

Hello, everyone. Thank you for joining us today. I'm going to give participants a couple more minutes to join before we get started. OK, everyone. As we get settled down, we can go ahead and get started here. First off, I would like to introduce myself. Hello, everyone. My name is Julie Sun. I am a consultant with Guidehouse helping with our OneLab Initiative today. And I am happy to be here with you all. A couple of notes before we join and get started. In terms of technical help, if you are having any technical issues, we have posted our onelab@cdc.gov email in the chat. Please reach out to us, and we're happy to assist you.

And if you have any questions throughout the session today, please insert them into the Q&A function by clicking on our Q&A icon there below. Happy to help answer those questions for you. And additionally, if you need any closed captioning, we also included a link in the chat, as well, for live captions. Please be sure to have both the captions and Zoom open at the same time for both screens to follow along with us today.

So with that, I will take us through our agenda today. And then before our agenda, I'll begin with reviewing our new participant rules of engagement for our webinar chat. And then after that, I will lean into discussing our OneLab resources, and we will do some presentation introductions and go through a Q&A session towards the end. So we will be happy to, again, please use the function. And we'll be happy to answer those questions toward the end of the session today.

Then with that, go through our rules of engagement for our new webinar chat feature. So we are looking to definitely open our chat feature here for engagement today. So we ask that when utilizing the chat, so please follow along on these rules of engagement.

So we encourage for you to use the chat feature to react, share experiences, ask questions to fellow participants. But if you have a question for the presenters, please do avoid using the chat, and please use our Q&A function for that.

We ask that you show respect and professionalism. Any inappropriate language, improper conduct, and any form of discrimination may result in removal from the webinar. We also ask that you remain on topic to ensure our comments are relevant to the topic and that you comply with any moderators guidance. So if moderators are giving directions regarding chat behavior, please comply accordingly.

And then lastly, if there are any technical issues, please notify the moderators. If you're experiencing any of those difficulties or observe any disruptive behavior. So with that, I would like to hand it over to our OneLab test facilitator Jamie Perniciaro to walk through resources.

Thank you, Julie. Hello, I'm Jamie Perniciaro. And before we get into the main presentation, I'd like to take a moment to share some OneLab resources. The new basic level course Fundamentals of Communicating the Hazards of Laboratory Chemicals is designed for public health and clinical laboratory staff, safety professionals, and others who work in laboratories where hazardous chemicals are used. You can earn PACE credit by registering for and completing this course on OneLab REACH.

I would also like to highlight the course Fundamentals of Personal Protective Equipment in Clinical Laboratories. This course is designed to assist clinical and public health laboratory professionals with applying risk management strategies to identify hazards, assess risks, and select appropriate personal protective equipment. Register for this course through OneLab REACH or follow the link in the chat.

As a federal employee, I do need to say our disclaimer. Slide decks may contain presentation material from panelists who are not affiliated with CDC. Go ahead and pause so that the slides can catch up.

There we go. Thank you. So slide decks may contain presentation material from panelists who are not

affiliated with CDC. Presentation content from external panelists may not necessarily reflect CDC'S official position on the topics covered.

I'm now excited to introduce our presenter today Carrie Anglewicz. Carrie Anglewicz is the Biosafety officer and State Training Coordinator at the Michigan Department of Health and Human Services Bureau of Laboratories. In her roles, Carrie provides training and educational resources in laboratory safety, antimicrobial susceptibility, testing, and point-of-care testing to laboratorians, educators, and allied health professionals.

Carrie serves on APHL's Biosafety and Biosecurity Committee and Workforce Development Committee. The ASM Clinical Laboratory Practices Subcommittee and on the Michigan State University Institutional Biosafety Committee. Carrie has a Bachelor of Science degree in clinical laboratory science, and a Master of Science degree in food safety, both from Michigan State University. Thank you, Carrie, take it away.

Thank you so much for that introduction, Jamie. And let me just share my screen. Can we see my presentation?

Yes, I can.

OK, great. Thank you so much. I'd like to thank CDC for inviting me to speak today about personal protective equipment for point-of-care testing. So a couple of the objectives that we're going to go through today is, so by the end of my presentation, you should be able to describe what is personal protective equipment, be able to describe some of the hazards that you might encounter when you're doing point-of-care testing, and how those can affect the choice of your personal protective equipment, how to identify the characteristics of effective PPE, and then describe how to put on and take off PPE properly.

So we're going to start off at just kind of laying a foundation and starting off at the basics and talking about what is PPE first. So personal protective equipment is equipment that's worn to minimize our exposure to hazards that we might encounter in the workplace that could cause us injury or illness.

So in health care or laboratory work, most often when we think of PPE, it's things like our gloves, safety glasses, our clothes covering, and respirators. So those are things that we'll talk a little bit about today.

And then we use personal protective equipment in conjunction with other safety controls when we can. And most often, there are other safety features that we combine with personal protective equipment. We might not always see them or know that they're there but they are. And even though personal protective equipment is something that we use for biosafety, and by biosafety, we mean that the activities and the PPE that we wear to protect us from being exposed and getting ill from something that we encounter in the workplace.

We also can use PPE to reduce contamination in the environment. So we can use that to prevent the spread of these infectious substances around a facility that we're working in, and that goes hand in hand with some infection prevention measures that many of our facilities also practice.

So to get started-- oops, no, no, I'm sorry. Oops, I can't seem to go backwards. There we go. I'm sorry. So to get started, in the United States, there are some federal regulations that we work under, especially when we're working with infectious substances and that affect the PPE choice.

So in the US, the thing that we're most commonly trained on and most things go under, is the bloodborne pathogen standard. So if you work with infectious agents, we're trained on this and get annual training every year. And this really outlines the occupational standards for exposure to blood or other potential infectious materials that we would encounter in our workplace.

But along with the bloodborne pathogen standard, there are also other federal regulations that help protect us. And one of them is the personal protective equipment standard, and OSHA, who is the Occupational Safety and Health Administration that forms these guidelines for us, they've developed a nice document called The Laboratory Safety Guidance. And it is a really nice outline of all of the laboratory safety standards and practices that we follow when we're doing laboratory testing. In these regulations and standards, they outline the employer responsibility. So our employer has responsibilities in terms of the PPE that they provide to us to help us do our job and also our training that we are to receive when we're wearing PPE. But it also comes down to the fact that our employer is responsible for many of these things, but it is our responsibility, as the workers who are wearing PPE and doing these tasks, to use it properly and responsibly.

So moving on now to the hazards that we might encounter and how that affects the choice of personal protective equipment that we wear. There's something called the hierarchy of controls that was developed on the federal level. And it shows us the different practices that we can use in ways that we can be protected in the work that we're doing.

And they're demonstrated by the most effective measures to the least effective measures. And if you'll notice we're talking about PPE today. And that is marked as the least effective. That doesn't mean it's not effective.

But we also need to remember that when we're using PPE, we're also using a lot of these other controls in some combination to help protect us. We might not always see them like I mentioned before. But a lot of what they call the administrative controls, these are our occupational health program, or the vaccines that were offered, or the procedures that we use and the way that we work and some of the engineering features of the tests that we're using. A lot of these things, we use in combination to help protect us.

And this really fits in with something that they call the Swiss-cheese model of risk management. It was a nice article that was outlined, but I think it's a great way to demonstrate how we can combine all these safety measures, along with personal protective equipment.

So if you think about one piece of Swiss cheese that has holes in it, and you shine a flashlight through it, the light is going to get through where those holes are. But if you add another piece of cheese to that, the holes are going to be in a different place. So if each of these pieces of cheese illustrates a different safety measure or control measure, if we add pieces of cheese to that, eventually we're going to block all those holes in that piece of cheese in those cheese to help protect us. So basically blocking the hazards by applying safety measures. And we do that also by using personal protective equipment.

So how do we know the pieces of cheese that we're supposed to use? How do we know what PPE is necessary? And really, what it boils down to is doing a risk assessment. And what a risk assessment is, it's a whole topic for a whole other webinar, and it's a wonderful topic to learn about, but what it boils down to is, how likely are we to be exposed by something that we're working with? And if we are exposed, what are the consequences? Is it going to make us very sick or cause a mild illness?

So those are the things that we need to think about when we're choosing our PPE. How likely are we, by what we're doing, how likely is our chance of being exposed, and then if we are, what are the consequences? And in order to determine that, we need to know what hazards we're going to encounter along the way.

So what actions are we doing? What test actions are we doing? What equipment is available to us? What is the infectious substance and how can it be transmitted to us? How does it cause injury to us by what we're doing or how we could be exposed to it? And we'll talk a little bit more about hazards in a minute. And then we also need to think about what other controls are already in place? So what other safety measures are also helping us and supporting us when we're choosing our PPE? And a great place to find all those things, when we're doing point-of-care testing, is by reading the package insert that comes with these tests.

And so when we have a point-of-care test, we get a package insert, and then we get that one-page job aid. I really recommend reading that entire package insert, which is like the booklet form. It has a lot of wonderful information in it. It will oftentimes tell us the minimum PPE that we should be using and how the risks and the hazards that we'll encounter when doing these tests.

And by the hazards, they often let you know what infectious substances you'll be using, what the source is if you're using blood or other type of specimen. Chemicals can also be hazardous. So we need to think about that when we're doing point-of-care testing if there's some other kind of dropper bottle or reagent that could have a chemical that could be hazardous to us.

Heat can also be a hazard. We might not always have a step when we're doing point-of-care testing that could generate heat, but that's something that we need to think about.

And then also, the way that we are working can be hazardous to us. So we need to be thinking about our work actions and doing that in a comfortable way when we're wearing our PPE so that our bodies are able to work in a safe manner.

And then another hazard that is something that we don't always like to think about but it's people. People can be hazards. So in terms of doing point-of-care testing and working with PPE, I think a hazard could be people not wearing their PPE or not wearing it properly.

In terms of the infectious substances that we're working with when we're doing point-of-care testing, when we're choosing our personal protective equipment, we need to think about the route of infection that this sample could cause. Are we going to be doing something that we could come in contact, and it could make us sick if it encounters a mucous membrane. If it could get into our eyes or through some non-intact skin if we have an open cut or a wound or if we get poked by a needle?

Is it a respiratory pathogen? Is it something that we can encounter like COVID19 that might affect our choice of personal protective equipment, or is it something that can be ingested?

And then what are the activities that we're doing? So are we centrifuging blood? Are we doing something that is using glass that could break? Are we mixing something? Are we pouring something that we can be splashed or sprayed? Or are we using any kind of sharp, like a needle or a lancet something that we can be poked. All of these things need to be considered when we're choosing our personal protective equipment.

So choosing effective personal protective equipment how do we know what we're wearing is effective for what we're doing? So one thing to keep in mind when we're choosing personal protective equipment, is that it has limitations. But we need to know what those are when we're being trained to use them.

And then also to note that our risk of exposure is never zero. So by what we're doing for a living, we have some risk of being exposed to something. But what we're doing when we're doing our risk assessments and choosing our PPE and working safely is, that we're reducing that risk to as low of a level as we can.

We also need to think about if that PPE is appropriate for what we're doing. So not all PPE is appropriate for certain tasks. So if we are doing a point-of-care hepatitis B testing using blood, we don't need a respirator. So more PPE is not always better. Three pairs of gloves is, a lot of times, not better than one pair of gloves because there are hazards to limiting our dexterity when we're doing testing.

So moving on to types of personal protective equipment and how to choose what's best for what you're doing, we'll start talking with gloves. We need gloves when we come in contact or there's a potential for contact with an infectious substance. In the United States, the FDA has classifications for medical gloves. So one thing that we need to know when we're buying gloves, is that there are all kinds of gloves on the market. They're not all graded as medical-grade gloves. And gloves have different thicknesses and different pore sizes. And so we need to choose something that's classified as a medical-grade glove. If we don't could choose something that's thinner, and that's really only intended for people that do food service or something like that. So choosing a medical-grade glove is really important. And then also, when we're wearing it, we need to choose the glove that fits us properly. So we've probably all put on a glove that was too small, and we can't bend our fingers. There's no way we can work safely if that happens. Same thing if we choose a glove that's too big. We have that big gap at the end that could get caught in things and create a hazard that way.

Change your gloves when they're contaminated. We all like to work as efficiently as possible. And sometimes it might be tempting to just kind of wipe off our glove and keep going or something like that. But that's not how they're intended to use, and that could create a hazard. Gloves are not meant to be disinfected and reused. If they're contaminated, change them.

And then remember to wash your hands after you remove your gloves. That is something that if you are also taking off your gloves to answer the phone or do another action, remember to remove your gloves, and then either wash or sanitize your hands before you touch another object.

And then keep in mind that there are some gloves that have allergenic potential. So latex gloves have kind of moved out of favor in the United States because of that fact. Whether you're doing something where a patient can have an allergy, but also, they've found that the longer people wear latex gloves, it does have a sensitizing action and that we can develop latex allergies over time.

So most people and most facilities have changed to a nitrile glove that has less of an allergy potential. And then also keep in mind that powdered gloves are no longer in use in the US. So if your facility is using either latex or powder, you could think about an alternative.

So moving on to eye protection. And most often, when I think of eye protection, it's safety glasses. So if you are doing something where you could be splashed, or if you're working with a sharp or something that can be broken, glass that has an impact potential, so think of doing something where something can come flying at your face or your eyes, that would be a time when you should be thinking about wearing safety glasses.

Now, prescription eyeglasses are not safety glasses. The glasses I'm wearing right now are standard eyeglasses. They're not meant to be worn in the laboratory for those kind of activities because they're not impact resistant. So if something flies at my face in a high speed, it could break that glass and still injure my eye, as well as they don't have side shields.

So I could still be splashed or sprayed from the side. So safety glasses are rated for that impact resistant they also have side shields. But if you do wear prescription eye correction, there are prescription safety glass options available. And that's something that you can talk about with your employer.

So if safety glasses aren't your thing, you might consider a face shield. And they have a lot of those disposable face shields that protect your whole face. But those are really meant for splashes and spray protection only. Just keep in mind that the bendable flimsy kind are not impact resistant, so those aren't going to protect you from anything coming that could injure your eye either from a high-energy source like a broken glass or something like that.

So if you choose to wear a disposable face shield, but you're doing some kind of activity like centrifuging blood or shaking something or spinning something, also, you should wear safety glasses underneath that face shield.

And then a lot of times, they do have safety glasses or goggles that can be worn over your vision-correction glasses. So there's really no reason not to wear eye protection if you're doing some kind of activity where you might need it.

I found this sign when I was doing some searching for something, and I thought it was kind of interesting to show. It really talks about-- it's meant to be used for chemical splashes, or that's how it was published. But I think you can extrapolate to if you are using any kind of infectious liquid and how that splash pattern might work.

But it really shows how different styles of safety glasses or goggles will protect you. And it's not meant to say that one is better than the other, but that really think about what you're doing and what kind of protection you will need for your activities.

So moving on to close covering. When we are working with infectious liquids or substances that could splash on us or we could drop something on us, we should maybe consider something that covers our street clothes. Most often when we're doing lab activities, the button-up lab coat is the thing that's most widely used.

It protects our street clothes from being saturated if something spills on us, or we get splashed with something. So the qualities for clothes covering that you might want to look at would be it should be fluid resistant. And what that means is it creates a temporary barrier from that liquid saturating your lab coat and reaching your street clothes or your skin.

It allows you time, so if you do get splashed, or something infectious gets on you, you do have time to change out of that lab coat before it reaches your street clothes or your skin and keeps you safe.

Elastic cuffs are another good feature to those because a lot of times, when we are wearing lab coats that don't have elastic cuffs, the cuffs of our shirt kind of creep out from underneath. And that's an area that could be exposed to that infectious substance more likely. So choosing elastic cuffs is a really great feature in any kind of clothes covering.

So we have the button-up lab coat, and then we have a solid front gown that is also a possibility. This might not be something that you would choose for some point-of-care operations when you're doing that type of testing, but it's out there. And it does provide additional protection.

Because it has a solid front, you don't have any gaps where the buttons could come together. And that's really meant for working with like, highly, highly infectious substances, or if you're doing gross procedures like autopsies or working with a lot of liquid infectious substances.

They also have elastic cuffs. A lot of times these solid-front gowns are a little bit more liquid and permeable than the lab coats, but really, they're meant for the same thing. They're just a temporary barrier to you. And then with these solid-front gowns, if you wear them or encounter them, keep in mind of where those closures and ties are.

Some of them, some people are smaller in size, and they have the long ties on the lab coats where the smaller people, the more petite people, can wrap the ties around their body and then tie them in the front. The front of your body is the area that's most likely to be exposed to something. So in my laboratory, what we say is, if you're going to use a solid-front gown, tie it either on the side or in the back so that if you are exposed to something, if something does splash on the front of you, your ties are not contaminated with something. So that's options to cover your body, your street clothes from being contaminated.

So respirators, we don't need respirators for a lot of our point-of-care testing. They're really meant for any kind of respiratory hazard that we would encounter. During the pandemic, obviously COVID pandemic, they were used very frequently. They're meant to protect against particulates. So just keep in mind that respirators are not meant to be used for chemical vapors. They won't protect you for that.

And there really is a lot to choosing and wearing an N95 or type of respirator. So there's a medical evaluation that goes along with that. So before you're approved to wear one, you should be evaluated by a physician because there are some medical conditions that would preclude people from safely being able to wear an N95 or a respirator.

And then there's training that goes along with wearing a respirator. So we should be trained annually. There should be annual fit testing because when we are trained and fitted for a respirator, an N95, especially we really are only fitted for that model of respirator. So if you are unable to get a different model, you need to be fit tested to make sure that it's fitting tightly around your face, and that it will protect you.

So other types of PPE that we could consider. These are add-ons, usually. Footwear, it provides some protection for your shoes. In the event that you have a spill or something, it might be something that you want to keep on hand. It would be something that you would encounter if you did a risk assessment and found that you, in some cases, should need some kind of foot protection.

And then because we talked about respirators, I just thought I would mention face masks. They really are meant to contain your respiratory droplets from being transmitted to others. And just keep in mind that they are not the same as respirators. So those disposable face masks, we do wear, but just keep in mind that they're not meant to be-- they don't have the same protection value as an N95.

So now that we've gone through the hazards and ways to choose PPE, how do we really use it? How do we put it on properly, and how do we take it off properly? Because that really goes into how well we will be able to protect ourselves so that we're not putting it on improperly and then taking it off in a way that will contaminate us.

So for donning and doffing, for putting it on and taking it off, we need training. So these are something that your employer is responsible for training you on how to use your PPE properly and then, like I mentioned before, letting you know what the limitations of that PPE is.

There should be training on how to put it on and take it off, how to dispose of it or launder it if you're using something that's reusable, or how to clean it if you're using safety glasses that aren't disposable, when to clean, what those practices are. And then as part of your occupational health program, if something should go wrong with your PPE or some kind of fluke accident, just be mindful of what your exposure protocols are.

So getting into donning your PPE, putting it on. Always, before you put it on, inspect it. Make sure that there is nothing damaged or soiled. So be familiar with what you're using and make sure that all the

buttons on your lab coat are there. That nothing is soiled or that your safety glasses aren't damaged in any way.

These are very general guidelines, but generally, I like to say you put things on that are clean to dirty. And what I mean by that, is the first thing that you would put on would be the thing that should be the least likely to be exposed to something infectious. The dirtiest would be the thing that is most likely to encounter the infectious substance that you're testing.

So an example of this would be the first thing that you might put on would be your safety glasses, then your clothing protection, and then your gloves, obviously, are going to be the thing that would be the most contaminated. So that would go on last, and then that we would put the glove over the cuff of the sleeve of our lab coat so that none of our skin is exposed.

So there are some exceptions to these rules like, if you're using one of those disposable face shields, it might not be the most comfortable thing to put that on first, which would be your eye protection and then your lab coat. So it might be easier to put on your clothing protection first and then your disposable face shield and then your gloves. So think about what you're using when you're doing your risk assessment and how is the best way for your facility and for you to do that.

And when you're learning how to put it on, and someone's training you, you should be able to demonstrate competency. They should be evaluating you that you're doing everything properly because one of the main things that we see, is that people wear lab coats, but they don't button them up. Or we have safety glass policies, but they're wearing them up here like, sunglasses or something. So we really want to make sure that we're wearing these things properly.

So when we take them off, that is really a point where we could take something off improperly and then contaminate ourselves and possibly make ourselves sick. So it's important that we take things off properly. Key thing is to work slowly and deliberately. Don't go fast when you're taking off your gloves or your, other items, especially if you know that there is a contamination issue.

And generally, I like to say we remove things dirty to clean. So generally, we remove the item that is the most likeliest thing to be contaminated first, and then we remove the thing that's probably the cleanest or the least likely to be contaminated last. So generally, that means that our gloves come off first, and then our clothing protection, and then our safety glasses.

Obviously, these things can change if you are in the middle of a spill, or you've had an exposure in some way. But generally, this would be some way of working or a guideline to use.

Make sure that you're cleaning any PPE that's reusable. So your safety glasses should be cleaned regularly. Make sure that you are treating any PPE properly in terms of disposing anything that's disposable. Follow your facility guidelines, your local guidelines on how to dispose of your PPE properly, and then wash your hands when you're finished.

So glove removal, I'm a high advocate for periodic retraining and reminding people of how to take off your gloves without contaminating your hands. So we just did an activity in my lab where I used something called Glo Germ, which is a fluorescent liquid powder that people put on their gloves, and then we check to see if they could take off their gloves without any of that powder getting on their skin.

It's kind of a fun thing to do, but it's because we're all-- over time, we get used to removing our gloves as fast as possible. And that is a good way of contaminating ourselves. So there's a lot of good resources out there on donning and doffing procedures and how to remove gloves.

There really isn't a right way, one right way to remove gloves. There are right ways to remove gloves, but there are different methods that are effective. So CDC has a lot of resources. I have one here, how to remove gloves. There's something called the beak method. That's another way of removing gloves. And CDC has a lot of resources on donning and doffing PPE that make wonderful job aids that you can post in your facility and use them as training methods and tools.

So in conclusion, to wrap it all up, PPE are things that we wear to minimize our risk of being exposed to infectious substances. And we need to know the hazards of what we're working with, our sample type, and then the actions that we're doing that could be hazardous. Because that all affects the PPE that we wear.

I highly recommend utilizing references from CDC and other reputable sources to stay up to date on-- there's different PPE that comes out all the time, especially I believe, recently, I just saw that there's some kind of more environmentally friendly type of gloves that are available, which is something to look into if they meet the proper standards. Different qualities, make sure that you know how to choose a quality PPE for you and your staff. And then the best practices and training to make the best decisions. And then know how to put on and take off your PPE. That really is essential to minimizing your risk of exposure when you're doing point-of-care care testing. And that is all I have. So I thank you for your attention. Happy Halloween to all who celebrate, and I will hand it back over to Jamie. Thank you so much.

Thank you, Carrie. I've been putting on PPE for years, and I learned some new tips so thank you. Great.

And now we will take time for a few minutes to answer as many questions as possible. If we do not get to answer your question today, we will do our best to respond via email. And if you have questions after today, please feel free to email onelab inbox at onelab@cdc.gov. All right, so we can go ahead and get started with our first questions.

So our first question is, where do we put away regular waste or biohazard our used gloves during phlebotomy that are not soiled with blood and apparently they are clean?

That's a really good question. And I would recommend that you look at your state OSHA guidelines for how to dispose of PPE. They have different recommendations for PPE that is visibly contaminated or saturated with bloodborne pathogens or infectious materials, and guidelines that aren't. And then you can establish facility guidelines from there.

So in my laboratory, to eliminate confusion between housekeeping and things like that, we just dispose of all of our gloves as contaminated. I would recommend starting with your OSHA local and state guidelines. Thank you. And our next question is, are there any situations where gloves can be disinfected to be reused in the meantime? For example, in the US, reusing gloves is an absolute no. However, in developing countries or situations where obtaining new gloves on a regular basis is very difficult, are there any situations where they can be disinfected?

I don't know of any-- off the top of my head, although, I don't-- I would say it would probably have to do with how the glove is composed. There might be situations where gloves are thicker, and but generally, I would say have to follow the manufacturer's guidelines, but I do understand that there are resource limitations in places.

Any time that you are reusing some kind of PPE or want to establish a reuse protocol, there are limitations to reusing things. So it would be great to-- I recommend validating the procedure first and

knowing that you can safely decontaminate something or disinfectant or to reuse it. And then know what that limitation is.

But generally, in the US, my recommendation is just to follow the manufacturer's guidelines and consult CDC, actually, too. They do a lot of work with global health, so they might have some recommendations too.

Thank you. And I believe that is all of our questions. I'll let you know if we get any more in the Q&A for now. And so, thank you so much, again, Carrie, great presentation.

And as a reminder, the slides with links will be posted to our OneLab web page at www.cdc.gov/onelab within the next week or two. And last, I would like to encourage you all to utilize the OneLab inbox to share your training needs and feedback on OneLab with us.

We use your input to select event topics and to better understand the community's needs. And thanks, everyone. Thanks again, to Carrie and have a great rest of the day. And Happy Halloween to those who celebrate it today, thanks.

Oh, we do have a hand raised. Thank you. We have a hand raised. I just caught it. If there is a hand raised, can we go ahead and come off mute to ask it or put it in the chat? There is one more question in the chat here that I'll go ahead and ask. Is there a procedure for removing gloves after use? I believe we covered that but just wanted to go ahead and confirm any reminders.

Yeah, there are a lot of resources on the internet, a lot of training methods. CDC has a lot of resources and job aids for removing gloves. YouTube has some great resources also for removing your gloves without contaminating your hands.

OK, great, thank you. And if anyone does have a hand raised, feel free to come off mute. And if not, I will go ahead and thank our speaker again and wishing everyone a lovely rest of the day. Thanks.