Active Play in Hot Weather: Supporting Outdoor Play in ECE Settings

Facilitator Guide

July 2026

NEMOURS CHILDREN'S HEALTH

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Acknowledgements

Nemours Children's Health acknowledges the PALS trainers and partners who served on the micro training Advisory Committee and reviewed these materials. We thank them for their valuable input on this session.

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Disclaimer

Nemours Children's Healthy Kids, Healthy Future Technical Assistance Program is funded through a subaward agreement with the Association of State Public Health Nutritionists, the funding for which comes from the Division of Nutrition, Physical Activity and Obesity (DNPAO) in the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) at the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award (cooperative agreement number 6NU38PW000047-02-02) totaling $2,775,000, which funds several ASPHN and Nemours Children's Health programs. This program is 100 percent funded by DNPAO/NCCDPHP/CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by CDC/HHS, or the U.S. government. For more information visit https://www.cdc.gov/nccdphp/divisions-offices/about-the-division-of-nutrition-physical-activity-and-obesity.html.

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Active Play in Hot Weather: Supporting Outdoor Play in ECE Settings

Active Play in Hot Weather: Supporting Outdoor Play in ECE Settings is a companion training course for the Physical Activity Learning Sessions (PALS). The session content is suitable for early educators and providers regardless of participation in PALS. Trainers may choose to spend additional time reviewing resources and adjust the session to 90 minutes. Trainers should work with their PALS state lead regarding provider professional development (PD) and understand how the training is entered into the state PD registry systems.

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For more information on PALS visit:

https://healthykidshealthyfuture.org/trainers/pals/

Training Overview and Professional Development System Overview

The following information is provided to assist trainers in entering the session in state ECE Professional Development registry systems, creating session certificates, and marketing training sessions. Reach out to the Nemours PALS team for assistance if your state system requires information not provided below.

Title: Active Play in Hot Weather: Supporting Outdoor Play in ECE Settings

Time: 60 minutes

Description: Active Play in Hot Weather: Supporting Outdoor Play in ECE Settings will help early childhood educators understand how heat affects young children and learn practical ways to keep outdoor play safe during hot weather. Participants will explore heat-smart strategies, activity ideas, and schedule adjustments that support healthy, engaging play even on hot days.
Core Content Area(s): Health, Safety & Nutrition

Objectives:

1. Understand how heat affects young children's bodies.
2. Recognize strategies to reduce the impact of heat during outdoor play.
3. Identify two activities to do with young children during hot weather.
4. Explore how to adjust ECE schedules to keep outdoor play safe in hot weather.

Session Handouts: Provider Handout

Training Methods: Large and small group discussion, lecturette, brainstorming, reflection activities, optional pre/post assessment.

Training Agenda

The time frame for this session varies based on the number of participants and the length of discussions. The table represents an estimate for training with a group of 10-12 participants. This session can also be a 90-minute session by expanding Objective 4 to 30 minutes. Provide small groups with copies of the daily schedule and ask each group to share back how they would adjust this schedule for hot weather play and what other adjustments to their program would need to be made. You could also encourage participants to bring a copy of their own schedule to review during the training.

Training Component / Content	Slide(s)	Estimated Time
Welcome, Disclaimer, Objectives, Goal	1-4	2 minutes
Opening Activity: Hot Weather Fact or Fiction	5	4 minutes (varies by group size)
Review of PALS Content	6-8	4 minutes
Objective 1: Understand how heat affects young children's bodies	9-17	10 minutes
Objective 2: Recognize strategies to reduce the impact of heat during outdoor play	18-24	12 minutes
Brain Boost	25	2 minutes
Objective 3: Identify two activities to do with young children during hot weather	25-27	8 minutes
Objective 4: Explore how to adjust ECE schedules to keep outdoor play safe in hot weather.	28-29	8 minutes
Summary Activity	30	6 minutes
Key Takeaways	21	2 minutes
Closing Slides- Q&A and Thank You	32-33	2 minutes
Total Content		**60 minutes**

Guidance on Content and State-Specific Adaptations

Trainers are expected to use the training materials as presented during the Training of Trainers sessions to ensure consistency in core content delivery and learning objectives. At the same time, trainers are encouraged to supplement the materials with state-specific content that is relevant to outdoor play within their state's ECE system. Slides with information and resources from the community served or the state that relate to hot weather play will strengthen the overall training content. This might include resources from your state's Licensure or Department of Health. Trainers may choose to add slides that relate to child care licensure standards on outdoor physical activity. As you are developing slides on administrative regulations/ licensure, note that your state may have different regulations on outdoor physical activity for each type of care (center, large child care homes, PreK, and small child care homes). An example of a licensure slide is provided below.

Child Care Licensing & Heat *example*

Tennessee Licensure Chapter 1240-04-01 November 2025

(3) Outdoor Play and Playground Routines.

(a) Children of all ages, including infants, who are in care more than three (3) daylight hours, **shall have a daily opportunity for outdoor play when the temperature range, after adjustment for wind chill and heat index, is between thirty-two degrees and ninety-five degrees Fahrenheit (32°F and 95°F) and it is not raining**.

(b) Agencies shall develop **written policies** promoting physical activity and shall strive to **remove any potential barriers** for children to participating in physical activity,

(c) Outdoor play and moderate to vigorous indoor or outdoor physical activity shall be available as follows:

1. Weather permitting, infants shall be taken outside two to three times per day.
2. Toddlers and preschoolers shall have sixty (60) to ninety (90) minutes of outdoor play per day for full-time programs. Exception: Indoor activity can be increased if adverse weather does not permit outdoor play.
3. Toddlers shall have sixty (60) to ninety (90) minutes of moderate to vigorous physical activity per eight (8) hour day for full-time programs.
4. Preschoolers shall have ninety (90) to one hundred and twenty (120) minutes of moderate to vigorous physical activity per eight (8) hour day for full-time programs.
5. Physical Activity Requirements for Part-Time Providers

Guidance on the Use of Speaker Notes

Suggested speaker notes are provided to capture key messages and essential content for each training section. These notes are intended to support trainers in delivering accurate and consistent information.

Reading directly from the speaker notes, however, can reduce engagement and make training feel repetitive or monotonous. Trainers are therefore encouraged to use the notes as a reference and present the content in their own words, using examples, discussion prompts, and facilitation techniques that align with their teaching style.

Personalizing delivery—while keeping the core content intact—helps:

- Increase participant engagement
- Support adult learning principles
- Create a more dynamic and interactive training experience

Guidance on Image Use and Copyright

Trainers are encouraged to edit or replace images in the training materials to better reflect the providers, children, and families in the communities they serve. Using locally relevant images can enhance engagement.

However, trainers are requested not to reuse images from this training outside of this session. Some images included in the materials are purchased stock images and are protected by copyright, limiting their use to this training only.

When adding or replacing images, trainers should use copyright-compliant, free-to-use image sources and follow any attribution requirements specified by the source.

Suggested Sources for Free Images:

- Microsoft Stock Images
- CDC Public Health Image Library (Note: Not all images are Creative Commons—check individual image usage rights before downloading.)
- Pexels – Free stock photos; attribution may be required
- SNAP-Ed Photo Gallery
- Nappy – Free, high-quality images representing Black and Brown communities
- Burst by Shopify – Free stock photos
- USDA ARS Image Gallery – Agricultural Research Service images

All images used should comply with the licensing requirements of the source and support respectful, accurate representation of Early Care and Education communities.

Slide 1

Suggested Speaker Notes:
Welcome to today's training. Our content today will build on the best practice of outdoor play covered in PALS. We'll specifically talk about supporting active outdoor play in hot weather, including understanding risks and strategies for safe outdoor play during hot weather.

Trainer notes:

Add your contact information and agency logo to the slide. The content of this session build on PALS content on outdoor play. This PALS Micro Training session is targeted at participants who have attended PALS sessions and understand the best practices of physical activity in early childhood settings. Concepts from PALS will be reviewed. The participants in your training may be a mix of administrators, classroom teachers, and home providers. Some of your programs will not be able to change their schedules to adapt to hot weather. Encourage them to think creatively about how they can apply the content to their settings and what they do have control over. This session will introduce ideas and concepts they can bring back to their program to influence future quality improvements.

Trainers are encouraged to add a GROUP NORMS slide after slide 2. Use your preferred norms and invite participants to share what they would like to see added to the list. A few suggestions are listed below. Having around 5 group norms is a good goal.
·Be considerate of differing opinions
·Speak respectfully to each other
·Share your knowledge and experience
·Minimize side conversations
·Take care of your needs
·Celebrate accomplishments

Slide 2

Funding Acknowledgement & Disclaimer

Nemours Children's Healthy Kids, Healthy Future Technical Assistance Program is funded through a subaward agreement with the Association of State Public Health Nutritionists, the funding for which comes from the Division of Nutrition, Physical Activity and Obesity (DNPAO) in the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) at the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award (cooperative agreement number 6NU38PW000047-02-02) totaling $2,775,000, which funds several ASPHN and Nemours Children's Health programs. This program is 100 percent funded by DNPAO/NCCDPHP/CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by CDC/HHS, or the U.S. government. For more information visit https://www.cdc.gov/nccdphp/divisions-offices/about-the-division-of-nutrition-physical-activity-and-obesity.html.

Suggested Speaker Notes: Development of the Physical Activity Learning Session (PALS) materials including today's session was funded by the Centers for Disease Control and Prevention (CDC). The views expressed in this session do not necessarily reflect the official policies of the Department of Health and Human Services or the US Government.

Slide 3

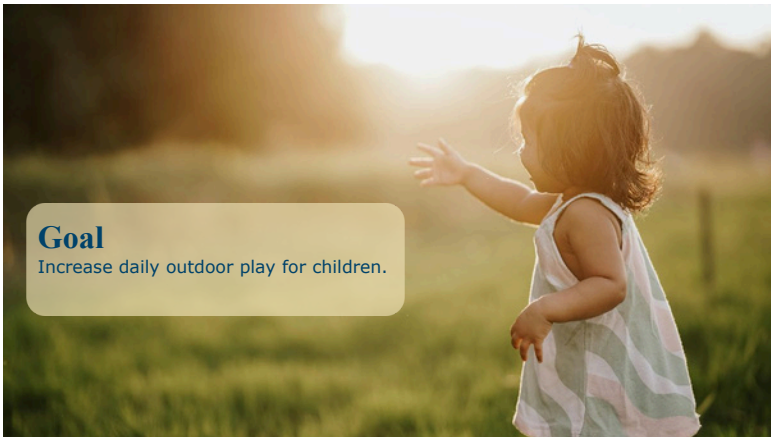
Session Objectives

1. Understand how heat affects young children's bodies.
2. Recognize strategies to reduce the impact of heat during outdoor play.
3. Identify two activities to do with young children during hot weather.
4. Explore how to adjust ECE schedules to keep outdoor play safe in hot weather.

Suggested Speaker Notes: Our objectives today will explore strategies that support children and ECE providers in safely enjoying active play in hot weather.

Image source: PowerPoint Online Photo

Slide 4



Suggested Speaker Notes; Our goal is for children to have daily, year-round outdoor play, and for caregivers to know how to support it safely, even in hot weather.

Image source: Pexels, Photo by Beard Kid

Slide 5

Trainer Notes:
This slide includes animations. Participants can engage with this activity in multiple ways- if presenting virtually, they can use the chat box to write fact or fiction, use reactions (thumbs up, down), or you can assign movements to "fact" and "fiction" to encourage physical activity (fact= arm circles, fiction= raise the roofs)

Suggested Speaker Notes:
For our opening activity today, we are going to do a short game of "Fact or Fiction" to check your knowledge about hot weather play.

Children should avoid outdoor play entirely during hot weather. FICTION- outdoor play is vital for children's healthy development. Today we'll talk about how to manage it safely.

Thirst is the only sign a child needs to drink water.
FICTION- Children need regular reminders and frequent water breaks. Children are not as aware of their hydration status, so it's important to provide water even before they tell you they are thirsty.

The hottest part of the day is usually between 10 AM and 3 PM FACT- Knowing this helps us plan for safe, outdoor play.

Image Source: Microsoft Copilot

Slide 6

Trainer notes:
Outdoor play was a part of the PALS learnings session content and was included in multiple recommended practices- space, types, daily activities, and provider role. Outdoor practices related to physical activity should be included in program policies as well. This slide recaps the outdoor play best practices addressed in PALS.

Suggested speaker notes:
The PALS training addressed the best practices of physical activity in eight areas seen in the image on the screen, (Time, Space, Type, Daily Activities, Providers Role, Families, Training & Resources, and Policies) Let's review a few of the concepts covered in PALS that are relevant to our topic of today, outdoor play during hot weather.

Space-Young children need adequate space to practice gross motor skills including outdoor play areas. Children tend to be more active outdoors as they have more space to move and use large muscles.

Type- Children should experience different types of play daily including adult-led, free play, MVPA (moderate to vigorous physical activity) and outdoor play.

Daily Activities-Outdoor play should be woven in the daily schedule 2-3 or more times per day for infants, toddlers, and preschoolers.

Providers Role-Providers (adults) are responsible for setting up spaces and experiences that support children in active play and practicing fundamental movement skills. Some provider roles include scheduling outdoor time, setting up experiences during outdoor play, leading activities, encouraging, being a role-model and supervising.

Policies-Policies, family and staff handbooks address outdoor play including clothing, staff roles, and weather considerations.

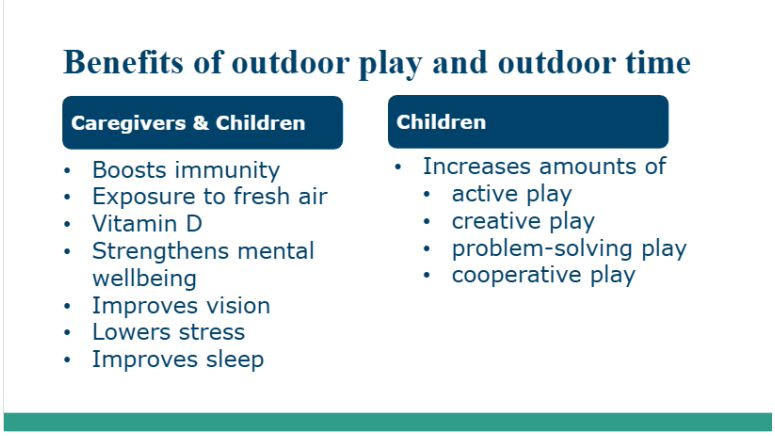
Slide 7

Suggested Speaker Notes: The recommended practices come from Caring for Our Children: National Health and Safety Measures for Young Children in Out of Home Settings, and include 2-3 periods of outdoor play daily, weather permitting, for all children. There is not an established time recommendation for infants to be outdoors. Time outdoors may be shortened due to hot conditions, but children should still go outside 2-3 times each day except in conditions of extreme or dangerous weather.

Recommended practices also include that children experience a minimum of 2 adult led activities outdoors daily. Structured activities can allow an ECE provider to better regulate the intensity of the activities for children, something that is extra important during hot weather.

Trainer Note:
After discussing the best practices,advance slide to trigger animation. Ask participants questions to reflect oncurrent practices in their programs. How many times each day the children typicallygooutside? Does outdoor time happen on hot weather days? What happens duringoutdoor play time? Are ECE providers leading activities, engaging with children, andmodeling enjoyment of outdoor play?

Slide 8



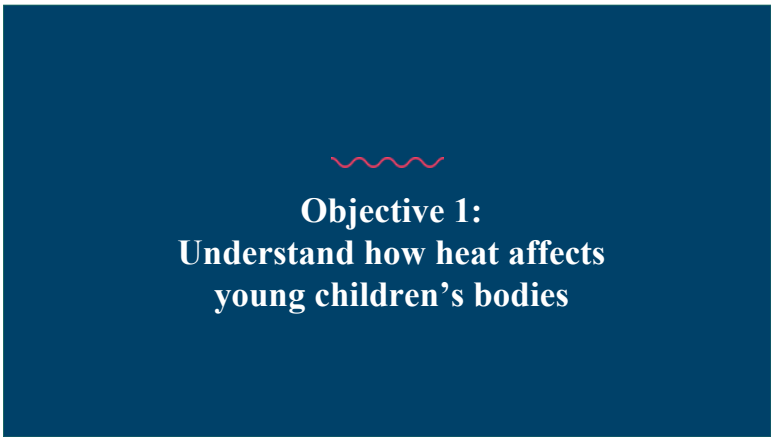
Suggested Speaker Notes:
Adults and Children: The benefits of time spent outdoors continue to be understood. Research reveals many health benefits to outdoor time including strengthening the immune system. Short periods of exposure to sunlight promotes the production of Vitamin D in the body. Vitamin D helps regulate the amount of calcium and phosphate in the body which are essential for bone, teeth, and muscle development.

Time outdoors supports mental health and well-being. It has been shown to reduce stress, boost mood and lessen anxiety and depression.
Time spent outdoors decreases the risk of Myopia (also called short-sightedness or near-sightedness) in children and ECE providers.

Outdoor time allows us to focus on distant objects like trees or play equipment such as a ball flying through the air— anything that's more than an arm's length away. This use of long-distance vision uses different parts of the eye muscles. Think about how much time children and adults spend on devices that limit the use of peripheral and distance vision.

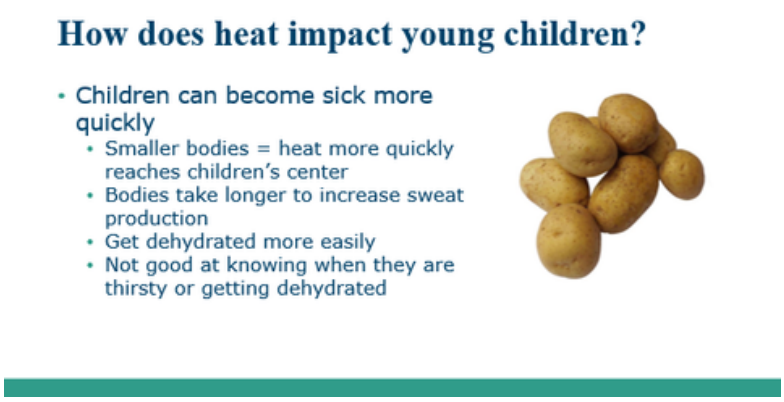
Children: The time spent outdoors is strongly linked with children's physical activity levels. Outdoor open spaces allow children greater opportunities to practice and develop gross motor skills.

Slide 9



Suggested Speaker Notes:
Let's discuss the impact of heat on a young child's body, especially during physical activity. It is important to understand the impacts, so that we can plan and prepare for safe outdoor physical activity during hot weather.

Slide 10



Suggested Speaker Notes:
Think of cooking a potato, if it's a big potato, heat will have a tough time getting to its core and it will take a while to cook. But smaller potatoes cook much faster because heat can reach their center more quickly. Young children are like the small potato in which heat can get faster to the core. Children also have a larger body surface area compared to their weight. On a hot day, they absorb heat faster because more of their body is exposed, relative to their size. These reasons make children's health more at risk during hot temperatures.

Young children get dehydrated more easily, not only because a larger percentage of body weight is water, but because they are not good at knowing when they are thirsty or getting dehydrated.

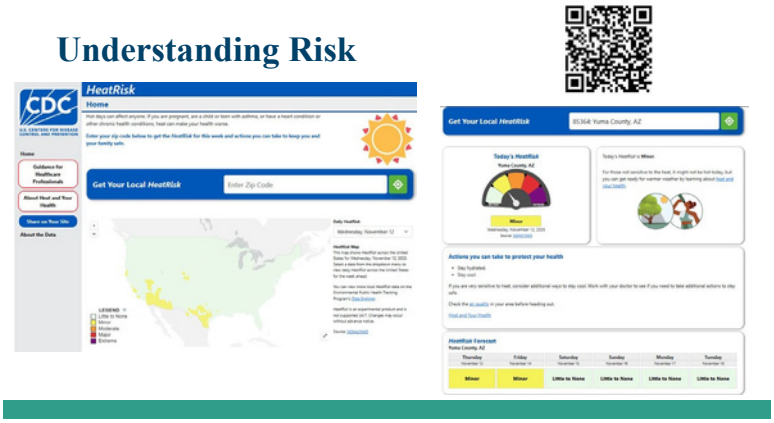
Children depend on adults to remind them to hydrate and to provide opportunities to hydrate.

Source:https://www.npr.org/2023/07/28/1190557974/kids- extreme-heat-outdoors-safety-water
Image Source: PowerPoint Online Photo

Slide 11

Suggested Speaker Notes:
Hot temperatures can cause children to become sick very quickly, so it's important to know the signs and symptoms of heat-related illness. Staff play a critical role in monitoring children for these signs and symptoms and if they notice them, to provide a break, shade, and/or fluids. The younger children are, the more carefully children should be monitored. Heat can impact children's behavior — crankiness or "not acting like themselves" may be due to overheating so that's something to keep an eye on.
Sources:https://www.healthychildren.org/English/safety-prevention/at-home/Pages/Protecting-Children-from-Extreme-Heat-Information-for-Parents.aspx
https://www.cdc.gov/heat-health/about/index.html
Image Source: Microsoft Co-Pilot

Slide 12



Trainer Notes: *Trainers can replace the screenshot on the right with the health risk for your community, on the day of the training. Trainers can also lead participants in an activity where they prompt participants to use the QR code to access the website and have them check the current heat risk for their zip code and explore the information on the page.*

Suggested Speaker Notes:
Now that we know how heat can have negative impacts on children, we need to know how to understand the risk of heat and extreme heat in our community. The CDC has a free 'HeatRisk' resource that helps you understand your local Heat Risk. You can enter your zip code, and it will share a color-coded heat risk. You can see from the example on the slide that for Yuma County Arizona on November 12th, the heat risk was "minor."

This CDC Heat Risk resource also includes information about Air Quality because heat can make air quality worse. We'll talk a bit more about air quality in a few slides.
Resource: https://ephtracking.cdc.gov/Applications/HeatRisk/

Slide 13

Child Care Licensing & Heat *example*

Tennessee Licensure Chapter 1240-04-01 November 2025

(3) Outdoor Play and Playground Routines.

(a) Children of all ages, including infants, who are in care more than three (3) daylight hours, **shall have a daily opportunity for outdoor play when the temperature range, after adjustment for wind chill and heat index, is between thirty-two degrees and ninety-five degrees Fahrenheit (32°F and 95°F) and it is not raining.**

(b) Agencies shall develop **written policies** promoting physical activity and shall strive to **remove any potential barriers** for children to participating in physical activity,

(c) Outdoor play and moderate to vigorous indoor or outdoor physical activity shall be available as follows:

1. Weather permitting, infants shall be taken outside two to three times per day.
2. Toddlers and preschoolers shall have sixty (60) to ninety (90) minutes of outdoor play per day for full-time programs. Exception: Indoor activity can be increased if adverse weather does not permit outdoor play.
3. Toddlers shall have sixty (60) to ninety (90) minutes of moderate to vigorous physical activity per eight (8) hour day for full-time programs.
4. Preschoolers shall have ninety (90) to one hundred and twenty (120) minutes of moderate to vigorous physical activity per eight (8) hour day for full-time programs.
5. Physical Activity Requirements for Part-Time Providers

Trainer Notes: *Update the information on this slide with any state specific information related to child care licensing and hot weather. The example on the slide is from Tennessee which has the strongest licensure supporting physical activity of all states. If your state does not have licensing that includes information about hot weather, you can keep the Tennessee example and discuss the different parts of the licensure, specifically calling out the heat threshold (a), written policies (b), proper dress and time adjustments for weather (d), and being alert for any signs of distress (e).*

Slide 14

Child Care Licensing & Heat *example*

(d) Children shall**be properly dressed**, and the**length of time outside adjusted according to the weather conditions and the age of the children**.

(e) Educators shall be**alert for any signs of weather-related distress**, including dehydration, heat stroke, and frostbite.

(f) Eachchild careagency shall develop simple playground rules that use positive language. Staff shall verbally communicate these rules to children prior to outdoor p lay.

(g) Staff shall plan and implement activities that engage all children in developmentally appropriate active, physical play such as skipping, running, and jump ing .

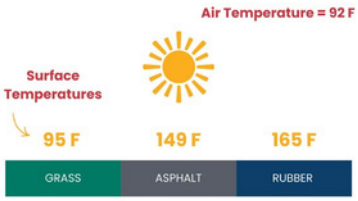
Trainer Notes: *Update the information on this slide with any state specific information related to child care licensing and hot weather.*

Understand state child care licensing rules related to weather.

Slide 15

Beyond the Temperature

- Paved concrete or asphalt play surfaces can be 50-90 degrees hotter than shaded surfaces on a sunny day
- Ensure equipment is safe use



Adapted from 'The Problem with Hot Schools"- Luskin Center for Innovation at UCLA

Trainer Notes: *Note how the image shows the surface temperature for different surfaces on a 92-degree day. The grass is 95 degrees; asphalt is almost 150 degrees and poured rubber surfaces can be the hottest at165 degrees.*

Suggested Speaker Notes:
When planning outdoor play in hot weather, it's important to look beyond the air temperature. Hot weather brings additional safety considerations for the equipment and materials of play spaces. Research from the Luskin Center for Innovation at UCLA has shownhow different surfaces temperatures can vary based on the surface material,with rubber surfaces getting the hottest. Play areas in the shade can reduce the temperatures even more and be an important strategy for reducing the impact of healththat we'll dive into in the next section.

Adults should also be sure to check any play equipment that has been outside in the heat to ensure it is safe for children's use. Using portable play equipment that you can bring from inside, or from a shaded area, can ensure the equipment is safe for use.

Source-https://extension.psu.edu/programs/betterkidcare/news/keeping-your-cool-heat-awareness-and-solution
UCLA Luskin Center for Innovation-
https://innovation.luskin.ucla.edu/publication/the-problem-with-hot-schools/

Slide 16

Beyond the Temperature cont.

Air Quality:

- AQI or Air Quality Index is a tool for communicating about outdoor air quality.
- The higher the AQI value, the greater the level of air pollution and the greater the health concern.
- Air quality can be negatively impacted by heat.

AQI Basics for Ozone and Particle Pollution

Daily AQI Color	Levels of Concern	Values of Index	Description of Air Quality
Green	Good	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
Yellow	Moderate	51 to 100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
Orange	Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Red	Unhealthy	151 to 200	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
Purple	Very Unhealthy	201 to 300	Health alert: The risk of health effects is increased for everyone.
Maroon	Hazardous	301 and higher	Health warning of emergency conditions: everyone is more likely to be affected.

Suggested Speaker Notes: Another factor to be aware of during hot weather is air quality. Air quality can be negatively impacted by heat. It is important to understand the air quality, because young children breathe faster and breathe more air compared to their body weight than adults. So, if the air quality is at an unsafe level, children can be especially impacted. Additionally, individuals with asthma may be more sensitive to air pollution or higher AQI. AQI is an important risk factor to consider when making decisions about outdoor play in hot weather.

Local air quality information is available on weather apps and airnow.gov. Air quality is measured using an Air Quality Index or AQI and is color-coded. Air quality from 0-50 is considered good; 50-100 moderate and is acceptable for most people. 100-150 is considered unhealthy for sensitive groups such as people with heart and lung diseases. Above 150 is unhealthy and children and caregivers may experience side effects.

Sources:
https://www.airnow.gov/aqi/aqi-basics/

Slide 17

Deciding When Outdoor Play is Safe

- Licensing Requirements
- Heat Index or "Feels Like" Temperature
- AQI
- Access to Shade
- Surfaces for Play
- Age of Children

This Photoby Unknown Author is licensed underCC BY

Suggested Speaker Notes:

We know that there are many factors that influence the decision of whether or not to play outside during hot weather. In order to make an informed decision, it's important to consider all of these factors:

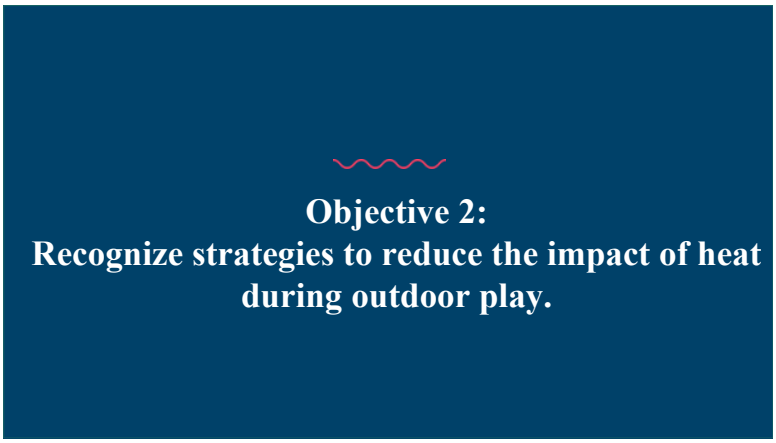
- What are the licensing requirements in your state?Is there a temperature threshold included like the example we saw fromTennessee?
- What is the current heat index or "feels like" temperature? You can find this on most weather apps. Heat Index is a combinationofthe air temperature and the humidity.
- What is the Air Quality Index? Remember, a higherAQI can be unhealthy, especially for sensitive groups including young children, and children with asthma.
- How much shade does your play area provide? What surfaces are your play area made of? On hot days, opportunities for play outside in the shade or on grassy areas are encouraged because they are not as hot as other surfaces.
- How old are the children in your program? Remember children absorb heat faster because more of their body is exposed, relative to their size. So, if you have all infants or toddlers, your decision to go outside, might be different than if your class is all preschoolers. In all cases, close monitoring of children during outdoor play is critical.

Remember, there are times when the weather is too hot or your outdoor play area is not well-suited for hot weather play. In these cases, it might not be appropriate for younger children, especially infants and toddlers to play outside.

Ask participants: what other things to do you take into consideration when you decide on hot weather outdoor play?

More information about heat index can be found here: https://www.weather.gov/ama/heatindex

Slide 18



Suggested Speaker Notes:
Now that we understand how heat negatively impacts children and how to understand the heat risk in your community, we are going to discuss strategies to reduce the impact of heat during outdoor play.

Slide 19

Suggested Speaker Notes:
Outdoor play is essential for motor development, learning, and well-being. But heat exposure for young children can rise quickly, especially on playground surfaces and in humidity. Safe, outdoor play during heat requires planning ahead and always monitoring children closely for signs of heat stress! In the next few slides, we'll discuss these four key strategies for reducing the impact of heat during outdoor play, while keeping children safe, hydrated, comfortable, and active.

Image source: Getty Images- SolStock

Slide 20

Suggested Speaker Notes
Our first strategy is adapting schedules and routines. In our "fact or fiction" opening activity we learned that the hottest part of the day is from 10 AM-3 PM. So, we want to adjust our schedules to plan for outdoor play either earlier or later in the day when the sun is not as strong. We know our best practice around outdoor play is for children to have 2-3 opportunities a day. Later in the training, we'll have the opportunity to look at a schedule and identify how it can be adapted.

Another way to adapt your routines would be to plan for shorter periods of outdoor play, along with many built-in breaks for water and shade. Additionally, you can plan for less intense or energetic activities, including structured, adult-led activities. We'll also share some specific examples of these types of activities in the following section.

Discussion Prompt: Thinking about your schedule, how could you change it for safe outdoor play during hot weather?

Some potential answers include outdoor play time during arrival, first thing in the morning, or at the end of the day.

Slide 21

Suggested Speaker Notes: Our second strategy is sun protection. There are many ways we can help protect children from the sun including: shade, using sunscreen, and sun protective clothing and accessories. Shade not only provides a place to escape the direct heat from the sun but also provides a cooler space for children's bodies to better regulate temperatures. Shade can be provided in many ways: trees and shrubs, structures like pergolas, trellises, or canopies (as seen in the photo). Consider temporary shade options like shade sail or sheets on the fence or tent pole, parachutes (make temporary forts and drape them over the corner of a fence), pop-up shade structures.

Trainer notes: *The Natural Learning Initiative has great resources on shade that are free to download and can be shared with participants- https://naturalearning.org/11-shade-solutions*

Sunscreen- with parental permission, for children older than 6 months, use sunscreen with an SPF of 15 or higher on exposed skin.Apply sunscreen 30 mins prior to outside play. Sunscreen is NOT recommended for babies who are 6 months old or younger. Keep young babies out of direct sunlight by finding shade and dressing in sun-protective clothing.

Sun protective clothing is lightweight and loose fitting. Sun-protective accessories include hats and sunglasses, which can help protect children's skin. We'll talk more when we get to our family engagement strategy, but it's key to communicate with parents about the best attire to send their children in when the weather is going to be hot.

Sources:
Image Source- Pexels, photo by AJ Ahamad
https://naturalearning.org/wp-content/uploads/2017/04/Summer-play-beat-the-heat2.pdf
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https://www.bccancer.bc.ca/prevention/Documents/ShadeLookbook_May2024.pdf

Slide 22

Suggested Speaker Notes:
As we mentioned, children are more at risk for heat-related illness because they are less aware of their hydration status and rely on adults in their lives to provide water, and opportunities to drink. Young children may not be able to recognize their need for fluids so it's extremely important to provide frequent opportunities for water and keep an eye out for symptoms of dehydration.

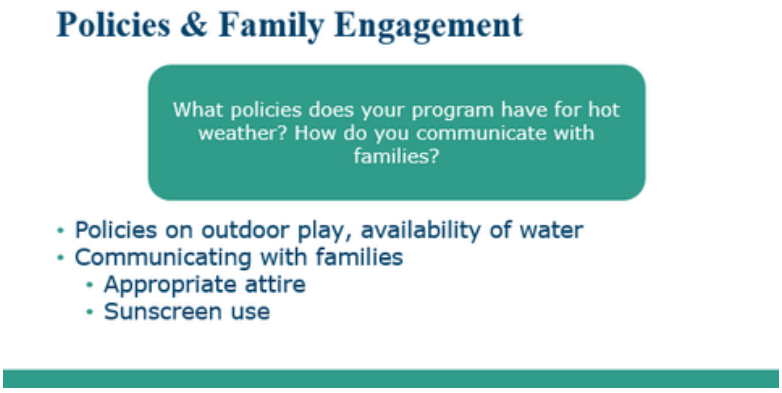
Water breaks need to be built into outdoor play, especially when it is hot. Depending on the temperature and how active children are, you should schedule water breaks at least every 15 minutes, if not more often. Add water breaks to daily visual schedules so children expect them. Plan to bring water outside with you, either a water cooler with cups or reusable water bottles. For children under 6 months old, they should only be drinking breastmilk or formula, not water to keep them hydrated.

You may ask, what about beverages other than water to keep children hydrated? Milk and sugar sweetened beverages do not rehydrate as well as water and should be avoided.

Consider also using water to create "cool down" stations with misters, fans, spray bottles, or damp towels if you have the necessary equipment. Designate a "hydration spot" in a shaded area for when you go outside.

Image Source: Getty Images- Karl Tapales

Slide 23



Trainer Notes*: the slide includes animation, starting with the discussion box in green.*

Discussion Prompt: *What policies does your program have for hot weather? How do you communicate with families?*

Follow up question: how have policies/communication with families impacted your children's readiness to play outdoors during hot weather?

Strong policies and communication with families are key to ensure that children show up at your program ready to be physically active during hot weather, including wearing the appropriate attire. Having policies on things like the temperature thresholds for going outside, or the way you plan to offer water or breaks for children outside, may help ease some families' concerns about physical activity during hot weather. Written policies make your practices known, understood, and supported by staff and families. They can help families understand that daily physical activity is important for children's health and well-being. Consistent routines, policies, and communication reduce risk and keep outdoor play safe and fun.

Slide 24

Hot Weather Policy Statement *example*

ABC early education center is committed to safe, daily outdoorexperiences forall children. We strive for 90 minutes of outdoor time daily, weather permitting. We will adjust our schedule to prioritize outdoor time based on the weather conditions and air quality.

1. Families should dress their child in lightweight clothing that supports outdoor play, hats that shade the face and neck, and apply sunscreen before arriving at the center.
2. Outdoor time will be limited and children closely monitored when the heat index is 90°F or higher.
3. Outdoor time may be cancelled when the heat index is 100°F or higher.
4. The ABC director will monitor weather conditions and make decisions on outdoor time.
5. Staff will modify activities to encourage children to play in the shade and frequent water breaks.

What policies does your program have that support outdoor play in hot weather?

Trainer notes:
Ask for a volunteer to read the slide aloud or give participants time to read the sample policy statement. Facilitate a group discussion on policies.
Note: Sunscreen policies and sunscreen use must comply with child care licensure.

Suggested speaker notes:
Policies communicate programs beliefs and practices.

Discussion Prompt: What policies does your programhave that support outdoor play in hot weather?

Follow up Question: How could your program's policies be changed/adapted to support you further?

This question may be especially relevant for participants that are not program directors or do not have the power to make the policies at their program. Encourage participants to think about what statements, if included in their programs policies, would support them as they lead outdoor play during hot weather.

Slide 25

Brain Boost

Tracing fingers

Conduct the Tracing Fingers activity to demonstrate how participants (and children) can use simple movements and breathing to calm their heart rate. This is an example of an activity that can be done outdoors on a hot day when educators are noticing the children breathing heavily and in need of a reset or break or as a transition activity before moving back indoors.

Directions:

- *To initiate this activity, have participants stand the hold your hand in front like you are stopping traffic. Note that this is the visual signal or cue.*
- *Wait for everyone to join before you proceed with the breathing exercise*
- *Separate the fingers.*
- *Prepare to trace the hand by placing the pointer finger of the opposite hand at the base of the thumb.*
- *Inhale as you trace up the thumb, exhale as you trace down the thumb.*
- *Repeat breathing pattern as you trace each finger ending at the base of the hand under the pinkie finger.*
- *Note that consultants may find it useful to exaggerate shoulder movement indicating inhale and exhale.*

Facilitate large group discussion using these prompts:

- *What other times this activity could be used?*
- *How can this activity be used for different age groups?*

Video option for this activity: https://www.youtube.com/watch?v=pPawLNYdMkQ

Slide 26

Objective 3
Identify two activities to do with young children during hot weather.

Suggested speaker notes:
Now we'll discuss two types of activities that you can do with young children during hot weather.

Slide 27

Suggested Speaker Notes: As we discussed, adapting routines is a key strategy to reduce the risk of heat for young children. One way to do so is to plan for both slower and shorter activities when outside. Consider activities that are in the category of "light physical activity" rather than "moderate to vigorous."

Practicing gross motor skills like catching or kicking is a great way to encourage activity while promoting fundamental movement skills.

Trainer Notes: Ask participants what are some of their favorite catching or kicking activities? Consider sharing the tip from Dr. Diane Craft of putting punch balloons in panty hoses, tying them to a clothesline and having children practice kicking or striking. This activity allows for children to practice the skills of kicking or striking without having to run and get the ball, keeping exertion low.

Balance challenges or yoga are other examples of slow and short activities. For balance activities you could use chalk to designate pathways for children to move along.

The use of wheeled vehicles like tricycles or balance bikes can support children in practicing balance and coordination, without as much physical exertion.

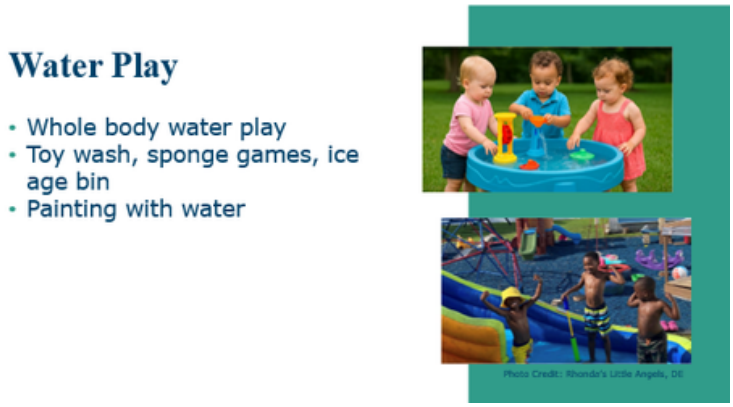
Moving outdoor physical activities into shaded areas can also be a strategy for reducing the impact of heat.

Many of these activities include staff as active participants in play. Remember, young children are more engaged when adults join them in physical activities, whether that is doing the activity with them, or showing enthusiasm and encouragement.

Discussion Prompt: what are your favorite activities to play on a hot day?

Image Source: Getty Images- struti

Slide 28



Suggested Speaker Notes: Another great option for physical activity during hot weather is water play! Engaging in play with water will help children stay cool during the heat. Portable wading pools are not recommended because they are hard to clean and can promote the spread of disease. Sprinklers, hoses, or small, individual water basins are safer than wading pools. Some examples of water play include:

- Whole body water play is ideal for keeping cool on hot days, while also encouraging moderate to vigorous physical activity. Examples of whole-body water play include running and moving through sprinklers or squirt toys for older children.
- Examples of water play activities that are focused on more fine motor movements and include low-cost equipment are:
    - Toy wash- think of a car wash, but for toys! A great activity for a water table or a bucket. Small buckets can also be used for water table fun. For toddlers, using cookie sheets as their water table can make it easier for them to access, while also not using as much water.
    - Sponge games- sponges are a relatively cheap piece of "equipment" that can be used for various games such as sponge tag (tagging others with a wet sponge), sponge pass (passing a wet sponge down the line without dropping it- consider adding in balance poses to make it more difficult), wet sponge hot potato (passing it around a circle while music plays and when the music stops the child with the sponge can squeeze it over their head- you can add large body movements also), or target toss.
    - Ice age bin- Add small plastic items (dinosaurs, safari animals) to containers (or metal bowls) and then add water. Freeze overnight. Bring the bin/bowl outdoors and you can put it directly on the grass or ground. Add additional water toys like cups and spoons and have children enjoy unearthing treasures from the ice! Consider using child safe food coloring for additional sensory engagement.
    - Painting with water- with paint brushes of any size is a wonderful way to engage large muscle groups. Children can paint directly on the sidewalk or fence.

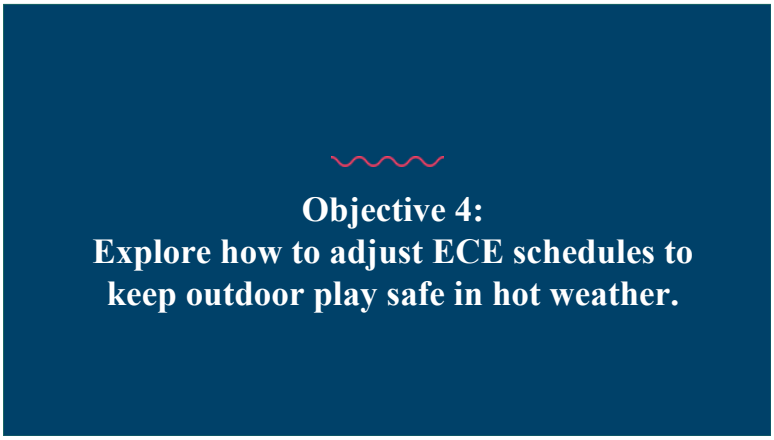
Water safety is extremely important. Ensure there is constant adult active supervision. Other things to consider when planning water play include appropriate attire (change of clothes and shoes), towels and scheduling time to change.

Discussion prompt: *What other water-based activities do the kids in your program enjoy?*

Additional resources:
More information on water play ideas can be found here: https://naturalearning.org/40-water-play
Ideas for building your own water table: https://activeforlife.com/diy-water-table/?utm_source=AfL&utm_medium=bottom+read&utm_campaign=summer+resources+active-ities

Images- Microsoft Co-Pilot, Rhonda's Little Angels- Delaware
Sources: https://naturalearning.org/40-water-play, https://dpi.wi.gov/sites/default/files/imce/community-nutrition/pdf/grow_healthy_kids_just_add_water_toolkit_.pdf

Slide 29



Suggested speaker notes:
For our final objective today, we are going to explore ways to adjust ECE schedules for safe, outdoor play during hot weather.

Slide 30

Daily Schedule Activity

How can this schedule be adjusted for a hot weather day?

8:00am - 9:00am	Drop-off + breakfast
9:00am - 9:30am	Independent play/play centers
9:30am - 10:00am	Circle time (morning routine + songs)
10:00am - 10:15am	Morning snack
10:15am - 11:30am	Outside play + physical activity
11:30am - 12:00pm	Lunch
12:00pm - 1:00pm	Sensory or art activity
1:00pm - 1:30pm	Story time (books + songs)
1:30pm - 2:30pm	Nap time
2:30pm - 3:00pm	Afternoon snack
3:00pm - 4:00pm	Group play (puzzles + games + center activities)
4:00pm - 4:30pm	Closing circle
4:30pm - 5:00pm	Choice time/Pick Up

Lead a large group discussion on how to adjust this schedule for a hot weather day. Possible responses include:

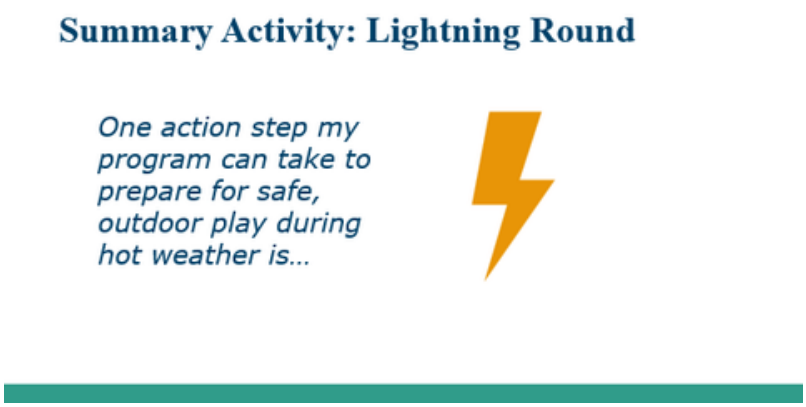
1. *Including opportunities for physical activity during arrival and/or pick-up.*
2. *Hold circle time outdoors in a shady area.*
3. *Move Outdoor Play before Morning snack, so you can get outdoors before 10 AM (beginning of peak UV hours).*
4. *Group play in the afternoon can be outdoor play.*
5. *Shorten and break up outdoor play- instead of longer sessions outdoors (45 mins), break outdoor time into shorter periods (~15-20 mins), multiple times per day.*

What are other adjustments you would have to make?

- Water availability - especially during arrival and/or pick-up.
- Communicating with families – about appropriate attire, expectations for physical activity during arrival and/or pickup
- Shade- temporary pop ups to support outdoor play in shade.

***Trainer Note**: If you work with programs that cannot change their schedule, consider adjusting the content of this section. Consider an activity where participants have time to reflect on what to do if schedules can't be changed or consider how to integrate one of the other key strategies into their program: extra sun protection, water, or policies and family engagement.*

Slide 31

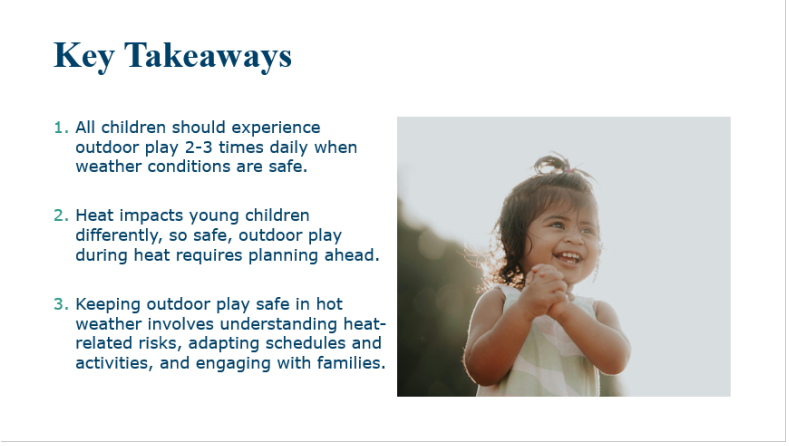


This summary activity is meant to be an energizing way to close out the training, have participants reflect on what they learned and identify one step they can do in their program to support active play in hot weather. Depending on the size of the group, you can pair providers or put providers in small groups to identify one action step together and then do the lightning round.

Go around quickly and have each participant complete the sentence "One action step my program can take to prepare for safe, outdoor play during hot weather is…" Examples include:

- *Review our policies to ensure it includes specific information about hot weather play.*
- *Develop a newsletter template to share information about hot weather play with families.*
- *Develop a modified schedule to prepare for hot weather days.*
- *Write down a list of activities you can do outdoors next time there is hot weather.*
- *Prepare a "hot weather kit" including equipment and game ideas for the next hot day.*
- *Install or identify shaded play areas.*

Slide 32



Trainer Notes: Share key takeaways with your participants.

Slide 33

Trainer Notes:
Invite your participants to raise any remaining questions or share other comments on hot weather play.

Slide 34

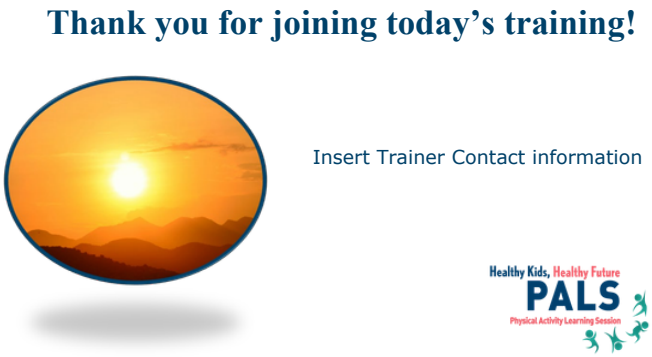


Image source: Pexels Photo by Bruno Scramgnon: https://www.pexels.com/photo/silhouette-photo-of-a-mountain-585759/

Slide 35

References & Resources

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- https://www.cacfp.org/assets/pdf/August-2025-Mealtime-Memo-Staying-Hydrated-In-The-Summer/
- *https://www.cdc.gov/early-care/communication-resources/outdoor-play-and-safety-for-children-in-ece.html*
- *https://extension.psu.edu/programs/betterkidcare/news/keeping-your-cool-heat-awareness-and-solutions*
- *https://innovation.luskin.ucla.edu/publication/the-problem-with-hot-schools/*
- https://www.c-uphd.org/documents/wellness/weatherwatch.pdf
- https://www.npr.org/2023/07/28/1190557974/kids-extreme-heat-outdoors-safety-water
- https://headstart.gov/publication/summer-safety-tips
- https://www.airnow.gov/aqi/aqi-basics/

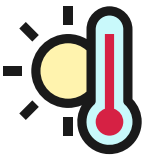
Suggested Participant Handout

SUPPORTING OUTDOOR PLAY IN HOT WEATHER

Tips and Tricks for Outdoor Play during Hot Weather

1. Adapting Schedules and Routines - Plan outdoor time to avoid the hottest parts of the day.
   a. Play earlier or later - aim for before 10am or after 3pm when temperatures are lower
   b. Plan for shorter play periods, many breaks, and less intense activities
2. Extra Sun Protection - Keeping sun exposure low helps children stay comfortable and safe.
   a. Look for shade, use sunscreen and dress children in sun protective clothing (lightweight, hats, sunglasses)
3. Water - Hydration is essential!
   a. Offer water before, during, and after outdoor play
   b. Water breaks must be built into outdoor play, at least every 15 minutes
4. Policies and Family Engagement - Work together with families to keep children safe.
   a. Strong policies and communication with families are key to ensure that children show up at your program ready to be physically active during hot weather

Activity Ideas for Hot Days



Slower and Shorter Activities - Great for keeping bodies moving without overheating:

- Catching Activities
- Kicking Activities
- Balance Challenges
- Yoga
- Wheeled Vehicles

Water Play - fun, safe, and cooling!

- Whole body
  - Moving through sprinklers
  - Squirt toys for older children
- Fine motor
  - Water tables
  - Toy wash
  - Sponge games
  - Ice Age bin
  - Painting with water

The 2026 PALS project was made possible with funding from CDC.

NEMOURS CHILDREN'S HEALTH.

My Notes:

Brainstorm: One action step my program can take to prepare for safe, outdoor play during hot weather is...

Additional Resources:

CDC HeatRisk
Air Quality Index (AQI) Basics
Natural Learning Initiative Shade Solutions
Natural Learning Initiative Water Play Ideas
Natural Learning Initiative Summer Play: Beat the Heat
Better Kid Care - Keeping Your Cool: Heat Awareness and Solutions

Optional Sample Pre/Post Assessment Questions

1. **True** or False- Recommended physical activity practices for infants, toddlers, and preschoolers include 2-3 outdoor play periods daily.
2. True or **False**- Children should avoid outdoor play entirely during hot weather.
3. T**rue** or False- Young children are not good at knowing when they are thirsty or getting dehydrated.
4. T**rue** or False- The hottest part of the day is usually between 10 am and 3 pm.
5. True or **False**- On a sunny day, grass surfaces are hotter than asphalt or rubber surfaces.
6. Name one outdoor condition that would influence your decision of whether to play outside during a hot day.
7. Describe one strategy you could implement to reduce the impact of heat during outdoor play.

Additional Resources

For more information on PALS and the PALS Micro Trainings, please visit: https://healthykidshealthyfuture.org/trainers/pals/

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