Bureau of Primary Health Care (BPHC)
Infection Prevention and Control in Dental Settings Part 2

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2:00pm-3:00pm ET

Coordinator: Welcome and thank you for standing by. For the duration of today's conference everybody is in a listen only mode and I would like to inform all parties today's conference is being recorded. If you have any objections you may disconnect at this time. I would like to now turn the conference over to Ms. Nguyen.

Vy Nguyen: I'm the dental officer from the healthcare office of quality improvement. Thank you for joining us for today's webinar evaluating your infection prevention and control program. Before we get started, I would like to direct you all to the upper left side of the Adobe connect room under file share where you can find the PDF to download the presentation. This session is going to be recorded and we will let you know when it is available. It will be posted on the Bureau of primary health oral health webpage. This presentation will be interactive so we encourage you to participate and feel free to put any comments or questions in the chat box as we go along. We will also try to get to as many questions as possible at the end. With that I would now like to introduce our presenter for today's webinar. Miss Kathy Eklund. She is the director of occupational health and safety subject patient advocate at The Forsyth Institute. She is adjunct faculty dental hygiene program and serves as faculty for the New England education and training center. She is the 2017 and 2019 chair of the organization for safety a sepsis and prevention board of director. Over the past 34 years miss Eklund's published papers and contributed to several text on infection control and safety and is an author of the CDC guidelines for infection control and dental health care settings 2003. It is my pleasure to turn it over to miss Kathy Eklund.

Kathy Eklund: Thank you very much and welcome everyone. I will provide my disclaimers and I want to point out that they will be visuals here of products and devices and is not meant to have any specific endorsement of any product or device. I wanted to go over just a couple of things. To provide different methods and strategies for your ability to do site-specific monitoring and evaluation for compliance in your specific setting. Because you all are in federally qualified health centers you have a number of oversight agencies as well as institutional policies that integrate those. The other part of it is to identify credible resources that can help facilitate how you can work on your continuous quality improvement of your infection intervention and control program. Obviously infection prevention and control is a systematic approach of guidance, regulation and standards. As well as people understanding that individual ethical responsibility that we have to both patients as well as personal safety. In the background of all of your written policy and procedures there are a number of not just CDC guidelines and regulations but I want to highlight some of the so you have an appreciation of many of you already do I'm sure of understanding their both federal and state regulations and your state regulations are very specific in which are actually practicing. Federal guidance and regulation both CDC which provides guidelines, OSHA which does in fact regulate as well as CMS. One of the things I want to clarify because many times there is confusion and people say OSHA, my OSHA program and training. OSHA is a number of regulation that impact every employment site, primary regulations which impact your infection prevention safety program but you need to keep in mind that OSHA regulates employers for the protection of employees so when you read the standard it is focusing on that personnel safety. CDC is a guidance agency that does not have regulated -- regulative authority but it's also important to keep in mind that the CDC guidance impacts both personnel safety as well as patient safety. The two primary documents of which you will discuss -- was in fact the for infection control and dental health care settings as well as the The Forsyth Institute summary of infection prevention practices which is the plain language summary of the 2003 guideline. The U.S. FDA regulated manufacturers for the clearance and registration of food, drugs, and medical devices. CDC recommends you only use FDA cleared product and devices such as sterilizers, packaging materials, vertical facemasks, examination gloves and

others. The Environmental Protection Agency, EPA, well considered that it regulates hazardous-waste for the protection of groundwater and air. The other thing the EPA does is it registers hospital antimicrobials and CDC recommends you only use an EPA registered hospital. Other basis and include standards such as practices from the American dental Association which in the area of infection control really defers to the CDC guidelines for infection control and dental health care settings and the OSHA pathogen standards. Accreditation agencies such as the joint commission impacts many of you because you are inside the joint commission accreditation and those standards from the joint commission and the Arab infection prevention reflects CDC guidelines. As well as certain standards including AAMI and ANSI standards and we will talk about those as it relates to -- joint commission private sectors auditors look at. Also manufactures of the product and devices that you're actually using following their validated instructions or directions for you. The organizations that I represent is the organization for safety and I encourage you all if you're not familiar with OSAP please go to their website. There is many resources they are available to you and I encourage you and I will discuss some of those throughout the webinar.

One of the things that CDC did was to put in the introduction section statement that in the section control coordinator knowledgeable or willing to be trained should be assigned responsibility for coordinating the program. Many of you may have an infection control coordinator in your health center that's not from the dental department or possibly as some of the health centers unfamiliar with in Massachusetts, it's actually the dental director who maybe the infection control coordinator for the center. The important piece about this whether it's individual or it's a committee, this infection control coordinator committee holds certain responsibilities for policy development and implementation but also the team management and the program. Since 2013 OSAP has collaborated with the assessment based foundation. It became very clear that there needed to be some type of formalized education. Obviously we recognize the need for the infection control coordinator in dentistry but there was not a formalized process about education. Today offered through OSAP is an assessment based certificate program that I will

be discussing with you. There will be a certification for both industry specialists but also for professional certification for dental professionals so those of you who hold responsibility in your health center this is something I encourage you to go to the OSAP website , there is a link to the certification program explaining how the process goes including the steps and what can be done online. The first step is actually doing something that's reading an article. The article covers the 2016 summary from CDC. Answering a few questions and then there are some other steps that can be taken in addition to that choosing one that fits your needs if you happen to be a certified dental assistants you can take the exam or you attended the boot camp or you have done one or two training programs in step 2. The third step will be launched later this spring it's called the the handbook and think of it as a large review assessment workbook where you will read and answer questions as you go through and one that's completed you will be eligible to take the test and receive this educational certification. I encourage all of you, that's something I can really benefit both you, personally but also the health centers. One of the thinks that CDC stressed in 2003 is that there will be a system for your infection prevention procedures that involves and includes not just having written policies and procedures but evaluating and monitoring. This can be done through observation documentation and you can use this checklist as well as others that I will show you and have a documentation that you really evaluating your program. During the evaluation that's only part of it you have to be able to provide feedback to staff and receive feedback from them looking at trends cannot only just in exposure incident but trends in behavior and I will talk about some of those. The entire process should be around how to improve practices and about compliance but it's also continuous quality improvement for your program. Dr. Young in a previous webinar discussed with you the 2016 summary that includes the two part checklist and this is a plain language summary of the guidelines and I want to reiterate there is an app for android and for iPhones that you can download with the document and the checklist. It is easy and accessible and something I encourage all of you to use. There are checklists and a lot of resources available on the website and we have various trainings and you can link to more information related to the certification program and that will take you to all the information as well as many of our publications and

we have actually launched the first OSAP Journal of dental and infection control and safety and I will talk about this from two aspects because it includes information on the certificate and credentialing program and it's a free downloadable journal. It has a physician paper on dental unit water quality.

I am not seeing anything on the screen.
Looks like we are unable to see you in Adobe. Can you try to log back in. We are taking the slides for you but once you login, that will be great. Also, it looks that we are having some volume issues. If you can increase the volume for your phone and maybe the operator can also do that.
I actually have the phone all the way up but I can increase my voice as well.
I am opening the connection against hopefully it will come up.
There you are. Give me one second. All right. You are back on.
Can you hear me now a little bit more clear?
Yes. This is the checklist for those of you and I know some of the health centers unfamiliar with are doing outreach in the community including school-based programs and examinations that are being done. This is the checklist that was developed by OSAP in collaboration with folks in the public health community. They took the CDC recommendation and put them into the first one document which is a site assessment to determine the infection control needs when you're in those schools or community centers. What you need for your infection control as well as other aspects down to how many outlets you need with your portable equipment. The second is a checklist to develop your on that program and also be able to go back and evaluate it. This is a free downloadable resource from OSAP. You probably developed lots of other checklists that you have for maintenance of the sterilizers, weekly biologic monitoring, other checklists you have in the center. These checklists are important. They lay out what needs to be done and who needs to do it, and when it needs to be done but then it becomes a written document that frames -- when it occurred and by whom and would what. Reflect on those because they are part of your evaluation. Overall infection control is an approach to preventing healthcare associated infections in patients and injuries and illnesses and personnel. When you backup from that thinking about the steps you need to take in

your sites to do this, check back in 1994 in the 1993 CDC requisition for infection control in dentistry. In that he broke out the recommendations into little pockets called principles taking action to stay healthy, immunization, education and training, hygiene. Principle 2 of avoiding contact with blood and other potential infectious materials. Prevent injuries. Principle 3, which is actually environmental infection control, limit the spread of blood and other potential infectious materials. High you handle and clean and disinfect surfaces and principle 4, making patient care items safe for using, throw away something that's a single use item and not reusing them. Anything that is reusable ensuring that you have a strong sterility assurance program and using manufacturers validated repurpose thing instructions for the items you are repot -- repurpose thing. Protecting immunization and all of you have strong programs through your human resources department and occupational medicine department in your facility. I want to talk about this from a standpoint of also backing up into what is your waiting room look like? We are ending influenza season thinking about common colds and flu's and ensuring you have hand sanitizer's, tissues, waste receptacles, signage reminding people about cough etiquette and proper respiratory etiquette. One of the things I find in my facility here at foresight which is a clinical research center that sometimes people get really busy and this is why observation becomes so important in your evaluation program.. CDC recommends you wash your hands when they are visibly dirty with soap and water after touching contaminated object and before and after patient treatment. That can be if your hands are not physically soiled, use of alcohol-based hand rub. The observation up to -- activity I want you to do is look at your hands. CDC guidance is to avoid artificial nails and avoid hand jewelry. Ensuring that those artificial nails are not worn because they harbor a lot of organisms and they can also interfere with gloves and stretch club and necessarily with hand jewelry such as rings, it's difficult to clean under the area. Another observation I would like to encourage you to do is when you get back in the clinic, go in and look at people after they finish with a patient. They will remove the gloves. Ensure they are performing hand hygiene either using the alcohol-based hand rub or washing their hands. One of the things I observed in our clinic sometimes people get busy and they just take the gloves off throw them away, and there often away. Observation

becomes very important. Personal protective equipment is something you all have and you are wearing masks and different things but it's not just about wearing it and having it. It is also about keeping in mind how it is being worn. Here we have two of our staff at the kids program. In the chat box you might want to consider what corrections you might recommend thinking about looking at both pictures. You can put something in the chat box and see what we come up with. I will say that I think most of you would probably think this is more than appropriate. She has on personal protective eyewear, with side shells and a surgical facemask. The one thing I would encourage her to do is pull the facemask under her chin more and actually spread the sides more.

Now we go over to Dr. Miller. Dr. Miller just finished in a school-based program in the schools a and what do you see here? I am seeing some really good points. Dr. Miller has facemask under the chin. Facemasks should either be a on the face or in the trashcan. Dr. Miller has this great beard and mustache and you need to make sure it covers all that facial hair. The other issue here is Dr. Miller's eyewear. That is not true protective eyewear. Even if he puts solid side shields on these glasses, that would not make them protective eyewear. The eyewear needs to be beveled at the top and bottom with solid side shields around. I'm glad many of you were picking up on a lot of these issues. Other things that we see in the top picture here, which we staged at Forsyth . Things look really good. Patient eyewear is not necessarily a CDC recommendation, it is mentioned as a good idea but it is something that does protect the patient. It covers their eyes and prevents getting spatter even though it may be from their own mouth and eyes or potential drop edge of something across the eyes. Now let's go down to our dental hygienist. What do you see here? What kind of problems do you see in this case? Let me review first of all the attire. The attire needs to be not taken over the head. It should be able to be removed by unzipping and unbuttoning and untying or un-clasping from the front or back. We see and many of you picked up on this scrub top has to go over the head and with that there is risk of contamination across the eyes, nose, and mouth. Also in dentistry because the spatter generation is across here, the arms should be covered with longer sleeves. We also see he does not have on protective eyewear. The

patient's eyes are not covered either. Again, these are the things you really want to look at so if you do have our reach into schools, community-based centers, you want to make sure you have that infection control coordinator doing periodic observations in the field.

This is a polling question. And we want to ask you which is the correct sequence for putting on personal protective equipment? You choose which one you choose is correct. Anybody had an opportunity to answer? Looks like we had a few change their answers. Can we end the poll now? Let's move forward. The correct answer is a, gown, mask, protective eyewear so you can make sure it helps to hold the mask in place and perform hand hygiene and gloves. One person taking off their personal protective equipment and the other person looking at and assessing how they're doing it from the chart. These are tools to use.

Now we move on to environmental infection control and that really is limiting the start of blood and other potential infectious materials and in this area over here we have the CDC recommendations on this is directly from the 2003 guidelines and this is the checklist evaluation item from the 2016 summary checklist. You can see what CDC did without -- with that document was to take the recommendation and turn them into evaluation that you can answer and actually on the checklist there is an area where you can document more details of what you see. I also recommend when you take photographs that gives you a visual which how to discuss the issue later. Environmental and infectious control is important and a sense that things like hepatitis B and hepatitis C can remain on environmental surfaces. Hepatitis C for several weeks and hepatitis B for at least one week. Both can be inactivated or killed with a low-level not tuberculosis and disinfectant. HIV however is something that does not survive well outside of the body. Many of you may have seen saliva -- if saliva were read, a project that CDC did after the 2003 guidelines was published and in this we actually did die saliva. We used a real blot and we put three drops under this dental student patient tongue and then they actually went in with an ultrasonic and did a little instrumentation and we really measured and visually saw where saliva goes. If high-volume evacuation was added we got -- high-volume

evacuation using reduction of that spat. I would like to move on now to discuss barriers cleaning and disinfecting so here we have a polling question. Which of the following is correct regarding clinical contact surfaces?

I think we can move forward. The correct answer is all of the above. This is straight from the CDC recommendation. Clinical contact services try to walk into your -- like you to become contaminated with spatter and contaminated items being put down somewhere. I think what you want to think about is the type of surface you happen to be working with. Keeping in mind that if it's a smooth hard surface you can clean it. If it not a smooth hard surface, that's when you need to use the surface cover. There's nothing the wrong with using surface cover on smooth surfaces as well. You should have a plan of how you want to manage the the operatory but also think about clinicians habits and what are they touching. Someone may reach something or touch something frequently that would not normally be a clinical contact surface like a door handle. Thinking about behaviors as well. Considering what you want to do you want to remember the barriers you placed the barrier and you remove the barrier and replace it with a new barrier between patients if the underlying surfaces not become contaminated, there is no need to clean and disinfect under that surface. For cleaning and disinfecting, whether it's a spray or a wipe, you have to follow the manufacturers instructions. Again, CDC recommends you only use an EPA registered hospital disinfectant. CDC's terminology is low to intermediate level and with EPA they do not use these terms, they use the kill claim. Tubercular side of claims it's an intermediate level and something that does not have a tubercular side a claim is considered a low-level disinfectant.

One of the things I want to draw your attention to is it is important to the couple of things. One know and differentiate whether you have an intermediate or low level and that is simply by looking at the list of organisms that that product is registered with EPA that it's been tested to kill. If it has TB, mycobacterial tuberculosis it's an intermediate level and if it does not it is a low-level disinfectant. The other thing that's important is to read directions which none of us really like to do. But it is important because that can help you understand how to properly use that product,

there is a wipe or spray. For instance with the wipes is on the back it says please clean the surface and use it premoistened towelette to spread the disinfectant, allowing it to remain for certain amount of minutes, that means it is not a cleaner disinfectant. You have to preclean with wet towels and use the disinfectant by to spread the disinfectant. If however it says something to use one clean moist and towelette and clean the surface and discard, use another premoistened towelette to spread the disinfect allow it to remain wet for ex-amount of minutes, the disinfectant contact time. The other thing you need to look at is not only are they being used correctly but the whole storage of the disinfectant. You want to keep that led down and think about the Webster use at home. How many times you go to the bottom and there is a puddle of liquid at the bottom. When recommendation is at the beginning of each clinical time you're coming in, whether you come in at noon or in the morning for your clinical day, you tossed the container like salad dressing distributing the liquid throughout the wipes. The so you have choices. Your first surface barriers and change between patients or clean and disinfect so handles like smooth and hard or you can cover them with a barrier. Keeping in mind that's one of the things the patient sees from lying in the chair and sometimes sees disinfectant can corrode stainless steel or can the scholar powder coated steel. If the patient in the chair looking up and they see specs or discoloration, in their mind that may look like it is not clean. Sometimes surface currents can be a better option for things like the light handles even though they can be disinfected. Here is another polling question and now we're moving on to dental unit water quality. Which of the following is correct regarding dental unit water quality? I think we can end the poll now. And yes, it is b and c. routine dental treatment output water should meet EPA standards and keeping in mind where you want to be. Here is the recommendation for dental water quality. Recommendations being for your settings, EPA regulatory standards for drinking water and that means is lesser equal than 500 CFU per milliliter of heterotrophic water bacteria. Using sterile saline or sterile water as an arrogant when performing surgical procedures and that is incision or excision of hard or soft tissues. Surgical procedures surgical instructions of teeth, those require a high cleaning sterile environment and if you are using a handpiece that requires cooling, that's separate from the dental unit water line, a separate system that would

be used in that case. OSAP published the first issue of the Journal the dental unit water quality white paper recommendation that were put together by a number of authors and it also had participation by EPA, FDA and CDC input into this particular document so I encourage all of you, it is free and downloadable and can be very useful. Not only talking about the technologies available, what the CDC guidances, discussion of testing the water, methods of testing the water, as well as other aspects. In the checklist, and this is in section 2 of the CDC summary checklist it asks specifically what you are using, following manufacturers instructions, and ensuring if you're doing surgical procedures or not and if you are using sterile coolant. That there are multiple treatment approaches available to control the dental water quality. A lot of you say yes, we have a water bottle and we put pre-distilled water but it has to be more than that because the issue of the contamination is in the dental unit water lines it sells for biofilm builds up. It's a combined approach not just the water you start with. It's actually what you're doing to control biofilm which can be a chemical treatment that can be used or it can be a filtration or a filter is being used. There is an antimicrobial tubing and reservoirs but in fact, that also needs to be used in combination with another system and again, if you're using or doing surgical procedures you need a sterile delivery system using sterile water or sterile saline. Making object safe for use that's about your insurance program and ensuring that if something is a single-use item, it is being disposed. Even those plastic and trays and I have this question sometimes. If it is just a trial and it does not fit, do we really have to throw away that plastic tray? Yes, because it is a single-use item. It cannot be cleaned and disinfected. That is not safe to do. Many of you may be in a health center that actually had rooms that are separate for your receiving and dirty processes from your sterilization and your storage. This is a diagram from the AAMI ANSI standards sterilization ST79 from 2017 where this standard actually acknowledges that it can be done if with the proper flow and a single area however, you need to make sure that you consider it to be like a one-way street. Keeping that in mind that you never backtrack across the dirty only areas. Now showing you a picture of a very small instrument processing area, single room and I guess what I would like to ask you is what would you change? Put things in the chat box. Think about what would you modify change or move in this space? Keeping in

mind you want to have a one-way street and that process should ensure that there is no backtracking. What might you change? Think about where the ultrasonic is placed. If you're coming into the area where you are receiving your dirty items, if you're putting them in the ultrasonic the have to be rinsed in the sink. By moving the ultrasonic to the other side of the sink it allows you to have more space for the instruments to dry and if you pull the sterilizer further down on the counter that would allow more counter space for your packaging material to keep it from getting wet in that process. There is a great space under that countertop where an instrument washer, washer disinfectant could be put in as well which would be an enhancement to this area. There's a lot of cabinetry at the top of this instrument processing area and one of the things that you want to think about is do you really need all that cabinet space because all you need in your processing area are the specific supplies for cleaning, packaging, sterilizing, and monitoring your insurance program. These supplies and packs are better stored outside of your sterilization area because the heat creates changes in temperature as well as humidity in the room itself. There are other considerations. Proper barrier separation may be adequate as we said. You want to think about work actresses implemented to/is there or aerosol contamination in and clean area. Ensuring personnel are changing their personal protective equipment when they move from a decontamination area to perform clean activities and ventilation. Ensuring you have the appropriate proper ventilation. You don't want to have a ventilation moving air from the dirty side to the clean side. You want it always to go from the clean side to the dirty side to prevent contamination. The other thing you need to consider is how you are getting those instruments to be reprocessed from the operatory to your sterilization area. Here we have the AAIMI/ANSI ST79 that discusses the transport container as being a solid bottom inside walls but also that's able to be sealed or closed. The OSHA pathogen standard discusses transporting containers that need to be solid bottom side well but does not necessarily say that they have to be sealed. Obviously if you have outreach in communities in your bringing instruments to the field and bringing them back, you definitely want something that can be sealed for appropriate transport and it should actually display the biohazard label.

Personal protective equipment is important and is this something no one likes to way year. Puncture resistant heavy-duty utility gloves. Should be worn for pickup transport and cleaning of packaging of contaminated instruments. This is really important and one that most people do not like to wear. Ensuring you have the proper -- appropriate number of them and then really doing that and monitoring and evaluation and observing the people are in fact, using them.

We have some issues with what the Spalding classification which we all learned in our training, that hierarchy that anything critical going in the mouth is something that penetrates tissue and semi critical touches, like mucous membranes, CDC recommends those items be sterilized between each patient use. If anything is not tolerant, try to replace it with the heat tolerant item and if it is not heat tolerant, does not have a replaceable item, such as many of these things, following manufacturers instructions for use for the appropriate management between patients. These are challenging issues today. We have more and more digital and materials and digital impressions coming into the market which are wonderful however, some of them pose significant infection control management challenges. Again, always talking to manufacture and ensuring you have an appropriate seal barrier for these things. For instance multi-intimate dispensers which Dr. Young discussed you should not be wiping these down because this barrel can touch tissue. You need to have an appropriate barrier and as we all would like to see, we would love to -- we would love to see many factors come out with more -- and over 57 other materials that come in multidose dispensers. Dr. Young discussed the CDC recommendations for dental handpieces. Again, that are attached and removal from the water line, air and water line should be detached according to manufacturer's instructions and this is an important thing to keep in mind. We do have new technologies and this is one of the things in April of 2018 CDC provide clarification standards recognizing that these types of technologies are actually independent of air and water lines. The manufacturers instructions for reprocessing should be followed and these include different instructions from different manufacturers but mainly if it has a cover, the covers are sterilized between each patient use. Barriers over the molder component of it so again following manufacturers instructions for use. Verse, and that Arctic

files and brooches as early as 2003 to CDC guidelines had evidence indicating that these items cannot be adequately cleaned and if you cannot adequately clean something, it cannot be properly sterilized. Or you cannot be assured it is properly sterilized. There was not enough evidence for a full recommendation to consider them single-use but it was strongly suggested that they were problematic. Now that changed. In 2015 FDA produced a document for all manufacturers of what are called reusable semi critical and critical items. In that stating very clearly that the manufacturer has to have what is called validated reprocessing instructions for cleaning maintenance and sterilization. That means it has been tested and validated testing and it can be adequately cleaned and the maintenance and it can be properly sterilized. This again, is for manufacturers of these devices. What does that mean for you as an end user? That means you have to follow the manufacturers instructions for use and if you have verse, -- burs, daimonds and they do not have cleaning instructions they should be single-use. It is important for you to ensure you do have the instructions for reprocessing so for instance a joint commission comes into your facility and you are reprocessing them, that auditor may walk up and say please, produce the validated reprocessing instructions and if you don't have them that is a problem. Excuse me? We are down to five minutes and I'm almost done. The other thing I would like you to look at is a verifying cleaning efficacy of washer disinfectant as well as for your ultrasonic units and these are simple tests that the manufacturer will tell you what to do and how often and actually verify a validation test. They also have them for in fact, ultrasonics. The manufacturer of the ultrasonic should tell you what the validation test is to use and how often you use it. One simple question I want to ask is what is missing? What is missing from this ultrasonic unit quite hopefully many of you are thinking where is the biohazard label because it contains contaminated items. And prepping for your packaging material please keep in mind you want to make sure you are using disposable towels and puncture resistant gloves. Keeping in mind also what are the instructions for your handpieces like lubrication and maintenance, ensuring that they are on notched going into sterilizer. We're going to skip this polling question if we can just move forward and we know the packaging material is cleared by the FDA. The other thing is to ensure that you have specific policies on wrapped versus unwrapped. What is

called immediate use sterilization is not recommended. Specifically in dentistry because most items can and should be packaged for sterilization and for use to the point of use. In terms of packaging materials there are patches, plastic paper pouches and you want to make sure they are sealed and all the ear is removed from them and also using your sterilization wrap writing only on the tape not on the paper material. Following the instructions for use if it's a single-use rapport double wrapping on the packaging material the manufacturer provides to you. Package labeling and again, you want to have specific documentation of what you are labeling and how you are labeling it and your ID should be included what sterilizer is being used and the contents and that maybe they have a sticker or a stick color you are using on your wrap indicating what's stored from surgical. Data sterilization and making sure if there is an expiration date. Expiration dates that's an area where CDC recommends that it is related based on the condition of the packaging material. If you have a time related storage and an expiration date, that in fact, is something you need to ensure you are monitoring your inventory but the critical thing, no matter what you're doing is to always inspect the packaging material before opening the items and if the packaging material is damaged, that item should be repackaged and sterilized. You have sterilizers, you're using idle -- either digital readout or temperature and for how long and there's different types of autoclaves out there and I'm going to move through this really quickly. I want you to keep in mind that the chemical monitoring of the internal component is very important. That means you have both the process indicator potentially on the outside and that internal indicator, whether it's in ink, stamp, single or multi parameter indicator inside or if it's a separate strip, that is penetration of the steam heat to the items to be sterilized. You want to make sure those are checked before you release that from a sterilizer and checked again. I think we are just about out of time and I would like to end here in a chemical monitoring and ensure one of the things you go back to this afternoon is to look at the practices. Observed when someone is opening the instrument pack, are they really checking those internal indicators and this is part of when you go back to do your training and showing that you reemphasize this. It's not just upon removal from the sterilizer you are looking through the package and see the indicators have changed but particularly with sterilization wrap, you cannot look through as you

remove it from the sterilizer so you definitely need to be checking that your site.

The process challenged devices as well and these are a type of fiber type VI indicator that are used in each load and that's a validation check that you can do. What I would like to do now is stop and we can open it up for questions

Vy Nguyen: Thank you, Kathy. We do have a couple of questions from the chatbox. You recommended puncture resistant gloves for sterilization and we had a consultant, and she regretted using this poseable sterilization loves. They are the extended design for sterilization but they do not testify that there puncture resistant. Do you have any particular gloves you recommend?

Kathy Eklund: First of all, I don't recommend products that's something I avoid doing at any point in time. I think the question on this is to consider what the OSHA relations and CDC regulations are. OSHA is very clear that the regulation is they need to be puncture resistant heavy duty utility gloves. The idea of the sickness is extremely important because you want to make sure even if you have a -- and you're trying to open it and there happens to be an explorer up through one of the holes, that you're not going to put your thumb against them and if that glob is not puncture resistant, you can have an exposure. I'm not sure what gloves they were actually recommending but you want to make sure that they are of a sickness and can be considered -- thickness.

Is it okay to use as surgical handpiece as long as you're irrigating or sterile saline and not using water from the line?

If I am clear you're not calling the handpiece in any way? Because if there is any coolant coming through from the line, from the regular line, that would not be appropriate. If it's an electric handpiece and you're not using water or air from the line, that would be different and again, you should really check the manufacturers instructions for that specific handpiece.

How commonly do dental clinics follow the AAMI and ANSI requirements for airflow and separation of spaces. It will be difficult for our clinic to follow.

I cannot answer that in terms of exact numbers because I have not seen a survey of that at all. I think that's something that is a real standard and initially, when early guidance came out, that the rooms be separated, that's how you could get positive and negative airflow if you have separate rooms. It is much more of a challenge when you have a single room so that's where you look at where are your rent docs of your intake air and your air going out. Your air flowing in should be over the clean side and the outtake air on the dirty side because they want to move the air from clean to dirty. Anybody who is restructuring, if you have funding and you're actually redesigning your sterilization area, that document, ST79 can be helpful to you because there's a lot of considerations in their and not just flow and other aspects including airflow.

Vy Nguyen: Thank you, Kathy. There is a question on instruments. On the transporter instrument there has to have a biohazard label on top and bottom of the unit or just on top? As shown in the dental tray with the lid?

Kathy Eklund:

The transport container however it is constructed, needs to display the biohazard label. If it's a lockable late going on the instrument tray it would be on the lid. How many instruments do you advise to be included in one package for instance a restorative set? Depending upon the packaging material you are using, I think with plastic paper pouches you want to be very careful not to overload those. If you have an instrument cassette and the dividers are designed for that. The other thing you want to check his if you are using instrument cassettes and you're putting them in plastic paper pouches, you need to check with the manufacturer of the plastic paper pouches that it has been cleared for the weight of the cassette itself. Weight is an issue as well as numbers.

Vy Nguyen: One last question. Do you recommend that we place the biohazard label on the ultrasonic cleaner?

Kathy Eklund: Sure. The one thing you want to think about what's going in there and obviously you have contaminated liquid that many times is standing and it is holding contaminated liquid after you are done. One of the reasons for putting that so someone understand they should not be putting their hands in that liquid.

Vy Nguyen: I think those are all the questions we had. Thank you so much, Kathy. That was a great presentation and a very informative one. If there is nothing, no other questions on the last slide of the presentation, there's a couple of additional resources in addition to the ones that Kathy shared with some links on patient safety infection control so as we close out I would like to thank you all for joining us today and hope that you found this webinar to be helpful and also would like to thank our partners Kathy and Ashley and Michelle for helping to put this webinar together and please keep a lookout for an email after this webinar with an evaluation and steps to receive your one hour of CE. Was to complete the evaluation and submit your automatically receive see documentation so again, we are thanking you for joining us and have a great rest of your day. Thank you very much.

Coordinator: This concludes today's conference. Thank you for participating. You may disconnect at this time.

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