

**Promoting Health in Early Care and Education Programs:
Child Care Health Consultant Webinar Series**

April Powell: Welcome and thank you all for standing by. Welcome to the Child Care Health Consultant Webinar Series Promoting Oral Health in Early Care and Education Programs. My name is April Powell and I'm resource program manager for the National Center on Early Childhood Health and Wellness, and I'm pleased to welcome you all to today's webinar. Before we begin the presentation I have just a few announcements. First, all participants will be muted throughout the entire presentation portion of the webinar. And there will be a slide presentation shown through the webinar system. Only the presenters will be able to change the slides. If you have a technical question, please type it in the Q&A box of the webinar platform on your bottom left-hand corner.

There's a lot that we'll be covering within the next hour. And you can submit questions at any time in the chat box. Only the webinar staff will be able to see your question. Some questions we'll be able to answer right away. And some questions that we don't get to, we'll email you with the answer. And we'll also continue this conversation on MyPeers later, but more about that in a second. Immediately following the webinar, you'll be prompted to take an evaluation. Only those who take the evaluation will get a certificate. And the certificate will be emailed to you within 10 business days. This webinar is being recorded, and an archived version, along with the slides will be emailed to you following the webinar. So today, we have two expert speakers, Kim Clear-Sandor and Diane Flanagan. And now, I'll turn it over to Kim.

Kim Clear-Sandor: Thank you, April! And welcome everybody to today's webinar. We are so excited to have so many people joining us from all across the country. And just myself, I lived in Seattle less than 12 hours ago, and I'm back on the East Coast today. So I feel very much a part of all of you who have joined us today because I've probably flown over your state at some point in the past 12 hours. We have a lot of folks joining from child care, who are child care health consultants and directors. And we even have our colleagues from Head Start, our Head Start health managers, and nutrition folks. And lots of other early care and education folks coming to hear this great information about promoting oral health in early care and education settings.

As April shared, my name is Kimberly Clear-Sandor, and I'm a senior training and technical assistance associate with the National Center on Early Childhood Health and Wellness. Let me share a little bit about myself. For over 20 years, I've cared for children and families in under-served settings as a nurse and a family nurse practitioner. And worked with Early Care and Education Programs as a child care health consultant. I am passionate about leveraging my understanding of health, families, and early childhood to advance children's health, safety, growth, and development within the educational setting. In addition to my work at the National Center on Early Childhood Health and Wellness, I'm also the executive director of the Connecticut Nurses Association and provide private health consultation and training to early care and education programs. I'm so lucky to be joined today by Diane Flanagan, a registered dental hygienist. Diane is an oral health senior project manager at Children's Health Alliance of Wisconsin.

She's also the dental hygienist liaison for region 5 and Wisconsin. So some of you from that area may know Diane well. Diane serves as the oral health educator for the Healthy Smiles for Mom and Baby. She trains Wisconsin's Early Head Start home visitors to assist families with oral health decision making. She received her associate's degree in dental hygiene from Madison Area Technical College. And she brings

more than 25 years of clinical practice in Pediatric Dentistry, to come and share all that expertise with us today. So we're looking forward to a conversation about oral health. So today we're going to hear from Diane and she's going to share all her great knowledge and experience. And we're going to allow some time for discussion with all of you. And throughout the webinar, we'll specifically cover some of these

objectives: reviewing the national trends in oral health. We're going to discuss the effects of tooth decay on young children's development, health, and learning. We're going to share key prevention strategies that are easy to incorporate into daily routines. And we're even going to explore some resources for families and caregivers. So let's not delay any further. We're going to turn this over to our expert Diane so she can help us understand some more about oral health. Diane, can you share why we're talking about oral health today?

Diane Flanagan: Well oral health is the most common chronic disease of childhood. It's five times more common than asthma. It's also seven times more common than hay fever, and four times more common than childhood obesity. As we start to look at the prevalence of tooth decay in children, we see that 23 percent of children ages 2 to 5, have already experienced some form of tooth decay. And children ages 2 to 5 from families of low incomes, are five times more likely to have untreated tooth decay than children from families with higher incomes. And as the children get older, the number of children who experience tooth decay increases. So we do see 56 percent of children ages 6 to 8 have already experienced tooth decay. But in addition to income, tooth decay disproportionately affects children of color. Rates of tooth decay among our Hispanic population and non-Hispanic black children ages 2 to 4 are presently 34 to 38 percent higher than among their white counterparts. So decay rates among non-Hispanic Asians as well, in that 2 to 8 age range, are nearly 15 percent higher than non-Hispanic white children. So there is some disproportionately affected populations that some of you working in child care have those children in your program. But the dental community alone cannot prevent tooth decay in America's children. Everyone who touches the lives of children and families needs to be involved in preventing tooth decay by promoting oral health in their organizations and communities. Since we know that tooth decay in our young children is nearly 100 percent preventable.

Kim: Wow! That's an interesting way to think about it. 100 percent preventable. And I like to think that our child care health consultants are here to be that bridge and be an oral health cheerleader, so to speak, so that we can think about addressing this. Or supporting programs or thinking about addressing it. And even taking little steps to go ahead and promote good oral health. In early care and education programs, we commonly think about the asthma that we see, or the hay fever that we see. We're very focused on good nutrition and physical activity so that we can address those obesity levels. But, you know, the tooth decay must be there, it's just something we're not seeing. I mean these numbers are pretty significant, but it's not something that maybe shows up so much on the outside. So it's clearly a very important health issue. And it can be a challenge, many folks share the belief that young children just have baby teeth and they're going to fall out anyway. So can you share a little bit why primary teeth are so important?

Diane: Oh I'd be happy to. You know contrary to what the media would like us to believe, our teeth are just more important than just that dazzling smile that people associate with oral health. Many parents overlook the importance of their child's teeth, especially their primary teeth. How many of you have heard parents say, they're only baby teeth. Why should I do anything about them if they're going to fall

out anyway? Well, we're going to address that here today, and here's some information about primary teeth that you can share with them. Primary teeth, they have a lot of useful functions.

One is to chew your food, to ensure proper nutrition. Without healthy teeth, children may have difficulty chewing, may not be able to eat the whole wide variety of foods that they need to stay healthy. They also help make speech possible, an important point for talking. Our teeth work with the lips, the tongue, and the palate to form sounds. For example, when you make this letter B sound, the lips curl over the teeth and they form the sound. In forming an F and a V, you have to use your lower lip to put pressure on the teeth to shape them. We can make a J sound without the teeth, but we usually don't. Same with the L sound. So try taking some of these letters and saying the word love without using your teeth and see how that works. I'll give you a second, and you can all try that for a second. So it is very, very important that we use our teeth to help make sounds. They're also extremely important for keeping the space for the permanent teeth and help to guide them into their proper position. So the primary teeth serve that purpose as well. Many primary teeth must last until the child is 5 to 12 years old, or even longer. Each primary tooth holds a space in a jaw for the permanent tooth that is growing underneath it. Therefore, it is important for primary teeth to stay in place until the permanent teeth are ready to push them out. So that each permanent tooth comes into its assigned space in the jaw. They also help in the normal development of the jaw, the bones and facial muscles. They promote positive self-esteem by adding to an attractive appearance, which we can never underestimate the importance of that. Tooth decay can impact a child's self-esteem and social interactions. I'm sure many of you have seen a child who won't smile because her mouth is full of cavities.

Or you may have seen that in many adults and some of the parents that you work with. Or the child might talk with their hand over their mouth, so that no one else can see their decayed teeth. And even worse, many children with visible signs of tooth decay are teased by classmates for having ugly or rotten teeth. And we don't want that for any child. This particular model is one that I use quite a bit when I was working in clinical practice to demonstrate to parents the importance of primary teeth. And I use this particular model in this picture when I'm working on training home visitors and Early Head Start and other home visitation programs. The model you see right here is the typical tooth development of a three-year-old. And I find it very, very interesting that when people first see this picture they're like, really? Teeth have long roots on them? And yes they do. The baby teeth in a three-year-old, you can see how long those roots are. Our parents commonly think, well wait a minute, I didn't know they had roots. But we have to think, what does a parent usually see when the tooth falls out? They only see that little bit of a crown of the tooth and don't realize that at one point those teeth did have long roots. But as the permanent teeth start to grow in, they dissolve those roots away and the teeth then have just that little crown that falls out of the gum tissues. I just wanted to point out just a couple of things about these teeth. Here we have the anterior teeth, you can see the ones there in the front.

Those are usually the ones that come in first. We see them anywhere from oh, about 4 to 8 months of age, typically. We think of them erupting at around six months of age, but that as well can vary. I can think of my own daughter, who had the very speck of one tooth at 12 months of age. And yet I can think of my other daughter who had her first tooth at five months. So there is a wide range as to when they fall out or when they first come in. But generally, the front teeth come in prior to age 1, and the last tooth that comes in, the last molars generally we don't see those until approximately three years of age. Anywhere from 2, 2 and 1/2, to 3. They should all have their teeth then. Children with delays in development, their eruption of their teeth may also be delayed.

But what I want to point out also in this particular picture, is the root tips of the teeth. And you can see where they sit in proximity to the newly developing permanent teeth. And sometimes when they're infections in the teeth, that infectious material, the puss, may actually enter the sack that surrounds that newly developed tooth and can also affect that. The other thing that I wanted to point out to you is the six-year molar tooth. And that particular tooth is this tooth that we see right here in the back, you can see it's tipped slightly towards the baby tooth. And in fact when it starts to grow, and it relies on the back side of this baby tooth to guide itself into proper position. If for some reason this child were to have that tooth extracted because they had an abscess tooth, an infection, and a huge cavity, then this six-year molar does not have anything to guide it into its proper position. And will actually grow over the developing space for this permanent tooth right here. And when that happens, instead of some relatively easy prevention method or a restoration, a crown, a filling, now we're looking at complex orthodontic problems.

And if we think some of our children are having difficulty getting their teeth repaired, imagine how difficult it can be when they need orthodontic treatment. And then again we've committed that child to having crowding and mis-positions of the teeth for their life. So these are some of the things that we look at when we're looking at kids that have their primary teeth. The next thing is, when do these teeth fall out? Another thing our parents when they're saying, oh my goodness these are just baby teeth, why would I even think about them? Well, the lower front teeth, they were the first baby teeth to come in and they're also the first permanent teeth to come in. So generally we see at around age 5 and 1/2 to 7 that the child loses their first teeth. But because these other teeth didn't come in until quite a bit later, we may not see these last teeth coming in until the child is somewhere between the ages of 12 to 14.

So the teeth do need to remain in their proper position and be healthy for quite a long time. The other thing about primary teeth, as compared to permanent teeth, is the enamel is made differently. It's thinner, it's not as mineralized, and it can get tooth decay very easily. And once the tooth decay sets in in primary teeth, it can go very, very rapidly. So having regular dental checkups would be another important aspect and something we have to consider for our children. And the permanent teeth are much thicker and usually the decay process goes a little slower. So the primary teeth are something that we need to really focus on.

Kim: Thank you, Diane. That explanation covers visually, so many pieces that you talk about. About the importance of the teeth holding the position of all the other teeth, and how it impacts the jaw and the facial muscles. And thinking about, even though all we're seeing are those baby teeth, to know that those other teeth are there and are already making their journey up and being impacted by the nutrition and the health of those teeth on the top. It's such a visual display of how important it is to keep those baby teeth healthy. So thinking about that --

Diane: I'm sorry, Kim.

Kim: Go ahead.

Diane: And that has been my experience in working with families. When they see a picture like this and you can explain it, it really -- if they say a picture is worth a thousand words, that definitely applies in this case. [Laughter]

Kim: So now we want to keep those teeth looking really good, maybe to help us think about how we can keep teeth healthy, you can share a little bit about how tooth decay actually happens.

Diane: Well for tooth decay to occur, you need three things. You need the tooth obviously, you need bacteria, and the diets that have carbohydrates and sugars in them. And when all three are present, then the tooth decay process can start. The bacteria we're generally looking at for the tooth decay process, they call it *Streptococcus mutans*, there are other bacteria that are in this whole process. But that's usually the bacteria that rises to the top when we're talking about tooth decay. And this illustration shows that when these come in combination, that the conditions are right for tooth decay to occur. You know, we all have teeth, and we all have bacteria, and we all need to eat. Which means we're all capable of developing tooth decay. And as I mentioned, or discussed, a little bit before, about tooth enamel, the tooth is covered by enamel, which is the hardest substance in your body. It's harder than fingernails, it's harder than bones. It's the hardest substance in your body and it takes a lot to develop this tooth decay. This means there's a lot that can be done to prevent it too, so that's helpful. And most people are born with really healthy well-formed teeth. And in fact, young children, it isn't real common to see defects in their primary teeth. Although you do on occasion see that, but generally there are very beautiful, very white, translucent, gorgeous teeth. I think the prettiest teeth ever made. And in some senses though, you do sometimes have some structural defects although those can be relatively rare in the primary dentition.

And if there are defects though, that does put the child at increased risk for tooth decay. When we look at this tooth decay process, what kind of illustration could we use to get this message across? But basically, you have to have those germs. And children are not born with the bacteria that causes tooth decay, they usually have to acquire it from the mouth of another person. Generally if the mother has a lot of active tooth decay, she has a lot of that *Streptococcus mutans* bacteria, and she can actually transmit that to the child's mouth. And we don't know how many times the child has to be in contact with the saliva of the mother to acquire this bacteria. But we do know that if mom has lots of active tooth decay, it is more easily transmitted to the mouth of that child. Other members of the family can also transmit this bacteria, but generally by the age of around 2 to 3, the child has established their oral flora, or the type of bacteria that they're going to have in their mouth. And if they have a lot of tooth decay causing bacteria, they are at higher risk for developing the cavities themselves.

Now, then you have to feed these bacteria. And their food of choice is sugars and carbohydrates. And what they do with these sugars and carbohydrates, is they digest them, and then they excrete acid. And it's this acid that sits on the teeth, and burns the holes into the teeth. It's called de-mineralization, they actually take some of the minerals out of the tooth until the enamel is weakened and thinned and then can break. And then you've got that hole that we all think of as a cavity, and it's all due to this decay process. The interesting part though about the acid production is, generally the acid sits on the teeth for 20 to 40 minutes following the introduction of foods that contain carbohydrates or sugars. So the frequency of carbohydrate and sugar consumption is the real culprit here. The more times a child, or an individual, eats sugars, the more time acid sits on the teeth. Which then can result into decay. So this is the process in itself. And this is the point that really prevention revolves around. This, as we call, the tooth decay process equation.

Kim: Thank you. Again, the illustrations make it so easy -- [Laughter] -- to see what you're talking about. And I don't think I ever thought about the idea that it's the germ plus the sugar creates that acidic

environment, which then causes the decay. So that was a great way to share that with us. And 20 minutes! [Laughter] You know, young children do tend to graze. They are obviously attracted to sugary foods. But that's a place that health consultants can talk with programs about the choices they're making for beverages and foods. And, when are they actually eating and drinking? To begin to think about different little steps we could take to decrease that acid production and hopefully keep some of those teeth healthy.

Diane: Well, and I think that's a really important point that you bring up, Kim. In that if we're eating three meals a day, and you have let's say 20 minutes of acid from each meal, 60 minutes of acid. Generally it's not a cavity problem for anyone. Now we know that the recommendation for children is that they have three meals and two snacks in a day. And then again, that's 100 minutes of acid production. But generally after the 20 minutes, the child's mouth goes back into the neutral position, and the acid is no longer present. The minerals in the saliva and fluorides can soak back into the teeth during those rest periods. And make the teeth harder again. And those 100 minutes, even with the three meals and the two snacks, is not usually a cavity problem. It's when we see those kids are, as you said, grazing, drinking out of cups that have juice or any other thing other than water, and they're drinking that all day long. You can just imagine how much acid and how time those teeth are sitting in that acid environment. And that's when we have the issues of severe tooth decay in our young children. Children, as we said, are at high risk for tooth decay, when they have visible tooth decay.

So if a child already has a history of tooth decay, we know they've got some of that bacteria that causes cavities. And we see it on their teeth, we see some of their action by having these white spots where the assets have started to eat into the tooth enamel. Or sometimes some of the bacteria colonies will come together in what we call plaque, and you can visibly see that along the gum line usually of the children. We also know that children are at risk for tooth decay if they haven't had adequate exposure to fluorides. Now the fluorides that you get in toothpaste, the fluorides that you get in drinking water, and then some naturally occurring fluorides that are even in well-water that occur. So it is important that children have some of that fluoride exposure at the right amounts, so that they can work and help re-mineralize some of those areas where the acid has taken away tooth structure. We also know that children with poor oral hygiene are at high risk, as we said, if there's plaque on the teeth or the child doesn't have access to a toothbrush. That can also be a problem. And children as we said before, if they're eating and drinking frequently throughout the day, that is also a problem. And that's important to know that frequency is the thing that we really take into consideration. And we look at the diet for young children.

Kim: And this is really an area where I think health consultants can play that important role in bringing the understanding about the implications of tooth decay and suggesting some different strategies that may hit at some of these high-risk populations. So if a consultant is working in a program, and they know that they're possibly on a well, with a water source that is not well fluoridated, looking into making sure families are aware of that. And families understand what that means. If you have programs, you share high-risk for our low-income children. And so if all children are at risk, and we know our program serves some lower socio-economic groups, and they're at higher risk, it's even upped the ante on what we can do. So talking about all these issues with your program, is such a great way to start and support them in having healthy teeth in their program.

Diane: Yes I think that's really a great point, Kim. In that our children need to have access to good quality water. And hopefully water that does contain fluoride, during the day. And watching what the kids are drinking. In between meals they should be drinking water. And that's one of the points that we really like to get across. That they are drinking water and preferably they have community fluoridation in their water, and that children have access to that.

Kim: Yeah. And consultants can really work too to promote some of the best practices in early care program, such as learning to drink from cups when they're having a meal or snack, and ensuring that they're not permitted to walk around with a sippy cup or a bottle. Those are all standards from caring for our children and that we can bring and share with our programs as well. It is always nice to have some of those evidence-based resources to be able to share, to bring everyone up on that same page. Now that we've talked about how important these teeth are and how this decay actually happens. When a child does have decay, it could affect them in so many different ways. So can you begin to share some of the ways that tooth decay can really be a bummer for these little ones?

Diane: Obviously pain and discomfort is top of that list. And in pain and discomfort in children can be exhibited in a variety of different ways. Children may be showing some behavioral issues that could be related to their teeth. What I found in the 25 years of my clinical practice is kids generally don't say, oh my tooth hurts. Little kids don't. We as adults of course, we would be shouting from the rooftop if we had some of the problems that some of our young children have. But they usually exhibit their pain and discomfort in different ways. We might see that they're having difficulty chewing. Or they're limiting the foods that they eat. They may not want to be eating foods that are hard, or hot, or cold. And we need a variety of foods so that children are healthy. Sometimes we see weight loss in the kids. Or poor weight gain. Those can also be a sign of their inability to eat properly, or owing to tooth decay or broken teeth. And we spoke earlier about misaligned teeth and impaired speech development, that's also a big problem. And of course as we talked about, the reduction in self-esteem. I'm compelled to tell you a story of an experience I had. And I was actually going to a Head Start to check some of the teeth, and I had talked to the teacher a couple of days in advance. And she said, well I have this little girl and she doesn't seem to be eating the food that we provide at school. And she also won't participate in the tooth-brushing. And she said, well should I make her brush her teeth? And I said, well we don't try to make kids do things that they generally don't want to do, but has anybody looked in her mouth? And she said, well you know, it does look like she has a few cavities.

Well it turned out that I was coming to check the kids' teeth in her class and I said, well let's see her first. So I get to the school, and the little girl comes walking down the hall, and she's four years old. And as we all know, four-year-olds we expect them to be touching the walls, singing a song, skipping, being just very active little people. And this girl was none of that. She was very, very listless. And as she approached me I looked at her. She was extremely pale, had big dark circles under her eyes. And she came to me and I explained to her what I was going to do and reluctantly she opened her mouth and I looked. And I expected to see 20 baby teeth in her mouth. Instead what I saw were the remnants of 12 teeth that had been decayed below the gum line. All of the teeth had cavities. The remaining teeth had holes in them. And nine of them had active abscesses.

So as I ask the home visitors that I trained, I said, was this child healthy and ready to learn? And the obvious answer is no. This child was not sleeping, this child was not eating. And she just was having a hard time functioning. As it turns out, we were able to get her to see a dentist within a day. And

eventually they took her to the operating room, and they extracted teeth and restored function in her mouth. I don't know exactly what they did because it's hard for me to imagine all the work that needed to be done. But the one thing I would have liked to have seen would have been her pre-op blood studies. Because what we would know we would see with all the presence of infection, is we would see high white cell counts. They would probably be through the roof with all that infection going on in her body. So a lot of inflammation and infection. And we know with the red blood cells we would anticipate that they would be really, really low because of the malnutrition. And of course, our red blood cells are very important for carrying oxygen. And oxygen to the brain, oxygen to the rest of the body for this young child. So this child, because of tooth decay, really was severely impacted by the results of the infection she had in her mouth. And I'd love to tell you that this is the only story, but we see a lot of it. And as we noted when we are looking at prevalence, a lot of our kids are having problems with tooth decay. And we together have to work to see what we can do to change this trajectory for some of our children.

Kim: Diane, one of the participants asked the question, can tooth decay poison a child's body? And I think when you discussed looking at the child's blood count at that point in time, the word poison is a little bit different. But the idea that the child had a severe infection is quite relevant.

Diane: I think it's a great question. And as you said, poison may not be quite the term we would use. But this bacteria, and you remember the model that I showed you a couple of slides back? Remember where those root tips are? Those root tips, that's where the blood vessels and the nerves go from the teeth into the body. And some of this bacteria may end up going throughout the child's body. And they can become septic, which may be what the individual's thinking about getting poisoned. Or it could migrate to other parts of the body. It could cause infections in the neck, which could potentially close the airway. Or you could get infections in the brain, which ultimately would result in the child dying. So do children die of tooth decay? Unfortunately the answer is yes. It's rare, but we're talking about an infection, tooth decay is an infection of the teeth. And then when they get really severely infected, they can affect other parts of the body. So yes, unfortunately children can die from tooth decay. Yeah.

Kim: That was. That's. That's -- It -- That story was just really hard to listen to, Diane.

Diane: Well I hope people remember it. Because I will remember her forever. And it's nice that I'm able to share her story so that others can better understand what's going on. Yeah. So we're also looking at the effect of tooth decay as we were talking about, but, you know, if our little kids get a lot of cavities, they're at higher risk of having cavities throughout their life and including their permanent teeth. So that also can be a problem for our children. And again if they have extensive tooth decay, they may have some experiences in the dental environment that may not be very positive. Which is something we work really hard, especially like when I was working in pediatric dentistry to make things as easy as possible for children. But in a growing number of cases, young children are receiving treatment in hospitals, and outside of dental offices. And that can be an unnerving experience for a child. And it's extremely expensive. It's extremely expensive for families that have to pay out of their pocket. It's extremely expensive for those that may be covered by Medicaid. And the cost to all of us as taxpayers. But these experiences too can also sometimes result in a lifetime fear of the dentist. And we don't want that for any child because we want child and adults to be as healthy as they can be. And we talked a little bit about how tooth decay, if it's not treated, can be a major infection. And we also know that children, if they suffer from a condition such as diabetes, it's very, very difficult to control the insulin in a body that

is experiencing a lot of infection. So that connection is an important one. And the children with diabetes are also at higher risk for tooth decay and infections just because of the disease itself. But the most disturbing example, and as was asked by one of our participants here today. The impact of the tooth decay on the overall health, was really quite profound in a 12-year-old by the name of Deamonte Driver who died because of an infection from a decayed tooth that did spread to his brain. And he died after two surgeries to treat that infection. And this is a disease, as we said before, is nearly 100 percent preventable. So how can we work together to impact the health of children and promote their health?

Kim: And I think sometimes as we talk about the impact of tooth decay on children, we're hearing it's hard for them to chew, get their nutrition, and it causes some self-esteem issues, and puts them towards the future of more concerns. I'm just noticing the time, Diane. And I want to make sure -- [Inaudible] [Laughter] So I know our next slide is, I think, is really -- I don't want to go through it quickly. because I think this really gets at the heart of some of the things that teachers see that can be mistaken for other things. And thinking about oral health as a possible root cause of some of these things, may be able to get to kids sooner if we do know that's happening. I like to take it away. [Laughter]

Diane: Well, yes I think we've made it perfectly clear the impact and the effects it can have on children. But we see, especially with lost school days, it's estimated that 51 million school hours are missed as a result of issues related to oral health. And children from families with lower incomes are nearly 12 times more likely to miss school because of these oral health issues. So again, we need to be thinking about that.

Kim: So here we go. Things we can do. [Laughter] Go right ahead.

Diane: Well we always talk about the bad parts, but it's always nice to know that we can really make a difference if we're working together. And with this here we're talking about finding time for tooth-brushing. We know that in, Head Start that's a requirement, but in our child care centers not necessarily so. So would your center consider doing a tooth-brushing program within your school? That's something to think about. How can we find dentists in your community that see kids for whether it be routine care or if they need restorations? What dentists in your community? Being a resource to families and finding out where they can go. And if something is detected in the mouth of the child, how can we help families to follow up and get the treatment that the child needs to have.

Kim: I think of that because a health consultant can really help in that and be a connector between the community and the program. Maybe try and find some dental professionals that can work with a program, that are willing to take some of the insurance that the program families carry. So they can also work to reinforce some of those positive messages with staff about the importance of oral health. And a health consultant may have that opportunity to again be that oral health advocate or champion in your center. So that we can begin to get some of these issues addressed. And then we have the issue about how brushing teeth and toothpaste. [Laughter] So we know that the kids get cavities. It's no good if they do. But how about this tooth-brushing?

Kim: Well tooth-brushing, if we can do that in our early childhood education programs, we do recommend that children use toothpaste, well not just we, but the American Dental Association recommends that toothpaste with fluoride be used for all children that have teeth. And when we look at it for children under the age of three, you only need a teeny, tiny, rice-sized little piece of toothpaste on the bristles of the toothbrush. And if a child were to swallow that amount, it does no harm to the child.

And so we're looking at a rice size amount for a child under the age of three, and a pea sized amount for a child at the 3 to 6. And sometimes peas come in different sizes. I always say to the parent, no bigger than the tip of the child's little finger is what we're looking at. And the fluoride, as we mentioned before, can help soak back into those de-mineralized areas where the acids have started to eat into the tooth and help make the tooth stronger. We also look at that toothpaste and tooth-brushing and you can start to brush teeth as soon as the first tooth erupts actually into the mouth.

Kim: You mentioned varnish, and I hear of children getting varnish from their regular primary health care providers. Can you share a little bit about what varnish is and who actually applies it?

Diane: Okay. In some programs, and even in pediatricians offices, you might hear that they're using something called fluoride varnish. Fluoride varnish differs from the fluoride that we have in toothpaste in the way it works and the way it's delivered. But generally, fluoride varnish is something that's painted on to the teeth to administer fluoride at a very slow rate because it sticks to the teeth and is dissipated over 24 to 48 hours on the tooth surface. The fluoride varnish is concentrated and really can soak into those areas. Especially those little white areas that we talked about where we're seeing the effects of the acid working on the teeth. And the fluoride varnish is exactly what it sounds like. It's very, very sticky. And it does stick to the teeth. And that's generally when you go to the dental office, or pediatrician's office, or if your program has dental hygienists, or even nursing staff coming in and putting fluoride on the teeth. They're generally doing a fluoride varnish treatment.

Kim: Thank you for sharing about that, because it is something that I've just heard come up more and more and was curious about it. So let's see if we can hear a little bit from our audience out there about brushing teeth. Brushing teeth. It just sounds like such a big task to be able to do. And I'm wondering if you guys can answer the poll, what type of brushing approach do you use in your infant and toddler programs? So if you work with infants and toddlers, please pick one of the selections. The teachers brush the children teeth. The children brush individually at a sink. The children brush at a sink in groups. Children brush at a table in groups. Infant/ Toddler brushing doesn't happen in the program. Or you don't work in infant/toddler program. So you get a skip on that question there. So if you take a second, I see some results starting to come in. The biggest number looks like children brushing individually at the sink. And we do have some that are doing group tabletop brushing, which is really neat to see. So I'm going to go ahead and let everyone see that poll as it comes in. I always like to watch that come in, and we can see that individually at the sink is definitely the most common. Followed by the group table brushing. All right, so let's see at preschool, those of us that work with preschool programs, so please let us know what you're doing. Teachers brush the teeth. Children brush individually at the sink. Children brush in groups at the sink. Children brush in groups at tables. Brushing is not done. Or you're not a Pre-K teacher or program. [Laughter] So we'll see those results flying in there. Well our older children are brushing individually at the sink, and that goes along with some of the things that you were sharing earlier about the ability to brush the teeth. [Inaudible]

Diane: It's really exciting to see that a lot of programs are.

Kim: And definitely more programs are brushing teeth than not brushing teeth. That little purple line is staying small, which is really awesome. All right, let's go to our last one. Some of us have school-age programs, or we might consult with school-age programs, or you might work with them. So at the school-age programs, are we including tooth-brushing. And if you are, do they brush at the sink? Do they brush in groups at the sink? That could be interesting. Children brushing in groups at tables. Maybe we

are not offering brushing in those school-age programs, or you don't work in school-age programs. And not too big of a surprise, that many of you don't work in school-age programs. But we do have quite a number that are working in school-age programs and they are offering tooth-brushing individually at the sink. And is really taken the win there, which again, that really warms my heart to see so much tooth-brushing going on.

Diane: But you know, as I said, we're all working on this together. And for some children brushing the teeth at school may be their only opportunity to do that. So I applaud programs that are considering or are already having a tooth-brushing program. They don't go without challenges though and here we just show one of brushing at the table which actually is a very organized way to do tooth-brushing. And it's also a way not only to do tooth-brushing, but to model the appropriate way to tooth-brush. Because if we all sit around the table and the teacher sits at the table as well with the toothbrush, the children can learn by seeing what the teacher's doing. Now do we expect children of 3 and 4 and 5 years old to be able to adequately brush their teeth? No, not necessarily. The skills needed are usually you have to be able to snap snaps, button buttons, tie shoes. When you have the eye-hand coordination to adequately brush their teeth. For tooth-brushing, we do promote that parents brush the teeth at least once a day. But doing it in the classroom is a fabulous way to make sure that the child is getting the amount of fluoride in the toothpaste each day, and that they are learning. And when they modelled the behavior and they learn how to do tooth-brushing, these are skills that they will acquire and get better and better at each and every day.

Kim: Well I love this poster that's up there, and it is one of the resources that we shared on the resource list that was passed around. And I think when brushing teeth in an early care and education program feels like a daunting task, it really breaks it down and makes it feel like it's very doable in a clean, sanitary type of way. And it's a great strategy to be able to bring to programs that might be thinking about wanting to do it, but feel that the challenge of executing it comes with its inherent issues, when you think about a bunch of little kids around the table brushing. So how do you address those infant teeth?

Diane: I'm sorry, I missed the question.

Kim: With our infant teeth.

Diane: Yes, as soon as the infants have teeth you can introduce tooth-brushing. And you can use that small, tiny, little rice-size amount of fluoride toothpaste when you're doing the tooth-brushing. But even before children have teeth and they're infants, just by having the parent wipe the mouth out once a day, at least. I know from my own children and for my daughters with my grandchildren, they just take the little burp cloth and they put it around their finger and after they're done nursing they just wipe in the mouth to get the routine established that the parent is actually going into the mouth and looking around and is aware of what's going on. As well as the child, it would be very, very easy to introduce a toothbrush to that child once they do have teeth. So for infants, sometimes that works out really well.

Kim: And Diane you mentioned the dexterity in our three-year-olds, around there. You said, snap snaps, button buttons, what was the? Tie shoes.

Diane: Yeah. If we broke tooth-brushing down, there about 28 different steps in tooth-brushing. So our children can't remember 28 lines in a song, so we can't expect that they're going to get every single part

of every single tooth. So that's why I think it's so critical that one of the things that programs consider doing this brushing at the table, because of the modeling of the behavior. And then they can actually see what the children are doing.

Kim: Thank you. We have -- I'm -- I'm just cognizant of the time, because we are coming up on our last five minutes here. And we do have a couple other slides with some information to share. Diane, I'm wondering if perhaps we can maybe take these questions and I will share a little bit at the end about the MyPeers online community? And we can take all of these questions and be able to provide some answers in there? Or do you feel like we should jump to some questions now? What you think would work best?

Diane: I think we do want to make sure we did talk a little bit about feeding practices. And I think that is something we probably should mention. And then making sure that we talk about going to the dentist, which are the next two. So if we could delay the questions a little bit. We talked a little bit about feeding practices earlier and making sure that the child has access and drinks plenty of water throughout the day. And then we also talked about the three meals, two snacks during the day, so to be aware of that. Juice again, remember, it's not to be given before the age of 12 months. And those are the new recommendations by the American Academy of Pediatrics. And if juice is given, four ounces a day for children ages 1 to 3. Four to 6 for children 4 to 6, 4 to 6 years of age. So just keeping that in mind and sometimes we like to reward kids and put this in their behavior plans to have food be the reward for good behavior. But really again, we're looking at that frequency that we talked about before. And if pacifiers, if the children are still using that, not dipping them into sugar or honey prior to giving it to them.

Kim: Just remember that picture, the germs plus the sugar equals the acid. And all that stuff is all about the sugar, so avoid the sugar. All right, or avoid the frequency of it, yes. There you go.

Diane: You know you talked a little bit, Kim, before about programs, what can we do in our communities? And making those lists of providers that accept different types of insurance, and those that will see children. And helping parents with guiding them or have messaging within your facility, oral health messaging. And the resources contain a multitude of different things, that you could make into posters, or have in handouts frequently during the year. It's Children's Dental Health Month now, and sometimes that's the only time we ever hear about oral health. But we need to have multiple messages throughout the year. And look for those opportunities where we can include messaging to family. Whoa, did we cover a lot! Here's what we talked about with locating the oral health professionals and some of the resources that are out there.

Kim: Yeah, and I think that you've really put a lot of breadth and depth of different ideas out there for programs to think about different ways of engaging the local health professionals, the dental schools, the federally qualified health centers, the volunteer clinics. Those are all great, different ideas. And I love that find a dentist for your child link there, as well.

Diane: Here are some of your challenges. How can you get buy-in? And nobody knows your program better than you do. And who is it that you would have to talk to? And what type of information would you have to give to staff, and to directors, and to parents who want to incorporate oral health programs within your facilities. So think about that. What's going to be the cost? And where can you get materials? We know in Head Start toothbrushes are provided, but sometimes locating dental societies

within your community may be willing to donate some toothbrushes and toothpaste. And the time. We're talking about our children's health and if we want them to be healthy and ready to learn, how can we carve out the amount of time that we need to ensure that their mouth is healthy? By doing a program that's efficient, the tooth-brushing at the table is a very efficient way to do it. And I think people who try it, have found that there's a time savings in that way of approaching tooth-brushing.

Kim: Yeah, I think that circle brushing is really neat. So I'm just going to highlight a couple of these wonderful resources that Diane pulled together for you. Again you should have received a resource list hand out with your reminder. And you'll get one again following the webinar when you receive an email with the evaluation link, you'll get the handout again with the resources on there. We're also going to provide a link to something called, MyPeers, which I'll talk about in a minute. But many resources are posted there as well. And these resources are things that you can use to work with staff and directors. They can have some of those posters. Different ideas for toothbrush storage, and important key factors to consider in picking what kind of storage you want to use. There's wonderful family tip sheets. And there's even some recipes that are in there. So please take the time to dive into some of that as you're thinking about creating an oral health program within your program that meets the needs of your children and family. You can see there's some videos included. And there are some links to some different curricula. And really a treasure trove of resources in here. The MyPeers online community that we've mentioned a couple times, is an online social community for peer-to-peer interaction. And the opportunity to ask questions and not only get ideas, but hear from your colleagues who are doing the work around the country. And here are some of the strategies that they've used to overcome challenges and really use their wisdom to launch any work that you're doing.

And anybody can join MyPeers, the link is on the bottom. And, as I mentioned, it will be included in your evaluation email that you'll receive. It's important that when you register for MyPeers, you click on the link. And at that time when you fill it out, you will end up receiving an email from Mango Apps, MyPeers. And you have to activate your account. And then when you're in there, you can have fun. There's a lot of different communities in there. There's a health, safety, and wellness community. The child care health consulting community. You might find a treasure trove of information from all of your peers that are doing this work across the country. And we are going to take all of these great questions that we received today, that unfortunately we haven't had the time to address, and we are going to make sure that next Thursday we have answers to the questions posted. So please go ahead and get into MyPeers. Make sure you have your account so that you can check in next Thursday and get some answers and share some of your experiences that you have done. So many of you are doing good oral health programs out there, and so many of us can learn from that experience that you bring. We hope you take away some key information about the importance of addressing oral health. The importance of talking to families and staff. Choosing water and avoiding all that sugar that creates all that acid out there. And really thinking about how we can make a difference in a child's oral health and prevent that 100 percent preventable chronic disease that children have. April, do you want to give any closing recommendations about the evaluation before we sign out?

April: Yep. The post-webinar evaluation will come up in your web browser. So you can go ahead and take that evaluation, it should take only about a minute. We'll email you a certificate within 10 business days.

Kim Excellent! And I want to thank Diane Flanagan, joining us from Wisconsin for all of her great oral health information. Making it really easy to understand and giving us so many great strategies to think about this as we go forward. On the screen you can also see we do have a health line health@ecetta.info that is our info line.

So if you do have any questions as time goes on about anything we've talked about today, we're really trying to encourage a lot of the questions and sharing on MyPeers, but you can always ask us at our info line. We are there for you. And we always include our link to the Early Childhood Learning and Knowledge Center, which is really the clearinghouse for all the information and resources that we create, that you can find the information on there. This website is being recorded and it will eventually be up on the ECLKC website. And we also do post in the child care health consultant community so that you can view it again and share it with others in your program. And with that, I think I'm going to say thank you to all of you for hanging in there. Sorry to run a little late. Have a wonderful rest of the day. And we look forward to chatting more about oral health on MyPeers.