# THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

convenes the

#### Thirteenth MEETING

# PEASE COMMUNITY ASSISTANCE PANEL (CAP) MEETING

September 21, 2020

The verbatim transcript of the Meeting of the Pease Community Assistance Panel held virtually on September 21, 2020.

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September 21, 2020

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#### PROCEEDINGS

(6:00 p.m.)

#### WELCOME AND INTRODUCTIONS

CDR MUTTER: Okay, good evening. This is CDR Jamie Mutter. Thanks for joining us tonight for the Pease CAP meeting. We hope to have a great meeting tonight. So if Dr. Breysse, would you mind giving a few welcoming remarks, and then we'll start with the introductions.

DR. BREYSSE: Okay. So normally Chris Reh would be here tonight representing ATSDR but Chris is on holiday. So want to make sure our ATSDR leadership was committed to carry out these meetings so I'm filling in for Chris tonight, and so I want to welcome everybody. But I have to confess, I was tempted -- given it's in the evening and I'm at home, and I would normally be drinking a glass of wine right now. I was tempted to like, pour myself a glass of wine, but I thought maybe this still counts as worktime, and it might not be kosher to do that. So as soon as we're done, my wife has a glass of wine waiting for me.

CDR MUTTER: Oh, nice. Thank you, sir.

DR. BREYSSE: So you know, normally after these meetings -- I don't know if you all know but we'd normally hit a bar and get a late dinner and a beer afterwards anyway. So that's part of the camaraderie of working together. So we won't go and do that either, because of this mess we're in right now. But I want to just, you know, thank everybody for helping at -- helping us to go forward. We remain committed to getting the Pease Study back on track and we could talk about what that means as we go throughout the meeting. But we look forward to keeping it going and getting back to the field. So I'll just stop there, and we'll let the discussion carry forward.

CDR MUTTER: Thank you so much. Okay, so we're going to do introductions. We're going to start with a CAP, and I can see who's on, so I'll go ahead and just say your name, if you want to give a brief introduction. So we'll start with Andrea.

MS. AMICO: Hello. My name is Andrea Amico. I'm a Portsmouth resident and cofounder of Testing for Pease and CAP member.

CDR MUTTER: Thank you. Lindsey Carmichael?

MS. CARMICHAEL: Hi, everyone. Lindsey Carmichael; I live in Portsmouth. Also a CAP member and a parent of a child who attended daycare at Pease.

CDR MUTTER: Thank you. Cliff Lazenby?

MR. LAZENBY: Good evening. Cliff Lazenby, City Council in Portsmouth, Pease CAP member.

CDR MUTTER: Thank you. Stefany?

MS. SHAHEEN: Good evening, everybody. Stefany Shaheen here. Current Portsmouth Police Commissioner, former City Councilor and CAP member. Nice to see some of you.

CDR MUTTER: Thank you. And Technical Advisors, Dr. John Durant? Okay, I'm going to move on to Dr. Laurel Schaider.

DR. SCHAIDER: Hi, everyone. This is Laurel Schaider. I'm a research scientist with Silent Spring Institute, and Technical Advisor to the CAP.

CDR MUTTER: Thank you. Any other CAP members or Technical Advisors I may have missed on the call? Okay.

DR. BREYSSE: John might not have known he was muted. Maybe that might've been --

DR. DURANT: Hi, this is John Durant. Sorry. I'm a Professor at Tufts University, Civil and Environmental Engineering.

CDR MUTTER: Thank you so much. Okay, so we'll go to ATSDR. Dr. Breysse already introduced himself. Let's see -- Dr. Bove?

DR. BOVE: Hi, this is Frank Bove, ATSDR.

CDR MUTTER: Dr. Pavuk?

DR. PAVUK: Hello, this is Marian., Marian Pavuk.

CDR MUTTER: You - CAPT Sommers?

CAPT SOMMERS: Hi. Tarah Sommers, ATSDR, Region 1.

CDR MUTTER: Thank you. Lori?

MS. LAUNI: Hi, Lori Launi, PFAS Communication Lead for ATSDR.

CDR MUTTER: Thank you. Dr. Rogers?

DR. ROGERS: Hi, this is Rachel Rogers, PFAS Science Lead for the ATSDR PFAS Community of Practice.

CDR MUTTER: Thank you. Meghan?

MS. WEEMS: Hi, Meghan Weems, Program Manager for the Multi-site study.

CDR MUTTER: Thanks. Kim? Kim, are you on mute?

MS. DILLS: Yes, sorry. Hi. Kim Dills, Congressional Affairs for NCEH/ATSDR Policy.

CDR MUTTER: Thank you. Dr. Ragin-Wilson?

DR. RAGIN-WILSON: Hi. I'm Angela Ragin-Wilson, Deputy Associate Director for ATSDR.

CDR MUTTER: Thank you. And Mica, do you introduce yourself?

MICA JAMISON: Sure. I'm Mica Jamison. I'm the special assistant to Dr. Breysse.

CDR MUTTER: Thank you so much. Did I miss anybody from ATSDR, CDC? Okay, wonderful. If we can go to U.S. Air Force?

**COL HOLIFIELD:** Evening. This is Col Freeman Holifield with the Air Force Secretariat for Installations, Energy, and Environment.

CDR MUTTER: Thanks so much. And Abt, please?

DR. HUNT: Hi, Danielle Hunt from Abt, Pease Study Director.

MS. DUROCHER: And I'm Kate Durocher, also from Abt Associates.

# ACTION ITEMS FROM THE PREVIOUS CAP MEETING

CDR MUTTER: Great, thanks. Anybody else on the panel, that we might've missed? Okay, so from there, let's move on with our agenda. We have action items from the June, 2020 CAP meeting. And all the action items are for ATSDR, so I will read them now. 1. ATSDR will let the Pease CAP know when the new PFAS website will be launched. And Lori, correct me if I'm wrong, but I think that was discussed at a previous CAP meeting. Is that correct? You're on mute.

MS. LAUNI: Excuse me. Yes. Yes, we -- it was announced, and it was launched. So we are looking for feedback. We're continuingly going to update it as we see -- especially as new items are added to the website. We just want to increase community awareness of this, so we can make sure it functions well for everyone.

CDR MUTTER: Great, thank you. The next action item: ATSDR will send talking points to the CAP regarding the pause in the Pease

Study, and they can share with the community. And that was sent on July 24th of this year. The next one: ATSDR will research the proper PPE to use in the Pease Study. And that information was sent last Thursday, September 17th, to the CAP. The next one is: The CAP asked what is ATSDR's policy if someone refuses to wear a mask or can't tolerate wearing a mask (child)? Will they still be able to participate in the Pease Study? Frank do you want to take that one for me, please?

DR. BOVE: Well, I mean, we're going to encourage everyone to wear a mask. We're going to mention that when we screen them. But if it's impossible for them to wear a mask, then they can still participate. We'll just have to think of [inaudible]

CDR MUTTER: Frank, I'm having a hard time hearing you. Would you mind restating the last sentence?

DR. BOVE: Okay. So again, we're going to encourage everyone to wear a mask, but if they can't, they could still participate. But we want to ensure that there is a safe distance between them, and the staff, and other [inaudible] So keep that protected.

CDR MUTTER: So I heard that they'll still be able to participate, but they'll want to keep a safe distance between the participant and the staff. Is that correct, Frank?

DR. BOVE: Right. Can you hear me, or is there --

CDR MUTTER: I hear you strong to start, and then it wanes off, for me, anyway.

DR. BOVE: Okay.

CDR MUTTER: Okay, so I think I got that. So the next action item: ATSDR will send the Pease CAP information that CDC has on its website, and guidance around serology and testing. And that was sent on August 18th. So that — those are the action items. I do want to circle back around to introductions, since I see we had a few — few new CAP members joining us. Alayna, would you mind just introducing yourself, please?

MS. DAVIS: Hi. My name is Alayna Davis. I'm a member of --cofounder of Testing for Pease, and a CAP member. My son was impacted by PFAS, and so that's why I'm on the CAP, and working with the community.

CDR MUTTER: Thank you. Rich, would you mind giving an intro? Rich, you're on mute. Rich, you might need to take your mic off mute. There you go.

MR. DIPENTIMA: Okay, there we go. Hi. I'm Rich Dipentima from Portsmouth. Former Chair of the Community Advisory Board on PFAS. Former State Representative, representing the city of Portsmouth. Thank you.

CDR MUTTER: Thanks so much. And I wanted to introduce Joe. He's our newest CAP member. It's his first CAP meeting today. So welcome. If you'd like to give an introduction?

MR. RYAN: Hi, everyone. My name is Joe Ryan. I live in [inaudible] New Hampshire. And I'm part of the Pease CAP, and very much looking forward to, you know, making this work as effectively as possible.

CDR MUTTER: Wonderful. Welcome to the group.

MR. RYAN: Thank you.

#### PEASE STUDY UPDATE

CDR MUTTER: Absolutely. Okay, so let's move on with our agenda. Let's do a Pease Study update. Frank and Marian, would you like to give a brief update, and then I think Lori is going to jump in with a communications update after that.

DR. BOVE: Okay. I guess I'll do it. We're still waiting to hear from OMB. We last week, requested that OMB do a very fast, expedited review of the package, to see if that would move the approval process along. And but we're still waiting to hear. We have all the procedures in place, so that we can move quickly once we get approval. We've resolved some of the issues around the neurobehavioral testing, so that we can do all the tests. And you know, we're just waiting to hear from OMB. We do also have to go through the IRB process, but that shouldn't take long at all. It's really the OMB process that's holding us up. Marian, do you want to say anything?

DR. BREYSSE: I can comment. So I got involved with that this week, and we're pushing every button we can to make sure that our stuff moves up as far in the queue as possible with OMB. You know, they're getting requests from government agencies to do all sorts of COVID stuff, and they're prioritizing the COVID stuff. And but we -- we're trying to make the case that since they've already approved these measures, that were changes that we made in terms of protective measures for our exposure assessment study, we hoped that this would be an easy look for them, and they might agree to kind of pick it up quicker. So I'm confident we'll get approval by the end of the month at the

latest. And I'll -- I'm going to keep pressure on our Office of Science. They're going to keep pressure on HHS, keep pressure on OMB to make sure that happens.

CDR MUTTER: Thank you. Any questions on the OMB update?

MS. AMICO: Okay, this is Andrea. Thank you for the update. So can you help me understand what OMB -- have they already -- have they looked at this a few times, or is this the first time they're laying eyes on this revised plan with these COVID protocols in place? Have you had a back-and-forth with them, or you -- are we going to expect that they're going to look at it, and then they could come back with comments, and then that delay even more?

DR. BREYSSE: So I don't think we've heard anything back from them, at all. If I'm wrong, somebody correct me. So --

DR. BOVE: Just on the incentive issue.

MS. AMICO: It won't increase the incentive, right?

DR. BOVE: Well, the incentive is separate.

DR. BREYSSE: That's a separate issue. We divorced the two. We didn't want the incentive issue to hold up getting the whole thing restarted.

MS. AMICO: Okay.

DR. BREYSSE: So the restart package is really just the changes we had to make to accommodate the COVID situation now. And we have gone back and forth on the incentive issue, but not on the [inaudible] part.

MS. AMICO: Right. Okay, so Dr. Breysse, you said you feel confident, by the end of the month at the latest, we should have the approval, but you don't know -- you haven't heard back if they have any even initial reactions. And they could come back and want more information, or want you to change something, and that could also delay things, right? That's a possibility, or do you think that's not going to happen?

DR. BREYSSE: I'm confident, however, because they've already reviewed our changes to the exposure assessments. And they're the same with [inaudible] that. The exposure assessments, we did have a couple back-and-forth, and we learned from that. And so that's one of the reasons for my [inaudible]

MS. AMICO: Okay. Okay, I think that's it; thanks.

**CDR MUTTER:** Thank you. Any more questions on the OMB piece, I don't know if Frank, you have any other updates? Did you want to touch on the incentive piece?

DR. BOVE: We've made some changes to the incentive thing. We added some more arguments in its favor, after getting comments from OMB. So we'll have to wait and see whether that flies with OMB or not, or whether [inaudible]

CDR MUTTER: Frank, Frank, I'm going to interrupt you, because it's hard to hear you again.

DR. BOVE: I'm right up against the computer now. I think that OMB might allow us to do it for a short period of time, to have incentives, increase incentives, but we'll have to wait and see what they finally decide. So that's it.

MS. SHAHEEN: Could I just ask, both on the incentives and on the approvals from OMB, how much do you all anticipate the current political climate and the upcoming campaign is affecting timelines here?

DR. BREYSSE: I don't know the answer to that. I don't think so. I really think they're swamped right now, and they have a long queue. And it's just a question of where they put you in that queue.

MS. SHAHEEN: So can you give us -- I mean, I know that it's a shot in the dark, or like throwing a dart at a dartboard you can't see. But any sense of like, are we talking a week? Are we talking three months? Are we talking six months?

DR. BREYSSE: I'm hoping in the next two to three weeks., which takes us to the end of the month.

MS. SHAHEEN: Okay.

CDR MUTTER: All right, thank you. So --

MS. AMICO: I'm sorry. I have two more questions that came up; I'm sorry. So once we get that approval, like, right, once that comes through, are we ready to hit the ground running? The study office could reopen? Participants can come in as long as they're calling and making appointments? Like, is there going to be something else that needs to be done once you hear from OMB? It's all set? Is the study office ready to go, the staff is ready to go, the PPE is in the office, like, we're ready to hit the ground running? Putting aside recruitment, because I know that's going to be a challenge. But there will be some people that had to be rescheduled, that were scheduled during this time, that — so are we ready to call those people and get them

going? Or is there going to be something else that needs to happen, to actually get the doors open?

DR. BOVE: Danielle, you want to --

Sure. So we won't open immediately. We will need at least a couple of days to train our call center staff. So there are some short term activities that we can do, like calling the people who had previous appointments, and rescheduling them. We are -- we did retain our staff for the purpose of being able to start up quickly, once we got approvals in place. So that should be ready, pending, you know, any decisions by ATSDR in the meantime. But we would need a couple days at least, to train the call center staff. We don't want to do that too early, because they're working on other projects, and we would just have to retrain them once they get approvals in place. And then after that, it's just a matter of getting the communications channels out, and making sure the people know that the study is open for people to call in and enroll. And in the meantime, we'll be sending questionnaires out to the people who are scheduled to have a telephone questionnaire administered. And we'll schedule the in-office appointments for the blood, body measurements, and then the neurobehavioral testing that will take place.

MS. AMICO: Okay, great. And so you are planning, once this is open, you will call all of those previously-scheduled people and rebook? You won't expect that they're going to call you, right?

DR. HUNT: Absolutely not, no, no.

MS. AMICO: Okay.

**CDR MUTTER:** Okay, can you touch on the PPE question that Andrea asked as well?

DR. HUNT: Sure. So we have received PPE from ATSDR. We also have some PPE that's being ordered by Abt. And then we're just waiting on a couple of other things that are newly ordered, like some face shields for the neurobehavioral testing, and some thermometers. But other than that, everything else is at the office. So we're also working on the signage for the office, to make sure that people know to distance, and use the sanitizer, and those types of things, so we'll be ready once the OMB approval comes in on all those.

CDR MUTTER: Thank you, Danielle. Frank, would you touch on the CDC IRB? Or Marian.

DR. BREYSSE: I don't know if he heard you.

MS. SHAHEEN: You're on mute.

DR. BOVE: I mean, once we hear from OMB, and there are no changes, we send a package quickly to IRB for expedited review.

CDR MUTTER: So is there a kind of a timeframe on that, Frank, generally speaking?

DR. PAVUK: The IRB usually doesn't take more than a week.

CDR MUTTER: Okay.

DR. PAVUK: The -- these are again, you know, different situations these days.

CDR MUTTER: So there is one step after OMB is CDC IRB approval.

DR. PAVUK: Yeah, it would give time to Abt to train their staff and prepare the office.

MS. AMICO: the -- we can't work on the IRB step until the OMB step is done?

DR. PAVUK: No.

MS. AMICO: Okay, but --

DR. BREYSSE: If they changed something Andrea, we have to go back to them. So until we know exactly what changes they approved, we don't know what to ask them, you know, IRB, to look at.

MS. AMICO: Okay.

**DR. PAVUK:** So those are the same documents that come back from OMB -- those will be sent to IRB. So they will not be creating the new documents, really.

MS. AMICO: Okay, so just to be clear -- I want to make sure I understand. So we're waiting on OMB. Once we get that, we need to get IRB approval, which hopefully should take maybe a week. And in that time, Abt can retrain their call center staff and get their staff up and running. So once we hear about OMB, we could anticipate like, within a week after that, that the Study doors could actually reopen, and people could come in.

DR. BOVE: Yeah.

DR. PAVUK: That would be correct.

DR. BOVE: During that period, we'll be doing the outreach that we've been talking about as well.

MS. AMICO: Sure. Yep. I had two other questions that came up. So Danielle had mentioned a questionnaire going out to folks.

So, I know the plan now is to do the questionnaire over the phone. Will people be getting a copy of the questionnaire ahead of time? Is that what you said -- you'd send a questionnaire to people? Or will they just be asked the questions over the phone from the staff member?

**DR. HUNT:** Our plan is to give them a copy of the questionnaire in advance so that they can review it and be prepared to answer the questions over the telephone. But the questionnaire will be administered and data will be collected over the telephone.

MS. AMICO: Okay. And then the other question I had was around the neurobehavioral testing. So, I know the last time we spoke, there was concern that we may have to cut some of the tests, or -- no? With the appropriate PPE, we can continue to do the full neurobehavioral testing? That's great news.

DR. BOVE: Yeah.

MS. AMICO: That's great news. Okay, wonderful. Thanks so much.

CDR MUTTER: Stefany?

MS. SHAHEEN: Yeah if I can just push on the timeline here that Andrea just started to outline. So, realistically, We're not going to hear back from OMB until, if we're lucky, the middle of October. And then there's another week or two, so that gets us right around the beginning of November. And then we have -excuse me -- so, I just want to, you know, in the gear up to where we're only going to have one more crack at the apple, in terms of rolling this out and trying to get -- people -engaged and reengaged. And so, to be trying to break through election noise, COVID, and concerns over flu, the holidays, -- I mean, I want to be as aggressive as we can be. I'd like to be able to start directing people to study enrollment now. But are we, you know, are we being realistic here that we can do something with the holidays looming, and the election, given the timeline you just articulated? In a best-case scenario, we're talking maybe the chance to get people to start coming to an office by early November.

DR. BREYSSE: I'm hopeful we can do it a little earlier than that. I'm hoping mid-October.

MS. SHAHEEN: So at what point are we going to -- like, what's the backstop, if it's early November, or then, a week or two into November? I mean, we've all been at this now a long time. At what point do we say, we're going to wait until after the holidays, or, we're going to not try to message and drive attention to enrollment in the middle of November or December? I

mean, my fear is, we're going to do all this work, and we're going to get to November, and then we're going to lose any momentum, because we're going to hit the holidays and then we've got, you know, the fallout. So, you all tell me. I mean I -- maybe

DR. BREYSSE: I think we need to talk that over ourselves. If it goes that far along, that might mean we'll have to get back to you.

MS. SHAHEEN: Okay, so I can just tell you, for those of you who aren't on the ground in New Hampshire, there is -- there are no -- there's very little air time for anything other than the election, because this is a purple state, and because we have a U.S. Senate campaign and a gubernatorial race and the Congressional. So, the idea that we're going to break through and drive people to enroll and get through the noise, between now and November, I think is wishful thinking. And then we've got the holidays. So, again, I would like to be able to start enrolling people now. I'd love to be able to use, you know, the attention we'd get as a part of this election, to help drive attention to this study. But, my fear is, we're not going to have enough runway, by the time we can actually start enrolling participants, given the time limit we're now talking about. So my plea back to the group in D.C. is just to be as realistic as you possibly can be, because if we are using political capital to get people to help us drive attention and traffic, and get people to pay attention to this study, between now and the holidays, it's a really tight window. And then we may not be able to go back to them again in January, February. So, again, I'd like to start being able to enroll them right now, but if -but if we get pushed too far out, I think we're going to really be up against it.

DR. BREYSSE: We'll talk it over Stefany and we'll get back to you on that. You know, my sense is, you know, we do our best to put it forward. And, you know, if we have to back off the gas pedal a little bit around the election, you know, we can probably do that. But, you know, what we

MS. SHAHEEN: No, no, please don't misunderstand. I don't want to back off the gas pedal at all. I want to put the pedal all the way to the --

DR. BREYSSE: Yeah, yeah. In the worst case scenario, I understand. Yeah.

MS. SHAHEEN: No, but, the issue that I'm genuinely worried about, and I don't think people really understand, it's a big

ask to get people to enroll in the study. And we've been as part of a smaller working group, have been brainstorming and pushing ideas and concepts for what kinds of things we can do to get folks enrolled. So I just want to make sure that's teed up with a realistic time frame. And if we're saying middle October but it really ends up being middle November, then it really means January. Because if -- we can't roll something out in the middle of November, I just -- don't think we're going to get anybody to pay any attention at that point.

CDR MUTTER: All right, thank you. Great discussion, and we'll take that back. Lori, can we look to you for an update? And Pam, would you mind pulling up the slide, please?

Hello everyone. I wanted to share with you what MS. LAUNI: we've been doing as a working group. I think everybody who is on this working group has really, really helped us come up with some great ideas. I mean, we are facing a tough challenge, given even the additional considerations that Stefany just brought up. So we are trying to brainstorm different ideas and the best ways to do things. So I'm just highlighting a few of our activities. Pam, if you want to go to the next slide. So one thing we've started to do is we're reviewing and revising all of our communication materials so we can make sure all of our changes to address COVID-19 safety guidelines are incorporated. We're trying to change the way we approach our ask. We're giving a little more of a soft touch, to increase participation. And, you know, we're trying to allow people to understand, we know that this is a tough time to -- during the pandemic. So, just make it more of a -- less of a demand and more of an ask, and focus on how important this study is, even though these are difficult times. We're also continuing to develop more media outreach strategies. One of the things we're doing is we're having -- a number of people have been identified, and we're still trying to identify more individuals who will be our spokespersons in the community, our community ambassadors to reach out to the media. We're going to share with them best practices and talking points on the Pease Study to really help drive home our message across all media outlets. Also, a number of CAP members, community members have offered to write op-eds. And again, we're just sharing basic tips on writing op-eds and including talking points as well. Another thing we're doing is identifying stakeholders who are willing to videotape themselves promoting the study. And again, having some tips on the best way to videotape yourself on your cell phone. But we're just as many, you know, if there's other people in the community that you think would make good spokespersons. You know, if you'd like to get them in touch with the media team and we will work with them

so they can promote the short videos, that they can be used on social media. Further, we're increasing community outreach. And I think this is one of the best things about our working group, is all the time we've spent brainstorming different ideas and ways to increase community engagement. The community has so much more knowledge of the people and the places where we can share the messages that we are developing. So, -- and we'd like to continue with that. And you know, in this, the overall group here, is to continue asking people. Maybe if they have not thought of somebody that they know who would be a good person to reach out to, to help us get the message out, and -- or any type of community event, or community organization that could help promote the outreach goals for us. So I just want to again thank the Pease CAP working group for all of their efforts, meeting every week to really come up with good ideas and give us strong feedback. So thank you.

CDR MUTTER: Thanks, Lori. Are any questions from the CAP for Lori? With the communication strategy? Okay. I don't hear anybody. I don't see anybody attempting to get off mute. Okay, so with that, are there any other questions from the Pease Study in general? Okay. All right, so let's move on.

MS. AMICO: Jamie, I have a quick question. Have you guys heard -- I know I forwarded a few names to the Pease Study, yeah, at CDC.gov email. Have you guys seen any other people emailing, showing interest in the study at that email address, other than the ones I forwarded?

CDR MUTTER: No. Not other than the ones you forwarded me.

MS. AMICO: Okay. Thank you.

#### QUESTIONS FROM THE AUDIENCE

CDR MUTTER: Yes. Okay, so, we have questions from the audience next. Pam, would you mind directing the audience on how to raise their hand or write in the chat? Do you see if we have any questions?

MS. WYTON: Sure, Jamie. Hi everyone. This is Pam Wyton. In order to ask a question, you can verbally ask a question by raising your hand and I can see that from the attendees if you do raise your hand, and I can allow you to talk and ask your question after you unmute your line. And then as Jamie mentioned also, there is the chat function within Zoom. You can click on the chat box and type in your question there as well.

CDR MUTTER: Thank you. So I'll wait just a second to see if we have any questions from the community. Sorry for the pause. Okay, so I see one chat question for Lori. Can you describe how you contact employers who may have participants? I see Lori trying to get off mute. There she is.

MS. LAUNI: Yeah, I am off mute now. There. Well, one way we are doing that, I'm working closely with Abt, who is in there on the ground. We're also working -- we're working with the HR group -- I'm not sure, what were they -- the exact name of this group, Kate?

MR. RYAN: Seacoast Human Resource Association.

MS. LAUNI: Oh, thank you, Joe. Yeah, Joe is helping us take the lead on that. So, We've got some folks right there on the ground, and Joe is really helping us contact some employers.

CDR MUTTER: Thank you for that. Any other questions? Are there any raise-your-hand questions, Pam?

MS. WYTON: No, no raised hands at this time.

CDR MUTTER: Okay.

MS. WYTON: There's another question in the chat though, Jamie.

CDR MUTTER: Thank you. It says, "I have taken the bloodwork at the start of the testing, but yet to see the results. When can we expect to see results? Frank or Marianne, would you like to address that?

DR. BOVE: Yeah, we'll present results at the end of the study. So, you know, since it's a study, it's not a exposure assessment, we wait until the end of the study to release results.

CDR MUTTER: So to answer that, because Frank trailed off a little bit, the end of the study, you'll get results. Okay? Any other questions from chat, or raise your hand. Okay.

MS. WYTON: Joe Ryan has his hand raised, Jamie.

MR. RYAN: Yes, question. So, what are we talking about? So a person goes in, they have their blood drawn, how long does it --can they reasonably expect to get results one way or the other? So, you said -- or Frank said, I think it was Frank -- or somebody said at the end of the study. What are we looking at in terms of time, roughly?

CDR MUTTER: Frank, can you take yourself off mute, please?

DR. BOVE: We want to reach our targets, which is 350 children exposed, a thousand adults exposed. So, we want to continue recruitment until we come at least close to those targets. Then we have to analyze the data, and present results. So we're talking quite awhile.

MR. RYAN: So, when a person -- its determined that they've been exposed, what are the next steps?

DR. BOVE: Next steps. I'm not sure, what next steps would

MR. RYAN: I mean, so say I'm one of those people, and my blood shows that I've been exposed to PFAS. What can I expect to happen next? Is it -- is that it for me? I mean, who is going to monitor -- am I part of an ongoing program where my health is monitored, or what?

DR. BOVE: Well right now, this is what we call a cross-sectional study. So, we do your blood work, we analyze the data, we present the results. If we get additional funding, we'll follow people over time. But right now we're basically -- you have to start with a cross-sectional study if there are any associations then you can follow them over time. We don't have funding yet for doing something longitudinal, at this point. So

MR. RYAN: So, I have a third question. And that is, and it's probably in what I've already read. But what are the parameters for what's considered a hazardous amount in the blood? And is it trace -- I mean, what are we saying for?

DR. BOVE: I think we don't know the answer to that question. That's part of the reason why we're doing these studies.

MR. RYAN: Okay.

CDR MUTTER: Thank you.

MR. RYAN: Thank you.

CDR MUTTER: There was a follow-up about the bloodwork. And is that the same for individuals, that individuals can expect results at the end of the study? I see a head nod yes.

DR. BOVE: Yes. Yes.

CDR MUTTER: Okay. Thank you. Another question: Can you remind me how you educate area physicians? Tarah, you might want to take a stab at that, possibly.

CAPT SOMMERS: I'm getting off mute. So, yeah, we do have plans with the study, like we did with the exposure assessment, to

reach out to area clinicians and -- again, this is all -- the timing of this is, we still have to work out --. What they did for the exposure assessment, they were able to do a virtual clinician education session. That was back in March, in the Westfield area. So we might want to think about something like that, since I'm not sure when, exactly, in the future, we're going to have more gatherings of people, like, in-person education again. That's a little uncertain still. So, we can work on that. I can circle back with Jamie Rayman, who is at our agency, who has been doing some more of that work.

CDR MUTTER: Thank you for that update.

CAPT SOMMERS: Sure.

MS. LAUNI: I was just going to add, we do have information on our web site for clinicians, so they can go in and read that as well. And for the Pease Study, we did share information with clinicians that -- for them to go to our web site. So we are doing some outreach that way.

CDR MUTTER: Thank you. Great question. Do we have any more raise-your-hand questions, Pam?

MS. WYTON: No, not at this time.

CDR MUTTER: Okay. I don't see any in the chat, so thank you to the community for those questions. We appreciate it. So we're going to move on. We have a break. I was going to say, we skipped the break, because we just started, it feels like. Let's get back to the families. The next topic is multisite study. Marian and Meghan, would you like to give an update, please?

#### MULTI-SITE STUDY UPDATE

DR. PAVUK: Sure. Thank you, Jamie. So, I have three, four updates on the Multi-site study. Similar to Pease, the OMB package for Multi-site has been with OMB for some time. They have received it on July 23, so we have decided, in light of what Dr. Breysse mentioned earlier, is they are overwhelmed a little bit with all the COVID changes. We have decided to request expedited review for the multisite study as well. So we have updated the package, have put the -- also exposure assessment approved COVID changes in it, and have prepared a package request for that expedited review. On the other part, on funding front, in addition to a year or two budget, agency has also identified funds for investigator-initiated activities. In a very short window of opportunity when this was available, we

were able to fund those activities that investigators proposed in their original proposals, and six out of seven sites were funded with \$200,000 for still in budget year two. So that was great news for the investigators as the technical team has advocated for those money to be put in place for those activities, and ATSDR is still committed to work and support activities if funding becomes available in additional funding years. On data support activities, third point here, we have completed a technical review for data coordination and laboratory analysis support, that will be a contract awarded by ATSDR, by the end of September. So, that part of the technical review has been completed and the process continues with the selection of the contractor on that important task, to coordinate data collection across the seven sites and also the collection processing, shipping, storage, and analysis of all the biological samples, up to 9,000 samples from the Multi-site study. So this is in progress and to be awarded by the end of September. So we've been also continuing working with the study investigators work while we -- in anticipation of the field work, there's a lot of work being done by the sites and ATSDR on historical reconstruction, that is part of the protocol and the overall study since all the sites had slightly different processes and exposure policies in their sites. And also on the PBPK pharmacokinetic modeling work. Overall, we have indications so far only from one site that is contemplating the start of fieldwork later this fall. Other six sites are really planning for late spring or summer of 2021. I'm happy to take questions.

CDR MUTTER: Thanks, Marian. Any questions on Multi-site study?

MS. AMICO: I have a quick question. So, I just want to make sure I understand, when you're waiting for OMB, are you also waiting for the COVID changes? Or are you waiting for the initial plans to be approved? Sorry, I just want to make sure I understand that point.

DR. PAVUK: The initial plan has been approved on May 28. So, in terms of clearance, there were -- there was amendments to OMB that we have submitted in July, as I mentioned. So, what we have decided to do for the -- as the package has not been picked up, we have added to those changes the COVID changes as well. So now it's all in one package.

MS. AMICO: So it's your expectation that once you get this OMB approval just like with the Pease study, you should have to do IRB approval and then the different sites are ready to kind of hit the ground running when they're ready. Like you said, some - one site only wants to really get started this fall. But everyone else is next year. So, do you anticipate any other

approvals or delays or anything for these sites to start their work, other than this OMB package that we're waiting on, like we are here at Pease?

DR. PAVUK: So, no. The process is similar. So, that is a little bit further. Pease has been sent to OMB sooner than Multi-site.

MS. AMICO: Okay. So you don't think that you would hear back by the end of the month, like it was said earlier on the call that we would hear back for Pease?

DR. PAVUK: I mean, Office of Science and Leadership have put together package. We are not the only study that is being, you know, affected by this process. So we anticipate some conversations with OMB as Dr. Breysse mentioned earlier.

DR. BREYSSE: Andrea, I'm pushing both studies when I -- I'm encouraging CDC to encourage HHS to encourage OMB to expedite both of them. But if I had to pick one, I would pick the Pease.

MS. AMICO: Well I guess what I'm trying to figure out too is, are you expecting -- you know, obviously with Pease, I think, I mean, our community is ready. We've been ready since, you know, the summer, really, to get our study reopened. And we've been waiting. So we are affected by this delay, and it is hurting us every day that ticks away. And I just wonder with the Multi-site study, are they in the same position? Because regardless of this approval or not, would they have already started their field work? Are these sites kind of delaying the collecting of their fieldwork because of COVID? If COVID hadn't happened, would they have already been starting right now?

DR. PAVUK: Yeah, I mean if COVID would not have happened, they would have been also contemplating the fieldwork.

MS. AMICO: Okay. See, I just -- I think --

DR. PAVUK: So, you're not in the same situation, right? So the Pease has already started. That's why they have originally requested expedited review for Pease only. We were not under that pressure for Multi-site studies, so, we always wanted to push Pease first, and we have directly put the expedited package to OMB for Pease. We have only now realized that nothing is moving, so, we had time to, you know, kind of consolidate all the different activities that we've been doing, since, you know, they didn't move on anything.

MS. AMICO: Okay. I think I, you know, would -- my comment would just be, it's so -- it's so disheartening as a community member, -- and this isn't, like directed towards one person or one

agency. I just -- we worked so hard to get to this point. We worked so hard to advocate for these studies and get them planned and funded and up and running. And it's just -- it's frustrating to see these delays and see that, as every day ticks away, it's going to impact our recruitment, it's going to impact the result, and just, -- it's just a comment. It's so -- frustrating and discouraging to work this hard and just kind of get to this point, and then have it be jeopardized in this way. So, I just want to share those thoughts as a community leader, that it's just --

DR. PAVUK: No, we hear you.

MS. AMICO: really frustrating.

DR. PAVUK: We hear you, you know. We have people -- Abt is there. You know, we have office there. We have those -- we have staff in there that we're paying. We have done all the preparations so that, you know, we can start. We have, you know, viles that have expired. So we have re-sent some of the supplies, you know, just to keep it all current, so that we can go back. So, we hear you. You know, we're kind of in the same boat here, from the point of the -- we really want to be there as well.

CDR MUTTER: Yeah, thank you.

MS. AMICO: Thank you.

CDR MUTTER: Any other questions for Multi-site study? Okay, with that, let's move on to Tarah, would you give an update on the Pease Health Consultation please?

#### PEASE HEALTH CONSULTATIONS UPDATE

CAPT SOMMERS: Certainly. So, again, we're still reviewing the comments that we got when the public comment period closed for the private well document which was released in late spring, and the public comment period went into the summer. So Gary and Greg are working on that. And then when we address those comments, we'll finalize the document like we did for the Public Drinking Water Wells Health Consult, and will release that back out again. So that's where we are.

# EXPOSURE ASSESSEMENT UPDATES

CDR MUTTER: Thank you. Any questions on the Health Consultation? Okay, thanks Tarah. Appreciate it. All right, next on the agenda is Exposure Assessment update. I have a quick update, and if I miss anything, those from ATSDR can jump in and add to it. So, from Massachusetts, the report is currently going through our clearance process, and the reports for Delaware, West Virginia, and Washington are pending, regarding that Massachusetts report going through our clearance process. Once that report goes through, then those other reports will follow shortly after. Alaska and Texas, fieldwork is completed at both of those sites. Colorado, they completed on-the-ground recruitment, and they started field sample collection on September 15. And that collection will continue through 9/28, so September 28. And New York, the restart is on hold due to COVID-19 travel restrictions that they are --. I've been in many meetings where they're trying to figure out ways to get to New York. So, that is currently on hold but they are brainstorming many avenues to try to get to New York. Did I miss anything, ATSDR colleagues, on the exposure assessment?

DR. BREYSSE: The good news is, for you all, is that the protective measures that have been put in place to exposures have worked. You know, we're able to bring people in. We're able to collect data from them. We're able to protect ourselves, we have protected the community. And so, that's good news, because we're more confident now that we can carry forward with the studies in a way that's safe for everybody involved.

CDR MUTTER: Thank you. I heard Tarah --.

CAPT SOMMERS: Yeah, I was just going to say, also, we just hosted a big web event one evening. It was kind of like a public meeting, but virtually, that we did for the exposure assessment communities. We have one. And there's a second one. So we try to do East Coast time, West Coast time for the communities. And I think it went really well. It's hard -- It's a lot of information to deliver in a short period of time over a web cast. But we got a lot of questions from the community, and we're still following up on some of those questions to try to address them in like, an email going out to the people that participated. Because it's a lot to try to squeeze into an hour and a half webinar. But --

DR. BREYSSE: you know --

CAPT SOMMERS: It did work.

DR. BREYSSE: You know, having done this now for other things, the nice thing about doing these webcasts is that everybody has a chance to get their questions answered. Because if we don't get to it in the formal meeting, as Jamie will tell you, we take it down and we provide an answer afterwards. So, do we have the open public meeting face-to-face, when we're done, we're done. People didn't get a chance to stand up and ask their question. You know, perhaps they went home feeling disappointed. But now, as long as they get the question in, in a chat box, or in the question format, we will respond to all those questions, no matter how long it takes. So, in some ways, doing in online, virtually, is better.

CDR MUTTER: Thank you. Now I see Joe, I see your hand up.

MR. RYAN: Hi there. What ZIP codes do we believe could have been affected by the contamination? Besides Portsmouth, Newington, Greenland -- I mean, what -- is there -- can we draw on a map where the groundwater flow might have reached?

DR. BOVE: Well, we're talking about the Pease trade port. Where are supplies that were contaminated — there were three wells. Trade Port, one was the Haven well, which was most contaminated. The other two wells are now getting contamination because the Haven well is shut down. So the contamination is bypassing the Haven well and moving towards the other two. But that's where the contamination is, okay? So it would have to be served by those three supply wells.

MR. RYAN: So there was never any kind of concern that maybe groundwater flow might have reached into other areas outside of Pease?

DR. BOVE: Well we actually have done at least a initial historical reconstruction. It was done by Abt Associates. We're using data that had been assembled by [inaudible] the Air Force information that Abt collected. We had an expert panel to advise us on it. We did issue a report. We've condensed that report so that it's more user-friendly for people to read. It's going through clearance and I hope to get it to the CAP and to interested people -- concerned citizens as soon as possible. Because there are data gaps in the historical reconstruction that are key data gaps that maybe we might know someone who could -- who may have some information that might help fill those gaps. So that's -- we did the same thing at Camp Lejeune with the historical reconstruction there. The CAP, as well as other retired marines were able to provide some information that the Marine Corps could not provide, or would not provide. And so this -- we were hoping to get this thing to you as soon as

possible, as soon as it gets through our clearance process. But yes, the contamination, as far as we know, went towards the Haven well. Otherwise, it went to areas where there weren't drinking water wells.

MR. RYAN: Okay, got it.

DR. BOVE: Okay, so that's the situation.

MR. RYAN: So pretty much just the Pease the base proper, just, you know, Newington or --

DR. BOVE: Yeah, I mean, this is different from all the other sites in the Multi-site study. All the other sites are residential situations. This is a workplace situation and a daycare.

MR. RYAN: Yep, got it. Thanks. Thank you.

CDR MUTTER: Thanks, Joe. I saw Lindsey with her hand up. You can go ahead and take your microphone --

MS. CARMICHAEL: Yeah I got it. Okay. Joe, I just wanted to speak to your question. We do know from ongoing monitoring that the contamination impacted some wells outside of the Tradeport. So, while the Tradeport was the source of the contamination, we know from ongoing monitoring that several Portsmouth municipal wells that lie outside of the perimeter of the Pease Tradeport have been impacted.

MR. RYAN: Okay.

MS. CARMICHAEL: And we know that some drinking water wells in Newington have been impacted.

MR. RYAN: Okay. Thank you.

MS. CARMICHAEL: Yep.

**CDR MUTTER:** Thank you. Any other questions on exposure assessment?

MS. AMICO: So I have some questions. But before we talk about that, I just want to -- I know the water modeling study got brought up, so I just want to kind of clarify that because we're already -- we already talked about that briefly. Frank, or anyone else, does anyone have any idea when we can expect that water modeling? You said it's going through clearance. I feel like we've heard that for a while now. Do we know when it might be cleared, or you know, when the community can expect to see that study and be able to read it -- or that report?

DR. BOVE: Okay. The report was done a while ago, but it had not gone through clearance. We condensed it, and that -- and recently put it into clearance as a condensed version. So it's not been in clearance very long. I'm hoping though that it moves through clearance as fast as possible. Because it's helpful to get it out.

MS. AMICO: And who needs to clear that? The CDC, ATSDR? Where - who clears that? Is it OMB?

DR. BOVE: No.

MS. AMICO: Okay.

DR. BOVE: It's the agency clearance.

MS. AMICO: So it's within your agency?

DR. BOVE: Yes.

MS. AMICO: Okay. But that was done like over a year ago, right? I feel like last summer? No?

DR. BOVE: No, it was finished -- I'm trying to remember -- March, I think it was.

MS. AMICO: Of this year?

DR. BOVE: Yeah, yeah.

MS. AMICO: But you convened people to work on it last summer. Is that maybe what I'm thinking about?

DR. BOVE: We had an expert panel a year ago. Yeah, June of 20 -

MS. AMICO: Okay.

DR. BOVE: The work was finished in March of this year. And the report is like a couple hundred pages with a lot of technical detail that would, you know, put you to sleep. So we took some of that out. Because we wanted to emphasize what the data gaps are. Because there, I think, the CAP might be helpful in finding people who might be able to answer some of the -- or provide some information to fill those gaps. Again, that's what we did at Camp Lejeune. We were able to fill some gaps because the retired Marines had knew about stuff that occurred on base that the Marine Corps apparently didn't. And that may be true here at Pease, as well. So we want to get it out as fast as possible, but it does have to go through our agency clearance process.

MS. AMICO: Okay. Thank you for that. Yeah, I think there's definitely people in our community anxious to see that. Particularly there's a woman in the chat, Doris Brock, who's been an amazing advocate for the folks at Pease at the Air National Guard and both veterans. So I think she has an email list, and she's looking to share that widespread with folks. So as soon as that's ready, we do have people interested to see it, and see if they can share information. So thanks so much for the update on that. So getting back to the exposure assessment. So you know, I did attend one of the informational sessions, and it was very helpful. I agree it was a lot of information. I'm just curious. I feel like I didn't hear a lot from ATSDR about the results of what you've seen so far. I mean, I think what I interpreted watching the information session was that the PFAS were elevated in all of the communities so far. Maybe I'm mischaracterizing that. I didn't know if someone from ATSDR can at least share with the CAP what these blood test results of these other communities that they've tested at so far, what it revealed. And you know, does -- is this influencing any of your future work, you know? Because now that you're seeing these elevated levels at these other sites, is that going to justify additional health studies? Is that going to justify maybe more longitudinal components to the current studies that you have funded, such as the Pease site and the multi-site study? I mean, it's, to me, it's very obvious that communities surrounding these sites have been impacted. We can see that in the blood test results from what was shared the other night. So I don't want to characterize the results. I'm just curious if ATSDR has any interpretations of what they've learned so far, and how that may inform future work moving forward.

CDR MUTTER: Rachel, I saw your video go on.

DR. ROGERS: Yes. Hi. I can take a stab at that. Hi, Andrea. Thanks for the good question and for listening into the listening session. So the first thing that I want to make sure everyone is aware of is the fact that almost all, if not all, of the data that was shared in that information session for the four, at the first four exposure assessment sites is available on our website. It's a little bit of a -- you have to click a couple of times, but you can get to really nice infographics that show the specific numbers, the specific central tendency estimates for all of the primary PFAS that were measured in the blood at each of the four different sites. So you can see how those numbers compare to what we see in the NHANES population, as well as how the numbers compare across the different sites. So if you're interested in taking a closer look at those numbers beyond just seeing the PowerPoint presentation during the

listening session, that's one thing that is available to you. And I think we can probably also pull those PDFs and share them with the CAP in an email if that would be -- if that would make it easier to access that data. The second thing I want to say is that yes, I think you're right. That our first, and perhaps most obvious, takeaway from this initial reporting is that the PFAS levels in these communities are elevated. They are above what we see in NHANES. One thing that I think stands out to me as particularly interesting is that the profiles that we're seeing aren't the same across all four sites. So we know that all of the sites that were included in our PFAS exposure assessments are communities that are located near current or former military installations, so these are all communities that are located near places where AFFF was used. And so it's really interesting to us that despite the fact that that kind of primary exposure source was the same, the exposure profiles look different across, at least across the first four sites. So that's really interesting information that we can carry forward as we design future studies, as we advocate for additional research. That's one thing that I think we will be doing, trying to -- I think that those initial findings really support additional work to better understand exposure pathways, human exposure pathways in these communities, as well as communities across the country. The next thing I want to say is that the data that is coming in through these exposure assessments is absolutely being used to help us move forward with the Pease Study and with the Multisite study. I think Marion or Frank may be able to speak more to that. But one thing that's particularly close to the work that I'm involved with on a day-to-day basis is the development of a suite of pharmacokinetic models to help reconstruct historical blood levels in some of our multi-site communities. The data that's coming in from the exposure assessments, because it is data where we have paired serum concentrations with a fair amount of information about the drinking water levels over time, we think that that data is going to be really useful in our model development process, both for the kind of designing the models, and then confirming that they actually work. So that's just one example, but there are a lot of different ways that this data coming in from the exposure assessments is going to be used in some of our additional work, and really is a foundation. It's what we've said from the beginning with that project. The exposure assessments are a first step, and the data that is coming out of those, I think, is really proving that to be true. So I hope that helps answer. It was a lot of questions, but hopefully that gets at most of them.

MS. AMICO: Yeah. No, that's --

- DR. BREYSSE: May I add something to that, Andrea, is that also remember this. The data we're releasing now are kind of high level, and we're doing very detail reports for each site. And those reports will be used to give a lot more information about what we think it means to the communities impacted. So we haven't finished our first report yet. We're working on it. And then at that point, you know, we'll have a lot more to say about what the numbers mean, other than just here are the numbers.
- MS. AMICO: Okay, great. And I think the only thing I would just say, Rachel, to your point about seeing different profiles in different sites, even though they're all DoD. I mean, I don't know the answer to this, but it's my understanding that there wasn't one type of AFFF used. That there was different kinds, right? So that's definitely interesting. An interesting observation, and it'd be interesting to see if we knew which AFFF was used at which site, and then could match it up with the blood in those communities. So anyways, thank you. I just was --I thought it was very helpful. I thought it was really useful to attend that info session and see the results. And I thought it would be helpful for the CAP to know. So I think, you know, even at our next CAP meeting a few months out, there probably may be even more information to share at that point. So if I could just ask in the future if we could get a little bit more. You know, you guys have been great about updating us on like how that process is progressing, but if we could actually hear more about the results, too, of like what you're finding. And it doesn't have to be a detailed thing, but I just think it's interesting for people to know that the sites that have already been looked at, the results have showed elevated PFAS in those communities. You know, and again, I'm just curious. What do we now do with this information, you know? I'm glad we have it, and now how do we take that information and take action? So thank you for the updates on that.
- DR. ROGERS: Yeah, absolutely. And I think that as we -- as Pat noted, the more in-depth reports for each of the sites will include a whole lot more information. So I think as we get further down the review process for that report, and we're ready to release some of that information publicly, it might be a really nice thing to have a representative from the exposure assessment maybe give a presentation on some of those findings for the CAP specifically.
- DR. BREYSSE: Well, for us, it does, Andrea, is it provides a very strong justification for why we're going down this road, and why we're doing the Multi-site study in the first place, right? And so we can point now to data that says this is why we

want to do the study, this is why we think it's so important to do the study. And it'll be interesting to see if the data that we get from the multi-site studies matches this, as well. So we're going to have the most comprehensive picture possible almost of what it means to be drinking contaminated drinking water, and what that means for communities. And then once we get the health study, and as Frank said, as we get information on what levels in the blood translated into different health risk, this information can be used by all these people, so people can now go back to and can see where do they fit on that exposure response profile. So the information is going to be useful for us now, it's useful for justifying why we're doing the studies, and it'll be crucial for future information about helping people understand what it means for them.

MS. AMICO: I'm so happy to hear you say that. Because I think that's the whole reason our group started advocating for the — in the first place, you know? It was that we knew we had this exposure, we wanted to first find out how much was in our blood. We learned that we had high levels in our blood, and now we want to know the health effects. So it's — I know this is going to take time, I know there's lots of work going into it, but this is exactly the goals of the community is to be able to — like Joe asked that question. How do we know what level in the blood is going to translate to a harmful effect? That's a huge question for the communities, and so I'm happy to hear you say that all this work is going to come together to try to help answer those questions for people, because that is the reason we're all here. So thank you for that. And I'm sorry, Frank. I see you trying to talk, so I will stop talking.

DR. BOVE: No, that's -- what you said was great. No, one thing you mentioned was AFFF may have been different in different bases in different sites. One of the data gaps in our historical reconstruction of Pease is not knowing for sure what type of AFFF was used. We're going on reports that Air Force used a certain type of AFFF, but this is a data gap, for example, that if you know of who might know what type of AFFF was actually used to feed, that would be useful to know. So these are the kinds of things that, again, I think the CAP can help us with once we get that report to you.

MS. AMICO: Can I ask a follow-up to that? So why doesn't DoD know that, right? They're the ones that purchased the foam. They're the ones that used the foam for training purposes. So would they not have records of that?

DR. BOVE: They should. They should. But oftentimes those records disappear over time because they're not maintained, or

who knows what other reason it might be. We've had this trouble with Camp Lejeune. But that's the kind of information that we could use if someone knows of some records, or knew where the records were, that might be helpful.

MS. AMICO: And can I ask, has — at all of these sites that you're doing exposure assessments, or you have done exposure assessments, has DoD been formally asked by ATSDR to provide which type of AFFF they used at that site? Because the exposure assessments are all military sites. Pease is obvious a military site. So has there been a formal request from ATSDR to DoD at each of those sites to say, we want a list of all of the AFFF sources that you used here, so then you can try to match up the blood results?

DR. BOVE: Well, at Pease, we have a list of items we wanted the Air Force and the DoD to provide, and they di provide some of that information. I don't know specifically we asked about AFFF or not, but we could check that.

DR. BREYSSE: Andrea, we've asked for this information before. And as Frank said, the answer is we don't archive these records because they're just purchase records. And in many cases, they buy AFFF to some sort of firefighting specification, and they don't even know exactly what's in it. You know, the company could be changing the formulation a little bit here or there, as well, without having to go back to the DoD and telling them, you know, we tweaked the formula. We added some new stuff. So even if they knew kind of what they'd bought in a technical grade sense, that might not tell us exactly what's in it.

DR. BOVE: Yeah. Well, you know, --

DR. BREYSSE: It's a problem.

DR. BOVE: Once you get the report, you'll be able to see what's in it. But the assumption we made about the type of AFFF at Pease seems to be born out to some extent on what we see in the wells. So -- but it would be very helpful to know exactly what kind of AFFF was used. Because we're not -- there are certain contaminants like PFAS that were not -- PFOA in particular, I think. That we weren't -- written off in the estimates. And I think part of that is the complexity of some of the contaminants, contamination on the base, such as the fire of that aircraft. And also other complexities, you know, hydrogeologic complexities. And all that is in the report. And I think it's in a -- it's understandable, so that, you know, people will be able to see where the data gaps are, see what we did, and be able to have input on it.

DR. BREYSSE: I will say, Andrea, there is some consistency among many of the sites that appears. There is a AFFF profile that we could infer from a number of the sites. It's not consistent across every site, but in a number of the sites, there does appear to be some signal that looks consistent with what we think is in AFFF. Is that right, Rachael?

CDR MUTTER: Not sure Rachel heard you.

DR. BREYSSE: Rachel, is that correct?

CDR MUTTER: Rachel?

DR. BREYSSE: Rachel might be frozen.

CDR MUTTER: Oh, she might be. She looks very stoic right now.

DR. BREYSSE: Yeah, so. But anyway, so it's not true about all cases, but I think it's true for a lot of the sites we've looked at Yeah.

CDR MUTTER: Right. Thanks everybody. Any other exposure assessment questions? Okay. So we'll open it up to any CAP concerns we haven't discussed thus far.

#### CAP CONCERNS

MS. AMICO: This is Andrea. So I had received another question from a community member before the meeting about, do you have any plans to incorporate veterans into your study, or your studies? So yeah,. I guess -- we know at Pease because we're only looking back to 2004 to 2014 that that wouldn't include prior military folks. And just curious if there's any plans to do something specific to veterans moving forward?

DR. BREYSSE: So none that we have active. We know that Congress has asked the Department of Defense to study servicemen in particular, and I assume that might include veterans. But not exactly. From our end, we don't have any plans for right now.

MS. AMICO: So can I ask a question about that? Because I'm, you know, in terms of asking DoD to study veterans, does that seem like a conflict of interest for DoD to study their own people that they may have contaminated? Shouldn't there potentially be another agency that conducts that?

DR. BREYSSE: Well, I think in a perfect world, that's absolutely true. But I think the funding was mandating the DoD to do it. I don't remember exactly the wording, but I know they were tasked with doing it. But you know, I would agree with you.

MS. AMICO: So is there a way --

COL HOLIFIELD: Dr. Breysse, this is Colonel Holifield. I just wanted to touch base on that. What we have is the National Defense Authorization Act that had us come in, and for DoD to go in and test. Right now, they're having us do the blood tests on the DoD firefighters, which is going to start on 1 October 2020. But that is what the act is, that right now has us going in and testing. Our community service members are doing the blood testing for that, and then seeing what their exposures are to PFAS, PFOA, and seeing what those levels are in the blood. Over.

DR. BREYSSE: Thank you.

MS. AMICO: Colonel, can I ask you a couple questions about that?

COL HOLIFIELD: Yes.

MS. AMICO: Okay. So are those active firefighters? Like current firefighters that work in the military now, or are those former?

COL HOLIFIELD: Right now, I think it's looking at our active DoD and civilian firefighters right now, and then it's also addressing those that are at the guard and reserve bases, as well. I don't know if it's going right now as far as testing our former firefighters. I'll have to check on that and provide you some more information with regards to it.

MS. AMICO: Okay. Thank you. And I think my last question would be -- well, two questions. Do you know how many firefighters DoD's planning to test? And you know, like, is it one site, or is it all across the nation? And then are you just looking for PFOS and PFOA in the blood, or is it going to be a panel of PFAS? Those would be my questions.

COL HOLIFIELD: Yeah. Right now, I can't say if it's a panel. I know for sure that it should be looking at PFAS, PFOA. It's looking at all of our Air Force installations where we do have DoD firefighters. So we are looking at gathering that information. I can't provide you all the exact numbers right now, but they are getting at least the information of how many firefighters are at the installations and then who all needs to be tested. So that would be done through their military treatment facilities through their MTFs. And they're going to be having them come there during their annual firefighter exams, which is what they do on an annual basis. Just as -- that's the test requirement that they go through to see what their health conditions are, and at that time, their blood would be taken to

support that study, that blood test to study for PFAS, PFOA, or PFAS. It's actually -- yeah, the PFAS, the PFAS in the blood.

MS. AMICO: Okay. Thank you very much.

MS. SHAHEEN: Can I just ask a question on -- and I don't know who best to direct this to. But it has gotten some attention locally in the past few weeks relative to the Air Force saying that they're not going to comply with New Hampshire's newly passed PFAS limits, and instead focusing on -- or deferring to the EPA limits. Can we collectively talk about the role the CAP should play in elevating this issue and continuing to raise it? I don't know. I know it's not directly an ATSDR matter, but given that we're responsible for channeling concerns of the communities specifically related to PFAS exposure, it seems as if this is one that's going to continue to come up. And so I just wonder if we can collectively talk about how best to communicate, advocate, raise alarm about this matter. Whether it's members of the military who are part of this group who can convey concern back to the powers that be, I'm not sure how best to proceed. But that like, given that we're all here tonight, I had to at least mention it and raise it. Because I've heard from several people in our community after this article ran just last week who are very concerned.

MS. AMICO: I would echo what Stefany said, for sure. So I think, you know, a little bit of context for people is that New Hampshire passed MCLs a year ago. And they were tied up in court for a while. They were just, you know, officially put into place this summer. And we know that there's at least five homes in Newington, private wells that are currently over the MCLs for the state of New Hampshire but below the 70 part per trillion lifetime health advisory for EPA. And our community did just learn last week that the Air Force is not going to comply with the state standards and not going to provide alternative water to these homes in Newington, these private residential homes, which frankly is completely unacceptable, you know? New Hampshire went through a very rigorous MCL process. They, you know, used the best available science based on vulnerable populations, and they came up with these science based MCLs that are put in place to protect public health, and are put in place for a reason. And it's not okay that the Air Force will not comply with our state standards. And I absolutely agree that we need to, you know, this is -- I understand we don't really think about drinking water regulations within this group, but we do think about public health, and we do need to care that we have people in our community, in Newington, being exposed to levels of PFAS in their drinking water that the New Hampshire State

Department of Environmental Services says is not a safe level. But yet we have a responsible party. We have identified the Air Force. They have spent millions of dollars cleaning up the groundwater and installing filtration. And I don't know what we can do, again, as Stefany said, as a collective group, except just beat the drum that this is frankly unacceptable, and this is not okay, and we need the Air Force to step in and take responsibility. They are the responsible party, and they need to provide clean and safe drinking water to these homes immediately.

COL HOLIFIELD: Yeah, if I can, I'll address that a little bit from what I know and the knowledge that I have, is that right now it's like, the legal opinion that the DoD has is that the Air Force does not have the authority to conduct the removal for -- based on state regulations or state levels right now. What has to happen is that you have to have what ATSDR is doing now, and trying to see, what are the safe levels within water, or what are the levels that are going to cause the effect? And then that can drive the EPA to establish the MCL's, which are the federal standards to which we have to abide by. So right now, we don't have those as of yet. We're still doing studies. We're still doing the research. We're still trying to figure out what levels are in the water, if drinking, will have those types of effects. So that's where we are right now. I could take the question that you have and the statement that you brought up, back to my leadership, so that they are aware, and that they understand, and that they know, and then try to get back with you to provide you some further clarification.

MS. AMICO: Thank you. And I would just say that, you know, the EPA -- in the absence of EPA leadership on PFAS -- because frankly, there is a significant absence of leadership in them taking action to help. You know, this is not just New Hampshire. I mean, obviously, we know we're dealing with this -- DoD alone is over 600 sites across the country. So in the absence of EPA leadership, we are seeing states take the lead and put these standards in place. And so I think it's frustrating to me that EPA hasn't done their job, but New Hampshire stepped in and did their job. So the Air Force should comply with that. You know, they didn't just arbitrarily come up with these numbers. They went through a rigorous, scientific process to come up with these numbers. Why wouldn't -- is there other situations or other contaminants where DoD would not abide by state rules? Or is this just specifically on PFAS? Can you think of another example where DOD would meet the state standard?

COL HOLIFIELD: I can't provide you example in that sense. What I'm trying to say is that what we have are MCL's that are developed by the EPA, which are federal regulations which we have to abide by. Right now we only have the lifetime health advisory that is out there, which is not a federal standard, as you know. So what we're -- what we need is what ATSDR is doing now, and trying to figure out what exactly it is, or what levels are in the water, that are going to cause effects, or the health effects? But to speak to your other things of which you were bringing up, is that I know our leadership has been talking to the state regulators there in New Hampshire to try to figure this part out. We're in constant communication with them, and try -- and we understand the frustration that everyone is going through right now with regards to this. So it's not falling on deaf ears. We all are trying to come to a good solution with regards to what's happening. And I can only take back what you were saying right now to my leadership, so they can further understand, again, the frustrations that are happening with this, so they provide you a better answer.

MS. SHAHEEN: I think -- we appreciate that very much, Colonel. The key here is that I think if you can convey, unlike in other communities, we have a community action group that's been formed, that's been working hard on this issue. And it's not going to go away. And I think if you can convey that, it would help -- at least help us feel like our voices are being heard, and it's clear that we're going to keep pushing on this one until there's an adequate resolution.

COL HOLIFIELD: Yes, ma'am, definitely.

MS. SHAHEEN: Thank you so much.

COL HOLIFIELD: You're welcome.

CDR MUTTER: Thank you. Okay, anything else the CAP would like to bring up before we close out the meeting?

MS. AMICO: Jamie, I have a question. You had -- right before the meeting, you had sent us a study on kidney cancer and PFOA. And I think you had said that -- sorry, I just want to read it. The -- I think -- I don't know, did ATSDR help with technical assistance, or the CDC? I just didn't know, is there something publicly that you -- that ATSDR should be saying about this study? Is there things that the community or other community members from other states that are watching this video may want to know about this study?

DR. BREYSSE: Yeah, so this -- okay, so we're developing a statement that we're going to have about that study. It just

came out today. We think it's an important study. You know, the [inaudible] as a carcinogen was limited in the past, based on the human epidemiology data this is from human epidemiological evidence. So we think it's a crucial contributor to the picture going forward. And the -- since we collaborated on the study, so by collaborating, what that means is, the Center for Environmental Health, the other half of my life, did the analysis for the study, the blood analysis. So we think it's an important study, and we're going to have something on our website that will say. And as soon as we get that wording agreed upon, we'll share it with you guys, going forward.

MS. AMICO: Great, thanks. I have one last question. It's about the Multi-site study. I'm just curious, because we heard about how one site is looking to do fieldwork, maybe later this fall, and others are doing it later next year. Is there a mechanism, or does ATSDR have a way that they're facilitating all of these sites talking together, whether it's through the PI's, or what not? I just think that there's so much information, even though each site is unique, we could all learn a lot from each other. And so I'm curious if there is a process in place right now where you get all of these leaders together from each site, and they share information? And if you don't, can you do that? And if you do, if you could just explain to us a little bit more about how you do that, and how you're learning from each other as we move forward and navigate these, you know. It's hard enough, I think, with the study getting up and going and then throw COVID in the mix, you know. So if we're finding things are working well in our community for recruitment or what not, how is that being shared with the other sites, or vice versa? Have they found something that worked really well, and can they share that with us?

DR. BREYSSE: Marian, you want to answer that?

DR. PAVUK: Sure. So the Multi-site study has several processes or similar functions in place to support and increase or -- and facilitate the coordination and information sharing between the different sites on a number of different levels. What, we were required from the very beginning when you award the cooperative agreements for stuff, you have -- you basically have two levels. We have monthly calls that's all PI's, all seven PI's, and their staff that are working on the study, that call for all the PI's is regularly visited either by Dr. Breysse or by Dr. Chris Reh. You know, on top of those monthly calls, then ATSDR technical staff communication and community engagement policy and other functions also have monthly calls one-on-one. So we have separate calls with each investigators, where we discuss the

site-specific issues or questions they may have for individual sites. And on -- in addition to those investigator calls, one for all seven sites and the separate one-on-one calls, we have set up three separate different working groups where -- that address the issues of multi-site study. One that was put together already at the initiation of the study, addressed the data collection and the statistical analysis. That group now is called -- has been put together in the other working groups that came up and were established around historical reconstruction, and the other one around pharmacokinetic modeling. So both those groups include a person responsible, and investigators that work on specific issues related to historical reconstruction in the -- in pharmacokinetic modeling and data collection. And as you are familiar with, you know, there are differences and commonalities between all of those sites. So we're trying to increase the processes and similarities between different sites. I think that was one of the strengths of the study to be flexible in allowing different sites to participate even when, you know, those sites had different exposure, you know, [inaudible] of PFAS and other functions. So but having incorporated that flexibility, we were required to provide some sort of overarching quality control process and procedures that would be similar for all the sites. So that's what we have been doing, you know, for the -- for those working groups, for the three working groups on data collection, that were also originally looked at the recruitment and sampling. And as we're doing now for a few months on historical reconstruction and PBPK modeling. So each of those groups has a ATSDR lead, and then we do have monthly calls with the staff and investigators, they're responsible for those functions at different sites. So that gives us a lot of interconnectivity for the sites, and I think as the study progresses, you know, they -- or some of the investigators, as Laurel Schaider is part of your CAP, so she also has, you know, unique input on, you know, being on the CAP for the Pease Study, and being part of Multi-site study. So there's also an initiative or a process that has been started going on to create -- each site will have their own Community Assistant Panel, or group, or some sort of activity, not necessarily mirroring, you know, Pease CAP, but there's a work in progress on figuring out some form where community stakeholders could be -- participate in some sort of super CAP.

CDR MUTTER: Thanks, Marian.

# WRAP-UP/ADJOURN

CDR MUTTER: Any other questions? I'm scanning the boxes. Okay, I see Andrea shaking her head no, okay. I don't see any other hands raised, so thank you guys. Thank you for taking time on your Monday night. I really appreciate it, and have a great week.

DR. BREYSSE: Thank you, everybody.