers that are actually doing the right things in their states. Or will it penalize them unfairly?

And is there a way to sort of mitigate some of that - some of those issues for producers in states that that - you know, we talked about that… reconciling probably some of those issues.

Other things that we heard about is that no matter what system we put in place we want to make sure that commerce is not negatively impacted and also that we don't want to overwhelm the system that's going to be in place, phased in over time too soon. So that we need to be cautious about the way we approach it.

And we have some thresholds that we're talking about right now, but again input that you might have on those thresholds I think would be useful to say are they reasonable, what happens if we think we've met the threshold but we still don't feel like in our guts we're ready to move on to Phase 2 or Phase 3. How are we going to manage that?

The other thing that we heard was that paper systems are a fact of life out here in parts of the West and East. Well, just everywhere. And that they work well. There's a reason people are still doing some things on paper and how are we - we know however that the traceability system is going to have to be automated. And so how, again, are we going to reconcile the potential that we have. Two paradigms here that we can work under and how are we going to adjust for that over time.

We also had a conversation with Dr. Lautner about lab preparedness and she gave us a whole host of information about how things there have improved over time. And also, Dr. Martin, Dr. Barb Martin, talked about the (NAHLN).

Again, the evolution of that - they've made great strides over the last even five years with going from focus on just search capacity and increasing that to now integrating testing results with a variety of other links to other diagnostic labs and integrating messaging, etc. So they've made a great deal of stride - great deal of progress in that area.

Also, then, with the public we had only one speaker, one brave speaker. I don't know if you guys were a scary bunch or exactly what was going on. But I just wanted to recount some of the things that were highlighted there.

In terms of traceability system, confidentiality and privacy concerns are still weighing heavily on the public's mind. How do you mitigate liability issues for people? What's the record keeping burden going to be on individuals and how can we reduce that to the point that it's at least manageable.

And then in terms of the couple of ideas we're throwing out there that suggested that we might want to chew on, what about like using a cooperative

model for record keeping and trace back. So that was kind of an interesting thought that I hadn't heard of and - before that we may want to consider.

Also, remember the small and socially disadvantaged farmers. And that was a concern that was raised by the public. So that's all I had and hopefully we hit the highlights. And if not I'm - I know it's been recorded so we'll get it all down here when the transcripts are ready. Thank you.

Kim Ogle: Great job, Jan, thank you. Now we're going to hear from Dr. Jill Rolland and she's going to talk to us about the aquatic animal health National Aquatic Animal Health Plan. Jill?

Aquaculture: National Aquatic Animal Health Plan & National Aquatic Diagnostic Laboratory Network (with Q&A)

Dr. Jill Rolland: Thank you. All right, good morning everyone. To start out this morning I'm going to talk a little bit about what aquaculture is. This is a very diverse group and some of you might not be as familiar with aquaculture and you might want to know why APHIS is even involved in aquaculture.

Well aquaculture is the growing farming of aquatic animals and plants. And it's been in existence for thousands of years and probably only recently has become a very growing segment of the farming industry. And like all other animal farming situations the animal health becomes a concern when you're growing large numbers of animals in confinement.

So the first slide I have here is just a picture of an offshore aquaculture facility. These are designed to be able to grow fish in extreme weather conditions out in the sea. And it's not a common practice in the U.S. yet, but it is certainly something that is of interest in the aquaculture community.

Here we have a salmon farm from Don Hoenig's home state of Maine. So here you see pins in which salmon are raised and when you go to the grocery store a lot of the salmon you see in the supermarket today is farm raised, whether it's from the U.S. or other parts of the world.

And here you see some marine species that are being looked into as potential new species to be grown in aquaculture facilities. So as aquaculture has grown as an industry and become more diverse, again, animal health issues have become issues in the ability for these farms to expand and to manage health issues.

In terms of what we grow here in the United States, catfish is the number one industry. Some of you might be familiar with the Mississippi Delta and the catfish industry that's there. That's the largest portion of the industry in the U.S. But you might be less familiar with other species there raised such as aquarium fish, which you might buy to put in your home aquarium.

Bait fish, which are used for - which you might go buy at a bait store and then you go fishing with your kids or your grandkids. And we also raise a variety of shell fish both for human consumption and we raise some shell fish that we export genetics to other parts of the world. So there is a huge component of animal husbandry in aquaculture so all of the things you think about in terms of growing animals and livestocks, those types of things occur with aquatic animals as well.

I'm not going to go into a lot of detail about the plant portion and some of the other species such as crocodiles and alligators and turtles and those things. Our focus is going to be on the fish and shellfish.

So previously APHIS has provided services and programs to traditional animal livestock growers and our definition of livestock at one time was pretty much limited to terrestrial. And in some cases we also listed poultry.

That changed in 2002 when the definition of animal in the animal health - or livestock and animal in the Animal Health Protection Act was changed to essentially include all farm raised animals. So if its farm raised APHIS is able to provide the same types of services to those industries as the traditional industries we worked with.

And add to that what's called the joint subcommittee on aquaculture which is a group that meets under the National Science and Technology counsel which answers to the executive office of the President. This is a Federal coordinating body that looks at coordinating Federal activities within aquaculture.

APHIS is a member of that group as are several other USDA agencies and any other Federal agency involved in aquaculture which includes commerce, Army Core of Engineers, interior -- many, many agencies have a role in aquaculture. And their goal is to coordinate Federal activities.

And the aquaculture industry approached this group in the early 2001 and said we have a need to address aquatic animal health. And there are various Federal, State and tribal authorities that are dealing with aquatic animal health. And we want you to work together and coordinate and come up with a strategic plan.

So as part of the focus of this JSA there are several working groups and a working group was formed called the National Aquatic Animal Health plan taskforce. And Dr. Clifford was the chair of that group in the beginning along with leaders from NOAA and the National Marine Fishery Service and the Department of Interior Fish and Wildlife service.

So these are the three agencies with primary authority for aquatic animal health in the United States. And we were tasked with putting together the strategic plan for aquatic animal health, recognizing that there's a patchwork of authorities in the Federal government; and that also states had a variety of different aquatic animal health requirements and that there was a need for a strategic plan and for folks to be working together to come up with a consistent approach to dealing with aquatic animal health.

So the first thing you do when you form a group like that is come up with what your mission is and so I know you can read through these but I think they're important so I'm just going to go through them quickly.

One of the main issues with facilitating the legal movement of aquatic animals and their products that is because this patchwork of state authorities and state regulations so depending on where you wanted to move your aquatic animals the requirements for aquatic animal health are highly variable...Ranging from nothing, to every passage known to affect any aquatic animal.

Also there's an increasing move in seeing international trade in aquatic animals, whether it's for genetic purposes, whether it's for food purposes. And we need to have a level playing field out there so that the industry knows what to expect. What are those diseases we're concerned about? What are the certification requirements? So that was a number one driver in developing this aquatic animal health plan.

Also of course is to protect the health and improve the quality and productivity of farmed and wild aquatic animals. Although this plan is very focused on farm raised animals we are also concerned about the interaction with wild aquatic species and we have to be concerned about those as well. And one of our partners is, you know, Fish and Wildlife Service and NOAA

fisheries and they have responsibility for the health of those wild animals as well.

Another primary driver was the availability of diagnostic inspection and certification services. A lot of veterinarians previously have not been involved in aquatic animal health and there were issues in terms of being able to get services by folks qualified to be doing the sampling, looking at those animals, being able to determine if they were healthy or not and what labs are going to do the diagnostics.

Traditionally the veterinary diagnostic laboratories have not provided those services. That's starting to change. But it presented a real gap for those people who needed help when their animals were sick or if they needed certification for their animals to move them.

And then lastly of course but certainly not least, we want to minimize the impacts of disease when they do show up whether they're in farmed animals or in wild aquatic animals. So an important thing to realize when we're talking about this plan is that it is exactly that -- a plan. It is not a regulation; it is a strategic plan with general principles and guidelines.

The project started in 2002 and culminated with the publishing of the notice of availability in the Federal register in 2008. We received approximately 27 comments and we will be incorporating those comments into the plan. We see it as a living document. It will need to evolve as the industry evolves and as our understanding of some of these diseases evolves.

And essentially the state we're at now is implementation and part of that is dependant on funding, but also it's dependent on getting some strategic direction in where we want to go next. And that's why I'm here talking to you today.

So let's talk a little bit about the organization of this plan so you understand what's in there. Some of the key chapters talk about the aquatic animal diseases of concern. We had some guidance from the OIE which I'm hoping you've heard of -- the World Organization for Animal Health.

They also have a list of aquatic animal pathogens of concern, but we received a lot of stakeholder input while we were developing this plan. And there are some disease that aren't listed by the OIE that we're concerned about and there's some that are listed by the OIE that maybe aren't of such concern in the U.S. because maybe they're endemic or they don't cause that much problems or they're not as important for trade.

Also surveillance, research and development needs, education and training and then Chapter 10 talks about implementation…about how we're going to go about this.

As a strategic plan and addressing all these pathogens that are of importance to fish and shellfish and crustaceans it's a pretty overwhelming list. And you need to have a starting point. Where are you going to start? You can't just develop plans for what you're going to do with all of these pathogens that folks are interested in.

So here is the list of only the fish diseases, not the crustaceans or the mollusks. So just looking at the fish diseases those that are in yellow are pathogens for which we already have programs in USDA and the green ones are ones that we have programs for in the U.S., whether they're import guidelines from one of our other Federal partners or some kind of program.

So you can see that that's a pretty big list. And so the question becomes when you talk about program diseases what exactly are you talking about. And that

can range from everything from a certification program and where you have these diseases that are exotic to the U.S. You might be talking about control and in some cases maybe eradication programs if they showed up in the U.S.

But all - that's a very broad spectrum of what you might want to do with the program disease. So going back to the recommendations and the Chapter 10, the implantation plan, the three main things that we heard that we needed to focus on are number one, creation of an advisory committee that can help guide us in how we're going to implement this plan. We're going to talk a little bit more about that.

The second one is the development of an aquatic health laboratory network. I understand you heard about NAHLN yesterday and there are reasons why an aquatic animal health laboratory network doesn't fit quite as well into the NAHLN and therefore it was decided that we should create a separate lab network that addresses aquatic animal health. I'm not going to go into the details of why it's separate from the NAHLN but suffice to say that that was the best way to go for aquaculture.

The third one is development of a secure application suite which was just a fancy word for a database and being able to handle aquatic animal health information. So starting with that third priority a broader aquatic animal health information system is in the works which aquaculture diseases will fit into.

And it's important that this system for handling data on aquatic animal health that various stakeholders can access at least certain parts of it, whether they're states or tribes or whether they're actual growers. And so that creates a lot of issues in terms of who has access to what data.

But some of the important reasons why you need this is that when we report our disease status to other countries when it comes to aquatic animal health

sometimes all we can say is we know we have this disease west of the Rockies but not east of the Rockies. We know that there's a more fine delineation of where that pathogen is actually found but because we don't have a really good way of handling that data we can't say it with more precision.

And so what if you're west of the Rockies but you happen to be in a pocket where you don't have that disease and you want to ship your animals to another state or another country. Well you're going to have to test for it even though you know you don't have it. So, that's why we need to have that capability: to know where we have pathogens and where we don't.

The second priority is the national aquatic animal health laboratory network. The reason why we need this network is not any different than why we need laboratory systems in general. We need a system to be able to meet international requirements for trade purposes. We want consistency in those interstate movement requirements for pathogens and we want a standardized system for retaining testing for comparable results and confidence in results.

Aquatic animal health diagnostic testing just simply is not as far along as it is in terrestrial animals. You have labs that are using similar but different diagnostic tests, different reagents. Things that ultimately result in some folks having confidence in some lab's results and maybe not other lab's results and that doesn't create a very predictable situation for folks who are growing animals and want to be able to move them.

So we really need to have comparable results and confidence in those results. And so there's a subgroup of the U.S. Animal Health Association that started looking at what a lab network would look at and looked at some of those existing networks such as the NAHLN on which we could model such a network.

So some of the things that they looked at were the existing standards for diagnostic tests there are multiple sources but two of the big ones are the OIE and also the bluebook which is put together by the American Fishery Society fish health section together with the U.S. Fish and Wildlife Service. We also need to make sure that there's a training component quality assurance quality control and then you have that data storage and accessibility which goes back to that database.

So there is a draft plan that was put together in September 2009 and a USHA resolution that asked USDA together with NOAA and Fish and Wildlife Service to move forward in implementing this draft plan, at least doing a pilot project. So as a pilot project there was a technical group that met in June that was looking at standardizing the testing for a disease called viral hemorrhagic septicemia. You might have heard of it some of you in the Great Lakes.

It was affecting many wild fish and created very large and dramatic die-off. And like many other pathogens there were different folks using different tests with different results. And because there are new movement requirements to move fish out of the Great Lakes to show that they're free of this pathogen we need to have a standardized test.

But that group has come up with a test and now we have to figure out how we're going to implement it considering that there are other tests that other folks are using, some that are referred to in their regulations, whether they're state regulations or some of the international testing requirements. And so we need to figure out how we're going to take those next steps.

And that brings us back to this need for a subcommittee. Not only do we need assistance in figuring out the next steps in implementing this laboratory network, you saw that list of diseases for fish alone. How do we prioritize

which of those pathogens we should be developing programs for and what do those programs look like.

The testing protocol for VHS is a start but there are other pathogens that we're going to need to be developing testing protocols for, but we also need to see how we're going to implement this nationwide, this lab network. And we also need some advice on what we're going to do when we find some of those program diseases, particularly the exotic ones. What's the appropriate response?

In the 2008 Farm Bill, Senator Snow from Maine proposed such a committee and proposed a make-up to ensure that there were - there was proper representation from tribes and states and stakeholders and Federal agencies. And so I'm here asking for your advice in how to move forward in such - with such a subcommittee.

It's at your discretion about whether or not you think such a subcommittee should be formed to provide advice to APHIS and NOAA and Fish and Wildlife Service, but again this was one of the recommendations that came out of developing that National Aquatic Animal Health plan and advice that came from several of our stakeholder groups.

So (Michael) do I hand it over to you?

Michael Doerrer: Could you maybe - maybe it would be helpful for the committee if you said a little bit more about what prioritizing the implementation actually meant. So what is it exactly you'd be looking for a subcommittee or some sort of working group to do?

Dr. Jill Rolland: I think the first priority is the lab network. In terms of looking at how we take the protocol for VHS that's been developed and continue to prioritize

developing other protocols for pathogens. And how we go about implementing that lab network, recognizing there are other groups that we need to be consulting with such as the American Fishery Society fish health section in terms of how we make that happen.

I think that's our number one priority and I think there are people here who probably have opinions on that topic. I think the second 1 is looking ahead as we think about programs for aquaculture we've always been in a response situation. We responded to emerging pathogens to foreign animal diseases.

And so with that whole list of pathogens that we have that we would like that group to start providing advice on what pathogens we should focus on and what those programs might look like, recognizing that there's a funding component. We would have to have funding to be able to implement programs, but also that those programs might vary highly from you just need to come up with a standardized protocol for testing that everyone's using or you need to come up with some kind of a certification program to enable us to move interstate.

Those are the types of items we're looking for advice on.

Michael Doerrer: Questions from the committee, comments, discussions, deliberation?

Dr. Jill Roland: And that was one that we discussed with Fish and Wildlife Service and which we've kind of gone back and forth on whether or not there would be a national program for that or whether it would be dealt with at the state level. And the last conversations on that were such that (whirling) disease is in so many states now that the feeling was that it should be less at the state level to address.

I mentioned it's a living document. If there's - if that changes, if that perception changes that there is something more needed from a national scope then that's the type of advice we need to hear.

Committee: And this, with your disease list, that was - you just showed the fish one, too. You didn't show the mollusk one which is just as long or longer, isn't it?

Dr. Jill Rolland: Yes.

Committee: Hi Jill.

Dr. Jill Rolland: Hi (unintelligible).

Committee: I had a couple of kind of larger issues. I know that in 2008 there was funding put in the Farm Bill to fund the National Aquatic Health Plan...

Dr. Jill Rolland: No.

Committee: There wasn't?

Dr. Jill Rolland: No. There was suggestion that funding be provided to APHIS for that and that funding was not made available.

Committee: Okay, so that didn't fly.

Dr. Jill Rolland: No.

Committee: And then you also mentioned the committee that was suggested by Senator Snowe...

Dr. Jill Rolland: Correct.

Committee: And I guess what I'm wondering is if you could clarify that would have created a pocket - could have created a pocket type committee similar to this committee, but why did the Department of Agriculture decide not - or somebody I guess decided not to go forward with a committee on aquaculture similar to the Secretary's committee on animal health? Would anyone care to field that?

Committee: I'm sure that John would.

Dr. John Clifford: You know, it's - as some of you may or may not know when you set up these types of committees they are limited in the amount of funding the department can spend on them; [this] is limited by Congress. So we felt it was best to - originally this committee was a committee for foreign animal and poultry disease. So we requested the department change this to animal health committee.

And under the committee itself, we can establish subcommittees. And one of our recommendations to the committee is establish a subcommittee for aquaculture to try to move the aquatic health plan forward.

Committee: Thanks. So as a follow-up to that, I mean, essentially what you're doing is you're asking us to, as John just said, to appoint a subcommittee which this committee can do. The question I have is there are - there's one person here who has a lot of aquatic animal health experience and I -- that's (Andy), it's not me -- and I fake it.

Actually that's not quite true, but I have a fair amount of experience going back a ways but if you were to have a subcommittee on an aquatic animal health at this committee you would have to draw on outside - I would think you would have to draw on many outside individuals and is that possible.

Michael Doerrer: Yes and let me clarify it. USDA can appoint a subcommittee. The process for establishing a subcommittee of the committee is very similar to the process for establishing a committee itself. So it's not as simple as saying, well I like this person, this person should be on the committee.

That being said, we've become quite expert in these processes, so that's doable.

Committee: Okay.

Committee: Michael is it possible to - oh.

R.J. Cabrera: I was just going to add to that. A subcommittee - aquaculture subcommittee can be established. We'll have one, two or more of the parent committee to be on that subcommittee.

We can expand that subcommittee with other experts within the field, but that subcommittee would deliberate whenever it met and would forward or advance its findings and recommendations to you, the parent committee. After which you would deliberate and decide whether or not to advance or not, whatever it was for. So you essentially get the same thing.

Michael Doerrer: I might just add, R.J correct me if I'm wrong, the subcommittee - when the subcommittee meets it does not have to be done based on public notice.

R.J. Cabrera: That is correct.

Michael Doerrer: However, as R.J. indicated, when they deliberate and make recommendations those recommendations coming back here to this full committee have to be done in a public setting.

Michael Doerrer: In our next administrative meeting we can discuss more of the details. Joe?

Dr. Joseph Annelli: The committee that was described in the National Aquatic health pen differs a little bit from the one that's in Senator Snowe's bill. And Senator Snowe's bill was a result of political compromise as much as it was, you know, APHIS' desires for - or Federal partners that their image of who should be on that committee.

And then it was modified partly due to political expediency. And is APHIS still comfortable with the composition of that committee that's in Senator Snowe's bill that 20 people happen to have it?

Dr. Jill Rolland: Yes, I think we're comfortable with that. That being said, I think there were some key components as to making sure that certain groups were represented, including, you know, wildlife agencies, state wildlife agencies, state agriculture agencies, tribals, appropriate tribal agencies.

So I think our main issue is that we just want to make sure that there's appropriate representation and that the committee is of such a size that it can function efficiently.

Committee: There was - you know, back when this first came out, especially when Senator Snowe's bill was in play, there was an awful lot of interest from industry and from other organizations and state wildlife, the things about who was going to be on that committee. You know, there were concerns about the wildlife people worried about agriculture people. And the agriculture people worried about the wildlife people and it was quite a compromise that was worked out.

It has - the final version in Senator Snowe's bill has equal numbers of state and tribal people with commercial aquaculture people. And it has not less than

three Federal agencies, which are probably the three Federal partners and not less than six state rep - or tribal representatives, not less than six commercial aquaculture and not less than two aquatic animal health experts.

That was what was in her bill and, you know, I've worked both with the aquaculture industries and I also am the incoming president with the AFS fish health section which represents all of the - a lot of the state DNRs and things like that. So the perspective from both groups, they're very interested in this, and I think that they were both fairly comfortable with this structure.

So if we get to a point where we're talking about deviating much from the structure that's in that bill, you know, we probably need to go back and talk to those stakeholder groups again and try to get everybody comfortable again.

Dr. Jill Rolland: No, I agree. And I think that that structure that was proposed was a good one and included all aquatic stakeholders.

Committee: Andrew and Jill, and I don't know any of this history so this is filling in on the historical background on this. What I didn't catch in the list of stakeholders you were just mentioning were the stakeholders sort of on the side of the concern about wild raising of fish from the more consumer side and, you know, the NGO side of that.

What it sounded like from what you just said to me was from the wildlife perspective it was almost all the government agency wildlife perspective. Was there any involvement on the more NGO and wild fish population side?

Dr. Jill Rolland: I think wild fish populations do end up getting included. The NGO ones they might fit in to some of those categories, but they weren't specifically identified.

Committee: I assume for 20 people on the committee and only 17 of the spots are mandated and tribe is minimum, so.

Dr. Jill Rolland: I'm trying to - working - that's a large committee.

Committee: Yes, it is.

Committee: Jill, maybe you could - I didn't hear you do this sort of earlier, I might have missed it. But maybe you could go through just the overall responsibilities that APHIS as commercial agriculture - commercial aquaculture, Fish and Wildlife Service has something else and NOAA has something else, right?

Dr. Jill Rolland: Sure, right.

Committee: Maybe that would help people understand.

Dr. Jill Rolland: Absolutely, why there's the three Federal agencies?

Committee: Yes.

Dr. Jill Rolland: So APHIS has primary responsibility for commercial farm raised animals. However, there is some overlap where pathogens or diseases in wild animals that might affect farm raised ones where we have some authorities there as well.

Fish and Wildlife service has responsibility for wild fresh water animals and the animals that they raise in their own Federal hatcheries and also they have shared authority for wild androgynous fish. Androgynous fish are ones that spend half of their life in fresh water - or not half, I should say part of their life cycle in fresh water and part in salt water.

NOAA fisheries has responsibility for the wild marine fisheries and again that shared responsibility for those fish that spend part of their life cycle in salt water and part of it in fresh water, so. And actually our Federal at least fish and wildlife services are represented here today, so I appreciate you coming today, (Joel).

So yes, that's where the delineation is. Now NOAA has some responsibility for aquatic animals that might be farm raised in the exclusive economic zone. So now I'm getting into the real details, which is 3 to 200 hundred miles off shore. That's where the authorities lie.

Committee: Thank you.

Dr. Jill Rolland: You're welcome.

Committee: So I understand three Federal agencies that have primary responsibilities. Where does FDA come in with the approval of aquatic - drugs for aquatic animals? And, you know, any concerns with that would they be considered an invitee to the deliberation or is...

Dr. Jill Rolland: Absolutely. One issue involved them and they are a standing member of the joint subcommittee on aquaculture, which I spoke about earlier. So yes, they are responsible for approving, let's see, we have responsibility for the vaccines and any kits, diagnostic kits, and they have authority for any other chemotherapeutants and drugs for aquaculture.

So there are many other Federal agencies that are involved and we meet quarterly, the JSA, to provide updates on where we are with certain issues. And we have key contacts in all those agencies who we bring in. You're welcome.

Yes.

It is very, very diverse and probably (Andy) is a better person to talk about it. But I'll at least give it a shot.

For example, the shellfish growers, you have some very large companies on the West Coast who have highly managed stocks with, you know, phase cot, the genetics, the history. And they produce large numbers of shellfish that you see in your restaurants, the kioto oysters in your restaurants, the kioto oysters and oysters on the half shelf, a lot of those come from a handful of big companies on the West Coast.

Then you have bait fish growers which can be everything from a mom and pop with five ponds in their backyard to large scale operations like ones that (Andy) deals with in Arkansas. You have the tropical industry aquarium fish in Florida which is - tends to be bigger companies, but you might have mom and pops who grow for one of those bigger companies.

The salmon farming industry is primarily in Washington State and Maine and those are pretty much owned by, I don't know, two companies: one in Maine and one in Washington State. So you've got some industries where [they're] big companies and they control all of the industry and then you've got other areas where you've got everything from very, very small growers to medium and large sized growers.

And, I mean, other species. You've got paddle fish for caviar. So the sport fish industry for those who enjoy fishing, a lot of times when you go fishing those lakes have been stocked with fish that have been raised in hatcheries. And sometimes raised by private folks and natural resource agencies purchase those fish from private farmers so that you can enjoy catching a nice big fish.

Committee: It - oh, now it's on. It's hard to tell when the green light is on. Their biggest constraint is the - getting permits. And because permits are hard to get the ones that are in the business are quite profitable because limited competition.

The catfish industry is shrinking rapidly due to foreign competition from China. The bait fish industry is about - has been even for years or maybe it certainly isn't growing. Tropical fish I don't believe is growing. Trout, there's a lot more trout being imported into the U.S., too. Part of Chile had an outbreak of salmon disease that - and a lot of those farms have switched over to trout now.

And that's good news for our salmon industry and bad news for our trout industry, so. Niche markets are doing good. You know, finding niches for white tablecloth, things like that, a lot of the bigger industries are stable or have declined slightly.

Dr. Jill Rolland: And the value of the industry past $1 billion if you - a few years ago which doesn't sound huge. But if you think about - one of the biggest issues is the trade deficit.

The trade deficit in the U.S. for aquatic animals and their products is like in the top 10. You know, you've got oil and gas and all these other things. And seafood is in the top 10. And it's because there are a lot of different constraints to growing the industry, which I'm not going to go into here.

But certainly one of those issues is trade too for the shellfish industry being able to sell mollusk, juvenile mollusk, mollusk seed, to the European Union, among other places, is very profitable and has allowed that industry to grow. But the EU audited us a few years ago and said what's your aquatic animal health infrastructure and they were not as impressed as they might have been.

And that's caused issues from a trade perspective because we don't have that infrastructure in place yet for aquatic animal health like we have for cattle and for hogs and all sorts of other industry, poultry. So there's a lot of infrastructure that could assist those industries in growing.

Now granted, there are a lot of other constraints to the industry growing other than this, but I think the reason industry approached APHIS about wanting aquatic animal health is because they saw a need for it in order for the industry to grow.

Committee: There's a need both for the protection against exotic diseases and disease movements but also a standardization of state fish health regulations. Those are a huge constraint on the industry of state fish health regulations. There's been some tendency to prosecute minor errors in - as to obtaining permits and things from states to prosecute those under the Lacey Act and now those just really increase the amount of concern in the industry.

So anything that they can be involved in that leads - the potential of standardizing state regulations is hugely important to them.

Committee: I'd just like to add, and I know this is from my perspective, but (Don) maybe can speak to this and (Andy) as well. But from my perspective what we have gotten involved with has been successful. The infectious salmon anemia program in Maine has been very successful.

It's been a control effort in that area. It's not an eradication to go in and eradicate everything. We dealt with spring viremia of carp issue several years ago and we put out a Federal order. It wasn't very popular for the Great Lakes states [to try] to reduce the spread of VHS in the Great Lakes.

Committee: And just to follow-up on that, yes, the ISA infectious and the anemia program was the first aquatic program that the veterinary services got involved in and they got involved because we requested their help.

To give you an example of how that disease evolved, when it first hit in New Brunswick in 1996 or ’97 we didn’t even know what it was. We called it hemorrhagic kidney syndrome, I think, HKS. And so for a year or two we didn’t characterize - couldn’t characterize the agent. I think it was the lab name that eventually identified it as infection salmon anemia virus which had been in Norway for many years.

So - and as that disease started to affect New Brunswick and Maine salmon farms, the industry realized that this kind of cried out for some - a larger help. And a group of veterinarians in Maine and New Brunswick put together a plan, actually developed a case definition for the disease and eventually went through the U.S. Animal Health Association with a resolution same time it was moving through the political systems through our senators who are pretty well known.

And a program was funded in 2002 that actually paid some indemnity at the time for fish that had to be destroyed because of ISA. And it was a very successful program so I won’t belabor it. But it’s - the Federal involvement has dropped off now. I think there’s still a Federal animal health technician perhaps involved up there.

But a lot of it has fallen back on the industry now to do surveillance and monitoring and monitor by security and so forth. But it’s improved standards within that industry, too, that have reduced the transmission of disease.

And as you might imagine trying to control disease in an aquatic environment that’s also has an international border running through the middle of it is quite

a challenge, but it worked. So far. So - and, you know, they got involved in the other two spring viremia of carp and VHS, which I know a lot less about.

Committee: Spring viremia was a - I think predates ISA, doesn't it? Wasn't the spring viremia...

Dr. Jill Rolland: No, it was within a year of ISA...

Committee: About the same year, okay. You know, that one was the first outbreak of - it was an earth and pond culture farm and it was the first outbreak of spring viremia in the United States and we discovered it, reported it to APHIS.

They acted very quickly to quarantine the farms. There were a few outbreaks on commercial operations over the next few years that we haven't seen it on a commercial farm now in very - in quite a few years. And so that seems to have been very successful.

It took a long time to figure out what to do with the infected environment and how to handle that. And I think that was a major impetus for the moving ahead and the national aquatic health plan for the industry because, you know, here's a bad disease. We don't want it to spread. How do we handle it? And there wasn't an existing plan for how all the agencies will work together and make it work. And part of what made the national aquatic animal health plan really important to industry and why they're interested in moving it along at this point, I think.

Committee: So when you move fish do you deed a health certificate? I'm going back to Howard's language because I can't remember ICVI.

Committee: It's a state level. The way it works is every state has their own regulations and usually they're based on testing. You must test this many fish for this disease.

So the farm - the fish are collected at the farm, they're submitted to the laboratory.

The laboratory issues an inspection report and the inspection report gets mailed by the farm to the state and the state decides whether or not to issue a permit. So the farm has to deal individually with all the states that they work with and all of their inspection requirements are different. And I turn out as many as 15 different kinds of inspection reports for an individual farm based on a semiannual inspection. It goes to all the different states. It's very complex.

Dr. Jill Rolland: Yes, and it's also complicated by its - different states have different agencies with authorities. Just like you have three Federal agencies, some states have the DNRs, some states have the Department of Ag, and some have both.

Maine has three agencies. They have inland fisheries, and marine fishers. So that can complicate matters. And particularly where you have maybe agents - state agencies who don't have folks who are experts in diseases they kind of open the book and they find the list and they say well you need to test for all of these and they'll just provide the entire list because they don't have anything else to go off of.

They don't know that perhaps salmon are not susceptible to spring viremia of carp so they want a spring viremia of carp test. And that creates a lot of issues in terms of testing cost to the industry and their ability to enter into commerce.

Committee: In our case, just to follow-up there, with the salmon industry the bird stock are kept in salt water. When they're spawned the eggs are collected and the milt is collected and the - when they're doing that in the fall generally the industry needs to get a permit from our freshwater agency to bring the eggs and milt into the hatcheries which are freshwater hatcheries.

A year and a half later when those molt the small fish that have been raised in tanks are going back to salt water, the industry needs to get a permit from the salt water agency by the Department of Marine Resources. I get involved whenever they want to use a vaccine because our Department of Agriculture approves all biologics in the state for animals.

Committee: So the state animal health authorities, you know, whether it's your state veterinarians are marginally involved...

Committee: It depends. Like, see, in some states aquaculture comes under the Department of Aquaculture. In our state it doesn't except for biologics. It generally comes under our resource agencies and since we have both salt and fresh water we have two agencies involved -- Department of Marine Resources and Department of Animal and Fisheries and Wildlife.

And so they're much more involved than I am. But in other states aquaculture I think in North Carolina aquaculture comes under agriculture. Wisconsin...

Dr. Jill Rolland: Wisconsin is an example of where it comes under the Ag Department.

Committee: Yes. Right.

Committee: (Unintelligible) in a recent issue of your state choice select is your (CA) involved in the quality control of...

Dr. Jill Rolland: No. That's primarily FDA and there's a movement in catfish to have the Food Safety Inspection Service involved. But what you're talking about is actually under Ag marketing services. That's more of a marketing program and that doesn't exist for any of the industries right now.

Committee: And is the U.S. behind a push to increase your markets?

Dr. Jill Rolland: I think the - was it the Aquaculture Act of 1980 and there was a follow-up one a few years later all basically saying that the U.S. will support the development of aquaculture, including its Federal agencies. So I think yes, we do support the development of aquaculture in this country.

Committee: Jill, you gave us a lot of information and I'm sorry, I thought you said this, but under USAHA is there a committee for aquaculture?

Dr. Jill Rolland: Absolutely.

Committee: And so have they in past resolutions endorsing the development of this plan?

Dr. Jill Rolland: They have. And Andy is actually the chair.

Andy Goodwin: I chair that committee. So yes, it has been endorsed by that committee and so has the lab network - the aquatic animal lab network that Jill mentioned also, so.

Committee: Okay. And so I guess what I'm hearing and I want you to tell me if this is correct, one of the first outcomes of a proposed subcommittee would be standardization of state regulations?

Dr. Jill Rolland: I think the first priority is to implement the laboratory network is to get some advice on how we would do that. And I think that implementing parts of the plan will assist in helping standardize regulations in state. The states are free to do whatever they want, but Don Fisher here sits on the Association of Fish and Wildlife Agencies which are the state natural resources agencies and he co-chairs one of those committees.

So we are trying to work with states through other avenues as well to encourage them to standardize those state regulations. But many states are still looking for a roadmap in terms of what are those diseases we care about and what kind of action should be taken. So there's a lot of expertise in a lot of different places. It's not our place to tell states how to run business in their states.

We would like to encourage them to create a standardized approach.

Andy Goodwin: A lot of the individual states, especially DNRs are very insular. They, you know, they work out their regulations by themselves. They don't care what anybody else does sometimes and because they want to do what's right for their state.

There's a tremendous advantage to forming this committee and bringing some of those people from departments of natural resources in to the same meetings with state agriculture agencies and industry people to try to build more of a community where everybody recognizes that standardization might be beneficial for everybody, both protecting the aquaculture and the wild animals, so.

Committee: And what you're saying, Andy is that 20 member is the larger industry is ready to accept that. So let me go back, with chronic wasting disease I think we had some similar issues with territorial who gets to decide what. And it sounds like the 20 member subcommittee that was proposed or 20 member committee, whatever we should be calling it, was endorsed by most groups?

Andy Goodwin: That was my impression is that, I mean, there was a lot of haggling here then a lot of visits to Senator Snowe's office by different constituencies. But I think the final version I think is I know it's supported by industry and the wildlife agencies, I believe, were comfortable with that final...

Dr. Jill Rolland: Yes, I think the person who was offered at that time is now in a different position. But the person who was approached at the time did speak with the states and it was endorsed.

Don Hoenig: The industry, just to follow-up on that, the industry also had a tremendous amount of input into the development of the national aquatic animal health plan which probably started in ’04, ’05, ’06. There were - ’02. There were working groups throughout the area - various places throughout the country that focused on the various segments of the industry.

So there was a mollusk state fish, wild fish and wildlife agencies. I don’t know, there were a bunch of them. I was at some of them. And it - so the industry had a lot of input into that and also in to the idea of this advisory group that was created by the national aquatic animal health plan.

And what has become apparent is that that group still hasn’t been formed and the, you know, APHIS was asking this committee whether we would endorse the creation of that group as a subcommittee. Yes.

Committee: So to follow on that, (Don), if we were -- and this is more for (Michael) and R.J.) probably, or John -- if we were to recommend that that 20 member subcommittee be formed, what are the budgetary constraints and do we have dollars to be able to actually support that sort of subcommittee?

Michael Doerrer: I guess I would recommend that the committee here go back and talk with your constituents about this issue as you would with the other issue that we’ve presented to you. And then on administrative calls, for example, the administrative call that we would hold next week we could get into the details of how we would go about forming a subcommittee and details related to budget.

So if it's the desire of the committee to explore that issue we can do that and provide all the administrative detail.

Committee: Michael, maybe you've answered this question with that response but, you know, we've got two people on this committee that know anything about fish. I mean, other than maybe some eating quality. And I always have a little problem with, you know, trying to decide something or rubber stamp something that I know very little about.

And it seems like to me that the subcommittee came back to this committee. You know, we've just been rubber stamping whatever. I assume Andy would be on there and maybe Don, you know, on that committee too. But why don't we have - why doesn't - if it's this important, and it sounds like it is, I mean it's a huge industry and there's a lot of different players, why isn't there a separate committee?

Why are we making it a subcommittee of this committee?

Michael Doerrer: Because full committees are limited. There's budgetary constraints to having these types of advisory committees by the department. Congress limits them.

Committee: But this is a broad umbrella committee for our (unintelligible) for animals.

Committee: So, okay I understand budget constraints. But if you're going to bring 20 people together what's the difference bringing them together as a subcommittee or as a full committee?

Dr. Clifford: Because the department is allowed - has X number - it's not the appropriation of dollars. They shut a cap that can be spent and I don't remember what that cap is for the department that can be spent on advisory committees.

So even if the department wanted to put more money toward it, they're not allowed to. Okay? So - and APHIS isn't the only one that has needs for advisory committees within the department. We - in fact our national poultry improvement plan is an advisory committee established in the code of regulations. So that's the reason.

It's not whether we can fund a meeting. Subcommittee doesn't come under...

It's a different sort of animal than a regular committee.

Committee: Yes, okay.

RJ Cabrera: In terms of deliberation, this committee would not and could not rubber stamp the findings and recommendations of the subcommittee. You would, just like any other subject, you know, with which you may not be familiar, would be brought up to speed on those issues and you would deliberate.

And as a committee the consensus would, you know, [be to advance] advice and recommendation forward so there would be no rubber stamping. [The Committee] couldn't do that because then [it] would be subject to FACA rules. And, we'll bring you more up to speed on that.

Michael Doerrer: And to, you know, to emphasize what I said yesterday, this is a committee of representatives, not of experts. We did not select you for your expertise on any issue. And that includes people who may know something about aquaculture. They were not selected for their expertise. The secretary did not choose you for that.

We chose you because of your capacity to representate your constituents. So as representatives we would expect you certainly not to rubber stamp anything

but to conduct meaningful outreach with your constituents and represent their views.

Committee: I promise not to use that word again.

Michael Doerrer: And you can strike slush fund from your vocabulary as well.

Committee: Maybe this is over-simplification but I was wondering USAHA has already got an aquatic subgroup, seems like you already have folks there. Is there a reason not to use that group and form a separate group?

Dr. Jill Rolland: USAHA only really represents some industry folks and the Ag Department you've got the Association of Fish and Wildlife agencies which is all the state DNR folks. You've got other groups such as - within the AVA, the American Veterinary Association, there's the Aquatic Veterinary Medical Committee, how do they play into this.

What about the American Fishery Society, fish health section, how do they play into this. They're not necessarily members of USAHA. So in a nutshell USAHA is not representative of all our stakeholders.

Committee: But this committee is.

Committee: (Jill) can you - I'm - I need to have a better understanding of why it's felt that you need a separate national aquatic animal health laboratory network and why you can't incorporate aquatic animal health laboratories into the NAHLN.

Dr. Jill Rolland: Okay, you want me - okay. So there are three main issues. Number one, the NAHLN laboratories primarily deal with molecular technology. Most of the ASAs that they're using are PCR based.

A lot of the aquatic animal health diagnostic tests are not PCR based at this time. There might be a confirmatory test that they include a lot of other things, cell culture, serology, those types of things. And when you look at the NAHLN requirements a lot of them are based on equipment that they are required to have which is again molecular based.

The second one issue is that the NAHLN laboratory system it only allows should I say public laboratories, state laboratories to be members. Within the aquaculture world we have far too many labs that are not state labs because traditionally they have not been involved.

There are some, don't get me wrong, but we cannot afford to exclude the only molluscan diagnostic lab that happens to be private. Your ISA lab in Maine is private and there are several other examples and that's an issue that the NAHLN is not willing to step away from. So those were two of the key issues.

The third one is also the funding structure through ARS. There's some funding available to NAHLN labs. If you're then going to bring in a whole new subset of laboratories under the NAHLN umbrella, they are not going to be able to participate in that funding structure…Because they're already at capacity.

There are some of those NAHLN labs who would like to be part of that network and they are certainly able to do that. But to the office that just made it too difficult to include aquaculture.

Committee: The third topic that you had up with this database thing and I remember back when that effort first started I had one phone call on a Saturday afternoon from a group that was working on that and they were asking me questions

about industry. And at the time I was the only industry aquaculture industry kind of input that they had. And I haven't really seen or heard of that project since then.

Is there an effort being made to seek out industry involvement and industry buy-in in the development of that database that - and there's going to be a lot of angst in the industry about that.

Dr. Jill Rolland: Well at this point it's a broader animal health system. And I have to admit I'm really not that familiar with what's going on with the database. But I think that the outreach that was done had primarily to do with what kind of elements that we would collect.

But before we started using it for any private farm data there are a lot more conversations that would have to happen but we're still a long ways away from actually having it implemented.

Committee: I'm not sure that even that kind of outreach occurred with the aquaculture industry.

Dr. Jill Rolland: I'm not sure the outreach with the other - I'm not sure how that whole project worked.

Committee: I think there would be something in the future that we could provide the information on. I'm not free to provide that at this time just because there are certain requirements under contract. But it won't be long.

Committee: You know that will be a concept that's quite foreign to a lot of aquaculture industry especially smaller farms. The more they are involved and see it coming the better it's going to go when it does.

Committee: I guess I just have to ask you Jill do you see any negatives to setting up this subcommittee other than they're going to need to set their priorities and work out - leave their territorial battles outside the room?

Dr. Jill Rolland: I mean, we've had so many comments about - from all stakeholders that we've had contact with about really needing this subcommittee that I'd say that the only disadvantage is going to be the logistics of getting folks to the table. So and that's not really a disadvantage. So I really see this as something we really need to do.

And it will give folks a voice, a seat at the table to talk about how we move forward with this. And I think that's critically important.

Committee: Just a comment on the last part. I accept the second reason, the public part, that… sounds very valid. I'm not sure if you examined further as an acting director of NAHLN member lab.

I think your first thing on the molecular testing may not - the structure will adapt to any kind of testing and I don't know that that is a hurdle. Your public/private may be but I think you ought to look at number one again, I don't think that's a valid reason.

Dr. Jill Rolland: Okay, we can do that. And we certainly had discussions with Barb Martin and others. And I agree with Dr. Clifford that, you know, it would be nice to have all of those under one umbrella but certainly the show stopper for us was the private laboratories just because you would be missing a huge amount of expertise and there would be no place else to pick it up. There are no public labs doing shellfish diagnostics.

Committee: And I agree, that sounds like a showstopper for the moment and compelling. But don't give up on the number one. I think the structure will adapt to other

testing besides molecular. And the contract part of the labs may not - may negate number three.

You know, if you're paying the fee for service it doesn't matter where the grant money's coming from. It's not subsidized testing. If you work out number two, it's promising on number one and number three.

Dr. Jill Rolland: Thank you.

Committee: It's also - there are some people that are very active in NAHLN that are also active in this fish network development. I think the - Kathy Curts from Wisconsin has been very, very involved in every step and so we do have some ties between the fish effort and in the NAHLN.

Dr. Jill Rolland: And Kevin from Washington...

Committee: Yes, Kevin…co-chair.

Dr. Jill Rolland: Right.

Committee: Also from the perspective of the labs I wonder how many of them would want to participate because of the obligations that come along with NAHLN and when we were offered an opportunity to become a NAHLN lab we looked into it and we're just not set up like that. And I wonder if a lot of these labs would be able to fulfill the responsibilities of a NAHLN laboratory if there would be flexibility that would allow them to participate to the extent that they're capable without assuming all of those responsibilities.

We, you know, we are not set up to be a storage capacity laboratory or anything like that which is what NAHLN was looking for from the start. So we declined to become a NAHLN member.

Dr. Jill Rolland: And it's interesting that you bring that up because we actually did do a survey of the NAHLN labs and asked specifically how many of you would be interested in participating. And I don't remember the number off hand but it was - it certainly was not the majority of the labs. It was a small percentage of those that said that they would be interested in participating.

Committee: So it sounds like from what you said Michael that you would prefer that we go back to our respective organizations and run this idea of a subcommittee by them and then come back at some future date and take action on that.

Michael Doerrer: And in the meantime we'll gather all of the administrative details that go into subcommittees and funding and we can present that during an administrative call.

Okay. Does that sound acceptable to everyone?

Thank you, Jill.

Kim Ogle: Okay. Something I'd like to do before we take a break is to introduce Dr. David Meeker who joined us this morning. Dr. David Meeker is in the rendering business and comes from Virginia. He's the Senior VP with Scientific Services National Rendering Association. Dr. Meeker, welcome today.

Dr. David Meeker: Thank you and I apologize for being late.

Kim Ogle: That's okay, we're glad to have you. Thank you.

Break

Kim Ogle: Okay folks, we're going to start.

Okay, we're going to begin. All right. I'd like to introduce Dr. Roxanne Mullaney. I apologize, it's making me giggle.

I'd like to introduce Dr. Roxanne Mullaney, and she's going to talk to you about VS 2015. She's going to make an informational presentation to you on where VS is heading. She's going to talk to you about their operational planning efforts and a strategic VS movement forward.

VS 2015 & Beyond

Description of Veterinary Services' strategic and operational planning efforts

Dr. Roxanne Mullaney: Okay. As Kim said, this is pretty much informational for you guys. Wanted to give you a little bit of an idea of what we have been up to over the last couple of years regarding a strategic imitative we have underway.

VS 2015 is a strategic transformation. Some might call it a change initiative or a project. What does it mean really to change or transform a part of the Federal government? That's who we are, we're part of the U.S. Department of Agriculture and within that the part of the Animal and Planned Health Inspection Services.

Does transformation mean we have a new strategic plan? Does it mean we have a new advisory committee? Does it mean regulatory house cleaning?

For us, yes to all of those things and also to taking a hard look at everything we do and how we do it. Whatever you call VS 2015 it's the kind of evolution every organization has to undertake to stay relevant. For us it's not just about

staying relevant though, it's about remaining a leader in animal health, both in the U.S. and globally.

Changes to animal agriculture, technology, and trade mean animal health today, it's not the same as animal health 20 years ago. We also are well aware of the need for us to do our work with less funding than maybe we had in the past. And we also are aware of the need to work with new partners than we have in the past.

VS 2015 is a very comprehensive undertaking. Veterinary Services has chosen to move a lot of furniture all at once and ultimately we hope that in doing so we will position ourselves to evolve more fluently in the future. We do not want to be starting the VS 2020 initiative in a couple of years.

I'd like to note that VS 2015 is not a date. It implies that Veterinary Services is going to become something different in January of 2015. The change we are looking for is already happening now and you've already seen an example of that in the discussion around traceability and the framework there. It's about generally organizational evolution just with a little extra caffeine.

VS 2015 initiative started around 2008 with the development of a conceptual framework for veterinary services. After looking at the changes happening in the agriculture community and in animal health in general, the senior leaders in our organization outlined areas of strategic focus for further discussion.

By 2009 VS employees and our key stakeholders had begun discussions around four specific mission areas that we felt would best utilize our unique skills and our business strengths. Those were One Health and you will hear a little more about that later, surveillance in the broad sense, emergency management to encompass preparedness response and recovery and movement and marketability.

You're going to hear more about our emphasis on One Health surveillance and emergency management this afternoon. So I won't go into a lot of detail on those three things. Movement and marketability is the facilitation of interstate and international trait and movement in animals, animal products and biologics.

If you think about it, it is through our focus and our emphasis on surveillance on emergency management and on One Health that we are able to facilitate movement and marketability, said it in that way.

Before work groups that we started in 2009 all fleshed out of direction meets a concept that had been developed and - or at least to come close, we made some changes. Several pilot projects were initiated to help ground true some of these ideas and also to involve more of our organization in shaping our future.

During 2010 VS developed a grass root network of employees to help communicate VS 2015 progress, share feedback, encourage creativity within the organization during that time. The change concept without a lot of details was shared with a few outside stakeholder groups that we worked with on a regular basis.

So here we are, it's not January 2011 and VS 2015 is preparing to share a more comprehensive strategy for feedback by both employees and stakeholders. We also look to spend some time this year matching the future of organization with the VS that we are today.

On the last slide we talked about looking at the scope of Veterinary Services' mission for specific areas. Those technical activities we do that most directly help us meet our goals. Most change initiatives start there, some end there.

What about things an organization does that aren't so obvious to the outside world or that help create its culture? VS 2015 is about that stuff too.

We've initiated a streamlining process to make VS regulatory development and implementation faster and more flexible. Among other things we're redesigning disease program regulations to make them more flexible and performance based. So in essence what do you want the outcome to be rather than being specific in a regulation bout how you want to get there.

Standardizing and consolidating terms and definitions. The definition of a horse of course should always be the definition of a horse no matter where you find it in the regulations.

We're also updating our policies and posting them on electronic boards either for our own employees or just the outside world. More people have access to our guidance either within our organization where it's appropriate or for the outside the better off we are. All of these changes are not going to happen all night - overnight. But all of the changes just mentioned are underway in some form or fashion.

Department of Agriculture, our umbrella department, is also as a whole undergoing some changes at the scenes. USDA has launched a department wide initiative aimed part at transparency and high performance. APHIS as an agency is leading efforts to meet those broad goals. VS 2015 through Veterinary Services, part of AFIS, is using that as a jumping off point for our own sort of look in the mirror, if you will.

Cultural transformation is - can be much more difficult than changing what you do. But we know that without a focus on the way we do business how we communicate and how we maintain course VS can strive.

So we're seeing feedback early in the regulatory process as all of you know, venturing into new media. Yes, Dr. Clifford now has a blog for VS employees. And well the State/Federal (unintelligible) and TV working groups are an example of some other stuff we're doing.

This diverse animal health advisory committee, as well as peer-to-peer communication networks within our organizations, are also good examples of how we are communicating better and in different ways.

As you hear more details this afternoon, veterinary services is looking to meet 21st Century animal health challenges through partnerships. We are enhancing the relationships we already have, reaching out to new public and private organizations. Comprehensive animal health cannot happen in a vacuum.

Part of the VS 2015 process is also preparing our employees with the skills and tools they need to shine in a more network environment. Start inside, go outside. Finally, VS 2015 is helping to meet broader priorities for all of USDA. To our farm based, field based employee workforce the animal health expertise we provide to the food safety discussions and are focused on continuity business.

Every organization needs vision, so I've been told. What we aspire to be, the VS 2015 practice led to the creation of a new vision for Veterinary Services late last year. As the recognized animal health leader and trusted partner, Veterinary Services safeguards the health of animals, people and the environment.

I want to point out a couple things about this vision statement. VS is already a leader in animal health. We intend to meet new 21st Century challenges and continue to lead. As mentioned already, we view ourselves as a partner in

animal health and are putting an emphasis on that through the vision statement.

We believe that through our expertise in animal health we also play a critical role in the health of people and the environment. We are, however, still an animal health focused organization.

So let's get into some of the meat of what we've been talking about over the last couple of years. We've created more specific goals. These five you see here that encompasses who we are and what we do. These five goals are road maps for our resource priorities to help further define who we are.

Go through them and just a comment about each one. Transforming the VS culture, we already mentioned that a bit but it's generally about becoming a more effective organization in general.

Collaborations and partnerships, this goal touches on transparency, networking and information sharing in a very broad sense, whether it be words, whether it be reports, or whether it be data. However unique competencies in animal health, where are our key strengths and how do we put them to the best use.

Readiness and response in a global environment, well, as the Disney channel might say we're all in this together. Or in a more poetic sense, ask then not to know for whom the bell tolls, it tolls for thee. So whether we're referring to animal disease, focusing in environment stewardship or working at the intersection of agriculture and wildlife we are there and we continue to be there with our partners.

Technical infrastructure is the last one up there. Almost everything we do in VS involves technology, certainly if we're going to function in anything

resembling real time. We've also learned that our technical infrastructure has to be a priority for us in order for us to accomplish a lot of other things.

I would like to point out one thing about the word technology here. It doesn't just refer to information technology, it also refers to the technology we need to have in a laboratory environment and everywhere else in VS. We heard some of that yesterday.

These are some of the objectives that we've been working on that go under those five goals from the last slide. We're developing more specifics on these. This process is underway as we speak but I wanted to give you a bit of what we have so far.

Each of these objectives as well as others being developed roll up to one of the five goals. This should allow us to focus our workforce and resources in a fairly organized way. And in the coming months as I mentioned, VS will be coming out with - to our employees and our stakeholders with a strategic direction and looking for feedback. We'd like everyone to be able to see in our roadmap how a better VS will lead to a better regulatory animal health community and to better U.S. animal health in general.

A lot of time and effort has gone into the VS 2015 initiative in the last couple of years. Nonetheless we realized the really hard work begins when a strategy is defined and we have to begin implementation of that strategy. Veterinary Services has been a national force for animal health for years. We intend to continue to focus on livestock health and to look to have the infrastructure in place to broader support animal health in general.

We look forward to working with all of you during the next phase of our makeover, if you will. Veterinary Services is animal health and we will continue to be animal health in a very broad sense. And there's an awful lot of

people in Veterinary Services that help deliver the goals that we have for our organization.

So with that any comments, requests or clarifications that I can offer you? Fire away.

Dr. Meeker: My name is David Meeker with National Renderers Association. I just - I want to commend APHIS for doing this and want to strongly support 2015.

I've been working in animal health issues of all the major livestock and poultry species for 10 or 15 years, but I started at the National (unintelligible) Discounts in 1985 and I can remember in early 90s in the midst of a - what turned out to be a very successful program disease application to the rabies.

I can remember having meetings with our swine health committee and hoping that in the future for the bigger picture we could have a faster, more flexible APHIS where we could have APHIS Veterinary Services have core competencies and core funding that weren't always dependent on the program disease of the year to have strength. So I think this is a very forward-thinking plan and I hope it continues.

Committee: I had a question and you may not or can't comment and that may be the answer I need. On number five goal, the integrated technical infrastructure, I'm aware that there was an initial step on that that was in progress. Has that reached the stage where you can comment on that kind of thing or you still can't comment on the acquisition of possible off the shelf...

Dr. Clifford: That's what I was really more talking about earlier. It's in its final stages of that process and as soon as that's completed then we'll make an announcement relative to that. It won't be much longer. Clock is ticking so we have a timeframe. So I can assure you within a couple of weeks you'll know.

Dr. Mullaney: Off the shelf products… we're considering that as an option as part of our technical infrastructure is - and it is part of the solution. I think, you know, as I mentioned we also need to look at how we train our employees and the skills we give them to use the technology that's available. And how we create a secure environment for data, Jill mentioned that earlier when she was talking about aquaculture data.

And that's really true if we are going to work in a more networked environment and perhaps data differently we definitely need a different technical infrastructure than we have now.

Speaker: Yes, and I back up how important that is. It seems like we focus on the program part but that delivery system is huge. And the roadmap that John Pocanza has presented is very good. I don't know whether - I know that John and I have seen it and maybe others, maybe something the whole committee might want to see and...

And we would be happy to share our - the IT roadmap with the whole committee, absolutely.

Dr. Mullaney: And that IT roadmap that was written a year and a half or two years ago now really predated most of the work we've done with VS 2015, but is current today and is still being used as a platform for the IT we need going forward.

Committee: Earlier in your presentation you commented that you were expecting that Veterinary Services would have to be doing more with less money. What does that mean and what does this mean in terms of implementation of this vision?

Dr. Mullaney: I think that it's good for any organization, public or private, to look at how they do business, find efficiencies and really be aware of where they need to put their resourced priorities.

A couple of years ago when this started I think the feeling was that within animal agriculture we need to make sure that we are doing work as efficiently as possible. We don't - I don't think at that time we could have foreseen the economic climate we are in right now that has happened in conjunction with our VS 2015 initiative and perhaps fortuitously.

It's really given us an opportunity to think especially hard about what we do and why we do it.

Dr. Clifford: I might just add a little bit to that too. You know, when we - everybody uses that word that's been - you know, I remember Vice President Gore saying, "Do more with less."

You know, there's only so much you can do more with less. However, you know, with any type of organization, private or public, there's always process improvements and we're looking, continually looking, at ways reducing administrative burden, reducing bureaucracy, reducing the burden on you all, but also on ourselves. To help streamline those processes to give us more efficiency to put more resources as I would say, "Boots on ground;" more people in the field.

More people actually working on the things that are most important to us. Having said all that as resources become more limited, and I suspect that they will especially in our current environment, if we have the flexibility that we're seeking to utilize those resources versus a stow pipe of disease but more on those things that are most important to the - our stakeholders and industry and others then we can be more effective in the way they're utilized.

So when we talk today about comprehensive surveillance whether that surveillance is a collection of a sample and running that sample against multiple diseases versus a single disease is an effective way of - it's an effective use of resources and of that sample. And there's other things that we can do.

One of the things too that I would just like to state and it goes to the issue of technology, I think for us to really be more effective and be a world class leader in animal health the data that we are able to collect and utilize is critically important that we have that available to us in real time.

I'm not talking about traceability here. I'm talking about all of these, these type of data and information we've got to have the ability to collect it and utilize it and to analyze that data in a way that makes it useable and effective for decision making every day as well as it helps you all as the industry in helping you make decisions and helping you do a better job of management and understanding some of the disease issues that are going out - going on today and emerging.

Committee: John, over the past APHIS has - I've always used the Jim McKeen analogy that APHIS uses that accredit veterinary workforce, kind of like the National Guard, if you really need them you've got bodies you can call up.

And as we look at the diminishing population of food animal veterinarians, and I know you're making changes in the accreditation program, how do you address that diminishing resources that's kind of outside of, you know, your pot of money. I mean, they're not your employees but they work as agents of you. So what - how are you looking at addressing that diminishing workforce?

Dr. Clifford: You know, partly we're working not just to build those resources for ourselves because we need them ourselves, but also we've been working with ABMA, the veterinary schools and others to encourage.

And in fact, there's been some resources minimal, but resources put forth by Congress to encourage more development of food animal veterinarians. And so we'll continue to do that.

I think, though, those issues we're all going to be faced with in the future and we're going to have to find ways to deal with them, so it's going to probably have to be incentives for people to go into that area of medicine for them to do that. But some of the ways in doing that is paying for school.

Committee: Doctor, not too long ago that the USDA given $25,000 a year for four years for veterinary. Now you go back to small community, you know.

Dr. Clifford: Correct, right.

Committee: Will you have a document report that you can share with us that sort of points out where you're planning to get these synergies and how this is going to affect the budget as you go into this next decade?

Dr. Clifford: We're going to be developing those documents. We're in the process right now of finalizing a document that we'll be sharing first internally and then going externally to our stakeholders. So yes, we will be.
Let me indicate this right off the bat though. When you mention budget, one of the things we have indicated we intend to make this transition with the money we have. So we will have to pick and choose priorities in what is the most important. We're not planning on implementing this with increased dollars because those dollars are not going to be there in the near future anyway.

Dr. Parham Let me just reinforce the (unintelligible) which is what we're dealing with right now. And those of you who may have read the front page of the Washington Post today where at least one faction of the Congress is talking about a $100 billion reduction in this year.

Now what makes that so important is that this year's almost half over in terms of being the Fiscal Year because we have been operating on what is known as a continued resolution, which means that we spend at the level of 2009 and we're almost through the year. They're talking about upwards of an 18% cut for the full year.

So since we've been operating for half the year at our 2009 level, the 18% effected over six months become effectively 36%. So those are the kinds of things that John is talking about when he says the transition that we're looking at is to be done with current dollars and those current dollars definitely will not increase and there's some likelihood that those current dollars may actually be reduced.

Because they're talking about that $100 billion decrease being a non-defense expending. That's only the discretionary side of the house and agriculture falls in that area. You know, so we are going to have some severe challenges overall.

It won't just be agriculture; it'll be in other departments as well. But you can imagine that for the things that - the situation we face in terms of animal health, okay, there will not be huge increases. There just simply will not, okay. And there very likely will be some decreases that will force the situation that Doctor Clifford is talking about where we have to look at things that are already priorities and prioritize the priority.

That will be the challenge.

Kim Ogle: Thank you. And for those that are new with us today, I would like to introduce to you Dr. Gregory Parham who is the associate administrator for APHIS. Welcome.

Kim Ogle: Any other questions?

Dr. Clifford: Roxanne, as Boyd said, he and I've been involved in this VS 2015 process and I've been on the - I'm one of the representatives to the committee, the council, right. Forgot what you called it.

The one thing that I think would make it real or more real to some of the people at the table is just maybe you could talk about one of the pilot projects and that may happen this afternoon for One Health and the emergency preparedness. But is there a pilot project in particular that you might talk about to kind of give people a sense of what - of where this is going and really how it's working on the ground right now?

Dr. Mullaney: Great idea. I'll pick one I don't think that will be mentioned this afternoon. It came out of the working group around surveillance.

Surveillance looked at how we do business now, which is in large part aligned with disease programs. And they said well let's see, how can we focus ourselves a little bit differently and perhaps think about data streams or surveillance streams instead of looking at things from a disease by disease standpoint.

What is a data stream that we haven't looked at. And so this pilot project looked at a data stream or information stream around exotic animal commerce. Specifically in Florida there is an awful lot of exotic animal

commerce and this also was an opportunity for us to say how can we best utilize the workforce we have in Florida.

And so our technician level workforce in that state was charged with finding and documenting exotic animal commerce operations that existed in Florida over the course of about six months as a pilot project.

What we learned from that was developing relationships with those operators, those producers in essence of exotic animals that are sold into the marketplace, not only helped us build bridges that we hadn't had before. It did turn out to be a very effective use of workforce there, but also we learned that a number of those operations are in very close proximity to traditional agriculture operations which sort of helped to further cement our thinking that sort of that we're all in this together mentality.

If we don't look broadly at animal health and at animal commerce we're really functioning in a vacuum. So, [it was] a very successful pilot project. As with a lot of these we need some legs and some thought before it might be integrated on a broader scale. But is that an example that helps, John?

Dr. Clifford: Yes, that's exactly it. I mean, when I went to the meeting whenever it was the last time we met, I - what really brought it home to me was when some of the people in the four working groups described the pilot projects. And the one in Iowa where they were actually stopping trucks, I think...

Dr. Mullaney: That was looking at enforcement of interstate movement.

Dr. Clifford: Yes. And to me that's huge, you know, because I - we've got - we all have a state and animal health officials movement of livestock in and out of our states. What we're most concerned about is the movement in and we never - we don't have the resources to monitor that in any way. We don't.

Florida does. They check everything on the way in.

Michael Doerrer: Roxanne, why don't you tell us more about the Iowa (unintelligible)...

Dr. Mullaney: Yes I was going to say, give you a little bit more information than - on the one John just mentioned. In Iowa we - within APHIS there is another unit besides Veterinary Services called Investigative and (unintelligible) Services. Their job is to do a lot of the investigative work for the different other units of AFIS.

We worked with them as well as local Department of Transportation officials in Iowa and the law enforcement officials in Iowa and provided training and information about the kind of documentation livestock transporters are supposed to have when they're moving interstate with livestock.

So when they were stopping trucks for other reasons or perhaps for this reason based on Iowa state law they were able to say well hey, show me your papers. What kind of ID are you supposed to have, what kind of health documentation are you supposed to have to help us with enforcement-- and with Iowa State Veterinarian--with the enforcement of interstate movement?

It turned out to be again, as with the Florida experience, very beneficial to us. Not just for the reason that we set out to have it be, because we certainly we did find a number of violations during that pilot project, we also discovered that in building relationships again with Department of Transportation and with others we found swine herds infected with brucellosis that we wouldn't have found had we not had that relationship.

We found frozen squirrels. We found fighting chickens and got to help with circus elephants. So you never quite know what you're going to find when

you're in the interstate movement enforcement business, we discovered. But again, a very good project for us in terms of building new bridges, developing new relationships and exploring where we can best use our workforce.

Dr. Mullaney: We anticipate within the next couple of months we are going to have something for feedback from all of you. And we look forward to your feedback on all of that. I think there was another question or comment. Yes?

Committee: Yes, this isn't really a question, either. This was stimulated by your comment about budget. If we take the equivalent of a 36% budget and it gets applied to VS, what affect is that going to have on animal health? I'm sure you haven't looked - haven't done exhaustive analysis of that because we don't even know if it's going to happen and in what degree. But if that gets levied against - across the board what can we look for from VS?

Speaker: Probably depends on how much flexibility we have with that. If it has to be across the board and across every line that's one issue versus if we have the flexibility to decide. If we have the ability to decide we're going to keep the programs that we feel are the most critical and reduce the amount of work and activity in those that we find less critical.

So yes, we can't - I'm not going to sit here and tell you which ones I would determine that to be at this point in time. That would need to have some discussion. But I mean, obviously if we had those kinds of occurrences it's going to affect our ability to do certain things.

It will affect not just the Federal side; it will affect the state side. We provide - I can't remember what the total number is right now in cooperative agreement dollars to the states to help carry out many of these functions. It'll affect the cooperative agreements that we're able to provide those states so it's going to affect state personnel and resources as well as Federal resources.

Committee: Well just assuming that the Department of Agriculture has some discretion, John this may be a question for you, would this be an area where the committee needs to make a recommendation as far as the importance of animal health to this country and to our eco? I'm sure that everybody's going to be making the pitch, but I think we need to think about this.

Dr. Clifford: That's an option for you all, but I'm not encouraging you to do so.

Committee: John, actually, and I know this doesn't get - this is going off of VS 2015, but I didn't want to follow-up on the budget question. Yesterday when we were talking about the budget in the context of animal ID, I think you were the one that made the point that you don't intend animal IDs just to be an unfunded mandate and therefore if there isn't funding, you know, the performance standards won't - we won't get to Tier 3 issues.

Is that something that you're looking at in other programs? I mean, what sort of flexibility do you have? And if you are, for instance, cutting cooperative agreements on the states that there won't be the repercussions trickling down to producers in terms of trying to fulfill the regulations.

Dr. Clifford: I'm trying to think of some examples of what you're talking about.

Committee: And this may not...

Dr. Clifford: No, I understand the question. I was trying to think of how to best explain it. And it depends upon - it depends on how money gets put out there. I mean, so for example, like certain diseases like tuberculosis. We have about 14 point something million dollars for TB. We - that's not enough for resource to carry out that program for the level it needs to be carried out already.

So we're already dedicating resources to those areas where we need it most. If that gets further reduced then it means that we're going to have to further reduce some of the activity that we're doing. So it might mean trace outs may take even longer than they did because of the reduction.

If trace outs even take longer, the risk to a producer who may have bought an exposed animal will go up.

Committee: And I'll use specific examples and see how this plays out. In taxes very recently we just had the regulations change on brucellosis point testing. You know, we've been continuing first point testing and we're planning to, I think, I don't remember how many more years our state agency wants to, they did create flexibility in the regulations so if the USDA funding for brucellosis first point testing dries up that the states also hook too.

As opposed to the other option which is continue first point testing and the producers having to pay, you know, for that first point testing. You know, and...

Dr. Clifford: That's a good example, Judith. And I think, you know, brucellosis in some of 2015 and the whole flexibility issue we're talking about is one of the things we're doing is moving - we came out with that interim rule which basically does not require us to downgrade a state with the finding of brucellosis. So therefore we're not penalizing all producers in that state.

And it allows us to more effectively use what dollars we have in the area where we know the disease exists.

A critical component of that though is to maintain our surveillance to continue to ensure ourselves. So that would be a priority for us to make sure that those

are maintained. So if I have the flexibility to shift, so let's say our brucellosis budget got cut but I have the flexibility to shift dollars I would to make sure.

Because that's something we've put a huge amount of resources over 80 years into and come so far. We don't want to lose ground there, where other disease issues where - well so, for example, Johne's is a very important disease, especially for dairy herds. But it's an effort that's been a control program, not an eradication effort.

It's one where we have developed with the industry but as funding has declined already we've shifted some of that burden back to the states in the industry because we're not able to continue to fund it.

So for example, if the funding got - what funding is there which isn't a lot, if that got eliminated that would all shift back to the states. But that's a voluntary program on the producers so it doesn't put the regulatory burden up on them. It's whether they want to do that from a management standpoint.

So I go back to the issue of ID of the budget that you say is ID. How much of that is paying for instruments that we would identify our animals with, whether it be mostly ear tags. Is that a big part of the budget?

In the proposed in the future it's not a big part of it. It is a component of it where we wanted to provide the metal ear tags free of charge to producers.

The nine alphanumeric bright tags, those tags are about 7 cents a piece. You know, it's not a big part of the budget.

Committee: And the RFID, there's nothing in the budget for that?

Dr. Clifford: We do purchase RFID tags for uses in program disease. So if we go into a herd, and working with the producers for a like and we're doing a lot of TB testing or brucellosis herd testing, we put our FID in there to help us do the herd management with regards to the testing.

And helping more easily find those animals… And when you run them back through again, especially on TB testing, you know, it saves a lot of time and effort.

And the industry, the producers have liked that because it's less handling, less time on them. So we do purchase some for that purpose. But not - we don't give those out to producers in general. We pay for the ones that we use in the program diseases.

I think, I don't see any of my ID folks here. But I think through the process we buy them, I think we pay somewhere around a $1.40 or $1.50, something like that per tag. Yes Brian.

Committee: I ordered some of those, excuse me. I ordered some of those tags and they were roughly $1.25 a tag on those RFID tags. And we're looking at putting it on our cattle to show the producers how the RFID is going to help on the record keeping of a livestock so that we could have a better marketing value on the livestock.

So they're roughly $1.25, depending on the type of tag you'd need on the buttons or the, all the information. It will give you your premise ID number and also the 840, 15 or 16 digit number. So it's, it varies from the manufacturer I guess, what all you want on there.

Committee: I know this is kind of a tangent that we've taken away from 2015 and into budget, but I'm liking this tangent a little bit.

We've talked about, I've heard talk about moving away from budgeting as a program disease lines into more of a general animal health line. And I guess the question I have is, as a representative here of the pig industry is how do you divide that by - between commodities? if there's still going to be a general sense that, you know, (cattle and bison) may have this and pigs and others, you know?

So is there a plan for that? Or is it just one big pot and it's who's got the biggest voice to - and biggest needs?

Dr. Clifford: There is a plan. It's not one great big pot. It's based on historical spending. And other than that I really can't say a lot because we have to wait for the President's budget okay.

So I think I've probably said all I can say at this point. But I can assure you it's not just, we don't want a free for all. I think Cindy and I had a side bar on this and Cindy says, she said John, you may end up with a lot more enemies than you ever had.

Committee: It's a good thing you're a nice guy.

Dr. Clifford: Yes, thanks.

Michael Doerrer: Anything else for (Roxanne)? Thanks (Roxanne).

Committee: I just had a question on priorities. I know we can't get real detailed but is food safety authority and where that overlaps (unintelligible), I guess we'll get into that here in a while?

Dr. Clifford: So can you, when you say food safety, I mean are you talking specifically relative to things like E. Coli 0157. All right, so those are issues that predominantly fall under the regulatory jurisdiction of other agencies like FDA and Food Safety Inspection Service, which is part.

So part of 2015 and the one health, and I think it's important for you all to understand where APHIS stands on this particular issue. We believe we have a major component in value added to provide to the food safety arena to help find better answers and solutions to producers (right).

And outside of looking for always a regulatory fix that makes everybody's life more difficult, we're looking for ways to resolve these issues. So if you take the work we've done historically on the National Animal Health Monitoring Surveillance Programs by doing national surveys, by taking sub, or sampling.

And doing some sampling and testing and looking at a lot of these issues. That 2015 is where we're looking to go. Now what I have indicated, and we've already reached out to Food Safety Inspection Service, and we're looking at some potential projects in the future.

If it's human resources that we have on our payroll and they're out in the field. And we can collect and do that as part of our day to day activities, I'm not looking for additional resources.

If it requires res - additional money then we would have to take out of our budget to pay for the samples, the movement of those samples. So the collection, the movement and the testing of those samples, I'm going to need those resources to be provided to us to help us accomplish that because we're basically doing that not in a regulatory framework.

It's not our, so we're doing it outside of that framework to help address many of these issues. We do think that we have a tremendous value to add to that. And that's what we want to do.

Committee: I think that a concern in the industry is the regulations are getting ahead of maybe even the science.

Committee: Exactly.

Committee: And we need I think an agreement maybe inside of the USDA, not just outside of the USDA to work together, maybe not so much to regulate things. If they're not understood, then they're not well understood rather than getting the science first and then getting regulations later.

Dr. Clifford: We're definitely onboard with you, in APHIS. I'm not speaking for the USDA or Food Safety Inspection Service (please).

Committee: I assume we can probably have a more extensive discussion of that this afternoon when we talk about the one health topic because I have some real concerns along those lines too.

So I'd like to take some time to explore that further this afternoon. And I hope, you're going to be here with us again for the afternoon?

Dr. Clifford: For most of it.

Committee: Good.

Committee: I want to comment just I know Don knows, and I fully understand going back to the budget conversation just for the, to be sure that everybody at the table understands the impact of John's comment which is no choice he's left.

Most of your states, if not all, have already endured significant budget cuts. In our own state my own budget is down 31% in the last two years, and we're facing more cuts this year.

So what John says is significant in your states. You will see an impact as quick as anything I know to the cuts in those cooperative agreements because right or wrong, we have come to rely more on them than we used to in the past.

So you will see the effects of those immediately in what your state is able to deliver.

Committee: Just wanted to make one other comment too. And it's related to the traceability question. Charles yesterday you raise the issue about speed of commerce.

One thing of 2015, when we talk about regulatory flexibility we talk about the way we're doing business. We want to be able to change and adapt quickly with using the best science and mitigating risk to not impede commerce.

To allow commerce, at the speed of commerce and to do things we need to do to protect animal health. And to do that, that's why we're looking at many different ways of doing business in the future.

Like regulatory flexibility, writing regulations that are performance-based, not so prescriptive that - and detailed that it ties our hands as things change.

Committee: Actually, this question is for either of you and to engage you and start the discussion perhaps.

You know, in looking at the brucellosis and TB plan, I think this was an example of what you all saw. And I appreciate the need for it. And I recognize the (cumbersomeness) of the administrative rule making process.

At the same time I worry because there's a reason behind the administrative rule making process, particularly the question of getting public input. And what I worry about, particularly when I look at my stakeholders and the folks who are involved in the local foods movement.

Who very often, although they are running commercial operations, don't get considered quote "the industry." I worry about the issuance of guidance documents based on information that hasn't engaged, you know, that side of what really is the industry. And producers would be affected.

Have you all been working through how you'd keep the public and some of the non-traditional partners engaged without the rule making process?

Dr. Clifford: Absolutely. In fact, we will not be bypassing any of the requirements that are placed upon us to make sure that there's public comment. What we're talking about is the difference of going through formal rule making each time versus establishing certain things that can be done administratively and placed on the website.

But all of those things that it's changed will allow public comment. So for example, let's say we go to a country. Instead of listing all countries that we regionalize for Disease X in the CFR, we list them on the website.

Anytime we would make a change to that website, if another country asked us to regionalize them for that disease, we would go do a risk assessment. We would put it out for public comment.

We would do a public notice. We'd put the risk assessment up so that people could comment on that, with our intent. And then we would accept those comments.

And then whatever change was made would be made after the public comment and notice and response to those comments… And then placed on the web.

And (unintelligible) that we're moving away from certain older version of public comment equaling public outreach and engagement. And we're moving toward a model of more proactive and just plain active actual engagement following the model.

I think traceability was a good model for outreach. And that's a model we'll be following. We've recently hired a, you know, someone to focus on proactive engagement and stakeholder outreach to get to not only our traditional stakeholders, but new stakeholders that are equally important to our program.

I think this committee is a good example of that.

Committee: Mr. Chairman the agenda we have is one that obviously we needed to get everybody kind of up to speed on what's happening with VS.

But with this new Congress and things moving very rapidly, and just the report that we heard that we - the department may have the potential to take a 36% cut.

It seems to me that, and that could happen quick. It seems like to me that needs to be a priority for this committee. And I don't know if we have space here today to discuss it more.

But we have to, I think it behooves us to support the VS here during this time of potential devastating cuts.

Chair: I agree Howard. And I think it is the role of this committee, even though John may not want to hear what our priorities are. But I'm sure he'd listen.

And perhaps we can make time this afternoon to devote some discussion to that. Do we have time where we could do that (Michael), (Kim)?

Committee: We can examine the agenda over lunch and see what we can do.

Committee: Okay. Yes, I agree.

Dr. Clifford: I'm happy to hear your priorities.

Michael Doerrer: We're good. Break for lunch?

Kim Ogle: We're ready to break for lunch.

Michael Doerrer: Back at 1:15.

Break

Kim Ogle: Okay ladies and gentlemen, we're going to get started now. We are going to begin with a brief explanation about how we're going to proceed with the budget issue. Michael…

Michael Doerrer: Sure. So we have to consider a couple of things when we're talking about a budget discussion. First and foremost, our agenda for this meeting, all of our agendas for our meetings are public.

And it's important that we make them public so that the public has ample opportunity to comment and also to be present. And to speak on issues that the committee is addressing.

So I am certain that there are members of the public who are not here today who would love to talk about our budget and to ask questions about our budget. So I'd hate to have that discussion without giving them that opportunity. That's Number 1.

Number 2, I think it would be useful to the committee to have perhaps additional data and information on our budget. And also, to have some of our budget personnel and experts here to answer your questions in a public setting…

So I would propose, this is how I would propose proceeding. I think maybe take a couple of minutes for you all, if you want now, to tell us what kind of information or what kinds of issues related to budget you would like to talk about.

Have that sort of a brief administrative discussion related to that. And then that would give us time to engage the public notified and also to prepare information.

And that's also an issue we can discuss on an administrative call, particularly what kind of data you want to have access too. Does that make sense?

It's really important that all of our proceedings, deliberative proceedings be in full public view. So that's my reluctant. Questions, comments, Don?

Chair: Yes Michael, RJ and I had a discussion right before lunch and figured we needed to clarify what we could and couldn't do, or could or couldn't discuss without some notice.

So I guess we just wanted to open it up for like five minutes or so for people to give you some input.

Michael Doerrer: Yes, get some input on what kinds of things you'd want to hear about. More specifically, also keeping in mind the President's budget is due out soon. So we'll have - we'll be able to share a lot more information at that point.

Committee: Soon it’s going to be pretty busy. It's always busy, isn't it?

Chair: What, I don't know is if there are any specific questions that we can ask because we don't know what the questions are going to be. We don't know, you know, we don't know if there is going to be a cut. Most likely there is.

We don't know if it's going to be across the board… Or if John's going to have discretion or if the Secretary is going to have discretion.

My only point for saying that we need to have a discussion at sometime, whenever it's appropriate, is that we need to defend the budget for animal health. That's what I'm interested in, defending our budget.

And providing all the support to the Secretary through this advisory committee as possible.

Michael Doerrer: Sure. And I think that's totally appropriate. And I also think it would probably be useful to give you all a chance to talk with your constituents too so that you can, you know, adequately represent their views when we're talking about defending their interests. So I think that's great.

Committee: I can understand the political ramifications of discussing, you know, the 2012 budget and the political ramifications of defending the budget in general. But are you also talking about prioritizing current budget or prioritizing work if the current budget is cut?

Committee: It depends on how much it's cut. But I mean if it was cut a lot I would, sure. And it depends on how it's cut. And it depends upon whether I'm given discretion.

So until we know those things, it's going to be, you know, it's really, yes, it's just all speculation at this point. So I think it's best that we wait and see what Congress does. And then we can have a little more thoughtful discussion about it.

Committee: From my point of view, I think it would be, you know, very worthwhile to discuss that for the 2011 budget once we know what Congress has done. So put it on the agenda of the Secretary's Advisory Committee for whenever it is we meet again formally as a group.

And perhaps also put an item in there for a discussion of the 2012 budget which we'll have fairly soon. We'll have, John will have the President's budget. You'll have it to present.

And we'll be able to compare it to the past. So I think both of those are important if immediate importance is what's going to happen for 2011 and then 2012.

Michael Doerrer: I think that's a great way to proceed. Let's get it on the agenda on our call, our administrative call next week. We'll set the agenda. That will give us plenty of

time to provide notice to the public and get everything out there. And so we'll proceed in a more planned for way for this discussion.

Committee: And if I could, I'd like to add one thing actually that (unintelligible) made during the lunch that I'd like to suggest that, with all due respect to the (USDA) people that we also think of it not necessarily as defending the (VS) budget.

But from the perspective of working with producers and working with the folks on the ground, what do we also see as potential ways to make the best use of the money?

And the comment that Genelle made at lunch and I think is relevant to this especially is the issue of, you know, what can be - what can be taken on by producers, not in cost?

In fact, one of my concerns is not dumping costs on producers. But are there aspects where for instance better training for producers, better education for producers, outreach efforts would enable us to keep a strong animal health program going without relying as much on government resources?

Michael Doerrer: And I think that's definitely one of the themes we heard from our 2015 presentation as well, so very good. All right.

Kim Ogle: All right, we're going to move forward with the agenda now. And next on the agenda is Dr. Thomas Gomez. And he is going to speak to you about the One Health Initiative.

And this is another informational presentation for the group. It's going to provide a little context of where we are in APHIS, where activities intersect with animal health, public health and the environmental health, Dr. Gomez.

Michael Doerrer: And could I just say I know that this is a topic that a lot of you on the committee talked about. And I'm sure that many of you have questions already even before hearing the presentation about this.

So we're going to leave plenty of time for questions. Don't worry. I think the presentation we're going to limit it to about 40 minutes or so. So that will give plenty of time for deliberation and questions, discussion.

And if you have questions as we go along, as always, please feel free to ask them.

One Health:An overview of APHIS' activities at the intersection of animal health, public health and environmental health

Thomas Gomez: Great, thank you. Appreciate the invitation to be here this afternoon. And I guess before I get started I'd like to, just as a means of introduction, give you a little bit of background on my position at Health.

Within Veterinary Services I'm attached to the National Center for Animal Health Emergency Management, specifically to the Interagency Coordination Staff which is directed by (unintelligible) who is at the back of the room there.

Physically I'm located at the Centers for Disease Control in Atlanta, Georgia, at their main campus where I function as a liaison between the two agencies.

Thomas Gomez: What I will present is on One Health an overview of APHIS veterinary service activities at the intersection of animal health, public health and environmental health.

As far as the outline, I'll cover these topics. I'll provide some background on One Health. And this includes what are the threats, the definition of One Health and what are the solutions to address some of these One Health problems.

Second, I will also discuss one health as one of our expanded mission areas. And then last, I'll provide an example of how public and animal health collaboration works at the animal human interface.

So if we look at the first topic on what are the threats, and on the presentation I'll focus on infectious diseases. But I think everyone hopefully recognizes that the One Health threats expand beyond infectious disease themselves.

You've likely heard the statistic that 60% of emerging infectious disease are zoonotic. That is those diseases that are transmissible from animals to humans.

And the majority of these, 72%, originate in wildlife. And for example this would include SARS, Nipah Virus and also Ebola Virus. The seeming non-ending emergence of these diseases and food and feed incidence and the media attention surrounding recent outbreaks has made the public more aware than ever of the connection between animal and public health.

So if we look now at what is One Health, the basic underlying concept of One Health is that with many disease issues humans, animals and the environment are linked.

Very important, One Health is not new. The concept itself has been in existence since at least the mid 1800s. In addition, our agency, the veterinary community and livestock industries have a rich history of applying One Health principles to protect both animal and human health.

If we look at one of the definitions, and again there are a number of definitions of One Health out. But the American Veterinary Medical Association defines One Health as the collaborative efforts of multiple disciplines working locally, nationally and globally to attain optimal health of people, animals and the environment.

Many of the issues identified as One Health problems, such as influenza, antimicrobial resistance, food and feed contamination with melamine fall into what can be defined or classified as wicked problems.

What are wicked problems? These are problems that are so complex that no one individual or group or discipline can completely understand them. And there is no single solution to resolve them.

These wicked problems are so compelling they demand action. And the challenge is that most of the groups or agencies tend to work in silos, which is not a good strategy for resolving wicked problems.

The solution to these complex examples or problems where traditional problem solving won't really work is to - the need to institutionalize problem solving across disciplines.

Therefore, we need to position ourselves to effectively, and I say we primarily not within Veterinary Services, we need to position ourselves to effectively work in a world of wicked problems. Answering the question of how to do this is our current challenge and opportunity.

I mentioned that One Health is not new. And that we have done and do One Health. What we now need to do is explore or determine how we can do it better.

I'll spend a few minutes on this slide. The information is not here. But just to give you some background on this historical perspective of our activities in these two pathogens.

Again, two of our early major initiatives or programs involve combating Bovine Tuberculous, or TB, which we started in 1917 and then Bovine brucellosis, which we began in 1934.

At that time, approximately 20% of human TB cases were infected with mycobacterium bovis. And this is the causative agent to Bovine TB.

During 1930s and 1941, approximately 29,600 human cases of brucellosis were reported in the United States. Thanks in large part to the cooperative efforts to eradicate these diseases in animals, the number of cases of both diseases has decline dramatically both in cattle and in humans.

But they're not gone. We find human brucella infections with B suis in slaughter plant workers, and human infections with B melitensis. And this change in the epidemiology of human brucellosis reflects the changes in the demographics of the human population, along with different exposures or sources of infection. Both of which provide challenges, or new challenges, in disease prevention and control.

The Secretary of Agriculture is taking action to help manage USDA and federal interagency One Health planning, coordination, response and policy-making by creating the USDA One Health Multi Agency Coordination or MAC group.

This is at the undersecretary level. This MAC group addresses One Health at the policy level, and also with interdepartmental coordination.

We've also established a One Health joint working group which is co-chaired by APHIS and FSIS. And this has been formed to implement One Health principles at the technical level.

These two groups work to ensure coordination of One Health issues whether they are initiated internally or externally to USDA. And they do this by ensuring synergy of ideas, reducing redundancy and improving efficiency.

To support establishing the One Health MAC group, the Secretary of Agriculture stated there are numerous policy groups that have formed and are being formed that focus on One Health.

It is important that USDA has a voice at these tables and forms sound policy as the decisions that are made through these groups will have a substantial impact on the work that we do.

There are also a number of external One Health activities or drivers in One Health. Externally again, the One Health initiative has gained significant traction, both domestically and internationally.

And in general these current activities have evolved from avian and pandemic influenza preparedness. I'll focus on two of these activities. If you look at Bullet 4, internationally a process began in 2007 to move the concept of One Health forward.

The most recent step in the series of these meetings was the CDC hosted Stone Mountain meeting. The goal of this meeting was to operationalize One Health.

The next meeting, as you see there, is a November 2011 meeting, joint ministerial conference. If we look at the last bullet regarding CDC, domestically zoonoses in One Health are a priority and very prominent in the CDC organization, including it's focus areas for infectious diseases.

For example, within the CDC National Center for Emerging and Zoonotic Infectious Diseases, CDC has established a One Health Office. CDC and their office - and their One Health Office are key coordination partners as we both move forward with our One Health strategic plans and activities.

In addition, the CDC is an OIE collaborating center for emerging and re-emerging zoonotic diseases.

Looking at the next topic on VS expanded One Health mission. As (Roxanne) mentioned previously, One Health is one of our four VS 2015 expanded mission areas.

(Roxanne) touched on the fact that the four 2015, at VS 2015 form four working groups. These are the members of the VS 2015 One Health working group.

And as you can see, the group represents a cross section of VS experiences and perspectives. And I'll go through some of these since the acronyms may not be clear.

We did and do have VS team sponsors --Dr. Beth Lautner from our National Vet Services Laboratory, with our Western Region. He has now moved on to lead the grass roots effort. Dr. Jerry Dick who is seated in the room here is also one of our VS team sponsors.

I'll go down the list very quickly again just to show the diversity of representation to this group. Lynn Creekmore is in our Western Region, myself, Beth Harris with National Veterinary Service Laboratories, (Steve Just), an Epidemiologist at the Minnesota Area Level, Patty Klein with our National Animal Health Programs, Katherine Marshall with our Centers for Epidemiology and Animal Health.

In the second column, (Mike McDole), originally with the New Mexico area office, now ABIC in Wyoming, Lee Myers is with our National Veterinary stockpile, (Cheryl Shaw) is our Area Epi Officer in Minnesota, (Gary Shrivnos) is with our Center for Veterinary Biologics, Jill Wallace, National Center for Import Export, (Randy Wilson) with our Oregon area office and (Joe Anely) is our Veterinary Services One Health Coordinator.

And you can see the facilitators who are listed in the bottom right. We also have, if you look at the bottom left column, representatives from the National Association of State and Public Health Veterinarians, Dr. Leslie Tingelsen.

And then we also have a representative from State Animal Health, specifically Jo Chapman with Maryland Department of Agriculture.

So again a very diverse group of individuals with different perspectives on One Health as we move forward with developing our strategic plan.

One of our initial workgroup activities, we conducted a strength, weaknesses, opportunities and threat or SWAT analysis of Veterinary Services, which included identifying our business advantages in One Health.

That is what are our areas of expertise and experience? This list, and also follows up in the next slide, is by no means complete. But it answers the

question of why Veterinary Services and One Health, or what VS brings to the table that others do not.

I'll go through some of these areas. But again, recognize that this list also reflects some of our key One Health partners. If we look at them, and I'll summarize some of them as we go - as we look at it.

The first one we have a national network of experts in a variety of disciplines. We have an animal - the Animal Health Protection Act that embraces all species and references public health, our sister agencies with experiences and expertise in a variety of disciplines.

We have a very strong veterinary laboratory infrastructure including the NAHLN which you heard yesterday. We are fully - have fully integrated programs and work synergy with our state animal health official partners.

We have a partnership with a sub-set of veterinary practitioners through our National Veterinary Accreditation Program, the private sector, including industry commodity groups and other organizations.

We have access and availability to a number of Federal Agency 1 health partners, voting membership in the OIE. We have OIE collaborating centers at (NVS) South Center for Veterinary Biologics and the Center for Epidemiology and Animal Health.

We have APHIS employees embedded in OIE and FAO. We have Veterinary Services embedded in CDC and also DOD, National Center for Medical Intelligence.

We conduct our NAHLN national studies. We have a nationally distributed infrastructure. And also key is we do have on-farm presence, trust, respect and the ability to communicate with producers.

The SWAT analysis that I mentioned previously also contributed to the development of our One Health, strategic plan for implementing One Health activities within Veterinary Services.

From our strategic plan our vision, and you'll see as I follow up here with our vision mission and goal statements, they pretty what parallel what you heard from (Roxanne) for VS 2015.

So again our One Health mission within the agency, APHIS VS, will provide US leadership for the animal health component of One Health. And as a dedicated partner, we'll contribute toward improving the global health of people, animals, ecosystems and society.

Now we added society to the definition of One Health to include that One Health also includes economic and political aspects and benefits.

To achieve our One Health vision, VS will contribute expertise, infrastructure, networks and systems to partner effectively in a multidisciplinary, multilevel collaborative approach to promote healthy animals, people, ecosystems and society.

We identified these five goals to move us from One Health as a concept to how One Health and Veterinary Services will be applied and implemented. These goals, and I'll go through them very quickly.

Number 1, align VS policy programs infrastructure with our One Health vision. Again a focus on building collaborations and partnerships. Spearhead

outreach and communication, this is both internal and external communications.

Transform the VS culture and workforce and build new skills. And again, as you heard with 2015, apply our unique competencies to support and enhance the One Health community.

We prioritize - if we look back on the previous slide, for each of these five goals we outline specific objectives and tasks. We prioritized these objectives and tasks by year, including 12 that we determined to be critical to be implemented in 2011.

And on the top title there, OHWG is One Health Working Group. These 12 priorities are listed here. They include establishing an interim One Health coordination office.

And in general the need to define by policy for some task a role in incidence involving zoonotic agents, joint investigations at the animal human interface, how we support requests for assistance, our role in pre-harvest food safety.

How we establish or enhance engagement with One Health partners at all levels. One Health communications, again internal and external, One Health training and development of course for our VS employees. And also where we go regarding coordination of zoonoses surveillance.

(Don) had asked in the 2015 about some of our pilot projects. And again, within our working group, we also developed a number of these pilot projects. Now three of them are shown here, the short-term developmental project, the Veterinary Services assessment teams and the One Health coordinating office.

If we look at the first pilot project very briefly, these are temporary assignments in which Veterinary Services work with or assist One Health partners or organizations at the state or local level in areas of mutual agency interest.

These are informal learning experiences, with the goal to establish or enhance coordination, collaboration and communication among and with One Health partners, again at the state and local level.

As an example in Minnesota, a Veterinary Services employee, through a two-week assignment with FDA and FSIS, this was a project based on drug residue testing and slaughter surveillance, identified an opportunity for better tracing of livestock that are found with drug residue violations.

This project has been expanded in Nebraska and may be further expanded into South Dakota and Wisconsin.

The second pilot project is our Veterinary Services assessment team, or VSAT. And this is a formal mechanism to respond to and support requests for Veterinary Services expertise, experience and infrastructure in situations where animals may play a role in impacting public health, animal health and the environment.

VSAT is an early response and assessment tool that's initiated at the request of state and federal One Health partners. The key in this is that the VSAT works in collaboration with state and federal personnel in response.

And at the bottom you can see sort of the range of what our assistance may entail, all the way from technical evaluation and consultation to site visits and field investigations.

We've also established a pilot One Health coordinating office to implement our One Health strategic plan. This office came on line January of this year and will function for one year.

The members of this virtual office are listed here. Dr. Joe Annellli again who is our agency's VS One Heath Coordinator, Lynn Creekmore from our Western Region, Katherine Marshall from our Fort Collins Center for Epidemiology and Animal Health, my Sara - myself and also Sarah Tomlinson who is with our National Animal Health Laboratory Network.

The Veterinary Services Management Team Champion or Lead is Dr. Jerry Dick. And as listed there, again the purpose is to forge the implementation of our One Health strategy.

Our goal is to identify concrete opportunities to implement our One Health strategic plan and recognize key barriers and possible options for overcoming these barriers.

In addition, our office is still in process of determining more specific roles and responsibilities.

Moving to the last topic, I'll present an example of how public and animal health collaboration works at the animal human interface. And this example will also highlight the need for a One Health approach to address the domestic and global health challenges such as emerging zoonotic diseases and issues at the animal human interface.

You may be aware that increased detections of interspecies transmission of influenza virus between people and pigs have been reported in the United States.

The first human infection with triple re-assorted swine influenza virus, or SIV, reported to the CDC occurred in December of 2005. Since that time 19 cases have been reported between December 2005 and 2010.

These have included H1N1, H3N2 and H1N2 sub-types. As shown, 12 cases occurred in children. These are persons younger than 19. And seven cases occurred in adults.

In 15 cases exposure to swine was identified. Although no person to person transmission of SIV has been laboratory confirmed to date in these investigations, some of these cases reported only exposure to ill persons, and no exposure to live pigs. Thus, limited person to person transmission is likely to have occurred.

Associated with these detections, we would hold a conference call between federal and state and public and animal health officials to discuss three things. One, possible joint public and animal health investigations; Second, public messaging and; third, domestic and international reporting requirements for these detections.

These initial calls led to the development of a formal notification and communications algorithm such as shown here for potential or confirmed human SIV cases, which are identified through public health channels that may be associated with swine exposure.

In April 2009 the first two cases of what became the 2009 H1N1 pandemic were initially investigated using the previous algorithm. That is we jointly investigated potential swine sources - swine exposures as the source of infection for each of these two cases and found none.

CDC showed that the viruses were genetically identical and contained a unique combination of gene segments previously not recognized among known avian, swine or human influenza viruses in the United States or elsewhere.

This particular point is important and supports why we in Veterinary Services must adapt and stay relevant to the changing animal health needs. The 2009 H1N1 pandemic virus contains a unique combination of genes donated from viruses originating from three species and two hemispheres.

So influenza can no longer be siloed as human, avian, swine and other influenzas. There are no barriers to the movement of genes. And as we, from a public - from a One Health perspective, need to understand how these genes move across species and across national barriers.

Because of the need to better understand the epidemiology and ecology of swine influenza virus, Veterinary Services continues to work with our federal and state animal public health and industry partners on SIV surveillance.

As you may be aware, SIV surveillance has been an evolving and expanding process which began in 2008 through an interagency agreement through CDC and USDA to our current national SIV surveillance program which was implemented in July of last year.

In summary, these points further support why One Health is part of our VS 2015 strategic vision. First, the ever changing demands and needs of animal agriculture continue to impact APHIS Veterinary Services resources and programs, domestic and global health challenges such as emerging zoonotic diseases.

And issues at the animal-human interface highlight the need for a One Health approach. The One Health approach has gained significant traction throughout the US Government, internationally, the private sector, academia and other organizations.

Our unique experiences, expertise and core capabilities position Veterinary Services to take a more active leadership role to fill critical animal health, One Health gaps.

And as part of our mission for 2015, VS will expand our engagement in One Health. This includes again defining, by policy in some areas, how Veterinary Services will or can coordinate and support One Health activities at the animal human interface with our One Health partners.

The implementation of our One Health strategy will commit our organization to build upon past successes and safeguarding animal agriculture and adapt a new paradigm to address the complex intertwined health relationship between animals, humans and their shared environment.

And on this last summary point, as mentioned previously we, Veterinary Services, must adapt to meet the needs of our partners and stay relevant to the changing animal health needs.

If not, reluctance by our agency to take a more active leadership and or supportive role will result in lost opportunities and critical One Health gaps that may be filled by other groups which may result in outcomes which we may not agree with.

I'd like to acknowledge the members and working groups of our BS 2015 and One Health again working groups for their activities and contribution as we move forward with these four areas.

And I'll close and take any questions. And again thank you for your attention.

Committee: Thanks Tom. We'll open it up for discussion.

Committee: Okay so what is the scope of your work in antibiotic resistance and antibiotic resistant infections at this point?

Thomas Gomez: I'm sorry, sure. And I'll respond and for others who are actually, their units are involved in antimicrobial resistance, we actually have been involved with antimicrobial resistance issues since it was identified by WHO and CDC early on.

In fact we attended multiple meetings at WHO on this particular issue. We do have activities which contribute to identifying what that resistance may look like, especially at the animal health level.

For example, we do conduct our national animal health monitoring system surveys. And as part of that we do biological sampling in which we collect samples and test for salmonella and other pathogens.

Those islets then feed into our agricultural research services and then into the national antimicrobial resistance monitoring system. So we're able to track and get some fairly good trend data as to what we are seeing in antimicrobial resistance in food-borne pathogens associated with animals at the live sector.

We are currently in discussions with FSIS on exploring some collaborative projects. One of which is focus on antimicrobial resistance and salmonella. We also are a member of the working group of the public health action plan for antimicrobial resistance. So we do have some activities, both at the science level with for example the NOMS and NORMS type studies.

And with that, Dr. Clifford or Dr. Grainger, anything else on antimicrobial resistance that I may have missed?

Committee: I guess for me, you know, you break it down more in layman's terms and okay. If there were certain people working in a plant, in a slaughter plant and there was a, maybe they had a methicillin-resistant staph infection.

Would that be something in your scope to be investigated? Or if - would you ever get the data from that, you know, once it was determined that that's what they had at a hospital?

You know, like if they went to the hospital. Do you ever receive that data and be able to tie that back to maybe something that - Is there a way to tie it back to something that either happened to them in the workplace, happened to them through an exposure, through an animal exposure? Or whether it was just a non-animal exposure-type situation?

You know, it's very common now. There's outbreaks of it in schools. There's outbreaks of it in hospitals. What are you doing to gather that kind of information to determine sources and, you know, isolate those type sources?

Thomas Gomez: Yes. Those are the big examples or settings I'm not familiar with. But if there was a, for example, an outbreak of MRSA infections in an occupational setting, whether it's in say a production facility or a slaughter facility. That's one of the areas that we're looking at in being able to provide assistance through the VSAT type of team that we are forming to provide assistance to public health and others to investigate what occurred and what happened.

Committee: Tom can you define VSAT for the group?

Thomas Gomez: Sure that's our Veterinary Services assessment teams. And I'll point to one example that's somewhat similar but also shows where we played a role.

There, in North Carolina there was a outbreak in slaughter plant workers of brucellosis suis. And we did a joint investigation, we being Veterinary Services with CDC, National Institute of Occupational Safety and Health to look at those infections, document them.

And then do studies to determine risk factors for infection, which led to trace backs to identify positive herds, and action was taken and such. So again I think depending on the setting and whose jurisdiction that fits into, it would be collaborative - in a slaughter plant it would be collaborative hopefully with FSIS.

But again, those are the types of investigation that we're looking to be involved in. Not only to determine that something happened, but to do the root cause investigations to determine why it happened. And then potentially trace back and determine what we might have to do for mitigation prevention strategies.

Committee: Right. That's exactly what I was looking for. Thank you.

Committee: Does the virtual One Health coordinating office have a virtual budget? It looked like everybody there had a full time job aside from that. So it, you're kind of putting something together there.

And then what do you see it having a budget lined in the future and for the developing?

Thomas Gomez: Yes I'll defer to Dr. Dick on that. But the virtual office itself, it's virtual in the fact that we have not organized around one specific area. We're...

Thomas Gomez: Yes. Dr. Annelli is 100% time, the rest of us are 50% time, Jerry.

Dr. Jerry Dick: Sure. The - there is a travel budget already set aside for this year. There are three full-time equivalents, that's not three people but three full-time equivalents.

We have four people working half time, dedicated to One Health activities. And (Joe Annelli) dedicated full-time. I'm also involved from the Deputy's office [with] John [Clifford].

And the arrangement that we've made is that we're dedicated to this pilot project, that supervisors of those four individuals will give them half time.

Now, you have to understand that the four individuals that we actually took for this project are already, as part of their regular job such as (Tom) located at CDC, working on One Health activities.

So the specific activities, when it comes down to their daily job, somewhat will overlap. Because as Tom gets involved in his daily activities, half time with CDC and the zoonotic center, then he can take that information and roll it in and inform the rest of the committee and the coordinating office about how we might become better engaged as an agency.

And then we take that as a coordinating office the next step. So they are funded through their normal mechanisms. The supervisors have allowed them, they will be supporting them through normal funding. But they are dedicated, those four individuals half time to work on One Health coordinating office issues.

Committee: I got a question on pre-harvest food safety, (we've) got the point there. What kind of activities do you foresee that being involved with?

Thomas Gomez: Sure. And I think that again is one of the areas that you saw that we need to look at and determine what our role can and will be within pre-harvest food safety.

And I think those discussions are part of what we're discussing with FSIS. As you may be aware, pre-harvest food safety authority and activities reside within the food safety inspection service.

Now having said that, one of the drivers that is really having us look at pre-harvest food safety activities closely is the recent egg rules and trying to see where there might be some opportunities or gaps where we might be able to provide some support.

So we are currently and hopefully will pursue discussions with FDA and Ag (Marketing) service to see specific for salmonella and (ritivis) where that might help in some areas.

So at this point that's one of the key areas is trying to determine what are and what exactly our role, even if it might look at some (quality) perspective, what that role may look like in pre-harvest food safety.

Committee: I guess (term) to just direction from the poultry industry, pre-harvest brings a lot of heartburn concern. And we do quite a bit, but there's been nothing proven. And I think that would be a role for Veterinary Services.

Anything done on the live side prior to harvest has not bee documented to be efficacious. There's been reports antidotal, but nothing scientific. And I think

some of the things being regulated have not been proven. And that's kind of concerning to those of us that are trying to do the right thing.

Thomas Gomez: Yes. And I think part of it also on the pre-harvest food safety side is, as I mentioned, the NOMS studies. And hopefully through those across the commodities we'll be able to look at when we identify, you know, higher prevalence or salmonella or 0157.

Then look at risk factors and be able to look at potential on-farm interventions or prevention strategies. Now I know in discussions with FDA on their egg rule, and specific to the - last year's outbreak in Iowa, they had the same question. But it sat outside of the scope of their activities.

They identified the outbreak. But what they're looking for to be able to determine, or have a system to determining that root cause investigation at to why it didn't occur.

So again, that may be one area within our agency where we would be able to provide the on-farm assessments and study to determine what those risk factors were associated with the size and the emergence of the SE outbreak (unintelligible).

Committee: I think something of an SC now, and going to the meat (birds) said that the (hang gliders) recent information from FSIS on their islets in plants show an increase in trend of SE.

But that's a percentage of a percentage. And we had a real issue with the lack of science that's being used. And again, it's a different agency within the same agency.

Thomas Gomez: And I think part of it, especially in the (layer) industry is trying to set up priorities because we keep hearing, you know, whether or not (Heidelberg) has had an issue or (unintelligible) has had an issue, especially if there are already trends of arial transmission.

So I think a lot of it is just trying to determine what those gaps needs are. And then with our partners, most likely ARS, start trying to sort out some of those on-farm needs.

Committee: What about import foods? What kind of plan do we have to control them? We got so much emphasis in the food, the meat that we produce here in America. What happened with the overseas foods?

Thomas Gomez: Yes, I'll defer to others. But I know that as I understand, it's one of the big areas of the USDA Modernization Act is to look at these imports now as far as the commodities.

That may fall within our realm or FSIS. I'm not sure if there's any changes or activities, product controls or prevent any, especially food safety issues.

Committee: That's not an area from imports on the food safety side that we would be involved in because of it's not - we don't have any jurisdiction in that area that lies with food FDA and FSIS.

Committee: I wonder sometime if there's anybody looking after that.

Committee: Tom I, you know, just as Veterinary Services has a liaison with CDC it almost seems to me as if you need a liaison with FDA because I think I'm very concerned of what the future holds with respect to food safety.

And your agency has the expertise, has developed relationships in the field with farmers. And I see the trend towards more of food safety issues, especially investigation of them, as evidenced by the SE outbreak this summer, being in the hands of FDA.

And I'm trying to be diplomatic here. So it's just hard for me sometimes. But let me just say that it gives me a great deal more comfort if I, as a state official am working with somebody who has some experience on farms versus working with someone for whom it's fairly new.

And I, and with the Food Safety Act that was signed by the President recently, I see the trend of these activities moving more towards an agency that I think need some of the expertise that your agency has. And has had for years.

And so I would, I mean I know you've said you've had discussions with FDA. And I would really welcome it if you had more than that.

John Clifford: Let me just, we definitely want to have more than that with FDA. I don't know if we'll have a person that will be located there like Tom is with CDC. But something we could discuss and you all could make as a recommendation if you so choose.

But we do agree that we need to have greater collaboration. We are reaching out to FDA. In fact, very soon I'm meeting with components of FDA to talk about our strategies for 2015 and One Health.

And I think, you know, those types of things are extremely important. So we plan to do that. One of the things too, as Tom's mentioned a couple of times, these - the Veterinary Services, these teams, these assessment teams.

What we're really saying as part of those assessment teams, when these types of occurrence happen, we believe that we should be at the table. And have personnel on the ground at those locations because we do have people that are knowledgeable in aspects of for example on the poultry side.

And in fact, APHIS wrote the first rule on salmonella enteritidis. I was on the original task force for that program actually. And so, you know, we hear you loud and clear.

And that's where we believe our expertise should be. And we should be at the table there representing the animal health component.

Committee: Well I'm glad to hear you say that. And I hope that I, this committee should have involvement with that and may develop some recommendations.

And just to follow up, the example of the egg industry is the USDA is in the plants, FDA right now has jurisdiction over the birds. And our, when we were inspected in Maine, our inspectors who are USDA State employees, but designated by USDA to be egg inspectors were there. I was there.

But the USDA does not have authority on the egg safety rule. But our inspectors were there. So, I mean that was a good thing. It was a collaborative effort. But it just causes me concern. So I'm glad that it's - to hear that you're going to be interacting with them.

Committee: To kind of follow up on what (Max) was talking about on the safety of imported foods. Another area of imports that's been identified as a problem area is the importation of exotic animals and exotic animal diseases that affect humans and foreign animal diseases.

And the (echo) parasites that come in on those things. And I realize there's some jurisdictional issues between interior and agriculture there. I think there was a recent GAO report identifying some of the weaknesses in that system.

Is this something that we would look to address through this committee and recommendations for the Secretary?

John Clifford: Yes, exotic animal facilities were mentioned this morning by (Roxanne). And the importation issues are well known to be a problem.

I think if you look at the GAO report, the GAO report actually sites some of the things we're talking here today about and makes some recommendation in it.

So I mean it's very, if that's a topic that you all would like to further discuss in the future for your [Committee], I think it's certainly within your jurisdiction here.

Committee: Well (unintelligible) could have been identified...

John Clifford: Not entirely, no.

Committee: I was just wondering if you could expand on the B. Melitensis cases? Do we know what species they came from? Were the people infected in this country or other countries? Or was it a food product?

Right (unintelligible).

Thomas Gomez: The only animal diagnosis I'm aware of of B. Melitensis in the US in the last multiple years was the one case - was one cow in Texas. And that was associated with a goat herd that migrated back and forth across the border.

But that's the only case of US animals I'm aware of having B. Melitensis in the last 20 years.

I don't know the numbers. Again, I can look at it but...

Michael Doerrer: If that's, if you want more data on that or, you know, any topic, that's something you can let us know on the administrative call. And we'll get that. And we'll give it to the entire committee. And we'll also make that data publically available.

Committee: I know the tendency is, especially with limited resources, to focus on what our, you know, immediate problem spots. You know, there's an outbreak of this. And here's where we need to focus.

I can't help but be struck, and this is the second time I think I've seen the One Health presentation. That the list of the goals looks a lot like the same sorts of goals that you will see, and I've seen, discussed for the last decade at every sustainable agricultural conference, every holistic management conference.

You know, these are the issues that that community has been talking about for a lot of years. And frankly has a lot of expertise on positive solutions before it becomes a problem where we've got something that can proactively start addressing animal health, human health and environmental health at the same time.

And I just, I'm hoping that we can find some room along with the problem solving side of the One Health aspect to also make sure that there's some room for the more proactive problem avoidance side of it.

And we've certainly got, I think, a lot of resources and experts that we could draw on from that community.

Thomas Gomez: I think that was one of the (direction) announcements that we were (unintelligible). But from the context you're actually implementing good examples.

And everyone, like you say, pretty well agrees that health is, essentially everyone agrees with it. It makes good business sense of what do you actually do.

I think that's one of the things that we're looking at is to identify those concrete opportunities where we can move forward and (unintelligible).

Committee: For decades there's been this kind of ongoing media battle over antibiotic resistance and confined animal feeding. And it's been going on for a long time with apparently no clarity.

Is your program able to start giving us some clarity? Is antibiotic resistance a problem or not?

John Clifford: Well that's, you know, from a standpoint of how much of a problem it is, that's a different issue. Antimicrobial resistance is definitely a problem for human health and animal health.

But the fact is when you use antibiotics, period, even when you use them correctly in some - in most cases you're going to see some resistance. But as far as it's use in agriculture and those types of things, there is some evidence of antimicrobial resistance.

That is scientifically sound evidence of when it's been used in an agricultural practice where you've seen the resistance and you can see some potential affect on the human health side.

Our position is from the standpoint of USDA antibiotics should be judiciously. They should be used correctly. We are not calling for the ban of those products. We are calling for science to prevail.

And let's have good science before we start just arbitrarily taking things away that may cause other problems or issues that we might see in the disease area.

Sure, it would be better for everybody if we could stop using antibiotics. But before we can ever get there, we've got to find other ways of dong those things that we currently do today in those intensive practices.

Committee: (Unintelligible) that don't use anything.

Committee: Correct.

Max Fernandez: You know what? Their cattle is the healthiest cattle you'll ever see. The only thing they use is de-warmers. And then the best cow you see, the biggest one, right there they are.

I think what's happened, I'm sorry if you (unintelligible), but many of them are the one that push all these drugs. They entice people to use it. All the 4H clubs and all start experimenting with the drugs right there.

And then all the other people, if you read in the computer in the chat lines that they are practicing veterinary medicine in the computers advising others what to inject.

Thomas Gomez: On that antibiotic resistance issue, it seems like the media is always kind of focusing on this theoretical problem of consumers and urban centers. But the first people who must be at risk are the ones who work in these confinement operations.

It should be relatively simple to screen them for antibiotic resistance. In it - is that kind of research going on?

Thomas Gomez: And I'm going to have to excuse myself. I'm not trying to get away from this conversation. But I do need to get - step out for a little bit. I'll be back later. And if you want me to talk anymore, I'd be happy to.

Liz Wagstrom: Thanks Tom. Would you like to throw me a less hot potato next time?

Thomas Gomez: (Unintelligible).

Liz Gomez: Okay.

Michael Doerrer: [There are no experts around the table here today.]

Liz Wagstrom: I can talk a little bit just about what research I know is going on, or what sorts of evidence you may have. And this will be the, no more than 90 seconds. So I won't get you off target here.

There is research obviously looking at what is the risk because I think you will find that there are resistant organisms found in meat. There may be resistant organisms found in people who work with animals.

But the question is often not looked at is what is the risk to human health of those organisms being present. And so that would be what I would say is the

newest body of work going on to try to assess the public health impact of the resistance.

Is looking at risk assessments of what is that public health impact? So there are some of those going on that might help answer that question of how are the practices on the farm impacting human health.

And if you'd like the notes, I can try to get you some citations or anything like that. But just as a brief 90-second answer, the risk assessments are seen to be that thing - those studies to try to bridge and answer some of those questions.

Committee: Well one thing, Dr. Clifford's recent testimony on this issue is USDA's official word on the topic. One thing - and that's available on our website. One thing I can do is make sure that the committee has access. We'll send you a link to that.

And the public already has access to that. And if this is an issue that the committee wants more information about, more data about, I can consult with our in-house folks, our experts to see what we can come up with for you.

So perhaps on an administrative call you can let me know exactly what sort of data and expertise you need. And I can try to find that for you.

Committee: Tom one more question. Just to kind of hopefully wrap things up, and thank you for staying here and allowing us a lot of time to talk about this because it's an important topic.

I hear about his constantly at meetings. We all do as veterinarians. I've always been a little bit skeptical that our human health colleagues talk about One Health as much as we do.

And I'm interested to hear your perspective on having been at the CDC for a while, and having gone to meetings of perhaps where there are more physicians involved.

Do you see physicians becoming more engaged in this? Or are they just kind of viewing it as well, this is the veterinary profession just kind of trying to horn in on our area.

And, you know, I don't want it to seem like a one way street. But that's what, I kind of get the impression sometimes that we're preaching to the choir on One Health.

And that are our human health colleagues engaged? And do we have their attention?

Tomas Gomez: At the clinical level (unintelligible).

Committee: One quick thing. What you were just saying there, the discourse between the veterinarians and the physicians, and that's what we've been hearing here and referring to as One Health.

I noticed the same thing at AVMA this past summer. Any time a veterinarian spoke with a physician that was labeled under the One Health, kind of that One Health umbrella; there's a third component to that.

And that's the environmental health in wild animals and water and fish. And I think we're overlooking that in a lot of instances. And I've seen some of the people who refer to that as 2/3 health.

And I think we have an opportunity here with our recommendations to the Secretary to keep it focused as a triangle with all three components integrated instead of just veterinarians and MDs.

Committee: (Tom) I have a, I guess...

Thomas Gomez: I'll certainly try to wrangle some information up on authorities.

I refer or defer to others. But they're saying that with the full progression in 1996 (unintelligible) pre-harvest activities and resources (unintelligible) veterinary services to FSIS. Others who, you know, we're directly impacted by that (unintelligible).

Committee: And I don't, I guess my...

John Clifford: I see (Kim) getting sort of mad at us. I think she wants us to move along. Sorry (Kim). We'll try to keep to the schedule here.

Surveillance

Larry Granger: No. That's the wrong presentation. It should have 2011 in the front of it. All right. That could be the red tie. There it is.

Thank you for having me on your agenda. It's an honor to be here. I'm privileged to sit at this table with all of you.

You'll see from that very first slide when she gets it up there that it references Dr. (Aaron Scott) as the one giving this presentation. Dr. (Scott) is a member of my staff. He is the Center Director for the National Surveillance Unit at the Centers for Epidemiology and Animal Health.

He unfortunately could not be here today. I count that as my good fortune because I am honored to be here. But I think that it's a very difficult thing sometimes for me at least to give someone else's presentation.

So I'll do the best I can at getting through these slides. I've been through them a number of times since yesterday. I've added a couple of comments of my own which is risky. But I have done that. And we'll see what we can do to bring the message forward.

So (Aaron) has put this slide in. I think it's good one because of the illustrations that are there. And the NSU mission is something that he wanted to bring out in this slide.

It is to develop and enhance national animal health surveillance through the evaluation design analysis prioritization, integration, coordination and communication activities that occur within the National Surveillance Unit.

And basically that's a long, complicated way of saying we do surveillance planning. That's what we do at the National Surveillance Unit.

We look at how to conduct surveillance in order to do testing in the field that is representative of the population at large. And we use scientific methods of analysis to arrive at that point.

The roadmap that he has on this slide from surveillance to information for action is something that the surveillance working group, which is part of the VS in 2015 effort has been working on for the last year.

They have, you have already heard about some of the pilot projects that the surveillance working group has. The one with exotic animal surveillance was one that (Roxanne) talked with you about.

Certainly there are plenty of curves ahead in this roadmap and traffic delays and dead ends. And I have encouraged the National Surveillance Unit to stop heading down those dead end roads.

We know where they are now. Sometimes we have to take a (sacutious) route to get to there and it's a long road and a little wheel. It takes a lot of turns to get there.

But as long as we're continuing to move forward, I feel more comfortable with that. And constantly running up against the sort of traffic delays and dead ends, obstacles that we run up against.

And some of those are related to the discussion you had yesterday with animal identification certainly.

The National Surveillance Unit was formed in 2003 as a result of this animal health safeguarding review that you see depicted in this slide. Some of you I think were members of that panel that examined the work that we do in Veterinary Services and made this recommendation that Congress and the USDA must provide funding and act to rebuild the state and national infrastructure for animal disease control emergency disease preparedness and response.

And we'd held true to that mission since that time. As I mentioned, the NSU was formed as a result of that. One of the principles that's in this executive summary or in this document is a comprehensive and coordinated integrated surveillance system is truly the foundation for animal health, public health, food safety and environmental health.

And that's all of those areas that you've been talking about today with the One Health discussion that you just had.

Another way to say that is that the value of surveillance really is an early detection to reduce disease spread. We talked about, the other day I heard discussions about market access.

And I've put that at the bottom of this slide. I added it myself to this slide because all of these things, proof of freedom which is really demonstrating the absence of disease which we all know is scientifically impossible.

And yet we can make statements about the probability that the disease exists in a population if we do certain levels of testing and don't detect the disease. So that proof of freedom is what gains access to those international markets and for commodities to move safely across state borders.

The notion of food safety, the notion of food security that you discussed earlier today with questions about food-borne pathogens and antimicrobial resistance and public health concerns are all things that guide us along the way to developing a national surveillance plan.

I wanted to talk just a little bit about role definition because there is I think a need for everyone to participate in surveillance and animal disease surveillance, animal health surveillance.

National surveillance planning is the role that we've taken on. Certainly the state animal health officials, tribal authorities, the producers themselves, we've talked a lot about the private veterinary sector and the National Veterinary Accreditation Program.

I told John Clifford back in I think it was February of this last year, when he moved the National Veterinarian Accreditation Program from National Animal Health Program staff to the Centers for Epidemiology and Animal Health. That he had no idea what sort of power he unleashed when he did that.

And he chuckled and said maybe I don't, but I think it's a good idea. And the fact of the matter is we're very happy to have the National Veterinary Accreditation Program because we see that first line of active observational surveillance occurring in the field with private veterinary practitioners that are working hand in hand with producers.

And while we're, clearly we don't always have the ability to make the diagnosis in the field; those folks do know when animals are well and when they're not.

And they are the first line of defense in terms of recognizing the sick animal on the farm. Some of these dollar figures that come, that are posted on these slides (Aaron) put together.

This was from a recent paper that the University of California Davis did that estimated a foot and mouth disease outbreak detected after 21 days would still cost an additional $565 million for each hour that was a delay in detection on new herds. And the total outbreak costs might be as high as $130 billion.

Certainly these are dollar figures with a lot of volatility. A lot of questions could be asked about whether - how those figures were calculated, whether they're accurate or not.

But the point is clearly that the disease outbreak would be costly. And the earlier that you detect it, the better off you'd be.

Some of the other return on investments that we look at with endemic diseases, just looking at a 10% reduction in morbidity, mortality. This particular study that was done there also talks about a $1.4 billion savings if we had effective animal disease surveillance for those disease that we know exist in our animal population.

So I put this slide in. This is one if mine. And what I am trying to point out here is that with the world being smaller, with international trade being of importance.

As (Howard Hill) said the other day when he talked about whether the disease affects the specie - animal species of concern for your particular industry or not, the affect on the red meat market and the overall price that the producers paid will be affected with an animal disease.

Sometimes an animal disease that isn't even in this country can affect that market and affect the price paid to the producer.

I think that one of the key elements is that this exchange of information between health authorities, whether it's interstate movement of animals. Whether it's international movement of animal or animal commodities, we need that exchange of information for the safe flow of commerce and for disease control decisions to be made.

Some of the things that we do at the Centers for Epidemiology and Animal Health is this notion of ongoing publication of statistical data on diseases in populations.

And we do that in order to inform people that are making decisions about where they want to buy replacement heifers, where they want to market their

animals. How careful they need to be when they visit the local co-op for milk processing.

When they go to the market and the bio security measures that they need to observe when they come back home in order to prevent bringing a disease home.

We certainly are engaged in recognizing emerging disease and prompt notification of unusual or emergency circumstances, situations is something that we do.

When we see massive dye outs in the field, we look into those situations. We sometimes conduct epidemiologic investigations much like CDC. And we publish that notification so that those that would make decisions can make decisions based on what we know.

And I think that this last point about public policy is incredibly important. That as we do our analysis we need to be transparent in the scientific method that we use to analyze the data that we have access to.

The second bullet under public policy is increasingly important that we need access to the data. We need to have complete and correct information in order to do those analyses.

There are examples where we have really good data sets to analyze and examples in animal health where we have almost no data to analyze. It's very, very difficult for us in those situations to be able to give correct information back if we can't have access to the data.

And then finally, we need the ability to challenge assumptions that go into public policy decisions. And surveillance gives us that ability when we actually have data that we can analyze and provide the information accurately.

These are some of the stakes, some of the money figures. But it's only part of the story. And this is where we get into the national animal health surveillance system.

(Dr. Scott) is pointing out in this slide that we have greater demands on national animal health surveillance than ever before. You saw the slide that Tom Gomez presented on 70%.

I think he said 60%. I've heard as high as 70% of the diseases, emerging diseases are zoonotic. And I think that's a thing to recognize when you hear that figure is that quite often the qualifier has dropped from that statement. Because what they're really referring to are studies that were done at CDC looking at emerging diseases in people.

And 70% of those diseases that have emerged over the last 20 years in people have been zoonotic. In other words they've come from this animal reservoir, wild animal reservoir, domestic animals.

As the Center Director for the Centers for Epidemiology and Animal Health I cannot tell you, and I can ask my staff, and we cannot tell you how many diseases that have emerged in animal, domestic animal livestock populations over the last 20 years.

Are first, how many have emerged. And second, how many of those are of zoonotic importance. And the reason is because we do not do that type of surveillance. We're not collecting that information.

We're looking at animal disease surveillance from a program perspective, from first threat perspective, from a foreign animal disease perspective. So, and we're doing it from a trade perspective.

We're looking at animal diseases that are important for us to have market access on the international front. But when it comes to diseases like PRS for instances a few years ago that was a newly emerging disease.

We, in the past, have been somewhat indifferent towards those diseases, relying on commodity groups that have successfully lobbied Congress to provide us with a line item to fund a program activity before we get engaged.

And what we're saying with VS in 2015 is that we can no longer afford to do that. And, that we need surveillance systems in place that can detect these emerging diseases sooner.

Now one of the concerns and this is one of the twists in the road that we talked about earlier, is the whole notion of information sharing and confidentiality.

I think that producers have a really genuine well-founded concern with this. And the challenge really is how can we collect and distribute information that benefits everybody, and avoid those detrimental affects on the marketplace that would cost producers lots and lots of money, as was demonstrated in the earlier slide.

We have some things that we didn't have a few years ago. We have information being partially protected by the Privacy Act. Some of the language in the 2005 Farm Bill provides protection for producers that voluntarily participate in livestock disease monitoring.

We have some FOIA exemptions. We're now pursuing a statistical recognition for the NOMS unit, the National Animal Health Surveillance Systems and monitoring systems unit (NCIA) under the CIPSEA Act which is the Confidential Information Statistical Efficiencies Act, Confidential Information Protection and Statistical Efficiencies Act.

This is the same act that protects other statistical agencies in USDA from having to disclose the source of their data and their information. We have used that CIPSEA protection under the National Act Statistic Service to conduct NOMS surveys in the past.

What we're finding though is it's a, we have a need to conduct smaller surveys on a smaller scale than a national survey where we can't engage the National Ag Statistic Service and use the CIPSEA protection that they have, the recognition that they have.

And so we're seeking that for the NOMS unit ourselves. What that means is that we'll be able to do these smaller surveys, ask questions of producers. Have them voluntary participation in surveys. And be able to protect the information that they provide to us in a way that doesn't compromise their ability to move animals or animal products to market.

And we'll be able to learn more about some of these critical issues in a way that's non-threatening. And so we hope that we can have that protection very soon. (Michael Doerrer) has been helping us with that in his unit there.

State budgets, federal budgets, we've talked about that already. There simply isn't enough money to do everything that's needed. But we've talked about this too. The answer is obvious, accomplish more with less.

And that really is what comprehensive and integrated National Animal Health Surveillance is about. And I hope to be able to show you how that works.

We're looking at doing animal health surveillance in the most cost efficient way. We're trying to benefit that broad stakeholder base that I showed you a couple of slides ago for it to be disease flexible and not just concentrate on those diseases (unintelligible) or program importance.

That it would be rapidly responsive. And that we could turn on and off this program, or this disease surveillance much quicker than we have in the past.

This is a formula that the surveillance group has come up with. The probability of introduction of the disease is figured in the top line in this ratio, along with the specificity and sensitivity measures for a particular test that would detect the disease.

We're attempting to then calculate in the probability of the success of intervention. Intervention mainly on the part of this agency, but also looking at how education might result in industry action that would be some measure of success at lowering the number on the top.

And then the cost that would be averted by virtue of the fact that the surveillance that we do would provide that type of information to those that would take action.

And then balance that with the cost of actually doing the surveillance. The critical thing here to realize when you look at this formula is that as we do more surveillance and organize it the way that we envision, the costs for conducting surveillance go down because the sample streams themselves are established already.

And sometimes it's just a matter of adding a micro assay range in the laboratory testing that's ongoing for program use in the (null) laboratory network for instance. And then gathering that information, test positive, test negative in a way that can be analyzed.

So we know that the stakes are high. We know the surveillance concepts. We know the budget is limited. We've learned how to value and how to prioritize. And what (Aaron) is suggesting here, we need to take a look at the types of surveillance.

So we have disease-specific surveillance. This is really what I have been referring to as program-type surveillance. We're looking at the inference that's made possible to population. Inference is made possible by the data that we collect.

We're defining sub-populations in order to target those for specific surveillance efforts in a way that doesn't spread the costs over the entire population, but rather looks at where the risks are and samples that sub-population more specifically.

Like with BSE and the notion that we wouldn't sample these downer cows or cows that have died on the farm. And that it's not always a random sample. And we're doing this with the notion of compartmentalization zoning and regionalization which is all risk-based.

So that when we have a disease detection and it involves just a part of one state, you've heard John Clifford talk about VS in 2015. And we're not going to lower the state's status for the entire state if we have enough information to be able to say that the disease risk is localized in just one part of that state.

So it's extremely crucial, critical really that we have access to the data from within the state to be able to make those statements and to put forward that notion. And not have states losing status as a result of a small focal outbreak for instance.

The other type of disease surveillance is non-specific. Some people refer to this as syndromic surveillance. This is surveillance with high sensitivity and low specificity where we're looking for anomalies in animal health.

And this is the one where the National Veterinary Accreditation Program and our veterinary medical officers in the field are so critical. One of the surveillance working group pilots that wasn't mentioned before that I think you need to know about is the site, the website that's been set up for our veterinary medical officers in the field to share information about what their seeing in the markets.

What they're seeing on farm when they do on-farm inspections. They're able to do that in a very elegant way on this website that's been set up. We hope that in providing that to our veterinary medical officers as employees of APHIS that we can iron out the bugs. And make that available to accredited veterinarians in the field as well.

And that that may serve as a way of disease reporting where the actual data that comes to us through that system can be analyzed. And we can look at morbidity and mortality rates in the field and do epidemiologic investigations to further determine, you know, what's causing that in a way of disease.

Michael Doerrer: That's an Intranet side right?

Larry Granger: Intranet site right now.

Michael Doerrer: Not Internet.

Larry Granger: Yes. Did I say Internet? Yes, okay, yes, no, it's Intranet. It's not public yet. It's for us within APHIS. That's right (Michael), thank you.

So this is the slide that shows all of the program diseases and the puzzle pieces that really don't fit together as fragmented. It doesn't allow for statements about our national animal health status in general.

While it's essential that we do this type of surveillance so that we can make statements about these diseases to our trading partners and for our program purposes, what we're really trying to build is something more like this.

And this pictation of how (Aaron) sees the temple of surveillance as he calls it. Has a round, has a red circle around sampling streams. Key critical element for this to work.

We have to have a collection of samples at the markets on farm and in various other critical places that are ongoing. All of the passive reporting, the traceability, the (null) laboratories, the standardized data systems, you've talked about all those things, serve as a foundation for this system.

And then we see the emerging diseases, the swine, the ruminant, the poultry disease, aqua culture by species, the program diseases that you're familiar with stacked up there.

Where we really want to get to though is this top part where it's early detection of FADs and identifying the new emerging diseases. Monitoring and controlling those that we know already to be endemic.

Providing information to people so that they can take action with what they know. And enhancing program disease surveillance. And that's the key element right there, the surveillance information for action. Because without knowing what we're going to do with that information, it's really a lost investment.

This is another pictograph that talks about the way that we collect this data. The disease program slaughter plants and (null) labs on the left side of this slide are pretty sophisticated already.

We get lots of data from those sources. The livestock markets, the accredited veterinarians on the farm. The interstate movement, those CVIs that you talked about, the interstate veterinary certificates of veterinary inspection, we don't gather that information the way we could to be able to derive useful data from it and do analysis.

All of that should be brought into an IT bucket for analysis, interpretation and reporting. And what we would envision is that little guy off on the right there, that's Dr. Clifford saying, you know, we've got a problem here folks.

Turn on the faucet. Let's be testing for this disease so that we can have information about it to make good policy decisions or to provide you with information that you can use to make decisions on the farm.

So this is an approved livestock markets map. This is some work that was done at NSU that shows the distribution of where the markets are where we can gather that information from.

It's important that we have the front line of surveillance present here. There's no way that we have enough people, federal employees, to put them in all of these markets.

We rely on accredited veterinarians to do much of this work. And we don't have any way right now of capturing the information from them when they see something out of the ordinary. Unless they do a brucellosis test and find a positive, generally we don't receive any reports from them at all.

These are the FSIS inspected slaughter plants. The number of heads slaughtered is reflected in the size of the dot. You can see that it's very focal. We actually are doing some modeling work that shows the catchment areas for these various slaughter plants and various species so we know what areas of the country we can test.

Geographically, when we start to look at animals that go into those slaughter plants, and we've begun to do some analysis of the data that is collected in FSIS slaughter plants and in terms of carcass condemnations and condemnation rates and the reasons for condemnation.

And it's interesting the work that we've done so far. One of the studies that we'd done showed us that we could have predicted the (syphilis) outbreak that was recognized probably six to eight weeks sooner than it was if we had been actively examining that data real time.

This was all done in retrospect. And we saw the trend emerging before the disease became evident to everybody by other means. These are the National Animal Health Laboratory Network labs.

You've seen this picture. You've seen the diseases that they monitor for down the side there. Just today I got a request from the European Union. They want to know about enzootic bovine leukosis in the US.

They consider our industry here to be uncontrolled compared to their industry in the European Union where they have a disease program for bovine leukosis.

And they want to compare the rates, the morbidity mortality rates, the carcass loss, the production loss estimates in this country where the disease is uncontrolled in their view with what they're seeing as a result of their program in the European Union.

We don't have that data. We don't collect that data. We can't provide that to them other than individual studies. But we can't do it on a national scale. And so we're going to have to go out and reach out and seek out that information.

Where it does exist and where we can provide some information back to them. But that's an example of what types of things we might be able to do more completely if we had national animal health surveillance in place.

This is the enhanced passive surveillance system, the slaughter plant. I've talked about these things. I think I'll skip through these. (Aaron) tries to make a point again with this cost benefit formula that what we'd like to be is in a situation where we can have rapid detection in real time so that we can respond to these.

And I think Jose Diez is here. And I think he's going to talk to you after I'm done about the whole notion of rapid response and what will trigger that sort of thing from a surveillance perspective.

Give you some idea of the work that they've been doing with us for compartmentalization when we talk about things like the cure egg supply document, which is basically a continuity of business operations document based on risks.

In terms of the creative thinking that we're in right now, by the way, two days ago - three days now - on the 18th President Obama signed an executive order that talks about how he expects us in the regulatory realm to work to be not just cost justifying our regulatory initiatives but rather - or I'm sorry, not just demonstrating that the cost effect but cost justifying the regulatory programs where we are actively measuring impacts, economic impacts and impacts to society when we put forth a regulatory initiative.

This is something that I challenged our (NOMS) unit to retool to be able to do about a year ago in terms of evaluation of our program priorities. So when we have a disease program that is impacting a particular industry, what are those impacts?

And I think that the best way for us to determine them is to ask you, those of you that are engaged in industry. So the (NOMS) unit is retooling their survey tool and this is another reason why we need (Sipsy) protection so that we can go out and ask the right questions and be able to analyze the responses in a way that we can measure and evaluate our programs in the future, our disease control programs.

It's not going to be accessible for us to just say that the program was successful because we tested 40,000 cattle for instance. That's an output measure. What he's intent on getting, I think with this executive order getting at, is what's the outcome, what's the impact, not just what's the output.

And so we're talking about cooperation and participation from all of the industries from all the states, the tribes. We need to protect the confidentiality and share that data in a way that's appropriate. We need information management systems to do that. We need national coordination. That's what

we hope to be able to provide. That's what I think the role of the central government should be, providing that national coordination.

We need to be able to use that information, analyze it, and verify that things are the way we say they are to our trading partners. Another area of development for us is this whole notion of epidemiologic investigations for those diseases that are emerging, those diseases whose trends are bothersome, known endemic disease, for instance.

And this last acronym is something that I wanted to bring up and make you aware of, this (TAO) tool. It started out as the tool for assessment of intervention options. And we've renamed it now for the technique of assessment of intervention options.

This is a way that we have at the Centers for Epidemiology of Animal Health of looking at a particular disease, looking at the biology around that disease, the ecology, the intervention options that we have available, whether it's movement controls or vaccine use, the diagnostics that we have available to us in terms of that sensitivity and specificity of testing at the laboratories, whether or not we can collect the appropriate samples or they're already collected as part of our sample streams, measure that cost for whatever intervention option that we're entertaining and then put that relative to the other intervention options in a way that helps us determine future direction for programs.

I think that's incredibly important if we go back to the simplistic model that I talked about earlier and I call it simplistic only because I'm oversimplifying when I say that what has been the impetus for our agency in the past, the developed programs, has been the line item that comes our way to support that.

If we don't have those line items coming forward to us anymore we have to have a different way, a different methodology of prioritizing the priorities as (Greg Parham) said earlier. And this is one way that we can help to do that if we have more knowledge from our surveillance systems to be able to do that and then some notion of what the costs are and what the benefit, the outcome, the impacts are.

I think then we can measure not just what the appropriateness of the intervention option might be in the beginning of developing that program, but how we can evaluate it in the future.

And so that is the National Animal Health surveillance system's overview that I have for you from Dr. (Scott), the things that I've added in. If there're any questions I can answer, discussion that we might have, I'm looking forward to that.

Facilitator: Two questions there, and I think Dr. Clifford may have answered this a couple times, alluded to over - during the week, but the platform for a data warehouse, data capture of surveillance including the comprehensive and anonymous finds surveillance for influenza.

Is that what he's been talking about that somewhere in the next couple weeks we'll be able to know more - okay, so that's answered. The other question I have is about your national animal health monitoring surveys. In the past, I understand that there were sometimes constraints among the states that were - had field forces that were supposed to be conducting surveys and collecting data whether they were able to fully fulfill their - the needs for (NOMS) to do surveys and collect data.

Is that an ongoing constraint? And how are we handling getting the best most robust data for (NOMS) because as industry the pork industry has felt that

those studies are invaluable. And we want to make sure that they're really well supported.

Dr. Granger: Well one way that we're looking at those and dealing with those resource restraints, which is really what they are. You know, the number of VMOs that we have in the field has gone down just like the number of veterinarians doing food animal practice has declined, is to involve the private sector more in structuring the surveys in a way that they can provide information without the involvement, the direct involvement of a veterinarian medical officer on farm.

So this most recent survey that we're doing now to characterize the heifer rearing operations, as an example, does not involve any- doesn't have any direct involvement in that survey from the veterinarian medical officer in the field as an APHIS employee.

And we're asking for that information to come to us from a variety of sources. There's still some active expansion in some states, you know, in the land grand universities. We're looking at those. We're looking at the state veterinarian's office.

We're looking at the dairy associations themselves, at the AVMs, the local VMAs, the state VMAs. And as we collect that information we're trying to standardize the survey in a way that it doesn't matter who answers type of thing.

You know, the thing with that though is that the longstanding relationship that we've had as the (NOMS) unit with NASS also was structured in a way that we had NASS protection and confidentiality of that data.

And we use NASS enumerators in the field to a cooperative agreement to identify those participants for us in a confidential way. So here again, we run

up against that confidentiality concern and it underscores I think the need for us to become a statistical agency at least in that unit so that we can do these types of surveys and continue to provide you with the best information about your industry.

Committee: I (kind of) maybe think - again, I was very interested to hear about your Intranet with VMO's experiment and you did mention, you know, with the hopes of rolling it out, I'd be very interested in maybe that'll be something (Michael) could provide for me, some more information about that if it's available and what you just mentioned about the number of VMOs that are out actually on the farm. What is your timeframe to move it out because a lot of states - and we may not have the personnel long either - but the state personnel are the ones that are on the farms.

Dr. Granger: Right now that's just being piloted and internal to USDA APHIS. We don't have a timeframe I don't think to launch that at this point. And I'm not sure how much in the way of development beyond what it looks like on our Intranet site would be necessary to do that in terms of the security around the ITT.

Committee: Sure.

Dr. Granger: And there's also a concern any time you ask for information from the public that the Paperwork Reduction Act, you know, requirements are met. We have some question about whether that applies when we talk about accredited veterinarians particularly those that are doing work for us on a fee for service type structure which is something else that we'll need to develop in the future or that we've talked about developing for the future.

And those kinds of things are out there a little further then any sort of immediate return you're going to see.

Committee: But I still would be especially interested in seeing just even the screenshot of what the choices are, how they, you know, is this drop down menu categories of what you ask them to report. I don't see any reason we can't do that.

Dr. Granger: I think there's a little bit of information on that pilot in the (unintelligible) material that we sent around, probably just a blurb.

Committee: Okay.

Dr. Granger: I think it's (unintelligible) more.

Committee: I didn't catch it.

Dr. Granger: Yes. Yes, there're a lot of things (unintelligible) but yes, we can get (some more).

It really is an elegant system and I'm very proud of the work that this group has done and I think you'd find it interesting.

Committee: Larry, you know, I want to address this confidentiality issue. I'm probably telling you something you already know but the best example is with H1N1. In a lot of cases I think the industry is willing to be open about it if we know what the consequences are.

And I do- and I think if we could educate the industry, each one of our industries, as to what the consequences would be, it would be - we'd have a lot better cooperation from producers.

The example I'll give is the guy in Canada that had the first case of H1N1. As soon as everybody knew he got quarantined, everybody hunkered down.

Nobody sent samples in because nobody wanted to be the first case because we didn't know what was going to happen.

Dr. Granger: Yes, and besides that, he didn't get to sell pigs anymore, did he?

Committee: Exactly. He went out - he - yes, he - the depopulated.

Dr. Granger: Yes. So we know sometimes what the consequences are. I think that what you're asking really is, you know, what are we going to do to mitigate some of those severe dire circumstances that would emerge as a result of knowing these things.

And there is definitely as much a need for that from an individual producer and an industry perspective in dealing with animal disease as there is a need for that sort of confidentiality when we're talking about commodity trading on the stock exchange Securities and Exchange Commission.

I mean - and I really believe that that's going to be a make or break issue for us. Can we go out and collect samples for a disease that has those kinds of implications from a marketing perspective, from a profitability perspective, from a viability perspective and provide useful information back, not just to the public health sector but to the industry itself in a way that it makes a difference with the bigger issue of public health and animal health and does not put an individual producer at risk at - and under risk that they can't control, that they don't have control over?

And I think that that too is a role for a regulatory agency, a federal regulatory agency. And I personally believe that we need to seek that authority to be able to do that so that we can do these types of things.

And I use this as an example when it comes to SIV. If we could do disease SIV surveillance in a way that we could identify with some granularity where we're seeing a particular strain of virus, whether that's at the farm level, the county level or the state level, and we could make statements about the virus circulating in given areas or regions, then we could make recommendations about which vaccines would be most useful in those areas.

And we all know that if you use the wrong (insulins) of vaccine in a swine herd you can exacerbate the clinical (sign). So it's more important then ever that we use the correct one and that we make that vaccine commercially available.

Well we can't make it commercially available if we don't have the isolets and we don't know where it is. And those are the kinds of value that we can extract from a surveillance program that currently we can't do because of issues around confidentiality. So I believe you're on the right track.

Committee: Dr. Granger, is your authority for surveillance just within the United States or do you have international...

Dr. Granger: That's an interesting question that you ask because there is the OIE, the world organization for animal health that talks an awful lot to surveillance as concept and serves as one of the three (sector) advisory groups to the World Trade Organization.

Now, the other two are the Kodak (Salamentarius) and the Plant Protection Commission - PPC. I can't think what the C is.

Committee: (Convention) - the PPC.

Dr. Granger: Yes. What's the C?

Committee: Convention.

Dr. Granger: Okay. And the IPPC and the Kodak (Salamentarius) are both members of the United Nations. The OIE is not. They set standards for surveillance. They have the terrestrial code. They advise the World Trade Organization. And we participate with them in setting those international standards so that the chapter on Animal Health Surveillance that's the IOE chapter, we had a major role in drafting that, bringing it forward for countries to adopt.

And there is some measure of consistency that results from the international activity. Now as far as us conducting surveillance in other countries, we help them, we train epidemiologists, we have a twinning agreement, for example, right now under OIE where the Center for Animal Health and Epidemiology in China, the China Center for Animal Health and Epidemiology is someone that we work directly with on issues around animal disease surveillance and risk analysis.

That's an internationally recognized relationship funded by OIE and there are any number of other types of those relationships around the world where our epidemiologists actually go to those countries, examine the methods that they're using, make advisements. But I don't know of any examples where we actually go out and conduct surveillance in those countries. We use those country authorities to do that.

Committee: And we don't have - we do not have regulatory authority to go to another country.

Dr. Granger: Yes.

Committee: Larry, I have a question. This is an example of surveillance that's done in our state to maintain our (unintelligible) status of classified and all of our slaughter samples now go to Kentucky. And we're told that statistically we only need to test 30 samples out of Maine.

Some people think all we have is lobsters in Maine but we do have some swine and cattle. And I just found out this fall that we had our first diagnosis of (PRS) and it may have been here before but this is the first time that we found out about it.

So as part of that stream that goes to Kentucky I'm told there were about 100 and - around 200 samples that went there and since we only needed 30 they only tested 30 and they threw the rest away.

So I'm okay with that somewhat. But if there was a way that we could utilize those samples better to look for other diseases, maybe a panel of diseases, and I realize that, you know, that opens up Pandora's box too, but the program diseases we're looking for are great (through) the rabies swine (versalosis).

But what about (PRS)? What about influenza? And for a state animal health official to know what's - kind of what's going on in our state it would give me a lot better information. It would also give my industry more information about some of these diseases.

And that's just a very small example. Another is we used to test 300 cows a year, I believe, out of our state for blue tongue. And we stopped doing that. Well, this winter I got a goat that was tested for - that's in a diagnostic facility that was testing, came up positive serologically in a couple of different tests for blue tongue, was negative on PCR.

But I'm wondering whether with the warming, you know, climate change, whether we have the vector now and whether we should still - whether we should start looking for blue tongue again in our state and then try to figure out whether we have the vector.

But - so these are examples of we get all these cattle samples and we test them for (versalosis) but beyond that we don't do anything with them. And you mentioned bovine (lucosis).

Dr. Granger: Yes.

Committee: And so - I don't want to get too far off field...

Dr. Granger: I think those are perfect examples of ways we can look at it differently. And the fact of the matter is if we have the surveillance screen, we have the samples arriving at the lab, we have most of the cost covered already.

So if at some point it's just the cost of the test and the data collection is automated and then we need to do some sort of analysis or provide data, shared data in a way that you can do the analysis, we need to have those arrangements in place.

I think that's the key element of what the National Animal Health Surveillance System describes here.

Committee: So are you - do you have plans to do that, to ramp that up or?

Dr. Granger: Yes. No, that's what I tried to describe here. That's the National Animal Health Surveillance System. Now the question always is going to be that budget question in terms of where the investment comes from, what's the

return, can we justify it? And those are the other things that enter into those decisions about what's the priority within the priority?

Committee: So would you be looking, where do you go to get your guidance on priorities? Would you be looking for this committee?

Dr. Granger: Absolutely.

Committee: (Give) you priorities on...

Dr. Granger: Yes. We go everywhere. And we do our own evaluation as well with using the tool for assessment of intervention option that I mentioned. And that sort of formula that the national surveillance itself uses in terms of a calculation of relative cost for some surveillance efforts.

Committee: (Don), to help answer your question, the national pork board just convened...

Dr. Granger: There you go.

Committee: ...of veterinarians and producers and Dr. (Scott) and Dr. Granger were invited. This was in December. And we have a list of I think it was about 35 diseases, Larry, something like that, [and] spent the day going through all those diseases and then ranking those diseases. And that information now is going back to the pork boards of swine health committee for approval or adoption. And then that will go to the NSU.

And we expect them to test for all 35 of course, you know, so - but what we were trying to give the feedback. These are the ones that we feel are the most important and realizing that, you know, they don't have the money to do everything.

And an example of where we could've really used some surveillance is SIV. H1N1 was not in the swine population. That disease costs us hundreds of millions of dollars in lost sales. Had we had that information, we could've very quickly said, "This is not a swine disease." Even though Katie Couric, you know, might keep saying swine diseases - or swine influenza, we would've had more credibility had we had that information. That's just an example from a dollar and cents standpoint.

Dr. Granger: Yes. And much of the discussion at that meeting was around the dependency that the swine industry has to be able to export.

Committee: Exactly.

Dr. Granger: And so to maintain those export markets is of top priority right now for the swine industry or another industry like I heard the other day the discussion around cattle I think. It might be something (else).

Committee: Just to give you an idea of the thought process. There's (pseudo rabies) which had been eradicated in the United States in our domestic swine population but still is present in our feral swine population occasionally spills over and we can identify that quickly.

That actually ranked fairly high but it ranked that way because of what Larry's just talking about, international trade, because if we came up with - if our - if (pseudo rabies) got back into the domestic population we'd have certain trading partners that would use that against us as it sounds like the Russians may want to do with bovine (lucosis).

Committee: Whose responsibility is it, I guess within the government to come - give guidance when there needs to be a development of a vaccine, an effective vaccine, for a particular disease? Who - what area gives guidance on this? Is

that (VS) or - I mean, does the animal health surveillance system - you're looking at emerging diseases and diseases that are of economic value and, you know, economic problems.

Would you then give guidance to industry? Or who - I mean, at what point do you give guidance on the development of the vaccine? Or do you not?

Dr. Granger: Well, I'll answer it this way. There is a part of our VS family that is the Center for Veterinary Biologics and they are the ones that license vaccines for use in animals.

There is another part of our USDA family that isn't APHIS, that's the Agriculture Research Service that does research funded to develop vaccines. There's the notion of who's going to manufacture the vaccines and license them that from proof of concept through those development phases until there's a commercially available product requires private party investment.

And so once we identify that there's an issue, if a private company sees that they may be able to develop a market and ARS, for instance, or someone else has developed a vaccine that demonstrates proof of concept, then they may choose to invest in bringing that vaccine through the developmental phases, licensing it through CVB and making it commercially available.

That's not a government function unless it's a vaccine like the foot and mouth disease vaccine for which there is no domestic market and no company would invest. Then it's a matter of national security in which case then we, as government, make that investment happen.

Committee: We could, though, give recommendations to the industry to encourage development that maybe even assist in some way through like we did with the

H1N1. We provided - our Centers for Veterinary Biologics provided the master (seed) to the companies to speed up the process for vaccine production.

Committee: Right, right.

Dr. Granger: We have to offer it to all. We can't go out there and just offer it to one segment.

Committee: That's a good point.

Dr. Granger: So we can certainly advocate and support those things as much as possible as long as we're doing it fairly and in a business practice standpoint and encourage the industry to also develop this, especially if we see a new emerging issue.

So in Europe you saw the blue tongue virus 8 and, you know, vaccine production was a part of their strategy for (address advantage); same thing here in the U.S.

Committee: And that's where we need to give kudos to Veterinary Services because by giving, by providing that seed virus to the companies, we had a vaccine in our hands in record time and, John, what was it - four or six months which is...

Committee: We knocked four to six months off of our entire project.

Dr. Granger: Yes, and normally to develop a vaccine from seed to going through all the development, the approvals, the regulatory stuff, would take more like years rather then months.

So there was very good cooperation between VS and the industry. In this case the first one that came out was with Pfizer animal health.

Committee: But, (Howard), you were - is it okay - you were in a situation with major commodities, major species where the market supported developing that vaccine whereas you and I as sheep producers, it isn't going to happen.

Now - but that is something we should ask for. I personally feel like we should put pressure on the (USDA) Veterinary Services. We have a sister program and the FDA - sorry. I'm here to represent the sheep industry. We have a sister program in the FDA...

...that supports the development of antimicrobials and the like for minor species of which sheep and goats - sheep are and goats are not, but that's a separate issue.

And in the sheep world, for instance, we've been losing vaccines rather then gaining and it's certainly as important or even more important then new antimicrobials are better vaccines for our smaller industries.

So would that be the Center of Veterinary Biologics we would go to and ask for a sister program through the minor species FDA program?

Dr. Granger: Well, we can certainly consider that but the fact is we're going to have to have the private sector or (LC) industries to pay for that. It's not something - we can't - unless it's a program disease we're not going to pay for the development - full development of the vaccine.

We could help in some way to providing like the seeds for the vaccine and things like that. But we're not going to, you know, okay so this is a sheep industry. We need three vaccines. We're not going to go (over seed) ourselves and develop all the vaccines and give it to producers. We're not funded to do it.

There were some major regulatory changes that occurred three years ago that CVB regulation was amended to allow for them to provide the seed virus and bacteria. And there is licensing also for (autogenous) vaccine production in the event that your veterinarian would isolate a causative agent and that you'd find that important that - to be able to vaccinate on the farm. They can do that.

That doesn't require, then, the involvement of a major manufacture taking an interest and determining a market, making an investment, licensing a vaccine for commercial use. So there is that avenue as well.

Committee: Could you repeat that part about...?

Dr. Granger: (Autogenous) vaccine?

Committee: Yes, because I didn't hear that.

Dr. Granger: Yes. CVB has a regulation on the books that allows them to license in effect an (autogenous) vaccine for use on the farm, produced in a laboratory specific for a disease that you would determine in your veterinary client relationship on farm as necessary to protect animal health.

Committee: Okay.

Dr. Granger: And, in that regard, CVB does purity, safety, potency and efficacy. And they're looking at purity, safety, potency but the efficacy part of that is up to you.

Committee: Larry, you have licensed facilities. You really don't have a licensed product.

Dr. Granger: That's...

Committee: They don't license the product. Your veterinarian could make a vaccine for you in his own facility.

Dr. Granger: Yes.

Committee: If you have an (autogenous) laboratory which has to be separate from a commercially USDA licensed laboratory, they can make (autogenous) vaccines but they're not licensed. And there are certain regulations as far as where you can use those.

You have to use them in adjacent herds and there's 9CFR documentation of that. The other thing I'd say about the influenza thing, the - and CVB really helped out with influenza, not just for H1N1, but they changed the rules so that a commercial company now can add or sub- subtract and add new strains not exactly like we do in the human field.

But that really expedited the development - or the upgrading of influenza vaccines for livestock, I mean, like for pigs, which is a very commercial...

Dr. Granger: On a commercial scale.

Committee: On a commercial scale, right.

Thanks Larry.

Dr. Granger: Yes.

Coordinator: You have rejoined the conference.

Committee: Is that the administrator...

Michael Doerrer: ...for our national animal health emergency management diagnostics. It's a very long and important title. And he will talk to us about emergency management and preparedness. And you all have some materials in front of you that are courtesy of Dr. Diaz.

Emergency Response and Preparedness

Dr. Jose Diez: Thank you (Michael) and I hope you can hear me okay. Can you? Okay great. Really I'm the associate deputy. I'm proud to work with Dr. Clifford as one of the three associates. And my area of responsibility is emergency management and preparedness.

I also now have oversight of the labs in (unintelligible) and CBB. I know you've had (two) really long days. And I hope we've had some really productive and good discussions and I - I'll try not to bore you. I'll try to go at a relatively good clip. But obviously I know that you have interest in this topic and will be happy to entertain any questions at the end.

Before we get into the presentation, there're a couple other things I wanted to say. One is that I remember when this committee was the secretary's advisory committee for animal and poultry diseases. And it's more now into a broader committee.

And you could look at it in several ways. And I like to look at it from the perspective that it broadens it and therefore it perhaps serves us better in the sense that emergency management is part of the continuum of animal health and if that's the way we're going to be able to tap into the different industries and different perspectives that deal with emergency management, so be it.

I would like to make sure, then, that the committee as they have their deliberations and their meetings and what not, keep in mind the fact that emergency management, emergency preparedness is something that touches all of us and that perhaps we can use you as being an advocate of the needs that emergency management and preparedness has.

I looked around the table and I looked around the room and saw people that I've met before and others that I have seen and - but there're others that I - are totally new to me.

So one of my goals today is to make sure that everybody at least has some basic common knowledge about what the National Center of Animal Health and Emergency Management is and isn't and how it perhaps dovetails with some of the other VS units. And then we can take it from there. Is that okay?

Okay. I have responsibility over like I said the National Center of Veterinary Services Labs and the Center for Veterinary Biologics. And VSL, and you listened to Beth Lautner earlier this week - yesterday I believe. So I'm not going to cover any of her responsibilities.

I will say a little bit about CVB, the Center for Veterinary Biologics, they regulate biologics, vacci- you know, which means vaccines, (vactorins), anti-sera, diagnostic kits and what not. And they - they're tasked by the Virus Serum (Toxing) Act to make sure that the products that are out on the market are safe, pure and efficacious.

I will not say anything more about CVB. So I'm going to focus really this afternoon on the National Center for Animal Health Emergency Management or NCAHEM, which is a mouthful.

NCAHEM has three major units, three major areas where we touch the emergency management community. And before I go forward, Dr. (Mike) - Mark Teachman sitting in the back is head of one of these units - interagency coordination, Dr. Tom Gomez, who've heard before, is also on my staff. He's (embedded) at CDC, Dr. Randall Levings, who's sitting back here works as a scientific advisor to our group. Did I miss anybody else from my shop here? No? Okay.

We at NCAHEM focus on improving preparedness and response. We're big on developing plans. We work on building relationships with interagency groups and international groups that work in the emergency management community.

Most of our staff is located in Riverdale, (unintelligible) and (NBS), (pick), develops and distributes emergency response guidelines for response - for effectively responding to - for animal diseases and provides goals, objectives, strategies and procedures when we have incidents.

I will elude later on to (facta) which is a suite of documents that had been developed by the (pick) group and that kind of lays out the processes that we use in an outbreak, in an incident, and the SOPs for affecting that.

Interagency Coordination Group, the IAC group, that's headed by Dr. Teachman, we participate in interagency and international working groups and assignments to identify resources that we can bring to the table to capitalize on as we develop our strategies.

I - one of the biggest people we interact with or agencies we interact with, departments we interact with, is the Department of Homeland Security. And we're very actively involved with them in disease modeling analysis and

looking at things like ways of depopulation and decontamination and carcass disposal.

One more. The (unintelligible) (stockpile) - and I'll talk a little bit more about each one of these as we go along - was mandated by one of the presidential directors. I believe it was number nine some years back. And (the task) was responding to an animal health emergency within 24 hours. Within the re- within 24 hours of a request by state or a federal animal health office, we are opposed to - poised to provide supply, PPE - personal protective equipment - vaccines and antiviral that will arrive at warehouses near the outbreak site.

A typical shipment from the National Veterinarian Stockpile will include about six semi-trucks of stuff that the states need to respond to an incident.

Okay, a little bit more about (PIC). The planning and incident coordination staff has made a lot of - produced a lot of documents, a lot of guidelines, processes, SOPs that are housed under the collection known as (fat graph). And many of you I know are familiar with that suite of documents.

And if you - those of you that are not I'll tell you how to be fa- become familiar with them. We've issued - and there's - I'm sure you will get copies of presentations but actually you have this in your blue folders, the kinds of documents that the planning - preparedness and incidence coordination group has produced.

One of the things that we were challenged with in the last few years was there was a lot of institutional knowledge about emergency management and emergency response but there was a - what was perceived as a lack of actual documentation of how we were going to conduct business.

So they've really focused on trying to produce those documents and push them out to the states to ensure that we document what is it that we expect the - a response to look like or go and that we have a mechanism whereby we get feedback from those users so that we can modify our documents as we go along.

So in 2010, they've issued SOPs, guidelines, response plans, industry manuals, et cetera, et cetera, et cetera. There are eight more that will be coming down the pike in 2011.

And one of the big things this past year for the PIC people was the collaboration we had with the (X sector) working group which included industry, academia, (unintelligible), animal health groups and - that worked together to produce what's known as a secure egg supply which provides the tools for continuity of business during a high (path) AI outbreak.

The real force behind this was to - the AI people were the first ones to come to the table as saying, you know, sometimes when we have an outbreak of a poultry disease, the measures that you take are even worse then the disease itself because it precludes us from doing our business and we want to work with you in trying to get something that we can - some agreements we have in place ahead of time so we can start moving product - in this case - eggs as soon as we can in the face of an outbreak, realizing the first 24 or 48 hours are going to be critical and probably nothing's going to move, but that we want to have those mechanisms in place where we can, in fact, recognize products that can be moved under certain conditions that we have had risk assessments done ahead of time and those templates agreed upon.

The good thing about the egg sector working group is that the - first of all the people got along and they were able to work together very well and that we've been able to use that as a template to further other industries or other

commodity groups and bring them to the table to use this template as a way of developing their own.

I'm talking about the milk people, the dairy industry. We have a secure milk supply plan that is at the workgroup on risk assessment stage and they've been very engaged, these people have, in getting this off of the ground.

I'm not going to give you a lot more in- background on the continuity of business planning other then to mention that the working group is comprised of United Egg Producers, United Egg Association, University of Minnesota Center for Animal Health and Food Safety, Iowa State Center for Food Security and Public Health, the animal health officials from Iowa and Minnesota and APHIS Centers for Epidemiology and Animal Health of which Dr. Granger is the lead and of course, my shop.

One of the key documents that is very - with which many of the state and federal animal health officials are familiar with is Veterinary Services Memorandum 580.4. This is the memorandum that outlines the procedures for investigating a suspected (flu) animal or emerging ce- emerging disease.

It was revised in 2008. It took forever because everybody wanted to have their say, and rightfully so. If we're going to use this as the way we're going to address a - for animal disease investigation and how we're going to contact people and communicate with each other, it was - it took a long time to get off the ground.

Having said that, the product is pretty good although complex and convoluted. And you can see why. If you're going to spell out how you're going to conduct (for) animal disease investigation and how you're going to take actions after you conduct the investigation, in a document that (apprise) not

only to a small premises in Maine or a large premises in California, a dairy industry, or a feed lot or a slaughter house.

All of those angles and all of those considerations are in the documents. So you've got to be quite voluminous. And people are saying to us, if we try to use them in an exercise, it really gets really unwieldy. So one of the things that we've done, we've developed a sheet that has us up- it's on the board. It doesn't read very well on the board.

But once again, it's on the (fact) Web site. You can go. You can access it. You can download it. You can print it. It's in beautiful color. It has phone numbers. It has the 800 number that we use for - to report emergencies and whatever. So it's a really good reference guide for - especially for state animal health officials and federal animal health officials.

We developed that flow chart. All the (NOM) laboratories have it. And all that state animal health officials have it. And if you don't have it I'll make sure you get it if you want it.

The (fact Web) documents, that suite of stuff that I showed before, the secure egg supply plan, the VS memo 580.4, the flow chart - they're all available and you have this in your packet of information, a the (fat prep) - dot - mmi.org. That - you can access all of those, all of those plans, and it tells you how to even respond to concerns that you may have about the documents you read and you can also provide us with your input on - to further iterations of any of those plans.

Another thing I wanted to talk about is the - that is under the PIC responsible - area of responsibility - is the National Animal Health Emergency and Response Corp or NAHERC. This was formed in 2001 to provide an

emergency reserve of vet professionals that would be available to be tapped into to assist state and federal responders during animal health emergency.

NAHERC volunteers become federalized in the phase of - when activated and we have an outbreak. To be part of NAHERC, people apply through USA jobs so they - their credentials get checked and get blessed by the - our Minneapolis people.

At this point we have about 500 veterinarians and about 700 animal health technicians that have - they have expressed an interest of being available to be tapped into in the face of an emergency as needed.

One of the things - one of the challenges that we have that we're working on doing better at is the fact that we don't want people to just sign up for NAHERC and then forget about it and then when we have an outbreak they haven't - have no clue about ICS is or whatever.

So there is a - we collaborate with IO state develop Web based training courses for NAHERC volunteers and in the newsletter and we have somebody that's actually breathing down people's backs to make sure that they take this training and go on the newsletter.

It has to be better. We have to have more participation but at least we have the tool now to ask people to back every once in a while and refresh your knowledge about emergency management and emergency preparedness.

On interagency coordination don't worry about what's written in there because it's a very busy slide. We just wanted you to have an idea of the number of relationships and people and entities that we touch.

I talked about the headquarters staff. We also - I also wanted - acknowledge people we have - the person we have at CDC. We also have four people embedded at Ft. Detrick at the National Center for Military Intelligence, the old - it's a new name for the old facility at Ft. Detrick.

This group, you know, it's our (intel) branch and also coordinates interaction with other agencies inside and outside the federal government. They work, like I mentioned before, very closely with the Department of Homeland Security for the modeling efforts and are also very actively involved with DHS on the carcass disposal tools.

So if you - you know, when you go - look at your materials you might want to see some of the - you'll notice the people out - and the organizations we do business with.

We - you will recognize this from when you were president of USHA - one of the challenges - and I'll be totally honest about this - that we had one VHS became into existence was the turf issue with the VHS. Who's in charge? If we have an outbreak, you know, is it VHS, is it APHIS, who's really calling the shots?

And we've been able to work out an interagency agreement, so to speak. Not (assignment), jus the agreement, with all (players) at VHS, specifically the Office of Health Affairs, so that we are clear on who's in charge on what.

And when you go back and you can see it now though - the top row shows for each tier who's the predominate executor, whether it's local, whether it's the state, tribal or federal, and then it just increases in the complexity of the incident.

But the bottom line is the basic concept, all incidents are state and local incidents initially. And depending on how involved or complicated it gets, then we offer the support and we're there shoulder to shoulder with the state and the local people to be able to offer the support and facilitate getting the resources that you need.

I think that, for example, if you work to have an intentional introduction of - for animals - for animal disease. Let's just say foot and mouth disease because that's - puts in people minds these days, for animal disease like foot and mouth disease, in four (corners) of the U.S, that's clearly an intentional introduction.

I think people like - entities like the FBI and others would, in fact, step in on the criminal in the investigation but we still in APHIS will maintain the technical lead in making sure that those incidents and those diseases are addressed adequately from the standpoint of the disease itself, the veterinary piece and the follow up actions that would needed.

Case in point, I don't know if you've read in the news. It was some time back, there were some ducks that were dying here in the reflecting pond. FBI was all over the place. But they, in fact, came to us to try to get a diagnosis of what those ducks died from.

But initially - and I think we've done a good job on that one, many of the law enforcement agencies think terrorism, you know, they see a terrorist in every - behind every garbage can, which is okay. That's what they do for a living. But they can't forget that there're other reasons why things happen. So that just gives you - lays out the complexity of the little tiers and who's doing what, who's doing what when.

Our international partners are also a big part of what we do. We are part of the quads working group. The quads include - I know I'm going to screw this up - but includes - what - New Zealand, Australia, Canada and the U.S. We have a working group on emergency management that is ongoing and they review existing emergency management and arrangements, plans and approaches.

And they sit at the table and talk about things that have worked for them and that have not worked for them. We encourage a common quad approach to emergency management so that at least those four countries are doing things similarly.

We work cooperatively again with other groups with those - with similar objectives such as the International Animal Health Emergency Reserve which is also a way of being able to look at additional numbers of people should we need them here.

There are four standing working groups within the quad. One is the (epi) team working group, the training working group, the 3D working group for disposal (decon) and the zoning and compartmentalization working group.

The emergency management working group has a number of projects that we are involved with. And I'm just going to mention that one of them is for - sharing of training resources and the (de pop) (decon) thing that I mentioned earlier.

I'm going to skip through some of this stuff. In the (epi) team, though, I just want to mention that we, again, heavy on the modeling piece because everybody's interested in what's going to ha- you know, if we have these variables plugged in, what's going to happen.

And there's not a good set of data in any one country that helps us make decisions or help us make decisions yet. We will get there at some point. And Mark, I know that you may have something to add here, especially when we have the Q&A because Dr. Teachman has a particular passion around the modeling piece, so.

What did I do? Okay. I'm going to skip some of the modeling stuff. I'd like to talk to you a little about text exercises. We use - there're a lot of exercises that go on throughout the country. Some of them are sponsored by state, some of them are sponsored by VHS.

The National Veterinary Stockpile has conducted many exercises throughout the country to make sure that people that are requesting the materials that the National Veterinarian Stockpile pushes out know how to - what the volume is and the fact that they have to be stored and, you know, how do you handle the documentation that goes with using them, et cetera, et cetera, et cetera.

But in addition to that, there's - we've been holding at the DC and (Riverdale) level, a series of foot and mouth disease exercises. To - we use this information to feed the spread models and to help us build better scenarios for text exercises at the state level.

In the last six months we've done a couple of tabletops. One - and one of the things that I've learned is that, you know, every - the states have their own plans in place and we - in the (VHS) level have plans in place too, but if you don't exercise those, when the time comes for people to actively be (mobilized), you can't take for granted that they're ready.

So the two things that we've done this past six months, we had a (MAFIS) emergency road guide exercise where we tested the (true) mobilization of APHIS employees if we were to have a foot and mouth disease outbreak.

The second one that was actually in this room was with the FBI about an accidental introduction of FMD and a concurrent (agro) terrorism incident involving (red spot blotch) in soybeans.

A third tabletop exercise is scheduled for next Tuesday actually, is going to explore the federal to federal support in using the national response framework.

One other thing that I would like to mention is that it may - you'd be surprised at how quickly players change, not only in the states but also here within the beltway. And you think you've done your evangelization and then you realize that there's a whole new set of players that have never even heard of ICS and that they hold pretty important positions.

And I won't name names but some of our leaders in many of our departments, you look at them and you say ICS and they look at you like you don't know what - they don't know what you're talking about. So we continue to evangelize in that respect.

Let's see. I'd like to touch on emergency - the 3D tools, emergency - other manage- emergency management tools that we have online. We developed a set of tools in our Web site that includes carcass disposal decision (three) and several online training modules for composting, burial treatment, transport offsite burial and cleaning and disinfection.

We had some inquiries this past week from I think it was - was it Japan? Or somebody wanted to see, you know, how do we disinfect or in- when you have really cold weather. You know, that - those are some of the challenges that we face.

And I know that in Maine part of the exercise was on disposal of carcasses when you have those challenges - those weather challenges. Again, the Web site address is in your materials so if you can go - you're welcome to go in and look at those tools that we use for carcass disposal and that decision (tree) that identifies the sites where we can bury animals in a particular state.

We've - can never get enough ways of disposing of cattle and - or other species. And from a standpoint of what new research, what new techniques are out there that can be brought to the table should we need it.

And, you know, you see fire urns for cattle and you go, like, oh my gosh, you know, what is this about? And it's not about going out, you know, on a shooting rampage. But if there are legitimate uses for using firearms in an event that we need to depopulate incredibly large numbers of animals in a feed (bot) or not.

We are exploring CO2 technology for depopulation of swine just like we've done with turkeys and broilers. And we continue to look at other technologies, additional technologies for larger species of poultry.

In the disposal area we're also looking at several things. For example, composting and its effectiveness in activating pathogens, the - there's another ongoing study on evaluating the spread of pathogens during rendering. The other - another one that we're looking into is if there's significant risk of pathogen spread and the rendering plants - the contamination's (puricals) need to be developed to make sure that we can return those facilities to feed production after processing the infectious material.

And a lot of these things may be in place around the country. We just want to make sure that we're looking at them. We can't lose site of the cost, so we

analyze the cause and benefit of our response strategies to minimize risks in outbreaks.

Another one - technology we're looking at is the use of transportable (gasifiers) that we can take on a premises and use CO2 for some of the smaller species.

We have some other research projects ongoing with APHIS participation, for example, we're looking - we're working with EPA on a couple of things, for example, disinfectant efficacy and cleaning technologies. And the cold weather decon SOP with Canada - it was not Canada that asked the question this week, although I can't remember where it was.

Quickly on the National Veterinary Stockpile - I mentioned that within 24 hours of a request via state of federal animal health official, we deploy to the site.

The NVS has also been used in all hazard responses. For e- there's not really a small - for animal disease or even a disease event. In some of the IO (threats) in 2008 in Gustav and (Ike), also in 2008 we were asked to help facilitating with disposal of these carcasses and we used some of our contractors to help the - in the incident, in the disposal of those carcasses.

Another thing that we have and that we've used, we've tested and we've used successfully is we have a contract, a standing contract, where we can move high priority samples to (unintelligible) island relatively quickly. We've done Iowa samples to (cattle) in less then four hours a couple of times.

So one of the concerns the state has is you have to diagnose quickly in order to be able to respond quickly. And I'm not saying that we always have to have a (consumatory) test and in VSL especially now that we're very comfortable

with a long network, but really when it's of the essence that we get a confirmation within VSL, we are capable of moving the samples very, very quickly.

And, you know, they stay up all night running these samples. NVS annually exercises with states testing, ordering, receiving, storing, distribution and return of stockpile materials. And during 2011, you are correct. It will be working with a Navajo nation doing an exercise in this - I think it's this summer or fall.

Those are some of the things we do. I know that you have foot and mouth disease on your mind so if you want to, you know, start there that's fine. But anything of the things I mentioned is fair game. Sir.

Committee: Dr. Diaz. Jose, please. I'm curious what our current plan is. I noticed it's on the Web site and if that would have the information I need just...

Dr. Diez: Sure.

Committee: Don't waste your time piddling with this. But our plan to deal with an outbreak, do we have a set plan? Are we going to vaccinate to live, vaccinate to die?

Dr. Diaz: Right. That's a really...

Committee: (Anything else)?

Dr. Diez: You know because you've been with us for a while, that our former paradigm has always been we are going to depopulate, period, end of story. We can't do that anymore. The numbers of animals that we're dealing with, the pressures -

the social pressures that we're dealing with and quite frankly, will - the practicality of it all is just - it's just not possible.

The numbers of animals we have in California, for example, it just can't do it. So vaccine is a tool that needs to be in our toolbox and that can be used to address the development of a foot and mouth disease incident.

I see vaccine as - and, of course, vaccine is not a panacea because you know that we don't have vaccines sitting on a shelf. It takes - first of all because of the different types of FMD virus - we're talking FMD here - you need to first of all know what virus is it that you're going to vaccinate for.

And then you have to develop that vaccine and that's going to take a while. So in the meantime we're going to be killing a lot of cattle while we get that vaccine prepped and ready to go.

So if used in conjunction with depopulation, and one of the dialogues we have started with industries is repercussions of vaccinations. You know that several countries have used vaccination successfully with (Y) being one of them.

To live with vaccination, not live with the disease but live with the vaccination, that conversation has just started and I know (Elizabeth) has been involved with us and some of the swine people too. You know, do we - are we ready to make that jump? And if not, what are the repercussions of not vaccinating?

So - but in answer to your question, yes, we would use - let me just say I would recommend to the chief veterinary officer that we use vaccinations because it is his decision. And I'm pretty sure that at this point given what's going on with foot and mouth disease, we will give the vaccine. Is that a fair answer? Sir, do you agree? Disagree?

Committee: No, I agree.

Thank you very much.

I would assume that that depends on where the outbreak would occur.

Dr. Diez: Absolutely.

Committee: (In) a low density are you'd...

Dr. Diez: Absolutely.

Committee: I participated in a exercise and the question that we had that we couldn't get answered was how long does it take to take you to respond? And I'm going to give you a little scenario here. In Iowa we have some fairly large (soft) farms, in North Carolina, large (soft) farms, all through the Midwest.

If we identified foot and mouth in one of those farms, we get a ring around it, we have about two days before we have to move pigs or kill pigs. We don't have the capacity to kill that many pigs, you know, wean pigs because a lot of these farms are fairer to wean. We don't have the capacity to humanely euthanize that many pigs. So is there a way that you could respond within a couple of days in a situation like that? Or are we left up to our own ingenious ways of euthanizing that many pigs?

Dr. Jose Diaz: And when you mean by responding, (boat) on the ground, people that we can send to assist. Is that what you're talking about?

Man: The problem - yes, because the problem is, you know, you wean every day.

Dr. Jose Diaz: Right.

Committee: And you've got - the - that sow goes out, another sow comes in and has a litter so you've got to do something. You can't - I mean, we can't stop movement and not kill pigs.

Dr. Diez: Correct.

Committee: It almost has to happen within; I'm going to say two days, and...

Dr. Diez: Right. We can mobilize (youth and) management teams relatively quickly, within 24 to 48 hours. But you're talking about two days. That's really a tight one.

We can mobilize - we have contractors for the NVS that can help with euthanasia and disposal. We've trained those people. I think that part of the challenge is going to be that people are going to want to move animals before we're ready - if we have a diagnosis of foot and mouth disease, I don't think we're going to be moving animals anywhere, period.

Committee: No. Understand.

Dr. Diez: So what we need to do is be able to provide the resources for euthanasia and disposal to occur on site or anywhere that we can identify to - but in response to your question, yes we have - I mean, whether we're ever going to have enough to do everything, but we have teams and we have contractors that are trained to conduct euthanasia and disposal.

Committee: And see we're not...

Dr. Diez: If you're talking about two million pigs that's a different story but...

Committee: But we're not. In this case, you know, we're not talking about euthanizing sows or finishing pigs right away. We're talking about a 12 pound pig, you know, and less. I mean, you would probably start euthanizing newborns, you know.

Dr. Diez: Correct.

Committee: So you're not talking about a massive amount of burial or burning or whatever.

Dr. Diez: So in Iowa we would work with the state animal health official and with the AVIC, Dr. (Petersburg) will activate our risk and management teams and we would have a total mobility declaration for APHIS personnel. We'll be tapping into NAHERC and depending on what the incident commander determines in conjunction with the local people, what the needs are, we would supply those relatively quickly. I mean, a lot of things could go wrong. I agree.

Committee: I understand.

Dr. Diez: But that's the plan.

Committee: (Unintelligible).

Committee: A couple of question relating to FMD while we're on the topic. First is, you know, the question of initial detection and what steps we're doing to try to do outreach to producers.

I can tell you, for instance, in my area I cannot find a sheep veterinarian. None of the vets will handle sheep. End of story. They aren't coming to my place.

And I think there's - you know, we have that problem across the country where producers are going to be the first line of detection. You know, what - and again, this may be outlined in the preparedness plans but, you know, it would be good to know what steps are being done to help the producers be prepared for this so we can - the faster we can diagnose that, the better.

Dr. Diez: Well, one thing - a couple of things are going on. Number one in the new (unintelligible) program, we've added a module on emergency preparedness and making sure the people are aware of what they need to do if they suspect the (four) animal disease and who to contact, et cetera.

So we don't - I don't think we're doing a lot with outreach directly to the producers and it's something we need to do more of.

Committee: We rely a lot upon the industries - again, the industry organizations (themselves) and extension and others to do some of that outreach for us. We also have things available on the Web site. But it's also at the local level...

Dr. Diez: Right.

Committee: ...that folks should be working with the state animal health officials to try to reach out.

Dr. Diez: So in answer to your specific question, we - I don't - I'm not aware that we have a sheep producer's outreach plan now. That's something that - it's something that we need to do. Well, one thing that we do have that I have realized and it speaks to the issue I mentioned before about the turnover in people, we are working with legislative and public affairs to have our little show go on the road and hit the major meetings, the regional USAH meetings, the veterinary meetings so that we can - I use the word evangelize. I'm sorry I

don’t mean to offend anybody - to evangelize about what it is that we do and where to reach us and talk about our plans and this, that and the other.

Committee: And I think you may some - there may be some unusual challenges in reaching some of the smaller scale and diversified producers because they don’t tend to be - at the outreach...

Dr. Diez: At those meetings, correct.

Committee: ...that’s being (done) to the industry organizations that are, for instance, the - so, I mean, like our sheep industry, a lot of our smaller scale or diversified producers aren’t going to be (members).

Dr. Diez: Go - I go back to one of the things I said at the beginning. It would be great as you guys brainstorm - and ladies - brainstorm that we - you give us those ideas that we can use to reach those places we’re not reaching right now.

Committee: The other question is, you know, on the questions of depopulation, if - and again, this may be in the chart. You know, this may be in (pink). Where is the input or where are the opportunities for input on how that decision is made? You know, where can either this group, as a committee, or the public or, you know, where are the openings for people to have a say in this idea of how do we decide? Do we vaccinate? Do we depopulate? Which path do we take?

Dr. Diez: Well I think the decision to depopulate or not is going to be made at the local level with the people that are on the ground looking at what’s going on. And it’s going to depend pretty much on - and I think the gentleman over here - somebody over at this end of the table mentioned it - if you can pretty much squelch the disease because if you’re talking about in the unlikely event that it’s a small herd, that it’s a single foot and mouth and disease, you know, we’ve got to go that route first.

And that decision will be made locally. I think we would probably have a very vigorous surveillance in perhaps ring vaccination if needed or not. But when you're talking about - there're a couple of things you can do.

One, we want that input into the plan itself. It talks about the strategies for the vaccination. And if there's anything that needs to be considered that's not there, one. And number two, again, like Dr. Clifford mentioned, at the local level, the local state animal health official, we still have the sense of what the local industries want to do.

And you should be not shy about saying, you know, this - you need to consider this piece if you haven't. So is that fair?

Dr. Clifford: Let me too just add something and as Jose's laid it out pretty well with regards to vaccine, but I want everybody to be clear with regards to our goals. Our goal is to era- if we have an introduction of foot and mouth disease, it's to eradicate it.

Dr. Diez: Absolutely.

Dr. Clifford: It's not to let it stay here and live with it. We wanted to eradicate it. So if we have, though, a massive introduction, multi state, what we're going to have to do is practice vaccination for containment.

Dr. Diez: Correct.

Dr. Clifford: To slow the progression of the disease and then down the road, we'll make a decision as to whether we let vaccinated animals who will be identified, by the way, permanently identified, and make a determination as to whether or not those animals will continue to live or whether we take them out.

And that will depend - all of this is going to be economies of scale. If you have a very small local outbreak we're going to come in to eradicate. The states are going to make that decision because if they don't make that decision, you're not going to move any animals out of that state or any other place in the country.

So initially when we have foot and mouth disease in this country, what can you expect? The entire country will be shut off (unintelligible) automatic, immediately.

Once we can prove we can contain and contain the disease and we can show that it's in a small one or two state area and we have it totally contained, then we can begin - and we will begin that work as soon as possible to reopen markets and regionalize the country and be able to show proof (that for) our surveillance activities (no work) but the rest of the country remains free.

And then our work will be to work in that local - those local areas to contain and slowly move back the borders to free them again and reopen those parts of the country. So that's kind of what you can expect to see.

Dr. Diez: You know, right before this meeting I was on a conference call with some of the animal health officials from some of the Western states that had some questions about vaccination and I - you know, one of the challenges I have and we have as veterinarians or animal health people is that we assume a lot of things and I don't think I laid it out very well the fact that if you have - if people think of vaccine that's to protect me from acquiring the disease, in this particular case that's not what it's - we're talking about.

If you have an infected animal, you're going to put those animals down. We're just using the vaccine to prevent the spread of the disease not to say,

"Okay, now I'm in (unintelligible) for foot and mouth disease. I'm okay. I'm scott free.

And that's something that some people that are in the ag business are not animal health people do not kind of understand and I - we saw that from the kinds of questions we were getting on the call that we were on before.

Again, the tool is to prevent the spread of the disease not to immunize a particular animal so that it can live. So, this lady has had her hand up a couple of times and I don't want her to feel ignored.

Committee: (Judith) kind of took care of my question but I would like to see maybe a recommendation I'm hoping coming out of this group for an emergency preparedness plan more on the individual farm or community level. Not just with industry officials, you know, like you were talking about.

I would like to see, in particular, I'm thinking foot and mouth disease that we, as individual farmers in our communities, have it in our mind just like, you know, to call 911 or what we do if we catch on fire or how do we handle a tornado drill, you know, because there are going to be issues if there is a parameter put around there.

How - you know, can I put my animals in barns? Can I isolate them? Is there a way that I can protect my animals to try to keep them from getting this disease? And meanwhile, how do I get feed into my animals? You know, where - how are these feed trucks going to get in? Are my animals going to starve? Those are the animal welfare issues that we all as farmers need to be prepared for.

Dr. Diez: Right. Right. I - could I ask you two things? And I know that there are challenges, though, when we get asked to produce all those documents.

They're really a pain to go through because there're areas that don't apply to your particular industry.

But I'm going to ask you when you have some time to go on the (FAD) Web site and see what we have there. And there's actually a 2008 version of the red book for foot and mouth disease that kind of addresses a lot of those things. And there's a new version that's been circulated to the animal health officials. And I have one copy here that I can have some- let somebody have.

But version, the 2010 November red book for foot and mouth disease - and we're looking for your input. Those kinds of things are the ones that we want to hear. So I mean, if there's a piece that - if one of the things that I'm hearing you is, this is too focused on the large industries and we need to have an appendix or a section that deals with the small producers.

That's a valid thing that we probably should incorporate, kind of like the outreach that you were talking about. Sir.

Committee: (Unintelligible).

Dr. Diez: And perhaps the bigger risk too. Yes.

Committee: (Unintelligible).

Dr. Diez: Because they have less (band) security perhaps then the larger industries. You're right.

Committee: (Unintelligible) especially if they're older then the original farmers. We serve them both.

Dr. Diez: Right.

Committee: They don’t anything (about computers) and they don’t want to know anything.

Dr. Diez: I hear you.

Committee: Dr. Diaz, I was looking at this brochure here, the National Veterinary Stockpile Exercise and in it is a list of the 17 most dangerous diseases. And I don’t recognize all of them. But two of them that I do recognize is (riff) valley fever and (rinder pest). Why are those considered the most dangerous diseases?

Dr. Diez: Sure. I have a good answer for that one. When the - one of the things that the National Veterinary Stockpile steering committee decided when it was created - that was even before my time - was that they wanted to have - are we going to do all diseases known to man or not? And if not, which ones are we going to do?

So they went - the steering committee developed a set of criteria that included ease contamination, (kind of) (make) impact, whether it’s (zonosius) and they voted on what - and they rated those votes to see which where the ones that they were to focus on.

And they came up with this list of 17 disease that, if you look at the global distribution of these diseases, I have - that was one of the criteria - that - they came up with that list of 17.

Ever since that list of 17 came up, and there has been a lot of controversy. For example, BSE is in there. A lot of people did not think that BSE should be in there and what not.

There're some diseases that are not that important anymore. So one of the things that - the stockpile committee met three weeks ago and they were charged with taking a look at this list again to see if should we hold that as the ideal to address all these 17 diseases or given the climate - the budget climate that we're facing these days, should we focus on half a dozen, five or ten, as opposed to 17?

(And) the specific answer to your question, a set of criteria were developed with people evaluated diseases known in the veterinary community and gave them a ranking and those - that's the way it came out.

Well, I might be wrong but I understand that the - the second disease to have been eliminated in the world after (mouth paws) is (vinter pass).

Dr. Diez: That was just very recent though and way after the - that list was developed, now that would be an easy one. We're down to 16.

Committee: And take a look at (riff) valley fever because it requires a very special environmental condition.

Dr. Diez: Yes. And risk assessing is very sensitive too right now because there're so many - there are areas in the world where it's a big deal and we actually have some federal list of projects ongoing. But yes, your point is well taken and I have a new NVS director and I told to Mr. (White) in Europe a meeting weren't you - it's time to look at this list again because I don't think it's realistic anymore. So, your point is very well taken.

Committee: Yes, but it wasn't totally realistic in the beginning.

((Crosstalk))

Dr. Diez: The fact is though, (many) variety - you know, variety of people, they bring (unintelligible).

Committee: I think the important part of the National Veterinary Stockpile is being able to operate and have goods and things - a touch of things you would need in an outbreak setting there within 24 hours of the outbreak. And that's really what the stockpile does.

As far as vaccines, it does with some degree of those things, but it has a lot of the components needed in any type of outbreak situation.

Committee: So if we have some of these diseases, like right now we're getting a lot of phone calls about (achirony) virus, lambs, around the country. So what are we doing to look into that?

Dr. Diez: We're not looking at (achirony) virus actively. I think that if the industry or a particular individual has - is raising that as a concern, we - I would like to know about it to see what we can do. It's funny because I never thought that (achirony) was an issue in this country. I remember from vet school, it's one of those trivial things that you for- you don't forget no matter what because it was on the test.

But I never actually thought that (achirony) virus would come here. So if it is an issue with the industry, I think it's something we need to take a look at. Some - I was listening to find out what Dr. Granger was talking about with surveillance and there's so much that we don't have the resources to reach all of those things, so (achirony) virus I can - surprised. Sir. Yes sir.

(Don Hoenig): First of all I'd like to thank you for your past efforts to put some real - put your money where your mouth is and some regional efforts that we've taken in our area in New England to have some exercises. And this year we're doing

out own secure (multiply) plan as you know and we really appreciated that and a couple of years ago you supported a past exercise in our area.

And it's been extremely meaningful and helpful and it helped us advance our emergency response plan. Can you comment on - I notice you have an exercise listed for June but can you comment on, like, is there a national strategy similar to what you did five or six years ago with the (tripartied) plan? And where do you stand with that?

Dr. Diez: Yes. The (prior) - and this man is asking about exercises and I appreciate that. One of the things done is that exercises are really expensive if you're going to do them right. You just pluck a couple of people out and say, hey, you know, just develop a scenario and do this.

So we are planning on a national level exercise for the summer on FMD but quite frankly we do not have the resources to have an ideal comprehensive national series of exercises that we can reach everybody.

I think VHS has a boatload of money that it's making available to the states and we kind of (invite) ourselves to the exercises and hopefully take into - they take into consideration - the states, as they're planning, take into consideration our input. But we do not have the resources to be able to do the kind of stuff that I think is idea.

NVS is an exception because their funding is pretty much (in touch) although we've been even dialing into that lately. But the National Veterinarian Stockpile exercises, we've been able to preserve a little bit.

There is a tool and I can't talk as perhaps (Mark) or others can, (promexis) that kind of tracks all the exercises that are ongoing throughout the U.S. but

it's really dependent on the state actually putting in the information to share with the rest of the country.

I go back to my initial comments. Exercises, vaccines for FMD, are some of the things that are high cost and as you look at what is needed, it would be something that we could all benefit from. But right now we just don't have enough money to do the kind of stuff that I think would be worthwhile to do as opposed to just have a little bit here, a little there, a little bit there.

(Don Hoenig): Well just as a follow up to that, you know, I couldn't just let that go.

Dr. Diez: Sure.

Committee: If VHS has the resources...

Dr. Diez: Right.

Committee: ...are you discussing with them how you might partner with them to carry out a series of exercises and is that possible or feasible?

Dr. Diez: We do. We do actually, (Don), we do that. And that's - you know, (unintelligible) on tables here. Some states welcome our participation better then others. And they don't have to use us especially if the monies go directly from VHS to the state.

Yes, we do talk to VHS a lot about this. But we don't bring to the table the same amount of resources that they do. So it's in the goodness of their heart really if they want to include us or not. And it's something we could do a lot better.

So I think it's something that we need your help perhaps with as a committee.

(Howard Hill): We can provide that. Thanks Jose. Are there any other last questions for Jose? I really appreciate you...

Dr. Diez: You know, I keep looking - you look just like my uncle. It's just pretty eerie. You really do. It's like oh my God.

((Crosstalk))

Dr. Diez: ...like who was it? William Schatner.

Dr. Diez: Oh.

Committee: I'm going to get a complex. You know, I'd like to follow up on...

Committee: Is that before or after...

(Howard Hill): I just want his money, okay?

Dr. Diez: I (love) his (glasses).

Facilitator: He said (it's going to be) the smaller, better looking, smarter version.

(Howard Hill): I'd like to follow up on (Janelle)'s question and (Judy)'s question where you're talking about - and I think you were talking about communication but also size of operations.

And I've spent some time in some European countries where they had foot and mouth and where they had to depopulate circles. And when you get to that point, if you have a circle where it doesn't matter what the size of the herd (is), it's going to get depopulated - large herd or small herd.

And one of the things that we can't get hung up on is small versus large because if we do, I mean, our recommendations will look really weird. So I think when you talked about the difference between - just to clarify - the difference between slash and burn versus vaccinate and live with, to die or live with whatever, you know, you're talking about the density in an area.

So, you know, if you had an outbreak - I'm going to use (Don)'s state in pigs, you probably wouldn't spend much time vaccinating. If you had it in North Carolina, you'd probably have to vaccinate (in terms) of the spread.

Dr. Diez: Good point. I think you're absolutely correct. We do not perhaps do as a good of a job as we need to do that. I think it would be very atypical for a foot and mouth disease outbreak to be non-supporting and very discreet in one - you know, in one very small area. That's just me. But you're right.

Committee: And it's like - I just have one comment. I mean, I recognize that the policy of vaccination versus depopulation will not be, gee, we depopulate the big guys. We don't depopulate the small guys and, you know, et cetera, et cetera.

On the other hand, I do think this committee needs to grapple with the very real differences on the impact of things such as depopulation on large versus small operations and, you know, recommendations on how that decision gets made and some of the unique characteristics that go on in small operations, for instance, have been (line) breeding, that have heritage breeds, that have - represent genetic diversity in the system.

You know, I'm - I recognize the pol- ultimately the policy will be a policy but in how that decision gets made I think there are very relevant differences that we're going to have to look at.

(Howard Hill): Well, we have history on our side here because we've had countries that have had foot and mouth in the recent history. And when you form a circle it doesn't matter whether it's a breeding stock herd or a heritage or anything else. That herd's going to go because it's a risk to the rest of the whole industry, you know.

Committee: (Howard), I understand that. I think what I'm saying is in making the decision about whether to draw a circle and depopulate and then doing the cost benefit analysis and the advantages and disadvantages of depopulation versus vaccination, it's not just an issue in terms of numbers of animals.

It is an issue of who are we going to be affecting, what is the impact on them? And the impact on small farms, and particularly that those are working on, you know, diverse or rare breeds is something that is not simply the sales barn value of that animal.

Committee: (Unintelligible).

Committee: Right. Let's do what I did yesterday and check in with the folks that are here with the public. Is there anyone here from the public that would like to make comments? No? No one? Okay. Okay. (Or) (Mark)...

Facilitator: You wanted (Mark) to talk about something earlier. You mentioned that one system or the one...

Committee: Are you talking to me?

Committee: Yes. What were you talking about?

Committee: John's (hand is up).

Facilitator: Oh okay. Go ahead John.

Dr. Clifford: I - you want to go ahead before I do?

Committee: I was just kind of commenting here. We can draw all the circles we want to but we can't contain the wildlife. That's our big weakness.

Dr. Clifford: Are you talking about wildlife in general?

Committee: He's talking about...

Committee: Carrying disease.

Committee: Carrying disease - deer and swine. And that's something we would be actively being - doing, is to see if it's in the wildlife population in that area. If it is, you're right. It's going to be tougher to get it out.

Dr. Diez: Part of the challenge is that the role of wildlife in each disease is very different.

Committee: Yes.

Dr. Diez: With foot and mouth disease, for example, you will get people like (Alfonzo Torres) to tell you that it's not really a big deal.

Committee: For deer. For deer. He'll tell you that based upon historical record in epidemiology of the disease. However, while he is very knowledgeable of this disease, far more knowledgeable then I've been -- the states of the deer in this country is far different today then what it used to be.

And I think that's you're point. And I think those things are factors that we're going to have to seriously look at and consider. One of the things that I want this group to not go away with thinking - and I know some of you know this - you can't assume that if we have an FMD outbreak that we're going to have a vaccine because there are some types out there that are, you know, may not be available.

So I just want you all to be aware of that so - plus, if you have a large outbreak, we may not have enough vaccine.

Dr. Diez: And it's not something that's sitting on a shelf waiting to be used. It will take some time to get geared up.

Committee: (Unintelligible) and tying back to the FMD outbreak in Britain in, you know, around 2001, whatever. Anyway, is that for certain groups that are maybe doing heritage breeds or maybe they have specific genetics that they don't want to lose that particular genetics because maybe that genetics carries certain genes or carries a certain ability to thrive under certain conditions that weren't (assessed).

Anyway, there - what I'm saying is that we don't want to see a decimation of those populations like I believe it was (security) cattle breeds, which was almost completely decimated during the outbreak back in Britain.

I know time is in the (plant). There is a bank - a seed bank - over in Russia that - where there were breeds of tomatoes and other plants and stuff that used to be grown in the United States that the only way that they could find these seeds, the Russians had taken them and had saved those seeds over in that seed back.

And so our concern is, you know, there's not going to be enough vaccines, that we recognize there's going to have to be a certain level of depopulation but we need to have a discussion about how to preserve genetics of certain - you know, of those different varieties of breeds in genetic lines so that we can repopulate once we have to deal with all of this. Is that (reasonable)?

Committee: I think that's a reasonable thing, Jose, right, from a standpoint of continuity of operations and as well as preserving genetics. But I think you need to have, as a part of that, you need to have the type of plans that are realistic in a situation like this like having semen in embryos that are stored in locations to allow you to do that because initial outbreak, if you get it into that operation...

Dr. Diez: I think the zoos have addressed that issue too so it may be something that we can perhaps adapt some of the things that the zoos have done for their particular valuable collections.

We've done it with some - in some outbreaks of poultry diseases. The bottom line, though, is if the disease is on that premises, it might be a tough sell.

Committee: And I did want to clarify. I think (Janelle) came at a slightly different angle then I did and I'm not talking about situations act- I really do not have a situation where foot and mouth disease is on that property and that herd. That's a very different scenario.

I'm talking about the cost benefit analysis of the sighting that we're going to start drawing circles and doing depopulations where most likely we're depopulation in those that aren't infected and situations of what does that mean to the rural economies? That's a, you know, a whole range of issues that do differ based on size.

Dr. Clifford: Let me just say, (Judith), though - and I understand the desire for that (not that's) going to be done ahead of time. When you're in - yes, so I mean, yes, so those need to be discussions we have because exactly.

Committee: Yes so.

Dr. Clifford: Because once the outbreak happens...

Committee: You don't have time to figure it out.

Dr. Clifford: We don't have time to do that. If we order destruction of animals, you will get by regulation, 100% fair market value of that animal if we order destruction.

Committee: That's why we need to exercise.

Facilitator: Well I see a lot of folks packing up. I think we've had a very long and productive day. I'm not sure you want or need a wrap up of what you've heard today.

I do think, perhaps, (RJ) might want to just confirm the arrangements you've made for your call on Thursday.

RJ Cabrera: We'll get a sense of everybody's availability. So just stay tuned for some email communications from me.

Facilitator: What I think I heard you say was Thursday next week (we proposed to).

That was a proposal so tentatively pencil it on your calendar and you're going to confirm it through an email.

RJ Cabrera: Yes, I know at least one member that was not available that day, so.

Committee: (How long will it last)?

RJ Cabrera: Maybe on hour or more. Maybe an hour. Give or take. We'll have an agenda. We'll - you know, we'll have it...

Facilitator: (RJ), I have two administrative requests if you could provide this. (Morris Johnson) has asked me for the Web site that folks can contribute comments to the traceability on.

RJ Cabrera: Sure.

Facilitator: Could you please get that to him?

RJ Cabrera: We can send that out.

Woman: And also, there was a list of committee members put in the federal register...

Woman: Yes.

Woman: ...that I've been looking from. And it al- it tells where they're from and their credentials. And it has their email address in it. But everyone on the committee would like to have a full mailing address, phone number and fax number for each other as they start to work together. Could you get that out to everyone?

RJ Cabrera: Yes, we'll - we have plans to do that.

Facilitator: Thank you. All right.

RJ Cabrera: And also you should expect some communication from a travel specialist to give you instructions on how to process your reimbursements.

Michael Doerrer: And hopefully you saved your receipts.

Committee: All of them?

Michael Doerrer: Right.

Committee: Yes.

Facilitator: I did tell (Elizabeth) that she probably didn't need it for her meals.

Michael Doerrer: But if you didn't we don't have to pay - no, not for the meals. You don't need them.

((Crosstalk))

Committee: Okay.

Committee: Do you know when (unintelligible).

Committee: I don't believe you do yet.

Committee: No.

Committee: No, you're second...

Committee: That's something we'll have to discuss.

RJ Cabrera: One of the - you know, one of the things we're going to definitely lay out on the call are possible dates, going out maybe six months. Not the next face-to-face and we'll do that at a later date.

Committee: But (RJ), given the (sense), will it be within this calendar year? Perhaps the end of the year, (next to) school year?

Michael Doerrer: It depends on how much - how many receipts we have and how much we have to pay. How much money [remains in the Committee coffers].

Facilitator: So I would like to thank everyone for coming today.

We ha- we can ask either (RJ) or (Cindy). Do we have a sense of when the transcript...

Woman: (Unintelligible).

Committee: And if I may, I just wanted to thank all of you and taking your time and - for this very important issue. So thank you very much for being here and being a part of this.

Don Hoenig: I echo that too. It's been great to meet everybody here and thanks for being here and for all your input. Look forward to meeting you - with you again and talking with you again. Thanks.

END