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## ICARE Dialogues: Integrating COVID-19 Restrictions into Existing Policies and Procedures

**Presenters:** Interagency Collaborative Animal Research Education (ICARE) Project faculty members: Donna Jarrell, Wayne Barbee, Tanise Jackson, Monte Matthews, Jane Na, and Susan Silk.

A record of this meeting will be posted on the OLAW website (<https://olaw.nih.gov/home.htm>) on the ICARE Project webpage (<https://olaw.nih.gov/education/icare-interagency>).

Silk: It is my pleasure to introduce Donna Jarrell, she and her team will be talking to us today about integrating COVID-19 restrictions into existing policies and procedures. [L]  
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Jarrell: Thank you, Susan. I can assure you that these are times like no other. Similar to my colleagues at Mass General on the clinical side, we had our patients to take care of during all of this, and in some situations, we actually had to expand our patient population to support some of the specific research that was needed in addressing the pandemic and the COVID virus. All of these responsibilities that we have in supporting patients and our research customers is based, as we all know, in regulatory guidance and requirements, institutional policies and practices, and the pandemic requirements laid down on top of all of this. So, we want to try to explore how you have integrated the restrictions that came with the pandemic to assure that you were also able to meet those restrictions while maintaining the care, oversight, responsibility to the animals that we are responsible for in regard to the animal care and use programs, our institutions, and to general public. First of all, let me congratulate all of you for making it this far! Let us talk a little bit more about this subject of the integration of our restrictions that came with the pandemic against our foundation of compliance and practices.

Before we start, we are going to introduce ourselves. I will ask each faculty member to introduce themselves for this session. I will start. My name is **Donna Jarrell** and I am in Boston at Mass General hospital. I am the Attending Veterinarian there, and yesterday, I celebrated my 18<sup>th</sup> year anniversary here at Mass General. So, I'm happy to say that I made it. I did not know that 18<sup>th</sup> year was going to be 2020, a year like no other, but so be it. We can take it on. Prior to being at Mass General, I had four years in the biopharmaceutical industry, and before that I spent ten years at the NIH. I am a North Carolina girl by heart, living in Boston, Massachusetts. So I'm happy to be here. We will have Wayne go next.

Barbee: Thanks, Donna. I am **Wayne Barbee**, Affiliate Professor of Physiology and Biophysics and former IACUC chair at Virginia Commonwealth University. I have worked with a variety of lab animal species over about 40 years and served as a member of both small and medium sized IACUCs and in leadership roles as well. I also worked on the committee to revise the *Guide*.

Jarrell: Thank you. Monte.

Matthews: Hi, **Monte Matthews** here from the University of Oregon, Director of Animal Welfare Services, which is the compliance branch of our operation. And I am also the Director of the Terrestrial Animal Care Services, which is the service center. I have been doing this since July 14<sup>th</sup>, 1988, but who's counting?

Jarrell: Great, thank you. Tanise.

Jackson: I am **Tanise Jackson** at Florida A&M University. I've been at Florida A&M University going into my 23<sup>rd</sup> year. So, I am looking toward that retirement and I am excited! I am so happy to be here with you today.

Jarrell: Thank you. Jane, we'll let you finish up for us.

Na: I'm **Jane Na**. I have just recently become the Director of the Division of Assurances because Eileen Morgan has retired.

Jarrell: Congratulations on that recent promotion. Let's get started on the dialogue. We are all PHS Assured, potentially USDA registered programs. We have responsibilities for meeting federal and state compliance. Also sometimes local compliances such is our case in Cambridge. Then there are our own institutional standards that were always in place around the animal welfare. Then came the pandemic, and new federal and state and local and institutional requirements, and sometimes restrictions, were put into place in response to the pandemic. These were associated with trying to protect our staff and the personnel in our areas and our communities. I am hoping some of you would be willing to just share the reaction at your institution, you can enter comments in the chat or you can take your mute off and just speak. We want to start with, where have you seen some successes with this tricky integration that we have had to deal with. There is no need to go into a lot of detail, but just share with us some of the places where you think you have seen some successes in that integration.

Participant: Are we talking about the integration of going remote?

Jarrell: Well, let's say that the pandemic restriction was to only have essential personnel physically come into work. Tell us where your restrictions originated from. For instance, did your institution say only essential personnel would be on site and everyone else must work from home? How was that put in place?

Participant: That is how we started. It was voluntary work from home, and then it basically got to the point where it was mandatory work from home. It no longer seemed safe for our staff that do not actually have to be on site to come into work. We could no longer travel, which made things really interesting for our field studies, our wildlife researchers not being able to go out into the field for quite a while. When things started to loosen up, and they started to bring people back very cautiously. We still have a lot of controls in place, such as social distancing and PPE.

I did want to talk about some successes that were really surprising that came out of this in the move to remote technologies. One, I think people have already mentioned. First, we get much better attendance in our IACUC meetings, and second, we have moved some things out of the meeting to just email. These two things seemed to have promoted better discussions, which was really exciting. From the committee side, we have had two fantastic wins.

From the admin side, we also had some shocking surprises. We had been struggling to get a PAM program off the ground for the last year. When things went remote and PIs started to come back on site, we were trying to be real cognizant of social distancing and so we started offering Zoom PAM meetings and Zoom observation of procedures. All of a sudden, we were almost overwhelmed with PIs having PAMs scheduled. We almost do not have enough PAM staff to accommodate all of the PIs that are willing to undergo a PAM visit because of the convenience now. We are having the most amazing observations of procedures. I mean, they are so excited about playing with the technology, I think more than anything. This was such a shock to us. So, I think this is going to be something that we will take forward. We can come see you in person, or we can do it by Zoom. If we keep this momentum up, we might need more PAM staff. What an amazing outcome from a horrible situation. Anyway, I thought that was cool.

Jarrell: That was very rich. Thank you for sharing that. Does anyone else want to share a success that they might have experienced? I think several of us mentioned we see more people showing up at some of these big scheduled virtual meetings. For now anyway! I do not know if it is a trend that will go back down, or if it is the new normal. Anyone else have anything they would like to share?

Matthews: I actually have a follow-up question for the Participant, or I will just throw it out to the group. I am curious if anyone, taking that example of observation for a PAM purpose, might not use Zoom for training purposes? I am curious to know if other folks within their training program have utilized Zoom or virtual methodologies for training. We started doing that, I am just curious if anyone else has looked at that.

Participant: We have done it for IACUC members, but I really do not know if the training is continuing/changing with the animal facility. I think the training unit just closed down and now has been cautiously reopening live.

Jarrell: I will share that we are also doing that, more of the background training but still trying to socially distance while in the same room for the technical observations. But, actually having people get excited to demonstrate and record what they are doing, might actually be something that we could expand into.

I will share one thing that we found as a success, interesting enough, the researchers were asked to determine the people who were the most important people to be on-site. They actually consolidated their research so that the most technically capable staff were coming on-site, and they are doing more of the animal handling which is leading to less PAM findings/non-compliances. We actually are seeing a lot more success with experiments and things. So, it is just an interesting way that the labs have started to manage their research coming back on-site.

Participant: We are using Zoom for protocol workshops, just as labs are having trouble with their online protocol submission system. The admin department is going from one problem-solving huddle per week to three of them via Zoom and they prefer it that way.

Jarrell: Great. So, let us talk about challenges. We have talked about some of the things that worked well. What have been those things that have just been a bear to tackle, even if you have had trouble tackling them and ended up succeeding. Where have been your biggest challenges? We have been dealing with the team and the communication, so maybe let's think more of the integration of the institutional expectations with the COVID against the regulatory responsibilities that we all know. So, what are some of the other areas where you have had challenges?

Participant: My biggest challenge is right now, because I can't go on-site and observe. I have only been allowed to go on-site once in a month because getting PIs to agree to me observing in person is difficult since there are additional PPE requirements if I am observing at the time of them doing a procedure. They have to wear a face shield, which a lot of them are reluctant to do because it interferes with using a microscope or something for the surgery. Trying to find people that will let me observe things such as high-risk procedures to try and prevent compliance issues makes it difficult to get my job done as far as doing at-risk PAM sessions. That has been the biggest challenge that I have had, trying to figure out different ways to do PAM. I'm really intrigued by doing it via Zoom. I would love to know how others plan on doing that. I would think that with Zoom, there would be difficulties as far as security of working with the animals and stuff like that so I do not know if my institution would even let us do that remotely.

Participant: We are pretty careful about it. We do not solicit them to send us videos. However, the PIs have been spontaneously sending us videos because all of a sudden they realize they could. They send us the videos and say, "Look, we filmed ourselves doing X". We will watch it but then need to make sure that the video is deleted from everywhere. We delete it on our end and then we ask them to delete their email and delete all the files, etc., because public information requests are just flying in like crazy right now. But what we do is when we reach

out, we offer in-person or we offer to do Zoom, we are picking fairly simple procedures that do not require any kind of video record. We also give them hints and tips as to how this would be successful. Such as setting up your phone or your tablet on a tripod, if available, such that everything can be seen, that's great. If not, you may want to have somebody else helping you. And then we talk to them about PPE and that sort of thing. But my personal opinion is that everybody has become so isolated that I think they are thrilled to have some human interaction, and so even if it is PAM, they are thrilled to have some human interaction.

Jarrell: We determined that if you have a Zoom with a waiting room or a password, that you are HIPAA compliant. Zoom has some of the securities that you need. You may want to just talk with your institution about having the right Zoom setup to provide that security. I think I also heard also that they could actually demonstrate with the camera doing Zoom and not be recorded, or they could record if necessary. We definitely want to protect any visuals that are collected to support this. Has anybody found changes that were needed in their animal facilities or their comparative medicine programs where there may have been some challenges there? Or successes there? One participant is saying scheduling procedure rooms was a success.

Participant: I don't know if it was a success. I think it was something that we had to do in order to maintain social distancing. I do not work directly in the facility anymore, but speaking with the clinical veterinarians, they feel that the investigators feel under pressure and are trying to get things done a little bit more quickly because they have had so much time off and now they are constrained as to the amount of time that they have to get experiments done. May not necessarily be a positive thing.

Jarrell: Is the limitations of people being in the facilities an institutional requirement?

Participant: The institution went through and determined the ideal amount of cubic feet per person for COVID-19 social distancing requirements and then from that determined how many people can be in every single room. The rooms are labeled as such, so only a certain number of folks can be in a procedure room at the same time. So, we have moved to scheduling. I don't know what feedback we will be getting on that. Before the scheduling, they were on shift work, which was really challenging. If you did surgery and had to leave by a certain time of day, you had to start early enough so your animals would be awake. It was a very difficult for them.

Jarrell: Those are all big challenges on the veterinary animal care side that are equally important to maybe some of the IACUC and PAMs, just getting all of the things we have to get done. Some of these challenges and successes you've mentioned are at different, shall we say, levels of responsibility. And we will delve into that a little bit more, talking about the challenges during the pandemic at these various levels. I again encourage you to keep the conversation going in the chat. And I'm going to turn over our time to Wayne now to focus in on the federal and state regulations.

Barbee: Thanks, Donna. Part of the reason we are holding this particular dialogue is because of the huge variability that people are experiencing in infection rates, and whether you are staying

stable, increasing or decreasing, opening up, or worried about shutting down again. So, just for instance, I looked at a quick partial sampling of the institutions registered for today's **ICARE Dialogue**, and went to one of the COVID dashboard sites. I will put that in the chat later. (<https://globalepidemics.org/>) You can look at what is going on down to the individual county as well as the state. What I saw was a sampling of rates from 4.1 to 40.7, new cases per 100,000 population. That is roughly a tenfold variability. We have seen even higher in some of the previous **ICARE Dialogues**. So, institutions are going to create their own restrictions based on these local infection rates and the individual needs of the institution and location.

Before I turn this over to Tanise, and we will tag team a bit, I wanted to add to the previous comments about shifts and physical distancing in animal procedure rooms. That is something that institutions have been working with. Sometimes it is successful and sometimes it is a struggle, and it is a very good idea to look at your individual rooms and indicate how many people can be populating those rooms at a given time and still maintain safe social distancing. Animal care staffs have gone to differences in scheduling, sometimes starting early, sometimes having early and late shifts. There are a lot of possibilities. Some other things you need to start thinking about are contingency plans if multiple employees are out sick and what your response plan is going to be if an animal care tech or somebody on the vet team tests positive for COVID-19. And then there is also worst case scenarios where you need to prioritize what animals are going to be euthanized, if necessary. So I am going to turn this over to Tanise but any of you that have additional comments, please jump in or use the chat.

Jackson: Thanks, Wayne. I would like Monte to go ahead and talk first about the overreaching decisions made by various levels of administration.

Matthews: Thanks. There are challenges I think that we have all faced, for those of us who are involved in animal care and use, whether it is at the administrative level or whether it is within the service center operations who are responsible for making decisions related to COVID-19. The folks in the administration, who oftentimes have the responsibility on behalf of the administration or the institution, must come up with these plans, but may or may not be integrating with the animal care use program. And so, I'm just curious to hear from other folks if they have had challenges or successes with policies or procedures being developed at the very highest levels within their institution that may or may not reflect input from the animal care community because I know we have had both.

Jarrell: I will add one quick success that we had at Mass General is that we were able to get the vivarium's PPE requirements incorporated into the hospital's PPE material management program, so that we did not have to compete for our PPE. And we had a consortium of other programs in the Boston area that came together during this time to see what everybody was dealing with. The institutions that did not do that really struggled with maintaining PPE.

Matthews: We certainly struggled with that, Donna. I always like to have a big stock of PPE on hand. We were trying to figure out if N-95s can be reused. I experimented with autoclaving them, and that did not work. We actually did find out that we could reuse our yellow gowns,

our caps, and even our surgical procedure masks by running them through the autoclave. That was a nice surprise to us. There still is not a uniform method for obtaining PPE on behalf of the institution. Each individual department has to get it on their own. So that remains a challenge.

Jackson: A participant stated in the chat that there has been some disconnect at their institution. So, yeah, that is what we were talking about. How did you all overcome that disconnect? Is that still a big issue?

Participant: It is still an issue, and I am listening very intently for everyone's answers and solutions.

Matthews: I can tell you what we did. I started at the University of Oregon on July 14th, 1988 and became part of the university crisis management team which was only just beginning so, in fact, I actually helped develop the first crisis management team. And so ever since then, I have always been involved in our ever-expanding crisis management team at the university. Now it is called the incident management team. So, one way to guarantee input is to make sure that you have stakeholders from the animal care program that are members of your incident management team. Here we have myself and the attending veterinarian. I think someone else said their attending vet was not invited to be a part of those discussions or working group on behalf of your research institution, and I would say that it is time to re-evaluate that. There are many reasons for being a part of that incident management team (IMT), let alone to be in compliance with some of these rules and regulations that we are required to still be in compliance with. But also for good animal welfare, right? Get those folks integrated into those different working groups.

Jarrell: Participant, what connection is your leadership to your IO? Is your IO aware of the challenges that your programs are facing?

Participant: Yes, our IO is very responsive. I was thinking more from our AV's perspective. I am on the IACUC side of things. But I know that our AV has expressed dissatisfaction with just kind of the overall connections between how the situation has been handled and the animal care team in general.

Matthews: Let me give you a tip. I don't know where you are in your cycle of semiannual program review, but there is always an opportunity to make recommendations to the Institutional Official. And you can do that actually at any particular time. If you raise it to that level where there is consensus amongst the IACUC, that is charged with responsibility for oversight and evaluation of your program, that they want the AV, or at least some representative of the animal care program, to be a part of these groups. That is something that you could put either as a formal written recommendation in the semiannual program review or separately. I am doing that right now in terms of COVID-19 testing. The university students are coming and they are being tested, but there is still no consistent plan for testing animal care staff as well as researchers who are in the vivarium. At our last IACUC meeting, we were putting in our recommendation into our semiannual report recommending that animal care

staff and researchers who use the vivarium to be tested on a regular basis. I'm just using that as an example of how you can utilize some of the tools that are already at our disposal to be able to get what you want.

Participant: I really love that idea.

Jarrell: If workers are recognized as essential, they should be included in the list of everything to protect those essential employees that are coming to work on site. Early on, I had to keep saying over and over again that we have essential employees outside of the clinics that are going to be on site, and that was something that you just have to keep championing during an emergency response.

Participant: I agree. That's been our experience, being the broken record and championing the cause of our staff, for sure.

Jarrell: Good, good. We look forward to advancing that effort with your continuous over and over again reminding them. I didn't know if anyone else wanted to comment. Monte, you want to keep going?

Matthews: Well, you know, if there are any other challenges or successes people want to share please do. I can give another example, and it relates to what Wayne talked about earlier in terms of COVID infection rates. The IMT group, the research IMT, not even the campus-wide IMT, came up with this idea that if you travel out of state and you came back, then you are not allowed into an animal facility until you wait seven days after you have returned. Now, mind you, there is just that general principle, you could go to Florida or I could go over to Idaho in the church wilderness area by myself. Yet in these two examples, they would come back, and regardless of what was going on in the places where they had gone, they would have to quarantine for seven days. So, that is challenging for my staff who want to go out, maybe just go on a camping trip. But when they come back they must now, in addition to the time that they have spent away from the vivarium, quarantine for an additional seven days, which puts stress on the rest of my staff. Just one person, can have a significant impact on the rest of my staff.

Jackson: That's really interesting, Monte, because where did the seven days come from? I thought it was always a 14-day quarantine period. And you keep saying seven days.

Matthews: Good question.

Participant: At my institution, people have to quarantine for 14 days or have two negative quarantine tests.

Matthews: I like that idea.



Participant: We are doing the RTCPR locally, and any employee, symptomatic or non-symptomatic, can have a free test. I don't know, maybe they bill our insurance. You can have a free test every ten days. Early on when rates in our state were higher than almost any country, when we left the state, we had to quarantine for two weeks or have two negative COVID tests. I don't know what it is this afternoon, but that is what it was yesterday.

Matthews: We had a county in Oregon that was off the charts, one of the highest counties during this particular period of incident rate. There were a couple of big clusters there. It continues to be a challenge for us, but I like the idea of those institutions that continue to ramp up their testing capacity to be able to have that rather than just a timeframe. I'm going to bring that up at my institution.

Jarrell: We have talked a little bit about the variations that our institutions have put in place. Plus, we are all functioning from slightly different state rules. We are all functioning differently even from within the state, different interpretations of those rules. The academic programs and the universities in the Boston area have a significant testing program because they have students. Mass General does not have a testing program because we focus on PPE. We are all trying to use each other as a benchmark, understand what will work or will not work even with different requirements at our institutions. A lot of creativity is needed here and I think we are moving pretty well. Wayne and Monte, did you want to ask any additional questions before we speak a little bit more locally about how the animal care programs are changing?

Barbee: Folks can use the *Guide* to insist that their animal preparation for the animal care group be integrated into the institution's larger plan. That is mentioned on page 35 of the *Guide*. So, they can use that as their pulpit to say, hey, you really need to think about this and include us.

Matthews: That is a good point. I think Jane is even going to expand on that a little bit later.

Jarrell: Okay. Tanise, do you want to take us through the next topic?

Jackson: Absolutely. We talked about the pandemic on a large scale and how it is impacting the institution and the university. Let's drill all the way down to the animal care staff, because those people are considered our essential workers and they have to come in to do their job, and we need to make sure that they stay safe and the animals healthy. Because if they are not safe, then the work of the vivarium does not get done, creating more problems, just as Wayne was saying earlier. Let's make sure to think about keeping those people safe.

Have you added any more cleaning and disinfectant procedures to your normal vivarium procedures? If you have, where have you done that? You can unmute yourself or chat with us or type something in the chat. Has anybody changed anything when it comes to your cleaning procedures? You were already topnotch in the beginning and ready for COVID, right?

Prichard: Someone in the chat is mentioning that they are cleaning high-touch areas in restrooms, changing rooms and break rooms.

Jackson: Absolutely. The high touch areas were added to the general daily sanitation needs of the facility. There are a lot of high-touch areas that you may not have thought about at first. Once the pandemic hit, everyone was concerned with what are high-touch areas. How are you physical distancing? We put a sign up, and so that the researchers would know exactly when we were in the rooms doing husbandry work. And asked the researcher to not do any studies or enter the room at that time. With the cleaning schedules posted on each room, researchers were able to know exactly when the staff would be in there doing their daily maintenance and cleaning of the rooms. And then, come in and do your work any other time after that. That was keeping physical distance. If the staff is in there, you can't enter. And then physical distancing at lunch was also difficult.

Jarrell: Our whole lunch took a two-hour window. Not everybody had a two-hour lunch. We rotated everybody through lunch and it was much more complex for our large facility. We had 18 people on staff.

Matthews: Would you expand the areas where you can take a break? Are you looking at other areas where people could take a break or eat their lunch?

Jarrell: I will just give you facts that we know. I don't think that we are asking anybody to adopt it. At Mass General, the only on-site transmissions that occurred in the clinics was when nurses took off all their PPE on a COVID ward and then came together to have lunch before they then put it all back on to go back out. And so it was real important for us from that experience to make sure that we have people spread out during lunch. That was our highest risk area. Everybody used to sit in the lunchroom together on top of each other and hang out. And now we have only four people per room. We also had to then move into a conference room that we had in the facility. Now they eat in shifts to get everybody through and not be too close with their mask off. And our hospital infectious disease group has determined that in our normal PPE, we have the protection that they would not - so the six-foot distancing becomes a little less of a concern for them. They would not consider that a contact to trace. But each institution has such very different guidance and requirements of how they do that. That was a biggie for us to get everybody spread out at lunch.

Prichard: People in the chat are mentioning the signage as well and single stall bathrooms.

Jackson: That is wonderful. Normally in our vivarium, it was not required that you had to have a face covering or a mask as you enter. And now that is something that must be done. So that was a new institutional requirement for us, to make sure that everybody has on their face coverings upon entry. How have others been able to navigate that? Was that a change in your vivarium?

Matthews: I can tell you what we did, Tanise. Our PPE stations used to be not right at the entrance but kind of outside the administrative office. You could walk in and go through the atrium and maybe walk about 40 or 50 feet before you put on PPE to go through double doors into the vivarium. Well, one of the researchers was by me going towards the PPE station and had a big sneeze. No covering, anything, just a big sneeze. So, I decided to fix it right then and there, I moved every single PPE station to right at the entry of each of our entry points. And so now, people entering the vivarium are required to step on a footpath, hand sanitizer, put on a mask, and if they are going to go fully into the vivarium, put the rest of the PPE on.

Jackson: We did that a little bit, too, Monte. It was further in and we moved it all the way back right at the entrance. Was it a requirement to have a mask on already in some of your local animal facilities? Or was that something new when it came to the COVID pandemic?

Matthews: The new part was, as soon as you walk in, you put on a mask and you keep it on even if you are going into an administrative office. And so the only time we are allowed to not wear our mask, like right now, I'm at work and in my office alone. I'm not wearing a mask and it is okay because that is in alignment with our guidelines. As soon as someone comes to my door to talk to me, I have to put on a mask. That person will already have a mask on. So, any time we have a conversation we have our masks on also making sure that the conversation is beyond six feet. One thing that is important to point out, CDC guidance just changed concerning close contact. It is the guidance that they have as part of their definition of close contact which was within six feet for no more than 15 minutes. Now they are saying to maintain the distance of 6 feet regardless of whether or not you have PPE on, including masks, including N-95s, that's a change. I was always comfortable saying, hey, even if we get within six feet, it is not a close contact because we have PPE on. Now they are saying that it is not the case. Even with face coverings on, they suggestion that distance should not be less than six feet and for no longer than 15 minutes. I think the important points here are beyond six feet, and the shortest timeframe as possible.

Barbee: That's based on the new evidence that the spread is not simply through respiratory droplets, that it can be in the air for seconds to minutes, but it can extend up to hours.

Jackson: One thing we have not talked about was deliveries and vendors into your area. Has that changed for you? Have you made different requirements for the vendors to deliver to you? I know some people said that they went to one single area for all of the deliveries. Is that something that other people have done? So, you really did not change what you were doing for any of your deliveries, anybody? Most of your vendors are now required to wear masks, which is good. And they have to complete a form to be cleared before they can come on-site.

Jarrell: Similar to our attestation.

Pritchard: One participant shared that all packages are disinfected prior to distribution.

Jackson: Is that something new or is that something that was always a part of your procedures?

Pritchard: They say it's new. But they have always kept deliveries to designated areas.

Another participant had a really interesting comment before that we didn't get to. She was mentioning that staff were now wearing contact tracing badges. Is it similar to the apps where you just come into contact with each other and it records it?

Participant: Yes. It is a little black badge that we turn on every single morning when we get into work. And it is on throughout the entire day, if you get within six feet of anybody for any amount of time, it starts beeping. Until you back away. And it traces every single contact.

Participant: That's impressive.

Jackson: My institution just created a geo fencing area, we have a morning app that we have to check into, and so now as soon as you get close enough to the campus, it sends you a message saying that you are within so many feet. Then it reminds you that you need to do your morning self-check. I could have used that well before COVID.

Pritchard: Wayne is saying they have a COVIDWISE app in Virginia.

Barbee: It is a cell phone app that monitors your distancing with individuals and lets you know if you have come within six feet or more than a few minutes of an individual that subsequently tested positive, and it gives you an update every week.

Matthews: Wouldn't it require everyone to opt into that app?

Barbee: That's the unfortunate part. We have a little less than 50% participation in Virginia right now.

Matthews: That's not bad.

Jarrell: I heard where one elementary school gave everybody a hula hoop. If you have a hula hoop and your person has a hula hoop and you don't bang onto each other, then you've got your six feet distance. So if you have got to do further than 6 feet, then we've got to get bigger hula hoops! But I think it is a good idea because I've seen most people do not actually know what six feet looks like. They assume it's a lot closer than it really is. And I have taken a measuring tape around and actually kind of reeducated people on what six feet looks like.

Jackson: We had a lot of signage that went up all over the campus about six feet. There is all kinds of signs, six feet distance here and there. So, you are right, we had no clue how to measure six feet prior to the pandemic.

Na: You're in Florida, Tanise, don't they have like a statewide "leave one alligator's length between you and somebody?" [Laughter] They actually had that at the Detroit zoo. I went to

the Detroit zoo and they said leave one anteatr space between you and somebody. And someone else was saying there are signs to stay at least 2.5 pigs apart.

Jarrell: I like that one.

Na: My sister works for Boston public schools, and in an effort to teach her students what six feet was, they used jump ropes. So that is easy, too.

Barbee: Just a clarification of what I said earlier. I said 50%. I checked that number. Somebody told me it was that. I actually just checked that. It's more like 15%. Not as good as we would like.

Jackson: We were so impressed, Wayne. Well, Wayne, do you want to go in and talk a little bit more about the contingency planning for the animal care staff?

Barbee: Yes and Jane can add to this as she wants on the compliance side. But for contingency planning, your disaster plan needs to look at all the possibilities, even if your rates are low and you are opening up, because it needs to take in the possibilities of what might be happening this fall and this winter, particularly if you start losing animal care workers. At Virginia Commonwealth, we have various color options, green, yellow, orange, black. Green means where we are either fully staffed or almost fully staffed. If it drops down to 80% or less we are in the yellow option. We dropped down there once briefly. We have asked for volunteers and I am pleased to say we have had three dozen volunteers from various research teams that actually underwent animal care training for doing basic animal care and we have not had to put them into service yet, but they are out there if we need them. So, yes, you need to have things in place and decide in advance what you are going to be doing if you drop down to those various levels of staffing.

There is always that worst case scenario where you need to plan for if you start dropping down to really low levels. Are you going to need to change your husbandry practices or even ultimately start thinking about euthanizing animals? I think Donna mentioned recently that they were able to start changing the frequency of cage changes. If you are going to do that and you start going beyond the general guidelines, you may need to start collecting the appropriate information to make sure animal welfare is not compromised and then use that data to create a performance standard. Donna can add to that. But I think in their case, they started looking at ammonia and CO<sub>2</sub> accumulation. And if you can show that, for instance, having ventilated cage beyond two weeks does not compromise the health of the animals and you have data to show that, then that's good. In those worst case scenarios, if you need to start thinking about euthanizing animals, this needs to be done in conjunction with the IACUC and IO to decide which are clinical research animals and which really cannot be replaced. That is your opportunity to ask people to set aside animals for egg or sperm cryopreservation.

Anybody want to add to that how they have worked out the contingency plans? Have they beefed up their disaster plans based on what they have learned from our current new normal? I'd like to hear what other people have to say.

Na: Institutions that have an Assurance must have a disaster plan. As Wayne was saying, you need to think ahead in advance and be on the same page with the IACUC and upper administration. The *Guide* also says the disaster plans should be established in conjunction with responsible investigators. So, did any institution find that you actually were not well-prepared and now are wondering where are we going from here? Did you have any challenges with how the shutdown -- I know some of them were abrupt -- occurred, or how you worked through that?

Barbee: We went from thinking about egg and sperm cryopreservation to having just a huge load and having one person in our core just spend weeks and weeks cryopreserving animals, which is a great thing, I might add.

Jarrell: One of the challenges as the director that I had early on in the shutdown was the fact that there were so many competing priorities of criteria happening during the initial response, and it was very important for me as I watched that to determine and set what exactly are going to be the priorities, what is most important, what is second-most important, etc. And after taking that stance and putting my stake in the stand, the decision-making of the team seemed to go a lot smoother because they then had the priority order.

Our priority was to only have on-site the people who were absolutely needed. That created the need to change our schedule, to create a seven-day work week. When we went to a seven-day work week, we found the opportunity to do spot changing only, which we got permission from our IACUC, by setting a performance standard, prior to actually implementing that as part of our response plan. We wanted to have real long-term longitudinal data on the conditions in the cages during those periods of time. So, we went on to set up to measure ammonia, temperature, and humidity in the cages prior to spot-changing. And then comparing it to what was published for the more standard two-week cycle. I would just comment that it was very important for me to recognize that everybody was kind of competing and to set very clearly our priorities because the hospital, actually, were the ones to set the institutional-wide the priorities.

Barbee: I'll just say, someone mentioned in the chat that when you work with this plan, you think normally about natural disasters or hurricane or tornado or power outage or flooding. Something that is going to happen that you deal with as a matter of hours or days. Dealing with something for months adds a lot more complexities and that is why I indicated why it is so important to keep updating those disaster plans.

Jarrell: Let us move on to Jane. Let's get into a little bit more of the compliance and the disaster planning component of our pandemic. Jane, would you please walk us through that last part?

Na: We certainly did talk about disaster plans. One participant's comment actually did not get read, their disaster plan works fine, but they did not predict, like I think most of us, that the length of time they would need to implement it would be so long. She comments that when the disaster plan is written, you think of a natural disaster or something a very time-limited event. So their institution adjusted to just implement some of the flexibilities long-term. And so some of you may have been in on the **ICARE Dialogue** that discussed flexibilities or signed up for future potential **ICARE Dialogues** when they do talk about the flexibilities.

OLAW has released guidance as well as many FAQs and webinars to help institutions realize what already exists built into DHS policy and the *Guide*, the flexibilities that already exist are there so that you can get things done with these new imposed restrictions that we have due to the COVID pandemic. Thanks for that comment.

I see a new comment about previous H1N1 pandemic being built in, but she also talks about the long-term nature, introduced new updates. I'm glad you updated it. I encourage you all to look back at your disaster plan and update it as needed because now, when we are in the middle of the pandemic, is the time when all the details are fresh in your mind and you have all of that readily available. However, several months or years later, you maybe have forgotten all of the little details. Thanks, Cate, for providing the **ICARE Dialogue** about flexibilities in the COVID landing page that OLAW has. What type of things had to be updated in your pandemic plan?

Participant: The duration of the PPE was a huge challenge. That was a challenge of resources being shifted to hospitals and not being available, even things that can cover a cage for transport purposes within the university. And schedules for staff, because staff were going to be a huge issue. Even with H1N1, it was a much milder pandemic and did not pose that big of an issue. But this is important, having staff being there and present to care for the animals.

Na: Great. Those are things that definitely are issues. Previously, individuals had mentioned collaboration safe setup with other institutions. So, for example, if you are at a small university or college, you might want to reach out to a neighboring hospital or institution to see if they can help. In Donna's case, they were smart to work with the hospital. So that the animal programs don't have to struggle because we may seem less important. So, yeah, excellent job. I know Wayne before in the past indicated to think ahead, especially contacting your vendors early. And even Jennifer who works at UCLA, University of California Los Angeles, and the UC system is actually an entire kind of state set of colleges or universities. They have agreements with other institutions where they do cross-training. In the event of maybe UC Riverside, their staff is more or less decimated than some other UC campus could help out.

I see there is a question in the chat box from a participant. Is it the expectation that there be an institution-wide plan or is it acceptable to have the disaster plans for different areas and departments such as biomedical, and then separate from college of Agriculture, and then Biology? So, disaster plans should actually be coordinated at the higher level, and including, ideally, law enforcement and emergency personnel that your law enforcement should actually

know and understand, such as the location of your animal facility and what concerns there are. And you really want to establish relationships with those individuals beforehand, have everybody on the same page, perhaps do table top exercises, and revisit them so that people will keep it fresh in their mind. So the expectation is that even though there may be separate areas, everybody should be in a coordinated effort. So that was a good question.

I know that Donna indicated that we could move on to compliance. We can do that right now. Compliance is obviously very important, and being from OLAW, something that is near and dear to my heart. And we just wanted to know if you had experienced any changes or noticed any changes any compliance issues. I know Donna earlier had mentioned that there have actually been less PAM findings at her institution. Do you have any experiences with any unique challenges or successes that you've had. I am glad to hear that Donna's institution is having less findings!

Jarrell: We were very happy to hear that, too.

Na: I mean, in general, institutions are very compliant. Are there cases where you do have to address things and report more? Does anybody have any stories they want to talk about or have questions for other people in the group. How they dealt with something, if they saw different things. Does anyone have more noncompliance?

Participant: I'm not sure if anyone wants to say that in front of OLAW.

Na: We absolutely know that people are not perfect, so we expect noncompliance, and that is kind of the theory or thought of institutional self-regulation. So, absolutely, we are expecting noncompliance, and we just need to resolve and address anything that comes up.

We have a comment. A participant says, we are cautiously optimistic as research ramps back up that we will not see an increase in noncompliance. We also wonder what we are missing since we have a waiver and have not been allowed on campus to do inspections. So, this is also a really good point. As, hopefully, most of you know, OLAW was offering waivers from conducting semiannual inspections during this time, just because we know that it might not have been safe for individuals or some institutions may have been on real low staffing.

Na: We do realize the importance of semiannual inspections, but we do also want to provide the flexibility, which is why we gave institutions waivers to not have to really shoehorn themselves into six months if they were not able to safely conduct those semiannual inspections. The Division of Policy and Education has been doing a fantastic job putting out a new FAQ that talks about the importance of completing those semiannual inspections as soon as you are safely able to do it, even if you do have a waiver, not waiting for optimal situations for institutions to be, fully back and running. We want you to work with the flexibilities that were released, and Cate included a link to the COVID landing page. <https://olaw.nih.gov/covid-19.htm> Work within the flexibilities so that you are compliant and able to adequately provide oversight.



Jarrell: I thought I would just comment about research ramping up. At the beginning, there was not a lot of research, so there was really just a lot of maintenance of the animals and their health during this period of time. And I can say that our research community was so grateful to our animal care staff for maintaining these critical models while they were not allowed to be on-site or while they had limited access on-site. So, I agree that as things ramp back up that our staff are starting to recognize that all that energy is coming back. Everything was kind of in a status quo for a while.

Barbee: And this may be a vulnerable period while people are coming back onboard and feeling the real urge to get animal procedures started back up. There may be a little competition for bringing animals in and getting things done. Something just to watch out for.

Na: Absolutely. That is a concern that I think is shared by Division of Compliance Oversight. We really want to make sure that institutions are communicating effectively with their researchers, don't feel like you are bothering them. I think it is important to let them know that you are there and are able to provide the oversight so that they know how important good animal welfare is to animal care programs, and that you are not just going to let things go.

Participant: We have actually had to outsource some of our staff as far as getting people to assist us if there is a noncompliance, because I am not physically there to go investigate or anything. So we have had to grab from other departments, maybe vet services and staff like that to help us a little bit so that we can actually deal with this, since I am still not allowed to be on campus.

Na: Yes, definitely a challenge. Has anybody else had issues with the ability to be on campus, that they are finding other people to do things for them, or finding creative solutions on how to investigate potential noncompliance? Here's a comment that says perhaps there is actually a little less faculty oversight needed just because many PIs are still not fully on-site. It is possible that could have been a slight benefit, a little bit of a reprieve for the compliance folks, where institutions just did not have the research going on. Well, I think I am going to pass it off to Donna.

Jarrell: Well, thank you. I think what we have done this afternoon is really take a moment in the middle of this pandemic and reflect on what we have experienced, where we are today, and through dialogue, maybe how we can confront or address the things that we are yet to experience. I think we all have understood from our comments that we are kind of building this ship as we sail it or building this plane as we fly it. And we are reliant on each other to think creatively about how to achieve both the requirements for a pandemic being off-site and still trying to do compliance for an example. Or trying to manage how social distancing looks in the vivarium these days while working with researchers. How do we do training where we want to be close normally or we have an OR situation where we have a lot of people who have to be there for the animal's health and well-being. All of these challenges that we used to experience

every day and not really see a big deal, have a whole new approach to them in the pandemic era.

I just want to thank everybody for your thoughts, for thinking about where you are and for sharing what works. Most importantly, for being open to sharing that there is still a lot of stuff that you need to work out, that we are all still trying to work out. We are going to keep having to practice social distancing. We are going to keep having to wear a mask as a way to protect ourselves when we are around others, regardless of the distance.

We have to still make sure that the animals are cared for every single day, observed every single day, that they get the analgesics, that they get the post-op monitoring, that they get everything that we know they need for their well-being in support of the research data that they are hoping to generate. So, I would just say to continue to remain flexible and creative. We will be putting a summary of all of this discussion we had today on the ICARE website. It is going to be there with some reference materials that you might have seen in the chat. You will also find summaries of previous conversations that we have had on this topic.

<https://olaw.nih.gov/education/icare-interagency>

I would just encourage you to benchmark that and refer back to it when you run into an obstacle and you get stuck. Go in there and use some of those ideas and feedback to help get your creative juices going. I hope that those who do not feel that they have enough support from their institution, to be able to do what they need to do to go back and champion for what they need, knowing that other institutions have done it and used our name to say, well, they did it at this institution, and we should be able to do it there. We are here to continue to respond to this emergency. You definitely want to update those disaster plans once you get a chance to recover. I think any guidance that you issued is the language you can put in your disaster plan right off the bat to start in that edit. And just remember that we are going to be tweaking along, making differences, and I hope everybody continues to be safe, have their workplace be a safe workplace for their employees, and continue to meet the expectations and requirements of our animal welfare partners. Thank you all again, thank my co-presenters for helping create in dialogue, and have a good afternoon, everybody.

Silk: I want to thank all of you for participating and for being such great participants. I also want to thank the faculty, who volunteered a great deal of their time and I think did a wonderful job.