U.S. Department of Health and Human Services







## HSB (Health Care Systems Bureau)

## Health Resources and Services Administration

# Advisory Commission on **Childhood Vaccines - Day 2**

9/5/2014

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Submitted by: Jon Salaveria, Adobe Connect Team



Event: Advisory Commission on Childhood Vaccines - Day 2

**Date:** 9/5/2014

Event Coordinator: Herzog, Andrea (HRSA)

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Audio: Universal Voice/ Conference Bridge

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#### **Problems Encountered with Adobe Connect Pro**

No Problems Encountered

#### **Recording**

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**Recording Date:** 09/05/2014 8:49 AM

#### **Attendees**

Allison Durham Allyson Andrea Herzog Caption Colorado Captioner Emily Jocelyn McIntosh Jonathan Salaveria melissa stephanie mok Wayne Rohde

#### Chat History

N/A

## <u>Polls</u>

N/A

### <u>Q&A</u>

Q/A Done Over the Phone

#### **Transcript**

**Event ID:** 2429146 **Event Started:** 9/5/2014 8:50:29 AM ET

Please stand by for realtime captions.

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Welcome to the 90th meeting of the advisory committee on childhood vaccines. Today's conference is being recorded. If you have any objections please disconnect at this time. This is are in a listen only mode until the public comment portion of the program. I will now turn the meeting over to the ACC chair, the certificate. You may begin.

Thank you. Welcome today to of our quarterly ACC meeting. Before we begin I would like to do a roll call. We will start on my left and work around and that will poll the people from the phone as well who have dialed in. [Roll being taken]

On the phone please.

[Roll being taken]

Kristin is actually on Route and we expect her to arrive momentarily. When she enters we will announce that she is present.

Having said that, we will get started.

A couple of things before we get started. One, we want everyone, when I speak to announce their name first. So if people are on the phone they will know who is actually speaking a case they don't recognize the voices. The purpose of the AC CD is really about vaccine injured individuals, whether they be adults or children now because of the way this evolved over time, so we ask that would we make an deliberate and make decisions in our deliberations that we think for most in mind of those who are injured and that if we are going to error let us err on the side of those who have been injured.

Additionally,, yesterday we received comments cough either way, from the NVIC, Theresa Wrangham and her director, comments that are a part of the public record and we want them to be inserted into the comments section so want to make sure that is a part of the official record, their comments and a letter that was directed. That letter might need to be explored a little bit more in detail by the commission and in case there is a specific request in their, it was a rather long document and thorough, and it may actually be asking us to undertake something and if that is the case it's probably want some level of response, I would think.

There's going to be a slightly [Indiscernible] of the agenda today. Part of this will be because we have some commissioners who might be compelled to leave before the meeting is over. It is really a function of timing a part to shop our we get rid what we accomplished today. We will continue to start with the process workgroup but after we Kristin arrives we are going to switch direction and we want to hold the election of chair and vice chair and we want to make sure that all commissioners are present for that process. We will conduct that in an official format. We will use a secret ballot like was the last time that we will need some nominees and things of that nature to step forward but we will address that's when we get to that components and I just want everyone to understand there were going to rearrange the agenda a little bit in that way.

Having said that I believe I have covered all of the key critical components I need to gather does cover as we get Sir. The first item on the agenda right now is a report from the process workgroup. [Indiscernible] please proceed.

This is the quarterly report of the process workgroup. As reported last June caught during the May 8, 2014 process workgroup meeting we discussed the merits of statistical table proposed by Pfister [Indiscernible] sorry for mispronouncing that, assistant director of the national vaccine information founder. This table looks to collect information all ready available to the public regarding adjudicated acting cases in which NVIC propose to be a more easily readable and more informative format. To answer questions we raised during the question [Indiscernible] was a tight those invited to attend our July 21 meeting. During the meeting we asked her to clarify the reasons for NVIC proposal and

identify the things that would [Indiscernible] better if this information was available in the suggested format. She stated that NVIC request is from the public right for transparency regarding the program's operation. Available information comes from different sources and it's not helpful in creating a bigger picture in the trends in vaccine injuries and words. Fingerprints and the different conditions being awarded [Indiscernible] safety research studies. The proposed table would also help simplify search for information. It would be meaningful for parents in knowing what different conditions are [Indiscernible]. She also reminded the committee about [Indiscenible - heavy accent] from the vaccine cases. In looking over the details being requested that would go into the statistical table NVIC responded that creating a table would require additional initiative work cost specialists [Indiscenible - heavy accent] she reiterated that why is published or unpublished at finding the reasons for dismissal of the claim, why claim was not [ Indiscenible - heavy accent ] individual case. This information is not tracked in this manner. Workgroup unanimously agreed that [Indiscernible] information the manner proposed a be useful with what is available now. It also agreed that [ Indiscenible - heavy accent ] within requested [ Indiscernible ] to follow-up in creating the table and the Trac report. In our September 1 meeting the director of NVIC Dr. Houston reported back to us that this program has reviewed the statutory and regulatory requirements and was comfortable that information that was published adequately describes the program operations. Ask A decisions [ Indiscenible - heavy accent ] website. A portion of the court and lower court also be found in the website and under the tab on statistics. Information is provided [ Indiscenible - heavy accent ] database. The group also discussed extensively the merit of having anecdotal testimony during the ACC meeting and problems regarding the statutory limitations [Indiscenible - heavy accent]. It was decided that for now the information could be best gathered in survey form. Ask A compensation bar, -- [Indiscenible - heavy accent] compensation bar regarding this issue. However, for ACC to initiate such a survey there is a lengthy and [ Indiscenible - heavy accent ] approval process before it can be undertaken. The process would take us longer than a year. That gather information is one of the duties of a CCB the committee asks the administration to provide us with information on [Indiscenible - heavy accent] as the approval process unveils. Indiscenible - heavy accent ] information on the potential has been submitted to the White House. There's no certainty the new commissioners will be on board by the meeting however, were helpful that [Indiscenible - heavy accent] the new

appointees will be in place. Until then the current commissioners are asked [ Indiscenible - heavy accent ].

Okay. Any questions, comments ?

". Just to clarify, I'm sorry, I know we have [Indiscernible - low volume] referred to as the vaccine injured petitioners, TIP are --

I was trying to figure out what that was.

I'm sorry going to pointing it out before.

Thank you. Any other comments or questions ?

The chair has one. It has to relate to the information that we received condos reports, and whether or not there was some confidential information so each commissioner has received a report and some of it is in fact potentially confidential, do we say were no? None of it is? All of its available now?

[Indiscernible - low volume]

[Indiscernible - speaker not in range of microphone.]

So we turn and find out, have we been able to have any contact with the or to find out of that information is releasable or not?

I believe Jocelyn is on the phone.

Jocelyn?

I him on the phone at the chief special master is with me. I think I will let her speak -- can you hear me?

We can hear you loud and clear.

Hello?

Yes. This is cheap special master valve. The information that was I think in tab three, the annual report from, to BAO are not available in the ports website. They are not my. I don't control them. You have to talk to the ACC be does a CCB will have to talk to the court report if they want those reports. I do ou know how much information are going to provide that is going to be useful on issues you would like address. Bushlike address. I have no difficulty getting approval to get them to be a CCB but does a CCB but in terms opposing them public elsewhere I can give you that authority

Kristin has joined the meeting. That you can give us the authority who do we go to to get that authority?

The clerk of court, the US Court of Federal claims. Hazel key he is turning. I think probably it would be best to contact her either through e-mail or in writing. She is usually very responsive.

Okay. So, two things. One, Melissa, I'm sure you will take care of contacting them contracts or direct someone to do that? And two, where there is some confusion on the hard copies that we have here because they're not identified by tabs and so we are unsure what is tab one, tab two, Tapley,

What we sent them over they came over in tabs. There is attachments to an email.

So when we get it electronically it will be apparent to us on what it is?

Correct.

So we would ask a be disseminated to the commissioners an electronic for Matt. -- Format. Commissioners, to we have the answer in tab three we would ask that particular component be held until we find a whether or not it's allowed we put out to the public. Does that make sense? Does that violate any of the rules of sunshine and a that nature for documents here in a meeting ?

#### Andrew Davies?

I'm not sure. I understanding is that --

A CCB documents are public so if that is the case I thought today made public that was given to us in a public meeting.

Is a process workgroup consider the public meeting?

No. It's not.

It is not considered a public meeting, the process workgroup because

No.

And the reason that it would not be is?

[Indiscernible - low volume]

Understood but if I'm not mistaken let us look at the charter

[Indiscernible - low volume]

Don't go there ? I will open Pandora's box if I do?

They're all good.

Is that the record of the commission only -- shall be handled in it accordance with general record schedule 26 item to or other approved agency records disposition schedule. These records shall be available for public inspection and copying subject to the Freedom of Information Act. That would apply to me that the process workgroup records are public

To a FOIA request.

To a FOIA request?

They're available via a FOIA request, not actually brought to disseminate freely. Does that make sense?

Are reading concurrence? Does are we in concurrence?

All right. Then we can move on, we will have our information and we will have it sorted through.

Were going to rearrange the agenda item -- is anything else for the process workgroup? Any other comments, committees, suggestions, issues? No. So, Thank you, I appreciate that. Thank you for having me do that. Could have everybody's attention. What we want to do here is rearrange his schedule talk about the election of a chair and a vice chair. The reason that we are maneuvering here is that we do know that the likelihood of new members being appointed is high for December but even more probable for the March meeting. We think there should be some level of transition because when that occurs a group of us, both the chair and vice., Will be deleted. [ Laughter ] we will be illuminated. We will be gone. As well Anthon. We also have other commissioners who really will be asked to extend their time until those replacements are in fact approved and appointed and if I'm not mistaken that specific paperwork has not yet been sent on its way. Is that correct?

No. That would be great.

So that would be great. So the likelihood of them been on for another three or four meetings is probably good. Is that a safe that's?

Because they probably.

It probably works. -- Probably works. That's a safe bet for me. [Laughter] having said that caught that would -- I'm going to announced the names of the individuals who I think then would be eligible at least to serve in the position probably for three or four meetings at a minimum and then the others will probably have to serve out their entire term which by the way, and at the end of 2015, but, based upon past history which is not necessarily a predictor of you to performance but seems to be in this particular case those will probably be extended as well. So-called individuals will be leaving our myself, David King, show Williams and and prod. Those were in the second cohort, if we can, would be Kristin seems or, Jason Smith and Charlie Douglas. In the third and final awards we would have Sylvia Villareal, that up and down

Greatly ? close enough is only good another things. Productive for me please so I can learn

[Indiscernible - low volume]

We will do it on a break. [Laughter] and Krause and Lucy the de la Rosa.

What we need to do is have nominations for the chair and vice chair. Whether you self nominate or if someone wants to nominate you is acceptable. Are you nominating for interrupting to ask a question?

I was going to make a nomination. I wanted to nominate Kristin Teamster for chair.

I second.

You didn't get to finish. [Laughter].

It would not be the first time in my life. Kristin, think the question many to be ask of you is are you willing to serve if greatness is thrust upon you?

Okay. Yes.

[Laughter]

Out take very good care of you, Kristin, I promise.

Are there any other nominations for the chair position?

So cost to take the nominations for the vice chair while we're at it we go

Or do want to vote on this one ?

We will vote on this one. Normally we vote on a secret ballot the there's only one candidate -- the chair is willing to work with acclamation here and allow it to exist

in that format so all in favor of Kristin becoming -- it's -- is is going to take effect immediately? My going to hand the gavel? [Laughter]

[Indiscernible - multiple speakers]

At the conclusion of this meeting we will hand be gavel over and give you power.

If elected.

[Laughter]

It's going to be a little dicey but let's play it out. [Laughter]

All in favor of Kristin being the chair please they I.

[Indiscernible - multiple speakers]

Any opposed?

The chair rules it was unanimous. Welcome, Kristin, thank you for being the new chair.

[Applause]

We need -- aren't you glad you can? [Laughter]

[Indiscernible - multiple speakers]

We need a nomination or nominations for vice chair and I will let the commissioners work that out here.

I would like to nominate Charlie Douglas for vice chair.

Charlie Douglas has been amended.

We have a second to the nomination?

Second.

We are there any other nominations for vice chair?

I nominate Jason.

Jason has been nominated as a vice chair. Any other -- is there a second two that?

I will second.

So we have a second to Jason Smith. Let me ask two questions. Charlie Coe would you be willing to serve?

I would.

Jason, would you be willing to serve we go

I would.

Very good.

Are there any other nominations?

We will have a secret ballot on this like we did in the last election that we had with akin to vice chair. We need -- what's the paper?

It's not anything official but there are little slips of paper you can write it on.

Right on the paper as either Jason or Charlene.

[Indiscernible - low volume]

[Indiscernible - multiple speakers]

Jason, you should e-mail any with your vote.

Okay.

Why don't you collect them?

Okay.

[Indiscernible - multiple speakers]

It is apparent that we don't do it election a lot here. I'm giving you these ballots.

You don't want to read them because

I think someone else should read the ballots. I don't think the share should be reading ballots. I think we will let you read them out.

You meant to say lame-duck chair.

Lame-duck chair.

[Indiscernible - low volume]

[Laughter]

We don't wait to read anything else until you have Jason's e-mail.

Okay. I do. So you just want me to tell you who had the most votes ?

No. Just tell us the tally. I will write down here Jason and Charlene.

Okay.

And as you call out the names I'm going to put a mark under their name.

Okay.

Others can do the same to make sure I do the correct count

Okay.

We have Jason. Jason. Charlene. Jason. Jason. Charlene. Charlene. Charlene. Jason.

That is nine votes. I count for for Charlene and 54 Jason.

Right. That's what I have.

That's what you have as well?

Jason, you are the new vice chair.

Thank you.

Congratulations.

It was like survivor episode at the end of the season.

[Laughter]

Okay. That having been done the gavels will pass at the end of this meeting. Thank you. Let us move on on the agenda items. The next item on the agenda is the update on immunization safety office Centers for Disease Control and Prevention vaccine activity and we have Dr. Tom [Indiscernible]. July get a correct?

Good.

Thank you caught Tom.

-- Thank you, Tom. Tom, you are in the book if I'm not mistaken under five.

Under five.

Thank you Charlene.

This is an update from the immunization safety office. I'm on slide two. The topic slide -- I'm going to give you a follow-up on the 2010/2011 febrile seizure signal for inactive influenza and pneumococcal 13 ballot conjugate vaccines. I believe back in 2010 and it was a follow-up to the signal presented at the 2014 meeting. I will also give a CIP highlights and selected publications I'm on slide three, the follow-up to the signal this was presented at the June 2014 a CIP meeting you can see the slides at the first website and if you want to watch the presentation is on YouTube as well. Just to refresh everyone's memory and I think most people were here when this happened but in 2010 and 2011 there was a vaccine adverse report system for blue zone which is a trivalent inactivated influenza vaccine which is the only vaccine that's licensed down six months of age the clinically relevant age group within children 6 to 23-month-old. At the same time we were conducting rapid cycle analysis in the vaccine

Data-gathering. There was a signal for febrile seizures in children, actually procedures, but most of these are febrile seizures following TIV and children 6 to 59 months old. Subsequently we conducted a study in the vaccine safety datalink and confirmed the signal. The attributable risk for concomitants administration of TIV and PCB 13, the two most vaccine given at the same healthcare visits peaked at around 16 months with 45 additional be procedures per 100,000 children vaccinated. That is 45 additional seizures with these are given together as opposed to if they were administered at separate visits. That was not accounting for other vaccines the following season, following influenza season the vaccine safety datalink rapid cycle analysis persisted and there was no formulation changed. That is not unexpected we saw this persist for the next season there was also a study and the CDC assessment project and there was also a reports thing children 6 to 23-month-old received TIV and PCB 13 together at the same visit were about three times as likely to have a fever on days zero and one appear to children who received TIV or PCB 13 without the other product. This demography procedures but logically fever proceeds of seizure. This confirm that when these were given together there was more fever. That when they were given separately. And then in 2012 and 2013 and also in 2013 and 2014 there was a formulation change for TIV and there was no BSD rapid cycle and I the analysis following a formulation change. In response to the initial findings CDC and FDA and a CIP reviewed that the data -- is of information that was posted on the website, saying that these groups reviewed the data on febrile seizures and following 2010 and 2011 inactivated influenza vaccine and after the really evaluating the available

information determined that no changes in the childhood immunization schedule when necessary. I'm on 56. This information was added to the vaccine information statement for inactivated influenza vaccine. Young children who get inactivated flu vaccine and PCB 13 at the same time may be at increased risk for seizures caused by fever.

I have a question. I guess quote the web source we were given notice [ Indiscernible - multiple speakers ]

I'm sorry Konsyl via -- we were given I noticed not to give any antidiuretic before a vaccine. And invited this is there any [ Indiscernible ]

No. That is still the same. My knowledge the guidance for giving and type Pyrex prophylactically hasn't changed. That is my understanding.

In light of this information?

Yes.

Thank you.

A follow-up those I'm sorry, I follow-up to the 2010 -- I'm still on slide seven, follow-up studies to the 2010/2011 febrile seizure signal included an additional study, this is in addition to the one that just presented to you, what was a study looking at multiple vaccines so febrile seizures following multiple vaccines in the vaccine safety datalink and the question to answer was did vaccines other than PCB given -- previously they just looked at to vaccines, follow-up study looked at the entire schedule. Also there was a separate FDA study assessment of febrile seizures after TIV during the 2010/2011 influenza season in PRISM got that is one of their active surveillance systems. The questions was exposure to to TIV or PCB 13 associate with greater risk of febrile seizure when compared to unexposed periods? Assuming children who received to TIV at PCB 13 did a ministering them on the same day lead to greater risk of for febrile features when compared to separate days?

Looking at the results of these two studies, looking at the independent affect of TIV on the risk of febrile seizures conscious looking at TIV alone the personal

analysis copy FDA analysis found no statistically significant independent risk of febrile seizures associated with TIV during the 2010/2011 influenza season and the updated BSD analysis found no statistically significant independent increase risk of febrile seizure what associated with TIV during 2010/2011. No independent increase risk for febrile seizure for TIV given without PCB 13 or you During the 2006/2009 season. Any follow-up studies when you're looking up with vaccines it does not appear to be an independent risk for febrile seizures when flu vaccine is given alone or independent of other exposures. Now looking at those I'm on 59, looking at other vaccines those in the BSD analysis when you're looking at risk of febrile seizures when TIV was given was PCB and/or detail, makes one is a little bit in the BSD they look that the entire schedule but when they ran a model other vaccines fell out of the model because when you do your testing to determine that they don't have an impact. The vaccines that were left were TIV, and PCB and that is either seven or 13 because they looked at multiple years and the tap. Alternately taken the vaccine schedule as a whole when you fill the down to the vaccines that we think make an impact it was limited to TIV, PCB and the tap. The updated analysis suggested four 2010 suggested that the relative risk increased among threefold when TIV was given with PCB and work detail for detail containing vaccines compared with unexposed periods they found similar results for 2006 through 2009. From previous seasons. This included PCV seven and PCV13 because of that transition that occurred those I care remember, I think it 2010 -- 2010 the transition occurred. FSMA analysis did not -- the FDA analysis did not find greater risk for febrile seizures for same date as a separate a back six dose vaccination with both during the 2010/2011 influenza season. PRISM just looked at once even and they did not see any greater risk with concomitant vaccinations. To some all of this information up, the weight of the evidence and the consistency of the findings from the BSD analysis over several season suggests that when TIV is given alone the risk of the febrile seizure is not increase. When it is given with PCV or detail the risk increased in the highest risk of when TIV, PCV and eat Given together at 15 months of age. The attributable risk is about 38 additional febrile seizures per 100,000 children vaccinated. Just put that in context concept similar to the febrile seizure risk seen with MMR vaccine. Simultaneous administration of, I'm on 511, simultaneous administers with all three appears to be associate with an increased risk for febrile seizures and young children. The increased risk is transient, it is limited to the day of, the day after vaccination, that is day 0 to 1 interval. All the fretting for. And caregivers febrile seizures do not have lasting effects. Most children recover quickly. Get it

recommended childhood vaccines during a single healthcare visit has important benefits. On-time vaccinations keep children protected against many infectious diseases, and provide multiple vaccinations in healthcare visit minimizes the number of health your visit that parents, caregivers and children must make.

Dave King. Although training for parents and caregivers copy procedures do not have lasting effects. That is physical. Do you know if there is any other types of issues both of the parents? Does this create a fear legal --? Does this create a psychological issue? What does this do because we have a measurement in that area?

Out of virtue the pediatricians on febrile seizures but these are -- febrile seizures are caught like a cicada may be frightening for children but they are be nonevents. They are actually quite common in to, in fact about 35% of all children have a febrile seizure, the most common after febrile illnesses sometimes occurring after vaccines, they don't -- children who have febrile seizures are not at risk for developing epilepsy or other seizure disorders. As far as the impact on parents, I cannot -- I can to address that. I don't know if there's data out there but I will say that febrile seizures and these are limited to kids at their age 5, 59 months or so, they are the nine events caught children recover from them. They're not predictors of epilepsy or other seizure disorder. I don't know if anyone has anything else to add to that ?

Thomas correct with the signs. Though if the working with alternative families or families who have a myth about seizures this is very frightening and it's very typical the next time to talk to them about immunizations. Drafting a psychological social phenomenon?

Yes.

Yeah. So my practice if I have a kid who has a febrile seizure it is difficult, whether it's related to immunization or not, to get them to stop visiting you every time they have a fever in the past. That's the science, there's no long term [ Indiscernible]. There is a group of kids who have seizures with fever that go one to have neurologically they are more prone to seizures. That is extremely small numbers but with family history and all of that. The answer to your question is for some people it's a psychological social phenomenon. They won't have anything to do with immunizations afterwards. They can correlate it. I got my shot, I got my fever, I got my seizure. I don't know how to answer the question.

In. I would say it would affect not only that tile but maybe there future children and they will pass onto the friends and family and whatever. It is a frightening, as you say, it's a writing experience and may not invoke physical harm such as we know but it does surly turn people off to vaccines.

Taking. I just question the lasting effects. Perhaps that's too strong of a statement.

Let me caveat that caught they don't have lasting effects on the child that has the febrile seizure. They recover, children recover quickly from febrile seizures. They're not at risk -- they may be at risk for having other febrile seizures but not risk for developing a seizure disorder because of that febrile seizure.

Thank you. I am on 512. Just run through the AC IP, June 24 meeting update the copy was an influenza session and we did an end of season safety summary. There were no new safety concerns detected for inactivated influenza vaccine or live attenuated influenza vaccine during the 2013/2014 season. The formulation for the 2014/2015 season is unchanged from the previous season. Surveillance four 2014/2015 will include monitoring for water Valent IAB and LA ID vaccines. Cell culture-based inactivated influenza vaccine were common in IAB comprehensive reports, which we do regularly, reports in persons of history with egg allergy after IAB and LA ID that enhance monitoring that were doing after the AC IP liberalized the recommendations for egg allergic patients. Also reports of his rib asthma and wheezing after LA ID. At some of you know there is a recommendation to give LA of the two younger children if it's available. Because of that recommendation I'm going to do some enhance monitoring for asthma or wheezing after LA ID which was seen in clinical trials in some younger children

Stakeout this is Jason. If I can enter up for one second, to do it before Tom started opportunities benefit and Melissa and Andrea, just an abundance of questions, wanted to know if everyone that Pfizer, which is my employer, markets a PCV13 vaccine in the United States under the trade name Prevnar 13. Also there is reference to investigation meningococcal vaccine later on in Tom's presentation and PCV13 is also an Elaine's presentation but we are also developing an

investigational meningococcal group B vaccine for license here in the United States. To the extent there's any discussion or comment I won't participate but I wanted to make that aware for the committee and the folks there listening as well.

Thank you caught Jason.

I'm on 513 which looks like there's no site #. Influenza continued. There was a presentation of fever in children following LAIV and IIV. The finding is there was no change in fever rates in the 3 to 10 days post vaccination after LAIV versus IIV. This is recognition was talking about. This in the Recommendation2 regarding use of LA ID in IAB for healthy young children were either was available and appropriate. LA ID should be used in both does and both are available but IIV should be used and not delayed if LAIV is not available.

I'm on the next slide now, the 13 Valent PCV updates. Some policy updates under consideration, these were discussed at the AC IP meeting discussion of adding a dose of PCV13 for adults 65 years and older to be currently recommended pneumococcal polysaccharide Regiment. A PCV13 those followed by a dose of PPSV23 at age 65 or greater and Lizbeth Gray conditions for PCV13 and PPSV23 use remains unchanged. Replacement those of PPSV23 at age 65 or greater with a dose of PCV13, discussions are around PCV13 at age 65 or older and that riskbased recognitions for PCV13 and PPSV23 use remains unchanged. There will be additional information coming out on these updated recommendations for incorporating the pneumococcal conjugate vaccine into the schedule for older adults. I'm on the next slide -- the manager cockle vaccine update. There was discussed publication of interim guidance for the use of a serogroup B meningococcal vaccine under AC/DC sponsored expanded access IND. At the time that guidance was published but that guidance has a book -- subsequent within published. If people are interested in looking at this guidance for using mentor cockle B vaccine during outbreak is available at the link. There are also update to CDC comprehend -- comprehensive guidelines. Will be developed once the vaccine is licensed in the United States. There is is a Bactine -- vaccine scheduling publication by Norton at all, influenza vaccine safety in pregnant women, risk for acute adverse events. In July does about my for this study is in a large cohort of pregnant women in the vaccine safety data length, no acute safety signals were identify within six weeks of received of monovalent 2009 81 and one in

inactivated influenza vaccine. That was the pandemic vaccine. Stokely at all, human papilloma virus vaccination coverage among adolescents 2007 through 2013, posts by Fincher safety vaccine monitoring, to thousand six, 2014 in the Wesco this is an annual MMWR that comes out every year on HPV coverage and HPV safety and for the safety piece we added an additional year of monitoring. And our message was that Post licensure monitoring data continues to confirm the safety of HPV vaccines as far as the coverage improving practice patterns so that clinicians use every opportunity to recommend HPV vaccines and address questions from parents and -- can help the less reductions in vaccine preventable infections and cancers caused by HPV. I'm on 517. -- This is the for statement that comes out every year the recognitions of a CIP does this was a short version. Some years they have very long versions. This was the short version. There was a formulation change. I'm not going to read up on paragraph but these are annual Recommendation4 influenza vaccines but those put out by CDC and a CIP. On slide 18 this is update to the recognition for HPV vaccinations. Human papilloma virus recognitions of the advisory committee on immunization practices. I don't remember with the last update name but this is a routine update that CBC without every so often updating the recognitions for HPV back -- vaccines in the US.

I am dropper one second? [Indiscernible] speaking. This lad -- the side is brought in and the presentation low -- [Indiscernible - low volume]

A minority because I sent this presentation that had been published yet.

Okay.

This is a more current version of the --

So you have an update out there for us?

Yes.

Thank you.

And I would be happy to answer any questions

Any questions on that?

I have a question, the a CIP does not feel the need to change the schedule for six months, [Indiscernible] or any other in between [Indiscernible - low volume] where they could potentially get DTaP [Indiscernible - low volume]

That's correct.

Based upon what I'm seeing here I think we should get a 10 min. break before this next section. We're going to take a 10 min. break.

All right.

Thank you.

[Event is taking a 10 minute break.]

[Captioners transitioning.]

Tom remains, holding the floor, he had his next presentation, is that correct? I'm sorry. Ed?

I actually had a question or comment on the previous --

Before you begin, let's go back.

So I understand, the conclusion of -- my first question is a point of information. Who made the conclusion that getting recommended for childhood vaccines during a pivotal healthcare visit has important benefits, vis-a-vis the increased risk of seizures -- is that the judgment of the CDC?

It's really a CDC statement. There was -- that is, I believe, that language is largely taken from the bigger statement that was put out on grand mal seizures. So that's really a statement from CDC.

Well, my comment would be this. I understand there are product -- there are benefits to having multiple vaccinations in one visit. Pediatricians can provide parents with meaningful information so that they can have meaningful informed consent about subjecting their child to increased risk of seizures if they are having a vaccination of flu vaccine as the same time as CPB and the DTaP as well. I understand from a global public health perspective, there are benefits to getting the vaccinations into the child and -- if you spread out visits, there are consequences perhaps with reduced rates of vaccination. My concern as an ACCV member is that individual parents should be in a position to make choices about -taking on those increased risks. I understand that it's part of the statement now, and that's good, but as was pointed out by Sylvia, clearly, there are other consequences. I'm not disputing, obviously -- I'm in no position to dispute what you said about seizures not having any sort of -- no evidence of not -- long-term neurological -- but just in terms of both that family's reaction and in some way, the general public perception of how vaccines -- I'll just say vaccines -- I think it's important that the information and the CDC make it clear pediatricians and doctors that we do have information that there is an increased risk. We recommend globally, that people continue to get their vaccines in one visit. Even though there is an increased risk. But we think it's important for parents to be aware that they are making that choice.

That's all.

Great.

Any questions or comments? We'll proceed to the next presentation. Be advised that the forms that Tom is going to talk about our actually in our blue folder. Is that correct?

Although I wouldn't try to follow along because I've made some pretty substantial changes.

Let's pay attention to the presentation and don't look at the form for now.

I'm on the presentation titled the Vaccine Adverse Event Reporting System, VAERS form version 2.0 proposed, slide two. So my presentation is going to cover background on VAERS, then go over the VAERS 2.0 form proposed and cover some next steps in the process of transitioning to the VAERS 2.0. I'm actually going to be presenting this form at other advisory committee meetings but it's going to be a rather short and condensed version of this. I thought for the commission, it was important to make this a little more longer and described the process a little more so you're getting the long version although I don't think I'll take one whole hour. To start off with, slide three, VAERS is the national spontaneous reporting system for adverse events after US licensed vaccines. In recent years, we've received around 30,000 US reports annually. VAERS accepts reports from anyone, really. Healthcare providers, m anufacturers, the public. Signs and symptoms of adverse events are coded using medical dictionary for regulatory activity terms. Entered into a database. VAERS is jointly administered by CDC and FDA and it was authorized by the national childhood vaccine injury act of 1986. On slide four, you see a breakdown of strengths and limitations of VAERS. Strengths, its national data. It essentially has the whole United States under surveillance. So a large, diverse population under surveillance -- I'm sorry, better said it -- better stated, monitoring the entire population.

#### [Laughter]

As I said, it accepts reports from anyone. Anyone can send in a VAERS reports and we do not judge reports based on what we think are clinically important or make any judgment on causality. It allows for rapid signal detection and can detect rare adverse events, collect information about the vaccine, the characteristics of the person getting vaccinated and the adverse events. And data are also available to the public on the CDC website and on the VAERS website as well. Limitations are, the limitations of passive surveillance in general. There's reporting bias, largely underreporting but there can be stimulated reporting in certain instances. There's lack of an unvaccinated per -- comparison group. We generally cannot access -assess if a vaccine caused an adverse event. And pregnancy is inconsistently reported. Slide five, this kind of visually illustrates the limitations of VAERS. You see here a standard two by two contingency table. The top -- on the left-hand side, are the rows for vaccinated individuals and unvaccinated individuals. We're looking at the whole population here. On the top, adverse events and no adverse events. You really have four outcomes if you're looking at the total population as far as people -- total population. You have individuals who are vaccinated and have an adverse event. You have individuals who are vaccinated and don't have an adverse event. You have individuals who are not vaccinated but have an

adverse health event. Then you have individuals who are not vaccinated and have no adverse event. Whole population being monitored, really. But in VAERS, we only have the information in that pink square. So we have a subset of individuals who are vaccinated that experience an adverse events after the vaccine and temporal association and report that to VAERS. So we have limited -- we have a limited set of numerator data and no denominator data. Does that make sense? VAERS only contains partial data in the pink sell. II. Because of that, we are not able to calculate rates of occurrence of adverse events incidence rates. We're not able to determine increased risk for adverse events because you have to compare rates and vaccinated versus unvaccinated. We're certainly not able to calculate vaccination coverage. Slide six, submitting a VAERS report currently, we have a secure online submission portal. Roughly 30% of reports in recent years have been submitted online, but that's largely plateaued. And with the current system we have, the current process we have, we think it would be difficult to really move that needle. Most of our reports come in at least from the public, mailed, written, hard copy or faxed hard copies. We do accept telephone reports to the VAERS customer service representative as well. On slide seven, you have a miniaturized version of the VAERS form. You also should have a real VAERS form in your packet. You might want to pull out. This is the VAERS form. If you were to go to this form, print it out, --

This is the one you said you made substantial changes to?

No. This is the real VAERS form. Slide presentation has changes, but the actual VAERS forms -- the real one and the current VAERS-1 and proposed VAERS 2.0 -- you need to go to the VAERS website, download this form and print it out on your computer. This is what you get. In a miniaturized version there on the right. It's a paper form that must be completed by hand or using a typewriter. It's not a fillable form at this point.

On the web based one --

The web-based is a web submission process. It doesn't look anything like this. It's like -- it looks completely different. It's got the same fields, the same questions, maybe in different o rder. But it doesn't look at all like this. It's a web submission tool. So these forms are either mailed or faxed into the VAERS contractor. It requires manual receipt. We get these through the mail. They need to be

stamped, they need to be recorded. There's an intake process. And there's manual data entry as well. So all the information in this needs to be put into the database. Hard copies of the form are scanned and uploaded into a VAERS image database. There's really two VAERS databases. There's a database like most people think where you have rose of reports and columns of variables with research database. Then there's also an image database with the exact VAERS report -- if it's submitted online, they generate a report. The thing is actually scanned along with medical records if medical records come in, and it gets put into an image library and FDA and CDC staff can access that library and actually do a clinical review of the report and the medical records and any other medical information that comes in.

Dave King. Question. The report -- you have the image scan and the web online submission. That -- is that --

That's in the image database.

It doesn't go into the other database?

No. It does.

Does all the information populate?

Yes. So this is -- I'll get into this a little more. There are folks -- Stacy Nelms, sitting in the back there, is the VAERS contractor project manager. So her group actually does all this work that I'm talking about. We work with Stacy and her group to actually get this done. There's actual manual data entry where a person is looking at the report. Probably on a computer. And entering data into a database. For the online -- if that comes in online, it may be slightly different but that information also gets into the database. The hard copy of this gets scanned and put in the image database. If it comes in online, they basically take that information, stick it into a report and that gets uploaded to the image database. Does not matter if it is submitted by paper or online, the information gets into both databases.

Thank you.

As you can imagine, processing these paper reports is labor intensive. Slide eight, objectives for the VAERS 2.0. In your folder, this is the proposed VAERS 2.0. It's the more modern looking form with some yellow color coding. The objectives are to create a fillable, salable electronic reporting form. Something that can be completed on a computer. Update the data fields to address current vaccine safety information needs and changes in vaccination practices over time, modernize the appearance and format of the VAERS form, modernize reporting procedures. This is to implement electronic document upload capability with the VAERS 2.0. I'll explain that a little bit later. Also to ensure the data collected on the VAERS 2.0 form allows for comparisons to be made with older data. That is, historical comparisons between the VAERS-1 and the VAERS 2.0. If you look on these two forms, side-by-side, on the old form, some of these fields have a box around them. You see that box? Like three, four, seven, eight, 13, and then if you look on the new VAERS form, you'll see them color-coded. Those are considered essential elements. The essential elements haven't really changed on the two forms. So we want to make sure that the data we collect for those essential elements and other data are similar enough that we can still make historical comparisons with the older data. On slide nine, as far as the question of why revise the VAERS form, in terms of content changes, some fields on the current VAERS form have limited public health and/or regulatory value. We've worked with our CDC immunization safety office staff and FDA colleagues to really go over the form and say, what information on this form do you use for public health purposes or for regulatory purposes? And what don't you find that helpful or don't you use at all? There's a substantial amount of information on the form, which didn't have that much public health or regulatory value. The flipside of that is other information isn't being collected. So some fields are no longer relevant due to changes in the immunization program that -- the immunization program has evolved since about 1990 when the VAERS-1 form went into practice. And we felt it was important to update the fields to reflect those changes. Language in some fields is confusing and needs clarification. We noticed that some questions are consistently answered with what we think -- people are not interpreting the question the way we think it should be interpreted. Or else there's a lot of variability in answers. So we felt the language needed to be tightened up a little bit. Fields used in paper reporting for manual processing will no longer be necessary. So there are certain fields that the manufacturers had to fill out and certain fields that even paper reporters had to fill out which when we moved to paperless reporting, are no longer going to be necessary so they're occupying

space on the form that doesn't need to be occupied. Finally, federal advisory committees and other stakeholders have expressed interest in collecting information on pregnancy status, race, and ethnicity. Moving onto slide 10, so why revise the VAERS forms? We think the VAERS form would benefit from a more modern appearance with breaks and headers to clearly defined sections or groups of data elements and grouping things together in a more logical way. Also, electronic form, even a PDF form, allows for features like standardized dates, times and phone numbers. We can pretty much forced the reporter to enter in a date in a certain format that we want. So we don't have to fix the dates or the times or the phone numbers. We can incorporate some drop-down menus, which make it easier to report. We can program check boxes, make them mutually exclusive or all that apply. We can put in logic checks. So illogical answers get flagged. If you said adverse event started before the vaccine was administered or the vaccine was administered before the date of birth, we have little checks that alert the reporter that those are not logical answers on the paper form. It's just a purchase -- person writing in, and there's no check for that. Also, we can incorporate some pop-up instructions and reminders to help people fill the form out. If they move to another section and the haven't answered questions, especially essential questions, we can remind them to please go back and fill those questions in. However, we're not going to put a hard stop on any of this. Like prevent a person from advancing because they haven't provided information. You can always submit a VAERS report in whatever state of completion you want to. I'm on slide 11. Why revise the VAERS form? As far as process changes, as I said, handwritten, mailed and faxed copies of paper reports is a very inefficient way to conduct vaccine safety surveillance. Our understanding is a lot of person time is spent processing these reports, doing data entry. For certain reports we do double data entry. Quality assurance on data entry. We can eliminate a lot of that. Moving to paperless reporting using electronic forms would eliminate most manual processing activities and much data entry. There will be additional data entry when we get follow-up information like medical records. You have to do some data entry. There's some redaction we have to do. But most of the manual data entry, we think could be eliminated with an electronic form. It will mitigate the problems of poor handwriting and nonstandard reporting. So probably most people experience, trying to deal with poor handwriting. Especially if you work in the medical field. Electronic entry will largely address that issue. And also nonstandard reporting, that's -- sometimes people put things -- they right things in the VAERS form, answer it the way they want it and it's not that helpful to us or

they make -- when they do a check, you can't really check -- tell what the box they are checking so you don't really know what the intent of the answer is. Things like that. It will mitigate the problem of illogical answers, allow for standardized data elements and this form will also address the complaint of getting timed out on the online reporting tool. The online reporting tool which is separate from this form, it's designed -- you have to finish it in a single sitting. You can't come back to it, and you can't leave the online reporting interface, take a coffee break or go get information, come back and finish it. You basically get timed out and you lose the report and have to start over again. That has been a complaint especially in medical practices because they might fill these reports in, in chunks. One person might do some of the basic demographic and another person might do the clinical, et cetera. If you can't do this in one s etting, you get timed out.

For this form, you can actually fill this out, save it, come back to it, start it again. You could post this on a secure share drive and tell people to go in and update it. It's a salable form. It gets around the issue of getting timed out.

This is Kristen. So this would completely replace all paper submission? Only paperless would be an allowable way to report to VAERS?

So there would be actually three ways for the public to submit reports. I'm getting ahead of myself, but I'll answer your question. You fill out this new form, save it -- it's like electronic document -- then you would go to the VAERS website and upload that form or mail it.

We would not want them to e-mail it in because of privacy issues. We want them to go in and upload it kind of like you submit an abstract for a conference. Same thing. You go to a portal and upload this, like you attach a document to e-mail. The other way is to use the online reporting tool. That's our preferred way but we understand not everyone can do t hat. The third way, since we're getting rid of paper reports, a person could always pick up the phone, call and dictate a report. That's our way of allowing people who don't have access or may not be comfortable using a computer, you can still do that. Given where we are, we think most people would be comfortable using the electronic form or the online reporting tool. To fill out the old paper form, is about half an hour to a little bit longer because you are looking for the data and you may have two to three people working on that subset. Is there a way now for you -- into the EMR? Because when we're working on our EMR, which is -- with our state registry, all our data is there. So is there a way in the future where you're using epic or whatever you're using, that you can -- from your EMR, directly send the data to you? Which is the medical records, which is the kids chart?

We've actually done some pilot work with that. The answer to your question is yes, there is. But this was done in I would say, like a research setting. It's not like a production scale, but once we implement this paper form, our next goal is to take advantage of EHR is, to do these HL7 or messages what you can directly submit to VAERS from the EHR. I do believe there is a way to upload reports -- to upload medical records and other things right now. But our next -- I think I have that in the slide, the next phase of this automation process is to further develop direct reporting from electronic health records. I don't think it will be something so simple as you just, like check a box. You hit return. It's still going to evolve -- involve a decision-making process and entering in some fields that might not be in your normal electronic health record. Our goal would be to allow direct reporting using HL7.

All I'm saying is in our EMR, we have the database for the vaccines with the lot number and everything. So when you get the lot number being wrong, because you just put in -- seven to one or whatever -- when I look at your VAERS line, sometimes that can work. Again, you're making us go back and forth. Not that you're not going to have trouble with the EMR but everything we can do so that all our data gets string together. Right now you're asking us to do too many different steps. And it does take a half hour -- sometimes a little bit longer to fill out the old VAERS. It is a pain.

Yeah. We have certainly discussed trying to incorporate exactly what you're describing. Where -- I guess the advantage to what you're saying is the patient information and -- something could be auto populated into your report. And fill that into the EHR. And we recognize that that's a common complaint from healthcare providers. And I think that we have a way -- I think that is technologically feasible to do and we're certainly interested in exploring that.

I have a question. [Indiscernible] confused and -- [Indiscernible -- low volume] going to be sending medical records through something -- compatible back-and-forth -- would you be -- would it be mandated that we report that or -- how does that work if you are sending it right from the EHR?

My understanding is that HIPAA allows for reporting of this information to include medical records, to CDC and FDA.

Dave King. Quick question. I was on a previous slide. Logic checks. So when a larger check -- turns out it doesn't meet the logic, what happens?

Well, something would alert the patient and say, please check your birthdate or please check your vaccination date. I don't know exactly what the word is. That's in development. This answer doesn't make sense. Would you like to go back and change it? The person can override that. The person can't ignore it if they want to. -- can ignore it if they want to.

The logic should be overridden --

Yeah. We don't stop a report.

I'm on slide 12. Actions that have already occurred. The initial VAERS 2.0 development was with CDC, FDA and the VAERS contractor staff. There was internal review and revision within the CDC, FDA, within the VAERS contractor staff. Review and revision is an ongoing activity. It never ends. There was initial external review by immunization partners. So the CDC immunization program, national vaccine program office, Department of Defense, state immunization program officials and other partners. We conducted cognitive interviews with 21 potential reporters. These were physicians, nurses, pharmacists, parents. These were face-to-face, 45 minutes to one-hour interviews where we sat down and went through everything -- every question on the VAERS form with a recorder and observer. And that's to get feedback on what they thought about the content, the layout, the form, the flow and the observer was there, taking notes and also observing body language. There's a whole science behind cognitive interviews. A challenge some of our assumptions and we made some major revisions based on the results of cognitive interviews. Just for example, we shifted -- we initially thought we would put the information on the adverse event upfront because
that's the most important information, the person would want to get right to the point. We found out after -- in the cognitive interviews that actually that should be switched back and you should have the demographic information upfront because that's the most readily available information, and pretty much anyone in the office can answer that. So what you thought was a logical organization turned out to be a practice where you ask people who might not use it, not to be so logical. We presented to internal and selected external partners at CDC. And with our state vaccine state -- safety coordinators, we presented to the federal immunization safety task force, then we've conducted some follow-up interviews with the sample of individuals that completed the initial cognitive interviews. So the next slide, 13, talks about our proposed reporting method for the VAERS 2.0. This involves the reporter downloading the VAERS 2.0 form from the VAERS website. That's similar to what they do now for the VAERS-1 form. But then the reporter would complete the VAERS form on a computer. And then save the VAERS form as an electronic document in a secure environment. The reporter would upload the VAERS 2.0 to the contractor through the website. The VAERS contractor would receive this data and extract it from the report into the VAERS database. They would also review, redact and perform QA on the data. The data that's on the VAERS 2.0 would be put into some type of report. And that is what would go into the image database, similar to what we do for online reporting right now. We take information the person put into the online reporting tool, generate a report for the database and then -- I guess that covers six. I'm on slide 14 now. Why do we think we can successfully transition to this new form and this new reporting process? Access to computers and to the Internet among the public is fairly high, right now, and expected to increase with time. Healthcare facilities are increasingly becoming connected to the Internet and productivity is becoming a requirement for modern healthcare. Familiarity with electronic forms and electronic data submissions among the public is increasing. Electronic reporting for public health surveillance has broad acceptance and support in the public health community. And then we think there will be -- we will be able to demonstrate value to the program as far as efficiency gains and freeing up resources for other priorities. Like shifting resources to rapid follow-up on serious reports, focusing on coating quality and consistency and also exploring automated reporting options from EHR and immunization information systems. So that's really our next step in the automation process. Slide 15 shows a miniaturized version of the current form with a website where you can get the form. Slide 16 has the front page of the VAERS 2.0 form. So probably it's best to pull these two

forms out and put them side-by-side so you can -- when I'm explaining this, you can flip back and forth. Things we removed from the VAERS form. If you look up in the corner, for CDC FDA use only. That actually is for paper reporting and it's not really even used right now because we stamp this information. That's going to be removed. Much of the header information which has all the contact information -- because a person is going to have to go to the website to submit a report, we can shift that to the website and that's taking up a lot of space so that's going to be removed. Box 16 on the current form, vaccine purchased with -- and you see the private, public, military, other. This goes back to when there was a pretty clear separation between public vaccination programs and private vaccination programs. Publicly purchased vaccine was given in -- largely in health departmentrun clinics and then private purchase vaccine was given in provider offices. Vaccine for children's program, that distinction is pretty much gone. Because now private providers can order vaccines through NVFC. Although there is still vaccine given in public health clinics, much of it is shifted to the private sector. That -there is not that sharp distinction. That used to be a way for public versus privately purchased vaccine. That no longer exists. So this box isn't necessary a nymore. Box 20, have you reported this event previously? That, we believe, is designed to capture duplicate reports. Sometimes a provider will submit a report or a patient or maybe the provider tells the manufacturer, and you can get multiple different reports for the same provider. And we believe this question was to address that issue. However, there's a sophisticated algorithm that the VAERS contractor uses to identify these duplicate reports, which is much better than relying on that box. The information isn't used for anything. So that's going to be illuminated. 21. Adverse events following a prior vaccination. If you look at box 21, it's hard to believe you could actually put in any information in that box. You've got three quarters of an inch or so of space. And this box is rarely used. And asking about brother or sister has very limited public health -- and really, no regulatory value. So we decided to just make this a text box. And I'll get into -instead of asking in this tabular form, we asked the question and let them write free text in the VAERS 2.0. Birthweight, box 22. That's largely a proxy for prematurity. Wasn't used to much and we felt that that's probably better to get the information either from the text field or from the medical record. And decided we weren't going to ask that anymore. A number of brothers and sisters -- it was not used by CDC or FDA. And then if you see this box in the bottom righthand side of the VAERS form, it says only for reports submitted by manufacturers immunization project. So box 24, 25, 26, and 27 as it relates to manufacturers,

manufacturers are moving to a separate way of reporting to the standardized international data elements. So they're -- almost like a totally different way of reporting to V AERS. Their pharmacovigilance departments are going to be lasting these directly to VAERS. They are not going to be using a form. That will be taking effect in the spring and summer of next year. So all the information for the manufacturers -- we really don't need that information on the form anymore because they're going to have a totally separate way of reporting it to VAERS. But we will keep immunization Project report number and I will get into that. Get to the new form. So on slide 18, added to the VAERS 2.0, we added e-mail in, because it's an efficient way of following up or contacting people and following up with people that wasn't captured on the VAERS-1 f orm. On 2.0, box number eight, report is about vaccine administered to a pregnant woman. This is a completely new field. Previously we had to text searches and it was kind of an in efficient way to look. We will probably still do text searches but right now we asked directly, is this about a vaccine administered to a pregnant woman? If yes, it gives instructions on how to fill out. With more flu vaccine being administered, to pregnant women with TD AP being recommended that every pregnancy -possibly other pregnancy related vaccines like GBS vaccine, we felt it was important to ask that question directly. Box 24 and 25 on the form, race and ethnicity, these are questions that the National Vaccine Advisory Committee and white paper recommended that we asked about. Those are the standard ways that the US government asks about race and ethnicity at the highest level. And if you look at box 27 and 28, those are the last two questions under this category for military, slashed DoD related reports. So Department of Defense is pretty much a preferred customer for V AERS. We give them unredacted reports for adverse events, concerning US military personnel. They do their own vaccine safety monitoring. If you look at the VAERS-1 form at boxes 15 and 16, if for vaccinated at military clinic or hospital was checked, and vaccine purchased with military funds was checked, if either of those were checked, that was considered a military report. We send those reports to DoD or allow them access to those reports. That's sort of an indirect way of asking it. And doesn't really cover other DoD reports. Working with Department of Defense, we created these two questions which directly asked the question. And we think it's a more efficient way to capture those reports. So I'm just going to run through the VAERS 2.0 form now if you want to take that one out. So if you look at box one, patient's name, address, other contact information, very similar to the VAERS-1 form, upper righthand. Essentially the same information. Number two, date of birth is the same.

Sex, male, female, unknown is largely the same. We have an unknown box. It's the same as box number five on the old form. Date and time of vaccination is the same question. Date and time of adverse event starting, same. Age at vaccination, slightly different wording. On the VAERS-1 form, patient age is box number four. There's some confusion. Sometimes they put age. Instead of age at vaccination. If you had somebody reporting, like 10 years later, what just happened? They may report age now where that's not what we want. We specifically ask for age of vaccination. We're asking for months because for children younger than two, we think it's important to get months. After two years old, it's not so important. I will say for six, if a person puts in a valid date of birth and a valid date of vaccination, number six will be calculated for them. They don't have to do anything. They can go in and override it but it will be calculated for them. If they don't know the date of birth, the date of vaccination, they can go in and manually fill in that information. Number seven, today's date is the new way of asking date form completed. The old box, looks like six. Yeah. Just a different way of asking t hat. Box eight, I covered. Nine, prescriptions, over-the-counter medicated -medications, herbal remedies, dietary supplements, that is the new box, 17. Look at 17 on VAERS-1. Other medications. We're asking for prescriptions and other OTC supplements. 10, allergies to food, medications or other products. The interviewers during the cognitive interviews, we got feedback that allergies are important to ask separately from other medical history. It's important to know about allergies. You should ask that as a separate question. So we really split that out of the toolbox, 19. We talked about pre-existing physician diagnosed allergies, birth defects, et cetera. Illness that time of vaccination, up to one month prior. We're trying to get, were you ill at the time of vaccination or just proceeding -preceding vaccine? Similar to box 18. And then 12, chronic or long-standing health conditions. That's another way of asking for some of the information in the old box 19. The feedback we got on the cognitive interviews, even laypeople understood the difference between these two. 11, asking about some acute events or something that just recently happened. 12, chronic conditions. Asthma, diabetes, whatever else. Moving on to the section, information about the person completing the form. This is similar to the upper right-hand cell where you see form completed by in the old form. form. Relation to patients has changed slightly but we're still asking, what is the relation to patient? Healthcare, professional, parent, guardian, caregiver, the patient or other. In the can't -- then the contact information. Best doctor /healthcare professional to contact about the patient. New way of asking about responsible physician in that middle box on the top.

Responsible physician. Feedback we got from physicians and other administrators is that a threatening way of asking that question. Responsible implies liability and people may be reluctant to answer that. What we're asking is the best person to contact. The reason we're asking that is because sometimes if you are seeing in the hospital, that physician may not be the best person to contact about that patient. There's an option to put in the primary care provider even if the report isn't being filled out at the primary care provider's office. Then there's the check boxes in here if you check something and it's the same as in box one, it auto populates. So facility clinic name is similar to the middle box and the top middle box in the old VAERS-1 -- I say old, it still current -- we are just referring -- got in the habit of saying the old form. The current form. That's just the contact name -the facility. Type of facility. Similar to the old box 15. Vaccinated at. We're asking, where was the vaccine given? We offer some options, additional options which are consistent with how vaccine is administered nowadays. On pharmacies and in the workplace, nursing homes or senior living facilities, at school. 17 is similar to box 13. That's asking about the vaccine, manufacturer, lot number. There's going to be some dropdowns where if you click on route, it's going to say, intramuscular, subcutaneous, there'll be dropped down to help. You can always go in and override and right text, whatever you want to be body site, we're going to offer body sites a person can go in a drop-down and select that. Does number and 2 series is slightly different. People confuse -- people don't really understand you're asking about this vaccine or how many I had in the past. What we want to ask is, for the current vaccine, is this your second MMR? Is this your third DTaP? That's what we're asking there. Box 18 is largely unchanged from the current box seven. Described the event. 19 is medical test and laboratory results largely unchanged. Box 20, patient recovered from the event. Yes, no, unknown. Largely unchanged. Tox21 has a couple additional b oxes. So -- box 21. So one thing we got from the interviews is if you look in the old form, it starts off with patient died, life-threatening illness. The feedback we got was, you need to ask about the least serious first down to the most serious. We've kind of flipped the order of where we're going from least serious down to most serious. We separated doctor, healthcare, clinic visit from an ED visit because we thought it was important to get that distinction. The rest of them are the same but we did add in, -- to be consistent with what in the regulatory language. Congenital anomaly birth defect wasn't in the VAERS formed but that is in the regulatory language so that's been added back in. Box 22 is similar to the old box 14. Same information about vaccines except in the previous month. A box 23 is the new box that's replacing

box 21. I discussed we didn't think having that small, little table in old box 21 was that helpful. We are asking, have you had an adverse event previously? If yes, describe it. I covered box 24 and 25 and also the military as well. There's a continuation page on the next side. So individuals need more played -- more space, they can go to the continuation page, continue to type. There's a considerable amount of space for adverse event field t here, which we think there's ample space on this continuation page for the reporter to get their information down. And then the following pages are instructions. We have general instructions and then some specific instructions on the elements. At the end, we have some general information and one of the things we're going to add to the instructions -- we can put this on the web form when you are required to read things before you advance -- second to last bullet where it says -- most -- so the national vaccine injury compensation program is administered by HRSA. Separate from there's an reporting and event does not constitute filing a claim for compensation to the ICP. Then it direct them to the website. We got some very long and detailed instructions but the reporter said, first of all nobody reads instructions. Second of all, you should get the basic information out there and then refer them -- people want additional information, they can go to the website and get more detailed information. Keep the instructions pretty short and sweet. And so this is our proposed VAERS form. If you go to slide 19, the next steps are to present to ACCV, which we are doing today, to end the AC and ACIP. To create the smart electronic form. Incorporate these features I was talking about into the PDF form. Computer test the form with reporters. Public comment solicitation through the Federal Register. We plan to post this on the Federal Register. Make final revisions based on computer testing results and other comments. Develop the platform to accept the electronic VAERS 2.0 submissions and update the online reporting tool. Once these get updated, we have to go into the online reporting tool and update that as well. Then implement the form and evaluate completeness and quality of VAERS data. Do a pre-versus post comparison. So that is our proposal to update the form and update the reporting process. We've been working with our partners in FDA on both content and process and other partners out there in the immunization world as well. So I welcome any comments or questions you may have at this point.

Participants on the phone, please press star one if you have a public comment at this time. Please record your first and last name clearly when prompted. To withdraw, please press star two.

Operator, it is not yet time for public comment. This is just questions of commission members only.

Operator?

Thank you. You may resume.

Thank you. Sylvia?

Is this in other languages?

It's not. There is instructions -- there are instructions on how to fill it out in Spanish. The other -- having another language -- it's got some problems because you're going to have to have MedDRA coders, basically -- it wouldn't be an electronic reporting process anymore. You'd have to translate the data, do -- have the MedDRA coders -- it would be challenging. I'm sympathetic to -- I understand what you're saying, but right now I think -- we don't have plans for having a different --

And the literacy level on this?

So we have to kind of -- the VAERS form is kind of difficult because it's for the layperson all the way up to like a subspecialist. And so we want to make it so pretty much -- everyone can use it and we've worked with our communications people to try to make this as plain language as possible, but get the information we want. So it's been challenging, so I will say we worked with our communicators and we will continue to do that to try and make this as plain language as possible.

What proportion of reports come from providers versus parents and patients?

It depends on the vaccine. And sort of where we are in the vaccine lifecycle. But about 25% come from -- if you look overall, I can get better information or current

information. 25% come from patients or parents and about 30% -- maybe a little more than 30% -- come from providers. Manufacturers or there's a box for other, which probably is a lot of parents and providers, but they just check that box for others.

Thinking about that, related to literacy and language.

[Indiscernible] downloaded from the website --

No. It's a PDF.

So how will people be able to type into it? If you don't have the conversion software on your computer?

I guess that would require somebody to have Adobe -- Adobe is free though, isn't it?

[Indiscernible -- multiple speakers] actually, I would say that it would be. If you were filling out IRS forms that were in Adobe format, you don't have to pay to have it, to do it and you can fill out Adobe f orms. I don't know that the IRS allows you to upload the form when it's completed. I do know from a business perspective, in private business, we fill out forms for the IRS through Adobe and we don't have to pay for Adobe to do it.

I guess we can look into [Indiscernible -- multiple speakers] on a PDF --[Indiscernible -- low volume] upload it -- I did for a while -- tried to do that -- for the year -- convert -- other experience --

In most forms, they always -- even the IRS, they have -- use Adobe or something -if you don't have it, here's the link to download it. They always add it to those instructions. I've always seen it that way.

You can't type on it.

Dave King here. You can. And I've seen forms like that. If you don't have it, click here. And you will get it. Then you can fill out the form.

I thought that was -- this is [Indiscernible] again -- read it --

Dave King here. You can read it, but you also have the ability in fillable forms to be able to input data onto those f orms. I do not know whether or not you are able to upload those forms. It may require a print, scan, mail, or fax.

We can look. I don't have an answer to that now, but we can look into that.

Dave King has a question. How long does it take -- do you know? To fill out this form versus the old form?

I think that probably depends on the person filling the form out but I will say this: there's roughly the same number -- the same amount of questions. Data fields in this form as there are in the old form. Although it may look a little busier, when we actually look at the total number of data elements, it's about the same. And this form has some features with the drop-down and all that which might make which might make it a little bit more efficient, but because we haven't done the computer testing yet, we don't know how long it takes the person to fill it out.

Recommendations -- which is after you find that information o ut, that it be provided under the general instructions and given? Many times we may have forms to fill out, it gives you an estimate of how long it should take you to fill out that form.

I think that may be hard, Dave, because the complexity of the report also determines how long -- if you have a simple like injection site reaction, with one vaccine, you may be able to do this in a very short period of time. If you have some complicated outcome with multiple vaccines and it's in a child who got a bunch of vaccines the month before, there may be a huge amount of variability depending on the person completing it. And the actual adverse event. I'd be reluctant to say it will take you approximately this amount of time because the standard deviation maybe gigantic.

Okay. Thank you. Any other questions or comments for Tom?

Apparently, the only way that it could be returned, this form, is by e-mail or uploading?

I suppose the person could e-mail it in although -- [Indiscernible -- low volume]

It's designed to be uploaded like -- the only analogy I know is when you upload an abstract to a conference or you upload a paper to the Journal site. You basically hit browse, you go to where you saved it and clicked on it and then you see it upload and then you hit submit and then the way it goes. A person could e-mail one in, but we wouldn't recommend that because that's a little --

[Indiscernible -- low volume]

We wouldn't be accepting faxes or mail. Our option for people who can't do it on computer would be to call and -- we would -- somebody would be there to actually fill the report out.

And they can fill it out online?

They could always use the online reporting tool. In fact, if you're not in a situation where you're running around getting records and you need to leave the computer, the online reporting tool is actually quite an efficient way to report and you can build in a lot of -- a lot more features which make it easy to submit an online report that you can't in a PDF form. So we would encourage people to use the online reporting tool, but we recognize not everyone can. So this is the option for those who can't. Or in the extreme situation where they don't have access to the computer, absolutely can't do it electronically, they can call it in.

[Indiscernible -- low volume] number one, and number two -- going to check -- a few minutes ago --

We'll look into that.

Sylvia and then Melissa.

Tom, Sylvia. Some of us are involved [Indiscernible -- low volume] barcoding for the -- are you going to beta test this so that it goes out to providers and those people who made -- might be helpful -- or [Indiscernible]

I think we're going to probably run this -- two things simultaneously at least for a wow. We have this as an option. People want to try out our new f orm, go ahead and do it. And hopefully we will learn something from that. If we need to make modifications, we can. But we discussed the best way to transition this and we think maybe running two parallel processes for a while to get some feedback would be the best way.

Low-volume. How many times do you put a report out? The major issue is to get the feedback on this.

Melissa, did you have --

Just identify yourself.

[Indiscernible] the ways that people could -- by calling in? And the number --

It's on the web. The have to go to the website to actually -- you have to go to the website right now to get the paper for many ways. So the 1(800) number is all over the website.

Okay.

[Indiscernible -- low volume] the website on their for the -- on the statement --

I think the VAERS website is on the VIS. If you go to the website, on the top of the VAERS form, www.VAERS. HHS.gov..gov. That will get you to the main site. In the instructions, the first one is -- I mean, it takes you right to the submission website.

[Indiscernible -- low volume]

Okay.

Any other questions or comments? Thank you very much, Tom. Appreciate it. Next item on the agenda is M s. Elaine Miller, is Elaine on the phone?

Yes. I'm on the phone.

Hi.

Hello.

So do we have a presentation in -- is it -- in fact, I think I'm looking at it.

Elaine, what -- the one that we're doing is the safety of pneumococcal polysaccharide vaccine. So that is -- for those 5.7 -- for those who have their books with them --

Okay.

Okay? So proceed.

Okay.

Please.

David, can you hear me?

We can hear you loud and clear.

Okay. Great. So as we said, this talk is on the safety of the pneumococcal polysaccharide vaccine. The brand name is Pneumovax 23 in the VAERS, the Vaccine Adverse Event Reporting System. So if you will go to slide number --

Can we get a little bit higher volume please? Seeing if we are up as loud as we can be here. If you can project through the phone as best as possible please?

Perfect.

We are on slide number three. And the purpose of this presentation is to provide your committee with a review of the safety of the pneumococcal polysaccharide vaccine. As you consider making a recommendation for the vaccine injury compensation program to cover adult immunizations. Slide number four shows the outline. What I'll do is I'll give you a short background on the pneumococcus disease, and then the vaccination. And then we'll talk about the VAERS analysis and then conclusions. We're now on slide number five. I assume you're hearing me fine n ow.

We are. Thank you.

Okay. As a background, pneumococcal disease is a public health issue. Wanted to be sure that you are aware of the impact of this disease. Each year, pneumococcal infections caused an estimated 3000 to 6000 cases of meningitis with a case fatality rate of around 30% up to 80% in the elderly. And even for people who survive, neurologic sequelae are common. There's also about 50,000 cases of bacteremia with a case fatality rate of about 20% up to 60% fatality rate. In the elderly. And about 0.5 million cases of pneumonia each year with a case fatality rate of about 5% to 7%. And the fatality rate for pneumonia of course is also higher in the elderly. Slide number six is a background of the pneumococcal polysaccharide vaccine called Pneumovax. And just to remind you, there's also a pneumococcal conjugate vaccine called Prevnar. I think the manufacturer mentioned that earlier. Pneumovax is indicated to prevent pneumococcal disease caused by the 23 type in the vaccine. It's approved for people 50 and older. And also for people ages two and older who are at increased risk for pneumococcal disease. And we'll discuss which groups are at increased risk for pneumococcal disease. The reason it's not approved for children under two is because they don't develop an effective immune response. That's why we have Prevnar for those children. For those ages. So there are 23 serotypes in the vaccine. And they're listed here. Some of those serotypes are also in the Prevnar, the conjugate vaccine. Prevnar serotypes are in yellow on the slide. And these serotypes cause 88% of back to remake -- bacteria disease. This can be given by the intramuscular route or the subcutaneous route. It's important to keep in mind that it is not a live vaccine. It's and in vaccinated or killed vaccine. And the reason that's important -you cannot get the infection from the vaccine since it's a killed -- slide number seven is a bit of a complicated slide, but I wanted to show you that because there are two pneumococcal vaccines, there have been a number of recommendations and a number of changes in the licensing of these products over the years. On the far left, in 1983, Pneumovax was licensed by Merck, licensed for people two and older. At the same time, there was a vaccine called Pnu-Immune, licensed until 2002. In 2002, it was taken off the market not for safety reasons -- my understanding is that there was a shortage of the pneumococcal conjugate vaccine, which Wyeth Lederle makes, so they wanted to put their resources into

making the conjugate vaccine. That leaves us with just one pneumococcal polysaccharide vaccine, Pneumovax. So you'll notice at the top of the bar, there are several different ACIP recommendations. Actually, I spoke with the subject matter expert at CDC for this vaccine. She said what they're going to do is combine all the recommendations now into one document. So it will be a lot simpler to understand. Now we're on slide eight. This slide shows what Childers -children ages two to 18 are recommended to receive the pneumococcal polysaccharide v accine. These are children with conditions that put them at higher risk for disease. So there's three different categories. There's immunocompetent with chronic conditions, children with functional or anatomic -- and immuno compromising conditions. The immunocompetent children with chronic conditions, the chronic conditions include chronic lung disease, diabetes, cerebrospinal fluid, leaks, cochlear implants, alcoholism, chronic liver disease, and cigarette smoking. Children with functional or anatomic -- sickle-cell disease and children who have -- who do not have a spleen. And immuno compromised children includeshildren includes children who are born that way, or who later develop illnesses like HIV, chronic renal failure, as nephrotic syndrome, leukemia, lymphoma, generalized malignancy, suppression for medication, solid organ transplant and multiple myeloma. Now, if you go to slide nine, this shows the adult recommendations for the vaccine. You'll notice that it's essentially the same as the recommendations for children -- for persons 19 to 64. The immunocompetent with chronic conditions, functional or anatomic asked linea -as bulimia -- asplenia. All adults are recommended to get one dose regardless of previous history, all adults 65 and older. Slide number 10 shows the adverse events from the pre-licensure studies in the package insert. The most common adverse event reported in at least 10% of the subjects are listed on this slide. There's a very high rate of local reactions for injection site pains, soreness or tenderness. 60% of the subjects have that. And when they got revaccinated with the second dose, 77% had injection site pain, soreness or tenderness as compared with 8% of placebo recipients. For systemic reactions, that were most common, headache, as Xenia, fatigue, and myalgia. You notice those were also higher in vaccinees than placebo recipients. Slide number 11 -- and 12, show the main studies that have been done post marketing. And these are -- most of these are included in the ACIP recommendations. We won't go over these. I just wanted to put this in as a reference. Slide number 13 shows -- starts the VAERS review. Slide number 14 says the objective is to describe the safety profile of Pneumovax 23 and VAERS. Slide number 15 is a slide that Tom showed you earlier that shows the

strengths and limitations of VAERS. So just to remind you again that the strengths of VAERS are that it's a national system, it accepts reports from anyone -- it's good at rapid signal detection for rare adverse events. And the main limitation of VAERS is that VAERS generally cannot assess if a vaccine caused an adverse event. Usually, when people see data in VAERS, they think it means that the vaccine is causally related, but it's important for you to understand that it's not necessarily causally related. These are events that happened after the patient got a vaccine but they may not necessarily be causally related. So the strength of VAERS is that it identifies signals or trends that warrant further studies. Generally, we don't make conclusions from VAERS data. Slide number 16 also is a slide that Tom showed you earlier today, to try to help you understand the limitations of the VAERS data. VAERS has reports of people vaccinated who had an adverse event and also reported to VAERS. It doesn't have data on any of the other boxes listed on this slide. Okay. Slide number 17. We're going to talk about the methods we used in looking at the VAERS data. Slide number 18 shows the methods we included. US VAERS reports following Pneumovax or pneumococcal polysaccharide vaccine brand unknown after 2002. As I said, after 2002, Pneumovax was the only brand on the market. We reviewed reports received from the beginning of VAERS in 1990 through January 31 of 2014. We excluded Pnu-Immune, since that brand is no longer on the market and hasn't been since 2002 and it's only about 10% of the pneumococcal polysaccharide reports in VAERS. We looked at what's called MedDRA coding terms, and this stands for medical dictionary for regulatory activities M edical Dictionary for Regulatory Activities. These are signs, symptoms or diagnosis. MedDRA is an internationally standardized terminology. It's been clinically validated. And we looked at descriptive statistics including age, serious, nonserious status, and death reports. Various reports are defined as those -- of course, deaths, but life-threatening illness, hospitalization, prolongation of existing hospitalization, and permanent disability. Slide number 19 explains the other method we used in presenting this data to you. It's called empirical Bayesian data mining in VAERS. And this data mining is done by the FDA for VAERS. What it is, is detecting disproportional reporting. And a vaccine adverse event pairing signals when a statistical threshold is reached. This is called the data mining. Earlier today, when Tom presented the data to you about flu vaccine in young children in febrile seizures, that was example of a data mining finding that was later study using more rigorous methods. But a data mining finding does not necessarily mean that the vaccine is associated with an increased risk. What it does is it prompts further studies to

look into it. But sometimes, there will be a change in a coding term and that might cause a data mining finding or there are just adverse events that we know are side effects that are going to show up on data m ining. Okay. Go to slide 21. Now we're going to review the results of the VAERS review. There are over 25,000 reports of Pneumovax 23 in VAERS. 8% of these reports were serious report's. 67% were among females. The most -- as we said, VAERS will accept reports from anybody. So the most common type of report -- the largest percentage of reports, I should say, come from healthcare providers at 42%, followed by other manufacturer, patients and parents. This slide also shows the age group of the patient, and the biggest percentage are in the 19% to -- 19 to 64 age group. You will notice there are reports for children under two years of age. The reason is because VAERS will accept reports of vaccination errors. Even though it's not approved for this age group, sometimes it's given -- giving an error that people under age two -- slide number 22 shows the VAERS reports by age group and serious status. So again, you'll notice there are over 25,000 reports. There were 66 deaths. Four of the deaths were in children 18 and under. And we will review those in a slide coming up. And 8% of the reports were serious. Slide number 23 shows the doses distributed and the adverse reporting rates to VAERS. There were 142.2 million doses of Pneumovax distributed in the US from 1991 to 2013. The reporting rate of 17.7 reports per hundred thousand doses distributed. There were 1.5 serious reports per hundred thousand doses distributed and .04 per 100,000 doses of anaphylaxis reports. Just to put this in context, we have a paper on a summary of flu reports in adults from 1990 to 2005. And there were 2.44 reports total per hundred thousand [Indiscernible] vaccine -- there were 86.2 per hundred thousand doses. So there's a big gap here. But if you keep in mind this vaccine is given to people who are either older or have high risk conditions, the reporting rate is higher.

Elayne, Dave King here. So when we look at the reporting rate and looking at what it is and it's based on doses distributed, which is -- do we mean distributed? That's different than actually being given or are you using the terms equally here?

We don't have data on how many doses were given.

Fair enough.

So my question then is, so -- maybe not so much a question as -- is it safe for us to assume -- I guess it is a question -- to think that there are less doses actually given as opposed to distributed?

Well, it's the best data we have, but I'm sure that -- it seems like not all the doses are given. There's always ways --

The answer is yes? Correct?

Yes.

So based on that, then, that means that it's likely that actually -- I know we don't have that number -- it's a little difficult -- but these numbers actually are skewed -- probably a higher amount of things that our occurred here based upon the actual given vaccines as opposed to the strategic?

-- as opposed to the --

I think probably you could say that. You could surmise that.

I know it will be difficult for us at this moment here to thank you actual -- to figure out what the actual rate might be but we can assume that the numbers we're looking at are actually probably higher in terms of what the rate is for this actual given vaccine? As opposed to distributed?

This is Charlene with a q uestion. Are leftover Pneumovax vaccine's returned? Can they be used for a long period of time? Or are they destroyed?

I'm sorry. I didn't hear your full question. Would you repeat that?

Of the Pneumovax vaccine's that are distributed, this is not a vaccine thatine that we give in public health. So my experience with it is limited. Is this vaccine returned to the manufacturer if not used? Is it destroyed? Or does it have a long shelf life so that it can be used over a protracted period of time?

I don't know the answer to that. Maybe Tom knows?

This is Tom Shimabukuro from C DC. I don't know this for sure, but anecdotally, I think return and exchange policy depends on whatever business arrangements have been made by the provider or the facility. And the manufacturer or the distributor. I will say, I don't know what the shelf life for Pneumovax is -- unlike flu which has a standard expiration date, I don't believe Pneumovax has a standard expiration date. As far as reporting rates, reporting rates are very crude estimate. We use those because generally, we don't have doses administered data -- we don't have product specific doses administered data. So like Elaina said, the best data we have -- I think it's reasonable to assume that not every single vaccine dose that gets distributed gets used. I think, though, a little bit different from flu vaccine where you may have a lot of vaccine distributed that doesn't get used and then expires, I don't think you have that problem with Pneumovax. Or Zostavax. So when you're looking at reporting rates, the best thing to do is not try to figure out what the actual reporting rate for doses administered -- just look at the reporting rates in the context of reporting rates for other vaccines. That's the best way to look at it. And keep in mind that also, vaccines -- vaccine reporting to VAERS -- I don't want to say predictable, but it does follow a trend where when a vaccine is introduced, you have a high amount of reporting and the vaccine used in the market -- as it matures, you have lower reporting. So reporting rates will be higher early on when a vaccine is introduced. And tend to be lower later on in product lifecycle if that makes sense. This reporting rate is an average since 1990. And if you try to compare reporting rate for a vaccine that's been off for 20 years versus one that's been out there for 1 year, you might see differences, but that's not -- that's apples and oranges comparison if that helps.

So it helps but raises the question, Dave King speaking, the reason for that leveling off is -- is it because of the high adverse reactions being cited that may be changes are actually occurring in a number of areas in terms of how the vaccine is given in -- maybe how it's formulated to some degree, minor things that -- we know what would cause that leveling off, or it's just --

I don't have specific data on that. But we think it's related to these reporting biases in VAERS in general. When a vaccine is introduced, it is new. There's more awareness of it. There may be -- May generate more reporting because there's a new recommendation out there. As opposed to a vaccine out there in the marketplace for a very long time, that has a long history of use. People know what the safety profile is. It's kind of like when anything is new, there may be more interest including safety versus when something has been out there.

Dave King here. I have a slight problem wrestling with that in my head. Are there ever any new and improved versions of a vaccine?

When a vaccine gets into manufacturing -- that's more of an FDA issue. You want to change the way a vaccine is manufactured, I think you need to get regulatory approval for that.

So that doesn't quite answer the question which is, are there any new and improved vaccines that have ever come out?

In rotavirus.

Great. That leads to the next question, which is based upon the fact that when something is new, there seems to be higher incident report, over time, it levels out. When the new ones that are new and improved our introduced, is there a blip and a higher reporting of those at that time?

Generally, yes.

So --

You were going to draw a conclusion. But that's okay.

This is Charlene Douglas. I'm not sure where we're dealing with that blip -- a function of the vaccine versus the function of my child or my family just got a new saying. And I'm looking for -- I never took it before, versus -- this is the fifth kid in the 50-year. It's fine. Versus, this is something new. And a bit over --

Okay. Anne?

As a provider, I can tell you there's also [Indiscernible -- low volume] comes out -information and -- people still respond -- or whatever to a new vaccine -- it's like, [Indiscernible] people were like [Indiscernible -- low volume] so that adds to the blip as well. So providers say, [Indiscernible] later on, [Indiscernible -- low volume] possible things that can happen and -- small frequency --

Fair enough. Dave King here. Let's talk about that scenario for a moment here. So we have a couple things that are occurring. One, when something is new, high awareness through it. There tends to be a blip. When we have something that's introduced new and improved, that also creates awareness. That tends to be a blip. An issue that Anne might raise -- I think Charlene is on it as well with some familiarity -- breeds acceptance to some degree. And in fairness -- but n evertheless, shouldn't an adverse report -- that something that can happen -- shouldn't that be reported anyway, though? Just because -- well, that's c ommon, we see that but usually no harm. Isn't that an adverse event that nevertheless should be reported?

This is Charlene Douglas. The thing that [Indiscernible] H1N1. And it was a new disease that was taken out -- taking out children. It was a new vaccine that I'm sure made parents -- I was on the frontline with that -- they were scared to death, and they didn't know what to do. If I am not negating any -- adverse events -- I have learned since being on this position that a sore arm is considered an adverse event. I've certainly seen people with bad technique who inject into the bursa and that makes it real sore for real long. That's an adverse event. But the year of H1N1, when we had a new disease and a new vaccine, people were afraid of the sore arm the -- people were afraid of a lot of things. Right now, a flu shot -- all flu shots have H1N1. You get a sore arm, [Indiscernible] okay. That's still an adverse event. But I got a short -- I shot and a sore arm. Maybe it will be better in today's.

The adverse event doesn't get reported and that then begs the question, is it because of timing? Is it because the form takes forever to fill out? Who knows -- is it because it's not that severe, we let it go?

This is Tom -- Tom Shimabukuro, CDC. Mandatory reporting is pretty clearly laid out in the VAERS table reportable events. And manufacturers have to report by law. So you talk about what has to be reported. Events that are in the VAERS table, or -- it's also events that are listed as a contraindication to future vaccination in the package insert and then manufacturers. Everything else -- like CDC encourages reporting of clinically important adverse events. But what is a clinically important adverse event? [Indiscernible] objective. So a bad local reaction to one provider may be clinically important. It may not be to another provider. So beyond what's required by law for reporting, it's largely provider judgment.

It could be inconsistent.

Even more inconsistent, Charlene Douglas, before you get the provider is the parent. Experienced parent is not going to take a child to a doctor for chickenpox. Mama is here. I've seen it before. It will go away. Even before you get to the p rovider, does the parent perceive it? Sore arm after injection? The parent doesn't perceive that as an issue. The provider may never know.

Right.

Or [Indiscernible -- low volume] like I did.

Did not know about it. I did not report it. The nurse practitioner or David reported it because we went to the pediatrician. So I don't know who was responsible for reporting. I don't know. It never happened to me.

This is clearly not something that gets resolved here.

This is Tom. To get back to the 142.4 million doses distribute did and 25,000 reports to VAERS. That's a lot of vaccine d istributed, probably a lot of that gets used and then 25,000, which 92% of those are not serious. So that's reassuring information, even though we can't drill down to the dose administered level, that's reassuring information.

It would tell us that 1600 of them are roughly in that area, are serious.

Yes.

Which -- that's a lot.

But we don't -- based on the limitations of VAERS, all we can say is, those are events that meet the regulatory definition of -- that occurred in temporal association with receipt of vaccine. That's all we know, based on the VAERS data. Obviously. Okay. Elaine, please continue. Thank you.

Okay. We're now on slide 24. The slide shows the top 10 coding terms in children ages two to 18. On the left side are the top coding terms for the nonserious reports. The main term is pyrexia or fever in 42% of the nonserious reports. Followed by injection site erythema and injection site swelling. On the right side of the slide shows MedDRA codes for serious reports. Again, fever is number one but it's in 72% of the reports. The white blood cell count increased at 40% of reports. And then cellulitis and injection site reactions. All of these symptoms or related symptoms are listed in the package insert, except for blood culture negative. Slide number 25 shows, in children, co-administered vaccines with Pneumovax. 45% of reports, Pneumovax is the only vaccine listed on the report. The most commonly co-administered vaccine is trivalent inactivated flu. As you know, children especially when they get vaccines, they usually get a bunch instead of just one. Slide number 26 shows some details about the four death reports that were in children. The first report was a 3-year-old male with -- was vaccinated. He had a history of sickle cell disease. And about three and a half years later, he had sickle cell disease with fever. And the cause of death was unknown. The report did not provide much information. It's said that he may have developed pneumococcal sepsis around the time of death. The second report was a 7-yearold female. She had a history of microcephaly and seizure disorder. And she died three days later from accidental asphyxiation. The next report was in approximate -- an approximately 6-year-old female with sickle cell disease. Almost six years later, she died from pneumococcal sepsis and sickle cell disease. The fourth report in a child with an 18-year-old male, got vaccinated with this and meningococcal polysaccharide inactivated flu hepatitis B and MMR vaccines. One month later, he died from meningitis septicemia. Prior to that time, he had no illness risk. Slide number 27 shows the top MedDRA coding terms in adults 19 and older. Serious reports. Among nonserious reports, injection site erythema, pyrexia, injection site swelling, are the main symptoms. And the serious reports that -- the number one symptom is fever followed by injection site erythema, cellulitis, injection site pain. Again, all of these symptoms or related symptoms are known and are listed in the package insert. Number 28 shows, among the adult reports, that co-administered vaccines with Pneumovax, 52% of the reports had Pneumovax as the only vaccine given in -- and an additional 38% had influenza c o-administered on the same visit as the other vaccines listed that were given. Slide number 29 shows reports of

Pneumovax administered during pregnancy. There were 17 reports total. The adverse event include two reports of spontaneous abortion, reactions, four reports with no adverse event and one report with gestational diabetes and chlamydia.

This is Charlene Douglas. How can chlamydia be an adverse event to Pneumovax? Help me with that.

I'm sorry. Would you repeat the question?

I'm not understanding how chlamydia is -- is an adverse event for having received a Pneumovax vaccine.

That is what the VAERS report said. The patient --

Good.

No logic.

This is Tom. Adverse health event that was reported after a vaccine. And we don't try to determine the validity of VAERS reports. We accept them as face value.

We're on slide number 30. The death reports in adults over 19. There were 61 total. Median age was 69, with a range of 27 to 98 years old. 44 of the reports had records or death certificates or autopsy reports to show the cause of death. 17 reports had no records to confirm the cause of death. But we listed here the body systems involved in the cause of death among the 44 reports that had records to show you there's a variety of conditions that were listed as cause of death among these reports.

Question, please. Sylvia here. In the body systems, one of the things we're seeing in pediatrics is the transition of young adults to adult services. So are there sickle cell patients in this group, the same categories you get -- [Indiscernible] in adults?

Your question is are there sickle cell patients among these 61 adults?

Correct. I'm asking for the same category in pediatrics where we administer the doses for a Splenda -- asplenia? If death came from that chronic condition category?

I have a list here for each category for the cause of death. And sickle sell is not on this list.

# Thank you.

Okay. Okay. We're on slide 31. So we mentioned data mining. And so these are terms for which statistically significant threshold was reached. After this vaccine in VAERS -- these terms include cellulitis and injection cellulitis, site cellulitis, and these are labeled events. And we are aware that cellulitis does occur after this vaccine. We have one study that demonstrated that clearly. And it's commonly reported in V AERS. The next data mining term was leukocytosis, white blood cell count increased. And it says systemic signs and symptoms associated with the vaccine including fever, leukocytosis and increased C-reactive protein are commonly reported in VAERS and are included on the label. Slide number 32 shows additional data mining terms that signal -- these are local reactions, skin warmed, injected limb mobility decreased, injection site s treaking. And we know that injection site reactions are commonly reported after this vaccine. The next MedDRA term was blood culture and blood culture negative. And these terms from the MedDRA system are listed under investigations or are usually reported in the context of severe injection site reactions or cellulitis. Slide number 33 shows summary and conclusion. 1990 to 2013, VAERS received over 25,000 reports following Pneumovax 23. 92% were classified as nonserious reports. Fever at 47% is the most commonly reported adverse event in children. Followed by injection site you're a schema, injection site pain and injection site swelling -injection site erythema. There were only four. And listed cause of death in information that we have about these reports do not suggest a pattern of concern. Injection site erythema, injection site pain and favor -- fever are the most commonly reported adverse events in adults. There were no concerning patterns detected for Pneumovax 23 in adults or children. Slide number 34 shows the World Health Organization position paper on the 23 Valent pneumococcal polysaccharide vaccine. It says on the basis of decades of use, PPV 23 is considered safe, both in terms of severe immediate reactions and potential longterm adverse event consequences. Minor adverse reactions such as redness and

pain at the injection site occur in 30 to 50% of those who have been vaccinated, more commonly following subcutaneous and intramuscular administration. Lowgrade fever occurs infrequently. Local reactions may be more frequent in recipients of a second dose. Number 35 shows -- help me -- I'd like to thank them for their help. Thank you.

Thank you. So Elaine, you're scheduled to go again on the vaccine safety presentation on shingles, but I'm going to call for a 10 minute b reak. Until five after 12:00 on my clock. If you want to synchronize, I have five of 12 on my watch. We have a 10 minute break. Thank you.

[Event is on break until 12:05]

Please stand by. The conference will resume shortly.

Operator, we are going to reconvene if you will let the parties know, unless they can hear me loud and clear.

They can hear you loud and c lear.

It's like Tom Cruise. Crystal. [Laughter]

Elaine?

Yes. I'm here.

We're going to have you -- you are next to give the shingles vaccine safety presentation. I do know that a number of slides as you get through them are things that we've already gone through. So I'm assuming that you will move through them without having to repeat since we've seen them on the prior presentation. In some cases. Right?

Yes.

Perfect.

So proceed, please.

The safety of the vaccine called Zostavax in VAERS. You will notice the format is very similar to the previous presentation. Slide number four outlines background on zoster. VAERS analysis and summary and conclusions. Slide number five, herpes zoster or shingles occurs when a person with a history of chickenpox has a reactivation of the virus. Associated with aging immunosuppression, intrauterine exposure or having chickenpox at age under 18 months of age. So it's the same virus as chickenpox. And complications include postherpetic neuralgia, vision loss if it occurs around an I or other neurological problems. Postherpetic neuralgia is pain that persists after the rash has gone away. And it can last a year or more and there's no adequate therapy available on it.

# Hello?

I'm still here. Can you hear me?

Yes.

Postherpetic neuralgia occurs in about one in five people who have shingles. There are half a million to a million cases of shingles each y ear. And the lifetime risk is 32%. As a background on Zostavax, it's a live attenuated or weakened form of the virus. It's a single dose subcutaneous injection. It was approved in 2006 for people ages 60 and older. And then in 2011, the approval was moved down to age 50 to 59. So it's indicated for prevention of shingles in people ages 50 and older, since it's a live vaccine. It's contraindicated for people who are immunosuppressed or pregnant women. And also it's contraindicated for people who have had anaphylactic reaction to gelatin or another component of the vaccine. Slide number seven shows the ACIP recommendations for the vaccine. It's recommended for people 60 and older. ACIP did not recommend it for people 50 to 59 due to concerns about vaccine supply and also concerns about long-term protection of the vaccine. Since the risk is higher for people who are older, ACIP did not recommend it in 50-year-olds and older. People with previous episodes of zoster or people with chronic medical conditions can be vaccinated unless they have contraindication or precaution. Zoster in persons 60 and older. The vaccine reduced the risk for developing shingles by 51%. Which is probably lower than most vaccines, but you'll notice that the vaccine -- the efficacy goes up when we talk about postherpetic neuralgia, especially postherpetic neuralgia that lasts a

long time. The efficacy increases. So even though it's only 51% effective in preventing shingles, it's higher at preventing postherpetic morale Joe. Slide number nine from the p re-licensure study summarized in the package insert had -- headache and -- the most frequent adverse reactions. Injection site reactions were 48% in those vaccinated, 17% in the placebo recipients and headaches were 1.4% in those vaccinated versus 0.8% in placebo recipients. It shows that the adverse events in pre-licensure as I said, injection site reactions and headaches were the most common adverse events. There was a safety study with about 6600 cardiovascular events were more frequent than those receiving -- in those receiving Zostavax than in placebo, 0.6% [Indiscernible -- audio cutting out] shows the most -- the main safety studies. These are listed in the recommendations. Slide number 12 bears review. Slide number 13 says the objective of the VAERS review to describe the safety profile of Zostavax in VAERS -- slide number 14 shows the strengths and weaknesses of VAERS. We've discussed this. Just as a reminder, just because it's reported to VAERS, that does not mean that the vaccine caused the adverse event. 15, we've already discussed. So let's go to slide number 17. The methods. We included US VAERS reports following Zostavax or zoster brand unknown since there's only one brand. Reports received from 2006 to 2014. We used -- looked at the MedDRA coding terms. And we looked at descriptive statistics including age, serious, nonserious status and gaps -- deaths. Slide number 18 discusses the empirical banes in -- Bayesian data mining. This is just to show adverse events that have disproportionately been reported after Zostavax is compared to other vaccines. The results, starting with starting with slide 19, number 20 shows all ages -- almost 16,000 reports, 5% were serious, 72% were among females. The largest percentage of reports were from the manufacturer at 40% followed by healthcare providers. And the age groups are listed here. You'll notice again, there are some reports in people under age 50. Most of these reports are medication errors. Number 21, by age groups and serious status, you'll notice there were 51 death reports. None of these were in children. And about 5% of the reports were serious. The Zostavax -- there were 18.4 million doses of Zostavax distributed from licensure in 2006 to 2013 for reporting rate of 86.2 reports per 100,000 doses distributed. And 3.9 serious reports per 100,000 doses distributed. 24 shows the top MedDRA coding terms in adults [Indiscernible -- audio cutting out] for the nonserious reports, the most common coding terms were injection site erythema, injection site swelling and erythema. For the serious reports, most commonly reported serious reports in the 50 to 59-year-olds, the terms are injection site erythema, pyrexia or fever,

and dyspnea, difficulty breathing. Most of these terms are in the label. There are a few exceptions. Let's see -- there are a few exceptions. Red-blooded -- blood culture negative, blood glucose increased -- not in the package insert. A couple more listed here. Slide number 25 shows the top MedDRA terms in adults ages 60 and older. For the nonserious reports. Injection site erythema followed by herpes zoster by injection site swelling. For the serious reports, herpes zoster is the number one coding term followed by pain, rash. Slide number 26 shows the vaccines that were co-administer among the reports in VAERS. For 90% of the reports, Zostavax is the only vaccine listed, followed by inactivated flu, 5% and pneumococcal polysaccharide 3%. Slide number 27 shows reports of [Indiscernible -- audio cutting out] there were a total of 15 reports. Seven of the reports occur among pregnant -- meaning the nurse or pharmacist giving the vaccine was pregnant and those reports, the adverse events were one reports of oral numbness when the vaccine was splashed in the mouth, to reports of aye irritation when the vaccine was splashed in the eyes, two needle sticks and two splashes on the skin. There were eight reports among pregnant patients vaccinated with Zostavax. Two of them were reports of spontaneous abortions, one report of cleft lip in a newborn, report of uncontrolled blood sugar and a preexisting diabetic patient, one report of injection site erythema and three reports with no adverse events.

# Yes. I'm sorry, Melissa?

This is Melissa Houston. Elaina had a question. Do you have the ages among the -- of the pregnant patients who were vaccinated with Zostavax?

Yes, I do. There was a 40-year-old, a 50-year-old, a 37-year-old, actually -- just for those three.

Also, this is Charlene Doug us. [Indiscernible] -- Charlene Douglas. Given the number of children with cleft lip and palate born around the world whose moms never see this vaccine, I know that what's reported in VAERS is what you just have in VAERS. But something like this would still be held in the books as an adverse vaccine reaction?

It's an adverse event reported in a woman who received a vaccine when she was pregnant. Granted, that adverse event was in the newborn, but this goes back to

what is submitted in VAERS. The report is the report. We accept all reports. We don't judge clinical reports. And we don't assess causality.

You just look at that number and decide whether or not you're going to go with something further.

A report of a pregnant woman getting vaccinated in adverse events was specified as cleft lip in the newborn. So that's what it is.

Okay.

Okay. Any other questions? Proceed, please.

Now we're on slide 28. Death reports in VAERS following Zostavax. There were 51 deaths. The median age was 74 with a range from 56 to 90 years old. 41 of the 51 were confirmed with autopsy reports for medical records and the slide lists the body systems involved in the cause of death among the 41 confirmed death reports. Cardiovascular, other infectious respiratory noninfectious and other gastrointestinal. Slide number 29 shows the data mining results from FDA for this vaccine in VAERS. And again, these are terms for which a statistically significant threshold was reached. The first terms are herpes zoster, ophthalmic herpes zoster, oral herpes, Vara Cella, Marisol a virus test positive, -- varicella, varicella virus test positive. Conditions related to varicella zoster and herpesviruses are commonly reported. And may represent confounding by indication as well as general confusion about the virology of some of these clinical entities. I did show you the efficacy of this vaccine so you'd understand it's not 100% effective. And how common zoster is, lifetime risk of 32%. Other MedDRA coding terms that showed up in data mining were blistered injection sites, pure -itis, injection site rash, in just -- injection site vesicles, scabs, and skin lesions. Slide number 30, dating -- data mining terms that were statistically significant threshold include accidental exposure to product, drug administered to patients of inappropriate age, no adverse event, secondary transmission, and wrong are drug administered. As we've said, in VAERS, if there's a medication error, it is reported to VAERS. Sometimes this is a live vaccine and it's only indicated for certain ages -- to get reports of [Indiscernible -- low volume] slide number 31, summary and conclusion. 16,000 reports following Zostavax from licensure to 2013. 95% were nonserious. Adverse event in 50 to 59-year-olds followed by injection site s

welling, erythema and injection site warm. In 60 and older group, injection site erythema, herpes zoster and injection site swelling and rash were the most commonly reported adverse events. Death reports are rare. There were 51 total. Listed causes of death and information from medical records do not suggest a pattern of concern. Patterns were detected in VAERS for Zostavax. I'd like to acknowledge my colleagues who helped me with this presentation. Thank you.

Thank you. Does anybody have any questions for Elaine? Comments? Elaine, thank you very much. Appreciate it.

My pleasure.

Next up on the agenda is Dr. Barbara Malik, the update on the national Institute of allergy and infectious diseases. National Institutes of Health vaccine activities. Do we have a presentation?

Claire is here.

Claire is filling in. Indeed. Claire, if he will state your name for everybody to hear?

I'm Claire Schuster from the national Institute of allergy and infectious diseases. And I have a brief update to share with you today.

I should have known. Sorry, Claire.

No problem.

Among the 27 institutes and centers that comprise the National Institutes of Health, NIAID has the mandate to responding to public health threats. NIAID manages a complex and diverse research portfolio that aims to expand the breadth and depth of knowledge in all areas related to infectious immunologic and allergic diseases, and develop flexible and domestic -- flexible domestic and international research capacities to respond to emerging disease threats. That's what I'll be talking about today. So one such threat is Ebola. NIAID supports and conducts research seeking ways to diagnose, treat and prevent Ebola. This includes basic research and genomic sequencing. To understand how Ebola virus causes illness. NIAID is supporting several Ebola vaccine candidates at various stages in development. Earlier this month, NIAID began initial human testing of an investigational Ebola vaccine. The vaccine was codeveloped by NIAID and Glaxo Smith Kline. The trial is evaluating the experimental vaccine safety and ability to generate an immune response in healthy adults and is taking place at the NIH clinical centers in Bethesda, Maryland. A study is the first of several phase one clinical trials that will examine this investigational vaccine, and also an experimental vaccine developed by the public health agency of Canada and licensed to new links genetics Corporation. These trials are being conducted or will be conducted in healthy volunteers who are not infected with Ebola to determine if a vaccine is safe and induces an adequate immune response. The NIAID GSK vaccine is also planned for testing beyond the NIH clinical Center study. NIH is collaborating with partners in the United Kingdom to test this vaccine in healthy volunteers in the UK and in the West African countries of Gambia, pending approval from the relevant authorities, and Bali. The CDC has initiated discussions with Ministry of health discussion -- in Nigeria about prospects of conducting a phase one study of vaccine among healthy adults and countries. For more information including details on NIAID Ebola research and other vaccine candidates, please see our website and the press release from August 28. Another emerging threat is chikungunya virus. It can cause high fever, joint and muscle pain and headache. While chikungunya virus does not often result in death, the joint pain may last for months or years and may be a cause of chronic pain and disability. It was first identified in East Africa and caused sporadic illness and urban outbreaks in Thailand and India in the 1960s and 1970s. It first appeared in the Western Hemisphere late last year. Since this slide was made two weeks ago, the numbers in the Americas have grown to over 659,000 including 37 deaths. Within the United States, currently we've seen 696 cases. Most are brought in through foreign but there have been six locations that will fully acquired chikungunya, all in Florida. Currently we don't have any vaccines or therapeutics for chikungunya. The most effective means for prevention is to avoid mosquito bites. Last month, NIAID reported on results of a study looking at an experimental chikungunya vaccine. This vaccine elicited antibodies in all 25 adult volunteers who participated in this early stage clinical trial conducted by NIAID scientists. The results are reported in the August issue of the Lancet. The study found that the vaccine induced antibodies persisted in all volunteers even those who received the lowest dosage. So at least 11 months after final vaccination, suggesting that this vaccine could provide durable protection against the disease. Continuing with the theme of how we are responding to emerging and reemerging infectious

diseases, I wanted to mention that NIAID recently established the centers of excellence for translational research for the program, spanning from discovery, pre--- preclinical development, through use of improved countermeasures against emerging and reemerging infectious diseases. These countermeasures could include diagnostics, therapeutics, vaccine and vaccine technologies. There are 14 multi-Project centers across the United States and each focuses on specific themes. Several have vaccine related research games including novel platforms for the production of antibacterial vaccines, novel nanoparticle platforms for the delivery of vaccine and adjuvant, and vaccines to prevent gastrointestinal infections such as E. coli, salmonella and Clostridium difficile. In addition, five of the's are focused on Ebola research. Lastly, I wanted to mention several meetings that may be of interest. And these are several meetings that we've been holding this year related to the area of antimicrobial resistance. In July, we cosponsored a meeting with FDA on the development of new antibacterial products. This included input -- exploring key issues and challenges related to antibacterial product government. Later this month, we are sponsoring back-to-back workshops on overcoming bottlenecks and antibacterial product development and coordinated development of diagnostics and therapeutics. Thanks. Are there any questions?

Any of the studies Ebola or [Indiscernible -- low volume]

Chikungunya?

Chikungunya, pediatrics or all adults right now?

At this point, the Ebola I believe are all adult and I believe that's true for chikungunya also but I would have to confirm.

Thank you.

Any other questions? Comments? Claire, thank you very much.

Thank you.

Next item on the agenda, M s. Valerie Marshall. Update on the center for biologicsCenter for Biologics, evaluation and research, Food and Drug Administration, vaccine activities. There is a report under tab 5.1 in your book.

Good afternoon. July 2014, FDA approved supplement the biologic license application for diphtheria and tetanus toxoid and inactivated poliovirus vaccine which is Kinrix to include safety data for coadministration of Kinrix with their SL a virus vaccine and to update the pharmacovigilance plan. In July 2014 the FDA include the supplement to biologic license application for HPV recombinant which is CERVARIX to include efficacy and immunogenicity data from the end of study analysis in the package insert and to update the pharmacovigilance claim. In July 2014, FDA approved supplements to biologic license application for licensed influenza vaccine to include the 2014-2015 formulation. Influenza that have been released by FDA are available for distribution by the manufacturers. Scroll down. In July 2014, the FDA released draft guidance and intended to provide new information to review boards, clinical investigators of study sponsors about FDA informed consent regulations. August 2014, FDA approved supplement to the biologics license application for influenza vaccine manufactured by CSL to include data and labeling for the use of AFLURIA with the status, needle free injection system, in patients 18 to 64 years of age. To more updates noted here. FDA has received by Logix license application from Pfizer and Novartis for vaccines to protect against meningococcal disease. Upcoming conference will take place on September 22 and 23, cosponsored by NIAID entitled to translational and regulatory science of polio vaccines and antiviral. The main goal of this international workshop is to bring together stakeholders to identify gaps to introduce new vaccines and antiviral against poliovirus. This concludes my report.

Great. Thank you. Any questions for Valerie?

[Indiscernible -- low volume] to know what the issues were -- more data to support coadministration [Indiscernible -- low volume] may have come across -- I don't recall --

I am not sure about that exactly but I can find out for you. I don't know if they needed to update the package insert with data they already had, or if there was another issue with that, but I can find out from my colleagues at FDA.

Any other questions? Valerie, thank you very much. The last item on the agenda -not the last item but the last report, the update from the national vaccine program office. Karen?

5.11 is the tab in our workbooks.

Hello, good afternoon. I want to first introduce myself because it's my first presentation in front of a committee.

Welcome.

Thank you. My name is Karin Bok. I'm a vaccine scientist by t raining. In charge of vaccine safety for the national vaccine program office. I'll be your official from now on. So thank you. I also can pronounce [Indiscernible] so --

# [Laughter]

That's why I got voted out as chair.

[Laughter]

I will have the next chair.

# [Laughter]

So I'm sorry my slides are not not -- not numbered. Next time, I'll get that are. So we have a couple of reports in the last few months. One is that MVP funded extensive review on adverse events oral vaccinations. This review was conducted by RAND under contract with ARC. And it kind of complemented the previous review by ILM but it also included pregnant women at least for the vaccine. There were two publications they completed review. And also in the Journal of pediatrics, talking not only about children -- adverse events. So this is just a list of all the vaccines that were included in the review. Which are most of them. And I just highlighted a few of the adverse reactions that were written in the review. Now, the literature that was included in the review was first graded like -- much like ACIP does for the significance of the findings. Once it was graded, then it was decided whether it was significant finding or not. So for the hepatitis A vaccine,

there was moderate evidence for us -- after hepatitis A in children from seven to 17 years old. For the flu vaccine, there was moderate evidence of febrile seizures. Mainly the TIV vaccine. And it was increased when it was associated with PCV13. And of course PCV13 was found to lead sometimes to febrile seizures as well. And the rotavirus, we already suspected this, but of course there is a very low chance that you can experience enteral section -- interception. The other thing is that we are starting to invest more budget on supporting vaccine safety research. We've had -- historically corroborated with CDC, research projects. This time we are collaborating with CSA for the first time and we are following babies vaccinated with TD AP. We're also approved for FY15 to launch a pilot program for a cooperative agreement, also on vaccine safety research that will be announced early next year. And this is a pilot program so they -- the investment is moderate but we hope that it will grow and we're hoping to fund vaccine safety pregnancy vaccinations and also in general. And I think that's it. Any questions?

Questions or comments?

What was the signal for moms who got vaccinated?

It was safe. The vaccine was deemed safe. There were not adverse events following -- yeah. That was a good question, though.

Thank you very much. So that's now brings us to the public comment on the agenda. Operator, first off is there anyone in the public you who wants to speak? It would appear not. Is there anyone on the phone lines, operator, that you could open up the line for anyone to make a public comment?

Participants, please press star one on your touch tone phone if you have a public comment. Please before -- please record your first and last name clearly when reporter -- when prompted.

I'm showing no comments in q ueue.

Okay. With no comments in queue, the next item on the agenda is any new business or future agenda items that should be discussed or brought up? Do we have any? Any summaries of what we've been through the past day or two? Survey, institutionalizing surveys or something that we've committed to do? Yes? I had a question. It seems --

Melissa.

This is Melissa. In a few meetings back of the presentation -- regarding the safety of [Indiscernible -- low volume] as a CCP was considering whether or not they should -- coverage of a dose --

That was the purpose -- this is -- that was the purpose of Elaine presenting about Pneumovax and -- [Indiscernible -- low volume] the information to inform whether or not you all wanted to consider recommending that those vaccines be added or not, but that was the purpose of Elaine Miller's presentation.

Okay. So that would be a future item and a new business item. Do we want to have that considered by the commission as a whole? I'm reluctant to determine what we do, because we have a chair in waiting. [Laughter] who -- but do you have any thoughts on that, Kristen?

This is Kristen. So I do remember that this is something we talked about as the follow-up of recommendations for maternal vaccination. If I recall, this is something we were going to consider within the process working group. I did miss that presentation this morning. So what we can do is either decide whether or not we need -- would we move that to the process working group or consider another working group or -- we can add this as an agenda item for the next meeting. It will take some time to develop recommendations.

Right. So Dave King speaking. Go ahead, Michelle.

Not sure if the process workgroup is the right place.

It may not be. I think it -- having a separate working group would be effective because there's a lot of information to review and we have multiple presentations on a smaller scale that -- so I would suggest that as a potential. Next approach. This is when we talk about it?
Dave King. We can either talk about it here, or it can be put on the agenda i tem, talked about and then workgroup of some sort be created to look into it at that time. So we can either talk now --

[Indiscernible -- low volume]

We can if we wanted to, create a workgroup right now but we don't necessarily have to have the members before we leave but we have to get members into it, commissioners that would be willing to work on it. So I am really deferring here because I think that it should be coming from you rather than me, to be honest. We can do it.

This is Anne. So I'm wondering, were those two presentations the only vaccines that would not already be covered? Routinely --

Correct.

As I reflect on those presentations, our original thought was some children are vaccinated and then as they become adults, that becomes an issue. But what I'm pulling back in my mind from those presentations, those are things that were given and -- in adulthood.

## Correct.

But they weren't injured people. They weren't people vaccinated as old teenagers, if you will. And who grew up and the injury became manifest. What we heard was 65 and older, pregnant, even mature pregnancies. Is there another commission that handles vaccine injury for adults?

This is Michelle. We cover -- the injury fund covers adults. If the vaccine --

Correct.

[Indiscernible -- multiple speakers] they get --

We can -- we can put whatever we want.

We can ask as a group -- Dave King speaking -- to put something on if we wanted. I don't know that it would happen, but Tom, you are going to make --

Tom from CDC. I think the issue -- correct me if I'm wrong -- for other vaccines, if it's routinely recommended for children, it's covered even if it is also given to adults? So most flu vaccine including like high-dose flu vaccine which is only approved in elderly people, I mean, those people are covered, whereas these other two vaccine -- vaccines aren't. So there's kind of this inconsistency and it was to kind of resolve that issue of, you have some vaccines which are covered for everyone, just because of -- but they're recommended in children where you have other vaccines that aren't covered and there's kind of an incident -inconsistency there.

It was just --

This is Melissa speaking.

Sorry. This is Melissa. Not sure if there was i nonsistency. If I recall correctly, the ACCV particularly requested the informational session because there was some consideration of whether they wanted to make a recommendation of the program, be expanded to cover vaccines that are recommended for routine use in adults or not recommended for routine use in adults.

This is Anne. I suppose the other issue would be two vaccines would be other strains or lesser strains of an organism -- [Indiscernible -- low volume] related to the Zostavax -- conjugate vaccine and saccharide -- it's not like we're picking out yellow fever vaccine or some other --

It also depends on what -- so the requirements -- it must be covered [Indiscernible -- low volume] excise tax so the excise tax -- and number two, it must be recommended for routine use among children by the CDC. So those are what the current parameters are.

This -- since Pneumovax is only sir -- only recommended for certain high-risk groups it's not recommended under the program cut?

Correct.

So I guess I would suggest if we would like to pursue this is that we do form a working group and one, really consider what the options would be and what additional information would be helpful in formulating a recommendation. And so first I want to make sure everyone on the commission would be in agreement for pursuing that Avenue and then we can -- people can think about whether they'd be interested in what joining a workgroup and think about it, send an e-mail, if that would be a good way I guess, so like starting as chair the second this meeting is over?

[Laughter] [Indiscernible -- multiple speakers]

Yes. Dave King speaking.

I think that's -- I do think that's a good course of action in that it makes sense for us to create some sort of workgroup to at least look at the issue because -- and then way whether or not shouldn't even be considered by us or should it not? And then take it step-by-step. Logical thinking through and it makes sense to have it in a more condensed organized group of than a, big group. So the answer is yes. We need to form that commission or workgroup. We can call it. What shall we call it? The [Indiscernible -- multiple speakers] has been formed, with no current members. But the chair is an ad hoc member of every workgroup. So you already are there if you want on that one. And I think that over the course of time, before -- as we try to set it up, e-mail can go out, communicated to the commissioners asking for volunteers and doing things like that. Does that work for everybody? Good. Any other --

Clarifying question, recognizing that there are those two criteria. The commission can always recommend to the secretary that it pursues legislation to expand the statutes to adult immunization. I think -- you all can correct me if I'm wrong. The history -- when the fund was started, there were few if any adult vaccinations. That's not the case anymore.

It's upside down now.

Absolutely.

Right. Since the injury fund does cover adults, in practicality, not from a legislative standpoint, it does seem very discriminatory that we limit the funds in that way, because it appears to be from an historical perspective, not from reality anymore.

So that would be an issue that I think would certainly be warranted for discussion by the commission. Yes.

From the reports, --

It looks like if this vaccine is not covered in children as we are accidentally giving this vaccine, would they be covered by the program?

No.

So is that also one [Indiscernible] to cover it because of the adverse -- from the administrators?

That would certainly be something discussed and put into, on the workgroup. I would agree.

Sylvia, I need a clarification. Isn't the pneumococcal 23 covered for children? Because the deaths -- 23 is not?

[Indiscernible -- low volume] high-risk?

Yeah. High risk.

Routine for all children.

Dave King here. Even though it's a high risk, it's not for all children. Therefore, that nuance keeps it from being part of -- okay. Yes?

Sylvia. That becomes a critical factor for pediatrics because our number, percentage of chronic care kids, can be anywhere from 3% to 4%. But now because we're taking care of a lot more kids who transitioned as chronically ill, that's going up to 30% to 35%. So you're not talking about a small number of

special needs kids who get this vaccine. You're talking about a large number now, a larger percentage.

It's routine for the high-risk?

%. So so that's my nuance.

Right.

So they are left -- lots of things to consider.

We certainly have a big agenda for that workgroup to consider. So we probably should get some emphasis on that work group.

I will be.

Sylvia already volunteered.

Okay.

Sylvia will be our chair.

Sylvia is going to be the chair of the workgroup? Even better. Terrific. Any other comments or thoughts, concerns, issues, new business items, agenda? Then I will entertain a motion -- don't adjourn yet?

I just want to say it's been a privilege to be your vice chair. I appreciate every moment. And [Indiscernible] fantastic [Indiscernible -- low volume] the -- talking with you and -- on the commission with each of you. I understand that I will probably still be coming to the meetings.

[Laughter]

Most of all, thank you for voting me out of office.

[Laughter]

It's been a privilege to have Dave King take my chair.

First off, then I say thank you to everybody. I'm really not good at this part of saying -- as people probably have gathered, all I can say is I think everybody for allowing us to be able to having -- to have the honor of serving. Thank you for all being commissioners. And for everybody who has given us supports for us to be able to carry on as we have. With that, I do invite a motion to adjourn.

I move this business meeting of the -- the 93rd meeting of the ACCV adjourn.

Second.

All in favor, aye. We don't need to do that. For the very last time [Indiscernible -- multiple speakers]

All right. Can we end up there?

Thank you.

[event concluded]

Thank you for your p articipation. You may disconnect at this time.

[event concluded]