



Toolkit to Address Extreme Heat On School Campuses *for Education Professionals*

Los Angeles County Department of Public Health
April 2025



Hello!



COUNTY OF LOS ANGELES
Public Health



WELCOME!!

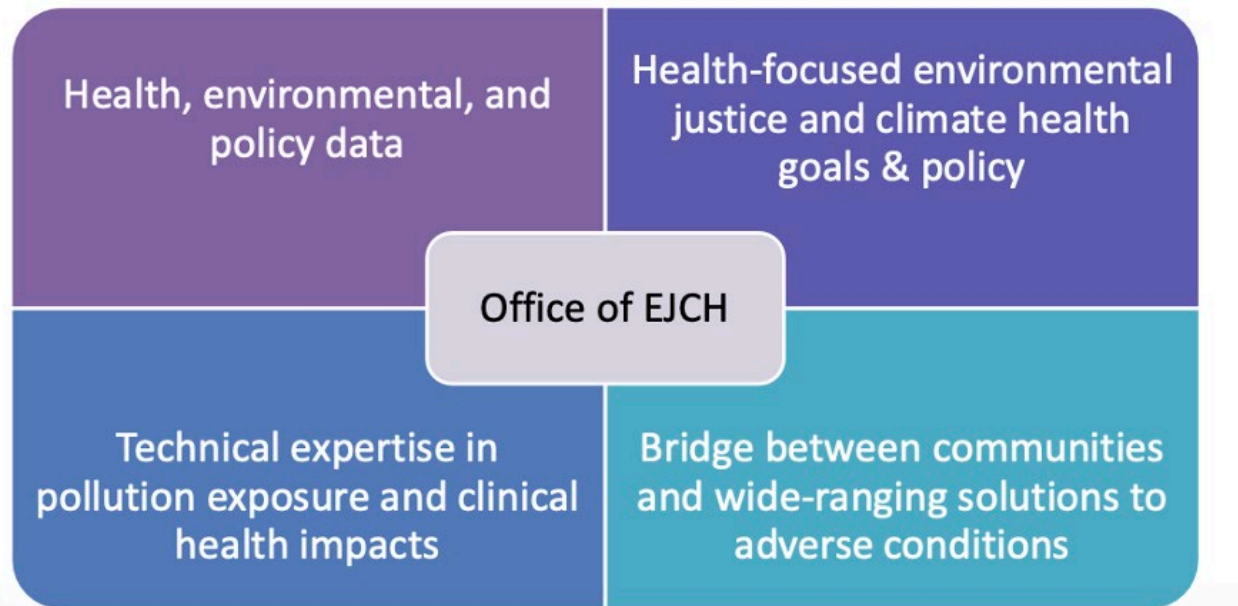
*Please share your name,
role at the school, and school name in the chat*



Who is presenting?

LA County Public Health

Office of Environmental Justice & Climate Health



Office of Education Programs & Partnerships



Planning



Education Sector



Resource Development



Integration



Community Engagement

1. Board Motion & Toolkit Development Process
2. About Extreme Heat
 - Context & Risk Factors
3. Summaries of Highlighted Toolkit Recommendations by Content Area with Interactive Group Activities
 - Tools for Decision-Making
4. Next Steps & Resources
5. Q&A

Learning Objectives



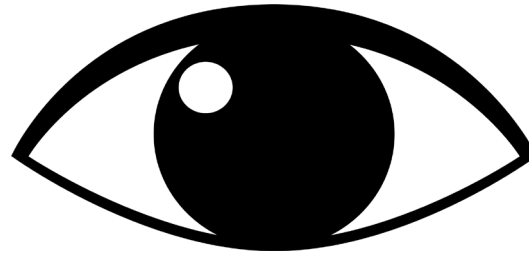
1. Provide **awareness** of LA County Board Motion on Extreme Heat and the increasing rates of extreme heat in LA County.
2. Provide overview of **LA County Heat Toolkit & Resources**. Participants will learn how to use the Heat Toolkit as a resource.
3. Understand the **risks of heat** exposure and heat illness and how it impacts the health, learning and wellbeing of students.
4. Promote **best practices for communicating** about heat.
5. **Improve capacity of schools** to prevent heat illness and other negative impacts of heat.

Takeaways on Heat



Plan Ahead.

Set a plan and roles using the forecast tools and prepare your campus environment.



Recognize the signs.

Remember what to look out for and how to act.



Spread the word!

Educate others with messaging and materials.

Board Motion 9/12/23: Protecting Vulnerable Students from Extreme Heat on School Campuses



[Sport](#) [Culture](#) [Lifestyle](#)

The Guardian US

[Environment](#) [Ukraine](#) [Soccer](#) [Business](#) [Tech](#) [Science](#) [Newsletters](#) [Wellness](#)

This article is more than 1 month old

At least three California students taken to hospital for heat-related injuries

A grueling heatwave resulted in five students being treated for 'general weakness' during a sports meet



A sign along a highway in Corte Madera, California, on July 2024 advises people to stay hydrated during a heatwave. Photograph: Justin Sullivan/Getty Images

As a grueling heatwave baked the US south-west this week, there were reports of at least three students being taken to the hospital with heat-related injuries. The injuries highlight the effects of extreme heat on health as the country struggles to grapple with increasingly severe weather amid the climate crisis.

“Lead the development of toolkits targeted at students, families, and school staff on best practices to safeguard public health and wellness to address extreme heat conditions, including tips to address air quality issues that regularly accompany extreme heat events...”

Office of Supervisor Hilda L. Solis

12-year-old Lake Elsinore student dies after collapsing during PE class

Thursday, August 31, 2023



[Español](#)

gofundme

Sign in Share

Yahshua "YaYa" Robinson

\$38,447 of \$50,000 goal

Share Donate more

This fundraiser is located near you

- Thomas Hibbard \$40 Boost donation
- Pedro R US Dr Field \$600 Boost donation
- Cristal Acosta \$20 Boost donation

See all See top donations

Amara Plummer is organizing this fundraiser

Created 1 d ago Supports & Mentions

For 12 year old Yahshua Robinson, August 29, 2023, started as a typical, fun-filled school day. But while taking part in his PE activities at school, Yahshua collapsed and became unresponsive, a tragedy we believe was brought about by the sweltering heat. Despite the response and care of medical professionals, Yahshua tragically succumbed to cardiac arrest at the hospital.

The void Yahshua leaves behind is profound. Janae & Eric Robinson and their three other children are trying to come to terms with this devastating reality. The agony of losing a child is indescribable, and as we wait with heavy hearts for the autopsy results, we are reminded of the preciousness of life.

Read more

Hello!



COUNTY OF LOS ANGELES
Public Health

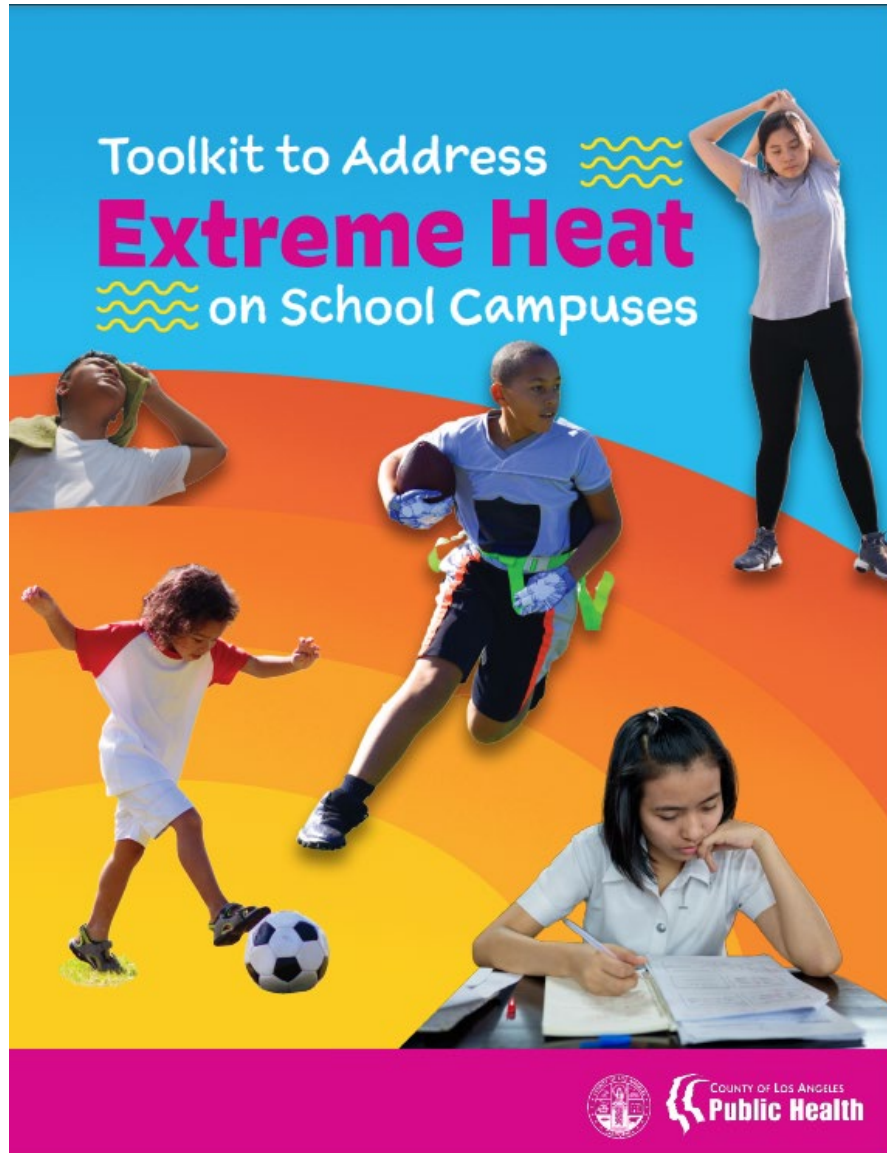
Please share in the chat....

What brings you here today?

How has heat affected your work on campus?



Toolkit Research & Development Process



- ✓ **Gathered and reviewed** existing resources and guidance
- ✓ **Met with** school district representatives and other partners
 - Department of Public Health, LA County Office of Education & LA Unified School District
- ✓ Affirmed a need for a **heat toolkit** including:
 - Weather surveillance and notifications
 - Preventative tips and guidance on temperatures, heat illness, hydration, physical activity, sports
 - Education, training and materials/resources for staff, teachers-coaches, students, and families

Toolkit Approach and Goals



Focus of Toolkit

Provide resources and guidance on how to protect students from heat at school.

>> consider potential impacts >> provide prevention activities

Desired Results

- ☐ All students and staff at school are **safe** from heat-related illness and death.
- ☐ Students **learning and engagement continues**, without disruption, on hot days at school.

What Works

- ✓ **Teach** and reinforce **awareness** of the heat exposure and illness risks
- ✓ **Promote** using **best practices for effective communication** related to hot weather
- ✓ **Provide** & promote **existing guidance and resources** for managing activities on hot days, using your location's "HeatRisk" forecast level
- ✓ **Improve** school **capacity to prevent** heat illness and other impacts of hot weather

Education | Guidance | Weather Forecast Tools | Reports & Data

How to Use Toolkit



A. About Extreme Heat



B. How Extreme Heat Impacts Health



C. Air Quality



D. Impacts of Extreme Heat on Learning, Well Being,
Mental and Emotional Health



E. Hydration and Diet



F. Clothing and Sun Protection, Cooling and Shade



G. Physical Education and Extra Curricular Activities



H. Athletics



I. Preparing for the Heat Season

Every Section Contains:

- ✓ **Key Content Areas**
- ✓ **Resources**
- ✓ **Highlighted Recommendations**

<http://publichealth.lacounty.gov/eh/safety/extreme-heat.htm>



About Extreme Heat

Background: context & risk factors





“There is hot, and then there is hot!”

Extreme heat is a period of high heat and humidity with temperatures **above 90 degrees for at least 2 to 3 days**. In extreme heat, your body works extra hard to maintain a normal temperature, which can lead to death. Extreme heat is responsible for the highest number of annual deaths among all weather-related hazards.”

– Ready.gov

It's Getting Hotter in Los Angeles County!



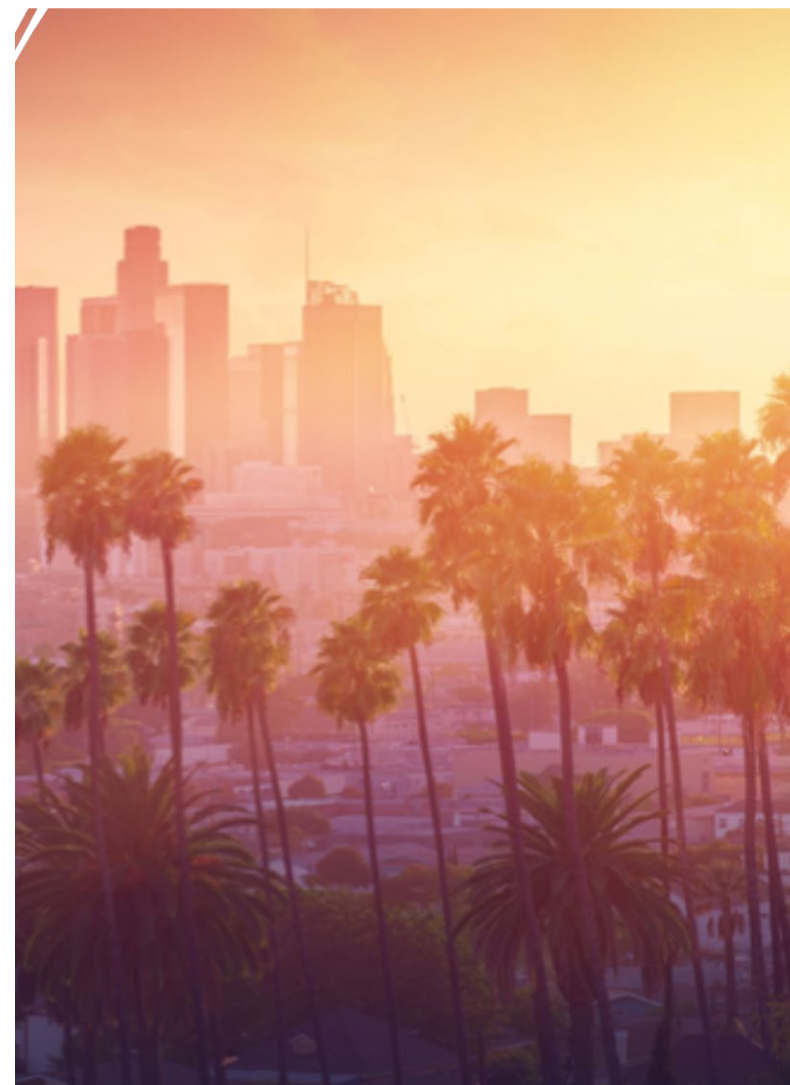
Extreme heat is a period of high heat and humidity with temperatures above 90 degrees for at least 2-3 days.

(defined by Federal government)

- Los Angeles County is having more **extreme heat waves that last longer.**
- Hot days are happening later into the summer.
- Scientists predict there will be even more extreme hot days in the future.

Recent Temperature Records

- The hottest years in history have all been in the last 11 years (2014-2024).
- 2024 was the warmest year globally since records began in 1850.
- 2024 surpassed 2023 as the warmest year globally on record (extreme heat is getting worse!)



What Weather Occurrences Are The Most Deadly Each Year?

Please put your answer in the chat.

- Flooding?
- Heat?
- Cold?
- Tornadoes?
- Hurricanes?



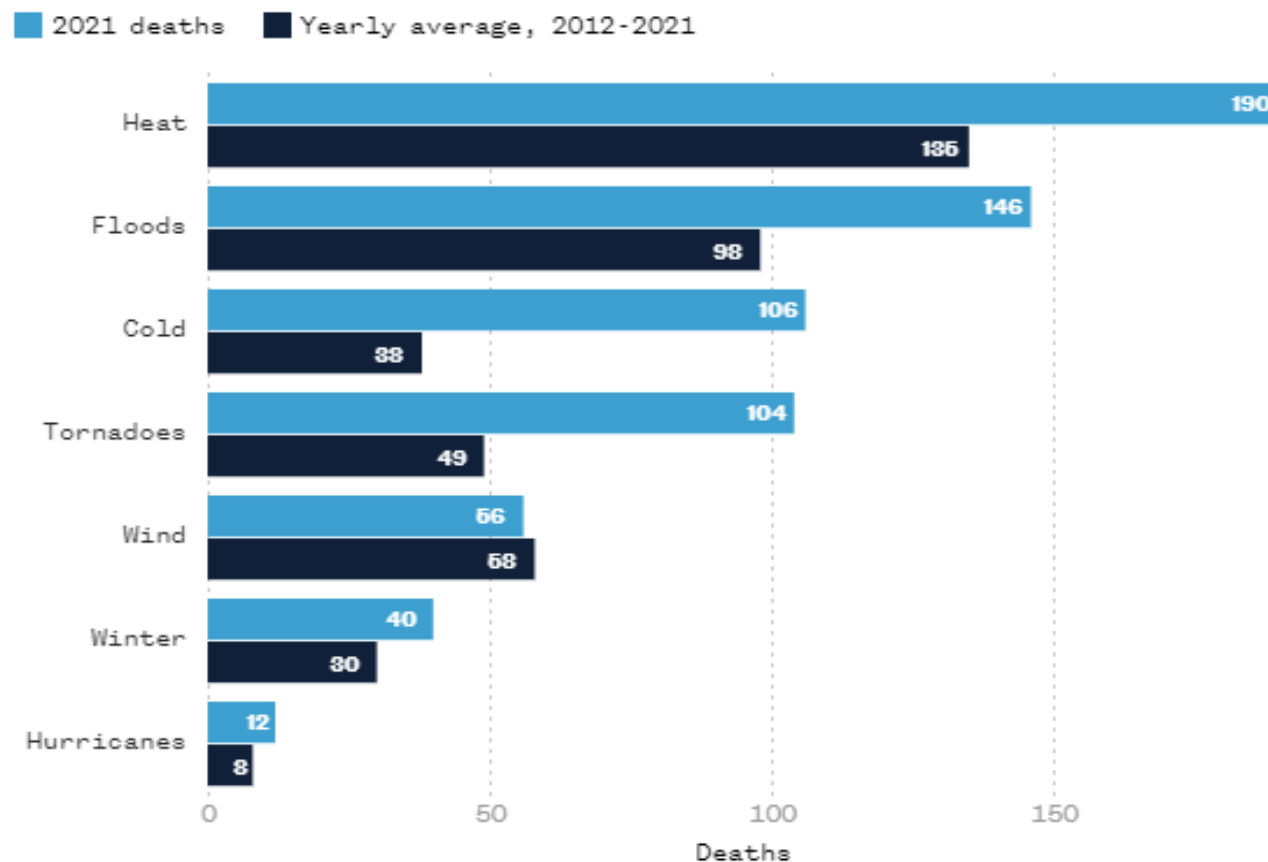
Extreme Heat Can be Deadly

Extreme heat is the deadliest weather-related hazard.

It is also a leading cause of death among student athletes.

Heat's hidden toll

Extreme heat, which is projected to become more severe as the world warms, is already responsible for more deaths in the U.S. than any other weather hazard.



Source: National Weather Service

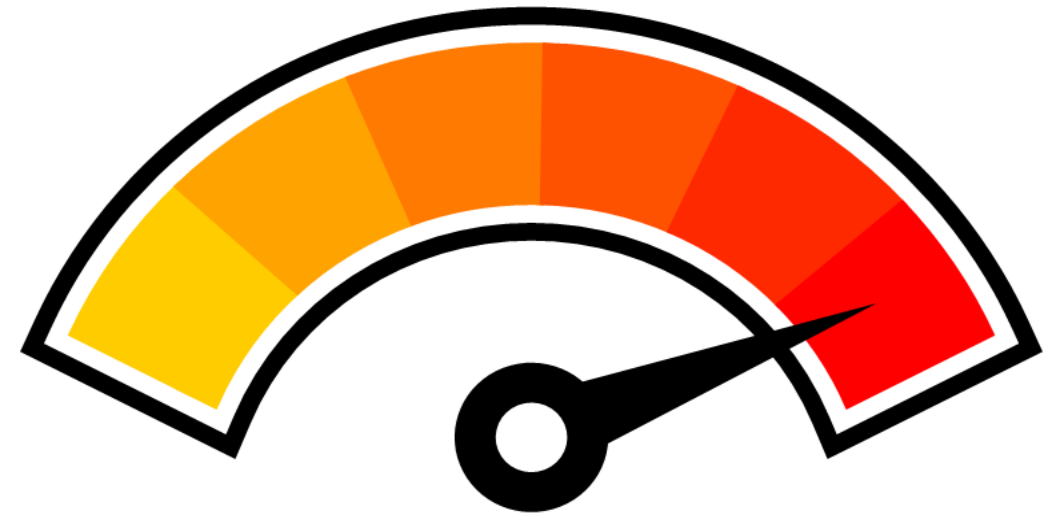
Graphic: Danica Jefferies / NBC News

Risks from Extreme Heat



In hot weather, the body works hard to stay cool.

- If the body can't cool down, it can lead to **heat-related illnesses or even death.**
- Extreme heat causes the **most deaths** from all weather-related dangers.
- Certain groups are at greater risk, including people who:
 - Do not have permanent housing
 - Work or exercise outdoor
 - Are taking certain medications
 - Have disabilities
 - Live in low-income communities
 - Are older adults or infants



Areas within a city that are significantly warmer than surrounding areas due to human activities and structures that absorb and retain heat.

Urban Heat Islands include:

- Areas with few trees or green spaces and many roads and buildings.
- Cities often replace natural land with roads, pavement, and buildings.
- Surfaces like concrete and asphalt absorb and hold onto heat.
- Unshaded concrete and asphalt radiate heat, making temperatures 15 - 20 degrees Fahrenheit warmer.

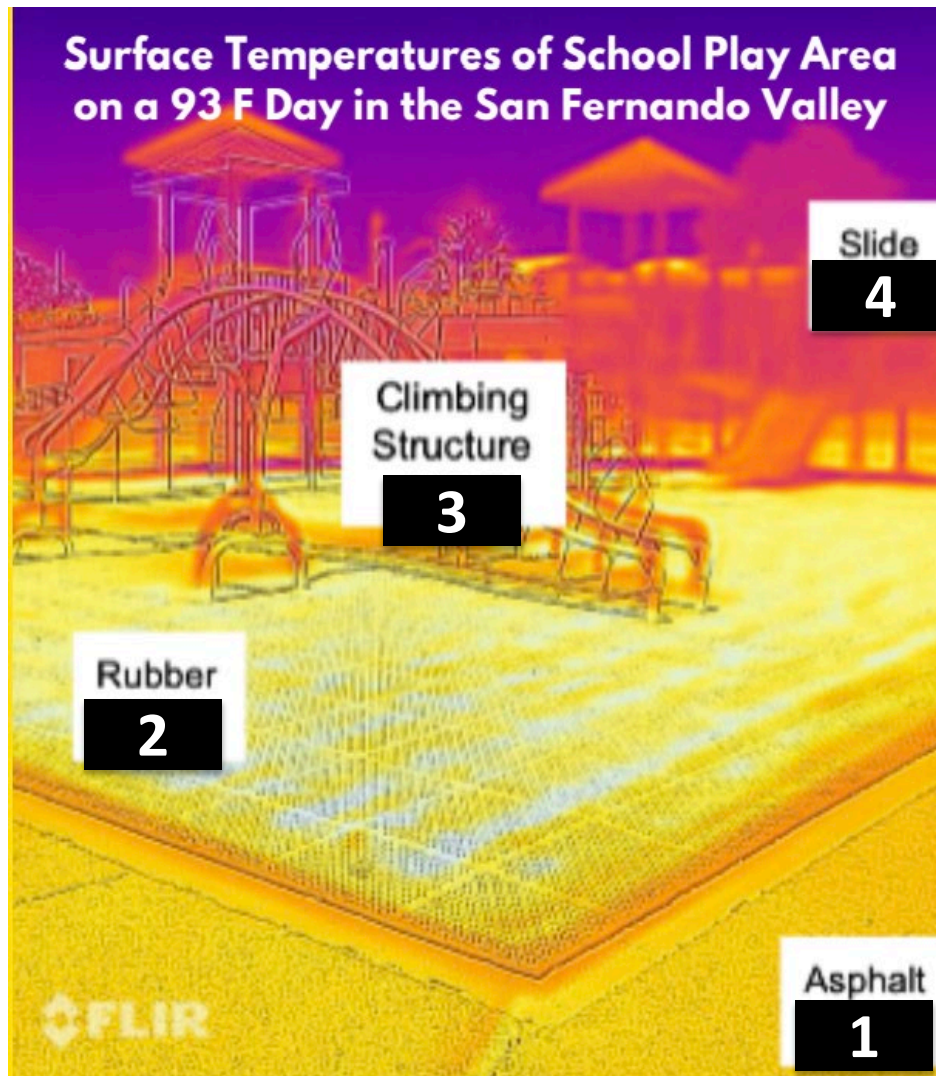


Image: City of Little Rock Arkansas

For more information on heat islands:

<https://www.epa.gov/heatislands/learn-about-heat-islands#heat-islands>

Group Activity: An Urban Heat Island



Let's take a test. Guess how hot...

- | | |
|------------|-----------------------|
| 1. Asphalt | 3. Climbing structure |
| 2. Rubber | 4. Slide |

Paved Surfaces:

- Playgrounds that are covered with asphalt or concrete **absorb and retain heat** from the sun.

Lack of Greenery:

- Often, playgrounds have limited vegetation or trees for shade.
- Without cooling through shade, the playground can heat up significantly.

Extreme Heat at Schools



Extreme heat especially affects students in schools.

- Youth are usually outside during the hottest part of the day.
- Many schoolyards do not have enough shade and have dark surfaces that get very hot.
- Sports are played on artificial turf, which gets hotter than other surfaces.



There are wide disparities across schools.

- Available **AC resources** or **cooling rooms**
- Access to **shade** and **tree** coverage
- Inconsistent Physical Education (PE) guidance
- Varying **understanding of the risks and how to respond** to extreme heat
- Amount of people who **experience heat** versus those that are adjusted to it



Extreme Heat Risk Factors



Many factors can affect how well someone can cool down in very hot weather.

Personal/Individual Factors:

- Age
- Being overweight
- Not drinking enough water (dehydration)
- Heart problems
- Mental health issues
- Having asthma
- Poor blood circulation
- Having a sunburn
- Being pregnant
- Using certain medications
- Consuming caffeine or alcohol

Exertion Levels:

- *Even young and healthy people can get sick if they do strenuous activities during hot weather.*
(example: intense exercise classes)
- Getting used to heat gradually happens over 1-2 weeks.

High Humidity:

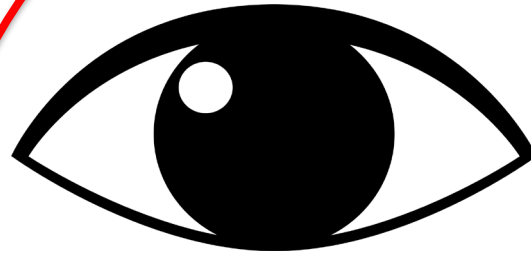
- Sweat drying off is the main way our bodies cool down. When it is very humid, sweat does not dry off the skin quickly.

Takeaways on Heat



Plan Ahead.

Set a plan and roles using the forecast tools and prepare your campus environment.



Recognize the signs.

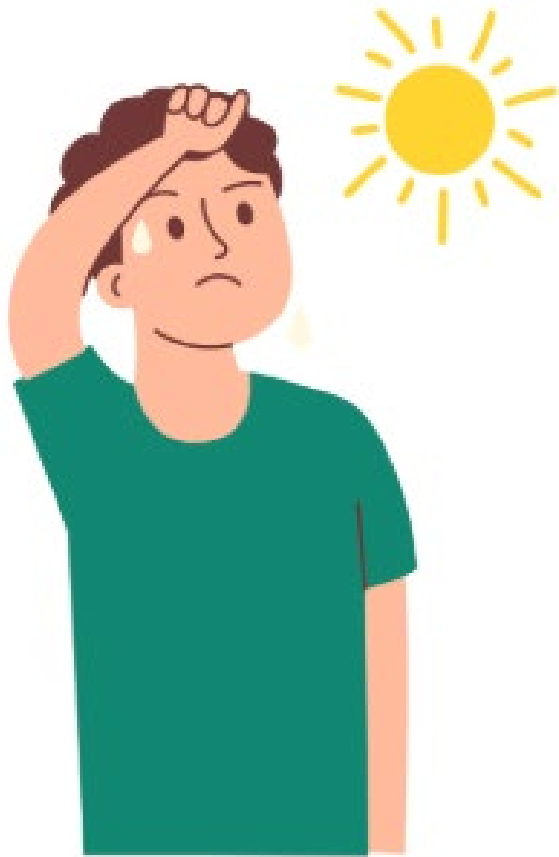
Remember what to look out for and how to act.



Spread the word!

Educate others with messaging and materials.

Types of Heat Illness



1. Heat rash
2. Sunburn
3. Heat cramps
4. Heat exhaustion
5. Heat stroke

SYMPTOMS:

- Red clusters of small blisters that look like pimples on the skin (usually on the neck, chest, groin, or in elbow creases)

WHAT TO DO:

1. Stay in a cool, dry place
2. Keep the rash dry
3. Use powder (like baby powder) to soothe the rash



Image: Canva.com



Image: Canva.com

SYMPTOMS:

- Painful, red, and warm skin
- Blisters on the skin

WHAT TO DO:

1. Stay out of the sun until sunburn heals
2. Put cool cloths on sunburned areas or take a cool bath
3. Put moisturizing lotion on sunburned areas
4. Do not break blisters

Heat Cramps



SYMPTOMS:

- Heavy sweating during intense exercise
- Muscle pain or spasms

WHAT TO DO:

1. Stop physical activity and move to a cool place
2. Drink water or a sports drink
3. Wait for cramps to go away before doing any more physical activity



Image: Canva.com

Get medical help right away if:

- Cramps last longer than 1 hour
- On a low-sodium diet
- Have heart problems

Heat Exhaustion



- When the body gets too hot and loses a lot of water and salt from sweating too much.
- **SYMPTOMS:** heavy sweating; cold, pale and clammy skin; fast, weak pulse; nausea or vomiting; muscle cramps; feeling tired or weak; dizziness; headache; and fainting.
- **WHAT TO DO:** move to a cool place, loosen clothes, put cool wet cloths on body (or take a cool bath), and sip water to prevent something more serious, heat stroke.



Image: Canva.com

Get medical help right away if:

- Throwing up
- Symptoms get worse
- Symptoms last longer than 1 hour

Heat Stroke



- Serious and life-threatening condition where the body gets too hot and can't cool down by itself anymore.
- High body temperature can get very high, 103°F or over (39.4°C).
- **SYMPTOMS:** hot, red, dry or damp skin; fast, strong pulse; headache; dizziness, nausea; confusion; and losing consciousness (passing out).

WHAT TO DO: Call 911 right away!

- Heat stroke is a medical emergency
- Move person to a cooler place
- Help lower the person's temperature with cool cloths or a cool bath
- Do not give the person anything to drink



Source: https://www.cdc.gov/disasters/extremeheat/pdf/Heat_Related_Illness.pdf



Please stretch and take a break



Summaries of Highlighted Toolkit Recommendations by Content Area

Putting what you've learned into action!

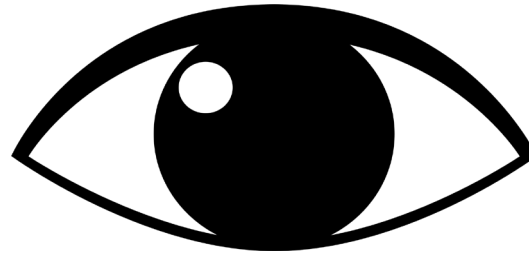


Takeaways on Heat



Plan Ahead.

Set a plan and roles using the forecast tools and prepare your campus environment.



Recognize the signs.

Remember what to look out for and how to act.



Spread the word!

Educate others with messaging and materials.

Part A: Extreme Heat



**Our Dry Heat is
Getting Drier & Hotter**



- ☐ **Know the weather and air quality forecast in your area**
 - ☐ Subscribe to advisories, use HeatRisk, Air Now and other forecast tools.
 - ☐ Be aware of ongoing days of high temperatures.
- ☐ **Develop a plan for your campus to protect people during the heat**
 - ☐ Assess the need to reschedule, cancel activities, or move to alternative or cooled indoor spaces.
 - ☐ If a circumstance is unclear or uncertain, cancel.
- ☐ **Notify your school community about the HeatRisk level and actions to take**
 - ☐ Use the CDPH Heat Risk Grid and HeatReadyCA assets (talking points, social media) to frame your messaging to parents, other faculty and students.

HeatRisk Forecast Tool



Plan for hot weather with the National Weather Service's tool, called *HeatRisk*

- Daily forecast of how risky the heat is for the next week
- Looks at:
 - How unusual the heat is for that time of year
 - How long it will last
 - CDC data to estimate the risk
- Different colors and numbers show heat risk with tips for staying safe

<https://www.wpc.ncep.noaa.gov/heatrisk/>

NWS HeatRisk

Identifying Potential Heat Risks in the Seven Day Forecast

Mon 7/15	Tue 7/16	Wed 7/17	Thu 7/18	Fri 7/19	Sat 7/20	Sun 7/21
-------------	-------------	-------------	-------------	-------------	-------------	-------------

[Click map for potential heat risks and NWS forecast for a location.](#)

The NWS HeatRisk is an experimental color-numeric-based index that provides a forecast risk of heat-related impacts to occur over a 24-hour period. HeatRisk takes into consideration:

- How unusual the heat is for the time of the year
- The duration of the heat including both daytime and nighttime temperatures
- If those temperatures pose an elevated risk of heat-related impacts based on data from the CDC

This index is supplementary to official NWS heat products and is meant to provide risk guidance for those decision makers and heat-sensitive populations who need to take actions at levels that may be below current NWS heat product levels.

Category	Risk of Heat-Related Impacts
Green 0	Little to no risk from expected heat.
Yellow 1	Minor - This level of heat affects primarily those individuals extremely sensitive to heat, especially when outdoors without effective cooling and/or adequate hydration.
Orange 2	Moderate - This level of heat affects most individuals sensitive to heat, especially those without effective cooling and/or adequate hydration. Impacts possible in some health systems and in heat-sensitive industries.
Red 3	Major - This level of heat affects anyone without effective cooling and/or adequate hydration. Impacts likely in some health systems, heat-sensitive industries and infrastructure.
Magenta 4	Extreme - This level of rare and/or long-duration extreme heat with little to no overnight relief affects anyone without effective cooling and/or adequate hydration. Impacts likely in most health systems, heat-sensitive industries and infrastructure.

[Comments? Questions? Please Contact Us.](#)



NWS HeatRisk Forecast Tool



wpc.ncep.noaa.gov/heatrisk/

DPH Managed Favorites

Experimental: This page is experimental to provide a period of time for customers to provide feedback to NWS.



National Weather Service

National Oceanic and Atmospheric Administration

[Bookmark](#) [Download KML](#) [Graphics](#) [En español](#)

NWS HeatRisk

Identifying Potential Heat Risks in the Seven Day Forecast

Wed 10/30	Thu 10/31	Fri 11/1	Sat 11/2	Sun 11/3	Mon 11/4	Tue 11/5
--------------	--------------	-------------	-------------	-------------	-------------	-------------

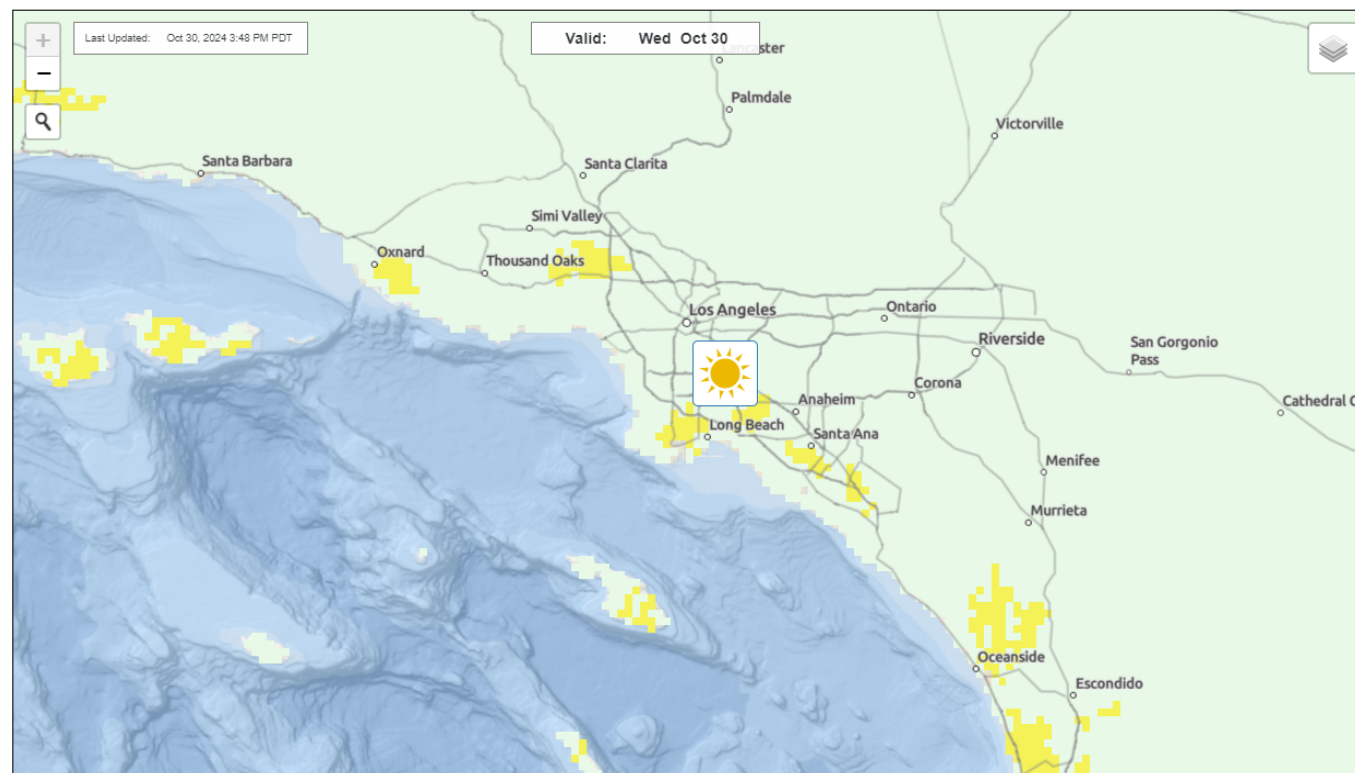
[Click map for potential heat risks and NWS forecast for a location.](#)

The NWS HeatRisk is an experimental color-numeric-based index that provides a forecast risk of heat-related impacts to occur over a 24-hour period. HeatRisk takes into consideration:

- How unusual the heat is for the time of the year
- The duration of the heat including both daytime and nighttime temperatures
- If those temperatures pose an elevated risk of heat-related impacts based on data from the CDC

This index is supplementary to official NWS heat products and is meant to provide risk guidance for those decision makers and heat-sensitive populations who need to take actions at levels that may be below current NWS heat product levels.

Category	Risk of Heat-Related Impacts
Green 0	Little to no risk from expected heat.
Yellow 1	Minor - This level of heat affects primarily those individuals extremely sensitive to heat, especially when outdoors without effective cooling and/or adequate hydration.
Orange 2	Moderate - This level of heat affects most individuals sensitive to heat, especially those without effective cooling and/or adequate hydration. Impacts possible in some health systems and in heat-sensitive industries.
Red 3	Major - This level of heat affects anyone without effective cooling and/or adequate hydration. Impacts likely in some health systems, heat-sensitive industries and infrastructure.
Magenta 4	Extreme - This level of rare and/or long-duration extreme heat with little to no overnight relief affects anyone without effective cooling and/or adequate



<https://www.wpc.ncep.noaa.gov/heatrisk/>

Preventing Heat-Related Illness



*Heat-related illnesses and deaths are **preventable** with awareness and preparation.*



*Department of Public Health (DPH) -
Weather Advisories Subscribers of DPH
– Weather Advisories*

*Messaging based on National Weather Service &
LA County Office of Emergency Management
announcements*



What You Should Know About Mpox
The risk of mpox in the general population remains very low based on the information available. [Learn more](#)



Learn More about COVID-19 in LA County, and What it Means for You
All the information you need to Stay Safe, Stay Healthy, & Get Vaccinated! [Learn more](#)

CDPH Heat Risk Grid: Understanding “HeatRisk” Level, Who is At Risk, and What Actions to Take

Revised July 27, 2023. Adapted from the [National Weather Service \(NWS\) HeatRisk tool](#). Learn more about how to stay safe during extreme heat at [CDPH Extreme Heat](#).



Value	Risk	What does this mean?	Who / What is at risk?	What actions can be taken?
0 (Green)	Little to None	<ul style="list-style-type: none"> This level of heat poses little to no risk from expected heat 	<ul style="list-style-type: none"> No elevated risk 	<ul style="list-style-type: none"> No preventative actions necessary
1 (Yellow)	Minor	<ul style="list-style-type: none"> Heat of this type is tolerated by most; however, there is a minor risk for extremely heat-sensitive groups* to experience negative heat-related health effects 	<ul style="list-style-type: none"> Primarily those who are extremely sensitive to heat,* especially when outdoors without effective cooling and/or adequate hydration 	<ul style="list-style-type: none"> Increase hydration Reduce time spent outdoors or stay in the shade when the sun is strongest Open windows at night and use fans
2 (Orange)	Moderate	<ul style="list-style-type: none"> Heat of this type is tolerated by many; however, there is a moderate risk for members of heat-sensitive groups* to experience negative heat-related health effects, including heat illness Some risk for the general population who are exposed to the sun for longer periods of time Living spaces without air conditioning can become uncomfortable during the afternoon and evening, but fans and leaving windows open at night will help 	<ul style="list-style-type: none"> Primarily heat-sensitive or heat-vulnerable groups,* especially those without effective cooling or hydration Those not acclimatized to this level of heat (i.e., visitors) Otherwise healthy individuals exposed to longer duration heat, without effective cooling or hydration, such as in the sun at an outdoor venue Some transportation and utilities sectors Some health systems will see increased demand, with increases in emergency room visits 	<ul style="list-style-type: none"> Reduce time in the sun during the warmest part of the day Stay hydrated Stay in a cool place during the heat of the day (usually 10 a.m. to 5 p.m.) Move outdoor activities to cooler times of the day For those without air conditioning, use fans to keep air moving and open windows at night to bring cooler air inside buildings
3 (Red)	Major	<ul style="list-style-type: none"> Heat of this type represents a major risk to all individuals who are 1) exposed to the sun and active or 2) are in a heat-sensitive group Dangerous to anyone without proper hydration or adequate cooling Living spaces without air conditioning can become deadly during the afternoon and evening. Fans and open windows will not be as effective. Poor air quality is possible Power interruptions may occur 	<ul style="list-style-type: none"> Much of the population, especially anyone without effective cooling or hydration Those exposed to the heat/sun at outdoor venues Health systems likely to see increased demand with significant increases in emergency room visits Most transportation and utilities sectors 	<ul style="list-style-type: none"> Cancel outdoor activities during the heat of the day** (usually 10 a.m. to 5 p.m.), and move activities to the coolest parts of the day Stay hydrated Stay in a cool place especially during the heat of the day and evening If you have access to air conditioning, use it, or find a location that does. Even a few hours in a cool location can lower risk. Fans may not be adequate.
4 (Magenta)	Extreme	<ul style="list-style-type: none"> This is a rare level of heat leading to an extreme risk for the entire population Very dangerous to anyone without proper hydration or adequate cooling This is a multi-day excessive heat event. A prolonged period of heat is dangerous for everyone not prepared Poor air quality is likely Power outages are increasingly likely as electrical demands may reach critical levels 	<ul style="list-style-type: none"> Entire population exposed to the heat is at risk For people without effective cooling, especially heat-sensitive groups, this level of heat can be deadly Health systems highly likely to see increased demand with significant increases in emergency room visits Most transportation and utilities sectors 	<ul style="list-style-type: none"> Cancel outdoor activities** Stay hydrated Stay in a cool place, including overnight If you have access to air conditioning, use it, or find a location that does. Even a few hours in a cool location can lower risk. Fans will not be adequate. Check on your neighbors

*Populations at higher risk of heat-related health impacts include older adults, young children, unhoused residents, those with chronic health conditions, outdoor workers, those exercising or doing strenuous activities outdoors during the heat of the day, pregnant individuals, those living in low-income communities, and more.

** For Extreme (Magenta/4) and Major (Red/3) risk levels, CDPH recommends more caution and therefore guides canceling outdoor activities based on these scenarios.

Use the **CDPH Heat Risk Grid** to guide actions for your school’s staff, students and parents.

<https://www.cdph.ca.gov/Programs/EPO/Pages/Extreme%20Heat%20Pages/extreme-heat-guidance-for-schools.aspx>

Highlighted Recommendations: How Extreme Heat Impacts Health



- ☐ **Provide** information/messaging on the signs & symptoms and how to respond.
 - ☐ **Train** school nurses to respond and treat
 - ☐ **Train** student heat ambassadors
 - ☐ **Encourage** everyone to watch for signs and symptoms in themselves and others
 - ☐ **Provide** your school community (incl. families), heat-related health education, guidance, cooling center locations, **in multiple languages**.

- ☐ **Install or improve** cooling equipment and/or spaces, hydration and shading where possible.
 - ☐ **Maintain** good working condition of hydration stations
 - ☐ **Avoid** use of fans alone in extreme heat (high 90s and up).
 - ☐ **Identify** alternative cooling spaces if AC is not available (gym, cafeteria, library)
 - ☐ **Review** School Cooling Funding Opportunities to modernize and become resilient against extreme heat.

Highlighted Recommendations: How Extreme Heat Impacts Health



- ❑ **Closely monitor** the health and well-being of students, especially those who are less aware of and unable to recognize heat symptoms and dehydration
- ❑ When it's going to be hot or the *HeatRisk* forecast level is elevated:
 - ❑ **Assess** each day's campus conditions and planned activities
 - ❑ **Provide** guidance/direction on moving locations, modifying or canceling activities, athletics, and extracurricular activities to reduce risk
- ❑ **Create a heat plan** with trigger points including:
 - Decreased activity
 - Increased attention and messaging on hydration and monitoring symptoms
 - Communication to staff, teachers, coaches and families

Highlighted Recommendations: Air Quality & Health



Hotter temperatures contribute to more air pollution and poorer air quality.

Daily extreme heat and air quality can be tracked using:

1. National Weather Service (NWS) [HeatRisk forecast tool](#)
2. CDC [Heat & Health Tracker](#)
3. U.S. Environmental Protection Agency's Air Quality Index, [AirNow](#)
4. [South Coast AQMD's app](#), which provides real-time and forecasted air quality



Highlighted Recommendations: Impacts of Extreme Heat on Learning, Well Being, Mental & Emotional Health



[This Photo](#) by Unknown Author is licensed under [CC BY-NC-ND](#)

- ❑ **Observe** how heat is impacting **students' ability to focus, learn and interact.**
- ❑ **Prepare** indoor activities
 - Have **grade-appropriate activities** that address students' experience, feelings and distress to heat (eco-anxiety).
- ❑ **Provide** students and families **resources, cooling center locations and information** on how to keep homes-units cool, in case air conditioning is not available.
- ❑ **Be aware** of **students taking medications** (incl. for mental or behavioral health)
 - It may impair their ability to stay cool and worsen their conditions.

http://publichealth.lacounty.gov/eh/docs/safety/Extreme_Heat_Toolkit.pdf

What are your campuses currently doing to address extreme heat?



REFLECTION ACTIVITY

Think about the following:

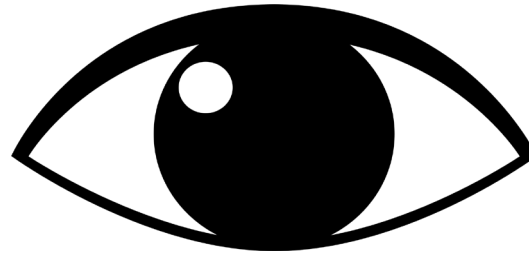
1. What are some current strengths (successes) of your campus's ability to address heat?
 2. What are areas that need improvement (key challenges/barriers or needs)?
 - *Who needs to be trained?*
 - *What needs to be fixed?*
 - *When would this need to take place?*
 3. Ideas or draft of a heat alert plan for your campus.
 4. What are grade appropriate indoor activities students can do indoors during periods of heat?
- ✓ **Draft a checklist of to-dos** on what supplies or resources are needed to implement this.

Takeaways on Heat



Plan Ahead.

Set a plan and roles using the forecast tools and prepare your campus environment.



Recognize the signs.

Remember what to look out for and how to act.



Spread the word!

Educate others with messaging and materials.

Part E: Hydration & Diet



About half of school-aged children are under-hydrated.



1 in 5 children & adolescents do not drink any plain water during the day.

Signs of Dehydration (4)

Dehydration occurs when you use or lose more water than you take in, and your body doesn't have enough water and other fluids to carry out its normal functions including keeping the body cool when it's hot. Dehydration can be mild and can be severe enough to be life-threatening.

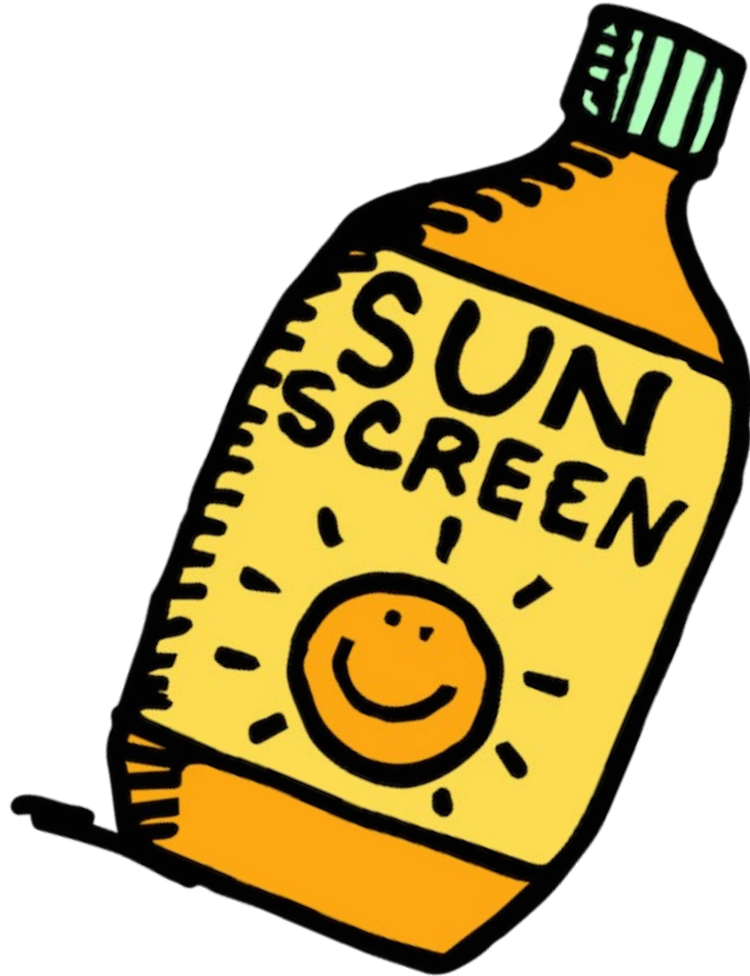
- Feeling thirsty
- Dry tongue or mouth
- Urinating and sweating less than usual
- Dark-colored urine
- Dry skin
- Feeling tired
- Nausea
- Headache
- Dizziness-Confusion
- Irritable and anxious
- Unusually sleepy

Highlighted Recommendations: Hydration



- ❑ **Ensure easy access** to drinking water for all!
 - ❑ **Provide** regular hydration breaks
 - ❑ **Maintain** campus-wide hydration stations
 - ❑ **Create guidance** for water bottle usage
- ❑ **Regularly remind students to hydrate** *using posters, text messages and other messaging*
 - During periods of extreme heat or elevated HeatRisk
 - After PE and/or direct sun exposure
- ❑ **Educate students & families** on:
 - The benefits of hydration
 - Food and fluids/beverages that support hydration and what to avoid
 - How to assess hydration levels and prevent dehydration

Highlighted Recommendations: Clothing & Sun Protection



- ☐ **Encourage students** to wear protective clothing, hats, sunglasses, and sunscreen, with a minimum of SPF 15
- ☐ **Implement** [CDC guidelines](https://www.cdc.gov/mmwr/PDF/rr/rr5104.pdf) to create sun-safe places that reduce exposure to UV radiation
<https://www.cdc.gov/mmwr/PDF/rr/rr5104.pdf>
- ☐ **Provide education** and messaging to staff, students and families on:
 - **Sun safety** and the **risks** of heat-related illness and **skin damage from UV radiation** and sun exposure
 - Appropriate **clothing** and use of **sunscreen**

Part I: Preparing for the Heat Season



Prepare your campus before the next heat season:

- ☐ **Provide** information and education to students, teachers, and staff on heat-related risks, signs and symptoms, with tips for prevention.
- ☐ **Delegate** responsibilities for monitoring weather and air quality.
- ☐ **Identify** temperature thresholds of when physical and/or outdoor activities should be modified or cancelled.
- ☐ **Assess** cooling equipment (incl. fans and air conditioners) is working.
- ☐ **Assess** locations where people spend time, to be modified during extreme heat.
- ☐ **Establish** effective communication strategies to reach teachers, staff and students.
 - ☐ Include heat as a topic in assemblies, staff meetings, and communications to families before and during high heat season.
 - ☐ Encourage students to be preventative – staying hydrated, etc.
- ☐ **Focus** on the vulnerability of students – closely monitoring health & well-being of students who may not exert control over their own physical environments.

OPTIONAL REFLECTION ACTIVITY

Think about the following:

1. What are 3-5 key messages for your campus? Regarding...

- Hydration & diet
- Sun protection & clothing

2. How would these messages be disseminated to...

- Students?
- Staff?
- Parents & Caregivers?

Key Message	Audience	Where (+method)	When (+how often)

3. Where, when and how often would this take place?

✓ **Draft a checklist of to-dos** on what supplies or resources are needed to implement this.

Highlighted Recommendations: Physical Education & Athletics



- ☐ **Identify** areas of shade outside during physical activity.
- ☐ **Make sure** water is available during outdoor activities.
- ☐ **Train** coaches and school nurses to recognize, respond and treat.
- ☐ **Determine** and provide guidance on changing locations, rescheduling, deferment or canceling during periods of heat or elevated HeatRisk.
- ☐ **Allow** for creative and alternative movement, (i.e. stretching, putting on a play, or dancing).
- ☐ **Assess** uniforms, costumes and other equipment required for their comfort and safety.

Highlighted Recommendations: Athletics



Heat stroke in athletes is considered a medical emergency.

Assembly Bill 2800, California High School Coaching Education and Training Program:

High school coaches are required to be trained with a basic understanding of heat-related illness with free, online trainings.

NFHS NFHS.org NFHSLearn.com Sign In Register

LEARNING CENTER Search our Products

NFHSLEARN FOR YOU USER LOOKUP HELP

COURSES FOR Coaches Students Parents Administrators Officials Performing Arts Featured

Back to Courses

Heat Illness Prevention

Elective Course

Recommended for: Coach, Student, Administrator, and Official

Share on Facebook Share on X

Get Course(s) For

Myself Distribution

Select State

California

Start Learning

- ✓ Approved for 1 Clock Hour
- ✓ Certificate of Completion
- ✓ Additional Resources

Every learner needs an account. Certificate names can't be changed in an account with a completed course.

<https://nfhslearn.com/courses/heat-illness-prevention-2>



Next Steps & Resources

What you can do as Education Leaders



- Consider your role in protecting students from extreme heat
- Sign up for DPH heat advisories: <https://bit.ly/DPHPartners>
- Check out DPH *Stay Healthy in the Heat* website:
<http://publichealth.lacounty.gov/eh/safety/extreme-heat.htm>
- Learn more about who is at risk for heat illness: <https://heatready.ca.gov/>
- Find out about shading and cooling funding opportunities:
http://ph.lacounty.gov/place/docs/SchoolCoolingGrantOpportunities_web.pdf

As a group: What are other actions you plan to take?

For more resources, trainings and guidance, use [the Extreme Heat Toolkit](#)

Resources: General Information



For more resources, trainings and guidance, refer to [the Extreme Heat Toolkit](#)

Contact	Call:
General Emergency Number	911
Non-Emergency Essential Local Services	211
Public Health InfoLine	833-540-0473

WEATHER FORECAST TOOLS	
Link	Description
Heat Risk Forecast Tool National Weather Service (NWS)	Heat Risk Forecast Tool Use the National Weather Service (NWS) HeatRisk Forecast Tool to monitor your location's heat risk level and determine your school community's risk of heat impacts.
Heat Risk Grid California Department of Public Health (CDPH)	CDPH Heat Risk Grid: Understanding HeatRisk Level, Who is At Risk, and What Actions to Take Once your school determines the HeatRisk level based on the National Weather Service (NWS) HeatRisk forecast tool, use the CDPH Heat Risk Grid to understand what each risk level means, who is at risk and what general actions can be taken to protect those in your school community.
Wet Bulb Globe Temperature Overview California Interscholastic Federation (CIF)	WetBulb Globe Temperature According to the National Weather Service, a WetBulb Globe Temperature (WBGT) is a measure of the heat stress in direct sunlight, which takes into account: temperature, humidity, wind speed, sun angle, and cloud cover (solar radiation). This differs from the heat index, which takes into consideration temperature and humidity and is calculated for shady areas. Using a WBGT monitor on-site provides more accurate data than that from the National Weather Service and can help athletic programs to dictate modifications in activity (work/rest ratios, hydration breaks, equipment work, length of practice) that make sports safer for all participants.

http://publichealth.lacounty.gov/eh/docs/safety/Extreme_Heat_Toolkit.pdf

Resources and services provided over the phone to Los Angeles County residents for public health issues:

- COVID-19 related inquiries
- Women's health
- Maternal health
- Nutrition
- Tobacco cessation
- Many more!

Los Angeles County

PUBLIC HEALTH INFOLINE



1-833-540-0473



8 AM – 8 PM
7 DAYS A WEEK

Call Us for Reliable Health Information!



Find out how to get your updated
COVID-19 vaccine & treatment



Get access to clinics for childhood
immunizations



Learn more about reproductive health



Get mental health resources



Discover community resources to
boost your health and wellness!

DPH needs your comments & suggestions!



We Want to
Hear from You

We are particularly interested in feedback on the following areas:

Clarity and Usability: Are the content areas easy to understand and provide enough information?

Relevance: Do highlighted recommendations address the specific challenges your school faces due to extreme heat?

Effectiveness: Have you tried any of the highlighted recommendations, and if so, what was your experience?

Additional Resources: Are there any other tools, resources, or strategies you believe should be included?

General Feedback: Any other comments or suggestions to improve the overall quality and utility of the toolkit.

Your input will help ensure that the guidance provided is relevant, actionable, and beneficial for schools.

**PLEASE SEND YOUR FEEDBACK TO
DPH-OEJCH@PH.LACOUNTY.GOV.**



Thank You!

Any questions, comments, suggestions?

Contact:

DPH-OEJCH@PH.LACOUNTY.GOV (Office of Environmental Justice & Climate Health)

DPH-EDUCATION@PH.LACOUNTY.GOV (Office of Education Programs & Partnerships)

