HEALTH CLUSTER BULLETIN

CHOLERA AND POST-EARTHQUAKE RESPONSE IN HAITI – TUESDAY, AUGUST 16, 2011 – #27

Highlights

- The alerts and corresponding responses were reported on in separate SitReps (http://haiti.humanitarianresponse.info/Default.aspx?tabid=77).
- There are currently 37 CTCs, 204 CTUs, and 766 ORPs functioning in-country.
- The case fatality rate remains the highest among children and the elderly.
- Since May, PAHO/WHO has received notices from caregivers that patients who have already received treatment in the preceding months are returning to CTUs and CTCs to receive care. Although it is possible that one of the two episodes is due to a disease other than cholera, further research is needed to determine the duration of immunity after infection and the probability of observing cases of reinfection at this stage of the epidemic.
- Post-Emily lessons learned include the importance of clear, uniform information dissemination and of communication between partners and the different emergency cells. Furthermore, it was once again noted that preparedness is paramount for adequate response.
- Many communities have made preparation efforts for the Assumption Holiday taking place on 15 August, which is expected to draw large crowds to the larger cities all throughout Haiti. Preparations have included hand washing stations, health promotion materials, ambulances, first aid stations, and mobile latrines. The focus is on re-emphasizing cholera prevention techniques.

Dear health partners,

Although the rainy season has not hit Haiti quite yet and Tropical Storm Emily dissipated before it could cause any real damage, it served as a good reminder of the importance of preparedness efforts. Therefore, we encourage our partners to take this time to review their plans and stocks so as to be better prepared for when the rains do come.

Health Cluster Coordination

Patients receive cholera treatment at the hospital in Saint Marc.

The Ministère de la Santé Publique et de la Population (MSPP) and PAHO, the Regional Office of the World Health Organization (WHO) for the Americas, coordinate the Health Cluster. **MSPP Cluster Contacts:** Dr. Claude Surena; Dr. Jean Hugues Henrys; **PAHO/WHO Contacts:** Dr. Juan Carlos Gustavo Alonso; Esther van der Woerdt

Health Cluster partners are asked to contribute to this bulletin with information on needs and activities as well as corrections to content, by emailing hai.clustersante@paho.org (subject heading: Health Cluster Bulletin). For useful information on meetings, guidelines, and CTC, CTU, and health facility locations, visit: http://haiti.humanitarianresponse.info.

SITUATION OVERVIEW

- In preparation for the arrival of Tropical Storm Emily, the COUN (National Emergency Operations Center) and EJOINT (Emergency Joint Operations Center) were activated and subsequently deactivated with Emily's dissipation. Preparations proved to be a useful exercise as hurricane season is underway. The storm dissipated as it reached Haiti on 4 August bringing with it some rain and wind, but thankfully nothing to the scale that was expected and causing no real damage or increase in cases. Post-Emily lessons learned include the importance of clear, uniform information management and communication between partners and the different emergency cells. Furthermore, it was once again noted that preparedness is paramount for adequate response.
- As the end of the year approaches, certain organizations are struggling to find necessary funding to maintain activities in the departments. The department that will experience this withdrawal most and soon is Nippes. All actors will be out of the department by the end of October unless funding is procured. The situation is similar in Grande Anse as well.
- MSF-France has opened a Comorbidity CTU (cholera case with other associated medical problem) at the hospital in Drouoillard since week 29. There is qualified staff onsite to handle these more complicated cases.

Table 1: Functional cholera health structures:

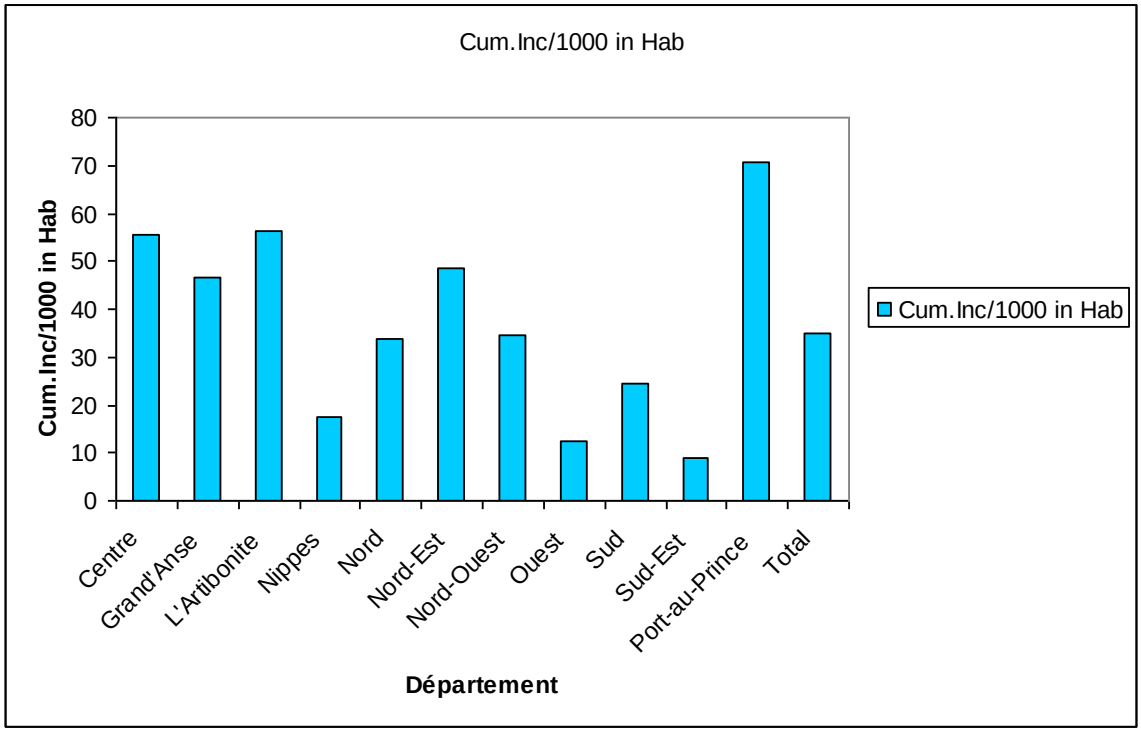
	10 Jan	16 Jan	23 Jan	30 Jan	6 Feb	13 Feb	16 Mar	26 April	16 May	18 July	5 August
Operational CTC	81	85	101	101	100	98	98	56	48	38	37
Operational CTU	156	129	165	185	188	215	214	226	210	191	206
ORP	s/o	298	786	778	774	642	692	760	810	863	847

EPIDEMIOLOGICAL SURVEILLANCE

Indicator-based component

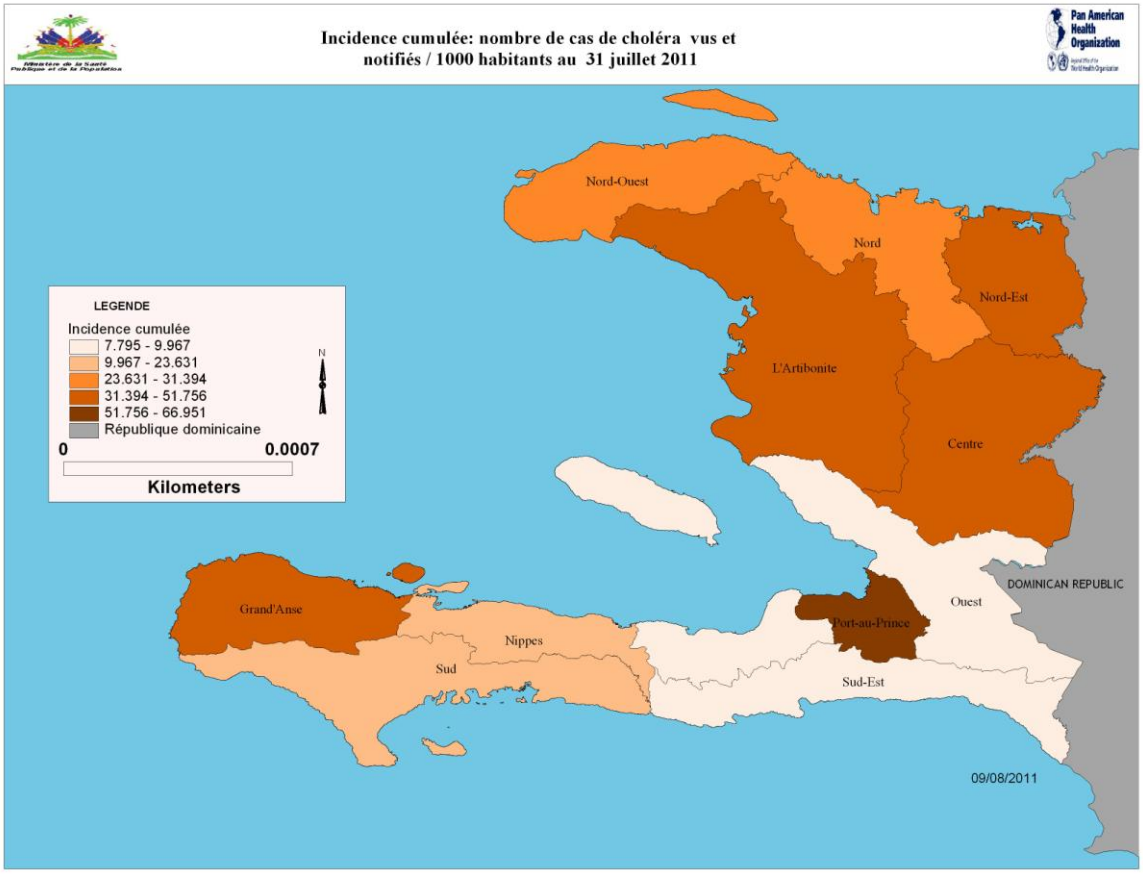
- As of 31 July 2011, the cumulative number of reported cholera cases was 419,511 of which 222,359 were hospitalized and 5,968 died. The case fatality rate is at 1.4%.
- The global attack rate is 4.0% for 100 inhabitants, with 7.1% in Port-au-Prince to 0.9% in the South-East.
- Overall mortality rate for Haiti is 57.3 per 100,000 inhabitants. The cumulative mortality rate since 31 January 2011 until 25 July, 2011 is 14.4 for 100,000 inhabitants.

Figures 1 and 2: Cumulative incidence of reported cholera cases (number of cases per 1,000 inhabitants), by department, 20 October 2010 – 31 July 2011



Department	Cum.Inc/1000 in Hab
Center	55.65
Grand Anse	46.55
Artibonite	56.45
Nippes	17.63
North	33.68
North-East	48.54
North-West	34.58
West	12.28
South	24.51
South-East	8.94
Port-au-Prince	70.78
Total	34.85

Figure 3: Cumulative incidence of reported cholera cases (number of cases per 1,000 inhabitants), by department, 20 October 2010 – 31 July 2011



The highest cumulative incidence has been reported in Port-au-Prince metropolitan area followed by the Departments of Artibonite and Center. The Department of South-East reports the lowest cumulative incidence.

Figure 4: Cumulative number of hospitalized cholera cases by week of reporting Haiti, 8 Nov 2010 to 25 July 2011.

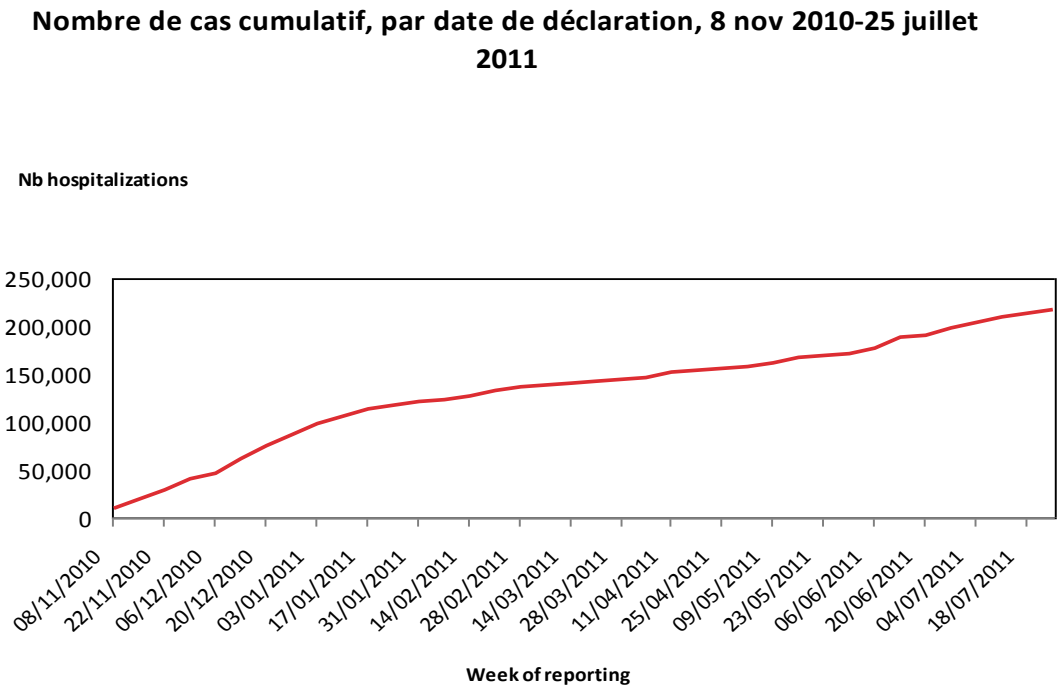
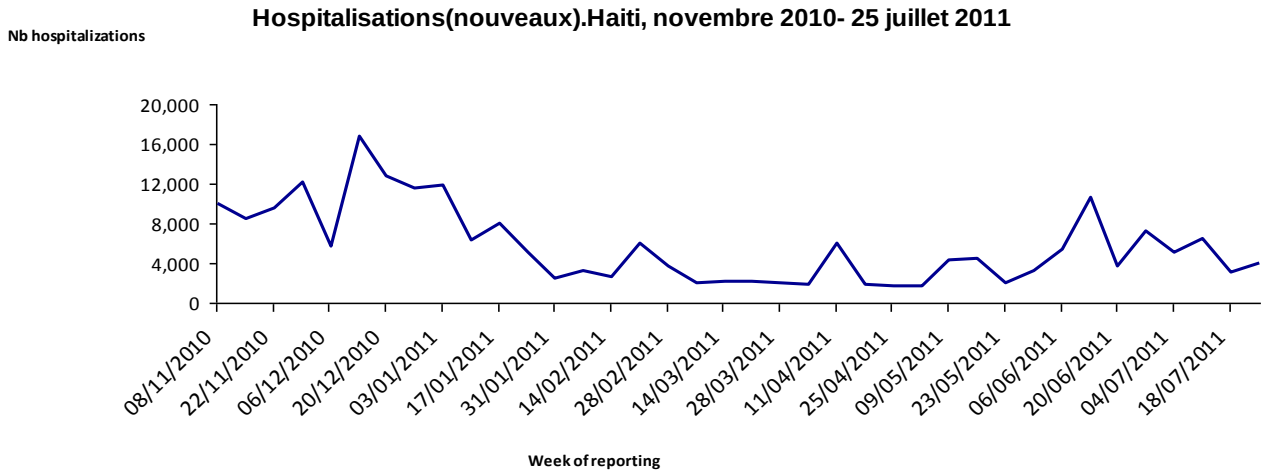


Figure 5: Number of new cholera cases hospitalized by week of reporting. 8 Nov 2010 to 25 July 2011



After a period of increasing cases in late-May through early-June, cases are decreasing once again. This could be due to an absence of significant rainfall during the month of July. The increase noted on this graph refers to the alerts in North-West and in South-East.

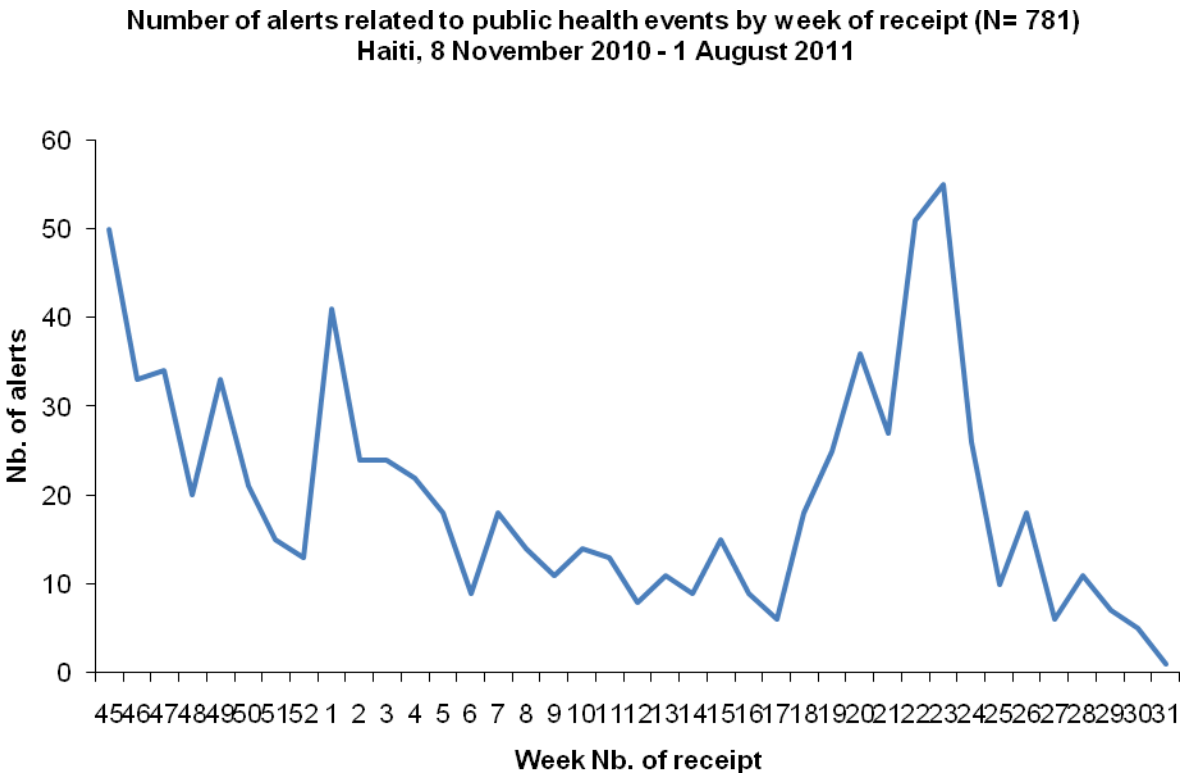
EVENT-BASED COMPONENT (ALERTS)

From 8 November 2010 to 1 August 2011, over 780 alerts were received by the MSPP-PAHO/WHO and the MSPP Alert and Response System. The alerts, reported mainly from NGOs in the field, are related to an increase in cases or patient load, deaths, lack of supplies (medical and/or WASH), lack of human resources, and/or prevention activities. The alerts also reflect hazards other than cholera (riots, strikes, etc), phasing out of CTCs and CTUs, and existence of other health threats (rabies, acute flaccid paralysis, etc). It also includes calls by health authorities and partners involved in surveillance activities for heightened attention at the health care facility and community level.

There was not much rain for the month of July despite being in the middle of the rainy season and the arrival, and almost immediate dissipation, of Tropical Storm Emily.

Note: Figures include non-cholera alerts (though very few yet)

Figure 6: Number of Alerts of Public Health Events



WASH (ENVIRONMENTAL HEALTH)

- Continued distribution of WASH material for MSPP central stocks, including disinfection products and water purification items.
- Support of hygiene promotion activities to prevent cholera, in collaboration with the MSPP. This has included health and hygiene promotion activities in Carrefour with the organization Haiti Participative.
- Support and financing of CDAC activities (Communicating with Disaster Affected Communities) such as rehabilitation of CTCs/CTUs in WASH infrastructures, namely water supply and latrines. More precisely, it has entailed the reconstruction of 5 latrines, emptying of 3 septic tanks, and drainage work in the CTU of La Pointe (North-West). Further information may be found at http://www.cdac-haiti.org/.
- Rehabilitation of water infrastructures, sanitation and waste management in hospitals to facilitate the transition strategy of cholera treatment from the CTC/CTU model to treatment in health centers. This has been executed in the hospital of Camp Perrin (South), and prepared in hospitals in Anse a Pitre and Cotes de Fer (South-East), Miragoane (Nippes), and Chambelan (Grande Anse).

HEALTH PROMOTION

1) Revision of Health Promotion Policy with the authorities of MSPP/discussions on strategies to consider in light of the development of the National Plan for Health Promotion.
The priorities already identified are:

a) Hygiene promotion and sanitation in public places, internally displaced persons camps, and homes
b) Promotion of maternal and child health
c) Education on non-communicable diseases
d) The fight against smoking and alcoholism
e) Prevention against rabies
f) Road safety

2) Several partners from the Health Promotion sub-cluster formed a working group on Hygiene in Public Markets to Prevent Cholera to Analyze High Risk Practices/Good Practices.

REPRODUCTIVE HEALTH

On July 29th, a meeting was held for all SOG (free obstetric care) institutions, bringing together the MSPP (DSF and departmental directors), Heads of organizations, PAHO/WHO, and partners (UNFPA and UNICEF in a joint project, CIDA, and World Bank).

At this meeting the following topics were discussed:
-The results of the missions for treatment of sexual violence
-The results of the SOG trainings conducted in the past year

The choice of topics was based on the weaknesses identified during the implementation, on the analysis of the SOG1, and on needs identified by departments and/or institutions. The trainings that were held addressed perinatal information system (SIP), nutrition (preventive screening and treatment of malnutrition), family planning/contraception use (PF), and emergency obstetric care, Neonatal Resuscitation, and Management of Essential Medicines.

- The results of SOG 2 compared to SOG 1
- A discussion on the notifications and audits of maternal deaths.
- Information on the upcoming program “manman ak timoun an sante”
- The results of the study on patient satisfaction, realized by ICIESA (Consultation Institute in Computer Science, Economics and Applied Statistics), with for the first time, publication of the highest rated establishments in the categories of patient satisfaction and free services for the months February-April. The highest rated centers were:

Patient Satisfaction:
1 ex- HUEH and St Antoine de Jeremie
3 ex- Port de Paix and St Nicolas de St Marc
Free Services :
1) Faith medical clinic sentrain
2) Lascahobas Health Center
3) Northwest Haiti Christian Mission

NUTRITION

One of the main activities in nutrition since the end of May has been the preparation and implementation of Child Health week, which took place from July 3 to July 10 2011. Some departments implemented the promotion activities with delay due to the cholera epidemic. All the partners, gathered around the MSPP brought their support for a more effective return.

Materials were available from BID and UNICEF. PAHO/WHO was in charge of stocking these materials at PROMESS and to monitor the distribution in collaboration with the World Food Program's logistic service. NGOs helped to support the implementation of this important activity.
The following activities were implemented in the departments:

- Effective administration of Vitamin A, iodine, Albendazole to all children less than 5 years old as well as to pregnant and lactating women.
- Effective administration of Zinc and ORS to children suffering from diarrhea.
- Administration of effective vaccines, training on how to conserve them, and documentation of these activities (administration and storage).
- Health education for mothers regarding nutrition.
- Compilation of data.

All departments benefited from supervision to ensure proper functioning of these activities. The supervisors were composed of local departmental officers, resource personnel from the central MSPP offices, and partner members.

SITUATION BY DEPARTMENT

In the section Situation by Department, the following information is presented: (i) trends of the cholera epidemic (number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 31 July 2011; source: MSPP, http://mspp.gouv.ht/site/index.php) (ii) trends and figures provided by the PAHO/WHO Teams at Departmental level; (iii) alerts regarding public health events received since the publication of Issue 26 of the Health Cluster Bulletin, published on 25 July 2011.

In many departments, the number of partners has decreased dramatically. Many health partners who were managing cholera facilities handed them over to the MSPP, following MSPP's continuity strategy. However, the MSPP lacks capacity to support the facilities financially.

Figure 7: vulnerability analysis compared to outbreaks 24 April – 20 May

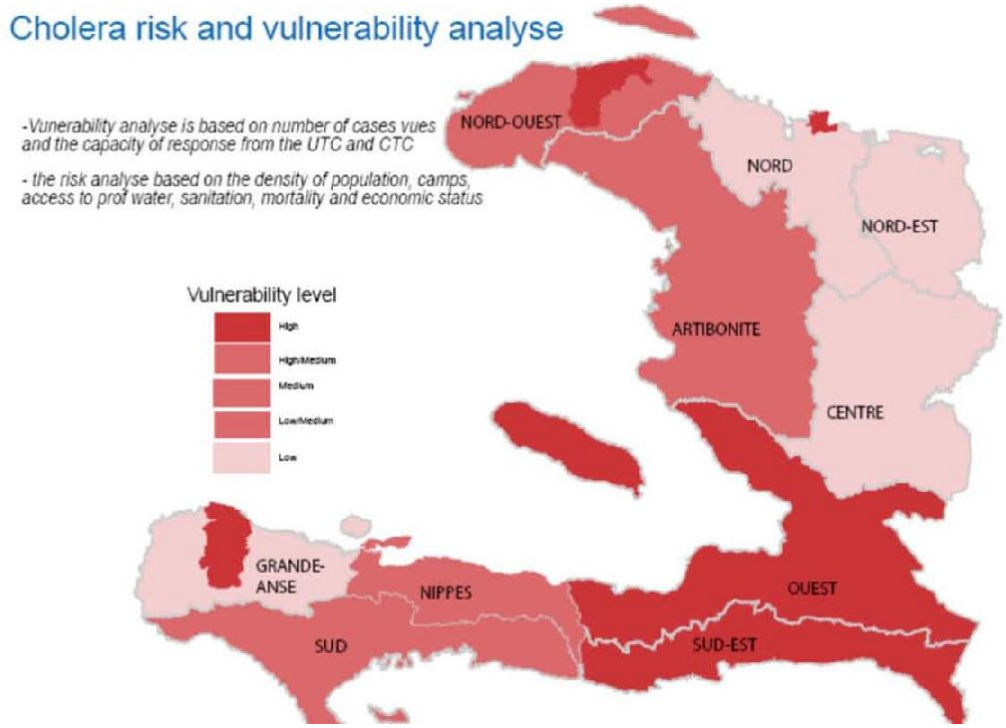


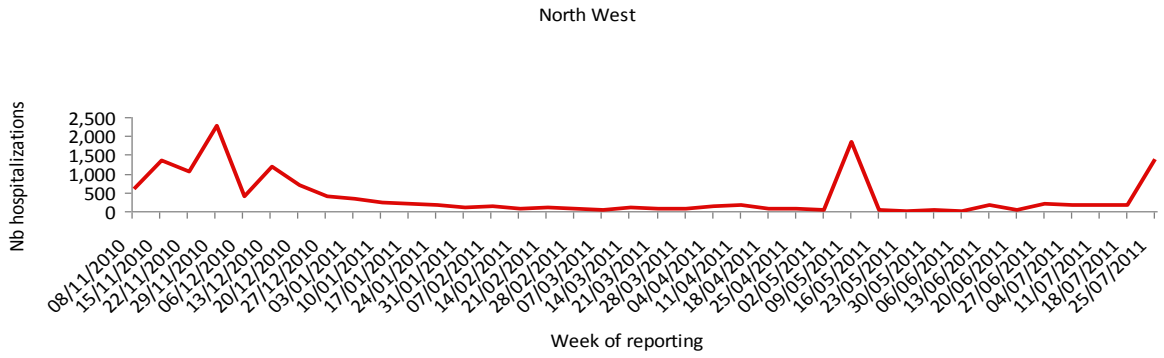
Figure 8: Alert and Response System from weeks 29-31

Northwest

The overall trend of cholera activity is increasing.

An alert was received on July 22nd for Immaculate Conception Hospital in Port-de-Paix and Hospital Beraca in La Pointe claiming between 108 and 249 hospitalizations per day between July 20 and 24th. Most cases came from the 1st Communal Section of Beaudin, which is located between La Pointe and Port-de-Paix. The Beraca CTC alone saw 998 patients between July 21 and July 27. Both centers were completely overwhelmed, making cholera response difficult. The effort was coordinated and supported by PAHO/WHO, OCHA, UNICEF, DINEPA, WFP, MTI, MSF-F, and ACF and involved CTC management and reinforcement of response activities, epidemiologic investigation, distribution of stock, WASH response, and food distribution. Epidemiologic predictions stated that Port-de-Paix would see an increase in cases based on current epidemiologic trends.

Figure 9: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 July 2011

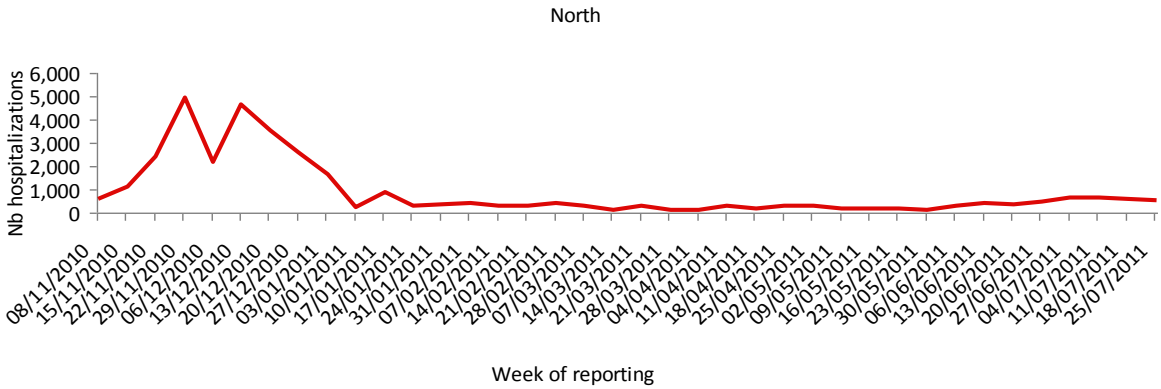


North

The cholera situation in the North is currently stable.

No hotspots to report.

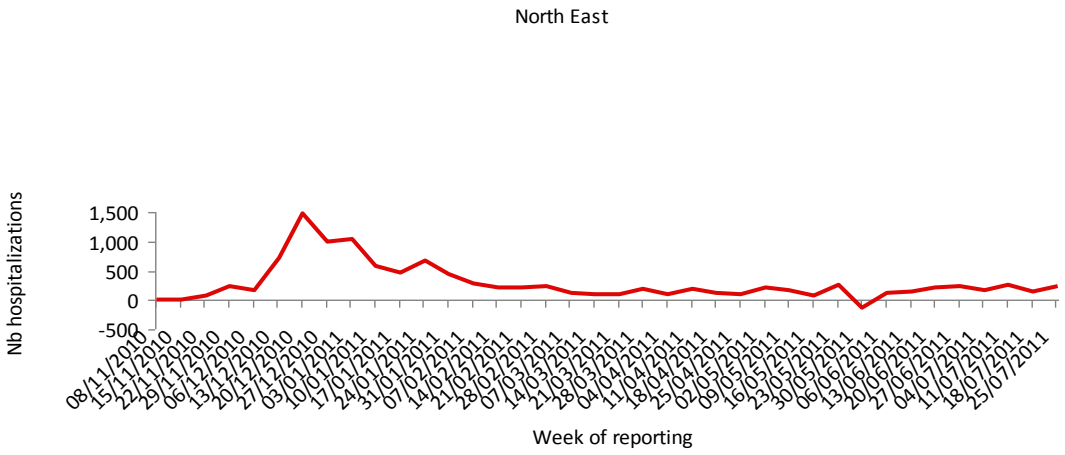
Figure 10: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 July 2011



Northeast

The overall trend of cholera activity is stable.

Figure 11: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 July 2011



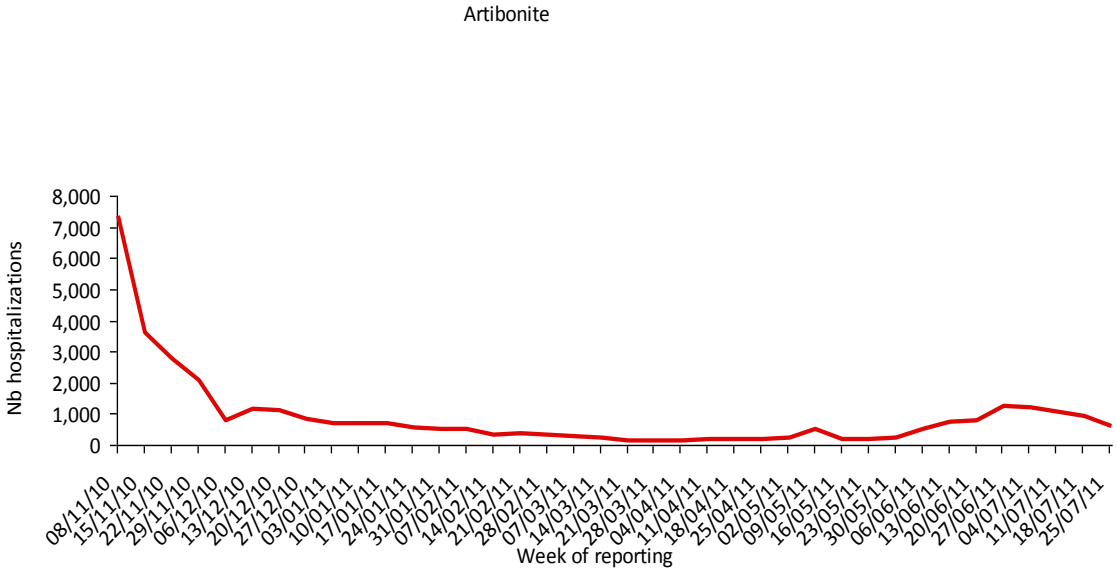
Artibonite

The situation in Artibonite is improving as cases have been decreasing for several weeks now.

Hotspots in the department included:

- In Saint Michel de l'Attalaye, IMC reports that for the period of July 3-21, they saw 993 patients of which 170 were hospitalized on Plan C. PAHO/WHO is helping them restock their medical supplies.
- In Dessalines (week 29), especially in Gilard, an increase in cases has been reported (no exact numbers).
- In Gros Morne and Bassin Bleu (week 29), the Cuban Medical Brigade reports an increase in cases coming from Gros Morne to their structures in Bassin Bleu as they are easier to access geographically than centers in Gros Morne. The MSPP was looking into opening a ORP in Gros Morne to decrease the risk of transmission to Bassin Bleu.
- IOM and MSF-France are working in supplement to meet the needs for response to cases of cholera in the region (High Artibonite). In MSF-FR CTCs, compared to the previous week, admissions continue to fall, 14.8% less than at week 28. However, the CTCs of Gonaives and Moulin had increased admissions of 60% during that week.

Figure 12: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 July 2011



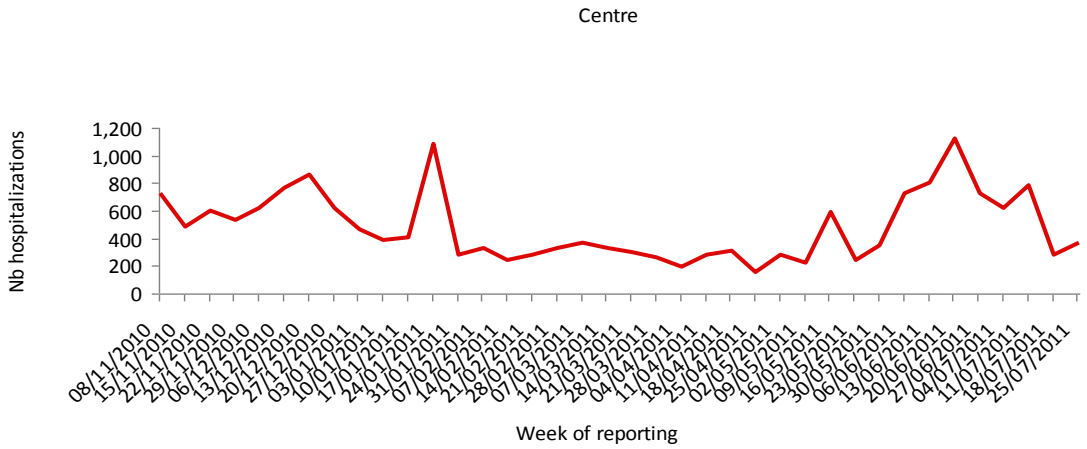
Center

The number of cases was decreasing in late June and early July, with an overall increase for July. The increase in cases could be related to the lack of partners. Nine of the twelve communes no longer have partner presence and MSPP has taken over all activities. The largest partner in the Center department, World Vision, has decided to discontinue work in cholera activities, but remains active in other health activities.

Week 30 saw an increase of cases in the department, namely in Hinche and Cerca La Source. On July 28, the CTU in Cerca La Source reported 50 hospitalized cases with 10-15 new cases per day, without any proper infrastructure to care for patients. PAHO/WHO provided support and logistics to help put into place a 20 bed CTU in the area and supply it with medical and WASH materials.

There was also an increase in cases in Cerca Cavajal (week 30) with approximately 15-20 new cases per day.

Figure 13: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 July 2011



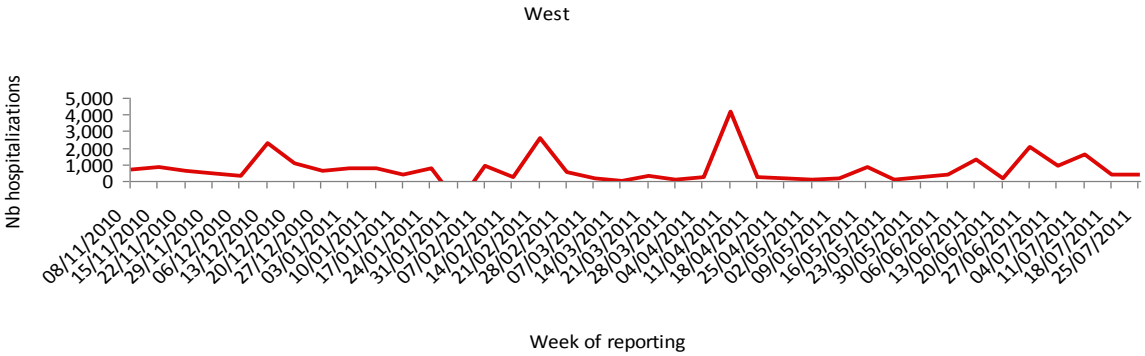
West

According to MSPP surveillance data, the overall trend of cholera activity has stabilized at low levels. New cases diminished, but alerts have been received especially in the mountains of Petit Goave and Grand Goave. These mountain cases are due to the distance it takes to reach to cholera centers, sometimes upwards of 4 hours. We are also finding that the different health actors are better connected with each other, which leads to a quicker response when alerts arise.

In Croix des Bouquets, more specifically in Crochu, 5 deaths in 5 days were reported. Health promotion materials were sent to CASEC, who will do education in the area.

In preparation for Tropical Storm Emily, all non-permanent CTCs were disassembled and patients referred or transferred to permanent structures as needed. The tents were then reassembled after the Storm dissipated.

Figure 14: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 July 2011



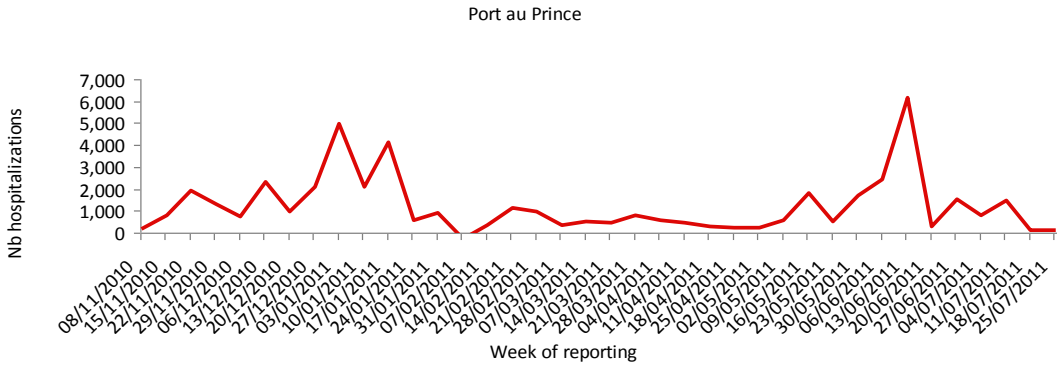
Port-au-Prince

The overall trend of cholera activity is stabilizing at low levels.

The camp at Lycee Jean Marie Vincent in Tabarre continues to see more cases (13 noted for week 29). WASH solutions are being sought out to remedy this problem.

In Petion-Ville, the nurse at Nouvelle Tourraine reported 18 deaths in 19 days (Week 30). The problem appeared to be that families of sick patients refused to admit that they had cholera and protocols for home disinfection and proper dead bodies' management were not being respected. As such, there was an increased risk of disease propagation. Brigadiers were sent to homes in the area to increase awareness and do health promotion activities.

Figure 15: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 July 2011



Southeast

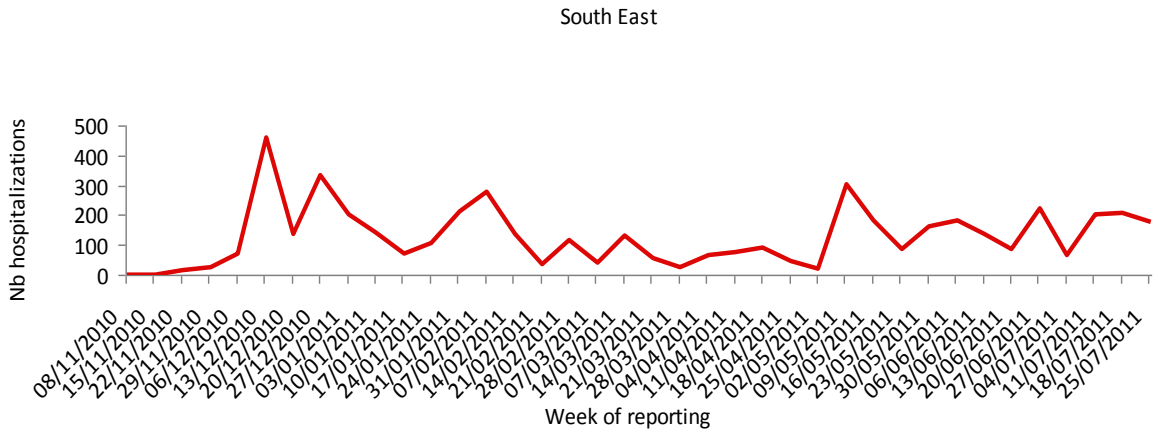
Occasional pockets of increases in different places, but overall cases are trending downwards. Save the Children turned over their CTU in Bainet and many of their activities to the MSPP in the beginning of August. They are the last partner to have CTUs, as all other CTUs in the department are managed by the MSPP.

The Dutch Red Cross has received additional funding to support MSPP and the Sanitary Department for the South-East (DSSE) for the response to cholera outbreaks in the Department, through case management, ambulance service, hygiene promotion, cholera prevention kits.

PAHO/WHO along with the Canadian Red Cross are helping to reinforce and support the CTU in Saint Michel. They have moved water points, fixed flooding issues caused by faulty plumbing, and added a roof to increase capacity if needed.

Several WASH projects have started or are ongoing in Anse a Pitre, La Valee, Peridot, and Cote de Fer. These projects include reinforcement of WASH infrastructure including potable water and improved sanitary conditions.

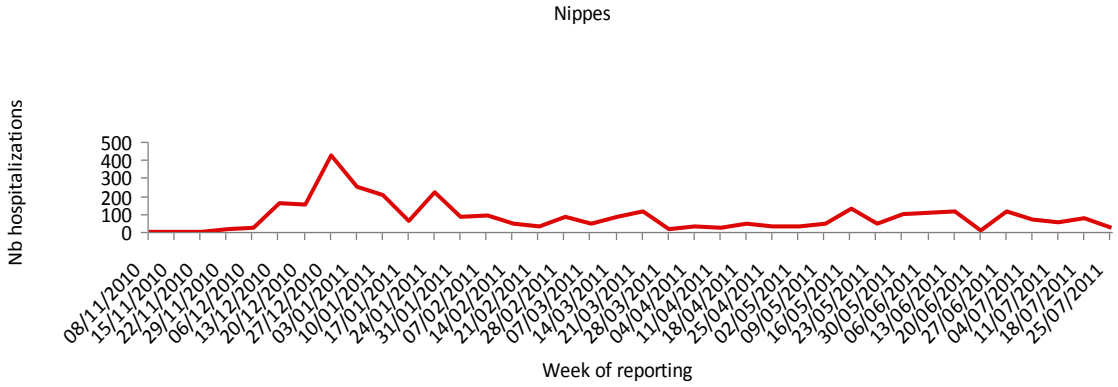
Figure 16: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 July 2011



Nippes

The number of cases reported has been decreasing for the past few weeks. The most recent alerts are of 9 cases in Miragoane due to poor handling of dead bodies and 6 cases were reported to an ORP in Carrefour-Michel. These cases have immediately been treated by the partners in the department. Unfortunately, these partners are almost all withdrawing by the end of September, except for Medecins du Monde Belgium that has an extra month of funding. The departmental hospital in Miragoane and the CTU in Fond des Blancs have both received water and sanitation improvements, including water infrastructure and better medical waste management.

Figure 17: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 July 2011



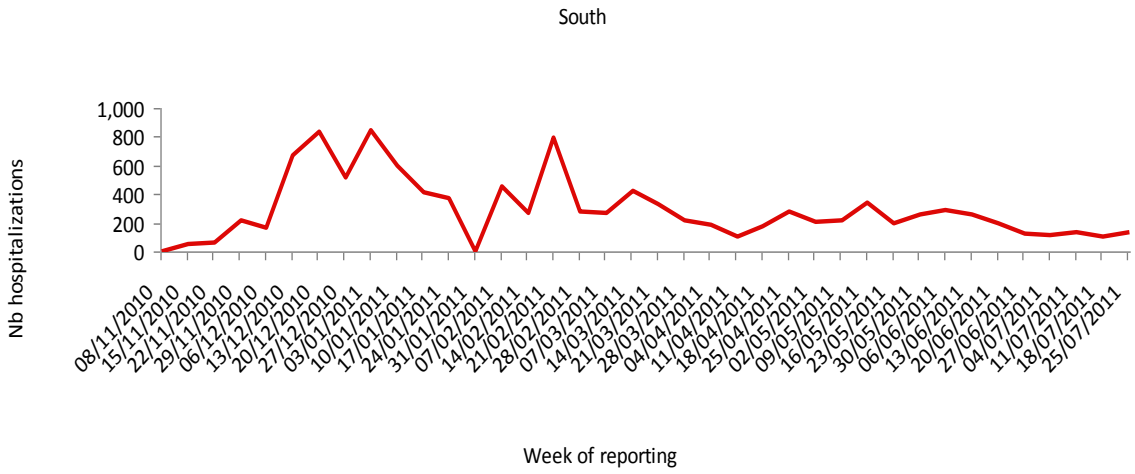
South

The overall trend of cholera activity is stable for the most part with a slight increase as of late.

Case levels have been low for several weeks. The biggest problem in the department is that access to roads is blocked with any rain limiting access to CTCs/UTCs to obtain treatment. There are still a number of CTCs/CTUs that have not been paid. Furthermore partners are finding it difficult to get the MSPP involved in Cluster meetings. The Cuban Medical Brigade recently inaugurated a hospital in Port Salut.

PAHO/WHO has been working closely with the departmental hospital in Les Cayes to improve its morgue by installing electricity in the cold room. In addition, water and sanitation improvement projects are taking place in the Camp Perrin Hospital.

Figure 18: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 July 2011

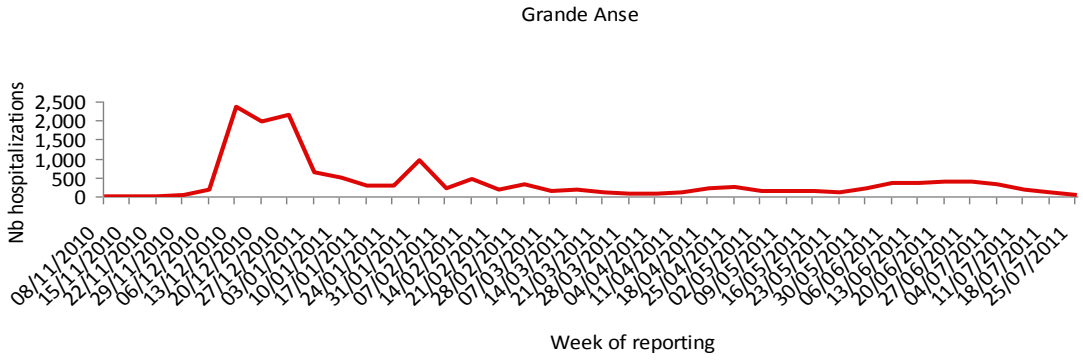


Grande Anse

The overall trend of cholera activity is slowly decreasing over the past several weeks.

Grande Anse is the department with the highest cumulative mortality rate: 204.1 deaths for 100,000 inhabitants. This is due to the high number of deaths at the beginning of the epidemic. Since January 2011, the cumulative mortality is 11.2 deaths for 100,000 inhabitants. Discussions are underway to improve the water and sanitation conditions in the areas of Moron, Chambelain, and Jeremie.

Figure 19: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 July 2011



A list of most frequently-used acronyms related to the response to cholera in Haiti is available at http://new.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=11788&Itemid=