HURRICANES IRMA AND MARIA
Situation Report No. 7
20 September 2017 – 19:00 EST

HIGHLIGHTS
- Hurricane Maria, made landfall on Dominica on evening of September 18, 2017 as a category 5 Hurricane. The Princess Margaret Hospital is reported to be severely damaged and flooded. Dialysis service damaged, and the electricity is down. Seven deaths have been reported on the island due to the storm.
- The hurricane made landfall on Puerto Rico around 6 AM today, bringing catastrophic flash flooding. Before Hurricane Maria made landfall, there were 172 shelters housing 9,981 occupants.
- Currently a category 2 Hurricane, Maria is moving over and around Dominican Republic, Turks and Caicos, and Bahamas with life-threatening wind, storm surge, and rainfall impacts.
- The U.S. Virgin Islands and British Virgin Islands under hurricane warning were most impacted by Hurricane Irma that struck on September 6. These islands suffered extensive damage to infrastructure and continue to have challenges restoring access to electricity and clean water.
- Islands including Martinique that had been serving as humanitarian coordination hubs for Hurricane Irma response and were subsequently impacted by Hurricane Maria, delaying relief response.
- As some people continue to be in shelters two weeks after the passage of Hurricane Irma, there is need to continue access to clean water and improve sanitary conditions at the shelters.
- Repairing damaged health facilities in impacted islands is crucial in managing emergency patients, quick diagnosis and treatment of diseases, and reestablish treatment of non-communicable diseases.

SITUATION IN NUMBERS

2 Hurricanes
That impacted the Caribbean and the Region in September: Irma and Maria

73,000
Estimated people living in Dominica which was in the direct path of Hurricane Maria as a Category 5 storm

$10.3 million
Funding required in the health sector of the Regional Response Plan for emergency support to the most vulnerable for Hurricane Irma

17 thousand
People in need of immediate shelter after Hurricane Irma according to UN OCHA

1. United Nations World Population Prospects 2017; Data estimate to 2015
2. UN OCHA Regional Response Plan
SITUATION OVERVIEW

On September 18 2017, Hurricane Maria, as a category 5 hurricane, made landfall on Dominica bringing 260 km/h winds. Preliminary reports from the island have indicated massive destruction, with flooding and infrastructural damage. Communication channels have been completely cut off, and more information will be available as communication is restored and needs and damage assessments begin after the hurricane.

Currently a category 2 hurricane, Maria’s core has moved over Puerto Rico, and reports indicate catastrophic flash flooding occurring over parts of the island. Hurricane Warning remains in effect for Dominican Republic from Cabo Engano to Puerto Plata, Turks and Caicos Islands and the Southeastern Bahamas.

Hurricane Maria can be particularly devastating to these islands due to the magnitude of the storm and the population is particularly vulnerable due to the passage of Hurricane Irma last week. Many of these islands in the path of both hurricanes, including British Virgin Islands and Puerto Rico have been working in recovery efforts to re-establish electricity, water, and healthcare services. Islands including Martinique had been serving as humanitarian coordination hubs for Hurricane Irma response and were subsequently impacted by Hurricane Maria, delaying relief response.

The U.S. Virgin Islands, British Virgin Islands and Saint Martin which are currently under hurricane or tropical storm warning for Hurricane Maria were in direct path of Hurricane Irma that struck on September 6. These islands suffered extensive damage to infrastructure and continue to have challenges restoring access to electricity and clean water. This could greatly impact already hurricane battered standing structures in impacted islands, complicate humanitarian aid delivery, and displace more people to shelters. Recovery of medical facilities in previously impacted islands is ongoing, and crucial in managing emergency patients, quick diagnosis and treatment of diseases, and reestablish treatment of non-communicable diseases.

DOMINICA (Population: 73,162)

The eye of the hurricane traversed across the island on September 18, bringing life-threatening wind and rain to the island. Preliminary reports from the country indicated seven deaths confirmed as of this morning. Initial reports from the helicopter reconnaissance from Martinique indicate that 82% of the housing stock suffered damage. The electricity and water service is not available. The National Emergency Operations Center (NEOC) has been compromised.

The Princess Margaret Hospital was reported to be severely damaged and flooded. The dialysis service was damaged and patients that require the service need to be relocated. Electricity on the island is not available, and use of generator is being implemented with the capacity of the electrical system in consideration. The hospital had been undergoing upgrade construction, and the construction company that had been working will help with immediate repairs of the facility.

There continues to be power and telecommunication outages, and roads are only passable on foot due to debris and trees. Due to widespread flooding, several bridges are totally gone and landslides are reported. Further assessments will continue as communication is improved with the island. The curfew has been set to 4 PM. The Cane Field Airport is flooded and not accessible. The bigger airport fared better, although further damage assessment is needed. Currently, the island is only accessible by boat and helicopter.

Response: The Barbados Coast Guard arrived in Dominica by boat with search and rescue teams. The boat included PAHO medical supplies from stock in Barbados and hospital in Bermuda, and PAHO consultant who went with the CDEMA team. PAHO engineers, who already on the island. Generators and other supplies have been identified in the PAHO warehouse in Panama to be sent. Emergency Kits are available to be sent to the affected islands, including Dominica.

Needs: Due to lack of road access by cars and telecommunication outages, damage assessment is ongoing. Immediate needs include water and food supplies, as well as tarpaulins for damaged roofs. A quick recovery and operation of health services is necessary to meet emergency needs. Logistical challenges including limited road, port, and airport access has to be bridged quickly for delivery of supplies and human resources.

UNITED STATES OF VIRGIN ISLANDS (Population: 104,977)

There are 6 shelters housing 145 occupants. All ports have been closed in anticipation of the hurricane. Communication restoration that was ongoing since Hurricane Irma was on hold in preparation for Hurricane Maria.

PUERTO RICO (Population: 3,673,728)

The hurricane made landfall around 6 AM today. Puerto Rico reported record-breaking flooding on some parts of the island. There are 172 shelters housing 9,981 occupants. All ports have been closed in anticipation of the hurricane. Reports indicate that there is 100% power outage on the island.

BRITISH VIRGIN ISLANDS (Population: 30,113)

Hurricane Maria passed approximately 160 km from the British Virgin Islands, and the elderly home was compromised. The British military engineers did temporary repairs. BVI were already heavily impacted by Hurricane Irma and working to restore access to water and electricity. The all-clear has been given and damage and needs assessments from Hurricane Maria is ongoing. The previous hurricane stripped much of the vegetation, and the island is susceptible to flooding. Shelters that are in place have been weakened and many homes have sustained damages by the previous storm. The main hospital in British Virgin Island had suffered minor damage last week, and was partially operational, providing regular services. Previous to Hurricane Maria, the logistics system had been established to streamline distribution of medical and relief supplies, and the hospital stocks had been assessed. Mobile Storage Units are in pipeline to be sent after the passage of Hurricane Maria.

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1 United Nations World Population Prospects 2017; Data estimate to 2015
DOMINICAN REPUBLIC (Population in 17 provinces under alert approx. 6,613,000)²

The Dominican Republic government activated the National Emergency Committee, and placed 11 Provinces on red alert, 15 on yellow alert, and 6 on green alert. Evacuation of populations in provinces under red and yellow alert is ongoing. Hospitals in provinces under alert maintain supply for 72 hours. The PAHO Country Office has activated the emergency plan and the Emergency Operations Center (EOC).

GUATEMALA (Population: 450,418)¹

Two deaths have been reported in Guatemala. The hospital is reportedly flooded, and the island is without power.

MONTESERRAT (Population: 5,124)¹

PAHO Eastern Caribbean Country Office continues to be in contact with the police commissioner and health disaster coordinator. Preliminary reports indicate that there was some damage to the hospital roof and was leaking. No significant damage to the structure was reported, and patients have been evacuated to dry areas. Some roads are impassable due to debris, trees, and poles.

ANTIGUA AND BARBUDA (Population: 99,923)¹

All relief operations in Barbuda stopped since Monday due to Hurricane warning issued for Hurricane Maria. There were 1,031 evacuees from Barbuda. Four shelters are in operation in Saint Johns housing approximately 265 persons from Barbuda. The main portion of Barbuda’s population is being housed by family members. Nurses Hostel is being refurbished into shelter for Barbudians with maximum occupancy of 200 people. No wastewater disposal system is in place, and septic tank systems are to be implemented.

Response: Vector control activities had been started, but postponed in anticipation of Hurricane Maria. There was marked increase in mosquito population, and all 182 homes were inspected for breeding sites. Control activities that were carried out includes fogging, emptying containers and treating cisterns. Stagnate water pools were emptied using a vacuum truck, and other stagnate water areas were treated to eliminate mosquito larvae.

SAINT KITTS AND NEVIS (Population: 54,288)¹

Health facilities have not been heavily impacted, although some minor flooding was reported. No electricity and water is available. The government of Saint Kitts and Nevis declared today a holiday and a national clean-up day.

TURKS AND CAICOS (Population: 34,339)¹

Turks and Caicos Islands are continuing preparations for Hurricane Maria as Hurricane Warning is in effect. Turks and Caicos suffered extensive damage from the previous storm, and recovery efforts are ongoing. The hospital in Provinciales was functioning and continued to receive dialysis patients from Grand Turk Hospital which had been partially operational. Additional Regional Response Team members are on standby for deployment to Turks and Caicos Islands.

NEEDS

Immediate needs for Dominica and other islands that were impacted by Hurricane Maria is expected to include water and food supplies, as well as tarpaulins for damaged roofs. Due to lack of road access by cars and telecommunication outages, needs access is ongoing. Logistical challenges for these islands with limited access by boat and air need to be addressed for quick delivery of supplies and human resources. The roads are currently only passable by foot, and needs to be cleared of debris to improve access to all parts of the island. For the islands forecasted to be affected by the hurricane in the coming days, a quick delivery of needed supplies and human resources as well as prepositioning and preparation for the coming storm will be important to avoid further public health impact by the coming hurricane.

For islands that continue relief operations after Hurricane Irma, needs continue to be focused on repairing damaged health facilities in impacted islands is crucial in managing emergency patients, quick diagnosis and treatment of diseases, and reestablish treatment of non-communicable diseases. Continued improvements in healthcare access including patient referrals and medical evacuations are needed. Maintaining sanitary conditions, especially in shelters, continues to be a priority. Increases in mosquito and rodent vectors have been reported in heavily impacted islands. Vector control and cleaning supply needs list has been requested from affected island for consolidation.

RESPONSE ACTIONS

PAHO is acting to quickly assess needs of impacted countries and territories and deploy supplies and human resources as needs are identified by impacted islands. PAHO medicines have already been sent to Dominica on a boat in coordination with the Barbados Coast Guard. Deployments are being planned for Dominica and British Virgin Island. Transportation continues to be a problem during the response. The newly impacted islands have limited access due to damaged ports and airports. The roads are impassable due to debris, and much of the cars that were on the island are not functional.

The Deployment of Regional Response Teams to the islands included focus areas in coordination, damage assessment, epidemiological surveillance, logistics, information management, and water and sanitation. As needed medical and humanitarian supplies are identified by countries and shared with PAHO, medical and other supplies have been prepositioned in Panama and Barbados for rapid distribution in preparation for Hurricane Maria. As new information emerges from the field, new possible

² Provinces included: Azua, Barahona, Distrito Nacional, El Seibo, Espaillat, Hato Mayor, La Altagracia, La Romana, Maria Trinidad Sanchez, Monte Cristi, Pedernales, Peravia, Puerto Plata, Samana, San Cristobal, San Pedro de Macoris, Santo Domingo

³ Population: 54,288
deployments may be considered by health authorities, especially after the passage of Hurricane Maria. A second round of deployments is being organized.

The Pan American Health Organization (PAHO) is coordinating emergency projects to cover medical supplies, reestablish health services, and purchase of essential medicines and medical equipment. PAHO continues to coordinate with military, national governments, CDEMA, international NGOs and other UN agencies to improve the health response operations.

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