[Transcript] The Daily / A New Threat: Surprise Hurricanes

This podcast is supported by Netflix's new film, Pain Hustlers.

Inspired by a true story and set against the backdrop of the pharmaceutical industry, Pain Hustlers is a bold, sharp and revealing look at what some people do out of desperation and others do out of greed.

Starring Emily Blunt, Chris Evans, Catherine O'Hara, J. DuPlas, Brian Darcy, and Andy Garcia. Don't miss this wild, raw and unexpected take on the intoxication of the American dream. Pain Hustlers, now playing only on Netflix. Rated R.

From New York Times, I'm Michael Balorro. This is A Daily.

Today, Hurricane Otis, which killed more than two dozen people in southern Mexico this week, has revealed a new kind of threat that meteorologists fear will become more and more common. A severe hurricane that arrives with shockingly little warning or time to prepare. My colleague, Judson Jones, explains.

It's Friday, October 27th.

Judson, we're coming to you because you are a meteorologist on the staff of The Times, which is a pretty new development, I have to think, because I didn't actually know that The Times had a meteorologist on our staff.

So I came on about a year ago, last Halloween, and it all came about because The Times wanted to develop an extreme weather team. We often say extreme weather is the fingerprint of climate change. So a lot of times, it's the evidence that the world is changing. And so by bringing on a meteorologist and a data journalism team, my team is responsible for diving into the data of these extremes. Got it. So the reality that climate change and extreme weather are deeply interwoven is why you are at The Times. Absolutely. Well, let's turn to the reason we're talking to you right now, which is an extreme weather event that happened just a couple of days ago, Hurricane Otis, and why it felt so different to those of us watching it than most hurricanes. What made Otis so remarkable and scary was that it rapidly intensified from a tropical storm Tuesday morning to a Category 5 hurricane by nightfall. Basically, it went from your run-of-the-mill storm to the most terrifying, powerful, destructive kind of hurricane in less than 24 hours. Yeah. I mean, it was the ultimate nightmare scenario. So tell us the full story of Otis from the beginning, from your perspective, as somebody watching it. Well, in full transparency, on Wednesday morning, I woke up and went, what happened? Like, normally, we have a lot of lead-up time to hurricanes, right? Like, we're tracking them across the Atlantic Ocean or tracking them across the Pacific Ocean. You can see them coming. It gives the forecast models time to initialize and give different results over a couple of days. So there's this chance to kind of understand that the storm is coming here. This storm. Otis is new to the scene in the Eastern Pacific. This is a tropical storm. Formed on Sunday. It was 40 miles per hour. Otis is pushing its way towards Acapulco. So we're going to see some very heavy rain around the southwest of Mexico. On Monday, it was 50 miles per hour. The forecast models weren't really showing it intensifying at all. Tropical storm. Otis continues to spin in the Eastern Pacific. Wednesday morning, it was still a tropical storm. So around 50 miles per hour. But by midday, it was 80 miles per hour. It was a category one hurricane strength. It started to look even more like a hurricane on satellite, which kind of gives an indication that it's intensifying. An eye started to form. Now let's talk about this one in the Pacific. This thing just jumped up just to a category three. And then that afternoon, hurricane hunters flew through the eye twice and found that it was actually a category four strength hurricane.

Now we go to a potentially dangerous situation developing in Mexico. A rapidly intensifying hurricane is making its way toward the resort community of Acapulco. And then later that night, all of a sudden it was 165 miles per hour. The strongest storm that has ever hit the west coast of Mexico. So every hour or every two hours, this thing is becoming like an entire order of magnitude

bigger. And that's just not you're saying normal. You know, it's one of the fastest strengthening storms we've ever experienced. It is beyond the definition of rapid intensification. The typical definition is 35 miles per hour in 24 hours. This one went above 100 miles per hour in 24 hours. Like it jumped from a tropical storm to a category five. I mean, it's just unheard of.

It's remarkable in meteorology terms. Okay. So when this very anomalously

intensifying storm arrives on the western coast of Mexico as a category five storm, describe for us what happens given the fact that from everything you're saying, there hasn't been very much time at all to prepare.

The winds came in howling. I mean, they were ripping off palm leaves and you can see it in video before all the power cut off. Then all of a sudden, you know, these these tourists and the residents, they're nearly a million people live in the city had broken shattered windows. The sides of buildings were starting to rip off. You know, you can see the rain coming into people's bedrooms, you know, where they're trying to sleep. I mean, this came in normally when people would be sleeping. Right. I think I remember 1 a.m. local time or so. Yeah. I mean, you just imagine like you think you're just going to sleep through the storm and then all of a sudden the windows are just being shattered.

And by the time the sun came up, you know, cell towers were down. Internet was down. It was really difficult to find out what was going on on the ground. But we know now that the damage was extensive. Twenty seven people have died and more are still missing,

which really would seem to highlight the problem of rapid intensification.

You don't have time to evacuate people and therefore more people die.

Yeah. In this modern age where you expect forecast and people to be able to evacuate,

we never want to see anyone die in the storms as meteorologists.

Like that's why we forecast it's to save lives. And so it just goes back to

the ferociousness of this storm. Just how unusual is Hurricane Otis,

given everything you've just described, which makes it feel very unusual?

Not as unusual as we hope. I'm afraid that we're going to see this happen more frequently.

You know, studies are showing that rapid intensification is happening more often.

I think that's the future we need to prepare for.

We'll be right back.

This podcast is supported by Netflix's Pain Hustlers.

Dreaming of a better life for her and her young daughter,

Liza Drake, played by Emily Blunt, lands a job from Pete Brenner,

played by Chris Evans, at a struggling pharmaceutical startup.

There, Liza's charm, drive and guts catapult her and the company to economic success,

but also put them on a morally dubious path that leads to the center of a criminal

conspiracy with dire consequences. Pain hustlers, now playing only on Netflix.

Rated R

This is Kevin Roos. I'm a tech columnist at The New York Times.

My job is not just to do glorified tech support. It's to talk to the people who are actually making the decisions that govern our digital lives, like interviewing the CEO of YouTube about how they're trying to deal with their extremism problem, or talking to Mark Zuckerberg about free speech on the internet. I'm trying to talk to the people who make the rules that we all live by, and the people on the other side who are affected by those rules. And this is what all of my colleagues at The New York Times are doing. We're trying to distill all of this complexity into something that people can understand. Subscribers support all of this work, so please join us and subscribe to The New York Times. You can do that at nytimes.com slash subscribe. Justin, what is the evidence that storms like odys, that intensify in what feels like lightning speed with so little warning, are now becoming more common, and are not as unusual as you would like them to be? It's one of the things that you can actually attribute to climate change a little bit. There are studies that have shown that typhoons and cyclones, which are just hurricanes in another ocean basin, that they're rapidly intensifying more frequently. Even a study just a couple weeks ago that focused specifically on hurricanes in the Atlantic showed that in a warming world, rapid intensification is twice as likely to happen. So essentially, the thing that tells us that this is becoming more common is people studying old storms and saying there's no denying this reality. Yeah, I mean, even the storms I've covered over the last decade kind of used to feel like something we would occasionally say, like this storm is going to rapidly intensify, or that storm just rapidly intensified, and now it almost feels like every storm we cover, it's just another indication. Right. And I want you to just mechanically explain why this intensification is happening. Clearly, the main driving factor is warming water temperatures, but I want you to just remind us how that works and how a warmer body of water means that a small storm is becoming a massive destructive storm so quickly. Well, to have a hurricane, you need to have warm water. It has to be 80 degrees Fahrenheit or higher to really give it the energy that it needs, right? So think of a hurricane as like an engine and that energy, that warm water is the fuel that's fueling the hurricane. Typically, you know, these storms that they sit over an ocean in an area for a long period of time, they continue to pull that energy up into the hurricane, but down below, colder water starts upwelling. So that hurricane is pulling colder water that's replacing that warm water. But what we're seeing in this warming world is that it's not just the ocean surface temperatures that are warming, the column of water is warming. So instead of pooling colder water up into the hurricane, it's upwelling warmer water that is again above 80 degrees, which gives more energy to the storm. So instead of a hurricane just kind of petering out because it's lost that fuel, instead, it's pulling more energy into that storm. That's fascinating. So when there's more and more fuel in the ocean for the hurricane, the chances of it speeding up become higher and higher, the chances of it petering out becomes smaller and smaller. Yeah, that's exactly right. So if you're a meteorologist, which you are, how does this new reality of there being so much warm water fuel for these storms to intensify, how does that change your role in warning people about these dangerous storms?

[Transcript] The Daily / A New Threat: Surprise Hurricanes

It's almost like we turned back the clock a little bit on forecasting. We've come a long way in meteorology. If you think back to the Great Galveston Hurricane in 1900, they didn't have warning. And then the satellite era came and all of a sudden we could see these storms in the Atlantic and we knew that they were going to move towards the U.S. So we've constantly been improving. Forecast models have even gotten better. We have this ability to see a storm out in the Atlantic and say, hey, that may hit the U.S. in two weeks. However, when you have this rapid intensification equation, like this problem that inserts itself, it changes the game. It undermines all that technology and says to it, you're not up to the task. Yeah. And I mean, I think scientists are guickly trying to develop better models to predict this intensity because it is a scary thing. I mean, we want to warn people and it helps to be able to see in the future. Well, what would help you adjust to this pretty scary new reality about faster, intensifying storms? What would help you be able to predict that Otis was going to do what it ultimately did? Are there some straightforward, easy solutions to that? I think one thing is better observations. I think we're getting in an age where we're launching weather satellites all over the place and that's helping improve our forecasts. Like having a better understanding of just how intense the storm is ahead of time is key. But even in this situation, it took a hurricane hunter flying through the storm to really know how intense it was. So I think that's one thing, right? But the other thing is the forecast, like these super computers that are trying to predict the future, we need to continue to develop that science. For example, if we had more sensors in the Pacific Ocean, we could get better data and understand what is actually coming from the West to the East or from the East to the West, depending on what part of the Pacific Ocean you're in. If we get more data, the forecasts are going to get better. Okay, but even if we get more sensors in the Pacific Ocean and even if we get better forecasts and better warnings on these more guickly intensifying storms, that doesn't solve the problem of helping people on land to prepare when by definition, they just have less and less time given the warming water. So how are we supposed to solve for that? I mean, the straightforward

answer would seem to be, we need to cut back on emissions, which is clearly a root cause of these warming temperatures, creating these nightmare scenarios. But even if we did that, that would take time. So what do we do now? If you live in a coastal community and you're getting less and less time to prepare for a hurricane, what can be done? A lot of it ends up coming down to mitigation.

It comes down to as simple as building materials, right? Like there are things called hurricane ties that you can get for a few bucks to hold down your roof to the rest of the framework of your house so the roof doesn't blow off. There are things that can be done to help mitigate that disaster. Another thing is, you know, not building in floodplains. We're seeing a lot more of that. But then it's also having shelters readily available that are hurricane proof or tornado proof. Like there are things that cities and towns and countries can do to help mitigate the disaster by giving people options if they're in the path of a major storm.

Right. Options that increasingly perhaps need to acknowledge that there might not be time to get in your car and drive for hours and hours. But are contingency plans that perhaps recognize that you may end up needing to stay in your community when one of these storms very rapidly becomes something super dangerous? Absolutely. I'm curious, just thinking about the fact that you are a meteorologist. If this situation we're describing makes you feel an immense amount of pressure to get things righter than ever before. I mean, there's always lots of carping when a meteorologist gets something wrong. You told us to worry about a storm. It passed us or annoyed with you. But the burden now feels even more intense because if you're wrong, the amount of time, the room for error is vanishingly small and the danger is so much greater and that puts you in a very tricky position. Yeah. I mean, meteorologists have always gotten it wrong. That's why it's a joke because it's a science meteorologist. What they're doing is creating a hypothesis. So when they're forecasting, when a meteorologist like myself is giving you a forecast, they're giving their best educated guess based off of everything that's happening around. So as I write these stories and I'm trying to forecast these bigger storms, being right is not easy. I feel responsible for what people may think by reading those words. Like, should they evacuate, should they not evacuate? Is this storm actually going to be a big deal? And I carry a lot of that weight on my shoulders. And in this world where storms can intensify and kind of come out of nowhere,

it's not the kind of storm I like to wake up to the next morning and go, oh, I should have covered this two days ago so people had more warning. Right. I want to be able to warn people three or four days in advance of a major hurricane. And when they rapidly intensify next to a city with nearly a million people, that is the worst nightmare. Well, Justin, thank you very much. We really appreciate it. Thanks for having me, Michael. We'll be right back.

As well as a New York Times article and book penned by journalist Evan Hughes.

From BAFTA winning director David Yates comes the tale of a scrappy single mother fighting to secure a better life for her daughter. Payne Husslers, now playing only on Netflix, rated R. Here's what else you need tonight. A massive manhunt entered its second day in Maine, where police were searching for the gunman who killed at least 18 people at a restaurant and bowling alley in America's deadliest shooting of the year. Police described the suspect as a Sergeant First Class in the Army Reserve, where his superiors became alarmed over statements he had made over the summer, threatening his own unit. All main people are sharing in the sorrow of the families who lost loved ones last night, loved ones, normal people who were killed or injured while unwinding from the day of work or while spending time with their family and friends, socializing. During a news conference, Maine's governor, Janet Mills, called the shooting a dark day for the state and for the city where it occurred. I know that the people of Lewiston are enduring immeasurable pain. I wish I could take that pain off your hearts, off your shoulders, but I promise you this, we will all help you carry that grief. And on Thursday, the Israeli military said it had briefly sent tanks into northern Gaza in preparation for its next stage of fighting, which could involve a ground invasion. In Gaza, the Hamas-Ran Health Ministry said that the number of Palestinians killed by Israeli airstrikes has surpassed 7,000 people. But those numbers cannot be independently verified and have been guestioned by President Biden. In response, Hamas released what it said were the names of 6,747 people who had died. Today's episode was produced by Olivia Natt, Eric Krupke, Claire Tennisketer, and Lindsay Garrison. It was edited by Devin Taylor and Liz O. Baylin. Fact-checked by Susan Lee, contains original music by Marion Lazano, Alicia E. Tube, and Pat McCusker, and was engineered by Chris Wood. Our theme music is by Jim Runberg and Ben Lansverk of

Wunderle. The Daily is made by Rachel Quester, Lindsay Garrison, Claire Tennisketer, Paige Cowatt, Michael Simon Johnson, Brad Fisher, Chris Wood, Jessica Chung, Stella Tan, Alexandra Lee Young,

[Transcript] The Daily / A New Threat: Surprise Hurricanes

Lisa Chow, Eric Krupke, Mark George, Luke VanderVloek, M.J. Davis-Lyn, Dan Powell, Sydney Harper, Michael Benoit, Liz O. Baylin, Asta Chatharvedi, Rochelle Banja, Diana Nguyen, Marion Lazano, Corey Shrepple, Rob Zipko, Alicia E. Tube, Muj Zady, Patricia Willins, Rowan Nemisto, Jody Becker, Ricky Nevetsky, John Ketchum, Nina Feldman, Will Reed, Carlos Prieto,

Ben Calhoun, Susan Lee, Lexi Diao, Mary Wilson, Alex Stern, Dan Farrell, Sophia Landman, Shannon Lin,

Diane Wong, Devin Taylor, Alyssa Moxley, Summer Tamad, Olivia Natt, Daniel Ramirez,

and Brendan Klinkenberg. Special thanks to Lisa Tobin, Sam Dolmack, Paula Schumann, Larissa Anderson,

Julia Simon, Sophia Milan, Mahima Chablani, Elizabeth Davis-Moore, Jeffrey Miranda,

Renan Borelli, Maddie Masiello, Isabella Anderson, and Nina Lassem.

That's it for the daily. I'm Michael Babarro. See you on Monday.

Only on Netflix.