



# Hurricane Matthew

## IFRC SITUATION REPORT

SITREP NO. 8

**Period covered**  
28/09/16 to 7/10/16

**Time of validity**  
7/10/16

**IFRC Office**  
ARO

**Number of people affected**  
TBD

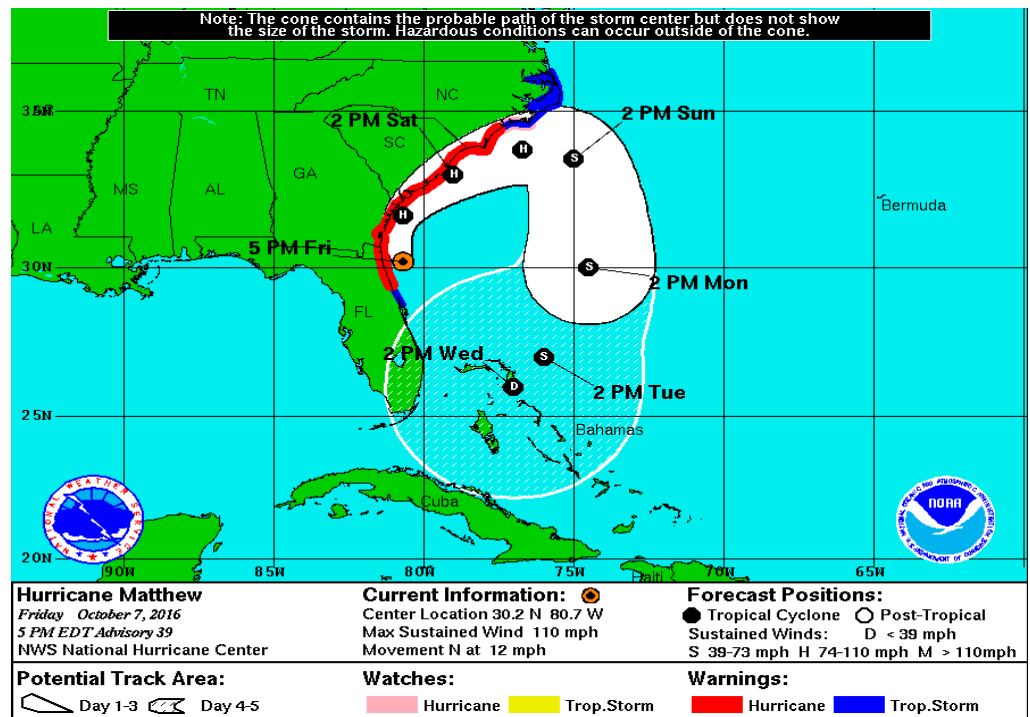
**Number of displaced persons**  
TBD

**Number of people evacuated**  
TBD

**Number of dead**  
TBD

**Number of injured**  
TBD

### 1. Map of Affected Zone



Map of Matthew's current and likely path as of 7 October 2016. Source: NOAA

### 2. Situation

According to the United States' National Oceanic and Atmospheric Administration (NOAA)'s National Hurricane Centre, Hurricane Matthew was around 40 miles (70 km) east of Jacksonville, Florida, United States and 135 miles (215 km) south of Savannah, Georgia, United States as of 5 pm Eastern Daylight Time (EDT) (9 pm Universal Time Coordinated [UTC]). Hurricane Matthew is now a Category 2 hurricane on the Saffir-Simpson Wind Scale, with maximum sustained winds of 110 mph (175 km/h), a minimum central pressure of 948 mb (28.00 inches) and it is moving north at a speed of 12 mph (19 km/h), according to reports from a NOAA Hurricane Hunter aircraft NOAA reports indicate that hurricane-force winds extend outward up to 60 miles (95 km) from the storm's centre, and tropical-storm-force winds extend outward up to 185 miles (295 km).

Matthew is moving toward the north, and this motion is expected to continue tonight. A turn toward the north north-east and then to the north-east is expected on Saturday, 8 October 2016. On the forecast track, Matthew's centre will continue to move near or over the coast of north-east Florida and Georgia through tonight and near or over the coast of South Carolina



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on Saturday. Although weakening is forecast over the next 48 hours, Matthew is expected to remain a hurricane until it begins to move away from the south-eastern United States on Sunday, 9 October 2016.

**WIND:** Hurricane and tropical storm conditions are expected to continue over the warning area in Florida tonight and spread northward within the warning area through Saturday. Residents in high-rise buildings should be aware that the winds at the top of a 30-story building will be, on average, about one Saffir-Simpson category higher than the winds near the surface. Hurricane conditions are possible within the Hurricane Watch and Tropical Storm Warning area in North Carolina by Saturday night or Sunday morning, with tropical storm conditions expected by Saturday morning.

**STORM SURGE:** The combination of a dangerous storm surge, the tide, and large and destructive waves will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water could reach the following heights above ground if the peak surge occurs at the time of high tide:

Flagler Beach, Florida, to Edisto Beach, South Carolina, including portions of the St. Johns River: 6 to 9 feet (1.8 to 2.7 metres)

Volusia/Brevard county line to Flagler Beach, Florida: 4 to 6 feet (1.2 to 1.8 metres)

Edisto Beach, South Carolina to Cape Fear, North Carolina: 5 to 7 feet (1.5 to 2.1 metres)

Cape Fear to Duck, North Carolina, including portions of the Pamlico and Albemarle Sounds: 2 to 4 feet (0.6 to 1.2 metres)

The deepest water will occur along the immediate coast in areas of onshore winds. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and it can vary greatly over short distances. Large waves generated by Matthew will cause water levels to raise well in advance of and well away from the track of the centre.

There is a danger of life-threatening flooding over the next 36 hours along the Florida north-east coast, the Georgia coast, the South Carolina coast, and the North Carolina coast from the Volusia/Brevard county line, Florida, to Cape Fear, North Carolina. There is the possibility of life-threatening flooding over the next 48 hours from north of Cape Fear to Duck, North Carolina.

**RAINFALL:** Matthew is expected to produce total rain accumulation of 8 to 12 inches over the Atlantic coast of the United States from north-east Florida to eastern North Carolina, with possible isolated maximum amounts of 15 inches. This rainfall may result in life-threatening flooding and flash flooding.

**TORNADOES:** Isolated tornadoes are possible across parts of the South Carolina and Georgia coastal plains late this afternoon and tonight.

**SURF:** Swells generated by Matthew will continue to affect portions of the Bahamas and the east coast of Florida over the next few days, and they will spread northward along the south-east U.S. coast through the weekend; these swells will likely cause life-threatening surf and rip current conditions.

**Watches and Warnings:** All coastal warnings have been discontinued south of the Volusia/Brevard county line, and the Hurricane Warning from the Volusia/Brevard county line to the Flagler/Volusia county line has been changed to a Tropical Storm Warning.



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A **Hurricane Warning** is in effect for north of the Flagler/Volusia county line in Florida to Surf City, North Carolina.

A **Hurricane Watch** is in effect for north of Surf City to Cape Lookout, North Carolina

A **Tropical Storm Warning** is in effect for Volusia/Brevard county line to the Flagler/Volusia county line in Florida and north of Surf City to Duck and the Pamlico and Albemarle Sounds in North Carolina.

### 3. Aid and assistance required / needs assessment

#### Bahamas

- 'All clear' given to Bahamian population at 9am EDT today
- 2 hurricane-related deaths reported, but they have yet to be confirmed
- Main damages: floods (2 to 4 feet in some areas [0.6 to 1.2 metres]), downed trees, damaged roofs and electric and cable lines are down (fear that some lines might still be live), traffic lights are broken and affected livelihoods (farms).
- Lots of stagnant water potential breeding sites (Zika is present in the Bahamas)
- Damages to the National Society's headquarters: Part of the roof still damaged. Generator is broken, no electricity in the warehouse and kitchen where all the supplies are store; the generator was replaced today
- National Society building in Grand Bahama is severely damaged; lost the roof and water came pouring in as a result; top floor is flooded.
- Grand Bahama heavily impacted. Looking for Bahamas Red Cross headquarters to do an assessment with the National Emergency Management Agency (NEMA) in Andros and Grand Bahama.
- Health centres, clinics and hospitals remained operative; some largely undamaged health centres were used as collective centres
- Few gas stations are operational; reported lines of almost 3 hours to obtain fuel.
- Eastern areas are restoring power; local radio stations announced that some areas will not have power for up to one week.
- Airport announced it will open tomorrow, 8 October 2016.
- Schools remained closed today.
- No information from other islands given the lack of communication as the Internet and landlines are still down

#### Cuba:

- Hurricane Matthew is the strongest hurricane ever to hit Guantánamo Province. Maisí was the most-affected municipality, and it cannot be accessed due to rain and strong winds. More than 109,800 people remain isolated in Baracoa, Maisí and Guantánamo.
- The High Staff of the Civil Defence and national authorities are assessing the damage; they expect adverse effects on sectors such as housing, water and sanitation, infrastructure, agriculture, food and basic social services.
- Many municipalities in Guantánamo Province reported severe damages: In Baracoa, 90 per cent of the housing is damaged (about 73,000 people affected), in Yateras, there is damage to houses, telephone lines and businesses, in San Antonio Del Sur, about 1,020 people are affected and 255 houses damaged (63 demolished and 192 partially demolished); Holguín, a municipality of Moa, reports 600 people affected, damages to 143 houses, fallen trees, blocked roads and power lines down.



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- The High Staff of the Civil Defence announced the return of the more than 1 million people evacuated prior to the hurricane. They are also preparing the return of the people in collective centres whose houses were not damaged. The hurricane destroyed agriculture in Guantánamo Province.
- Crops were severely damaged in the municipalities of Imías, Baracoa, Maisí, Yateras and San Antonio del Sur (total population 176,000); the high percentage of older people living in the area would be particularly affected by food insecurity and nutrition issues that could result from the crop loss.
- Hurricane-related rain did not significantly increase the water levels in reservoirs in Santiago and Guantánamo Provinces; therefore, the severe drought affecting these territories remains, with the consequent impact on the agriculture-food sector.
- The National Association of Small Farmers (ANAP) will take stock of land ready for planting short-cycle crops that will allow the sale of food in a short period.
- In municipalities of Guantánamo, several recovery tasks have started, such as clearing of debris, sanitation of evacuation centres and adjacent areas, storage of potable water and supply of markets.
- Damages have not been quantified (health infrastructure services) in the municipalities of Maisí, Imías, Baracoa and San Antonio del Sur, in Guantánamo province, and in the municipalities of Moa and Sagua de Tánamo in the Holguín Province.
- Floods and landslides may cause disease outbreaks, such as diarrhoea and dengue.
- There are reports of 22 damaged schools; however, difficulties in accessing the affected zones in Guantánamo prevented accurate data on damage to schools. More than 40,582 boys, girls and teenagers live in the municipalities of Yateras, Baracoa, Maisí, Imías and San Antonio del Sur in Guantánamo province and Moa in Holguín Province. In Santiago de Cuba, staff from the education sector are conducting sanitation efforts and organizing centres to receive students, and the monitoring of hygienic-sanitary measures established by the institutions remains.
- Needs pre-identified by the World Health Organization (WHO)/Pan American Health Organization (PAHO) and national authorities (quantities and positions to be confirmed) include access to water to prevent epidemics or gastrointestinal diseases, vector control and management of arboviruses outbreaks, recovery from damage to stocks and infrastructure, water pumps and portable generators.

### **Dominican Republic**

Fatalities	Affected Homes	Displaced to relatives' homes	Official collective centres	Collective centre population	Communities incommunicado
4	1,446	7,229	19	1,051	6

- The people sheltering friends' and relatives' homes have begun to return to their houses
- Cleaning operations have begun
- The restrictions on boating and water sports along the country's coastline have been lifted
- Due to the heavy rainfall in prior days and the forecasts for the coming hours, people are advised to abstain from crossing rivers, creeks and ravines that have high volumes of water; similarly, those who live in elevated places are advised to the necessary precautions for landslides.
- Operation in progress in the sectors of La Cañita, Transformadores, Barquita Norte, La Cucaracha, Los Reguindaos and la Lata in North Santo Domingo due to River



Ozama's rising water levels; area residents have been evacuated to the homes of friends and family.

- The East Santo Domingo Civil Defence chapter reported that 18 houses in the El Kennedy sector of Tamarindo were flooded when the River Ozama overflowed its banks; these families were displaced to friends'/relatives' homes

The Emergency Operations Centre (EOC) maintained a green alert level for possible flash flooding in urban and rural areas, the overflowing of rivers, creeks and flooding of ravines, as well as possible landslides in the following provinces:

GREEN ALERT
Monte Plata
Santo Domingo (including the National District)
Total: 2

	Green Alert: Issued when there is reasonable expectation of the occurrence of a dangerous event for the population; it can be partial or total.
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## Haiti

- The Haitian government has yet to declare a state of emergency

### Matthew Impact on Haiti as of 6 October 2016 (latest available information)

Department	Casualties			Evacuation (72 hr. max)			Protection
	Dead	Missing	Injured	People evacuated to evacuation centres (72 hr. max)	Open Evacuation centres	People evacuated to homes of friends/family	Protective cases
Artibonite	3	2	10	0		545	
Centre						1	
Grande-Anse	143		80	3,600	24		349
Nippes	6		4	2,833	45		
North-Est							
North-Ouest	1		1	0	2	15	
Ouest	34		65	3,877	54		
Sud	78	1	20	1,734	10		
Sud-Est	6		6	0	30	28	
<b>TOTAL</b>	<b>271</b>	<b>3</b>	<b>186</b>	<b>12,044</b>	<b>165</b>	<b>589</b>	<b>349</b>

Source: Haiti's National Disaster Risk Management System's EOC

## 4. Regional and local response

### GOVERNMENTS ACTIONS:

#### CUBAN GOVERNMENT ACTION

- 5,560 family-doctor offices have been instructed to have emergency supplies on hand and to remain open.
- Water tanks were mobilized in the eastern provinces
- More than 100 fully equipped electrical workers and a detachment of the armed forces are also contributing to clearing debris, fallen trees and sanitation; they went to



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Guantánamo to support the recovery of Baracoa, Imías, Maisí, San Antonio and Yateras.

### **DOMINICAN REPUBLIC GOVERNMENT ACTION**

#### **Education**

- The Ministry of Education suspended classes until today for all schools in the Dominican Republic

#### **Health**

- Coordination with the Infrastructure Board on the response to the flooding in hospitals that are under construction
- The Ministry of Health reported that all of the affected hospitals have been repaired and are 100% operational
- Maintaining control and epidemiological monitoring of the collective centres

#### **Shelter**

- Ministry of Health is providing healthcare through its Regional Health Services (SRS for its acronym in Spanish) to people in in the official collective centres
- The Presidency and Economic Consumers' Social Plan is providing food and provisions to the affected people
- The Metropolitan Office of Bus Services (OMSA for its acronym in Spanish) is transporting evacuated people from vulnerable and high-risk areas

#### **Infrastructure:**

- Sent a multi-disciplinary team to conduct a Damage Assessment and Needs Analysis (DANA) to determine the extent of the impact in the affected provinces
- The Ministry of Public Works conducted actions to clear and repair affected roads, trim damaged trees, remove fallen debris, clean drains, filters, debris collectors, ditches and culverts, and restore power in affected areas.

### **NATIONAL SOCIETIES ACTIONS:**

#### **BAHAMAS RED CROSS SOCIETY ACTION**

- 3 staff from the National Society started an initial rapid assessment at 9 am this morning (the IFRC communications delegate there joined the team in order produce communications materials) in south-west and southern areas in Nassau.
- National Society also deployed a team of 8 staff members to conduct a modified rapid assessment; the team will go to most affected communities to conduct more in-depth rapid assessment tomorrow morning
- 6 people were evacuated by the National Society during a rescue mission
- Emergency collective centres are still open and being run by NEMA; the National Society is providing support on shelter management
- The event is more national than international in scope, but the National Society may still request a Disaster Relief Emergency Fund (DREF) based on the damage assessments

#### **CUBAN RED CROSS ACTION**

- The National Society has offered its assistance to the government
- The National Society is rescuing people trapped in high-rise buildings.



#### **DOMINICAN RED CROSS ACTION**

- Disinfected the Tinacos Hospital's cistern in the province of Barahona
- Sanitized the aqueduct that provides water to 270,000 people in Canoa, Vicente Noble and Bombita in the province of Barahona
- Preparing a DREF request

#### **HAITI RED CROSS SOCIETY ACTION**

- Logistics support has been provided by the following PNSs (Partner National Societies): The Canadian Red Cross Society, Swiss Red Cross, American Red Cross, French Red Cross, Spanish Red Cross, the Netherlands Red Cross and German Red Cross
- The National Society is coordinating its response actions with the Dominican Red Cross
- The National Society's president will meet with the Haitian government to address the continued absence of a declaration of emergency
- The National Society performed an assessment in Jeremie, and it may set up a base camp there depending upon need
- The National Society will use the Directorate for Civil Protection (DPC for its acronym in French)'s forms for water and sanitation in order to ensure the uniformity of the collected data
- German Red Cross will assist the National Society with putting forms in an electronic format to facilitate the use of Open Data Kit (ODK)
- Emergency Appeal launched for 6.8 million Swiss francs (CHF) for 50,000 people for 12 months in Health; water, sanitation and hygiene (wash); shelter (including household non-food items) and disaster risk reduction (DRR); the appeal could increase based on the identified needs

#### **JAMAICA RED CROSS ACTION**

- An IFRC Logistics delegate is supporting the National Society
- Launched a DREF for CHF 130,149 today for 524 families (2,620 people) to replenish the Jamaica Red Cross's stock used during the disaster response in Kingston and St. Andrew, St. Thomas, Portland, St. Mary, St. Catherine, Clarendon, St. Ann St. Elizabeth parishes and to reimburse the National Society for the assessment costs it incurred

#### **SAINT LUCIA RED CROSS SOCIETY ACTION**

- The National Society will request a DREF for CHF 40,000 to replenish the stock it used during the emergency response to Matthew

## **5. Response by humanitarian organizations**

### **Regional**

Emergency Response Units have been activated and are on alert.

### **Cuba**

The United Nations Development Programme (UNDP) is ready to support national institutions on the recovery efforts. Experts in early recovery, debris management and post-disaster needs assessments are on standby.

UNDP offered the Cuban authorities assistance to mobilize resources to help reconstruct houses and social



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entities, and to transfer technology solutions already approved post-Hurricane Sandy in Santiago de Cuba. UNDP also offered the government production capacities of local materials recently installed through projects in Santiago de Cuba for recovery in Guantanamo.

The United Nations Resident Coordinator and the United Nations system in Cuba maintain close communication with the Ministry of Exterior Commerce and Foreign Investment and the Civil Defence.

The United Nations Office for Humanitarian Affairs (UN-OCHA) provided an initial emergency cash grant of USD\$100,000 for the immediate purchase of relief items, and UNDP has allocated USD\$650,000 to support assessments, debris and solid-waste management.

The United Nations Population Fund (UNFPA) has sexual and reproductive health kits available for distribution.

### Haiti

The United Nations will launch a Flash Appeal on 8 October 2016 to support response actions in Haiti. The Central Emergency Response Fund (CERF) released an initial grant of US\$5 million to begin life-saving response operations in the most affected areas.

The United Nations Children's Fund (UNICEF) is closely collaborating with the WHO/PAHO for the emergency health response and supporting the Nutrition Section of the Ministry of Health to re-establish sectorial coordination at central and departmental levels in order to maximize preventive measures and care capacity in the affected areas; the priority is to prevent disease outbreaks (cholera and other waterborne diseases, Zika and other mosquito-spread diseases like dengue and chikungunya). An estimated 150,000 people are targeted for assistance, including 75,000 children.

UNICEF identified the following WASH priorities: water production, storage and supply for collective centres; treatment of collective water; treatment of household water with Aqua tabs and chlorine for the next 2 to 3 weeks and emergency sanitation; the people targeted for aid are 1,200,000 persons, including 150,000 children.

The UNICEF Protection section supported the government's Institute for Social Welfare and Research (IBESR for its acronym in French), the International Organization for Migration (IOM) and the DPC on the evacuation of 130 children from a Cité Soleil orphanage, and the International Committee of the Red Cross (ICRC) provided them with mattresses, blankets and mosquito nets.

The World Food programme (WFP) pre-positioned emergency food to feed up to 300,000 people for a month. Subject to donor's agreement, there is an additional 3,500MT of food already in country, which could be mobilized immediately; WFP is also airlifting 30MT of High Energy Biscuits (HEBs) from Dubai.

WFP is leading the Logistic Working Group in close partnership with the United States' Office of Foreign Disaster Assistance (OFDA)'s Disaster Assistance Response Team (DART), IOM, DPC and other partners to ensure logistic coordination

WFP has deployed 6 mobile storage units in Port-au-Prince to stock non-food items (NFIs) for the global humanitarian community; one will be deployed to Les Cayes and one to Jeremie.

The United Kingdom's Department for International Development (DFID) deployed 4-person French-speaking team from the United Kingdom. The team is composed of team leader and humanitarian adviser, a humanitarian adviser, a humanitarian affairs officer and a logistics





specialist; a fifth team member (shelter advisor), who is currently deployed in Jamaica, may join as well. Several team members have prior Haiti experience (post-Earthquake and/or post-Sandy).

## 6. Implications for the IFRC

The Pan American Disaster Response Unit (PADRU) has indicated that it is at the disposal of the Caribbean National Societies if needed.

An IFRC team is in Jamaica, Cuba, Haiti and the Dominican Republic in order to provide the support needed by National Societies during the response phase.

The IFRC will manage the emergency appeal for CHF 6.8 million in Haiti and the DREF in Jamaica; more DREFs will likely be launched in the coming days once damage assessments have been completed.

## 7. Overall recommendations

National Societies with affected populations should share their data on their response actions so that they can be included on the Dashboard.

## 8. Other elements

Another storm has developed in the Caribbean. The following information about Tropical Storm Nicole was published on NOAA's website at 5 pm EDT (9 pm UCT):

Tropical Storm Nicole's centre is located near latitude 27.0 North, longitude 65.2 West; the storm is moving toward the south at around 5 mph (7 km/h), and this general motion with some reduction in forward speed is forecasted through early Sunday. A slow west north-westward or north-westward drift is expected later on Sunday. Maximum sustained winds have decreased to near 65 mph (100 km/h), with higher gusts. Additional weakening is expected in the next day or so. Tropical-storm-force winds extend outward up to 80 miles (130 km) from Nicole's centre. The estimated minimum central pressure is 994 mb (29.36 inches).

**SURF:** Swells associated with Nicole, along with rough surf conditions, should continue to affect Bermuda for the next few days.

For more information about Hurricane Matthew, please visit the following link:  
<https://app.klipfolio.com/published/ec77978d9513651515591847f84e4e61/hurricane-matthew->

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