

Playgrounds! Promote Safe and Fun Outdoor Play in Head Start and Child Care

April Pal: Welcome, everyone, and thank you for standing by. My name is April Pal, and I'm a research program manager for the National Center on Early Childhood Health and Wellness. And I'm pleased to welcome you all to today's webinar.

This webinar is a part of a series for child care health consultants and for others who work in early childhood programs to ensure the health, safety, and wellness of children. Before we begin our presentation, I have a few housekeeping items. First, all participants will be muted throughout the presentation portion of the webinar. There is a slide presentation being shown through the webinar system. If you have a technical question, please type it in the Q&A box to the left of the slideshow.

There's a lot to cover within the next hour. But if you have questions, you may submit them at any time by typing them in the Q&A box. There will be times where the presenters will pause and we'll have an interactive time and use the group chat feature. Immediately following the webinar, you will be prompted to take an evaluation. After the evaluation has been completed, you'll get a certificate. But only those who take the evaluation will get that certificate. This webinar is being recorded.

And an archived version, along with the slides, will be available following the webinar. If there are colleagues of yours who were unable to attend the live version of the webinar, please let them know that they can watch the webinar's archive, take an evaluation, and still get a certificate. And with that, I'm going to turn it over to our speakers today, Tobie Barton and Kim Clear-Sandor.

Tobie Barton: Thank you so much, April.

Welcome, everybody, to our call today on playgrounds, promoting the safe and fun outdoor play in Head Start and child care. We're really looking forward to the next hour to share information about how child care health consultants and others who are responsible for children's health and safety can promote safe and fun playgrounds.

As April shared, my name is Tobie Barton. I'm a senior training and technical assistance associate with the National Center on Early Childhood Health and Wellness, sometimes known as NCECHW. My role is to develop evidence-based and science-informed resources to link health and early childhood systems and provide training on best practices to support children's healthy growth and development with a special focus on injury prevention.

I also provide expertise on child care health consultation and am certified as a playground inspector by the National Program for Playground Safety. And I work remotely from Reno, Nevada, where it's cold and rainy today.

Kimberly Clear-Sandor: Good afternoon everybody. My name is Kimberly Clear-Sandor. And along with my colleague Tobie, I'm also a senior Training and Technical Assistance associate

with the National Center on Early Childhood Health and Wellness. I work remotely from Madison, Connecticut where it's bright, sunny, and warm today. So, I'm sorry Tobie.

As a nurse and a family nurse practitioner, I've worked for over years caring for children and families. I'm passionate about leveraging my understanding of health, families, and early childhood to advance children's health, safety, growth, and development within educational settings and the home. In addition to my work at the NCECHW, I am also the executive director of the Connecticut Nurses Association and provide private health consultation and training to early childhood program.

Tobie: Now we'd like to take just a minute to get to know all of you on the call today. If you can take a moment to respond to the poll that just popped up and let us know what your role is. Looks like a few responses are still rolling in, so I'll leave the poll open for just a moment more. All right, so it looks like we've got a really wonderful mix of people on the call today — child care health consultants, Head Start health managers, as well as program or center directors, teachers, caregivers, and others.

So, we're really excited to have all of you with us today. So, the webinar that you're listening to today is intended to build skills in child care health consultants who are working with programs on playground safety. However, the concepts presented will be relevant to anyone who is looking for ways to reduce injuries on the playground. And if you're a program that works with health consultants, this webinar will give you lots of ideas for how your health consultant can assist you in keeping kids safe on the playground.

Let's take just a moment to review our plan for today's webinar. First, we will briefly discuss why a safe playground is important, not only in terms of injury prevention but also for overall healthy development. We will provide some key injury data to help everyone identify the causes of the most common playground injuries. And finally, we'll provide some specific action items for health consultants to work with programs to create safer playgrounds, including how to help a program find certified playground inspectors, inspect a playground for safety risks, identify and adapt a checklist aligned with evidence-based health and safety practices, observe for active supervision, predict injuries by looking at program data and developing systems to eliminate hazards and prevent injuries.

Throughout the presentation today, I'll share with you the evidence for how to keep kids safe on the playground, and Kim will contribute her perspective as a child care health consultant on how to translate the evidence into specific tasks for the health consultant. Before we discuss this child care health consultant's role in keeping a playground safe, we need to talk about why it's important for the playground to be a safe learning environment.

As many of you already know, there are countless benefits to outdoor play for children. Research shows that children who play outside regularly have healthier body weight, improved vision and immune function, reduced stress, better sleep, improved motor skills. There are substantial immediate and long-term health consequences for children who aren't able to play outside or get enough physical activity such as increased obesity and chronic diseases. The research also shows us that kids who play outdoors have increased school readiness because outdoor play contributes to better social skills such as cooperation, increased attention span,

improved school attendance, and improved brain development and cognition. Physical activity plays a critical role in supporting health and learning.

And I highlight the benefits of outdoor learning as they relate to overall health and school readiness because it's important to remember that the outdoor environment is an essential extension of the indoor environment. So, all the learning that takes place indoors can also take place outdoors.

And anything that you would encourage programs to do indoors have an outdoor component. Consider for just a moment how a program can increase the benefits of outdoor play while also minimizing injury. Reducing risk does not mean limiting play equipment or enforcing rules that restrict children's ability to move and explore their environment.

An ideal playground is one that encourages children to challenge themselves while also preventing little risk for injury. And in fact, studies show that playgrounds that are high challenge but low risk are the very best at promoting the goals of outdoor learning. Children get more physical activity. They develop better physical and cognitive skills. They develop better social skills, including respect for others. And they are happier and more resilient when their outdoor play environment is challenging and also safe.

Kimberly: So, let's consider your role as a consultant. Health consultation does not mean telling a program what to do with their playground. Effective [INAUDIBLE] recognizes the program's expertise, considers their goals and constrains, and builds from the program's strengths. The consultant shares their own understanding of growth and development and expertise in health and safety within the context of the outdoor learning environment. Together you and the program share a mutual goal, to ensure children can safely explore a well-designed and well-maintained outdoor learning environment that encourages them to engage in active play, explore the outdoors, and develop healthy habits that support their physical, social-emotional, and cognitive development. Together you can work to promote the type of low-risk, high-challenge environment that Tobie has shared is so important for growth and development. Tobie is going to get us started in understanding injuries.

Tobie: So, we know that outdoor play is important. And we need to discuss how to reduce the risk for injury and increase the challenge outdoors. The first step is knowing what aspects of the actual learning environment are most likely to cause injuries. So, we have another poll up. If you could take just a moment to select what you think is the most common cause of injury on the playground. I'm going to go ahead and give folks just another moment to reply. All right, so it looks like about half of you said falls, and then about % said trips or slips. A few said collisions and broken equipment.

And a handful of folks said strangulation. So, let's take a look at what the national data tells us. And we can determine the most common injuries among young children. And here we see that falls are the number one cause of unintentional injury. So, good job. You can also see that fire and burns, poisoning, motor vehicle incidents, and suffocation are also among the major causes of injuries to young children. Young children can get hurt anywhere, but what this data tells you about where children are likely to get hurt in Head Start and child care programs is on the playground. Although falls can and do happen anywhere.

Over 200,000 playground-related injuries are treated in an emergency room each year, and most of these injuries occur at schools or child care centers. Data from playground injury visits to the emergency departments show that injuries are most common in September, April, and May. Knowing when injuries are more likely to occur shouldn't form a program injury prevention strategy, especially as injuries are most likely to occur at the start of the school year and in the spring when kids may be reorienting themselves to the play equipment after they've been away for the summer or have been inside more often during the winter.

We also know from national data that falls from, into, or on equipment are the most common cause of injury. Falls are most likely to occur on equipment that is not appropriate for the age and development of the children. And injuries are most likely to occur when the surface on which a child falls is not sufficiently shock absorbing. The equipment pieces that are associated with the most injuries include climbers, such as monkey bars or overhead ladders, swings, and slides. About 85 percent of all playground injuries occur on these three pieces of equipment. And a few of you who selected strangulation as the most common cause of injury were on to something. The most common cause of death is strangulation.

And that's an injury that chokes the child. This occurs most commonly on slides or swings and involves ropes, dog leashes, or drawstrings that get tangled around a child's neck. Clothing with drawstrings, necklaces, and bicycle helmets should not be worn on playground equipment. And equipment should be inspected for entanglement hazards such as protruding bolts that can snag clothing or hooks that can catch drawstrings. And playgrounds should always be checked for any children remaining outside unsupervised.

Kimberly: As a consultant, it's important to understand that injuries are not accidents. Most injuries are predictable and preventable. So, as we begin to process the information Tobie has shared about common injuries to young children, let's also consider that injuries are predictable. Take a look at this rusty swing. Think to yourself, what types of injuries might you predict if you saw a swing like this on a playground? You might predict the child gets a cut from the rusty chain. The chain may break and the child may fall.

The child may be pinched by any open or loose chains. And how about the proverbial banana peel? When we see a banana peel, we often think of someone slipping and falling. The data that Tobie has shared plays an important role in helping us predict the types of injuries a child may receive on the playground. Injuries are also preventable. Consider the previous slide. We can take steps to prevent the injuries we've predicted from the swing by closing or removing the swing, or prevent injuries from the banana peel just by picking it up.

So, thinking about the information being shared about the most common injuries amongst young children on playgrounds, we can predict some of the types of injuries that may occur and take safety measures to prevent them. Tobie shared that falls are the most common type of childhood injury. And many of you guessed that on the poll. And programs can predict that falls will occur on their playgrounds.

So, programs can take steps to prevent serious injuries by installing or using developmentally-appropriate play equipment to ensure children do not fall from a high level and the challenges on the playground are matched with their ability. Programs can also install proper surfacing to

minimize the severity of an injury if a child does fall. And providing intentional and active supervision — a teacher can maintain a close proximity to children, especially in places that are high risk for injury from a fall such as the slide or monkey bars. We also encourage safe behaviors. Programs have an opportunity to introduce safety habits to children. We can teach toddlers to wear helmets when they ride along wheeled toys to prevent head trauma. And we can encourage them to drink water and maintain their hydration by having water readily available.

Reinforcing these safe behaviors in an early childhood education program provides lifelong lessons about safety and injury prevention. As consultants, you can work with your program and teachers to predict and prevent many injuries and allow children to play.

Tobie: So, now that we have established a shared understanding of the value and the risks associated with playgrounds, let's talk about some specific ways that a health consultant can ensure that playgrounds are safe for children. Now, I know that a lot of you were probably assuming that this webinar would focus on specific items related to playground safety such as the proper depth of surfacing or the recommended height of play equipment. And while we'll touch on some of those specifics, the real goal of this webinar is not to make you an expert in all possible playground concerns, but to prepare you to identify common hazards and work with child care staff to implement policies and procedures to minimize the risk of injuries. Even if I told you all of the specifics about surfacing depths or fall heights, you'd probably forget those details quickly.

So, instead we're going to give you information about the best resources where you can access information when you need it about the details of playground safety such as surfacing depth or how to measure for head entrapments and playground layout. It's not at all reasonable to expect that every health consultant will be an expert in playground safety, but all health consultants can work together with a program to reduce injuries. There are four specific steps that a CCHC can take to help child care programs minimize the risk of playground injuries. This includes helping programs identify where and how children are most likely to get hurt during outdoor play, helping programs develop a procedure for conducting a daily inspection of the playground and outdoor environments, ensuring that program staff are actively supervising children at all times, and developing strategies with staff to help them prevent playground injuries.

Safe outdoor play space starts with selecting and correctly installing safe and age and developmentally-appropriate structures. The play space design should not be a hazard and should separate active play areas such as swings and slides from quieter activities such as the sandbox, nature-based learning, and dramatic play areas. Only equipment that is manufactured for public playgrounds or child care facilities should be used. So, home playground equipment like Little Tykes brand or plastic sets that are sold at Walmart or other local stores are not appropriate.

To assess whether equipment is safe, you should look for these labels. Equipment must meet Consumer Product Safety Commission or CPSC recommendations and the American Society for Testing and Materials, or ASTM, standards. These are two organizations that set standards for design and manufacturing that ensure the equipment is safe. These logos can give you some

peace of mind and knowing the equipment has been developed with the highest safety standards. And of course, it also needs to be installed according to manufacturer's instructions and properly maintained.

If you come away from this webinar with just one resource to help you implement safe practices on a playground, I recommend this resource. It's the best resource for learning about safe playground design, surfacing equipment based on height, equipment height based on age, and all manner of playground hazards. This purple book is the Public Playground Safety Handbook. The book is basically the key resource on playground safety. It's available in English and Spanish, and it contains lots of helpful checklists and resources. And it can be your source of expertise for helping to plan a playground or if a specific playground concern arises in a program. The Outdoor Home Playground Safety Handbook is also available for family child care homes.

And for family child care homes, I urge you to review state regulations and licensing requirements and other standards and accreditation to determine whether different standards apply to home-based care settings. A second resource that's really valuable is Caring for Our Children. You can use the Caring for Our Children National Health and Safety Standards third edition database as a location for science-informed, evidence-based recommendations in early childhood education settings. Chapter is related entirely to playgrounds and transportation.

Kimberly: So, your role as a health consultant is not to know everything but to know all your resources. And the resources Tobie has shared so far are really great. Another really helpful resource is a certified playground safety inspector, or CPSI. They play an important role in evaluating the safety of a playground.

Consultants can connect programs to a local CPSI by searching the website listed on the slide. The National Recreation and Park Association and the National Program for Playground Safety both certify inspectors. As always, it's important to know your licensing regulations as some states may require inspections by a certified playground safety inspector. Caring for Our Children, the national health and safety standards provide guidance on using an inspector in standard That's the standard on play equipment requirements. Caring for Our Children recommends that for new installations, a certified inspector conducts an inspection of the playground plans before it is even installed.

For playgrounds that have already been installed, Caring for Our Children recommends they should be inspected at least once each year by an inspector or local regulatory agency and whenever changes are made to the equipment or the intended users change. Consultants and programs can learn a lot from a certified inspector's complete and high-quality inspection. The inspector will identify hazards, check for proper equipment, installation and maintenance, and provide a report that identifies and prioritize corrective actions to take to address any concerns. Together with a program, the consultant can review, discuss, and make a plan to address the inspector's concerns that are immediate right now as well as how to plan to prevent any issues in the future.

Tobie: So, the previous resources, the purple Playground Safety Handbook, Caring for Our Children, and the expertise of a certified inspector are all tools you can use to learn about

specific recommendations for safe playgrounds. Like I said, a health consultant doesn't need to be the expert as long as he or she knows where to access the right information. One of the handouts that are associated with this webinar includes a list of links to these and other helpful resources. So, make sure to download those documents and familiarize yourself with these tools. Now although you're not expected to be an expert in playground safety in terms of all of the precise measurements and depths of surfacing, there are some key elements of playground safety that every child care health consultant should know.

The first is the importance of impact-absorbing surfaces. The playground surface is a material that lies under and around playground equipment. The surface material under the equipment should be able to cushion a child's fall. Unsafe playground surfacing materials is the leading cause of playground injury. So, you remember back to the injury data that we looked at earlier. Children are most often injured in a fall. And it's not because they fall but because the surface on which the fall isn't able to adequately absorb the impact of their fall. Proper surfacing is prevention of predictable injuries.

So, we're going to devote just a few slides to this issue. Now I'm putting a poll up. And please go ahead and select which surface you think is the best for impact absorption on a playground. So, it looks like we have almost half of you selecting unitary surfaces such as pour-in place surfaces or tiles. About a third of you selecting wood chips, a handful forcing pea gravel, sand, and grass. So, the poll that I just gave you was a little bit of a trick question. And I put it up because the number one question that is received by the National Program on Playground Safety is, what is the best surface to use on playgrounds? And the answer is that there isn't a single best surface to use on playgrounds.

The best surface is the one that the program can afford, the one that the program is able to appropriately maintain, and that meets the needs of the children based on their age, and is workable given the climate where the program is located, all while consistently meeting the standard for depth that is based on the height of the equipment on the playground. Surfaces such as asphalt, cement, dirt, and grass, however, are not acceptable surfaces. So, I saw that a couple of you selected grass on the previous poll.

And I do want to underscore that grass is not an impact-absorbing surface. And if a child falls onto grass, they are far more likely to get hurt than they are if they fall onto an appropriately maintained surface of wood chips or a pour-in surface or pea gravel or one of the other acceptable surfaces. Children who fall onto asphalt, cement, dirt, and grass are at increased risk of serious injuries. Unitary material such as tiles, mats, or a rubber surface, like the one that's pictured here on the upper right, are engineered to be sufficiently shock absorbing. And then loose fill surfaces such as sand, pea gravel, shredded rubber, or engineered wood fiber and mulch, when installed correctly, will also safely cushion the child's fall. You want to consider how data can help inform a decision about which surfacing is best for a particular playground.

So, some of the questions that you would ask are, who's using this space? This is important because some surfaces like pea gravel are not an appropriate choice for infants and toddlers who might put it in their mouth since it can be a choking hazard. Few of the loose fill material are accessible for wheelchair users without significant accommodation, such as a special wheelchair. Engineered wood fibers provide a little bit better access, but solid or unitary

materials are best if you have children on the playground with mobility impairments. You want to ask whether the program has the ability to maintain the playground surface. All loose fill surfacing required daily raking to maintain depth.

You want to consider how tall the equipment is because sand and pea gravel can't be used at fall heights that are greater than four to five feet. You also want to consider the climate. You need to factor in temperature, wind conditions, and precipitation, because they all impact the surface materials you choose. Sand, for example, can harden when frozen. Artificial surfaces can get really hot, in fact hot enough to cause burns when they're exposed to direct sunlight. Child Care Weather Watch is a really great resource for determining when outdoor play is not recommended based on weather conditions. And there's a link that's included at the end of this presentation.

I recommend that when considering what type of surface to use, if you have a surface material in mind, ask the manufacturer for the name of someone in your same geographic area who's been using that surfacing for at least a year, and then get feedback on how well it works — whether it's appropriate for the climate, if they've encountered any safety concerns, and if it's workable to maintain that surface in the child care setting. One reminder is that loose fill material — so that's materials like mulch, sand, pea gravel — all compress about 25 percent over time due to use and weathering.

So, this has to be considered when planning a playground. For example, if this playground will require nine inches of wood chips, then the initial fill level should be at least inches. That Playground Safety Handbook that I mentioned has great charts to tell you what depth of surfacing is needed based on the type of equipment in use. So, you always want to consider, as a health consultant, how you can support a program in developing a system to ensure that the depth of surface is maintained and what practices the program has in place to maintain safe surfaces. And how do you know that it's getting done? How do you know they're checking the depth of the playground surfacing? How do you know that it's being raked and maintained on a daily basis? The protective surfacing has to extend for the full use zone, which is the area under and around equipment where children might fall.

These areas must be free of structural hazards such as benches and pieces of play equipment. The use zone is sometimes also called a fall zone, but I like the term use zone because it encompasses more of the activity and it reminds us that you're not just watching for fall hazards but also for collisions and separations between the play area. The use zone should be free of movable hazards like trikes and toys, rocks, and groups of children who might cluster. A playground surface can't protect a child who falls onto a hard object such as a tricycle instead of onto the protective surface.

And while use zones vary depending on the size and the type of equipment, for most stationary equipment on the playground the use zone should extend six feet in all directions. And for children 6 ages to 23 months, the use zone should be at least three feet in all directions. Age-appropriate equipment provides children with opportunities to safely practice gross motor skills without putting them at risk for unnecessary injury. This takes us back to the notion of creating playgrounds that are high challenge but low risk.

Children are less likely to fall when equipment is only used with the age group for which it is designed. Equipment that is made according to the ASPM or CPSC standards will clearly be marked with the age group for which it is intended. And that's usually either 6 to 23 months of age, 2 to 5 years of age, and 5 to 12 years of age. So, any equipment that is marked for 5 to 12 years of age should not be acceptable on a preschool playground. Here are some certain examples of age-appropriate equipment for infants, things like ramps, single-file stepladders, spring rockers, slides, and bucket swings; for preschool-aged children, climbers up to inches in height, rung ladders, belt and tire swings and balance beams; and for school-aged children, climbers up to inches in height, arch climbers, flexible climbers, overhead rings and ladders, poles, and track rides are all age appropriate. School-aged equipment should not be on playgrounds for children in infant and toddler or preschool programs. And some equipment is not appropriate for any age group.

This includes trampolines, swinging gates, climbing ropes that are not secured at both ends, animal figure swings, multiple occupancy swings, ropes swings, and trapeze bars. Again, the purple Playground Safety Handbook has lots of information on how to determine whether equipment is age appropriate. Although falls are the most common playground injury and proper surfacing is the best way to prevent injury from falls, other common injuries and playgrounds can result from the following. Protruding bolts or fixtures can injure an eye during a collision or scrape or puncture skin. Protruding bolts that act as a hook can snag clothing which can cause falls or strangle a child.

Gaps in equipment such as the space between the platform and the top of the slide or hooks can entangle clothing or entrap body parts, causing trips, falls, or strangulation. Head entrapment into gaps that are large enough for a child's body to pass through — so that's bigger than . inches— but too small for a child's head to pass through — so that's smaller than nine inches— can injure a child's neck or choke a child. Equipment that spins and moves such as steering wheels or springs on rockers can pinch, cut, or crush fingers or other body parts. So, you want to make sure that any equipment that spins or moves is not accessible for little fingers. Broken parts or improperly installed equipment can cause injuries if the equipment tips over, breaks during use, or has sharp or loose parts that can cut or entrap a child. And railings to prevent falls can break if bolts are loose.

Swings can dislodge from the swing set if chains and hooks aren't properly maintained. And other outdoor injury risks include environmental factors such as sun and heat, insects, animals, poisonous plants or materials, and water. Kim is going to put all of this in context when looking at those three pieces of equipment that are most likely to cause injuries on the playground — climbers, swings, and slides.

Kimberly: Thank you so much, Tobie. There are so many things to consider when you are looking at playgrounds. So, it's helpful to go ahead and zone in on a couple of these high-risk areas and think about how all those pieces fit together.

So, let's first go ahead and look at our climbers. While we look at specific concerns related to these different pieces of equipment, always remember that playground injury can happen anywhere. And many of the concerns are relevant to other types of play equipment, as well. It's also a good practice to observe the playground with and without children present. This way you

can understand how the children use the equipment, as well. So, let's start with the climbers. Climbers promote gross muscle development and are a great way to challenge children to learn new skills.

Since we know that many injuries happen on climbers, let's take a look at some of the specific things a consultant could look for and review with a program to prevent serious injuries so that they can play on the climber, enjoy these challenges and growth, but stay safe. As we discussed earlier, the most common cause for injuries from climbers is from falls. To prevent injuries from falls, there are three important action steps. First, there's supervision. Some children fall because they aren't using the equipment appropriately. So, good supervision and enforcing of rules that keep children safe while using a climber are always important. Teachers can also position themselves so that they are in close proximity to the children in case a child needs a hand or some extra guidance.

Age-appropriate equipment — sometimes kids fall from climbers because the equipment is too risky for the child. Playgrounds are designed based on the size and development of children within a specified age group. When children are using playground equipment that's designed for their age group, the risk should be appropriate for their size and development. So, as Tobie mentioned, equipment that's intended for children ages 5 to 12 should not be used by 3 and 4-year-olds. The size of the steps, the height of platforms, the barriers, and the actual type of climbing equipment should all match the ages of the children using the equipment to ensure children are only using playground equipment designed for their size and development. And the surfacing—if a child does fall from the climber, the surface should absorb the impact of their fall. The surface must extend at least six feet in all directions from the stationary climber. As Tobie shared, this space is called the fall zone or use zone.

The surfacing material should be maintained at a proper depth to cushion any falls. And from some surface materials, this requires daily maintenance. Additional safety considerations on climbers include the railings, barriers, and platforms. These are important elements of safe climbing. But staff should check regularly to be sure railing, bearings, and platforms stay secure and that the bolts are tight and are not protruding. Sometimes where children are gaining new skills, they challenge themselves by climbing onto the platform, but they may not really be ready to progress all the way across a climber. So, it's important that there is sufficient room to allow the child to reverse direction and climb back down.

Now let's go ahead and take a look at swings. Swings are a great piece of playground equipment. Children enjoy them and they promote the use of big muscles, balance, and help kids develop a sense of how objects move through space. Consultants can look for predictable risk factors and work with the program to take simple measures to prevent and minimize the injuries so children can enjoy the swing. As Tobie shared again, the protective surfacing is important to minimize serious injuries from any falls.

When looking at protective surfacing around swings, keep a few things in mind. The protective surfacing should extend throughout the full use zone for a swing, which is really quite large. For swings, this zone should extend twice the height of the beam to the front and back. Also, as children swing back and forth, some types of surfacing materials move as children's feet kick back and forth, and the proper depth may not be maintained. So, a consultant can work with

staff to ensure that safe surfacing material is maintained around the swing. Another area of concern about swings are the S-hook. Looking at the chains together with staff allows a consultant to share what a safe S-hook looks like, and also look at ones that may be of concern so that you can answer questions from the teachers. An open S-hook can snag clothing and pose a strangulation risk, or the swing can dislodge from the hook, causing a child to fall. Staff should look at the chains and S-hooks to make sure they are in good condition. S-hooks should be closed so that nothing thicker than a dime can fit through the gap. In addition to ensuring this swing and surfacing is safe, it's also important that staff and children are aware of safe behaviors when swings are in use.

The consultant can work with staff to ensure the zone in front and behind the swing are kept clear. It's important that staff actively supervise to make sure children don't walk in front or behind a swinging child. So, lastly, we will consider slides. Slides are one of the most popular pieces of playground equipment. Children are encouraged to climb and are able to develop core strength while having lots of fun. Slides can also be risky. Falls from platforms are a concern as well as falls onto the surface at the bottom of the slide if a child is going too fast. Slides also pose a number of other risks. The slide can crack. And this crack is a risk for entanglement if a child's clothing gets snagged.

A crack may also be sharp and may cause a laceration. An enclosed slide poses challenges with supervision. Consultants can work with staff to ensure the supervision plan always includes a sweep of the playground to check for any child hiding or trapped inside. A consultant can work with staff to take a proactive approach to preventing injuries from slides. The consultant can observe staff to see whether they enforce rules for using the slide safely, such as not cleaning up the slide and not pushing a child down the slide. A consultant can also work with staff in a program to implement a process for frequent monitoring of the slide for cracks and for checking the enclosed types of slides before leaving the program to make sure no child are being left inside. It's also important to remember to check for children's clothing and to ensure there's no strings near their neck, such as with a drawstring clothing.

Many of the causes of injuries we discussed may be prevented through identification of the hazard, as well as daily maintenance. Tobie is now going to share how consultants can work with programs to create an individualized approach to ensure their playgrounds are well maintained to prevent injuries.

Tobie: So, once you know which features and areas of a playground to examine when you're looking at a playground from a safety lens, you can help a program develop a routine inspection to identify and prevent hazards. Outdoor play spaces are subject to a lot of wear and tear from use, sometimes misuse, from weather conditions. So, even if a program has correctly installed safe and age and developmentally-appropriate equipment, it still requires regular inspections and maintenance. While the consultant can conduct occasional inspections of the playground or can address specific concerns that a program might have, and the certified playground safety inspector will conduct an annual inspection, the child care health consultant should also ensure that health care staff conduct a safety check before every single use of the playground with a reliable checklist.

This so-called sweep will identify hazards that may have appeared suddenly such as broken glass, syringes, or animal feces. And a daily safety check will also alert staff to any pieces of equipment that may have broken or become worn since last being used. Some general items to include in a daily inspection may include ensuring that the playground is free from hazardous debris such as glass or needles, from trash, standing water, or trip hazards; ensuring that the use zones are free from obstacles that may have been moved into them, such as tricycles or movable benches; ensuring that displaced loose fill surfacing is raked; that platforms and pads are free of sand and surfacing debris and any tripping hazards; and that the area is scanned for insects or insect nests, broken equipment, weather-related hazards such as hot surface or equipment, ice, or other damage from weather.

A monthly inspection would include checking for loose or missing hardware, checking equipment for broken parts, splinters, rust, or sharp edges, replenishing loose fill surfacing if needed, and checking vegetation for hazardous or poisonous plants. A health consultant can work with a program to develop a plan for how staff will conduct their daily or monthly inspections. Although you can't see the full form that is on the slide, it includes both daily and monthly inspection tasks. A copy of this form is from the Model Child Care Health Policies and is included in the handout for this webinar. If you google Model Child Care Health Policies, you'll find the fifth edition — that's the most recent edition — for some additional information on playground safety checklists as well as policy recommendations. The plans for conducting daily inspections should include identifying who is responsible for the daily and monthly inspections; identifying how the inspections are documented and who checked to make sure that they are being done appropriately, as well as who signs off on the forms; and then a process for dealing with any identified hazards. I want to make really clear that checklists themselves don't solve problems.

Systems have to be in place to ensure that they are used and that follow up is activated any time an issue is identified. This is an area where playground safety measures often fail. There has to be a system in place to conduct inspections and then respond in a timely manner when something is identified. It's too common for someone to notice a hazard but to forget to report it or for somebody to report a hazard but then people forget to follow through to correct it. Many checklists include space for writing down a corrective action plan. Once the hazard is identified the person completing the form will write down what steps should be taken to correct the problem, including identifying who will fix it, what needs to be done, and when it will be done. The process should also include a system to check that the problem was fixed in a timely manner.

A record of any injury reported to have occurred on the playground should also trigger an additional inspection of that piece of equipment. This will help identify potential hazards or dangerous design features that should be corrected. Programs should consider having a second staff person look over the inspection form each day to make sure they are being completed and to make sure that any hazards documented are addressed.

Kimberly: So, a consultant can really support programs when thinking about the playground inspection forms. As Tobie shared a number of different examples of playground checklists, they're a really great place to start. So, you can begin to individualize and adapt it for your own

program. Perhaps you don't have swings or perhaps you don't have a climber. So, you can really start with a form that's informed by the experts, such as the one for Model Child Care Health Policies, or from the purple United States Consumer Product Safety Commission playground book, and work together to adapt it to meet your needs. And don't forget any information you may have gotten from your inspection by a certified playground inspector. That's also really helpful information that can help inform items that you want to include on your checklist.

When developing a checklist with your program, you can train the staff on what to look for, why it's important, and how to address concerns if they arise. This is just as important as the actual checklist. It's important to ask staff for their input when you create the checklist. Is it clear? Is it covering all the areas of concern? Perhaps staff may want to try out the checklist for a few days and report back about how well it works. Remember, if the staff don't like the checklist and find it cumbersome, they might not use it. You can assist when helping the program develop a process for what to do when a hazard is identified. Once a hazard has been identified, eliminate it immediately.

It may just require a quick fix such as raking the surface material under a swing. But some hazards cannot be addressed by staff in the moment. So, it's important that staff understand how to limit a child's access to any unsafe area or equipment until repairs are completed. The consultant can also monitor the inspection forms to make sure they're completed and to see how identified issues are being resolved. So, let's think about this. You're a health consultant. I'm going to do this little scenario. And if you guys want to answer, you can some pop some answers in the group chat. The group chat should be on the left side of your screen below the question and answer square.

So, let's think about how a consultant may review and use the information from a daily inspection report to inform your work with the program. If a consultant reviews a daily inspection report from five days ago, the report indicates that a railing on a five-foot climber is loose and missing two bolts. So, please write your ideas in the chat box about what are the next steps for a health consultant to do when they come across this in their review of the daily inspection report. And again, you can just type those in your group chat box, which is below to the question and answer box. All right, so I see some of you think about going to talk to the teachers to find out what they saw, to find out what they did when they noticed the two bolts were missing. Some of you are recommending that we go ahead and go out to the playground and check if the bolts are still missing. You might also check with the director to find out what has happened with the bolts.

An immediate concern as a consultant when you're working with a program, especially with a missing bolt, it's really important to ensure your program is following manufacturer instructions for those repairs. Because to address a missing bolt, the program may actually have to contact the manufacturer, contact them for any replacement parts and repair. It's not as simple as just going down to the local hardware store and getting some bolts. You really have to contact that manufacturer for those replacement parts and that repair.

Tobie: So, even the safest playground has potential for injury. And the most important tool for reducing playground injuries is active supervision. The health consultant can play a role by training staff on active supervision and then supporting program implementation by observing

for active supervision on the playground and working together with the staff to ensure that they are actively supervising children at all times. Active supervision is a specific child supervision technique that requires focused attention and intentional observation of children at all times. Active supervision includes six basic strategies. First, you would plan and set up the environment to ensure clear sight lines and easy access to the children and the equipment at all times while they're out on the playground.

Adults then position themselves among the children in their care, changing positions as needed so that they can keep an eye on the children. And teacher to teacher talk is happening. Teachers are communicating about which children they're observing. They're communicating about any issues that divert their attention so that they know other teachers are taking up the slack and watching the other children. Adults are watching, counting, and listening to children at all times. They also use their knowledge of each child's development and abilities to anticipate what a child might do or to anticipate areas on the playground where a child might need some additional support. And if needed, they get involved and they redirect children when necessary or they provide that additional support if needed.

Kimberly: A consultant can really play a role in supporting active supervision by training staff and being part of that systems and process and being the one to help perform ongoing observations of staff to identify how active supervision is being implemented in the outdoor area. This allows a consultant to provide feedback, support, and discuss any concerns. So, you may go out to the playground when children are out there with staff and observe for active supervision. You can look and see if the playground is designed in a way that staff can see children all at all times.

Is there equipment or fencing blocking the view? Is equipment open enough for seeing children inside? You can also see how staff are positioned, how they position themselves around the playground to see children and respond quickly. On the playground, this includes deciding where to locate staff so that every adult can see and hear the children and reach someone easily who may need assistance. Research demonstrates an adult proximity's to children is one of the most protective factors in preventing injury. You also want to see scanning and counting in action. How are the teachers counting the children? How are they communicating to one another to ensure all the children are accounted for and no one is left behind? Can the staff hear the children, or are they chatting with one another? Are staff communicating and covering for each other when a child needs attention? Staff also need to communicate regularly when there's more than one provider as children move around. The adults have to be positioned themselves as well.

Also consider if the staff have a way to communicate with someone inside while they are outside in case they need extra help. It's also nice to see how staff are intervening with the children when appropriate. Do they seem to know the skills of the children and do they anticipate the children's needs?

Tobie: So, as a consultant, your role is to help programs develop the infrastructure needed to prevent playground injuries. And this may include assisting the programs to develop a system for staff to inspect for injury risks and respond when a risk is identified as well as promoting a culture in which staff can speak openly about problems that might occur and injuries that are

taking place, providing training on common playground injuries and active supervision, and reviewing incidents logs to identify locations where children are most likely to be injured. Remember always that injuries are predictable and preventable. So, the health consultant can help a program predict and prevent injuries by relying on data, both national data around common injuries as well as program-specific data.

Kimberly: Everyone plays a role in playground safety, from teachers to directors, parents to maintenance staff, and even the children. When everyone understands the importance of safe-play environments, they can work together to prioritize a safe outdoor experience. A consultant can support everyone to understand their role in maintaining safety. Today we have discussed a lot about national data, about types of injuries and what types of equipment can be involved in those injuries.

Programs may be curious about what's happening in their own program and if measures they are taking to prevent injuries are working. A consultant can look at a program data to identify potential hazard areas and track different patterns. There's many places for consultants to look to begin to understand and review what's going on in their outdoor environment. Talking to teachers, reviewing daily and monthly inspections performed and equipment maintenance logs may provide clues about how safe the program is. Data can also help you determine what times of day injuries are most likely to happen and which areas of equipment on the playground are most likely to be the location of an injury. All this information can support the teachers in creating a safe outdoor environment.

Tobie: So, thank you so much for listening to us today. I want to quickly review our learning objectives for this webinar, and then we'll have time to answer one or two questions. First, we briefly discussed why a playground that is safe is important. We discussed many benefits to outdoor play, including benefits for a child's physical health, social and emotional well-being, cognitive development, and school readiness. We also discussed how a playground that poses low risk for injuries but encourages children to challenge themselves in an age-appropriate way can optimize these advantages.

Second, we discuss the most common playground injuries. Falls from climbers and other equipment are by far the most common injury, with improper surfacing being the main cause of injury from a fall. Swings and slides also account for many playground injuries. And the most common cause of death on a playground is from asphyxiation — for example, from a child's clothing getting caught on a piece of equipment. We discussed other hazards such as broken equipment and loose parts.

And finally, we provided specific action items that consultants who work with programs can use to create safer playgrounds, including how to inspect a playground for injury risks by looking for impact-absorbing surfaces that are maintained at a right depth, clear use zones, and age-appropriate equipment; how to help a program develop a daily playground checklist; and how to ensure that a program takes action if a hazard is identified; how to observe for active supervision; and some tips for how to help a program predict injuries by looking at program data and developing systems to eliminate hazards and prevent injuries.

Kimberly: We have — Sorry, Tobie.

Tobie: No problem. We do have some handouts for the webinar. You should be able to download them by left clicking on the link to the hand [Inaudible]. And they include a list of these resources as well as some sample checklists and other resources that you can use with programs. We'll open up for a few questions in just a moment. But first, I want to give Kim a moment to share some information about an online community that you can join where you can learn from one another about playground safety. So, if your question doesn't get answered here — 0 and we have a lot of questions that came in. We certainly won't have a chance to get to all of them — 0 I do encourage you to join this online community because you can ask your questions there and you'll get answers from a lot of experts.

Kimberly: Thank you, Tobie. I'm sorry about that. I get all excited about the online learning community. It's wonderful to have reviewed so much important information. And there's nothing like going back to your program and thinking about it and looking at your playground and wondering what other folks are doing. And this online learning community really allows consultants an opportunity for that peer-to-peer interaction and to connect with other folks doing the same type of work that you're doing and ask questions and share different strategies about how you are making programs safe in your different programs that you work with. This is just a screenshot of what the online community looks like.

And it just is a place where you can really engage and ask the questions and make the community be something that really meets your needs. So, if you'd like to join the MyPeers MangoApps online community, all you need to do is send us an email to health@ecetta.info. That's shown on the screen. That's health@ecetta.info. In the subject, put MyPeers. And in the body of the email, just ask to be included to the Child Care Health Consultant online community with your full name and email address.

Tobie: All right, so we are right at the top of the hour. We have a lot of questions that have come in. So, I do want to encourage you to join the online community to get answers to your questions. But we will take just a moment to answer one or two of the questions that came in. The first one that I see is, what age should children, infant, toddler, and pre-K, begin to wear helmets on ride-on toys? This is a great question, and it reminds us of one of the most important aspects of playground safety, which is that adults on the playground in terms of the rules that they promote and the guidance that they provide that children are setting good habits for children that they'll use throughout their lives.

So, helmets should be worn on ride-on toys as soon as children are riding on toys such as tricycles or bikes. Helmets promote safety even on small bicycles, but they also promote those lifelong habits of wearing a helmet anytime you're on a bicycle. I do want to remind everyone that while helmets should absolutely be ridden any time children are riding on tricycles or bikes or scooters on the playground, that helmets must be removed before children start playing on climbers, slides, or swings because they do pose a risk for strangulation.

The next question that came in is, how do you deal with bees on the playground? This is an excellent question because pets and bugs and insects can be quite an annoyance on playgrounds. I would like to direct the person who asked this question to the concept of integrated pest management. You can just google that term, integrated pest management. There's a lot of great information from the Environmental Protection Agency or the EPA. So,

bees themselves are not necessarily a bad thing on the playground. And you can always take an opportunity to teach children about the wonderful things that bees provide in terms of flowers and pollination.

And you can also teach them how to stay safe around bees. So, remind them to avoid swatting the bees or to avoid playing with bees. And then you can take some steps that can allow your bees to move away from the playground — so making sure that you don't have dumpsters or garbage near the playground because those can often attract insects, as well as to make sure you don't have standing water on the playground that can attract insects. But as long as there aren't active hives on the playground — those can easily be removed safely — then the bees on the playground shouldn't be too much of a hazard for children. And it looks like we are actually out of time on the webinar here today.

I do want to remind you all that the next Child Care Health Consultant Webinar will take place on September 19. And the topic is infectious diseases in the child care setting.

And finally, here is our contact information. So, you can see our website as well as our info line. So, that email address, health@ecetta.info, is a great place for you to send your questions. So, if you do have questions that you wanted to ask today on the webinar that we didn't have a chance to answer, I urge you to submit your questions via that email address. And you'll receive a thorough and timely answer pretty quickly.

You can also reach the info line by phone at the phone number listed on the slide. So, thank you all so much for joining us today. We hope that the webinar was informative. We hope that we've gotten you thinking about how you can help promote health and safety on the playground.

And we hope that you'll join us again for our next webinar on September 19. Thank you so much, everyone.