

# **Hurricane Beryl**

**Update 2** 

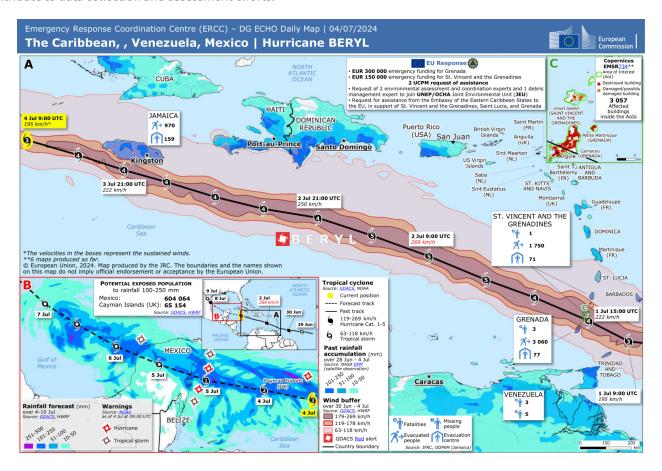
08/07/2024

#### 1. Overview

Hurricane Beryl significantly impacted several Caribbean nations from July 1-4, 2024, notably Grenada, Saint Vincent and the Grenadines, and Jamaica. In Grenada, the islands of Carriacou and Petite Martinique saw extensive damage, with 95-100% of homes either damaged or destroyed. Over 3,000 residents utilized evacuation centers at the storm's peak. Saint Vincent and the Grenadines experienced widespread infrastructural damage, affecting government buildings, schools, and churches. Bequia and Union Island were particularly impacted, with 90% of buildings on Union Island, including the airport terminal, severely damaged, displacing over 1,700 people to shelters.

Jamaica's southern parishes faced substantial disruptions in agriculture, livestock, and health services, with over 400,000 people affected by power outages. Across the most affected regions, there were at least 12 reported fatalities. Approximately 200,000 people in Grenada and Saint Vincent and the Grenadines were impacted, leading to significant displacements. The damage to infrastructure posed challenges to rescue and relief operations. The aftermath of Hurricane Beryl created critical needs for emergency shelter, food, clean water, sanitation, and health services, with logistical difficulties complicating aid delivery in the affected areas.

As the hurricane's intensity varied geographically, impacting sectors and populations differently, this report provides a detailed overview of the priority needs, affected areas, priority groups, and sector-specific needs. It aims to enhance and tailor the coordination, response, and support from humanitarian organizations and the international community, as well as contribute to data collection and assessment efforts.





# 2. Priority needs

In the wake of Hurricane Beryl, several priority needs have emerged across the affected countries, requiring immediate attention and support to address the most critical challenges faced by the affected population. Below is a detailed country-wise list of the priority needs across the region:

	Jamaica	Grenada	St. Vincent and the Grenadines	Cayman Islands	Barbados
Shelter and Housing	Emergency shelter materials (tarpaulins, tents, blankets), repair materials, rental support, and relocation assistance	Emergency shelter materials, temporary housing, and repair materials	Emergency shelter materials, temporary housing, and repair materials	Emergency shelter, tarpaulins, essential supplies	Emergency shelter materials, temporary housing
Food Security and Nutrition	Food assistance, livelihood support	Food assistance and livelihood support	Food assistance and livelihood support	Food assistance, agricultural recovery	Food assistance, Provision of child food packages and cooking utensils, and Nutrition services
WASH	Access to safe drinking water and restoration of water facilities, sanitation, hygiene kits, and prevention of water-borne diseases	Clean drinking water, water purification systems, and rehabilitation of toilets	Water purification systems, rehabilitation of damaged toilets, and enhancement of sanitation facilities to prevent the spread of diseases	Restoration of water systems, and hygiene supplies	Clean drinking water, hygiene kits, and rehabilitation of damaged toilets and sanitation facilities



## 3. Priority geographic areas



# Jamaica

#### Southern parishes:

- **St. Elizabeth**: One of the hardest-hit areas, with severe infrastructure and utility damage. Major issues with power and water supply. Restoration is ongoing, with only 20% of risk assessment completed. 5X more damage compared to any other part of the country.
- **Clarendon**: Significant structural damage, especially in coastal communities like Portland Cottage. Many homes are flattened and waterlogged. Scenes of complete despair were observed, with entire families affected.
- **Manchester**: Suffered from wind and water damage, affecting homes and agricultural activities. Specific impacts on Northern Caribbean University in Mandeville, which has been tapped to handle relief supplies.
- **Kingston and St. Andrew**: Experienced damage to infrastructure and utilities but with a higher rate of recovery compared to other parishes. Approximately 80% of the main power lines have been restored.

#### Northern parishes:

- **St. Mary and Portland**: Reported significant agricultural damage, with the Banana Board noting over 80% crop damage in some areas.
- **Trelawny**: While less impacted than southern parishes, they experienced issues such as breadfruit trees being uprooted. Residents were seen clearing properties and streets blocked by fallen trees.
- **St. Ann**: Less severe impact compared to southern parishes, but still faced infrastructure and utility disruptions. Collaborations with Sunshine Women's Centre in Ocho Rios for relief efforts were reported.



#### Carriacou:

- Carriacou has experienced severe devastation, with 95% of homes damaged or destroyed, including the airport terminal, while the airstrip remains functional; additionally, five out of six medical facilities have been damaged, and there are two confirmed deaths.
- The Princess Royal Hospital lost 70-80% of its roof, including solar panels and the hot water system.

### **Petite Martinique:**

• The island suffered near-total devastation, with 100% of homes damaged or destroyed.

#### Mainland Grenada:

- St. Patrick: Reported significant housing losses, with numerous roofs lost, extensive damage to forestry areas, and considerable agricultural losses
- St. David: The island has experienced substantial housing losses, with many roofs destroyed, notable damage to forestry areas, and significant agricultural losses
- St. Andrew: Reportedly endured major housing losses, widespread roof damage, severe harm to forestry areas, and substantial agricultural losses. Additionally, Princess Royal Hospital sustained damage to its roof, solar panels, and hot water system
- St George: In St. George's, the Mount Gay Psychiatric Hospital and the Celina Clouden Hospital have been partially damaged.



#### **Union Island:**

- Union Island saw 90% of houses severely damaged or destroyed, with significant roof and structural damage. Critical infrastructure like schools and hospitals were destroyed. Residents were left without electricity, water, and communication. The destruction of rainwater harvesting systems worsened the situation
- The airport on the island has seen extensive damage
- Approximately 700 people have been evacuated from the island

#### Canouan:

Almost all buildings sustained damage, with many roofs ripped off. Severe shortages of water and electricity were reported. Essential services like ATMs and supermarkets were closed. Residents sought shelter in compromised locations, such as leaking buildings

#### Mayreau:

Reports of around 90% of the housing stock damaged. Residents faced significant challenges in housing and access to essential services.

#### St. Vincent

- The island suffered significant roof and structural damage to houses and government buildings.
- Bishop's College in Kingstown had its roof torn off.



### Cayman **Islands**

#### **Grand Cayman:**

- George Town: Experienced significant flooding and infrastructure damage. Residents gathered at hurricane shelters like the John Gray High School Gymnasium on July 3, which registered 100 people by afternoon and can accommodate about 1,500 people.
- West Bay: On July 3, residents observed the increasingly agitated waters while the Cayman Islands Regiment unpacked supplies at Clifton Hunter High School hurricane shelter, the largest shelter in the area, hosting 630 people seeking refuge.
- East End and North Side: Heavy rainfall led to extensive flooding, affecting homes and agricultural lands.

#### **Little Cayman:**

• Limited reports due to communication issues, but expected to have similar environmental impacts such as damage to mangroves and coral reefs.

#### **Cayman Brac:**

The island faced structural damage to buildings, particularly in low-lying areas. Coastal erosion and damage to marine infrastructure were significant due to the storm surge.



### 4. Priority Groups



Rural farming communities in Jamaica



Urban poor at risk of homelessness



Fishing communities



Evacuees and displaced



Coastal residents



Vulnerable groups: children, people with disabilities, elderly, women



### 5. Sectoral needs and impacts

Hurricane Beryl has caused extensive damage and disruptions across multiple countries in the region, severely affecting populations, infrastructure, and livelihoods. The widespread impact has created urgent humanitarian needs across sectors.

Here is a detailed overview of the impact on each country:

#### Jamaica

The number of people affected by the hurricane in Jamaica is growing, with rural farming communities in St. Elizabeth being the hardest hit and experiencing widespread destruction. Nearly 1,000 Jamaicans are currently in evacuation centers as of July 4, and the number of displaced persons is expected to rise as assessments continue.

Water, Sanitation, and Hygiene (WASH)	In Jamaica, disruptions to water supply systems and potential contamination of water sources have created a heightened need for safe drinking water, sanitation facilities, and hygiene supplies. The National Water Commission reported that around 70% of its 400,000 customers were without water supply.  30% of affected users had restored water service by 5th July. Key treatment plants like Mona and Constant Spring are operational, while areas like St. Elizabeth, Manchester, and parts of Westmoreland are still severely impacted.
Food Security and Livelihoods	Jamaica suffers extensive damage in agricultural areas, particularly in rural communities, affecting food security and the livelihoods of farmers and agricultural workers. Significant losses were reported, with 100% crop loss at the Bodles Research Station. The Banana Board reports over 80% damage to crops in Portland and St. Mary, and the Essex Valley Agriculture Development Project's solar energy system reports severe damage. Total destruction of greenhouses in most areas.
Health and Nutrition	The country faces potential outbreaks of waterborne diseases, injuries, and disruptions to healthcare services, necessitating medical assistance, supplies, and nutritional support.
Protection	The displaced and vulnerable populations, especially women, children, and persons with disabilities, may require specialized protection services and support.
Education	The country also faces damage to school infrastructure and disruptions to the academic calendar, necessitating temporary learning spaces and educational support.
Energy	45% of the population, or about 315,000 customers, had restored power by Friday evening. St. Elizabeth remained severely affected with only a 20% risk assessment completed by then, and lack of electricity remains one of the main issues.

# **Telecommunications** and **Logistics**

The Ministry of Agriculture, Fisheries & Mining said communication across parishes remains extremely difficult, with reports of blocked roads due to fallen trees and poles. There was damage to the Norman Manley International Airport's roof and widespread disruption to roads, with over 200 roads initially impacted and cleared by the National Works Agency (NWA).

Flow Jamaica has restored service to 66% of mobile customers, while Digicel reports 60% of its sites are operational by Friday, July 5th at night.

#### Grenada

Approximately 3,000 people were in evacuation centers during the peak of the storm. Widespread housing damage in Carriacou and Petit Martinique has led many to seek shelter with relatives.

# Shelter and Non-Food Items (NFIs)

Grenada faces the most severe situation, with 95% of homes in Carriacou and Petit Martinique damaged or destroyed and requiring shelter assistance and support. Urgent need for shelter items like tarpaulins, and roofing materials is growing in the affected areas.

# Water, Sanitation, and Hygiene (WASH)

Grenada faces the most severe disruption, with water supplies halted since the storm hit on July 1st, necessitating urgent provision of hygiene and dignity supplies for the affected population. The National Water and Sewerage Authority (NAWASA) reports that 52% of the water systems in Grenada are operational, but communication remains disrupted in Carriacou, Petite Martinique, and parts of the northern corridor of Grenada. The Princess Royal Hospital in Carriacou lost 70-80% of its roof, including solar panels and the hot water system, and currently has no water supply.

# Food Security and Livelihoods

Grenada being one of the worst-hit countries faces the most severe agricultural destruction, particularly in Carriacou and Petit Martinique, severely impacting food security and the livelihoods of farmers and agricultural workers and increasing the need for food and livelihood support

#### **Energy**

There is no electricity in Carriacou and Petite Martinique, severely limiting communication capabilities. Restoration of electricity is expected to take a few weeks as the electrical grid needs to be rebuilt.

# Telecommunications and Logistics

The Carriacou airport terminal building was destroyed, although the airstrip remains functional. Roads are impassable, and communications were only restored four days after the hurricane. There is also a need for generators for both commercial and household use on the island.

#### St Vincent and the Grenadines

Union Island experienced near-total devastation with 98% of housing destroyed, no functioning sanitation facilities, and limited access to water. Extensive damage to the airport and power plant, one confirmed death, and ongoing but limited evacuations to St. Vincent due to the Vincy Mas carnival further compound the situation. On Bequia Island, 90% of buildings, including schools and churches, were severely damaged or destroyed. Overall, government buildings, schools, and churches across the country are impacted, with widespread power outages and disruptions to water supplies and telecommunications, leaving an estimated 16,453 people in need of humanitarian assistance.

Shelter and Non-Food Items (NFIs)	St Vincent and the Grenadines are critically affected, with over 1,700 people in shelters requiring temporary housing solutions and essential household items. In Mayreau, the storm tore the roof off every home on the island, leaving many items reduced to mere piles of dust and rubble.
Water, Sanitation, and Hygiene (WASH)	The islands have prominent WASH needs, particularly on Union Island, where the restoration of water supply systems and provision of safe drinking water and hygiene supplies are essential. As of July 6, there is no running water, and toilet facilities are non-functional, raising grave concerns over sewage disposal and the possibility of disease spread on the island. In other affected areas of the island nation, there have been reports of water disruptions but details are yet to be confirmed.
Food Security and Livelihoods	In parts of St Vincent and the Grenadines, there is a requirement for need assessments of agricultural losses and support for affected farmers.
Health and Nutrition	There is an urgent need for the restoration of healthcare facilities and services to address potential disease outbreaks and ensure access to essential medicines. The Union Island Hospital and the Mount Gay Psychiatric Hospital and Polyclinic in Gouyave on the mainland are both damaged, disrupting health service provision.
Protection	There is a need for the establishment of child-friendly spaces and psychosocial support services, particularly in shelters, as well as measures to mitigate gender-based violence risks and provide support for survivors.
Education	The need for the repair and reconstruction of damaged schools, along with the provision of temporary learning spaces and educational materials is prominent
Energy	Electricity has been restored to 5 out of 16 sections, including the Milton Cato Hospital, Kingstown Clinic, Central Medical Stores, Community Services, and Environmental Health. The hurricane also damaged a power plant.
Telecommunications and Logistics	Telecommunication services have been disrupted in several areas of St. Vincent and the Grenadines, including Union Island, Mayreau, and Canouan, complicating efforts to assess the full extent of the damage.

#### Cayman Islands

**Shelter and** 

In Grand Cayman, widespread damage to buildings, infrastructure, and utilities, significant flooding in low-lying areas due to storm surges and heavy rainfall, extensive power outages, and communication disruptions have occurred. Damage to the airport hampers relief efforts and crops and agricultural lands have been destroyed. In Cayman Brac and Little Cayman, severe damage to buildings and critical infrastructure, coastal areas inundated by storm surge, and disruptions to water and power supplies have isolated the islands due to damage to the only airports. An estimated 65,000 people are affected across the Cayman Islands, with approximately 20,000 displaced and in need of shelter.

Extensive yet non-quantified housing damage is reported, especially in George Town and West

Non-Food Items (NFIs)	Bay. The Cayman Islands need emergency shelter solutions, including tarpaulins, tents, and temporary housing, alongside the distribution of NFIs like blankets, mosquito nets, and kitchen sets.
Water, Sanitation, and Hygiene (WASH)	The main water supplies on Grand Cayman were temporarily shut down to protect infrastructure but have been fully restored. The islands require restoration of water supply systems, safe drinking water distribution, and provision of sanitation facilities and hygiene supplies in some affected areas and shelters.
Food Security and Livelihoods	Food assistance for displaced and affected populations and support for agricultural recovery and restoration of livelihoods are also crucial. An assessment of the impact on the agriculture sector is ongoing, with reports of potential impacts on mango, plantain, and avocado crops.  Initial observations indicate that the damage to the ecosystem could have long-term impacts on local wildlife and tourism, one of the pillars of the islands' economy.
Health and Nutrition	There is also a requirement for medical assistance and supplies for the injured, restoration of health facilities and services, and prevention and control of disease outbreaks. All medical facilities in the Cayman Islands are now fully operational again after being restored during the previous days.

#### **Protection**

The need for identification and support for vulnerable groups, including children, women, and the elderly, along with psychosocial support and protection services for affected communities is prominent.

#### **Energy**

There were power outages on all three islands (Grand Cayman, Cayman Brac, and Little Cayman), affecting 3,017 households on Grand Cayman. However, the restoration of the power supply in all three islands has been confirmed.

# Telecommunications and Logistics

Significant damage to roads, bridges, and public buildings. The Owen Roberts International Airport suffered roof damage and was temporarily closed, but it is now fully operational. Limited communication has been a significant issue, hindering the ability to gather comprehensive reports from the island.

### **Barbados**

Coastal infrastructure and properties sustained damage from the storm surge and high winds, significantly disrupting the livelihoods of the fishing community on the south coast. Over 200 fishing vessels were damaged or destroyed, severely impacting the fishing industry.

Shelter and Non-Food Items (NFIs)	Some coastal residents need temporary shelter assistance due to home damage, and there is a demand for NFIs like tarpaulins, blankets, and kitchen sets.
Water, Sanitation, and Hygiene (WASH)	Barbados, while affected, has less severe disruptions, with potential impacts on water supply and sanitation facilities in coastal areas, leading to a need for hygiene kits and safe drinking water.
Food Security and Livelihoods	The fishing community has suffered substantial losses, with vessels and equipment damaged or destroyed, necessitating assistance in restoring livelihoods and providing alternative income sources, as well as potential food assistance for the most vulnerable households.
Health and Nutrition	The country faces potential outbreaks of waterborne diseases, injuries, and disruptions to healthcare services, necessitating medical assistance, supplies, and nutritional support.
Protection	Barbados may need psychosocial support and protection services for affected individuals, particularly in the fishing community.



# 6. Humanitarian access

Jamaica	<ul> <li>Ongoing flooding and debris from fallen trees and utility poles continue to obstruct access to certain areas. Clearing operations are in progress but are time-consuming.</li> <li>Access to remote and rural areas remains challenging. Roads are blocked with these areas often the last to receive aid and restoration services.</li> <li>Transporting relief supplies to affected areas is complicated by damaged infrastructure. The availability of vehicles and fuel is also a concern in some regions.</li> </ul>
Grenada	<ul> <li>Rough seas initially made it difficult to access the island. With air control towers out, flights are limited to fly-by-visibility. Even when goods arrive at the airport, there are no accessible roads to distribute them. The seaport in Carriacou is functional, facilitating the movement of relief items.</li> <li>The small size and dispersed nature of the islands, coupled with limited infrastructure, posed significant logistical hurdles for providing aid and conducting relief operations.</li> <li>Disrupted communications make coordinating debris removal and access restoration efforts difficult, especially in the early days, especially in Northern Grenada</li> </ul>
St. Vincent and the Grenadines	<ul> <li>Being far from the mainland, Mayreau Island is accessible only by a four-hour boat trip from St. Vincent, complicating humanitarian access. Although some aid is expected to trickle in from nearby islands, the need is enormous and the aid is only guaranteed for the short term. With no vehicles on Mayreau, residents are reportedly forming human chains, passing vital bottles of water hand-to-hand to the improvised shelter.</li> <li>Overall, in general, the geographical spread and limited infrastructure of the affected islands complicate the delivery of aid and transportation of relief supplies</li> </ul>
Cayman Islands	<ul> <li>Local volunteers and the Cayman Islands Regiment have been working to clear debris and restore basic services, but access remained a challenge in remote areas.</li> <li>According to the latest updates, all roads in the three islands are now cleared.</li> </ul>
Barbados	No humanitarian access restrictions were identified.



### 7. Information gaps and challenges

# Barriers to data collection

- **Communication Disruptions:** In many rural and heavily affected areas of the islands, communication lines are down. This disruption makes it difficult to gather and relay information, affecting coordination efforts and the ability to provide timely updates.
- **Blocked Roads:** Many roads, especially in rural and remote areas in Jamaica, Grenada and St Vincent and Grenadines, are blocked by fallen trees, utility poles, and debris. This obstruction hampers the physical access of assessment teams, delaying their ability to reach affected areas.
- **Utility Restoration Impact:** The lack of electricity and water in many areas slows data collection efforts. Many electronic devices and systems required for data collection are non-functional, further complicating the process.
- Challenges in Rural Areas: Detailed assessments are still pending for remote regions, including parts of St. Elizabeth, Manchester, and Westmoreland in Jamaica. These areas are harder to reach, causing delays in providing comprehensive damage reports. Additionally, In Little Cayman of the Cayman Islands, the small population and remote location of the impacted areas have made detailed damage assessments particularly challenging.

#### Information gaps

- Displacement Numbers: Accurate numbers of displaced persons are still being compiled for the islands. Many families have sought temporary shelter with relatives, making it harder to track their movements and needs in parts of the affected countries
- Infrastructure Damage: The full extent of infrastructure damage is still being
  assessed. Initial reports indicate severe damage, but comprehensive data is lacking.
  Furthermore, the damage in the Mayreau and Canouan islands of Saint Vincent and the
  Grenadines remains particularly unknown due to telecommunication issues.
- Agricultural Losses: Detailed reports on agricultural losses are pending. Initial
  estimates show significant damage, but the full economic impact is yet to be
  determined. Additionally, economic losses due to the deterioration of coral reefs and
  local ecosystems are also a concern, particularly in Little Cayman of the Cayman
  Islands



# **About This Report**

This report is a synthesis of publicly available information, powered by the DEEP - the Data Entry and Exploration Platform - a collaborative analysis platform for effective aid response - and supplemented by assessment data provided by humanitarian partners working in the country. The analysis was conducted independently by Data Friendly Space (DFS) on behalf of the DEEP Remote Support Analysis Team. This project and report are made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the DEEP Remote Analysis Support Team through Data Friendly Space and do not necessarily reflect the views of USAID or the United States Government.

The DEEP team appreciates the generous contribution and partnership with the IFRC and all of our governance board members throughout this 2024 Atlantic and Caribbean hurricane season.

#### Get in touch with us

If you wish to have more information on this project or the DEEP, reach out to <a href="mailto:deep@thedeep.io">deep@thedeep.io</a>



### Methodology

The DEEP Remote Analysis Support Team collates and structures available information in the DEEP platform daily. All data presented in this report originates from DEEP's official repository for this project. Interested parties can access a detailed list of the consulted sources via <a href="this link">this link</a>. If you belong to the humanitarian community and wish to access the project and collaborate in DEEP's joint analysis environment, please request access here:

#### https://app.thedeep.io/projects/4476/tagging/

The Data Entry and Exploration Platform (DEEP) is an intelligent web-based platform, offering a suite of collaborative tools tailored for qualitative and secondary data review. DEEP is free, open source, and fully accessible for all humanitarian and development users. Log in here: <a href="https://app.thedeep.io/login/">https://app.thedeep.io/login/</a>

Each piece of information is tagged based on the pillars and sub-pillars of the Analysis Framework, based on the JIAF 1.0 (see below) and developed in line with successful models used across previous projects. The framework is shown below and comprises the humanitarian conditions (by sector) and the operational environment. All the captured information receives additional tags to allow examination of different categories of interest such as affected group, geographic location, etc.

The analysts follow key steps for ensuring robust and sound humanitarian analysis, relying on an analysis workflow and spectrum (see below). For this report, the analysts relied on the main three first steps of the analysis spectrum – description, explanation, and interpretation.