



## TRANSCRIPT

NOAA, CDC news conference on new heat forecast tool and health guidance

Monday, April 22, 2024 at 11 a.m. EDT via Zoom

Hosted by Unity Health Care's Brentwood Health Center

Media advisory about news conference

[NOAA, CDC news conference to unveil new heat forecast tool and health guidance](#)

HeatRisk news release

[NOAA expands availability of new heat forecast tool ahead of summer](#)

00:07:35:06 - 00:08:01:06

Lori Arguelles

Good morning, everybody. Thank you so much for joining us both here in person and virtually for today's exciting announcement. And before we begin, I want to offer a special thanks to Unity Health Center for hosting us today and for being such an important and integral part of this community for decades. I'd also like to acknowledge District five Councilmember Zachary Parker.

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Lori Arguelles

Thank you for being here and for being such an important part of this community. My name is Laurie Arguelles and I am the Director of Strategic Communications and Partnerships for NOAA and your emcee for today's news conference on the Heat Risk Tool, which is a collaboration between NOAA and the Centers for Disease Control and Prevention. Please note that the news release related to today's announcement will be available on NOAA.gov shortly.

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Lori Arguelles

For those of you joining us by Zoom, this news conference is being recorded. So if you do not wish to be recorded, please disconnect at this time. As we begin, I just want to remind you that today is Earth Day, which was first celebrated 54 years ago. At NOAA of course, we think every day is Earth Day, especially since our mission extends from the depths of the sea to the upper reaches of our atmosphere and beyond.

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Lori Arguelles

It's no surprise, then, that NOAA's portfolio includes addressing climate change, forecasting extreme weather and so much more, and heat is becoming more and more a part of that extreme weather. And more and more of a concern for us. And so we're excited that this new tool will help combat the stress of heat, particularly for vulnerable populations. I'd like to introduce our speakers today.

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Lori Arguelles

We'll begin with Don Graves, who's the U.S. Commerce Department Deputy Secretary, followed by Dr. Mandy Cohen, who is director of the Centers for Disease Control and Prevention, and also the administrator of the Agency for Toxic Substances and Disease Registry. Dr. Rick Spinrad, who's the undersecretary of commerce for Oceans and Atmosphere, and the NOAA administrator, Ken Graham, who only gets one title.

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Lori Arguelles

He is the director of the National Weather Service. But it's a very important one. And Dr. Ari Bernstein, who's director of the National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry. So let me now turn over the microphone to our host, Dr. Jessica Henderson Boyd, who is the CEO of Unity Health Care. Dr. Boyd, good morning.

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Dr. Jessica Henderson Boyd

My name is Dr. Jessica Henderson Boyd and I am the president and CEO of Unity Health Care. I also have the privilege of being a pediatric asthma doctor. So it is my distinct honor and privilege to be able to talk about this critical topic of heat sensitivity here at our Brentwood location and Ward five. I want to welcome Deputy Secretary of Commerce Don Graves, CDC Director Dr. Mandy Cohen, Dr. Ari Bernstein and the whole CDC team.

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Dr. Jessica Henderson Boyd

I'd also like to welcome Dr. Rick Spinrad, Ken Graham and the NOAA team and would like to acknowledge Councilmember Zack Parker, who's the Ward five councilmember, and Dr. Ayanna Bennett, who's the D.C. director of health, as well as Joe Dunn, who's the National Association of Community Health Centers, Senior Vice President of Public Policy and Research. So here in the city, they work very collaboratively with us as community health centers so that we're ensuring positive health outcomes for all of our patients.

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Dr. Jessica Henderson Boyd

I also would like to thank Dr. Reggie Elliott and Dr. Laura Robles-Cruz for their great work with the team to pull this event together. So Unity is one of the largest federally qualified health centers in the nation. We serve one in eight district residents, and we began as a health care for the homeless nearly 40 years ago.

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Dr. Jessica Henderson Boyd

Today, we still serve more than 7,000 unhoused individuals. We serve 10,000 seniors and more than 20,000 babies and children, all of whom are impacted by heat. And it affects their health outcomes. So we are grateful for this opportunity to be part of the announcement of a heat forecast tool from the CDC, NOAA, that can help our patients and improve public health.

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Dr. Jessica Henderson Boyd

So thank you again for being here today. It's my great honor and pleasure to bring the Deputy Secretary of Commerce, Don Graves to the stage.

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Deputy Secretary of Commerce, Don Graves

Thank you so much, Dr. Boyd, for that wonderful introduction. Good morning, everyone. I am so pleased to be able to join you all to speak about this important work that's being done between our National Oceanic and Atmospheric Administration, where NOAA and the CDC in building this tool, but a broader focus on building a climate ready nation. Thank you, Dr. Spinrad, for all you're doing there.

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Deputy Secretary of Commerce, Don Graves

I'd like to thank Dr. Spinrad and CDC Director Cohen for the work that we're this fantastic partnership, the work that we're doing to help make this event possible, but really to advance the interests of so many millions of Americans. Councilmember Parker, Dr. Bennett, thank you for all that you do to uplift this community, along with Dr. Boyd and the team here at Unity.

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Deputy Secretary of Commerce, Don Graves

Millions of Americans are impacted by extreme heat waves, which are growing in intensity, frequency and duration during climate change. Due to climate change. Last summer, we saw record temperatures across the country, a trend

that's likely to continue in the months ahead. What's more frequent and recurring extreme health event, heat events are costing the United States billions of dollars each year.

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Deputy Secretary of Commerce, Don Graves

This situation is alarming and it requires a whole of government approach to ensure that communities have the support that they need to plan, prepare and to recover from these extreme weather events. Part of NOAA's mission is to understand and predict changes in climate, weather, oceans, coasts. But more importantly, to share that knowledge, that information with others all around the country.

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Deputy Secretary of Commerce, Don Graves

NOAA's National Weather Service has always provided this commitment in its forecast, its warnings. The impact based decision support services for the protection of life and property and enhancement of the national economy. I'm pleased to announce that NOAA is following through on one of these commitments with an expansion of their heat risk tool through the National Weather Service.

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Deputy Secretary of Commerce, Don Graves

We're working hand in hand with the Center for Disease Control and Prevention to provide a new experimental product to assist populations that are most vulnerable to the hazards of extreme heat. This is the perfect example of the federal government working effectively and collaboratively to deliver for the American people. And this work wouldn't have been accomplished without the remarkable, dedicated, talented civil servants that make up NOAA. Their hard work

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Deputy Secretary of Commerce, Don Graves

So often behind the scenes and outside of the limelight is helping to inform, protect and safeguard millions of Americans from the real and increasing danger being posed by extreme heat. And on behalf of the Department of Commerce, I feel proud and grateful to have them at the forefront of these efforts. And with that, I'd like to hand it over to my colleague, CDC director Dr. Mandy Cohen.

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CDC Director Mandy Cohen

Good morning, everyone. I'm Dr. Mandy Cohen, director of the CDC, and it's great to be here at Unity Health Care. It was wonderful to see the services that are provided to this community. It was a great place to host this event. So thank you to everyone at Unity. And I'm glad to be joined by my colleagues at the Department of Commerce, NOAA, and the National Weather Service.

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CDC Director Mandy Cohen

It really is a one team approach to protect health and improve lives and to prepare for what we anticipate will be a very hot summer. Heat is a threat to our health. Heat can make underlying health conditions worse and heat related illness like heat exhaustion and heat stroke can cause serious illness and even lead to death. Heat can be especially dangerous for certain people, including very young kids.

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CDC Director Mandy Cohen

Kids with asthma, older adults, pregnant moms, and people with underlying health conditions like heart disease. Last year, heat related illness caused over 120,000 emergency department visits. So to be prepared this summer CDC has developed a new dashboard that includes the National Weather Service's heat risk map and the EPA Air Now Air Quality index. This dashboard, which you can access at [CDC.gov/heatrisk](https://www.cdc.gov/heatrisk), that's [CDC.gov/heatrisk](https://www.cdc.gov/heatrisk) and that you are now seeing on the screens here gives you a real time heat risk in your area and advice on how to protect your health.

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CDC Director Mandy Cohen

You can put in your zip code and see current heat risk and air quality levels and a seven day heat risk forecast for your area. So you can plan your day and you can plan your week with your health in mind as we get ready for hotter temperatures this summer. Here are a few simple actions you can take

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CDC Director Mandy Cohen

this coming summer. First, stay cool. Plan around high heat risk days. Find indoor locations to stay. Stay cool. Schedule outdoor activities for cooler parts of the day. Second, stay hydrated, drink fluids and replace salts. You lose when you sweat and drink water regularly through the day. And third, stay informed. Use CDC's Health Health Hit dashboard to check the risk levels in your community as you plan.

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CDC Director Mandy Cohen

Because children with asthma, pregnant moms and people with cardiovascular disease are particularly at risk. Today's CDC has new guidance for clinicians like those here at Unity and patients about how to prepare for the hot summer months ahead. Our new guidance has conditions, specific heat action plans to help patients stay well when it's hot. And we're asking clinicians like the ones here at Unity to talk to their patients and families about how to stay well in the coming months.

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CDC Director Mandy Cohen

Help patients understand what risk factors may make heat more dangerous for their help, educate them and protect themselves on hot days, including you using our new CDC heat risk dashboard and make sure that we're making a plan for patients. Develop those action plans for things like identifying a location to stay cool if they don't have working air conditioning, how to recognize worsening symptoms and signs of heat illness, and when to seek medical attention, how their medications may interact with the heat, and how to properly store medications like inhalers when it's hot.

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CDC Director Mandy Cohen

And finally, to talk about the air quality index and how poor air quality that can get worse on hot days may impact health. And steps they can take to improve air quality indoors. So in closing, as we prepare for the hot summer months ahead, we know heat can impact our health. But heat related illness and death are preventable.

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CDC Director Mandy Cohen

That's why today we're releasing a new heat and health tool and guidance to help people take simple steps to stay safe in the heat. And with that, I will now turn it over to our partner and the NOAA administrator, Dr. Spinrad.

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NOAA Administrator Dr. Rick Spinrad

Thank you, Dr. Cohen. And thank you to the whole team here at Unity Health Care at the Brentwood Center. It's a special treat to be able to walk through the facility and see where the real hard work is done with the community. I am Rick Spinrad and I'm the NOAA administrator. Welcome to NOAA's expansion of the experimental National Weather Service heat risk tool, and I extend my gratitude to the many public servants who work around the clock to keep the nation healthy, safe and informed as we enter the start of the summer season.

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NOAA Administrator Dr. Rick Spinrad

A little hard to understand on a cool April morning, but I guarantee you in the months to come you're going to wish it was this cool. NOAA and the National Weather Service stand ready to provide our nation with the best possible information from our researchers to our weather forecasters and communications specialists. We are prepared to help communities through the upcoming summer months with reliable forecasts, warnings and decision support services.

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NOAA Administrator Dr. Rick Spinrad

The question is, are you ready? I want to note that we're approaching the 30th anniversary of the historic and deadly heat wave in Chicago of 1995. Sadly, over 700 lives were lost over a five day period. Temperatures soared to record highs in the Chicago metro area and the second warmest July temperature was recorded at Chicago Midway International Airport at 106 degrees Fahrenheit.

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NOAA Administrator Dr. Rick Spinrad

Nighttime lows were also abnormally high generally in the seventies and lower eighties. We also witnessed three years ago in 2021, an extreme heat wave. I witnessed it at my then home in Oregon, in the Pacific Northwest and throughout the western states. An analysis by the New York Times suggested around 600 excess deaths occurred in late June, early July, across the states of Oregon and Washington.

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NOAA Administrator Dr. Rick Spinrad

In that year and the all time record high temperatures were recorded in Portland, Oregon, and Seattle, Washington, in 2023. Just last year, the Northeast as a whole and the state of Maryland experienced its second warmest year on record. And in fact, Washington, D.C., also had its second warmest year on record. Many of us remember such heat waves throughout our lives and how they may have impacted our communities, marking their anniversaries helps us remember that being prepared means staying prepared.

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NOAA Administrator Dr. Rick Spinrad

So why are we here today? Did you know that extreme heat kills more people in the U.S. today than any other weather hazard? That includes hurricanes, floods, tornadoes. Our friends and colleagues at the Centers for Disease Control and Prevention estimate over 1,200 people die from heat related causes in the U.S. annually. NOAA has had a long standing partnership and relationship with CDC from NOAA and CDC, co-founding the National Integrated Heat Health Information System or NIHHS, as we call it, to collaborating to create the CDC

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NOAA Administrator Dr. Rick Spinrad

Heat and Health Tracker. NOAA and CDC have been working together to address heat health for almost a decade now. In 2024, after several years of collaborative development, the CDC and NOAA's National Weather Service are here to unveil a new nationwide experimental tool, heat risk. The heat risk tool is a science based approach that uses National Weather Service temperature forecasts and CDC heat health data to place extreme heat into a climatological context and identify upcoming heat events that will lead to increased heat health impacts, which is especially useful in providing awareness to more sensitive and vulnerable groups. In the West, where heat, heat risk has been available for almost ten years.

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NOAA Administrator Dr. Rick Spinrad

Partners are using it more and more. Media partners are using heat risk in broadcasts and on their social media channels. Health partners in Marin County, California, are including it in their medical advice. Heat risk is also used in local and state planning, such as Maricopa County, Arizona's Hazard Mitigation plan, and the California Governor's Office of Emergency Services. Schools in the Sacramento area are using it to inform their decisions on outdoor activities.

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NOAA Administrator Dr. Rick Spinrad

The bottom line is heat risk will help people understand what forecast heat means to them and their families. It will provide heat health guidance for decision makers and heat sensitive populations, and it will add the needed context for people to prepare for heat across the contiguous U.S. this summer and for future summers to come. Before I close, I'd like to take a moment to remind you that when it comes to heat, it's never too early to prepare.

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NOAA Administrator Dr. Rick Spinrad

For more on the National Weather Service Heat Safety. Please visit [weather.gov/heat](http://weather.gov/heat) and [heat.gov](http://heat.gov). For more information and tips on how to be prepared. And now it's my pleasure to invite the director of the National Weather Service, Ken Graham, to the podium.

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NWS Director Ken Graham

This is this is incredibly exciting to be here. So thank you, Dr. Spinrad for those remarks. And good morning, everybody. I'm the director of the National Weather Service and really the honor of showcasing the heat tool. So I'm pretty, pretty pumped up about that. Dr. Spinrad already mentioned the fact that the CDC estimates over 1,200 people die from heat related causes in the United States.

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NWS Director Ken Graham

That's more than hurricanes, floods and tornadoes combined. So this awareness is incredibly important for people to see how dangerous heat can be. NOAA's Climate Prediction Center announced in late March that May and June, we're likely to see above average temperatures for much of the United States. So as summer approaches, it's going to be as hot as ever and even more as we get above average.

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NWS Director Ken Graham



So we're watching it really closely. It's a bit too early to have the specifics of that outlook, but the summer months are coming in. Remember, 2023 was the warmest year on record for the globe and the fifth warmest on record for the contiguous United States. And that's part of NOAA's National Centers of Environmental Information. In fact, ten of the warmest years on record have occurred.

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NWS Director Ken Graham

from 2014 on. So numerous studies have indicated heat waves. As you've already heard, heatwaves are getting hotter, longer, more frequent, and you're getting less relief at night. So it's becoming increasingly serious. So I'm so proud to be able to announce the latest efforts. A long standing collaboration between NOAA and the CDC enabled to really look at the experimental heat risk tool that will expand from the Western United States across the entire country, coast to coast.

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NWS Director Ken Graham

So all the hard work and the collaboration is all paying off as we look at this tool. Heat risk is divided into five simple numeric and color based categories for each 24 hour period for the next seven days. It provides the whole spectrum of potential heat related impacts. Heat risk takes a variety of conditions into consideration. This is what goes into it.

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NWS Director Ken Graham

So how above normal temperatures are both the highs and lows at any particular location. Time of the year. Duration of the unusual heat. Is there overnight relief. And if those temperatures are at levels that pose an elevated risk for heat complication based on peer reviewed information, peer reviewed science and heat health thresholds provided by the CDC. All those combine to be able to give us the overall heat risk.

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NWS Director Ken Graham

Heat risk will also complement other established National Weather Service heat related products like heat index. We have those. Wet bulb temperature and our watches, warnings and advisories to provide critical heat guidance to our people and groups potentially most at risk. So now we're going to demo that all you ready for this? This is a probably no drumroll, but I feel like there should be.

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NWS Director Ken Graham

So let's look at the heat risk tool here. So right at the beginning, you can see automatically you look across the country and see areas of concern. In this case with the yellow is some minor impacts, but if you look closely, there are some oranges in there. You can see the orange color there being more of a moderate type of impact.

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NWS Director Ken Graham

If you look at the top left, you can scroll days of the week, Monday. Remember the next seven days, you can scroll through there and be able to click on any one of those to be able to see the information. Really look at the heat for the next seven days. You can get kind of a, you know, a real perspective of the days that you're going to have some of those impacts.

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NWS Director Ken Graham

So let's zoom in. What's really nice about this tool is you can zoom in. I think the Phoenix metro area was kind of interesting. We saw some oranges in South Florida, Phoenix Metro, We saw that in Death Valley and also in Southern California. So when you zoom in, you can actually see more information about that forecast and see the areas of concern.

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NWS Director Ken Graham

And even from that, you can scroll across the days of the week and you'll see, you know, popping up there. What's the information as we go through that, the days of the week there are see it change. So you can follow the heat as it transposes across the country. You can follow areas where it's getting maybe worse, getting better.

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NWS Director Ken Graham

You can see some of those trends as you scroll in there. So let's go to today a zoom into the Phoenix area and there's there's questions about some of the urban areas. And taking that into account, the National Weather Service actually forecast for very small areas. One kilometer grids to get some real detailed information about some of these areas.

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NWS Director Ken Graham

So look at the Phoenix metropolitan area. As you scroll in there, you see different parts of the valley there that could be impacted by heat. So think about the decision making going forward. If you can see areas that have minor and throughout the summer season, you get into major and extreme, you can make decisions based on that. So if you see an extreme or you can see an area of major, you might change the day you work on something.

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NWS Director Ken Graham

A construction project or a Department of Transportation may change things to say, Well, you know what, we're not going to work on Monday. We may postpone this to a later day when the heat risk is less. So, so much information here. You can you can see. So I encourage everybody to really go through that and play with the tool at the top of the website.

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NWS Director Ken Graham

You'll see some other information about an overview, like what is heat risk. You can see information about definitions, some of the definitions that we have associated with this as well. And the other part of this is we have the website in Spanish. So if you're able to get information in Spanish across the board, which I think that's going to be really important.

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NWS Director Ken Graham

So I don't know if there's any Spanish media listening, but I had a couple of things put us up to in our information in Espanol Sobre El Calata and Tony says, You say esta heat risk tool por maintenance, they're seguro esta verano. So it's really important that we get the information out to everybody in these, these communities. So please use the tool, you know, kind of experiment with it, get comfortable with it, and you be able to see that information clearly.

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NWS Director Ken Graham

So I'm going to wrap up with this. We are. I want to thank the team, also the CDC and the Western regions developers were able to really come together to be able to develop this tool together and to be able to see that I think is a key initiative in the weather service as we transform our agency. This is true government innovation, saving lives and super, super proud of this.

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NWS Director Ken Graham

So I want to introduce Dr. Aaron Bernstein to the podium now.

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CDC Dr. Ari Bernstein

Good morning, everyone. Delighted to be with you all today. And I want to extend my personal thanks to the Unity Clinic, our colleagues at NOAA, my director, Mandy Cohen. And I'm here to just go in a bit more detail about what we at CDC are releasing today and how we see this as a real watershed for our ability to achieve our mission at CDC, which is to protect health and improve lives.

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CDC Dr. Ari Bernstein

Let me start by saying we want everyone in this country to enjoy the warmer months. I, as a pediatrician, know important it is for children to be outside and warm months. And I think what we're doing today is really empowering that. And it's also giving us knowledge so that we can use to take steps to protect our health if we need to.

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CDC Dr. Ari Bernstein

You've heard about the heat risk tool that is a cornerstone of what we need. So for the first time, we'll be able to know how hot is too hot for health and not just today, but for the coming weeks. So what does that mean? That means individuals can look at the heat risk forecast and make decisions about what they need to do.

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CDC Dr. Ari Bernstein

That means when an individual comes into a clinic like this one and they're meeting with their provider in advance of warm months, not unlike today, they can have a conversation about, okay, we know it's going to be hot out. We've heard this summer's coming. What are the steps I can take that will meet my unique circumstances to keep me safe when it gets hot out?

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CDC Dr. Ari Bernstein

So we're being prepared, folks. We're taking the steps in advance. And lastly, we really need to make sure that this information is simple and accessible. And so that's why we have made a dashboard. CDC has made a dashboard. Dr. Cohen alluded to it. It's at [CDC.gov/heatrisk](https://www.cdc.gov/heatrisk). And there you can type in your zip code and that will pull up your heat risk forecast for the week.

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CDC Dr. Ari Bernstein

And if the heat risk level is elevated, it will give you steps that you can choose to take, to take steps that will protect health. I want to underscore that these tools are for providers and patients, but they're also critical, I think, for those who are charged with protecting public health. And I want to acknowledge Dr. Bennett here.

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CDC Dr. Ari Bernstein

These are tools we hope that can be used by our health departments to make preparedness plans. We also see opportunities for people, regardless of where they are, to use these tools to protect their health. I mentioned I'm a pediatrician. I have seen how heat matters to health and development of children. And I can plainly see how tools like these can be helpful to improving the lives of children and family in this country.

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CDC Dr. Ari Bernstein

And I see today as transformative in the work we are announcing as a major step forward. To that end. Thanks very much. And I will turn it back to Lori. Thank you.

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Lori Arguelles

Thank you, Dr. Bernstein, and to all of our speakers. That concludes our formal remarks. And we'll now move to the Q&A portion of the event. When I call on your name, please state who you are, what your news outlet is, and who you are directing your question to. Let me invite Dr. Cohen and Director Graham to come up to the front.

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Lori Arguelles

I will take questions from reporters in the room first, and then we'll go to questions from the Zoom participants. Let me just remind you that if you are on Zoom, you may ask a question by raising your hand under the reactions tab and we will call on you. And in the great tradition of Helen Thomas. Seth Borenstein, I will call on you first.

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Lori Arguelles

Who is your question directed to you?

Seth Borenstein, AP

Thank you. Actually, I have one for each doctor, Graham and Dr. Cohen. First for actually and one for both of you. You both presented it as NOAA's or CDC's who actually is going to be producing this. So, I mean, is it being done out of Atlanta or is it being done out of suburban DC here?

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Seth Borenstein, AP

And then more importantly for Dr. Cohen, you mentioned how Maricopa County has been doing. Has been a leader here and how they've been using this, and yet they had more than 600 deaths last year. Is there a amount of heat deaths that given temperatures, given population that we will just can't get below? Or is this a problem that you can even reduce further?

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Seth Borenstein, AP

And then for Dr. Graham, you have, as you pointed out, wet bulb index. You have heat index, the universal thermal stress indicator. Why do you need another one? And is this something that is sort of feeling based or is there actual like the hurricane center that you used to run? Are there actual guidelines where it goes over 120 miles an hour and then we go to magenta?

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Lori Arguelles

Okay. That's more than one. Yes, it is. Let's begin with Dr. Cohen.

CDC Director Mandy Cohen

Sure. Thank you for those questions. So first, this has been a great collaboration using the underlying weather data. But then we feed in importantly into this overall algorithm some of the the important health impacts of different heat. So 92 degrees in Miami is not the same as 90 degrees in Portland, Maine.

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CDC Director Mandy Cohen

So understanding how that all fits together, the humidity in the air, not just the temperature. I think so. It gives you a more complete picture of what heat might mean for you. Importantly, what the CDC tool does is layer on the important health guidance that we would like folks to take the additional steps you can take to protect yourself.

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CDC Director Mandy Cohen

So while we do have two tools, different audience is we tried to put our tool together on the CDC side to make it super easy for individuals to both see the color or the level of heat risk for the day of for the week. And then also right there have very actionable, simple things that folks can do to protect themselves.

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CDC Director Mandy Cohen

I mentioned them before. Right. First of all, stay cool. If you can stay cool at home, fine. But if not, find some place where you can be cool. Change when you're going to be doing activities to cooler parts of the day. Again, we want folks to enjoy the outdoors. This is not a tool to say stay indoors. It's saying do things safely and here's how to stay hydrated and stay informed.

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CDC Director Mandy Cohen

So that's how we're thinking about it. And again, the larger tool that we were that we worked on with NOAA also helps our state and local health departments and emergency management folks to prepare to decide when should we be opening cooling stations, where when can we do be doing so? Folks like in Maricopa County can now have not just what is happening that day, what's happening that we can get ahead of things.

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CDC Director Mandy Cohen

I do think there's more we can do to impact this. It's exactly why we're putting out these additional tools so we can get ahead of these hot winter months, winter hot summer months that are coming here and so that we can all stay, stay safer. And I'm grateful that partnership and I'll turn it over to my colleagues.

00:37:59:13 - 00:38:22:23

NWS Director Ken Graham

I got to admit, Seth, it's weird hearing questions for you that aren't hurricane related. You and I go way back. So I appreciate the multitude of questions there. You know, it's our product. How wonderful is that? You think about, you know, it's a NOAA product, it's a CDC product. It's something that, you know, the public can look at it and see that it's a government wide effort to be able to do something good to save lives for for for the people across the country.

00:38:22:23 - 00:38:40:29

NWS Director Ken Graham

And I think that we have to be incredibly proud of being able to do that. So and for us, it's you know, you go to [www.wpc.ncep.noaa.gov/heatrisk/](http://www.wpc.ncep.noaa.gov/heatrisk/). I'll fix that. Give me some time. So experimental. We're just starting this thing, so give me some time on that one.

00:38:41:06 - 00:38:56:16

NWS Director Ken Graham

But you think about going to that and having a place to go to be able to simplify things. Your words. I mean, I, I even wrote some of them down. It's kind of interesting. We have wet bulb globe temperature, you know, And what is that? That's the heat stress and the daylight hours. Right? We always talk about the shade.

00:38:56:20 - 00:39:17:07

NWS Director Ken Graham

It's another way to be able to show what it's like in sunlight. We have dew point, humidity, wind, sun angle, clouds, heat index. Right. You get the point, just your words. This is a way to simplify that. That's what we want to do. Same as what we did at the National Hurricane Center. You got to be able to simplify the stuff so the people actually want to look at it first of all, and most importantly, understand it.

00:39:17:09 - 00:39:33:26

NWS Director Ken Graham

That's key. If they don't understand it, they're not going to be able to do anything and take some sort of precautions. So this is a way to simplify things. You see colors, you look at the color scheme and the thresholds that you mentioned in your in your question. Yes. When those thresholds are across the specifics or within the programming, it's simple.

00:39:33:26 - 00:39:51:20

NWS Director Ken Graham

You just look at the color and you look at extreme and it gives you information combined with the meteorology could bind with climatology time of the year. But then the CDC information, as I was, I talked about the peer reviewed science combining all of those that totals in the heat risk. That's simple and I think people can take action on that.

00:39:51:22 - 00:40:15:01

Zahra Hirjs, Bloomberg News

Zahra Hirjs here from bloomberg news. I have a question one for each of you. First, can you start by expanding on the history of this tool because it sounds like it has been around in the West, was it for seven days or is this even beyond what existed? And then when it's your chance again, Dr. Cohen, you mentioned how there's these new expanded guidances for certain special populations, like pregnant people and children with asthma.

00:40:15:01 - 00:40:35:03

NWS Director Ken Graham

So to talk a little bit about that and how clinicians or patients can use that in their particular risks, the kind of a wonderful history because you can actually think of it as it's a grassroots effort, a really ground up effort. It's starting in California looking at Cal Emergency Management office in the state thinking we've got to do something different.

00:40:35:05 - 00:40:58:09

NWS Director Ken Graham



You know, we look at the fatalities, we look at what's happening with risk, with heat. So the California Emergency Management working with our western region headquarters of the National Weather Service, thought we've got to do something different. And they did. So as a result, we started working with our offices in the western United States on there's got to be a better way to represent this and then bringing the CDC into it and started to develop some experimental tool on the West.

00:40:58:12 - 00:41:15:15

NWS Director Ken Graham

Well, then it got popular. People really liked it. And it was a simple way to be able to see this information. And as a result, the weather services like both of us, Right. The CDC is like, let's let's expand this nationwide. So that's really the history. It was really a grassroots effort of, you know, we have to do something different.

00:41:15:15 - 00:41:38:06

NWS Director Ken Graham

These summers are hotter. We're setting records. We're seeing people more impacted by this. Let's work together to be able to do that, to see that expand from those experiments. It looks so good to see that expand from coast to coast. It's just that's why today's such a big deal. That is a historic day. Yep. Thank you.

CDC Director Mandy Cohen

I'll start off, but I'm going to call Dr. Bernstein back up to talk about some of the clinical guidelines.

00:41:38:06 - 00:42:00:08

CDC Director Mandy Cohen

But first, I wanted to thank our partners at Harsa. I know you're seeing NOAA and CDC here, but Harsa, who are folks that support community health centers like this one here at Unity, have been a great partner in this, as we've been thinking about populations that are really impacted most by by heat, as you were mentioning, some of them pregnant moms, kids with asthma, folks with heart disease.

00:42:00:10 - 00:42:28:06

CDC Director Mandy Cohen

And we have particular tailored guidance, guidance to those populations. And in particular, we've been working with federally qualified health centers and clinicians to roll out that guidance in these in the health centers and with these populations so that folks can get prepared Now, start now ahead of summer, get ready. We have different kinds of guides that allow clinicians to go through with their patient, ask them some questions with the acronym chill out, and so ask them.

00:42:28:08 - 00:42:48:22

CDC Director Mandy Cohen

And so a reminder is about how they can ask some questions and tailor things, particularly around medication. We often forget about the impact that health can have on the medication stability themselves, how you want to take that. So again, tailoring that we have particular materials that are targeted to our clinicians so it reminds them what to go through and for for patients.

00:42:48:22 - 00:43:21:21

CDC Director Mandy Cohen

So that they can walk themselves through it as well. Dr. Bernstein, anything you'd like to add?

CDC Dr. Ari Bernstein

Thanks. Dr. Cohen. I want to underscore one additional point is we do have materials that are focused on providers, and we have materials that are focused to be delivered to patients. Those include, as Dr. Cohen mentioned, specific information about medications. So if you have heart disease, we know that some of the medications that are commonly used in heart disease may increase risk of harm on particularly hot days.

00:43:21:23 - 00:43:40:15

CDC Dr. Ari Bernstein

And then we use that as a basis of a conversation to say, okay, it doesn't mean stop taking your medications. We're very clear that people are on medications for a reason and we want to make sure that people are aware that those medications may affect their ability to stay safe and which may mean they need to take a few extra steps more than others.

00:43:40:17 - 00:43:57:29

CDC Dr. Ari Bernstein

I think it's also important, Doctor Cohen concluded, We have in our asthma guidance, there are many teens who have asthma. And, you know, teens are, as anyone who has a teenager at home, we know they're their own people. And so we wanted to create information that is really geared towards them being empowered to taking the steps they need to take safe.

00:43:58:01 - 00:44:23:00

CDC Dr. Ari Bernstein

And I think the overarching key message here is that we're trying or doing our best to create choices for people, given their unique circumstances, to stay protected on hot days. Right. So we recognize that people have different health conditions, they have different medications. They may have differential access to air conditioning, their ability to afford air conditioning. And that's really where we're focused on in this guidance.

00:44:23:02 - 00:44:44:26

Eric Niiler, Wall Street Journal

Hi, Eric Niiler with The Wall Street Journal for Ken Graham. I'm just curious. Most of us or many of us get our information about heat waves from local radio, television and, of course, our smartphones with apps that pop up. How is this tool going to change the products that you put out, like heat advisory? You know, that's been around for a while.

00:44:44:26 - 00:45:07:16

Eric Niiler, Wall Street Journal

I see heat advisories. How will this new sort of batch of information change the kind of products and the kind of information that the weather Service is putting out coming this summer?

NWS Director Ken Graham

Yeah, a couple of ways. It's exciting. The fact that, you know, you think about the heat risk tool and how it combines, you know, the actual impacts of the heat and the social science of the heat.

00:45:07:17 - 00:45:26:27

NWS Director Ken Graham

We already know, as we've heard today, heat in Miami, heat in Phoenix is could have different impacts and then heat in Seattle for different parameters meteorologically, but it's the social science part of it that that comes in here. So it's one of these things that, you know, we'll look at the heat risk tool, we'll start looking at what that comes up with and see if there's any adjustments to it.

00:45:26:27 - 00:45:49:13

NWS Director Ken Graham

But yeah, it could fuel ways that we issue some of those products and that's exciting because you want as much science in there as possible to be able to do that. And the comment about television, radio stations, the Weather Service being in, you know, 164 locations across the country, we're right there in those vulnerable communities. We're working with those emergency managers and the public health officials in those local communities to be able to share the tool.

00:45:49:15 - 00:46:14:22

NWS Director Ken Graham

So across the country, you're going to see and actually this afternoon is a big webinar, a public webinar on the heat risk tool. And then we'll be doing further webinars for our employees across the whole agency. So you're going to see a massive training effort over the next few months across the country with those local officials. That's a pretty big deal and I suspect you'll see other offices across the country being able to look at the tool to be able to fuel some of the communication and also some of the products.

00:46:14:23 - 00:46:36:09

NWS Director Ken Graham

So very exciting to be able to see the combination of all this. Yeah, I think we have another question in the back.

Veronica Johnson, 7 News in Washington

Director Graham, Veronica Johnson, seven News in Washington. So first of all, as a broadcast meteorologist, I'm so happy to see this tool finally after years of working in the business. So kudos to everyone who's worked on this.

00:46:36:11 - 00:46:57:05

Veronica Johnson, 7 News in Washington

My question is, we have severe thunderstorm warnings. We have tornado warnings, we have flood warnings, flash flood warnings. We have all these warnings that go out which get to us where we are. It reaches us where we are on our phones or on our devices or on TV. How is this? Because it's the number one killer, as we know.

00:46:57:07 - 00:47:16:27

Veronica Johnson, 7 News in Washington

How will this get pushed to everyone?

NWS Director Ken Graham

Exactly. Veronica, nice seeing you again, by the way. And no, I think I think once you start to think seeing, you know, the heat risk reached the thresholds like that, the red and the magenta type of colors, you're going to see, you're going to see quite a bit of communication associated. So we're going to count on our partners and emergency management to open shelters.

00:47:17:00 - 00:47:37:03

NWS Director Ken Graham

We're going to depend on media, television and radio to really help us be able to communicate that information across. So right now, unlike a tornado warning, you know that that's something that that we send to the actual phones to to alert them. This is such a long, prolonged event. We're going to have to look at ways to to really highlight our websites, maybe communicate on social media.

00:47:37:03 - 00:47:55:16

NWS Director Ken Graham

We're seeing the social media reach just ever increasing across the country as well. It continues to grow. So I think right now, I mean, we have not considered, you know, setting off an alert like a tornado warning because it's so short fuzed. So we're trying to think of ways to be able to better communicate for you of our websites.

00:47:55:16 - 00:48:13:07

NWS Director Ken Graham

But we're going to count. We've got to count on our partners in this one. So we're going to have to count on television stations. And, you know, across the country, we have these the meetings, though, you know, the meetings with the weather service, the media, the emergency managers, that's a prime place to be able to talk how to better communicate this type of information.

00:48:13:09 - 00:48:38:00

NWS Director Ken Graham

I'm not sure here. But so how will hospitals get the information? Is enough to each individual hospital on their own. You know, which is something that. Yes, you know, most most of across the country, we have the the hospital system, the emergency managers and hospital officials on our calls. So we actually do briefings across the country to our to our partners.

00:48:38:07 - 00:48:57:19

NWS Director Ken Graham

And as a result, they'll get the information there from our offices, the weather forecast offices across the country so it'll be briefed into those. In fact, I just met with emergency managers in Georgia. I gave a keynote speech last week. There were some hospital officials there. We actually talked about this. So they look forward to that being in the emails from our offices.

00:48:57:19 - 00:49:18:11

NWS Director Ken Graham

And we also have ways, something called chat, as you're familiar with. So if we think about our slack chat, there'll be ways to be able to to put information there, including a link to the website to say, Everybody, this is what's happening. And that reaches just almost every emergency manager, hospital officials and others on that chat to be able to say, here's the link, please help communicate this.

00:49:18:11 - 00:49:41:06

NWS Director Ken Graham

So there's ways that we can get that out to the people that need it the most. Yeah. Thank you.

Ariel Wittenberg, E&E news

You might want to stay up there. Hi. Sorry. My name is Ariel Wittenberg. I'm a reporter with E&E news, and I just wanted to just nail down a little further how the heat risk in this tool compares to or dovetails with the heat advisories.

00:49:41:06 - 00:50:03:12

Ariel Wittenberg, E&E news

The heat warnings, because, you know, I've seen research in the past about how hospitalizations, you know, don't necessarily dovetail with heat warnings. And depending on the location of course, I mean, so I wasn't clear if that research is what's in the heat risk or if it's how this is all comparing.

NWS Director Ken Graham

I think the difference here and I'll let the CDC speak to it as well.

00:50:03:12 - 00:50:27:04

NWS Director Ken Graham

The difference here is, you know, you look at the meteorological parameters that that, you know, of course, we can adjust that geographically when that kicks into gear. I mean, you can see a situation where you could get that heat advisory. But to be able to combine that with health information, right, to combine that with known health information, that that takes us to another level, that takes it to historically, where do we see fatalities historically?

00:50:27:04 - 00:50:49:06

NWS Director Ken Graham

Where do we see, you know, really impacts to those most vulnerable across the country? And I think that combination of the two really makes the heat risk that much better. Right. And I think you'll see as we go what time you'll see the heat advisories issue. But I have I have a feeling, you know, you start looking at it and how we could maybe look at some of those criteria across the country, looking at some of our experts here.

00:50:49:08 - 00:51:10:28

NWS Director Ken Graham

You know, I think this is a situation that I get excited about this, to combine it with the science of of those impacts that makes this the best tool possible. So we will see some heat advisories issued. But I think with time you'll start seeing those combined together, especially with our messaging when we get out to the media and get that to the emergency managers, it's pretty close.

00:51:11:01 - 00:51:43:27

CDC Dr. Ari Bernstein

Thanks, Ken, and nice to see you Ariel. I just would underscore one piece, which is that what I think heat risk, unique and powerful, is that we see when you look across the country and commute across the country, different relationships between a specific temperature and what we see showing up in the emergency department. To your point, sometimes there may be a heat alert where we don't see a lot of health burden, but heat risk is explicit, at least specifically designed to look at that relationship in these localities.

00:51:43:27 - 00:52:13:20

CDC Dr. Ari Bernstein

So when we see a heat risk of yellow, orange, red or magenta, that record that reflects an incremental increase in the actual health burden we have seen historically in that place. And so we have validated this. And I want to acknowledge Dr. "Rish" Vaidyanathan here from CDC, who has been at the forefront of this work for many years. Rish and others on the team have really worked to make sure that when we see these elevated levels, they really do reflect what we have seen historically.

00:52:13:20 - 00:52:35:17

CDC Dr. Ari Bernstein

And we've also looked prospective, you know, in real time now to see that when we see these elevated risks, we do in fact see increased health outcomes with them. And I think that's that's really critical advance here. Thanks.

NWS Director Ken Graham

I think just add one last thing. You notice we're calling it experimental, but that's important. So we're really going to get comments.

00:52:35:19 - 00:52:53:29

NWS Director Ken Graham

So we're going to get comments from, you know, we can interact again like we have with the CDC, comments from our offices, the weather forecast offices, comments from the public, comments from health officials to really get that feedback back to us to say, all right, is there anything else that we need to adjust going forward, the communication with these criteria as well?

00:52:53:29 - 00:53:14:17

NWS Director Ken Graham

So that's why we're putting it in there. So I look forward to seeing some of the comments as we go through the summer and see what kind of adjustments we have to make.

Lori Arguelles

Do we have any other questions in the room? Okay. If not, then we'll go to folks online and my colleague Mike Musher will help manage those questions from our Zoom participants.

00:53:14:19 - 00:53:36:19

Lori Arguelles

Once again, to ask a question, please use the raise hand feature under the Reactions tab. Mike, who's up first online?

Mike Musher

All right. Yeah. Thank you, Laurie. And just when you're called upon, please unmute yourself tell us your question and who it's directed to and we're going to go to with weather boy, Michael Phillips.

00:53:36:20 - 00:54:22:20

Mike Musher

Go ahead.

Michael Phillips, Weatherboy

Hi. My question is for Director Graham. And then you talked about the new social science used to develop this new heat risk map. Is there any insights, leverage from this exercise that you're applying to possible changes to the existing heat products you wish you would there be changes to the colors or the terms or the definitions or criteria for the other heat related products that the Weather Service uses and it seems like a really simplified direct messaging and any lessons to be learned or apply to other weather Service products like the Storm Prediction centers, convective outlook.

00:54:22:20 - 00:54:46:11

Michael Phillips, Weatherboy

Do you see using these colors and terms elsewhere beyond heat?

NWS Director Ken Graham

Well, one big effort, as you know about is we've been working real hard for our warning simplification, really trying to make things easier, less or fewer terms. And there's so much terminology out there historically and so many different colors. So we are looking at, you know, how do we use social science to to better be able to communicate this information?

00:54:46:11 - 00:55:07:19

NWS Director Ken Graham

And it's got to be simple, right? It has to be simple. You got to design things not for the meteorologists, You got to design things for somebody that's looking at that information to make a really tough decision, whether it's opening a shelter or changes in and construction or road construction department transportation type of adjustments. So we are looking at this as an experimental tool to see get those comments back.

00:55:07:19 - 00:55:29:20

NWS Director Ken Graham

But we are continuing our effort and the weather Service to be able to simplify those colors, simplify the warnings, and that will take root across everything. The other part of it is I wanted to mention this as well. I think this is important. I talked about our, you know, the Weather Service employees across the country in these communities are vulnerable communities, and not everybody gets impacted by heat the same, right.



00:55:29:20 - 00:55:54:01

NWS Director Ken Graham

There's you get urban communities, you get those in areas with urban heat island, those are disproportionately impacted by these heat events. So we have to be able to get information to them. So as part of, you know, really looking at the transformation of the weather Service going forward and being in a more locations, more locations in these vulnerable communities and working across the NOAA line offices to be more environmental forecast offices.

00:55:54:01 - 00:56:15:22

NWS Director Ken Graham

Right. Looking at across the board what impacts people and being able to provide that information right on the front lines where people are are most vulnerable. So that's a little bit more than you wanted with the answer to that. But I think it's important to be able to talk about that as being in these vulnerable communities with the people that understand that working with those that are closest to the community, the churches.

00:56:15:24 - 00:56:36:03

NWS Director Ken Graham

Right. The schools, the hospitals, working with those that are really in tune and trusted in that community, that's what we're really trying to advance and grow with this. So watch to tune in right? So if this is experimental, you could see how this might lead the way. We've got an incredible team over here leading the effort and we'll see how that leads the way for some of our other products as well.

00:56:36:03 - 00:56:59:07

NWS Director Ken Graham

So thank you for that question.

Lori Arguelles

So I just want to note that Dr. Cohen has to leave shortly. So if there are any other questions either in the room or potentially online for her speak now or for at least a little while, hold your peace. Any other questions in the room? Okay, Mike, let me turn it back over to you to see what's happening online.

00:56:59:10 - 00:57:28:09

Mike Musher

Okay, Laurie, this is just a reminder, everyone online, I think we've got about 60 to 70 of you. If you have any questions, please use the Raise the Hands feature. And right now I'm not seeing too many hands raised. Last call for any questions for our great speakers here today.

Lori Arguelles

Okay. Well done, team. You answered all the questions already and thank you to those of us who joined online.

00:57:28:12 - 00:58:01:11

Lori Arguelles

I just wanted to see if Dr. Boyd had anything from a practitioner's perspective that she wanted to add to the equation. As you have heard some of these questions, is there anything that you'd like to add?

Dr. Jessica Henderson Boyd

Sure. I would love to add just the amazing innovation and collaboration and what it will do to us on the front lines to be able to see at a glance when my patients who have asthma would be at risk and how to adjust their regimens or give them some advice or some tips about how they can manage it, it's really helpful.

00:58:01:11 - 00:58:26:15

Dr. Jessica Henderson Boyd

So I enjoy tools like the Heat advisory, but having the actual information about how it affects health burden specific, the locality in which we're working is just really critical. So I'm really grateful for the work and the collaboration.

Lori Arguelles

And on that note of collaboration, I think we've all come to closure. I will just make a couple of notes if you would like to do one on one interviews, although Dr. Cohen had to leave.

00:58:26:15 - 00:58:59:09

Lori Arguelles

Dr. Bernstein is still here. My colleague Kathleen Connolly with CDC will be happy to arrange interviews there if you need to speak one on one with either Dr. Spin Rad or Ken Graham, please let me know. And if you need any other information, you can email our public affairs specialists at [nws.pa@noaa.gov](mailto:nws.pa@noaa.gov) or you can call them at 301-427-9000.

00:58:59:12 - 00:59:23:06

Lori Arguelles

I believe that Dr. Boyd has been kind enough to offer tours of the facility to any members of the media who would like to tour the facility and potentially speak with a couple of patients. So for that, Dr. Boyd and her team will be happy to accommodate you. And with that, we come to closure. Thank you all for your time and attention today, and we look forward to having heat risk.

00:59:23:06 - 00:59:57:09

Lori Arguelles

Be a great tool that everybody uses as we go forward. Thank you.

[INSERT TEXT HERE]

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