



Overflow from the Rio Gurabo covers a road in Puerto Rico following then-Tropical Storm Ernesto on August 14.

The 2024 Atlantic hurricane season, which began June 1, has so far had six named tropical storms, four of which have been classified as hurricanes. Forecasted to be one of the busiest seasons on record, this season is already responsible for 74 deaths, with 47 in the United States and its territories. The storms have been estimated to cost more than \$12 billion in damages.^{1,2,3,4,5,6}

The fourth hurricane of the season, Hurricane Francine, arrived on the Louisiana coast amid multiple rainstorms in the Carolinas and ongoing excessive heatwaves throughout the US. Making landfall in Terrebonne Parish, Louisiana, as a Category 2 hurricane on September 11, Francine dropped up to 8 inches of rain and brought wind gusts as high as 100 mph. In preparation for the storm, President Biden approved an emergency declaration and mandatory evacuations were initiated across the coast. Though no fatalities were reported, the storm's damage across Louisiana, Mississippi and Alabama was severe. Affected areas in Louisiana reported dozens of water rescues, 380,000 power outages and more than 500 people in emergency shelters. Many of the affected communities were the same ones hit by Hurricane Ida in 2021—reminding residents of the constant threat of hurricanes.

Almost all of the 2024 season's storms have been closely accompanied by other extreme weather events, including tornadoes and excessive heat. The storms also have affected regions impacted by previous climate-related disasters, exacerbating the health impact on communities and complicating recovery.

Hurricane Beryl in July and Hurricanes Debby and Ernesto in August all struck regions affected by major disasters in recent months or years, with some communities still recovering from recent events when these hurricanes hit, highlighting the challenges presented by repetitive loss from disasters. Many of the storms this season were also accompanied by other climate events—most commonly extreme heat, as seen in the three hurricanes above. Across almost all storms, the

FAST FACTS

- So far in the 2024 hurricane season, there have been **six named Atlantic storms**, including **four hurricanes**.
- At least two storms have incurred **more than \$1 billion** in damages.

OUR RESPONSE

- International Medical Corps deployed teams in response to **Hurricane Beryl** in Texas and Jamaica, to **Hurricane Debby** in South Carolina and to **Hurricane Ernesto** in Puerto Rico. We also provided support to partners in Louisiana in response to **Hurricane Francine**.
- To date, we have distributed more than:
 - **3,533** wound-care kits;
 - **8,288** hygiene kits
 - **830** tarps; and
 - more than **2,500** recovery items and construction materials, including generators, headlights, water tanks and cans of shelf-stable food.
- We are collaborating with **19 local partners** to support response and recovery efforts.
- We are providing emergency preparedness and response trainings to impacted health center partners in affected regions.

¹ <https://www.cbsnews.com/news/tropical-storm-alberto-several-deaths-texas-mexico>

² <https://cw39.com/news/local/deaths-from-hurricane-beryl-climb-to-at-least-36-including-more-who-lost-power-in-heat>

³ <https://ttweathercenter.com/2024/07/11/hurricane-beryl-death-toll-now-at-33>

⁴ <https://www.nytimes.com/2024/07/01/weather/tropical-storm-chris-mexico.html>

⁵ <https://www.pbs.org/newshour/nation/death-toll-from-debby-rises-to-8-as-storm-crawls-up-east-coast>

⁶ <https://www.ncei.noaa.gov/access/billions>

weather caused extensive power outages that coincided with severe heat waves, exacerbating heat-related illness, food and water insecurity, and limiting healthcare facility operations.

Hurricanes and Heat

Extreme heat has heavily plagued the United States this year and the number of heat-related deaths has been increasing.⁷ Already a potent threat on its own, excessive heat has been a common actor in this season's hurricane season, exacerbating health impacts from storms and further threatening vulnerable populations.

In Texas, Hurricane Beryl caused a widespread and nearly two-weeks-long power outage, affecting close to 3 million houses and businesses at one point. This power outage coincided with an extreme heatwave, reducing food and water accessibility as well as cooling mechanisms, and compromising medication storage and battery-powered health machines—a scenario replicated in Puerto Rico in the wake of then-Tropical Storm Ernesto. In Houston, nearly half the deaths from Beryl were due to the heat-related issues after the storm.

These heat and hurricane combinations also occurred in previous storms, including 2017's Hurricane Irma in Florida.⁸ As global temperatures continue to rise, these compound weather events will likely increase, threatening the well-being of many vulnerable communities, which now need to prepare for “heat season” in addition to hurricane season.

Hurricanes and Healthcare Delivery/Access

Tropical storms and hurricanes create significant health threats to affected communities, including outbreaks of communicable diseases, unclean water, damaged sanitation facilities, interrupted medication or treatments, and increased mental stress—highlighting the importance of accessible healthcare before, during and after a storm. Increased demand in impacted communities for healthcare often inundates health centers and hospitals, while vulnerable communities often experience other barriers to accessing healthcare. As a result, there is a critical need for resilient and prepared health facilities, adequately equipped to withstand the shocks of emergencies.

In Puerto Rico,⁹ then-Tropical Storm Ernesto rendered 41 healthcare centers inactive and forced 23 hospitals to rely on emergency generators. Flooding and landslides caused by the storm isolated entire communities, raising concern for vulnerable populations such as the elderly, those who are bedridden or those who depend on electricity-powered medical devices, as they are typically least able to access the care they need.

In Houston, Hurricane Beryl caused nearly 20% of Houston's hospitals to rely on emergency generators, while the city's subsequent heat wave caused overcrowding in hospitals and health centers as hospitals could not release vulnerable patients to facilities without power. In Jamaica, numerous health facilities in Saint Elizabeth Parish incurred significant infrastructure damage from Hurricane Beryl.

International Medical Corps' Response

Hurricane Francine made landfall in southern Louisiana on September 11 as a Category 2 storm, ushering in days of flooding across the south. With winds reaching 100 mph and heavy rain, the storm brought power outages to 388,000 homes and businesses in Louisiana, 52,000 in Mississippi, and 10,000 in Alabama.¹⁰

Leading up to the storm's landfall, International Medical Corps closely monitored the situation and proactively coordinated with multiple partners, including four federally qualified health center (FQHC) partners located between Baton Rouge and New Orleans, to distribute 2,700 individual hygiene kits. As partners continue to respond to the impacts of the storm, International Medical Corps remains in close communication to provide support.

Hurricane Ernesto struck the US Virgin Islands and Puerto Rico as a tropical storm on August 14, before making landfall in Bermuda as a hurricane. The storm brought winds of 85 mph and up to 10 inches of rain across the Virgin Islands and Puerto Rico, causing river flooding, landslides and widespread power and water outages that at one point impacted more than 735,000 homes and businesses on Puerto Rico—nearly half the island.¹¹



International Medical Corps staff unload wound-care and hygiene kits to distribute to partner FQHCs in Puerto Rico in the days following Hurricane Ernesto.

⁷ <https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/climate-health-outlook/extreme-heat/index.html>

⁸ <https://apnews.com/article/hurricanes-and-typhoons-florida-state-government-nursing-homes-3cb1d6abfe80618137101df239dab640>

⁹ <https://www.koat.com/article/tracking-ernesto-august-14/61874084>

¹⁰ <https://www.nesdis.noaa.gov/news/hurricane-francine-slams-northern-gulf-coast>

¹¹ <https://apnews.com/article/hurricane-ernesto-caribbean-puerto-rico-6d919d9b8f9831c8a664457aeebdb8da>

Following the storm, International Medical Corps immediately began working with leaders from the Federal Emergency Management Agency, the Emergency Management Operations Center, the Puerto Rico Voluntary Organizations Active in Disasters and four FQHCs located in heavily impacted regions of the southeast and central municipalities to support response efforts. We have so far distributed 540 hygiene kits, 1,000 wound-care kits and 650 tarps, and continue to identify other critical needs, including vulnerable populations of people with chronic conditions, those who depend on powered medical devices and those who are bedridden. International Medical Corps is collaborating with FQHC partners to procure and distribute other items to support their recovery and help them prepare for future disasters, and is providing in-depth emergency preparedness training.



In Puerto Rico, we are partnering with local organizations such as the Centro de Servicios Primarios de Salud de Patillas to provide medical resources during an emergency response and before a weather-related event hits. Above, Shira Goldstein, Deputy Director of Programs for the US and Territories, shakes hands with Dr. Arturo Garcia during a meeting at the Patillas facilities.

On August 5, less than two weeks before Ernesto hit Puerto Rico, **Hurricane Debby** made landfall on the Gulf Coast of Florida as a Category 1 hurricane, bringing tornadoes, torrential rain and strong winds up the East Coast and affecting communities as far north as Vermont with flash floods and extensive power outages. International Medical Corps deployed a team work with local healthcare partners in the Low Country region of South Carolina to assess the impact of the storm.

Working with the local Red Cross, the One80 Place Homeless Shelter and FQHC networks Beaufort Jasper Hampton Comprehensive Health Services (BJHCHS) and Fetter Health Care Network, the team distributed 520 hygiene kits and 498 wound-care kits and procured an additional 2,970 individual hygiene kits for the BJHCHS, Fetter Health and AccessHealth healthcare networks. International Medical Corps also distributed 1,350 individual hygiene kits to the Salvation Army in Georgia, working with the Georgia Emergency Management and Homeland Security Agency. To build resilience and ensure readiness for the next event, we continue to work with partners in the region to procure generators and provide critical emergency-response training for partner healthcare clinics and their communities.

Hurricane Beryl, the earliest Category 5 storm ever recorded in the Atlantic, cut its way through the Caribbean and Mexico to make landfall in Texas on July 8 as a Category 1 storm. In the Caribbean, Beryl killed at least 19 people and left an estimated \$6.4 million in crop and infrastructure damage. Many health centers and hospitals in Jamaica incurred significant damage. Beryl also devastated coastal communities of Texas as well as the city of Houston, causing power outages to nearly 3 million people even as a heatwave with indices as high as 100 degrees F descended on the area. The storm caused 39 deaths in the US. Some communities in Houston were still rebuilding from a derecho that tore through the city in May, and did not have proper infrastructure in place during Hurricane Beryl, leaving them especially vulnerable in the storm's aftermath, without power, effective cooling systems and adequate access to food or water.

In Jamaica, International Medical Corps partnered with National Healthcare Enhancement Foundation, an arm of the Jamaican Ministry of Health, to support three temporary health centers, one hospital that is replacing services for three neighboring clinics that are non-functioning, and the Saint Elizabeth Regional Health Center, which is home to the offices of the regional health team. The team distributed 2,500 items for both the construction and medical operations of the temporary health clinics, including diagnostic kits, wound-care kits, hygiene kits, flashlights, IV poles, blood pressure monitors and a mosquito fogging machine. International Medical Corps provided similar supplies to healthcare workers at the affected clinics and hospitals, as well as to the surrounding communities. The temporary clinic, which International Medical Corps promptly equipped with hardware materials, medical supplies, equipment, and a generator, is now fully operational and accommodating a significant number of patients. We are currently procuring additional medical supplies and equipment for the main hospital in St. Elizabeth, as well as for the three temporary clinics.

In Texas, International Medical Corps partnered with two large FQHC networks located in some of Houston's hardest-hit communities. In partnership with the FQHCs, International Medical Corps distributed 180 tarps, 46 headlamps, 2,012 wound-care kits and 17 cases of canned and shelf-stable food.

International Medical Corps continues to work closely with our partner organizations to support their recovery needs. In addition to procuring additional emergency and recovery supplies, International Medical Corps is delivering a series of training to FQHC partners to build the capacity of health centers, enabling them to remain operational, meet urgent health needs and keep communities healthy in the face of extreme weather events. International Medical Corps will utilize and expand upon our current suite of eight training curricula to deliver tailored support to health centers to effectively meet the needs of their communities in the event of the next disaster.

International Medical Corps in the US and Territories

International Medical Corps has been an emergency responder in the United States and Caribbean since 2005, when we partnered with local community clinics overwhelmed by Hurricane Katrina. In the US, International Medical Corps works with national, state and local partners in the healthcare system to address the significant challenges that face domestic healthcare services and deploys emergency response teams in response to disasters.

Across the Caribbean and the US, International Medical Corps was a first responder during 2010's Haiti earthquake; 2012's Superstorm Sandy; 2016's Hurricane Matthew in Haiti; 2017's Hurricane Maria in Puerto Rico and Dominica; 2018's Hurricane Michael in Florida; 2019's Hurricane Dorian in the Bahamas; 2020's earthquakes in Puerto Rico; and 2021's Hurricane Ida, 2022's Hurricane Ian and 2023's Hurricane Idalia in Florida, among other emergency response efforts. Over the past seven years, International Medical Corps has engaged partner networks of more than 275 hospitals, clinics and health-related facilities and NGOs across 18 states and territories, supporting more than 6 million patients and healthcare providers in the US.

