Dear health partners,

We continue to observe an upsurge in cholera outbreaks. Apart from coordinating responses, the Health Cluster is continuously gathering information and analyzing the response capacity and short and medium term plans of health actors. We greatly appreciate your collaboration in this regard.

Health Cluster Coordination

**Highlights**

- Numerous alerts have been received by the alert and response team since the last bulletin. The alerts were especially concentrated in South-East, Grande Anse, South and West departments. In most cases, the response has been offered by a coordinated multi-partner effort.
- Some donors including ECHO and USAID have indicated that new funds for response to potential cholera outbreaks are available.
- PAHO/WHO’s contingency strategy is coordinating responses through the PED (Preparedness Emergency and Disaster Relief) teams deployed at the departmental level. PAHO/WHO distributes prepositioned emergency stock, coordinates with MSPP, identifies and deploys rapid response teams for initial control of the health situation and epidemiological surveillance. PAHO/WHO is making agreements with several NGOs across the country to establish those rapid response mobile teams. These teams are prepared to respond to not only cholera but also other needs of the affected population.
- The number of new cholera cases nationwide is stabilizing, except in areas with alerts for new outbreaks. The number of new cases in Northeast, Center, South, North, Northwest, Nippes and Grande Anse departments are stable or decreasing. However, cases in Port-au-Prince, Artibonite, West, and South-East are increasing.
- The insufficiency of health personnel is a consistently recurring issue, along with payment of healthcare staff.

**Last minute highlight:**

Based on data from the MSPP surveillance system and the MSPP/PAHO Alerts & Response system, an increase of cholera cases, mainly in the Departments of South-East, Grand-Anse, South, and West is observed. From 21-23 May 2011, a significant increase in cholera cases has also been reported in the Metropolitan area.

Given the early detection of alerts, a prompt response is being set up by all partners active in the area which will contribute to mitigate the dissemination of the disease. PAHO and partners remain vigilant and monitor the situation closely.

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; Dr. Josep Vargas

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](http://haiti.humanitarianresponse.info).
SITUATION OVERVIEW

- Since the past few weeks, and with the beginning of the rainy season, upsurges in cholera outbreaks in isolated areas have been observed in different parts of the country, particularly in the South-East, West, and Grande-Anse department. In addition to the need for heightened vigilance; it is of paramount importance that alerts are verified and coordination is strengthened to provide rapid response. Increased efforts to facilitate access to drinking water and sanitation as well as strengthen hygiene and health promotion should be made throughout the country and at the community level through community health workers and brigadiers.

- Health Partners at department level are preparing for the Cyclonic season by coordinating the contingency plans in different ways depending on the presence of partners, the weight of the DPC and the MSPP. Some departments are following the leadership of the DPC, whereas in other departments, the strategy is articulated by the health cluster meetings. In general the health cluster partners have, or are in the process of, identifying the resources available at department and community level and identifying emergency focal points.

- The Consolidated Appeals Process (CAP) is a humanitarian sector’s tool for coordination, strategic planning and programming which is presented to the international community and donors. Coordinated by OCHA, all sectors are now contributing to its mid-year review in order to adjust the previously presented requirements to the current situation and appeal for support accordingly.

- Irregular payment of salaries to local health staff continues to represent major risks that can jeopardize the response capacity at local and departmental level when sudden increases in the number of cholera cases or any other major outbreaks occur. Certain UN agencies and NGOs are able to provide temporary incentives as a short term alternative. However, it is expected that the MSPP ensures payment of salaries.

- The WASH sector remains of paramount importance. The chlorination of water systems and water trucks to metropolitan areas has been a huge progress, but this method of water provision is slowly coming to an end. In rural areas, the treatment of water remains an unresolved challenge that requires urgent solutions.

Table 1: Cholera health structures:

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EPIDEMIOLOGICAL SURVEILLANCE

Indicator-based component

- On 10 May 2011, the cumulative number of reported cholera was 302,401 cases, including 5,234 deaths. The observed cumulative incidence of cholera cases since the beginning of the outbreak was of 28.85 per 1,000 inhabitants, ranging from 5.75 per 1,000 in the Department of South-East to 42.8 per 1,000 in the Department of Artibonite (Figure 1).

Figure 1: Cumulative incidence of reported cholera cases (number of cases per 1,000 inhabitants), by Department, 20 October 2010 – 10 May 2011

The overall observed case fatality ratio was 1.7%, ranging from 0.8% in Port-au-Prince to 8.9% in the South-East department. Since the beginning of the outbreak, at least 88% of the reported cases were observed among individuals aged 5 years or older (266,024 out of 302,401 individuals of whom the age is known).
A plateau was observed in the number of new hospitalized cholera cases during the past three weeks, but in the last reporting week, the number of hospitalizations has slightly increased (from an average of 1700 to an average of 2600).
This increase in hospitalizations coincides with a rise in the number of alerts (see graph below). At this point, it is too early to say whether this corresponds to the reality on the ground, and whether we are observing a change that is the tendency of the epidemic. The rise in the alerts could be due to the closure of UTCs and CTCs, resulting in the accumulation of cases in less centers, thereby provoking the issuing of alerts from the partners.

**EVENT-BASED COMPONENT (ALERTS)**

The number of daily alerts received from partners in the field has been increasing for the last 3 weeks. The most prominent increases in cholera cases and deaths are observed in the South-East and West Departments, where little surge capacity is available. The alerts are now also reflecting hazards other than cholera hot spots in remote areas, including rainy season, elections, and phasing out of CTCs and CTUs. It also includes calls by health authorities and partners involved in surveillance activities for heightened attention at the health care facility and community level.
Note: Figures include non-cholera alerts (though very few yet)

Figure 4: Number of Alerts of Public Health Events

### WASH (ENVIRONMENTAL HEALTH)

In the framework of the DINEPA National Response Strategy to Cholera in the current post-emergency situation, PAHO/WHO is currently participating in the definition of standards on Water Quality in Haiti in collaboration with the MSPP and DINEPA. PAHO/WHO also participates in the review of health promotion policies such as policies on road safety or fight against rabies, with the Direction de Promotion de la Sante et Protection de l'Environnement (DPSPE).

PAHO/WHO continues to support the MSPP in the provision of WASH infrastructure in health facilities in the South, South-East, North, and North-East departments, thereby also contributing to the WASH response to cholera outbreaks.

In Port-au-Prince, the exit strategy for NGOs running water trucking and septic tank draining projects has started, adding another challenge to the health system, since sanitary conditions in the camps will deteriorate with the close of these programs. The access to water and sanitation should be a priority in camp interventions, but funding deficits further jeopardize the health of numerous populations.

### HEALTH PROMOTION

On 12 May, PAHO/WHO participated in a Seminar on food hygiene organized by FAO. Findings on the study of food hygiene and cholera prevention carried out in Artibonite were presented. The workshop mainly targeted Haitian technical staff involved in hygiene promotion.

The hygiene promotion sub-cluster completed its discussions on the draft project for Sub-cluster Hygiene Promotion plan for the rainy season and cyclone season (April – November 2011). The project will contribute to the reduction of risks in relation to water, sanitation and hygiene related illnesses (including vector-borne diseases) through implementation of appropriate activities for the general adoption of safe hygiene practices.
REPRODUCTIVE HEALTH

On the 6 May, PAHO/WHO and MSPP (Directorate of Family Health) organized a meeting with directors of all health institutions providing Free Obstetric Care (SOG) and departmental directors and partners (ACDI, UNFPA, UNICEF). The meeting formed a platform for useful exchanges on results, successes and difficulties of the project, future goals and means to achieve them.

Subjects discussed were:

- Neonatal health: the insufficient improvement over the years 2009 to 2010 justifies the neonatal training launched this year and current replications
- Treatment of syphilis
- Difference between HIV and syphilis screening
- Consumer satisfaction study results: mostly favorable (about 85%) but with gaps between departments and institutions
- Reasons why services are not entirely free
- Data circulation
- Maternal mortality
- Entrants and supplies

On the 10 and 11 May, seminar for Integrated Management of Childhood Illnesses (IMCI) HIV was organized.

NUTRITION

On 26 April, 2011, PAHO/WHO supported the MSPP in the validation of the National Nutrition Policy with the participation of other agencies like UNICEF, WFP, World Bank, as well as NGOs and other Nutrition partners.

On 28 April, 2011, PAHO/WHO collaborated with other UN agencies with the support of the Coordination Unit for Food and Nutrition Programs (UCPNANU) to participate in a workshop to develop a training module on nutrition for multi-sector Community agents.

PAHO/WHO Nutrition unit, together with UNICEF and WFP, participated on 2 May 2011 in the development of tools for the management of Global Acute Malnutrition in Haiti. These tools are specifically intended for partners in the field. PAHO/WHO drafted a strategic plan on nutrition.

From 9 to 11 May 2011, PAHO/WHO nutrition unit participated in revising the modules for Integrated Management of Childhood Illnesses (IMCI) in order to take into account the new recommendations from WHO and integrate new evaluation and malnutrition management aspects.

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 10 May 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 24 of the Health Cluster Bulletin, published on 3 May 2011.
**Figure 5**: vulnerability analysis compared to outbreaks 24 April – 20 May
Northwest

The overall trend of cholera activity is stable. There are three CTUs in Port de Paix, Saint Louis and Tortoise Island, and 15 ORPs will increase to 60 due to a UNIFEM/IOM project. Other health centers that do not have proper CTUs are ready and equipped to receive cholera cases if necessary. Supplies are available and plans are in place to isolate the potential cases within the hospital or health care center. Health partners in the area are MSPP and the Cuban Medical Brigades.

No hotspots have been reported in the department.

Figure 6: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 April 2011

North

The overall trend of cholera activity is stable or descending in the different localities. The North does not have sufficient partners to provide an adequate response in WASH activities.

UNICEF will implement a community mobilization strategy (brigadiers) in the North and North-East departments. While waiting for this implementation, health cluster partners are supporting this strategy with the establishment of ORCs in the areas mostly affected by cholera.

The number of community mobile teams is also insufficient: The MSPP is waiting to receive the UNICEF funds to implement the community mobilization strategy to cover the department. PSI and other partners are currently carrying out awareness raising activities in some sections. There is not enough personnel to carry out sufficient mobilization activities.

Figure 7: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 April 2011
Hotspots in the department include:

- 13 May 2011: Rapid increase of suspected cases in the following communes: Saint-Raphael (Sanyago locality), with over 50 cases in the past 2 weeks. In Pignon, 39 cases and 1 death were reported during the week compared to 23 cases in the week before. Action: MSF-Switzerland mobile team is responding.
- The remote localities of La Soufriere and Robillard are very hard to reach, and communication is limited. Therefore, no reports were received for 2 weeks. PAHO/WHO will deploy a team to the area to verify the suspected cases.

**Northeast**

The overall trend of cholera activity is stable.

UNICEF will implement a community mobilization strategy based on community brigadiers. While waiting for this implementation, health cluster partners are supporting this strategy with the establishment of ORPs in the areas mostly affected by cholera.

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

![Graph](attachment:image.png)

Hotspots in the department include:

- Week 17 (25-30 April): Small increases in the following areas that were most likely caused by heavy rains in the area: Carice, Mombin-Crochu, Trou du Nord. MSPP and MERLIN responded to these peaks by providing medical supplies and increasing surveillance with the outreach team.
- Week 18 (1-7 May): There was a small increase in Ouananaminte (4-5 cases per day instead of 1-2). Follow-up was provided by MERLIN.

**ARTIBONITE**

The overall trend of cholera activity is slightly increasing, with 524 new hospitalizations reported from the week of 3-9 May 2011.

There have been no alerts in Artibonite during the reporting period.
Figure 9: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 April 2011

**Artibonite**

The number of cases is stable. As a result of security issues in the area following the final results of the elections, health partners have left the Belladere and Maissade.

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

**Centre**

Hotspots in the department include:

- 12 May: Alert is received from Savanette. Action: Community awareness raising, hygiene promotion and distribution of aquatabs and ORS by World Vision brigades. DSC is establishing an ORC for the localities of Boulay, Petit Bois Pins and Corail Grande.
- 16 May: CTU in Savanette received 78 cases. From 1-16 May, the CTU has 159 hospitalized cases, and 4 institutional and 7 community deaths. The cases come from La Haye, Petit Bois Pins and Fond Roye. The Cuban Brigades will verify the alert, disinfect houses, carry out community mobilization and provide support to the CTU if needed. PAHO/WHO will send supplies. CTU personnel have not been paid for several months, and motivation and quality of service are decreasing.
West

According to MSPP surveillance data, the overall trend of cholera activity is stable. However, during the last 3 weeks, several alerts from this Department have been received. Initially, these alerts were related to increase in cases in the southern part of the Department. These cases sought health care in the South East department and thus are not reflected in the West Department statistics.

**Figure 11**: Number of reported hospitalized cholestera cases by week of reporting, from 8 November 2010 to 25 April 2011

Hotspots in the department include:

- 9 May: Increase of cases in Kenscoff and Petionville
- 10 May: Increase of cases in Croix des Bouquets
- 11 May: Increase of cases in Cornillon
- 13 May: Increase of cases in Fonds Verrettes
- 15 May: Increase of cases in Croix des Bouquets
- 16 May: Increase of cases in Kenscoff
  Action for all of these: ALIMA and the MSPP are providing response.

- 12 May: Alert of two deaths, several cases, and lack of transportation or access to care is received from Gros Cheval, Fonds-Verrettes. Action: PAHO/WHO is providing cholera and WASH kits. Red Cross has put in place a CTC and the MSPP Health Center put in place a CTU. The situation is stable.
- 12 May: Save the Children reports increase in cases in Diquini. Action: MSF-H, who recently downsized their CTC in the area to a 20 bed CTU, increased their capacity up to 80 beds due to a high number of new admissions per day. Situation is monitored.
- 16 May: Increase in cases was notified in Deuxieme Creasieu. Action: ALIMA is contacted for more information and assessment of needs.
- 16 May: UNICEF and Food for the Hungry informed us of an increase in cases with 50 deaths in Nouvelle Tourraine, aux Cadets, commune of Kenscoff. Action: ALIMA is working in the area and is contacted for more information and needs assessment.
- 16 May: UNICEF and Food for the Hungry reported an increase of cases in Cotho and Lefevre. Action: PAHO/WHO field team is gathering more information.
- 17 May: Alert was received regarding cholera cases in two communes in Ile de Gonave. In Port Sylvestre, 5 deaths and numerous cases were notified on the island, which is located 20 minute boat ride away from Miragoane. In Tamarin, 17 patients were referred to the CTC in Anse a Galet, which is a one day walk or 8 hours’ drive from their area. Action: Sensitization activities by the Cuban Brigades, MDM Canada accepted patients in their CTU in Miragoane, Nippes.
Port-au-Prince

The overall trend of cholera activity is slightly increasing.

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

Southeast

The overall trend of cholera cases is increasing sharply. The number of hospitalizations has tripled over the past two weeks. However, several of these cases come from the neighboring Department of West.

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

South East

Hotspots in the department include:

- 12 May: Jacmel Prison reported over 80 prisoners with suspected TB cases. Other prison population who had extensive contact with these prisoners for more than two months are still waiting to be tested for TB. Action: ICRC maintains regular contacts with the prison authorities and the health staff in Jacmel in close cooperation with the central and regional DAP as well as the SDM (Sous Direction Medicale). An ICRC team (medical/protection) has visited the prison from 2 to 4 May. During this visit, ICRC advocated to speed up the TB testing procedures. In order to facilitate this, the local hospital as well as the PNLT has been involved. ICRC monitors the situation.
12 May: It was reported that many areas in the department have cases of malnutrition. Action: PAHO/WHO has contacted both WFP and SAVE to assess the scope, location and severity of the situation.

15-16 May: St. Michel hospital received 48 new cases, almost all of them coming from Macary (South-East) and Seguin (West). There were 2 community deaths and 2 institutional deaths over the week. These patients had to travel long distances to get to Saint Michel, because the CTU that was closer, in Peredot, closed a few weeks ago. The response has been an exemplary multi partner including the MSPP, the Canadian Red Cross, Save the Children, and PAHO/WHO. After an emergency health cluster meeting, the CTU in Peredot has been reopened to attend cases coming from the area, an ORP has been put in place closer to the populations of Macary and Seguin and an ambulance from the Red Cross will transport patients in severe conditions to Peredot.

16 May: Increase in cases in the dispensary of Peredot, (Marigot commune). Cases are coming from Peredot but also from Macary and Seguin (see above). There are rumors of more cholera cases in Mont Desir and Ka Matherin. Action: PAHO/WHO will follow up on rumors. PAHO/WHO Field Team is setting up a temporary CTU in Peredot with MSF-E. Other partners in the joint response are: Save the Children, WFP, MSPP and the Canadian Red Cross. Since there was no water at the dispensary in Peredot, PAHO/WHO funded DINEPA to send a supply truck to this area.

16 May: Increase at the hospital in Cayes Jacmel.

16 May: Increased number of cases in Cotes de Fer. Confirmation and assessment pending. CTU is not open due to lack of personnel. Action: PAHO/WHO is working with partners in Cotes de Fer to get the CTU up and running, and is looking for staff and clean water for this site.

16 May: Increase in cases in La Vallee, coming from Morne a Bruler and Grand Goave. There is no water at the CTU and hospital in La Vallee. Action: Pending confirmation and assessment, PAHO/WHO has funded DINEPA to supply water to the area.

16 May: Increase in cases in Bainet, with 32 patients in the first two weeks of May, including 1 community death. Action: PAHO/WHO is following up with Save the Children, who is ensuring case management. However, Save the Children will have to close their CTUs in Bainet, Thiotte and Belle Anse at the end of the month, but MSPP still lacks funds to take over. Action: PAHO/WHO is coordinating to improve the situation in the South-East.

Nippes

According to MSPP surveillance data, the overall trend of cholera activity is stable. However, during the last 3 weeks several alerts from this Department have been received. Therefore, it seems that the trend of new cases is on the rise whereas many partners have left or are planning to leave the area. Staff working in MSPP CTC/CTU who have not been paid, are threatening to strike.

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

**Nippes**
Hotspots in the department included:

- Last week of April: Alert was received from Baraderes, with 80 cases and 6 deaths in 2 days. Action: PAHO/WHO is mobilizing all partners to respond to this alert.
- 14-15 May: a large number of cases were received from Ile de la Gonave (Ouest) into Miragoane (Nippes), creating political issues between the 2 departments. Action: MSPP / PAHO have responded.

South

The overall trend of cholera activity has slightly increased in the last three weeks.

Staffs working in MSPP CTCs and CTUs that have not received their salaries are threatening to strike. In the department of Sud, the nurses working in Randell were told by DSS that since they do not have a contract with MSPP, they might not get paid. MSPP took over the CTU in Randell in February.

Partners and MSPP still need to establish a response plan in Sud.

There are not enough community mobile teams and WASH partners in the department.

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

South

Hotspots in the department included:

- Contamination of water sources in Chantal and Ducis, which were tested positive for parasites and other microbes, but not cholera.
- There is a lack of waste management
- 23 April: Increase in the number of cases and deaths has been observed. Reporting from remote areas such as Randel, where telephone lines are not available, is problematic and insufficient.
- 12 May: Increase in cases is notified from les Mornes, Gerard, Billard, Deronceley and Guilgot, with 4 deaths in Billard where disinfection of corpses and houses has not taken place.
- Transportation problems between Ducis and Les Cayes. Action: Sensitization activities by MSPP and CRS.
- 12 May: Important increase in non-cholera diarrhea. This is confirmed by DINEPA water analysis and stools analysis of the patients.

Grande Anse

The overall trend of cholera activity is stable. The situation in the department is dire, with insufficiency in partners, lack of drinking water in health facilities, and poor sanitation. Additional partners are needed, mainly for WASH activities.
Figure 16: Number of reported hospitalized cholera cases by week of reporting, from 8 November 2010 to 25 April 2011

Grande Anse

Hotspots in the department include:

- Last week of April: There was an increase in cases in Chambellan, Dame Marie, Anse d’Hainault. Action: Case management by MSPP and MDM. Cuban Medical Brigades is considering assigning a doctor to the health center in Chambellan that could also supervise the PEC in CTU. However, they would not engage in the maintenance, cleaning, or sanitation of the CTU, since this is considered to be the responsibility of the MSPP.

- First week of May: There was a report of increase in the number of cases in Jeremie and Dame Marie. Action: Case management by MDM.

- 7-14 May: Increased number of cases in Dame Marie and Marfranc. After MDM stopped chlorination activities, Moron also observed an increase in cases. It should be noted that the staff in the CTU of Moron has not been paid since November.

- 16 May: The DPC transmits an alert from Moron with 5 deaths (3 institutional deaths) in less than a week. Action: Origin of cases is under investigation, and MSPP will mobilize brigades for decontamination of houses and awareness campaigns.

- Patients in Moron lose access to closest CTC in Lorry due to floods.

- The CTUs in Chambellan, Bourdon, Roseaux are reportedly in worrisome conditions.

- PAHO/WHO reports a lack of community mobilization efforts in Bourdon and Gond Dayer. PAH has contacted the Norwegian and Haitian Red Cross, both of which will go to the area. PAHO has proposed PAH to communicate with the MSPP to include the MSPP brigadiers in the intervention.

- On 18 May, information was received that the UTC in Abricots, that MDM was supposed to transfer to the MSPP since May 1st, has not received any MSPP personnel. MDM is remaining in order not to leave the patients, but without funding. Action: discussions with MDM are taking place to see if staff from the CTC in Moron can be transferred to Abricots.