UNITED STATES DEPARTMENT OF AGRICULTURE

NATIONAL ADVISORY COMMITTEE

ON MEAT AND POULTRY INSPECTION MEETING

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P R O C E E D I N G S

(9:00 a.m.)

MR. PAYNE: Good morning, everyone. May I have everyone's attention? Welcome again to our second day of our meeting. We'll start promptly now with the reports from each of the subcommittees. According to the agenda we'll stick to the 30 minutes allotted for each of the subcommittee reports from each of the subcommittee chairs. So we will start with Sub-committee 1. A report out from Subcommittee Chair, Dr. Betsy Booren on the evaluation and management of chemical hazards within the National Residue Program.

DR. BOOREN: Good morning. I think Sub-committee 1, we need to thank the staff for their insights yesterday. I know we had a longer discussion than Sub-committee 2, but I think it was very useful. I wanted to share with the full committee our responses and I know you've got paper copy. There has been some slight changes but welcome any questions and insights.

The committee supports the National Residue Program. We think it provides critical surveillance and information regarding the chemical hazards in the meat and poultry supply. The NRP, National Residue Program, should continue to be managed and be provided the necessary resources to achieve its mission. The committee recommends the following to improve the management and effectiveness of the residue program.

The committee recommends that the Food Safety Inspection Service or FSIS develop a strategy to effectively communicate the residue program, its mission, and the data it collects to stakeholders which could include industry, trading partners, laypersons, technical experts, among other stakeholders. And I want to, sort of, step off here and provide what I think is an interesting insight.

We had about a two hour discussion; the Sub- committee 1 did before break and much of the discussion, I think, led to; and this is my analogy, a lack of understanding of really the

scope of the program and I think that's telling, that even within Sub-committee 1 with even with the prior materials, there was a misunderstanding. So we do think it's important to have a better explanation of what this program does and how critical it is to the meat and poultry supply.

DR. CRUPAIN: You say to more effectively communicate?

DR. BOOREN: To more effectively, we can. Further, the committee recommends USDA develop an interagency working group. This interagency working group would include, but are not limited to, other agencies that regulate and collect data regarding chemical hazards, i.e., CVM, AFIS, EPA, CDC, FAS, international partners. The continuum of what is approved for use whether it's antibiotics, drugs, surveillance of heavy metals, go across many different departments and different agencies and we want to make sure there's effective communication on, perhaps, what is emerging and what exists and to have that communication across all departments and agencies

we think is critical to the success and long-term management of this program.

The committee recommends that this working group develop the following; again, a communications strategy that provides the information on the role and responsibilities of each agency and how they interact with each other; an internal process to determine if new chemical hazards exist and should be monitored if new methods should be developed as well as chemical -- as well as if there are chemical hazards that need to be removed when the risk is di minimus from the surveillance program.

The committee recommends, for known chemical hazards, the process should include long-term exposure and should be based on public health risk. Insights from stakeholders should be solicited and reviewed.

Are there any questions with that? We thought that an official process of reviewing and -- across the interagency working group was needed.

DR. MARCY: Just -- John Marcy, University of Arkansas. You might want to say it should be removed from the surveillance program when risk is di minimus.

DR. BOOREN: Do you got that? Should be removed when risk is?

DR. MARCY: No.

DR. BOOREN: And --

DR. MARCY: Should be removed from the program when the --

MR. WILSON: Should be removed from the program?

DR. MARCY: Yeah. Put removed with the --

MR. WILSON: From the program?

DR. MARCY: Removed from the program when the --

DR. BOOREN: Okay. Thank you.

DR. MARCY: Okay.

DR. BOOREN: The committee recommends that FSIS continues to provide stakeholders with quarterly and yearly reports and does so in a

timely fashion. The committee recommends the report should include a more detailed analysis of data including additional information on non-violative residues. The committee recommends the agency determine if additional comparable data exists among state residue programs and when possible include into the NRP analysis.

Any questions there? We had a lengthy discussion on what is happening within each state and the different programs and we wanted to make sure that the population being evaluated -- that we have the most robust data possible. Thank you.

The committee recommends that FSIS evaluate if more data is available or should be collected in small establishments either domestic or international within the residue program as well as in state residue programs. The committee commends FSIS for recent advancements in chemical detection methods. The committee recommends FSIS to continue to provide resources to improve the technologies within the residue program including the appropriate staffing needed to achieve the

mission of the program. The committee encourages FSIS to develop more rapid screening and confirmation methods in order for results to be reported in a timelier manner to the industry.

Questions, concerns.

DR. PAPPAIOANOU: Just to request that where CDC is mentioned in the interagency taskforce that it be CDC/ATSDR.

MR. PAYNE: Just as a reminder for anyone making a comment in the process, please state your name and organization for the record.

DR. PAPPAIOANOU: Hi, yeah. This was Marguerite Pappaioanou from CDC.

DR. RYBOLT: What is that? The ATSDR.

DR. PAPPAIOANOU: It stands for the Agency for Toxic Disease Registry and it collects a lot of information on chemical hazards targeted to superfund sites but, nonetheless, they produced profiles on chemical agents that many agencies use. So they're -- legislatively, they're connected to CDC. So the CDC director is director of CDC and ATSDR, but it's very helpful on this --

on an interagency taskforce recommendation like this that FSIS may want to call on experts in ATSDR to be a part of the taskforce.

DR. RYBOLT: Okay.

DR. BOOREN: Great, thank you.

DR. PAPPAIOANOU: Thank you.

DR. BOOREN: Any other comments, questions, concerns before we move on to the second question?

DR. OEDEKOVEN: Dustin Oedekoven, South Dakota Animal Industry Board and I just have a concern. I'm not sure if this is the place to address this, but it's related to the residue programs. And that is probably more on the FDA side, but it's related to the residue collection and that is we've noticed in our state -- I also work much more closely on the animal health side. I guess I'll describe that just a little bit.

As many of you know, for the past decade or so there's been a movement to improve traceability among the livestock industry and, in fact, we're almost on two years of having a

federal rule for traceability of livestock. The Animal Disease Traceability Rule went into effect in March of 2011. And so in the development of that rule there was a lot of discussion with various sectors of the livestock industry about what classes of livestock would be required to have official identification while they were in movement in interstate commerce and as they were going to slaughter. And one of the classes of livestock that was exempt from having official ID was cattle under 18 months of age that are going direct to slaughter. Okay, and so that -- there was a very long discussion on -- and some of you that were familiar with the NAIS and wasn't popular and now we have ADT which seems to be working. So I give you that little bit of background to say that we have noticed in some cases state counterparts who are working under the FDA agreement to follow up on violative residues are citing plants and producers for not having identification in that class of fat cattle sufficient to trace back for residue concerns.

So if you're following me here, we've got one agency, AFIS Veterinary Services working with state counterparts on traceability for live animals. Another agency, state, and FDA counterparts working to follow up on violative residues and they're saying different things about ID requirements. When we followed up with that; with FDA and our state counterparts on -- you know, they were saying that ID needed to be present in these animals that are slaughtered so that adequate trace back for violative residues could be in place. But they really didn't have regulation to cite that. And the result is it's very confusing to the livestock industry about what ID requirements are in place.

So, again, I know that's a little bit outside of the discussion of the violative residues that we're talking about here, but I think in the vane of communication and perhaps on the first bullet point, when we are communicating the NRP, its mission, the data collects with stakeholders, include industry, trading partners,

and so-forth, you know, if we could include something about the expectations there or perhaps we need to have more dialogue with the industry on what level of identification and trace back is expected in this process.

I'm sorry, that was a very long comment.

DR. BOOREN: No, no, no, no, I'm trying to synthesize -- one -- within our discussions we had a lot of discussion about state programs and of course the federal programs. We tried to be -- we didn't want to be too specific. We wanted to make sure we gave the latitude to the appropriate agencies. We gave them enough information to have the proper guidance for the discussion.

Would you -- to try to capture what you said, which is not only include industry, trading partners, et cetera, but also the relevant state programs or agencies and to also include that within the inter-agent working group? I think what you're trying to get to, Dustin, is we want to make sure that within the state programs and the federal programs there's a proper

communication of how -- what data's being collected and then how it can be utilized across other programs. And that's within, you know, your own state purview, whether it's South Dakota or Michigan or California. Every state operates slightly differently, but that interaction is made possible.

DR. OEKEDOVEN: Yeah, yes. And I think another important part to include is the coordination of the message among different agencies on what is expected for identification because I -- as I understand it, FDA has a -- an expectation. Whether that's in regulation or not, I don't know. But they have an expectation that animals with violative residues can be traced back to the farm of origin. And then if that's not correct, maybe somebody can correct me. But that's my understanding is they have that expectation and I don't think that has been clearly communicated to the livestock industry that that is an expectation within this -- directly related to this NRP program for the NRP.

DR. RYBOLT: Could that be a bullet point maybe under here below the communications strategy possibly?

DR. OEKEDOVEN: Yes, that's a good place to put it. I'm not offering much in the way of solutions.

DR. RYBOLT: Do you want to suggest some language real quick on that? (Laughter)

DR. OEKEDOVEN: Maybe I'll work on that while you guys want to go on.

DR. BOOREN: I think what Dustin -- yeah, and work on language, but something along the lines of ensuring that the NRP results are communicated across all state and federal agencies.

DR. OEKEDOVEN: Yeah, and I think, you know, I'll work on language. I think what I'm getting at is the expectation of the mechanisms of the NRP, you know.

DR. RYBOLT: I'll put a placeholder in here --

DR. OEKEDOVEN: Okay.

DR. RYBOLT: -- and then we'll come back to that.

DR. OEKEDOVEN: Thank you.

DR. BOOREN: Any other comments, questions? Brian?

MR. SAPP: Brian Sapp, White Oak Pastures. On the second bullet point there, I think it was brought up this morning. Not only interagency but intra-agency as well within FSIS, USDA, you know, in the -- instead of across but within -- that's good.

DR. BOOREN: Thank you, Brian. Anything -- any other comments, questions before we move on to the Question 2?

All right, Question 2 two was three parts. The first question was is FSIS allocating the right proportion of samples for the domestic versus the import surveillance program? The committee believes FSIS is sampling appropriately the domestic and international meat and poultry supply in their surveillance program. The committee believes that the volume weight of

process of selecting samples in the domestic surveillance program is appropriate. The committee recognizes the importance of the NRP in maintaining the import and export of meat and poultry products within the United States. The committee encourages FSIS to confirm communication among the NRP staff and the international program staff exist to ensure proper surveillance of the imported meat and poultry supply is ongoing while maintaining the necessary equivalent status with trading partners. The committee recognizes a stratified sampling program may be needed to retain equivalency with trading partners.

Questions, concerns, insights? We had a lot of discussion about the importance of the surveillance program to trade; both import and export and making sure that that trade is still able to be ongoing. Okay.

Brian, do you have a question or is that from --

MR. SAPP: I'm sorry.

DR. BOOREN: Nope, just want to make

sure we're capturing everything.

B. Is FSIS allocating the right proportion of samples across the domestic programs scheduled versus inspected generated -- inspector generated program? The committee believes the sampling allocation among the surveillance program, domestic and international, and the inspector generated is appropriate. The committee recommends FSIS review inspector training and conduct periodic reviews across districts to ensure adequate and consistent implementation of each program; particularly among inspectors for small and very small establishments. The committee recommends this review include sampling frequency and sample results. The committee encourages the FSIS to analyze surveillance data and inspector generated data including determining if correlations exist. And this is to ensure appropriateness of the sampling plan as well as inspector training.

Questions, concerns, clarifications, insights? Okay, seeing none.

C. Is FSIS allocating samples across slaughter classes effectively? The committee believes FSIS is appropriately allocating samples across all slaughter classes effectively for the surveillance program. The committee recommends FSIS ensure the Scheduled Sampling Program as random and the most effective representation of the population it is measuring.

Questions, concerns, clarifications, insights? Okay, Question 3.

Does the committee agree with FSIS's emphasis on known versus unknown chemical hazards? The committee agrees with FSIS's emphasis on known chemical hazards and encourages FSIS to continue to focus on the known hazards. The committee recommends FSIS utilize the interagency working group as described above to provide a process of reviewing the type and level of hazards, identifying new hazards, and reviewing of hazards no longer exist. The committee recommends this review of chemical hazards occur on a periodical -- periodic basis and FSIS provide the opportunity

for stakeholder input. The committee believes this process will provide the needed information on existing and emerging chemical hazards across departments for an overall improved process to ensure public health is maintained.

Questions, concerns, clarifications? Question 4. How should FSIS consider chemical categories equal or ranked relative to each other? The committee recommends FSIS consider chemical hazard categories based on relative risk and be public health based. The committee recognizes the Import Surveillance Program will need to consider that chemical hazards differ among the U.S. and its international trade partners. The committee recommends FSIS may need to allocate additional resources to ensure public health is maintained. The committee recommends that the above-mentioned interagency working group be convened to identify these issues.

Questions, concerns, clarifications?

DR. PAPPAIONAOU: Marguerite Pappaioanou, CDC Liaison to FDA. Although FDA is

not here, we're the -- again, where the interagency group is mentioned, the subcommittee mentions CVM, the Center for Veterinary Medicine, and you may want to consider making that FDA, CVM, and also potentially consider CFSAN, the Center for Food Safety and Applied Nutrition which also has several -- has toxicologist and testing program for FDA regulated foods that offer expertise that, again, might be considered by FSIS when they convene at the interagency group.

DR. BOOREN: Great, thank you. Is the committee comfortable with that recommendation? I see nods around the room. Any descent? Okay.

Dustin, we're, I think, we're back to the language.

DR. OEDEKOVEN: Thank you. I have a suggestion then. On the second bullet point that begins with the committee recommends USDA develop an interagency working group, in the parenthesis that begins i.e., CVM, I would agree with the previous speaker, maybe strike CVM and insert FDA to be more inclusive of all FDA agencies. And

then in front of international partners, insert state and -- so we have state and international partners. And then I think a quick -- the next bullet point that begins the committee recommends the interagency working group under the first sub-bullet point, communication strategy that provides information on the role and responsibilities of each agency comma; this is where I suggest they insert comma; and the expectations of the regulated industries comma including requirements or guidelines for traceability when violative residues are identified. And I think that addresses my concern. Thank you.

DR. BOOREN: Thank you, Dustin. We've added some language. Are there concerns, questions, clarifications that would be raised by the committee? Randy?

DR. PHEBUS: Just really minor. Instead of saying of the -- in Dustin's additional language, instead of saying of, it should be for expectations, I believe.

DR. BOOREN: For.

DR. PHEBUS: For.

DR. BOOREN: Thank you for the clarification. Other from the committee? Other concerns, issues?

DR. CRUPAIN: This is Michael Crupain of Consumer Reports. Can we go back to number four for a second?

DR. HOFFMAN: Could I just -- I think I've just got a spelling error on what we were just dealing with.

DR. BOOREN: Okay.

DR. HOFFMAN: Sandy Hoffman. I think he said require -- including requirements or guidelines rather than requirements for guidelines. Is that correct?

DR. OEDEKOVEN: That's correct. Thank you for catching that.

DR. BOOREN: Thank you. Any -- are we comfortable here and then we'll move down to Question 4?

Okay, so the new bullet and I'll read it

just so we hear it. The committee recommends the interagency working group develop the following; first bullet, language was added. Communication strategy that provides information on the role and responsibility for each agency and the expectations for regulated industries including requirements or guidelines for traceability when violative residues are identified.

Concerns, questions? Okay. Thank you. And then four. Michael you had --

DR. CRUPAIN: I just -- the second and third sentences. I'm not -- maybe we can make them more clear. I'm not sure what we're trying to express there now that I read it again.

DR. BOOREN: If I am recalling our discussion yesterday we wanted to make sure that we understand while there are chemicals that, perhaps, are approved here in the U.S., there are chemicals that are used in other countries and that why we may not have the surveillance or the methods to find them in our own supply because they are not approved, that we may have incoming

levels on those and to ensure that we recognize that there are differences and that we -- if we need to detect them that we have the resources. Now that may not have been communicated effectively in those two sentences, but I think that was, sort of, the general discussion. And as -- and then the third sentence says as a result we may need to allocate other resources to ensure that we're doing the appropriate testing as needed on some of the imports to maintain the equivalency status. We wanted to acknowledge that that may need to occur. It may not, but it may.

DR. CRUPAIN: So should we say the Committee -- something more like the Committee recommends FSIS may need to include additional chemicals that are from -- that are used in other countries but not here to make that more specific? That are --

DR. RYBOLT: What we have is the committee recognizes the import surveillance program -- we'll need to consider that chemical hazards may differ among the U.S. and

international trading partners and then -- and therefore, may need to provide additional resources.

DR. CRUPAIN: I think we might want to call out or consider more specifically that we're concerned that there's chemicals coming in from other countries that we're not even looking for because we -- they're not on our radar. That's what we're getting at here, right?

DR. RYBOLT: Yes.

DR. CRUPAIN: So we might want to be just a little more explicit because I think it's not entirely clear. So, let's see.

MR. SAPP: Brian Sapp, White Oak Pastures. I think it's clear here that we are -- they're considering that chemical hazards are different, you know, and then those resources need to be allocated, you know, when we find them. But you guys -- we spoke yesterday a little bit about it. You know, if we don't propose it there we're really not testing for them. But I think it would be more important to recognize that that risk is

there and then you guys would go on to say, you know, FSIS, the interagency working group, you know, before we talked about, you know, international trade partners. You got to -- if the international trade partners or international folks know that something's going on, then they need to recognize that, you know, and pass that information to FSIS. I don't think we can get more specific then saying we recognize it's there. You know, when you keep that on the radar, you know, and work through the interagency working groups to -- you recognize those risks.

DR. BOOREN: Thank you.

DR. VETTER: Dana Vetter, NAFB. Just a suggestion on the language. Possibly the committee recommends FSIS may need to allocate additional resources to ensure chemical hazards not endemic to the United States or identified in public health is maintained?

DR. RYBOLT: Say that again. Not endemic.

DR. VETTER: Not endemic; that potential

chemical hazards not endemic to the U.S. Is that the correct term or is there another word that might be better than endemic?

DR. RYBOLT: I don't know --

DR. VETTER: I know -- you know where I'm going with that. I'm not sure that that's exact term that you should use, but --

DR. RYBOLT: Would common be a better term?

DR. VETTER: Not approved/common.

DR. BOOREN: Not approved. I think approved would be appropriate.

DR. RYBOLT: Okay. Not approved within the U.S.?

DR. VETTER: Are identified and public health is maintained.

DR. RYBOLT: Are not identified and public health is maintained? Is that what you were --

DR. VETTER: Are identified and public health is maintained or ensured.

DR. RYBOLT: Okay. That's good.

Michael, I think that might get to what you were getting at, too. Thank you, Dr. Vetter.

DR. BOOREN: With that added language, is the Committee comfortable with this? Questions,concerns? Chris?

DR. WALDROP: So, just a question since I wasn't in this committee. On this point, was there a discussion of the Committee or information from FSIS in terms of how the agency would address chemical hazards that are, in other countries, not approved in the U.S. so they're not really looking for them? You know, how do they -- how did they get at that? Did you have the discussion?

DR. BOOREN: We did have that discussion, Chris. And if I jump in -- if I, sort of, tell the story wrong from yesterday. That was part of the question of how they should go about identifying unknown. That was, sort of, how I perceived that. And so, as we had the overall discussion over the whole afternoon, what became evident is that we needed a process. It wasn't just identifying, but would there be a process

that could be created to go through approval, non-approvals, new, unknown, and so-forth. And so, our recommendation was is to create that interagency working group that you would bring in the international people that may understand, perhaps, export requirements, import requirements, and then the appropriate live animal on-farm agencies as well as the residue program staff. And that way you would, sort of, have the whole farm to fork continuum address those issues. And that's why -- where that interagency working group came from. That we figured those people would have the necessary expertise knowing what potentially is being approved coming down the pipeline so new methods could be developed, but also if we have international issues that the appropriate staff are given the opportunity to share that with the regulatory bodies.

Does that answer your question? Did I summarize what we talked about yesterday? Okay.

DR. JOHNSON: Michael, within I think you just missed the within and just put with.

DR. CRUPAIN: The U.S.?

DR. WALDROP: Yes.

DR. JOHNSON: And it's supposed to be within.

DR. BOOREN: Thank you, Alice. I believe, John?

DR. MARCY: John Marcy, University of Arkansas. Slight wording change to ensure hazards from chemicals not approved.

DR. BOOREN: To ensure.

DR. MARCY: So you're not approving the hazards, you're approving the chemical.

DR. BOOREN: From chemicals.

DR. RYBOLT: From chemicals. Is that what you said?

DR. BOOREN: From chemicals. Thank you, John. Other issues, concerns? Hearing none, that is the report from Sub-committee 1 with the recommendations of the full Committee and other input which we thank you for. I don't know what the process is now, but if there are any questions, we're happy to answer them.

MR. PAYNE: Thank you, Dr. Booren. We sort of migrated from the report from the subcommittee into a full committee discussion. So what I'd put forth before the full committee, would the full committee -- would like to continue to discuss this report or are you ready to vote on it as a final? It's up to you. We have flexibility in our program this morning, so if you want to go into the second subcommittee report we can do that and break for our coffee. I see there's coffee out there.

DR. BOOREN: As chairperson of Sub-committee 1, let's go on to the second report. That'll allow people to review and think about what was discussed and if there are any other issues, we can bring it up afterwards.

MR. PAYNE: Mr. Sapp?

MR. SAPP: Brian Sapp, White Oak Pastures. Is there a way to print those back out with all those changes so we can read through, you know, kind of, what we changed and --

MR. PAYNE: Yes.

MR. SAPP: -- take care of everybody to focus on maybe one more time, I think we can change that.

MR. PAYNE: Yes, we can do that.

MR. SAPP: Okay.

MR. PAYNE: Okay. So what we'll do, we'll do that and we'll go into our second subcommittee report and we have Mr. Chris Waldrop as the chair of the second subcommittee on the FSIS and ERS cost calculation model.

DR. WALDROP: All right. This is Chris Waldrop with Consumer Federation. First of all, thanks to ERS for this charge and thanks to the committee members who serve for your deliberations and everything, yesterday. We'll walk through these questions.

So Question 1 is looking at what additional hazards should ERS consider? And the committee's response is the committee believes the current list of 15 pathogens is adequate especially since there may not be sufficient data for other hazards to include them in the model.

The committee suggested that inclusion of staphylococcus aureus would be useful. The committee also said that it would be useful long-term to develop a way to quantify the impact of the unknown pathogens in order to develop a more complete picture of the cost of foodborne illness.

The committee believes that ERS should focus its list on foodborne pathogens; although in the future, should consider incorporating other hazards such as heavy metals, drug residues, and chemical contaminants if sufficient data are available.

ERS should talk with FSIS and other agencies about prioritizing research in these areas as appropriate. ERS should take into consideration antibiotic resistant pathogens especially since those may change the disease cost modeling outcomes. We reference a CDC report on that. And then the committee says that the committee emphasized the importance of more frequent updating of foodborne illness incidence

data provided by CDC. And we've added those quick edits.

Any comments, suggestions, edits from the committee?

DR. CRUPAIN: Michael Crupain from Consumer Reports. I have two comments. In the first sentence, to me, the word adequate implies that you don't need to add staph aureus because 15 is fine? I don't know. I would say the Committee believes the list of 15 pathogens is good or something else. But adequate, to me, implies that you don't need to do anything else.

DR. WALDROP: Okay.

DR. CRUPAIN: The other thing; I don't know you if you guys discussed it. I think it would be -- it probably -- it's not appropriate to do -- right now if they were to redo this analysis, but since they're discussing doing this -- updating this every five years, I think, you know, we've traditionally focused on foodborne illness as food poisoning, but we're learning more and more, especially through advanced genetic

analysis, that foodborne illness isn't just food poisoning. So we have lots of -- some new studies coming out showing that E. coli found on food can -- are the same ones ending up causing urinary tract infections and I think as that data becomes more robust in the next -- between now and the next five years when they do the analysis, that's something that could be included.

DR. JOHNSON: I think that's done.

DR. WALDROP: Yes, so it --

DR. LORENZEN: That's in a later question.

DR. WALDROP: In a later question we're going to get to that because that looks at the long-term health outcomes to some degree and so we did talk about making sure that that's included and continually updated and you're looking at the research to make sure that that's involved. Right.

DR. CRUPAIN: Okay.

DR. WALDROP: So, a word besides adequate? You suggested --

DR. LORENZEN: Good.

DR. WALDROP: -- sufficient, good. Chris?

MS. JENKINS: This is Sherri Jenkins of JBS. I think maybe what we should do is, where we say the committee suggested the inclusion of staph aureus would be useful, maybe we should have it if the data suggests that it's necessary or something of that nature. So I think that the pathogen list is adequate. I think what we are trying to say is that there's a possibility, if the data is out there, to say that that would be the next one to look at. Is that where I remember the discussion from?

DR. LORENZEN: So after useful, say if the data suggests or --

MS. JENKINS: Yeah, I think that's what we were wanting --

DR. WALDROP: As the data's available.

MS. JENKINS: -- to say really is that if we had to pick one, if you will, it's, you know, that might be the one, but we need to also

look at the data that is presented to make sure that that would be the next step, I guess. I don't know how you want to say it, but I think that's where our discussion was, correct?

DR. JOHNSON: Alice Johnson, Butterball. How about if we come back and reword the committee suggested; a data review to determine the inclusion of, if data is appropriate. Something like that.

DR. WALDROP: Does that sound good?

DR. JOHNSON: That we go ahead and get the review done or we recommend --

DR. WALDROP: To determine --

DR. LORENZEN: Is appropriate?

DR. WALDROP: Yeah.

MS. JENKINS: Yes.

DR. WALDROP: And then that would let ERS look at that, find the data, and then determine that they can add it. Does that -- is everyone okay with that? Okay.

Yeah, so I'll reread that. So the Committee believes the current list of 15

pathogens is adequate, especially since there may not be sufficient data for other hazards to include them in the model. The Committee suggested a data review to determine if inclusion of staphylococcus aureus is appropriate et cetera, et cetera. Yeah, everyone's good? Should we move on to number two?

DR. RYBOLT: This is Michael. On the last -- Michael Rybolt. The last point there, it talks about the emphasis on the importance of more frequent updating. It's just, kind of, a statement. Is that because this is for CDC to do versus ERS? Would we want to make some sort of recommendation in there that the agency work with them to do that; to try to update it sooner or something like that?

DR. WALDROP: So --

DR. RYBOLT: I mean, it's a different agency. I got that.

DR. WALDROP: Yeah, I mean that's kind of what we were saying. We figured CDC would read this report and that's why we put it in there, but

the -- ERS has to rely on CDC to do the -- to do that work first.

DR. RYBOLT: Yeah.

DR. WALDROP: So it's, you know -- they're, sort of, waiting on CDC to update those numbers and then they can update their numbers. So we just wanted to, sort of, highlight the fact that more -- if CDC can more frequently update the Scallan numbers, that would be good and beneficial, kind of, all around. If you have suggestions to make that stronger, I think the committee would be fine with it.

DR. RYBOLT: Yeah, I'm not sure you can. I mean I -- this is for -- up to the Secretary of Ag so --

DR. WALDROP: Right.

DR. RYBOLT: -- different.

DR. WALDROP: Okay. Betsy?

DR. BOOREN: I would, on that recommendation, I would put not only incidents but attribution data. That would be my recommendation.

DR. WALDROP: And we touch on attribution later, but I'd be happy to include that here, too. Sound good? Okay.

Number two. For this one, for hazards for which CDC does not have disease incidents estimates, how would you recommend developing estimates of incidents? We say the Committee do not have additional information to this question. And as we were discussing this with Sandy, she said this was really a follow-up question to the first one. So if we had identified some additional pathogens, et cetera, you know, that we couldn't get instimate, excuse me, estimate of incidents for, how'd we go about that? We didn't really come up with that in the first discussion, so we, kind of, just punted this question a little bit.

(Laughs) Betsy, go ahead.

DR. BOOREN: I would just say are we going to have discussion now, like, we sort of, Shanghaied the earlier part of the morning? I think one of the things that might be worthwhile

considering is maybe a recommendation from this committee. If we don't have incidents, I think it's important to give recommendations on either bringing groups together or soliciting research. I think this is being used from an entire agency level from the secretary and there are other research agencies and that may be helpful to have that in writing. I don't know what that would look like, but that could be discussed in a later -- later on in the morning if needed. But, sir, bookmark that as if we don't have the information, we should recommend on how to help them achieve it.

DR. WALDROP: So do we want to talk about that now? Do we want to save that for a later discussion?

MR. PAYNE: I might suggest we get through -- this is Keith Payne here with FSIS. We suggest that we get through the report first. I'm looking at the time and break and then we can have hardcopies of both subcommittee reports for you to look at and then we can go through each one and

digest.

Just as a reminder, again, when you're making comment, please identify yourself with name and organization for the record.

DR. WALDROP: Okay, so we'll mark this one and come back to it. Randy?

DR. PHEBUS: Randy Phebus, Kansas State University. The other points Sandy made on this particular question was that when she put the questions together, she thought there may be epidemiologists amongst our committee and we don't really have epidemiologists, so. She didn't feel like we had the horsepower to really answer that.

DR. WALDROP: Okay, Question 3. This is asking if NACMPI is aware of supporting evidence within the scientific literature on which to base revisions of existing estimates of the percentage of patients who have specific chronic sequelae? And the response is the Committee noted that the literature shows that illnesses from 90 and 57 H7 hextechs are generally less severe than E. coli 157:H7 and we recommended some research papers

that you can see there. And then the Committee also emphasized the importance of including long-term health outcomes as part of chronic sequelae. This gets to the point Michael raised a second ago and then we reference some research papers there. This last research paper for Suri, we're going to bump down to the -- that's more of a chronic sequelae so we're going to bump that one down.

Any questions on those?

DR. CRUPAIN: It's Michael Crupain from Consumer Reports. I wasn't really talking about long-term sequelae, I'm talking about really short-term sequelae. So instead of getting food poisoning and throwing up for a day, you have a urinary tract infection and you have painful urination for two days. So is -- they're different. It's not really a long-term thing like they've identified before, like, Guillain-Barré or kidney disease. It's really acute illness.

DR. WALDROP: And do you have access to some of the -- some of those research papers that

we could add into this and share with ERS?

DR. CRUPAIN: Sure, I can pull them.

DR. WALDROP: Could you get them?

DR. CRUPAIN: I can pull some up -- references up.

DR. WALDROP: Okay, great. Then when we come back we can drop those in as well.

Or we could just say the -- including both long- term and short-term and then we can just drop them into that.

Great. Any other points on that one?

DR. HOFFMAN: This is Sandy Hoffman from ERS. Just -- I'll understand what you're talking about, but I think to make this clearer to others who might be reading it. Why don't -- if you could just break that out because, of course, the short-term health outcomes are what we want to include in the disease modeling and it's great to know about them. Thank you so much. But I think if you include it with long-term sequelae it may just be a little confusing to other readers.

DR. WALDROP: Okay.

DR. LORENZEN: It's like doing math on the board.

DR. WALDROP: Uh-hmm.

DR. HOFFMAN: Pardon me, but what I'm saying is don't call this chronic because it's not. It's part of the -- just as part of the disease modeling. Additional short-term outcomes, perhaps, would be the way to -- I think is what you want to say because we haven't considered -- we weren't, you know, that literature is emerging so we have not included that and it's an important thing to look at to see if we can.

DR. WALDROP: So it's -- Sandy, sorry. Additional short-term. How did you phrase that?

DR. HOFFMAN: Including additional short-term outcomes.

DR. WALDROP: Okay. So just additional there.

DR. HOFFMAN: Yes.

DR. WALDROP: Great. All right, Question 4. For any additional hazards that NACMPI recommends ERS consider, is NACMPI aware of

supporting evidence within the scientific literature that would justify inclusion of chronic outcomes? We didn't -- we, sort of, had the discussion around this particular issue. I don't think we had any specific evidence. We didn't have a discussion about antibiotic resistance and looking at whether or not how practices in animal agriculture may influence some of the disease modeling. And so, for this one we said the committee suggested ERS explore whether the effect of improved practices related to antibiotic use may have an impact on cost estimates if antibiotic resistance decreases are noted. So this is, sort of, looking long-term. If practices end up changing, how does that then impact the disease model and is there an impact at all? So it's just -- it's, sort of, something that we suggest ERS take a look at as time goes on and keep as part of something that they would review and research as they're updating these models.

Questions on that or comments? Okay, and then we -- I think we talk about antibiotic

resistance again in the last question so we'll come back to that.

Question 5. Is NACMPI aware of supporting evidence within the literature that would suggest a change in the type or likelihood of health outcomes associated with pathogens in the current model? I'm not going to read that. So here the Committee noted that whole-genome sequencing is leading to new information that may lead to new treatments and diagnosis which may impact cost estimates and the effect of antibiotic resistant pathogens on health outcomes may impact cost estimates as well. And here, the discussion was with whole- genome sequencing, you know, we're going to, at some point, get new information on that. It may lead to new treatments that may decrease the days that somebody's in the hospital if we have new treatments that arise from that. So it's, again, a notation to ERS to think about this long-term as they're making these updates. You know, are there new treatments that are coming out? Are there new diagnosis that are coming out

that are going to impact these cost estimates?

And then, again, on antibiotic resistant pathogens, those are leading to -- currently leading to longer hospital stays for many patients. So what are the impacts there as people are being exposed to antibiotic resistant pathogens? How does that impact the model in terms of morbidity or mortality? So a note for both of those for something for ERS to consider as they're doing updates on these models.

Any questions or comments on that? Okay. And then, this is our bonus question. We added this and this is how best can ERS communicate information to consumers about its data? So, the Committee recommended the ERS present this data in different ways depending on the audience. The scientific community may prefer to access the raw data, while the general public may need the data presented in context with appropriate explanation. Further, extension specialists may need a mix of the data and explanatory information. Once attribution data

becomes more robust, ERS should consider incorporating animal-class product pathogen information into its cost estimates. And then the Committee noted that breaking out the ERS data by other variables such as ethnicity or income may provide useful information and help target resources that noted that funding such work would require additional resources. That's a little repetitive at the end, but.

So any questions, comments on that -- on those points?

DR. CRUPAIN: It's Michael Crupain from Consumer Reports. I would just say that ERS is really good in many cases of presenting data. They write very good summaries of their research and they could do the same type of thing here. All right, so.

DR. WALDROP: Yeah, exactly. So this was -- we were -- I recommended or talked about how CDC has been presenting its data recently. They've done a really good job of giving -- putting out the hard data, the raw data that folks

can look at and see what the actual numbers are. But then they've also done a very good job of communicating that data and what it actually means to the public and to all the stakeholders.

And so our discussion was around ERS. You could think about who you're trying to communicate to; who are your audiences? And then you may want to do some adjustments. And one of Sandy's points was that they do a good job of, sort of, that last one, the extension specialists where they're mixing the raw data and providing explanatory that there may be other audiences out there especially as this data becomes -- as they're updating it more frequently and this data becomes more recognized that they may want to think about different ways to communicate that and who their audiences are. So, it was, sort of, noted on that as well.

DR. HOFFMAN: Sandy Hoffman, ERS. The other thing I forgot to mention -- that it didn't occur to me to mention yesterday is that we are working with the FSIS Communications Office who I

think has even -- is even more consumer focused and has the information on food handling that can be added to this, so.

DR. WALDROP: Oh, great.

DR. HOFFMAN: They are working on using our data to do communications. So you may see some of that direct communication to consumers coming through the FSIS Communications Office rather than directly through ERS, but we're working with them.

DR. WALDROP: Great. Thanks, Sandy. Does that help? A little context, Michael? Okay.

Any other questions, comments?

DR. BOOREN: Betsy Booren, The Meat Institute. Two quick questions in your discussion. I know I raised a question in the briefing earlier in the morning about Healthy People 2020. Was there any discussion about other data sets or how this could supplement other programs within the federal government? That's the first question. And then the second question was, was there any discussion as they're looking

at different data sets; if we can better understand the risk of illness if it's at-home preparation versus outside of home preparation? And I know those are being tracked in the various agencies, but didn't know if that was part of your discussion yesterday as well.

DR. WALDROP: So no, we didn't discuss either of those. I would say let's put a pin in that and then come back to it and bring that into the full committee and see if want to make any recommendations from there.

Other questions, comments? John?

DR. MARCY: If were doing grammatical -- John Marcy, University of Arkansas. In that last page, the Committee recommended may prefer to access the raw data? It seems like there's and additional word --

DR. WALDROP: Oh, yeah.

DR. MARCY: -- to.

DR. WALDROP: Right.

DR. MARCY: And then in the last sentence, we use the term extension. That's a

proper noun and should be capitalized.

SPEAKER: It was E, extension.

DR. WALDROP: We broke it. Okay.

DR. LORENZEN: Our IT specialist had to turn it.

DR. WALDROP: Other comments or suggestions or questions right now? Great, I'll turn it back over to Keith.

MR. PAYNE: Thank you. So what we will do is break now. There is coffee outside. We'll have the second subcommittee report; the revised draft, a copy for each of you provided during the break. I see that everyone has a copy of the revised draft of the first subcommittee report and then we will resume at 10:15 to continue the discussion on the first subcommittee report from the full committee.

(Recess)

MR. PAYNE: If we can -- let's reconvene the meeting. And just as a reminder, we have a sign-up sheet out front there for the public comment period if you want to make a comment; for

the public that is, you can make -- sign in. And as another reminder, we have -- there's resources out there. Please feel free to take some back with you to give to your colleagues and contacts.

We're going to start. I believe everyone has copies of both the subcommittee reports; the draft reports that is. So we'll start resuming our discussion as a full committee on that first subcommittee report and we're just loading that up here on the laptop in the front. So as we're getting prepared here getting the presentation loaded up; for the report loaded up, and Dr. Booren, if you wanted to lead the committee through the -- again, the subcommittee report.

DR. BOOREN: Okay.

MR. PAYNE: And then if there are any changes, I guess Dr. Rybolt can -- whatever you prefer. You can certainly speak in the microphone at your desk -- at the table there or conduct it from up here.

DR. BOOREN: Got it. I'll go over

there. Okay. Okay, good morning, we're back. Sub-committee 1, I know you have the revised sheet in front of you that we discussed earlier in the morning. George, I know you're ready for a comment or a question.

MR. WILSON: George Wilson, Wilson & Associates. The comment recommendation that I have for the Committee is on question one, bullet two, that -- where we're spelling out FDA, APHIS, EPA, CDC, and the U.S. agencies that are the international partner side, we should probably spell out World Health Organization, FAO, and EPSA as collaborating partners.

DR. BOOREN: So you want to identify FAO or World Health Organization or is it -- I know we had a discussion yesterday and that's why I'm asking for a clarification. There was some indication that individual companies or -- excuse me, individual countries may have input. So I want to make sure we're being reflective of that.

MR. WILSON: All right, with representative countries within FAO would be, you

know, that would be as, you know, a very inclusive group there. And there's an awful lot of data that's generated between FAO and World Health Organization with regards to pathogens as well as hazards and other areas. So I just was thinking about that.

DR. BOOREN: Okay.

MR. WILSON: Perhaps spell them out; identify them.

DR. BOOREN: Okay. I will let staff edit accordingly the proper punctuation and parentheses and so- forth. It's not my level of expertise. Thank you, George.

Other comments, questions, concerns, discussions?

DR. RYBOLT: Betsy.

DR. BOOREN: Who am I missing? Brian, thank you.

MR. SAPP: Brian Sapp, White Oak Pastures. I think it is a little confusing on the first two bullet points here. I think we've got -- the content is correct, you know, as far as

what we're trying to get across, but here's the way I would read this. On the first bullet point, the Committee recommends that FSIS develop a strategy to more effectively communicate the NRP, its mission, and the data it collects to its stakeholders. These should include, but not be limited to, industry personnel, trading partners, laypersons, and technical experts. If that's okay with everyone? You ready? Develop a strategy --

DR. BOOREN: Hold on --

MR. WILSON: Okay. (Laughs) I can't see it, so. I can change this if it's okay. I've got it written down. I can change it when we're done.

DR. BOOREN: If you bring me the written version that may be helpful.

MR. WILSON: I'll do that. So the second bullet point. Here is what I would recommend changes. The Committee recommends USDA develop a working group that includes inter and intra agency personnel and experts. This working group would include, but not be limited to, other agencies that regulate and collect data, and then

adding in what we had to add on there a second ago. Would that be sufficient?

DR. BOOREN: So you're -- the general premise of both of the bullets is good? We're working on wordsmithing here to be more accurate and precise.

MR. WILSON: Yeah, because it looks like what we're trying to do in the second bullet point is make two committees a inter and an intra, but I think it actually needs to be one committee, excuse me, one working group. So the Committee recommends USDA develop a working group that includes inter and intra agency personnel and experts. This working group would include, but not be limited to, the other agencies. And I've got all that written down. So if that's okay with the Committee, I'm good on that.

DR. BOOREN: Good. Yeah.

MR. WILSON: I can do it when -- bring it up.

DR. BOOREN: Might be easier for you to read it and type that. Let us capture this and

then we can get a response. Thank you.

(Pause)

DR. BOOREN: So we're going to work on this. I've been told my instructions. I understand them a little bit clearer. Are there other issues that we need to discuss within this? We'll fine tune this document. It'll be sent back out to the Committee for review.

MR. PAYNE: Yes, this is Keith Payne from FSIS. What we're doing is that this is the full committee deliberation to bring a final vote on the subcommittee report from the full committee. And we'll get this draft as close as it can be. We'll send it back to the -- each of the subcommittee chairs for final review after we put it into final format and we can -- you fine tune. And if there's any spelling errors or grammatical errors we could catch that too from our end. But this is for the full committee deliberation and for the final Committee vote on what you want the draft to look like.

DR. BOOREN: Thank you. I'm going to

let them keep working. Other discussion, comments. I know Sub- committee 1 went in-depth. Yesterday afternoon we went the full time. So for those in Sub-committee 2, any other questions or concerns? Well, hearing none, can we call for a -- it would be appropriate to call for a vote? Okay. Do you guys have any other outside of this?

MR. SAPP: Just grammatical stuff.

DR. BOOREN: All right, we'll continue on that. I would like to call for a vote from the full committee to approve this report. I assume all in favor? Aye?

GROUP: Aye.

DR. BOOREN: Any opposed? To my knowledge, I think you have consensus that this report should go through as final.

MR. PAYNE: Great. Thank you, Dr. Booren and thank you Sub-committee 1 and the full committee. So we will, again, we'll send that back to the subcommittee chair after we put in final format for final review.

Now we're going to turn to the second

subcommittee report for full committee deliberation. You have copy -- a hardcopy of that report; the draft report in front of you. So this is, again, a full committee deliberation before a final full committee vote on Sub-committee 2 report. And we'll have Mr. Chris Waldrop, you know, lead the discussion and it looks like Dr. Lorenzen will take care of the notes.

DR. WALDROP: All right, Chris Waldrop, Consumer Federation. We're back. I guess we'll just go back through the questions and see if folks have any additional suggestions, discussion points, et cetera.

So Question 1. I'm not going to reread this, so just raise your --

DR. BOOREN: Betsy Booren, The Meat Institute. I don't know where because I know you guys got into the weeds on this, but I do think it's important that this committee acknowledges that there are other public health initiatives across the administration that this, perhaps, could feed into or be integrated into in some form

or fashions. And I know I've talked about the Healthy People 2020, but there is a process. There is a mechanism in place and as a stakeholder for our government, the disconnect many times between these initiatives, I think, I see very close parallels to the work in Healthy People and there may be others that I would open it up to the committee or staff as they're looking at that that we align these better with. I think these type of illness outcomes could really strengthen many of those other initiatives. And Healthy People 2020, the Healthy People Program, I think it's good because it has a 10 year review and then a 10 year setting of goals which seems to be appropriate for public health outcomes and measuring as well as a review every five years. And so I'm not sure where that fits into this, but I think encouraging USDA, ERS, FSIS to make sure that these type of analysis are included in these other public health initiatives is really critical; it leverages resources, minimizes waste. So I don't know where you think that belongs, but.

DR. WALDROP: All right.

DR. JOHNSON: Alice Johnson, Butterball. I think it does belong in this first bullet because we talk -- you know, it's asking the question. As for the next five year update, it may be to the subcommittee group, maybe we put some narrative in about talking about, you know, recommending FSIS -- ERS coordinate with various other groups to share data such as the Healthy People initiative, you know, others that we might want to -- and be specific and put that in a bullet point in this document.

DR. WALDROP: So -- Chris Waldrop, Consumer Federation. Sort of a clarification question; is that what you're asking? What you're, sort of, suggesting is that ERS coordinate with other federal agencies to share data on -- you know, share their -- this data on cost estimates of foodborne illness outbreaks or -- is that what you're --

DR. BOOREN: Yeah, this is Betsy with The Meat Institute. Not only share, but if they

have data that could be utilized as well within those initiatives, that may help strengthen this type of analysis making sure that that communication and the agencies are aware of what's available.

DR. WALDROP: Okay. Other comments or thoughts on this?

MS. JENKINS: This is Sherri Jenkins with JBS. If Sandy Hoffman's here, if she could maybe stand up and let us know if that is plausible with their current calculator in -- or if that would change anything because my understanding is that their whole calculator was based off of the CDC assessments that have come out of the data. And they just take that and put it into their calculator and add it in there. So I'm not sure how the Healthy People 2020 information will fit into your calculator or your estimate.

DR. HOFFMAN: Sandy Hoffman, USDA Economic Research Service. I'm not certain exactly how our -- how Healthy People 2020 would

use our information. We can certainly make sure that we share it with them. We can certainly make sure one of the things we can look at is coordinating to see if we can come out in similar timeframes. Different agencies -- we will certainly be working with scientists across the agencies as an advisory groups as we develop our disease modeling and revise our disease modeling. But I will say that I think Healthy People 2020 will have their own approaches to modeling their own needs and I don't think I can -- I don't think it would be -- I don't think we can -- how do I say this? What we're doing may not feed directly into what they're doing, but we can certainly make them aware of it.

DR. BOOREN: This is Betsy with The Meat Institute. I would challenge the agencies to consider better ways of leveraging all the resources and that there may be tweaks to models that may need to be done, but leveraging across agencies for resources and management I think is critical. We don't -- do not need to be

duplicative if we've got resources within ERS or other agencies to achieve the same goals. And so I would encourage the agency -- USDA -- it may not be possible, but I would encourage that outreach and if changes need to made that when we report back to the Committee that you adequately explain, perhaps, why it's not being done or why they are. I think would be useful for the Committee in the future.

MS. JENKINS: So, Sherri Jenkins, JBS. Would that whole thing be better off in bullet point six, right? Because we're saying then that Healthy People 2020 would be like a consumer or -- of the ERS data potentially. So just another way to feed it to them because I think these first -- this first question is just, on the basis of what ERS is currently doing and what other information can they use to make their cost model estimates better. And I don't know if the Healthy People 2020 information would be able to do that so much as the information ERS gets out of it would be able to help guide the Healthy People 2020 goal I

think is, kind of, what we're talking about and maybe I'm just trying to understand it in my head a little bit better, but I don't know.

DR. WALDROP: So that's -- we were thinking, sort of, that. Question 6; it made sense there, is this is about communication and getting the information out; I mean, fits in that sort of thing.

DR. LORENZEN: Something like, in addition, the Committee recommends that ERS share their data with other federal agencies? Does that sound good?

DR. WALDROP: Let's try that.

DR. JOHNSON: Alice with Butterball. I just want to say I like Question 5 because it all revolves around the five year update and to be able to coordinate the ERS updates with the Healthy People or other groups I think would be useful.

I think our last question talks about communicate information to consumers and I think what we're talking about at this point -- and I'm

just -- I'm not going to, you know, everything's fine, but my reasoning for question -- putting it under Question 1 was just because of their updating, because of looking at what they're doing I think the last one is -- the question is more about consumer education and this is more about, I guess, collaboration within the agencies. But I can go either way.

DR. WALDROP: And I made up that last question so it probably is more -- ERS is probably more concerned about communication generally than just to consumers.

DR. JOHNSON: Well maybe we can --

DR. WALDROP: So maybe we just delete that to consumers on that -- in that question.

DR. PHEBUS: Chris, can I ask a quick question on that consumers -- our made up Question 6? I think the word consumers in that question isn't what we really need. I think it means users of the data because it may not be consumers. It could be government agencies or whatever. So users of the data, not consumers of the data.

DR. WALDROP: Great. Good point. Oh, sorry. That was Randy Phebus from --

DR. PHEBUS: Randy Phebus, Kansas State University.

DR. JOHNSON: I like it and let's be even more specific to say such as group such as Healthy People. How about that so that we -- information to consumers, stakeholders, and other agencies and groups.

DR. WALDROP: I'm sorry, Alice. Where are you suggesting we put that; in that question -- in the actual question or --

DR. JOHNSON: Yeah. As we look at the question for providing education, as Randy said, consumers, let's expand it out to give some examples --

DR. WALDROP: Okay.

DR. JOHNSON: -- and that would include the Healthy People 2020.

DR. WALDROP: Okay, so --

DR. JOHNSON: I think 2020 like the -- 2020 of the year.

DR. WALDROP: I think it's 2020 of the year; are the vision. All right. So let me come back to that in a second, Alice. So this last sentence we've added; in addition, the Committee suggested ERS communicates the data resources -- its data resources and collaborates with other federal agencies and initiatives such as Healthy People 2020. Does that capture what everyone was -- okay.

DR. JOHNSON: Thank you. That's fine.

DR. WALDROP: So does that address everyone's -- the concerns that were raised? Okay.

Okay, so let's go back up to Question 1 and make sure we're all good on that one.

DR. LORENZEN: I don't even have a laptop.

DR. WALDROP: Okay, so any other comments, questions on Question 1?

DR. BOOREN: This is Betsy with The Meat Institute. Additional hazards; and this may be delineating out some of the hazards. I know we're

collecting better data from other agencies like CDC and you reference illness and attribution. There are segments of at-home or away from home type of illnesses and I -- as it leads into your made up question for number six, I think there could be value. I don't know if it's possible, but value and better understanding where the foodborne illness risk may be at home or away in trying to get to those risks and making sure we communicate to consumers.

DR. WALDROP: So at the end of Question we have -- we talk about breaking out the ERS data by different variables. So we - we've discussed at our committee --

DR. BOOREN: Okay.

DR. WALDROP: -- ethnicity and income. You could certainly put location there if that's what you're getting at.

DR. BOOREN: That would be perfect. I didn't know if it was one or six, but --

DR. WALDROP: Okay.

DR. BOOREN: -- I -- we are getting

better at collecting data and new variables and I think that might be a valuable one and would help with other outcomes among agencies as well as we measure risk.

DR. WALDROP: And as we discussed in our committee, some of that information may not be there yet. But eventually as you build this out and ERS continues to update its model and you get more information from all these other different areas, you can start putting that together and coordinating it and make it start to get a sense of, you know, can you stratify a lot of these things.

So we've now changed this to the Committee. Again, the last paragraph in Question 6. The Committee noted that breaking out the ERS data by other variables such as ethnicity, income, or location where illness occurred may provide useful information and help target resources.

And I just -- one friendly amendment, let's just delete the or. After occurred put et cetera just to, kind of, make the point there's

probably other data out there. And then that would capture other data as well.

DR. JOHNSON: Do we need to be more specific when we say location because -- does that sound more like, you know, geographical location versus -- because we're talking about specific step in the process of food -- just somewhere so we're not targeting that geographical as to what we're -- yeah, but --

DR. LORENZEN: Carol Lorenzen, University of Missouri. Eventually you'd want both in with the et cetera there. That gives them the flexibility.

DR. JOHNSON: Okay.

DR. CRUPAIN: Michael Crupain from Consumer Reports. I think this concept probably belongs better with attribution because we're talking about where -- what type of meat it's coming from or what the source of that infection is, right. Is it cooking at home or in the store? I feel like those are closely related concepts. Does that --

DR. LORENZEN: So Michael, Carol Lorenzen with the University of Missouri, do you want this to go up again in that little paragraph before?

DR. CRUPAIN: I think it -- to me, it makes more sense there because I feel like that --

DR. LORENZEN: Well, you probably want it in both places, right?

DR. CRUPAIN: Yes.

DR. WALDROP: Yeah, so preparation location, we've added that to that sentence. Does that make sense?

The other terminology might be point of contamination? I don't know if that gets to more -- I'm, kind of, open either way. If we're happy with preparation location, that's fine. Okay.

So let's go back up to one. Other comments, questions, suggestions? Brian?

MR. SAPP: Brian Sapp, White Oak Pastures. I think it is important to stress in here somewhere to have CDC update their numbers as often as possible because I think this hinges, you

know, on those numbers. And if they're, you know, if we're updating ERS information every five years, the CDCs updating every 15 years, it's really counterintuitive to try to do that. So I think if everybody understands, you know -- let's put it in there where everybody understands it. This is hinged on CDC's information. You know, let's push CDC to update their information at some chronological, you know, time and then, you know, we can update this information so it coincides with each other so everybody's not always five years, you know, apart.

DR. WALDROP: Chris Waldrop. So, absolutely. The last sentence there in that section --

MR. SAPP: Yeah.

DR. WALDROP: -- references that. If you don't think that's strong enough. If you want to reword that, we're certainly open to that.

MR. SAPP: I think -- Brian Sapp, White Oak Pastures. I think let's make it a little stronger that CDC needs to update their stuff.

(Laughs)

DR. WALDROP: So --

DR. LORENZEN: Carol Lorenzen, University of Missouri. Some of our discussion also hinged on how resource-intensive it had been for them to update it and -- so that was part of the problem because we didn't see those papers, but Sandy said there's a ton of authors on it. And so it really takes a lot of time, energy, and money. So we can make a suggestion, but it's not our resource.

MR. SAPP: Is that getting -- I mean, is that process getting any easier or is it still --

DR. PAPPAIOANOU: Is this on? Marguerite Pappaioanou, CDC. It is a very labor-intensive process and updates really would require national population surveys that are very expensive. So there definitely is a resource constraint. It is not because CDC doesn't wish to provide more frequent updates. They would love to do that, but it does require additional resources above and beyond what the agency currently has; so

to comment.

DR. HOFFMAN: Sandy Hoffman. Marguerite, I have a question for you. Would be helpful to CDC in getting resources to have a statement from committees like this that this is an important activity?

DR. PAPPAIOANOU: Yes, I -- you know, I think that's always important and so that's why I've, kind of, been quiet. But any help that can be given to, you know, to -- so that the CDC can make the argument for greater resources. And it also could lead to potentially other agencies contributing to the cost of carrying out these surveys where it wouldn't necessarily be borne by CDC alone, but if it is important to USDA and other departments, that it might also be an impetus where other agencies might contribute our resources to the conduct of the work that's needed to update the numbers.

MR. SAPP: Brian Sapp, White Oak Pastures. I changed my statement. Maybe we should, you know, look at a way to encourage, you

know, helping CDC. These numbers are important to USDA and I'm sure that some of these new programs; the 2020 stuff, are going to feed numbers from CDC to get some of their reports. You know, let's offer some help, you know, for CDC to, you know, to be better at updating their numbers. You know, financially -- you know, financial help from USDA or, you know, these other programs where, you know, we stress the importance of those numbers if you think that's helpful.

DR. WALDROP: Betsy?

DR. BOOREN: Chris, I know we're, sort of, stepping outside our -- Betsy Booren, The Meat Institute. Thanks, Sherri. We're outside some of our scope. I think from this committee, as someone who uses all this data on a regular basis as we represent our stakeholders, I think it's important to acknowledge the difficulty of doing illness in attribution, acknowledge this committee that it's critical to the success of USDA's efforts including this. And that we would be supportive of additional resources as appropriate

by the administration. But I think I like the sentence of -- that we're emphasizing, but I think it's important for an advisory group like this to acknowledge the challenges that we know are happening and try to provide some support on how to get additional resources to support the activities within our scope. And I leave that to the discretion of you, but something along those lines, I think, acknowledges what we need for what USDA needs to achieve their mission, but also understanding that intra-agency, interagency data sharing.

DR. WALDROP: Let's just try to get some words up on the board and then we can play around with them.

DR. PAPPAIOANOU: Marguerite Pappaioanou, CDC. I also would like just to add to my prior comments for the record that CDC does appreciate the support that FSIS already does and contributes to the surveys and programs such as FoodNet and other work that goes into the provision of these estimates, so. That

intra-agency cooperation is happening and supportive funding is already happening and I just want to acknowledge that.

DR. WALDROP: Let's try this one. The Committee emphasized the importance of more frequent updating of foodborne illness incidents and attribution data provided by CDC. The Committee acknowledges the resource challenges in collecting this data, but the data is critical for accurate and timely cost modeling by ERS. The Committee recommends continued support by FSIS and suggests potential additional support by the federal government.

DR. BOOREN: This is Betsy with The Institute. I support the premise of that statement however we wordsmith later, but the spirit of it, I'm on board.

DR. WALDROP: Okay, does the premise of the statement sound good to everybody? Can you help us make it sound better? (Laughs)

DR. BOOREN: I would be happy -- this is Betsy with The Institute, to do that offline if --

just to keep a schedule if we need to do that.

DR. WALDROP: Is everyone fine -- comfortable with us just wordsmithing this a little bit afterwards? Okay. Great. Anything else on number one?

DR. LORENZEN: Chris, Carol Lorenzen, University of Missouri. Just want to point out, Betsy, you had commented on research and we do have it up here on the second paragraph realizing that FSIS doesn't provide research funds, but they do provide a prioritization which -- so it at least works with the other funding agencies within USDA.

DR. WALDROP: Okay, we'll move on to number two.

DR. BOOREN: Betsy with The Meat Institute, again. It struck me during the break, could you recommend other developing estimates of incidents? I'm not sure we're within the scientific literature. This is where my ignorance comes out, but there are always estimates from insurance companies and other, I would say,

non-traditional sources that may have incidents of health outcomes has -- and I don't know if that came up during your discussion, but that might be a recommendation to see if there are other illness estimates that may be out there that are non-traditional than are currently being used. Insurance companies is one example. I don't know if that's in the scientific evidence that can be used, but it may be worthwhile having what they call gray data to help provide some and then explain it.

DR. WALDROP: Michael?

DR. CRUPAIN: Michael Crupain from Consumer Reports. I'm a preventive medicine physician. That means I'm a part-time epidemiologist. So I think this is an interesting question and, you know, this -- as we were, kind of, just talking about in the last question, this data is very, very, very, very difficult to collect and I think the CDC does a really good job of -- and they have a huge surveillance system. So I would think that you -- ERS would want to,

sort of, work with CDC to see if there's any additional data that they can, sort of, lay their hands on, but I wouldn't encourage you to just go and try to do this on your own if that's, kind of, what this question is getting at.

DR. BOOREN: Okay, thank you.

DR. WALDROP: Sandy, just to, kind of, put those two points together. Does that make sense in terms of a recommendation and working with CDC to identify additional data? I assume CDC could bring in some of that non- traditional data or take at least -- be able to have the capacity to review it.

DR. HOFFMAN: I think in general what -- we follow CDCs lead on this and I know that they're working very -- like, in the infectious disease estimates for foodborne illnesses, they've worked extremely hard at identifying it; exploiting any available data. Certainly -- so this question was included in case there were additional hazards that weren't included in the CDC estimates that were important to the meat

industry that we should be considering. And if we were to do that, we would be working with CDC to see what is an appropriate way of modeling the disease incidents. The purpose of my including that question was to see if there's any information out there that we might be -- might need to be aware of, that we might not be, and we could bring that to those discussions.

DR. WALDROP: Yeah, so it sounds like you're already working with CDC, so I don't know if we need to make any changes to this if -- unless folks think we just need to reemphasize the fact that they should continue to work with CDC. So let's -- we can just put something there. The committee recommends that ERS continues to work with CDC to identify available data; all relevant data.

DR. BOOREN: To identify?

DR. WALDROP: Yeah. So just a generic comment, the Committee recommends that ERS continues to work with CDC to identify all relevant data. Does that -- yes. Okay, Question

3.

So again, these are some suggested research papers on long-term health consequences, the short-term outcomes, and the difference between illnesses from STEC and 0157 and non-0157. Any comments, additions, suggestions on this? Okay, great.

Question 4. Comments, questions, suggestions? All right.

Question 5. Comments on this one? All right. And Question 6. And here's where we added the information about -- So this one says the Committee recommended that ERS present its data in different ways depending on the audience. The scientific community may prefer to access the raw data while the general public may need the data presented in context with appropriate explanation. Further, extension specialists may need a mix of the data and explanatory information. In addition, the Committee suggested ERS communicates its data resources and collaborates with other federal agencies and initiatives such as Healthy

People 2020. Once attribution data becomes more robust, ERS should consider incorporating animal class, product, pathogen, preparation, location information into its cost estimates. And the Committee noted that breaking out the ERS data by other variables such as ethnicity, income, location where illness occurred, et cetera, may provide useful information to help target resources, but noted that funding such work would require additional resources.

Any comments, questions, on our work?

DR. CRUPAIN: Michael Crupain from Consumer Reports. Maybe going back to number two for one second. If --

DR. WALDROP: We're done. Sorry. We're at six now. (Laughter)

DR. CRUPAIN: No, but I don't have to add anything, I just -- maybe to clarify it. If you're asking -- I mean there're some things that have gone into this recommendation about antibiotic resistance and I was talking about E. coli's causing urinary tract infections. And

that's something that CDC might not have. So in that case, I think, you would just have to do what you'd normally do and just go to the scientific literature and use that. I don't think there's any extra sources that exist beyond that.

DR. HOFFMAN: We -- we'll do that, but it, you know, just -- there's a lot of smart people here in case -- and we have -- there's some suggestions here that are helpful. It'll make our work more efficient. So that was very helpful.

DR. LORENZEN: So you want something included in Question 2 and 3?

DR. CRUPAIN: I don't think it's necessary to include it. I think that's --

DR. LORENZEN: Okay.

DR. CRUPAIN: -- what they'll do.

(Laughs)

DR. WALDROP: Okay.

DR. CRUPAIN: Just wanted to make sure we were communicating properly.

DR. WALDROP: Great. Any last comments, edits, changes? No.

All right then. We will do some minor wordsmithing on that one paragraph, but aside from that I think -- can we go ahead and approve that? So I'd like to recommend that we -- the committee approves this document for final submission. All in favor?

GROUP: Aye.

DR. WALDROP: Any opposed? All right. Thank you very much.

MR. PAYNE: Thank you, Chris. And as I indicated before we will be sending these final recommendations back out to the subcommittee chairs for final review and then we will be posting these to our website as well as the transcripts of the entire meeting after we get the report -- the transcripts back from the recording company to review. That takes some time just to make sure that words are spelled correctly, acronyms are referred to correctly, and so forth. So once that all goes up, we will be announcing that to the constituent update. Any questions and so forth, you can refer to Natasha Williams, Jane

Johnson on our staff. They will be sending the reports back to you for review.

Now according to our schedule, we have a public comment period for half an hour. I do believe we have one person who did sign up on the registration sheet outside. Mr. Hunter, I believe, if you could identify yourself and organization when you come up to the mic, we can start the public comment session now.

MR. PLUNKETT: I didn't realize my handwriting was that bad. (Laughs) David Plunkett with the Center for Science in the Public Interest. We're a consumer advocacy organization that works on the issues of nutrition, health, and food safety. And we accept no government funding or industry funding. And what I really wanted to do was -- I had hoped to comment yesterday during the deliberations, but as it ended up, the Committee actually went where I would've asked them to go. So all my comments are actually just, sort of, complementary to the work you did and I want to thank you for that. Thank you for the

work you are doing and urge the agency to take on-board the recommendations that you've made today and incorporate those into the programs; in particular the National Residue Program.

Just going through some of the comments I had hoped to make and to offer them, as I say, in a complementary way to what the committee said. On Question 1, I did want to mention that CSPI does support the shift of multi-drug sampling that the agency has done in the National Residue Program. We found in the milk program that the focus on beta-lactams has actually led to substitution rather than solving the problem because the milkers know that they will be tested for beta-lactams, but they won't be tested for other items in a regulatory way. And so doing multi-drug sampling really makes the program work better as a deterrent to misuse of drugs, misuse of any kind of additives or any kind of materials that may be put in the animal feed or maybe injected into animals.

And also, it's an important factor that

this program -- you know, I want to make sure that I say that this program's incredibly important to consumers because it finds the things that consumers would not be able to discover until they would have the health impacts from having ingested, say, a drug or ingested a chemical that had some consequence for their body.

And it also is important for the industry because it supplies -- it solves for asymmetrical information. In the National Residue Program, they report on repeat violators and that report is made available publicly so you know who is having problems; who is creating problems. And that allows the industry to focus on those people and to take them out of the supply line if that's the appropriate response.

And finally, it also notifies the other agencies; in particular the FDA where they need to focus some of their regulatory efforts. And FDA has been successful in going out to some of the farms; in particular, dairies where we've been seeing a large number of residue violations. They

have been effective in going out there and stopping those operations. At least on the meat supply side, one of the things we're hoping is that the agency will also look and ask is there a collateral impact on the dairy side. If a farm is misusing drugs, misusing chemicals in the raising of their animals and they're producing both milk and meat, then does the fact that it's showing up in the meat tissues, does that also fold-over and indicate there may be problems on the milk side. Currently, FDA doesn't look at both sides of that question.

On the second question that was asked on recognizing -- well, I wanted to note that we need to recognize the potential that in targeting the samples, that if you become too focused on past problems you may fail to catch the emerging ones. And so I appreciate that the Committee put in a requirement -- put in a request that they do random sampling and maintain that random sampling so that they don't become so focused on their targeted problems that they forget to look around

and see if there are emerging new problems.

On question number three with regard to known and unknown, one of the things that I'd like to offer is a complementary suggestion to what the Committee is proposing is, for the agency to look at trends in animal husbandry as well as looking at other factors because these trends may tell you where you may see an emerging problem if people are changing the way they're medicating animals, if they're changing the way feed is made, if they're changing the practices on the farm or in, you know, in confined feeding activities. Whatever may be done, all of those things may factor in to when you might see residues in the meat.

And on the part of imports, I'm glad that the Committee caught the fact that there are other countries that have other rules. And so we know that there are approved drugs in some countries that are not approved here. We need to be testing for that at the border to make sure that those countries are not exporting meat that

might be acceptable in their program, but not acceptable in ours.

And finally on Question 4 on the question about whether or not you should rank the hazards. I would offer that one of the things that should be done is you should, in considering the public health impacts, consider the collateral impacts as well. Not just the immediate impact of if there is a harmful drug; say gentamicin in the meat, that does have an impact -- an immediate impact on a person's health, but you also need to look at the collateral impacts. Does the use of gentamicin indicate possibly injudicious use of antibiotics on the farm leading to any microbial resistance? And if that is so, then you really need to rank -- finding that a little bit higher than just for the health impact of the immediate consumption of the meat, but also the health impact on the larger public. If resistance gets out and affects more than just the person who's going to be consuming that food.

And that was really the substance of

what I had hoped to say yesterday. But like I said, I would've been wasting my time because you went where I wanted you to go anyway and I compliment the Committee on doing that, compliment the Committee on it recommendations and its deliberations. You've done a very excellent job and look forward to the agency implementing these proposals. Thank you.

MR. PAYNE: Thank you, Mr. Plunkett. Any other folks who want to make a comment? Any issues, comments from the committee members? Dr. Rybolt.

DR. RYBOLT: Michael Rybolt, Hillshire Brands. I just want to thank you and your staff and the agency for bringing these topics to the Committee. I think they were very good topics, good discussions. Not necessarily topics that we'd necessarily consider or expect to consider during these deliberations, but obviously, we had a lot of discussion and the committee was terrific. So thank you and your staff for bringing that also. Thank you for the updates

that you continue to provide us and also bring forward some of the contemporary topics, such as what was that; tiger meat or whatever. That was new to me.

(Laughter) So I appreciate that and thank you.

MR. PAYNE: Thank you, Dr. Rybolt. Any other comments?

DR. CRUPAIN: Michael Crupain from Consumer Reports. I just had to also thank you for coordinating the event and all the, sort of, logistics that went into it. It was very smooth and easy.

MR. PAYNE: Thank you, Dr. Crupain. One final call. Okay, we're going to turn the meeting over to our deputy administrator of FSIS, Mr. Phil Derfler for the closing remarks and to adjourn the meeting.

DR. DERFLER: Okay, I'm not going to take very long. I mean, there's no reason to. I want to join everybody else in saying thank you. Thank you to all of you. We know you're really

busy people. You're here because you have expertise and because of the work you're doing with your other lives and your willingness to take time out to come and help us with these issues. It's really appreciated by the agency. Thank you for the recommendations that you gave to us. We obviously will take them seriously.

To go back to a point that has been made twice now by Chris and Mike. We've heard from the committee in the past that, you know, we didn't come back. We would take your recommendations, we would take them under advisement, and we didn't use them. But we've not report back to the committee on what we did. That's why we spend a lot of time yesterday going through the recommendations that we've heard so that you know and have evidence that we take them very seriously. And one thing you should really know, there's practically on every single one of them, we've been back to this committee more than once seeking your recommendations. So I really do want to say thank you for that.

And what I would also ask is that if you have any comments or suggestions about how we can do this better or issues even that you think we should bring to the committee, we'd be happy to listen to those and consider them. You can e-mail me phil.derfler@fsis.gov or to Michael Watts or Keith Payne and we'll take it under consideration as we plan for the next meeting of the advisory committee.

I want to thank the FSIS people who made presentations to the committee and to Dr. Hoffman from ERS for being here and being here the whole time and the work that she did in preparation for this.

And then finally, I want to thank the people from the Office of Outreach and Employee Training for their work that they did to put this meeting together. I mean it's really them who did this. Yesterday Keith went through a list of all the people who worked hard to put this meeting together. I don't need to go through that again, but I do want to thank two people in particular;

Jane Johnson and particularly Natasha Williams. Natasha was here last night after everybody left cleaning up the room and getting it ready for today's meeting and she's done a whole bunch of other things including wrestling with a computer yesterday. So I just wanted to particularly note her participation.

So with that, thank you all and we'll see you again I assure you. Bye. (Applause)

(Whereupon, at 11:10 a.m., the PROCEEDINGS were adjourned.)

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CERTIFICATE OF NOTARY PUBLIC

DISTRICT OF COLUMBIA

I, Mark Mahoney, notary public in and for the District of Columbia, do hereby certify that the forgoing PROCEEDING was duly recorded and thereafter reduced to print under my direction; that the witnesses were sworn to tell the truth under penalty of perjury; that said transcript is a true record of the testimony given by witnesses; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this proceeding was called; and, furthermore, that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

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My Commission Expires: March 14, 2018