

HURRICANE MATTHEW

Situation Report No.24 Date: 04 November 2016 (16:00 EST)

PAHO HQ- Washington DC

This report is produced by PAHO/WHO in collaboration with PAHO Country Offices, Ministries of Health, and with inputs from official organizations. This report covers the period from 29 October- 04 November at 16:00 EST.

HIGHLIGHTS

- 1, 000,000 doses of Oral Cholera Vaccine (OCV) were transferred today by PAHO/WHO to Les Cayes and Jérémie for the upcoming cholera vaccination campaign in Sud and Grand'Anse, respectively. They will be stored and secured in WFP warehouses.
- United Nations' Inter-Agency Standing Committee Emergency Directors Group visiting Haiti was briefed by the Incident Manager yesterday about the aftermath of the storm.
- PAHO/WHO held Health group coordination meeting today with MSPP; 20 organizations participated. Next Health Group meeting will be on Tuesday, 08 November at 10am at PAHO/WHO.
- For country overviews of all response activities, in addition to background information of Hurricane Matthew, see Annex A and B.



The 1 million doses of Oral Cholera Vaccine (OVA) delivered on 26 October, 2016 is now in route to Les Cayes and Jérémie for the upcoming cholera vaccination campaign.

Country	Population in urgent need of humanitarian assistance	Persons Missing	Persons in Shelters	Shelters	Deaths	Cholera suspected cases in the affected area		Total Suspected Cholera Cases	Health Facilities Affected
						South	Grand' Anse		
Haiti	1,410,744 ¹	128 ¹	175,509 ¹	307 ¹	546 ¹	1352 ³	904 ³	4481 ³	36 ²

¹ Source: COUN/Ministère de l'Intérieur et des Collectivités Territoriales.

² Information from PAHO/WHO Field Teams rapid assessments, 56 health structures visited out of 105.

³ Source: Cholera Epidemiological Surveillance from the National authorities (DELR) and the Departmental Health Services. Information of Suspected Number of Cholera cases since Hurricane Matthew, between 1-27 Oct. including data from reporting sites.

HAITI

SITUATION OVERVIEW:

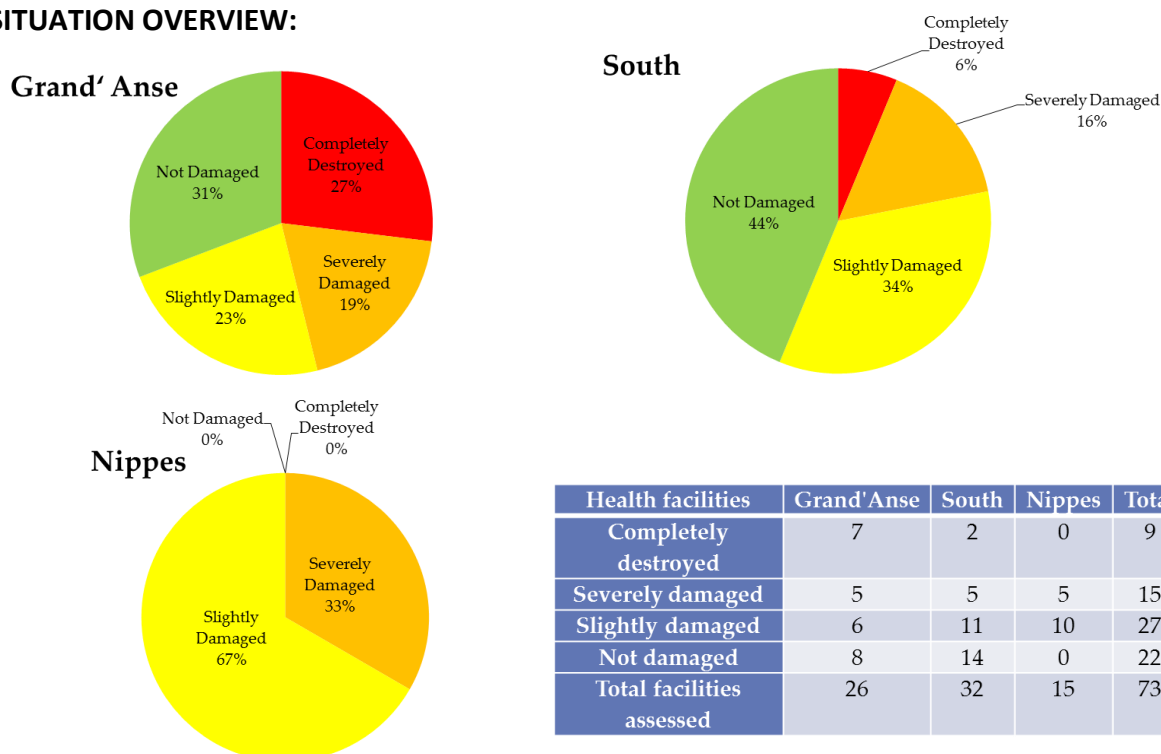


Figure 1-4: Damage to health facilities in Sud, Grand' Anse and Nippes Departments. *Source: MSPP, PAHO/WHO.*

GRAND' ANSE DEPARTMENT

- An increase in suspected cholera cases has been observed during the last few days, notably in Marfranc, Jérémie, and Abricots.
 - Due to the increase in suspected cholera cases, new strategies are being socialized to avoid duplication of efforts to combat the spread of the virus.
- DSGA and MSF are planning missions to reach isolated secluded areas that have not received assistance or relief.
- The French medical team working at Saint Antoine Hospital completed two medical evacuations to Port-au-Prince.
- Dame Marie's CTC, managed by MSPP with the support of MdM, is now functional.
- The PAHO/MSPP epidemiological team is investigating the reports of hepatitis, typhoid, gastroenteritis and malaria cases from Dame Marie and Anse d'Hainault.
- According to first reports from the PAHO/WHO health services quality expert, there are significant issues noted in the application of norms and standards in CTCs in the department.
- Plans for rehabilitation of Saint Antoine Hospital and damaged health centers are underway. Implication of DOSS is needed for partners to engage in works.

SUD DEPARTMENT

- Security incidents over the weekend, notably in Les Cayes and Torbeck, slowed down response activities and aid distributions. A decrease in suspected cholera cases has been

observed the last few days, but it must be confirmed, as there are difficulties in obtaining epidemiological cholera information in the department.

RESPONSE:

MSPP

- DPM/MT/MSPP held a coordination meeting today, in MSPP with partners working with supplies logistics to better coordinate supplies management.
- Oral Cholera Vaccination campaign training and micro planning activities are set to begin today (4 November) in Les Cayes and Jérémie.
- MSPP asked partners during the Health Group Coordination meeting for more interventions in affected communes that have little or no presence from partners (i.e. Saint-Louis-du-Nord and Ile de la Tortue in the Nord Ouest; Valle Jacmel, Marigot, Thiotte in Sud Este, etc.); and to engage in durable reparations to health structures in affected areas that have a lot of presence of mobile clinics but no functional health facilities.

PAHO/WHO

- PAHO/WHO laboratory expert visited Grand'Anse and Sud departments with National Public Health Laboratory (NPHL) to assess the capacities and needs of regional laboratories to make them fully functional.
- Deployment of a WaSH logistician that will work in Sud and Grand'Anse.
- PAHO/WHO experts on health services quality deployed in Sud and Grand'Anse have begun assessments of CTCs.
- PAHO/WHO assessed the water and sanitation situation for 14 health institutions in Sud and Grand'Anse and found that the water supply systems are affected and waste management needs to be improved urgently. PAHO is preparing a plan for the rehabilitation of WaSH in health institutions.

NEEDS:

- Humanitarian assistance to rural areas that have not been reached.
- Rehabilitation of existing health structures; awaiting donors' expression of interest and DOSS implication.
- Water and waste management in health structures and CTCs.
- Advance the protocols for cholera case management in CTCs.
- Adding a psychosocial component to mobile clinics.
- Reinforce epidemiological surveillance in the affected areas.

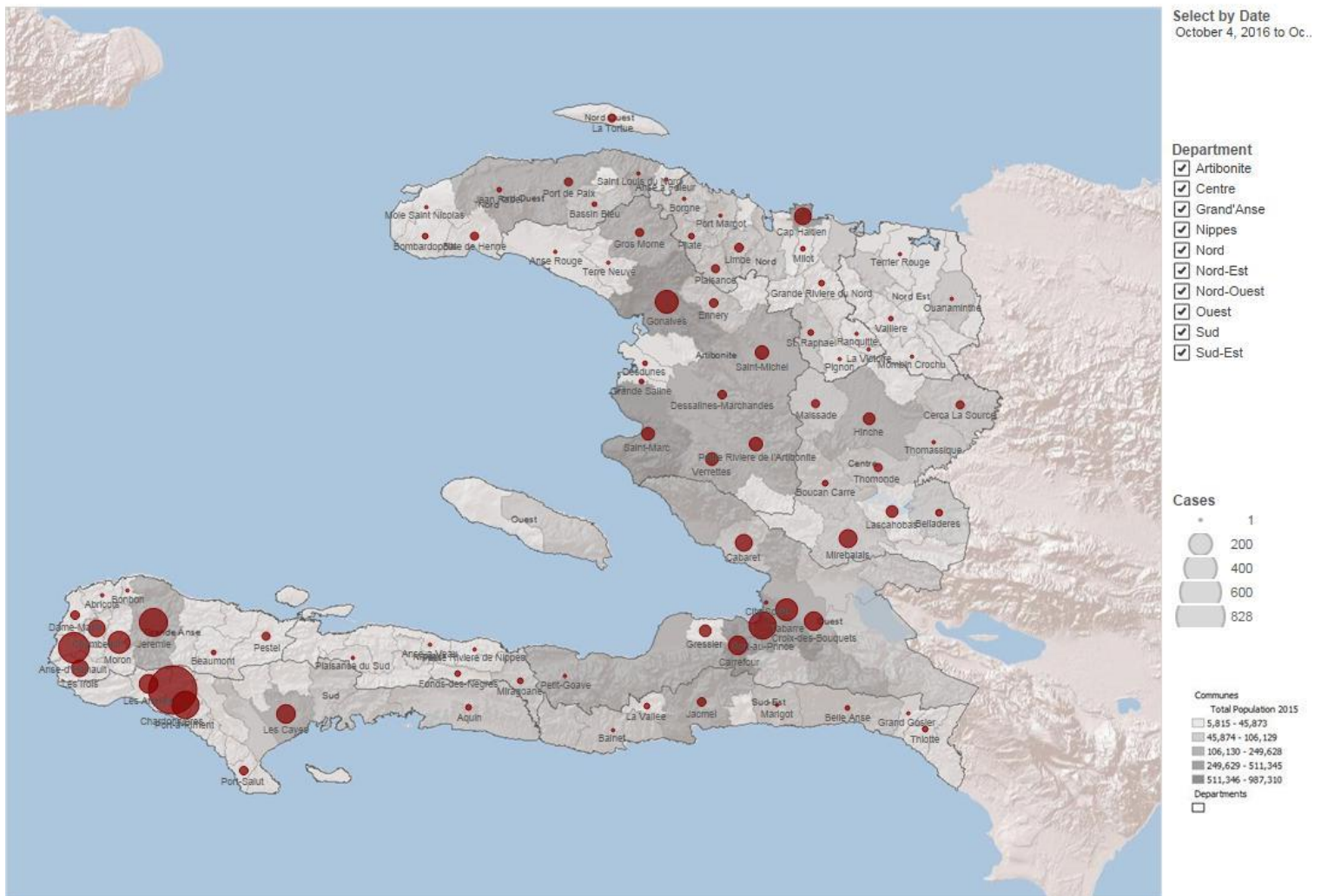
PARTNER ACTIONS:

- **PSI**
 - Support to National Malaria Control Program (NMCP) by prepositioning malaria treatment medicines in health centers in affected areas with the support of PROMESS.
- **PROFAMIL**
 - Plans to work in coordination with partner's mobile clinics to add family planning activities.

MAP OF SUSPECTED CHOLERA CASES



Suspected cholera cases by commune in Haiti Oct 4-31, 2016



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Data Sources: Cholera Epidemiological Surveillance from the National authorities (DELR) and the Departmental Health Services.

Sources: *CDEMA; OCHA; PAHO-HTI; PAHO-CUB; PAHO-BHS; PAHO-JAM; NOAA-NHC; DC COLOMBIA; FEMA; MPH-OEA; NEMA*

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ANNEX A.

Summary of Highlights per Country for Hurricane Matthew Response

Haiti

- The Departments of Grand'Anse and Sud were directly impacted by Hurricane Matthew as a Category 4 storm, resulting in significant destruction.
 - As of 28 October, more than 1.4 million people are in need of urgent humanitarian assistance; 128 people are missing; more than 170,000 people are occupying 307 temporary shelters; 36 health facilities (excluding Cholera Treatment Centers and Units) sustained varying levels of damages.
- PAHO/WHO has deployed 23 experts (Health/EMT Coordination; WaSH; DANA; Logistics; Communications; GOARN) to the country office to booster response activities and relief efforts as a result of the growing need for assistance.
- The Rapid Response Emergency Unit arrived on 5 October to begin conducting assessments. Field teams, including an Epidemiologist, were sent to Les and Jérémie to deliver medical and cholera supplies, as well as inspect the surveillance the shelters.
- Two additional PAHO field offices were set-up in Jérémie and in Les Cayes, and both were fully staffed with technical personnel to support relief efforts.
- On 17 October, PAHO/WHO began distributing medical supplies and cholera beds to health centers in Grand' Anse and Sud departments.
- PAHO/WHO presented the Post Disaster Needs Assessment (PDNA), which has been implemented with the leadership of Ministry of Planning and External Cooperation (MPCE) and the support of UNDP, the World Bank and European Commission.
- In Epidemiological Week, between 4 and 29 October, the departments of Grand'Anse and Sud reported 51% of the nationally suspected cholera cases. These two departments make up only 11% of the total population of Haiti.
- Only 8 out of 34 samples in Grand'Anse and Sud have been laboratory confirmed for cholera, as of 25 October 2016. The laboratory results indicate that Inaba serotype has replaced the Ogawa strain in five of the *Vibrio cholerae* O:1 strains isolated from Jeremie and one third of those isolated from Les Cayes. These results are consistent with findings by M. Alam et al (<http://dx.doi.org/10.1371/journal.pntd.0005045>).
 - The isolated strains have an antibiotic sensitivity and resistance profiles similar to the Haitian strain responsible for the 2010-2016 cholera epidemic (sensitive to tetracycline, diminished sensitivity to ciprofloxacin, resistant to sulfamethoxazole/trimetoprim).
- The Ministry of Health of Haiti, accompanied by UNICEF and PAHO/WHO representatives, received a total of 1,000,000 doses of Oral Cholera Vaccine (OCV). The OCV has been transferred to Les Cayes and Jérémie for the cholera vaccination campaign.
 - The cholera vaccination campaign is targeting 820,000 people in the 16 communes that have reported suspected cholera cases or deaths related to cholera outbreak.

Bahamas

- As a Category 4 storm, Hurricane Matthew impacted the islands of New Providence, Andros, and Grand Bahama.
 - Per official reports, 5,000 people were evacuated to 601 shelters.

- PAHO/WHO deployed 3 experts (WaSH; Health Coordination; DANA) to support health authorities with conducting the damage assessments.
- PAHO-Bahamas conducted 96 percent of damage assessments for all clinics and health facilities of the impacted islands, and then reported their status to the Ministry of Health and Public Health Authority (PHA).
 - PAHO/WHO experts developed a health facilities assessment plan that was implemented and executed to inform the report.
- A Zika Virus campaign was re-initiated with two workshops and insecticide testing due to concern of stagnate water caused by the flooding from Hurricane Matthew.
- PAHO/WHO is currently collaborating with the Ministry of Health and Public Health Authority to identify needs in terms of health and water supplies/equipment that may be necessary to fully restore the health facilities.

Cuba

- As a Category 4 storm, Hurricane Matthew impacted the Province of Guantanamo.
 - Approximately more than 365,000 people were affected across 10 provinces; 94% of homes were destroyed in Maisi, in addition to 13 aqueducts; 120 health facilities, including pharmacies, hospitals, and family centers, were affected.
- PAHO/WHO deployed one expert (Health Coordination) the Regional Response Team.
- PAHO/WHO and MINSAP are focusing on water and sanitation, health promotion and health facilities assessments as their primary response activities.

Dominican Republic

- As a Category 4 storm, Hurricane Matthew impacted the southwestern region of Hispaniola.
 - More than 1,500 people were displaced in 10 shelters; 4 recorded deaths; 94 aqueducts were out of service in 8 provinces; 33 health facilities were affected, including main hospitals and primary care centers.
- PAHO/WHO performed damage assessments on health facilities in affected areas.

Jamaica

- Winds from the Category 4 storm impacted Jamaica. A state of emergency was declared due to the project path of Hurricane Matthew – Hurricane Matthew did not make direct landfall on Jamaica.
 - More than 1,000 people evacuated to over 100 shelters; surge storm flooding was reported in Kingston, St. Andrew and St. Catherine communities; all health services remained functional.
- PAHO/WHO deployed three experts (Logistics, WaSH, DANA) to support country office operations. A Situation Room was established with designated experts for the emergency. The country office activated the Preparedness and Response Plan for Emergencies and Disasters, as well as the Business Continuity Plan.

Colombia

- Surge storm flooding and high winds from Hurricane Matthew impacted the coastlines of Colombia, resulting in 38 floods and two landslides. Basic response services (see below) were activated due to 6 departments and more than 26,000 families being affected:
 - El RUD (Victims Only Registration)

- AHE (Emergency Humanitarian Aid)
- Machinery and materials warehouse
- Basic water and sanitation
- Rent subsidies
- Agriculture and farming sector
- More than 600 civil servants responded to the emergency and all the National Risk Management Systems were activated.
- Per the flooding, the La Guajira Department water reservoirs were refilled in the region.

Barbados, Dominica, St. Lucia, St. Vincent, and the Grenadines

- Tropical Storm Matthew impacted these islands on 28 September 2016, causing heavy rains.
- Response-related organizations were on alert and evaluated the ongoing situation as needed; the situation remained manageable, and no additional support was requested.

Emergency Response Projects

PAHO/WHO assisted national authorities in identifying and quantifying needs and launching humanitarian appeals to support resource mobilization efforts in the most affected countries.

A \$119 million UN Flash Appeal for Haiti, including \$9 million for the health sector, was launched on October 10th, 2016. PAHO/WHO's funding requirements for the response to Hurricane Matthew in Haiti for the first three months was estimated at US\$9M (US\$ 3.55 million in the flash appeal and US\$ 5.5 million for the emergency cholera vaccination). As of today, almost US \$1.6 million has been approved, pledged or is in the pipeline from Andalucía, Canada, USA, Botswana and the UN CERF. This is in addition to just under \$900,000 previously in hand to support cholera response and vaccination from ECHO, Canada, Italy, and Chile. 1 million oral cholera vaccines have also been deployed to Haiti (~\$1.9M). This leaves a funding gap of US\$ 1.95 million for the flash appeal and US\$ 2.7 million for emergency cholera vaccination campaign.

Similarly, a \$26.5 million Plan of Action in response to Hurricane Matthew in Cuba was produced by UN agencies. Funding requirements for health were estimated at \$1.5 million. As of today, a contribution of \$288,475 was received from the UN CERF to support PAHO/WHO's response operations in Cuba.

ANNEX B.

Background

On 4 October 2016, Hurricane Matthew violently struck southwestern Haiti, before making secondary landfall over eastern Cuba. On 5-6 October, the Matthew continued to sweep across the central Caribbean impacting The Bahamas, bringing destructive winds and storm surge flooding. As Hurricane Mathew evolved into one of the most destructive storms in recent years, PAHO/WHO began preparing for its impact by deploying experts to countries that were projected to be affected. Following the impact of Hurricane Matthew, PAHO/WHO currently remains one of the lead collaborators with the Ministry of Health for Haiti, in addition to other United Nation (UN) and nongovernment organization (NGO) partners.