

HURRICANE DORIAN

Situation Report No. 19

3 October 2019

HIGHLIGHTS

- As of 3 October, according to the National Emergency Management Agency (NEMA), approximately 1,573 people are in 6* shelters in New Providence. Additionally, 52 people remain in 2 shelters on Grand Bahama. In Eleuthera, Camp Symonette is privately managed with a reported population of 44 evacuees.
- The number of missing persons has reduced to 424 as NEMA reports 876 people have been found. There have been 60 deaths recorded; 51 on Abaco and 9 in Grand Bahama. More deaths are anticipated as search and rescue efforts continue, and debris removal continue.
- As of 3 October, in Grand Bahama 4 out of the 10 public health clinics are reported operational, 4 are non-operational, and 2 have been destroyed. In Abaco all clinics are providing some services but need facilities to be replaced or repaired. Two clinics (Man O War and Hope Town Clinic) were destroyed but are providing services out of a nearby school and private residence respectively.
- PAHO vector control experts continue to work closely with the Department of Environmental Health Services (DEHS) to establish vector surveillance systems in New Providence, Grand Bahama and Abaco.
- An enhanced surveillance system continues to be operational in healthcare centers and shelters. The Ministry of Health continues to strengthen epidemiological surveillance capacity with daily visits to shelters and clinics.

* 3 tents in addition to the main building at the Kendall Isaac Gym shelter are being used and are included in the count.



Figure 1. PAHO entomologist setting up a BG-Sentinel trap for mosquito surveillance in Abaco



Figure 2. PAHO HHS Advisor assisting in the Economic Impact Assessment (ECLAC)

SITUATION IN NUMBERS

Affected

>76,000¹



Deaths

60²

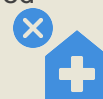


Government Health Facilities

4 Structurally Destroyed

4 Non-Operational*

11 Operational



Missing

424³



Evacuated

8,000



(New Providence)⁴

400

(Eleuthera)⁴

*Non-operational indicates no services are being provided at the health clinic

Sources

1. UN News September 5

2. Royal Bahamas Police Force October 1

3. NEMA Update September 30

4. Ministry of Health September 20

SITUATION OVERVIEW

The emergency caused by Hurricane Dorian is now in its early recovery phase. Various UN agencies, international organizations, and NGOs are in partnership with local authorities and are coordinating long term solutions for health care delivery, shelters and mental health support.

Shelter occupants in New Providence are declining. Sir Kendal G.L. Isaacs Gym still remains above capacity. As of 2 October, approximately 1,573 people are in 6 shelters (including 3 tents supporting the main facility in Kendal Isaacs Gym) in New Providence. In addition, according to the Department of Social Services as of September 26, 3,400 registered evacuees are residing in alternate accommodations in New Providence including hotels, relatives, and friends.

As individuals begin to return to the affected islands, it is essential that vector control measures continue to be implemented to prevent disease and respond to outbreaks. Mold removal in hospitals (notably Coopers Town Clinic and Rand Memorial Hospital), schools and in communities affected by the flooding also needs to be addressed.

The all sector Economic Impact assessment (ECLAC) lead by the International Development Bank (IDB) and a group of health structural engineers and economists from 40 countries in the Latin America and Caribbean region has commenced on 1 October to assess both Grand Bahama and Abaco.

HEALTH SITUATION

Syndromic surveillance activity continues to be low in New Providence, Abaco and Grand Bahama. Not many reports of suspected cases of communicable diseases or syndromes are being registered from clinics, shelters and EMTs on New Providence, Abaco, and Grand Bahama, suggesting the few cases registered are appropriately being captured by the surveillance system. Most patients continue to report with chronic diseases needing medication refills and minor lacerations.

Overall, in Abaco, Grand Bahama, and New Providence there continues to be an urgent need for mental health and psychosocial support (MHPSS). EMTs and the Ministry of Health continue to provide healthcare support to shelters and affected communities in Abaco, Grand Bahama and New Providence. Management of medical waste around clinics still needs to be addressed.

Grand Bahama:

- IMC continues to provide EMT support to East Grand Bahama and High Rock Clinic and providing rotation of clinical care in all the affected clinics

New Providence:

- AmeriCares is providing medical support to Kendal Isaacs Gym and assisting Heart to Heart International and the Ministry of Health to provide MHPSS.
- Bahamas Academy Shelter reported three cases of gastroenteritis in children less than 5 years old, but no samples were obtained. One case of suspected scabies in a child was also reported and treated along with one case of fever and cough in a child less than 5 years old.

Eleuthera:

- Camp Symonette is requesting mental health services for evacuees. No needs were identified in other areas.

WASH: The Water and Sewage Corporation (WSC) have delivered 50 portable toilets and have been distributed among various sites in Abaco. Water quality monitoring is ongoing in Abaco. However in Marsh Harbour, further water infrastructure assessments are hindered by the debris. Clean-up efforts by WSC are scheduled for October 2019.

Environmental Health: Mosquito source reduction activities and rodent pesticide measures have been implemented by DEHS and WSC at all shelters in New Providence. Water quality monitoring is ongoing at shelters and clinics in Abaco and Grand Bahama. Monitoring at the shelters will be implemented on a bi-weekly basis. As more people return to the islands, it is essential that the mosquito surveillance is implemented rapidly, and surveillance activities are performed multiple times per week to provide baseline data on mosquito populations and species distribution in a given area for targeted control methods and public health awareness. Monitoring of insecticide resistance is ongoing due to discrepancies found between the Caribbean Public Health Agency (CARPHA) report and rapid field tests that showed promising mortality results for *Ae aegypti*. Teams from DEHS continue to provide support to Abaco and Grand Bahama for vector control. Truck mounted spraying and fogging treatments continue in Abaco and Grand Bahama. Additional entomology lab and field supplies are in the process of being procured.

CONTEXT

Hurricane Dorian made initial landfall on September 1st, 2019 at Elbow Cay, Abaco at 12:40 EDT as a powerful Category 5 hurricane with sustained winds of 185 mph. The hurricane then moved to Grand Bahama and made a second landfall at 23:00 EDT at near same intensity, where it then stalled over the island for over two days. The hurricane had devastating effects, especially on the islands of Grand Bahama and Abaco, as they had prolonged exposure to extreme hurricane force winds, storm surges, flooding and intense rainfall

NEEDS

KEY POINTS

- Mental health and psychosocial support continues to be needed in communities in Abaco and Grand Bahama and in health care workers and evacuees in New Providence and Eleuthera.
- Restoring proper hygiene and sanitation, adequate waste management, and vector control in affected communities and health facilities is needed. Waste management and garbage collection at shelters in New Providence continues to be an issue
- Ensuring safe drinking water, food safety, and addressing sanitation and hygiene needs; specifically health promotion and hand washing both in shelters and in communities in the affected islands.
- A formal and in depth assessment of the Rand Memorial Hospital and Coopers Town Clinic needs to be performed to address the mold as well as assessments for mold in schools and communities affected by flooding
- Safe disposal and management of medical waste in health facilities in Abaco.

Primary health systems need to be rehabilitated to provide better services to the affected communities as people return. The Ministry of Health has identified six health facilities that need to be replaced (2 on Grand Bahama, 4 on Abaco) through temporary modular units or relocation to a new facility. Of these, Guana Cay, Abaco does not have a government clinic but due to the storm there is an urgent need to provide care which will be addressed by a modular unit. Assessment of laboratory equipment is still needed in Marsh Harbour clinic. Replacement clinics and modular homes for Green Turtle Cay, Hope Town, Sandy Point and Moore's island have been requested by the Ministry of Health.

Further assessments and repairs of public water pumping stations and systems, specifically the two water pumps damaged in Marsh Harbour, is urgently needed. On Abaco, identifying safe housing options for healthcare and response workers and those responding is urgently needed to ensure their wellbeing. Debris removal and identifying storage and management strategies on the affected islands remain an additional priority. A dedicated site for the management of donations needs to be identified in New Providence.

WASH: While water assessments are ongoing, maintaining water quality is a priority through chlorination, installation of RO water for communities among others. Sanitation issues in and around clinics and shelters, especially regarding waste and medical waste management still needs to be addressed. Additional needs include intensified health and hygiene promotion, particularly messaging for WASH and environmental health for disease prevention among the communities currently in the affected islands.

Environmental Health: Establishing baseline vector surveillance data for both Grand Bahama and Abaco remains a top priority. Additional vector control is urgently needed in the Mudd and Pigeon Pea area in Abaco due to the standing water and flies. Mold in various structures including health care facilities (Coopers Town Clinic, Rand Memorial Hospital) of the affected islands needs to be addressed. Alternate control methods such as environmental manipulation, source reduction and bio-rational pesticides will need to be used to reduce likelihood of resistance.

RESPONSE ACTIONS

MINISTRY OF HEALTH

The Ministry of Health continues to coordinate with nursing and medical staff, EMTs, and partners for health care personnel capacity to maintain health care delivery in Abaco and Grand Bahama. The Ministry continues to support mental health and psychosocial support services and ongoing disease surveillance at shelters and clinics. Response coordination for the health sector in Abaco will be coordinated by a Ministry of Health representative at the NEMA Emergency Operations Center.

Health promotion activities are ongoing at shelters and clinics. Public safety announcements were produced and sent to be broadcasted by radio and posted on social media. Printed materials on water safety, handwashing and chronic disease care continue to be distributed to shelters and clinics and other areas in Abaco, New Providence and Grand Bahama. Joint collaboration with other government agencies is ongoing for the screening of school aged children at shelters and reproductive health is being coordinated with various partners for distribution plans and messaging.

The Ministry of Health Surveillance Unit has updated its syndromic surveillance guidelines, with detailed case definitions and surveillance collection forms, which have been distributed this week to clinical providers, including EMTs, private and public clinics, polyclinics, and hospitals

PAHO/WHO

Throughout the course of the hurricane response and pre-deployments, PAHO has mobilized 20 surge staff to support the PAHO Bahamas country office.

WASH: PAHO continues to provide technical assistance for ensuring water quality and rehabilitation of affected wells and pumps through collaboration with Water and Sewage Corporation (WSC), international organizations and NGOs to support water quality surveillance and establish and maintain safe water and access in health facilities for both Abaco and Grand Bahama.

Environmental Health: PAHO led training with DEHS staff continues for vector surveillance specifically for mosquito and rodents including vector biology, ecology, pesticide safety and application, and Geographical Information Systems (GIS). A PAHO entomologist will be providing support to DEHS for the coming 3 months. PAHO is also participating in risk assessments of potential threats associated with the disposal of debris and ensuring biosafety of flooded health clinics and structures particularly related to mold in flooded wards and rooms.

Surveillance: PAHO continues to provide direct technical assistance to the Ministry of Health to strengthen heightened active disease surveillance in shelters and clinics for early detection and timely response. Daily syndromic and event-based surveillance have been established at shelters and hospitals. All shelters in Grand Bahama, New Providence and Eleuthera, all operational health facilities in Grand Bahama and Abaco, and all EMTs operating in the country have been providing daily reports from syndromic surveillance systems. Clinics in New Providence and Eleuthera that treat evacuees report weekly syndromic surveillance data.

Emergency Medical Teams

As of October 1, 2019, 4 EMTs remain operational and continue to provide daily updates through the CICOM. PAHO's EMT secretariat continues to provide remote support as scale-down activities begin and EMTs begin to transition into providing long-term care.

| Team | Location | Fixed / mobile | Patients seen on October 1 | Type of treatment received | Conditions treated | Trends |
|------------------------------|--|--|---|--|--|---|
| Samaritans Purse | Central Grand Bahama | TYPE 2 (Surgical, Intensive Care, ER, inpatient) | 168 consultations 25 inpatients 3 surgeries | Outpatient care Surgical care Inpatient care | Minor trauma, infectious disease and surgical procedures | Majority not related to event. Chronic disease |
| International Medical Corps | East Grand Bahama High Rock field clinic. | TYPE 1 FIXED & MOBILE | 28 Consultations | Outpatient care and home visits for health messaging | Chronic disease, infectious disease | Majority cases not related to the event. Hypertension, chronic conditions and infections |
| Heart to Heart International | Abaco (Marsh Harbour, Treasure Cay) | TYPE 1 MOBILE | | Outpatient care | Chronic disease | Most cases not related to the event. Mental health and psychosocial support |
| AmeriCares | Nassau – Kendal Issacs Gym Shelter | TYPE 1 MOBILE | 64 Consultations | Outpatient care Psychosocial support | Infections and minor trauma | All cases not related to event. Acute respiratory infection. Mental health and psychosocial support |

Status of health facilities: as of October 3, 2019

| LOCATION | NAME | Operational Status | Notes: |
|--------------|-------------------------|--------------------|--|
| ABACO | Hope Town Clinic | Destroyed | While services are being provided out of a private residence, the facility will need to be replaced. Roof sustained heavy damage. |
| | Treasure Cay Clinic * | Operational | A public government clinic will need to be added due to the significant increase of persons in the area |
| | Coopers Town Clinic | Operational | Urgent repairs and mold assessment are needed. Has tarp on roof but needs extensive roof repair. Medical equipment needed. Water leak in the ground. Pharmacy stock is low and needs to be replenished from Marsh Harbour. |
| | Fox Town Clinic | Operational | Need a new generator as the previous one is old (still functioning). Roof damage. Have medical stocks and records are intact. |
| | Green Turtle Cay Clinic | Operational | Facility may need to be replaced if integrity of the roof cannot be re-established |
| | Man o War Cay Clinic | Destroyed | While the facility was severely impacted, it can be rebuilt with the community. Services are being provided from a nearby school. Roof damage and flooding. |
| | Marsh Harbour Clinic | Operational | Lab and X Ray are not operational. Residential area for doctors and nurses has sustained damages. Supplies and medicine stocks are filled. |
| | Moore's Island Clinic | Operational | Needs structural care especially due to roof damage |
| | Sandy Point Clinic | Operational | In need of a generator |
| GRAND BAHAMA | Grand Cay Clinic | Non-operational | No updates |
| | High Rock Clinic | Destroyed | Facility needs to be replaced. IMC operating out of this clinic and servicing Grand Bahama |
| | McClean's Town Clinic | Non-operational | Needs internal repairs. Extensive roof damage. Equipment and furniture need to be replaced. |
| | Pelican Point | Destroyed | No updates. Facility sustained major damage. Was a rented facility and there is no short term need to re-establish operational capacity due to proximity to McClean's Town Clinic. |
| | Free Town Clinic | Non-Operational | Facility needs to be replaced as it is in a popular area. Roof needs extensive repair. |
| | Sweeting's Cay Clinic | Non-Operational | No updates |
| | Eight Mile Rock Clinic | Operational | In need of minor rehabilitation. Some roof and interior ceiling damages. Able to provide a space for lab and x-ray equipment to be relocated from Rand Memorial Hospital |
| | Hawksbill Clinic | Operational | In need of minor rehabilitation. |

*private clinic



Figure 3. What remains of High Rock Clinic, Grand Bahama



Figure 4. Mold in Marsh Harbour, Abaco nurse housing facility