Cholera in Haiti.
An end in sight.

December 2013

UNITED NATIONS IN HAITI

Cover photo: World Handwashing Day at Ecole Nationale de Pernier in Port-au-Prince, Haiti.

www.onu-haiti.org
This report describes the efforts of the United Nations and its key partners.

Haiti reference map

A relative of a cholera infected patient washes his hands with chlorine water before entering the Immaculee Conception Hospital in Les Cayes.
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Content

Sensitization activities in schools by mobile teams.
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1. Introduction

Throughout its history Haiti has faced many complex tragedies. Since the outbreak in October 2010 in the aftermath of the devastating earthquake that shook the country, cholera was added to the country's already overloaded list of challenges.

Cholera has affected too many people and claimed too many lives in Haiti. While the country has made an impressive recovery in the last three years, the cholera epidemic continues to persist, stubbornly, despite the efforts of all those involved in this fight. We must face this enduring reality. With sincere regret for those who have perished and sympathy for their loved ones, we commit with determination to continue working alongside Haitians to end this epidemic. There is simply no other choice.

There is, however, hope. It is taking time but the fight against cholera is slowly being won. Haitian authorities and their partners know what needs to be done and joint efforts yealded notable results. The National Cholera elimination Plan of the Haitian Government sets a target of "zero deaths" from cholera by 2022. With sufficient resources and sustained efforts, we could reach this target earlier. We are determined to end this epidemic as soon as possible.

Engagement, partnership and the resources available to us is what we can offer. From the most remote mountains of the countryside to the displacement camps remaining in Port-au-Prince, we will keep on working hand-in-hand with communities, health agents, local and national authorities, and NGO partners to promote safe hygiene practices, respond rapidly to every alert, strengthen the capacity of health facilities to provide adequate care, and improve the overall sanitation conditions of the country to sustainably curtail the spread of the disease.

All this is no small endeavour. The scale and complexity of the challenges require a comprehensive approach that combines life-saving interventions with longer-term investments in health, water and sanitation systems. It demands the combined resources, energy and dedication of all the willing and mandated national and international actors to scale up efforts so that, in the not so distant future, Haitians can live free of cholera. Moreover, such a comprehensive and long term effort would go beyond the combat against cholera, and provide a solid basis for improvements in public health and water and sanitation that the country needs and deserves.

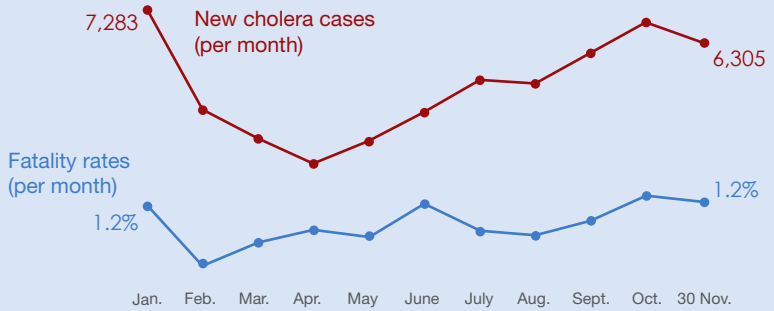
Peter de Clercq
Deputy Special Representative of the Secretary-General, Resident Coordinator,
Humanitarian Coordinator and UNDP Resident Representative

2. Key facts and figures

Current information on cholera from 1 January to November 2013

54,174
Cumulative cholera cases

550
Number of deaths

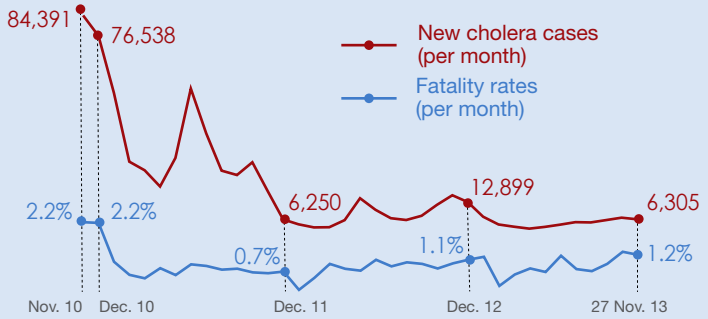


General information on cholera in Haïti (Oct. 2010 - 27 Nov. 2013)

694,842
Cumulative cholera cases

8,494
Number of deaths

1.2%
Fatality

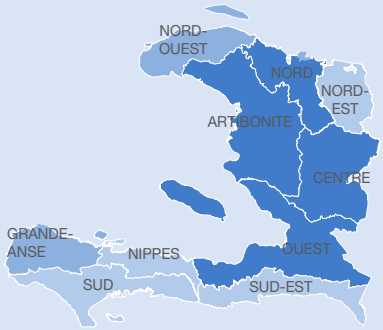


Sources: OMS/OPS, MSPP, WASH Cluster, Health Cluster

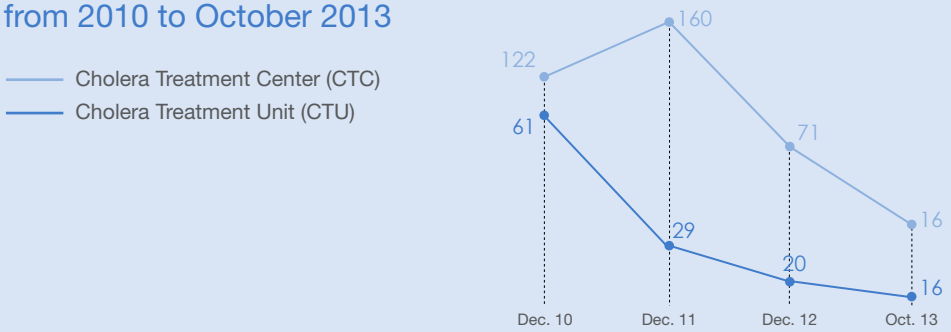
Current priority areas (Jan.-Oct. 2013)

Based on number of cholera cases in departement

- High
- Medium
- Low



Number of Cholera Treatment structures (CTC and CTU from 2010 to October 2013



Partners in cholera response in 2013

(Partners registered with OCHA and the cluster system in Haiti, as of September 2013)

51
Health and WASH cholera partners

- 25 International NGOs
- 18 National Partners + Government
- 4 International Organisations + Red Cross
- 4 UN Agencies

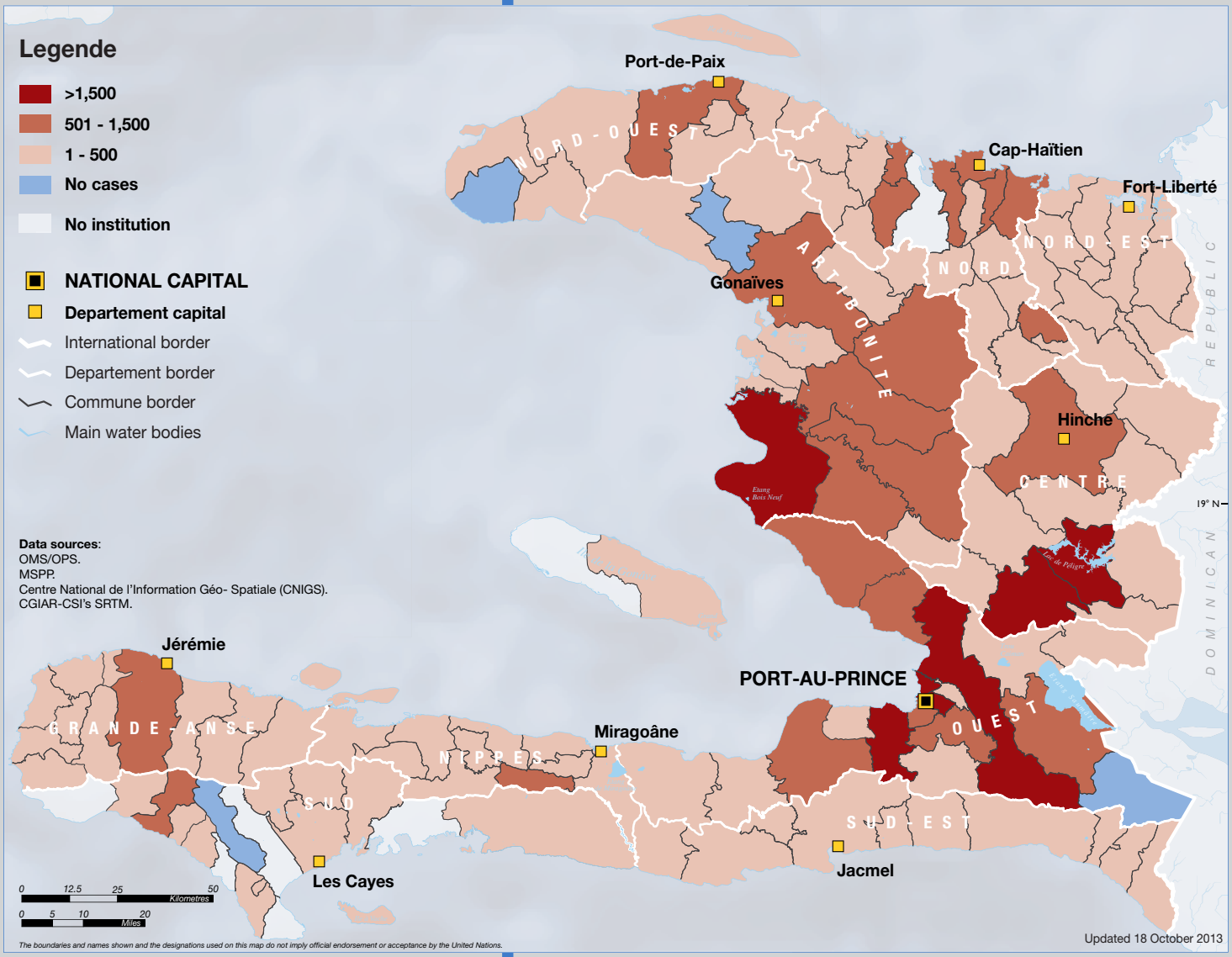
Current response to Cholera - HAP 2014 strategy

Requirements in 2014 (m = million $ US)

40m	=	13m	+	27m
requested		Health		WASH

3. The situation today

Suspected cholera cases by commune
(1st January to 24th September 2013)

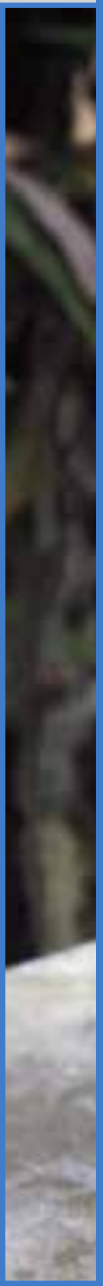


Since its emergence in October 2010, cholera has affected an estimated 694,842 people and claimed the lives of 8,494 people[1]. From January to early December 2013 alone, Haiti reported more than 56,174 cases and 550 deaths, making it the country with the largest number of suspected cholera cases worldwide.

However, there is reason for optimism. Concerted national and international efforts have resulted in a steady reduction in the number of people affected and killed by cholera over the last three years. The number of suspected cases has been reduced significantly every year, from 352,033 cases in 2011 to 101,722 cases in 2012 to 56,174 cases in 2013. The number of people perishing due to the disease stands at 1.22 per cent, slightly over the 1 per cent internationally recognized global target for effective cholera control but far below 2.2 per cent observed at the end of December 2010. To maintain this downward trend, ongoing efforts need to be pursued and scaled up. This requires sustained and long-term financial resources for both short and longer-term interventions.

According to available epidemiological and bacteriological data, areas of cholera persistence are believed to be in four of the ten departments: Artibonite, Centre, West and North. These four departments have systematically reported considerable numbers of suspected cholera cases since the beginning of the outbreak, including during the dry season (from December to April) when cholera usually retracts. Of the four, West and Artibonite are the most affected departments, with 58 per cent of all suspected cases reported during 2013. While all alerts need to be responded to wherever they take place, and sensitization efforts need to be pursued across the country, these four departments need to be prioritized for water, sanitation and sensitization interventions in view of limiting the transmission of the disease.

[1] Data as of 10 December 2013.



A child washes his hands at a fountain built by Haitian NGO Concert-Action and funded by UNICEF in Petit Bourg de Borgne, a remote village in the mountains East of Cap Haitian, in the North of Haiti. This is one of the seventeen fountains built in collaboration with community in the area.
© UNICEF Haiti/2013/Dormino

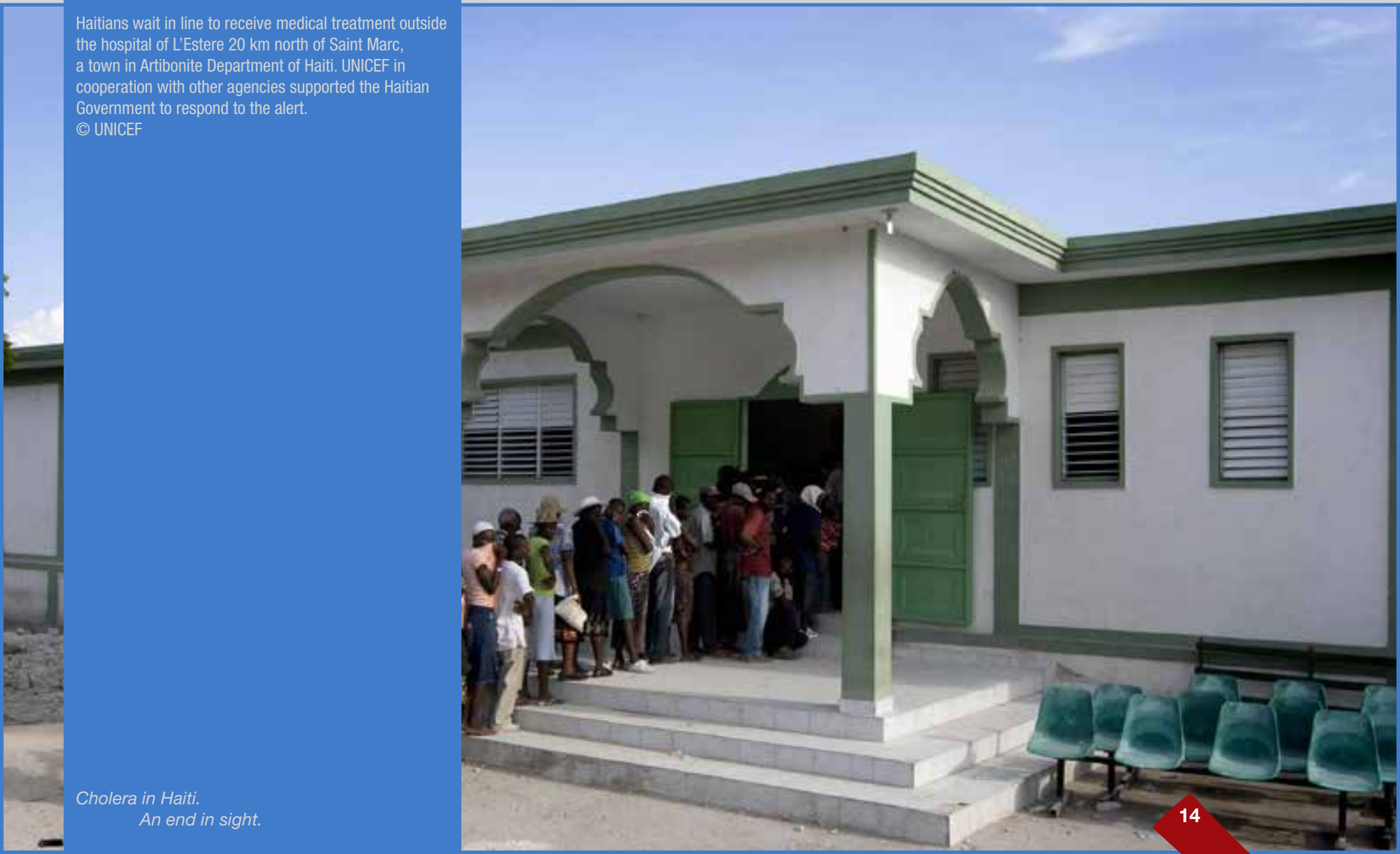
4. What is required to end the cholera epidemic in Haiti?

Cholera occurs in environments characterized by limited access to safe water and basic health, sanitation and hygiene services. It mostly affects the poorest Haitians. In Haiti, efforts to eliminate the disease are particularly challenging due to the lack of access to safe water and sanitation infrastructure, the high density of the urban population, the remoteness of many rural communities and the insufficient knowledge and cultural behavior of the population about protective hygienic practices.The complexity of the problems requires a comprehensive response that includes hygiene promotion, delivery of quality health services, reliable access to safe water and improved sanitation combining short-term life-saving interventions with longer-term investments. A government-led governance structure with clear accountability and monitoring mechanisms is needed to ensure the effectiveness of these actions.

Ensure access to treatment for all. The first life-saving intervention for any cholera victim is to obtain medical help and access to safe water. While treatment itself is fairly straightforward (Oral rehydration salts for mild cases, intravenous Ringer's lactate and antibiotics for severe cases), it is important to ensure that once a patient reaches a health centre, that the staff are aware of how to treat them; that infection control measures to limit spread of the disease are in place and that the supplies needed to treat them are available. More than 500 oral rehydration points and an estimated 100 cholera treatment facilities exist around the country. However, in order to be sustainable, cholera treatment services need to be integrated and expanded into the national health system. The availability of health services needs to be increased, especially in remote and difficult-to-access areas.

Reliable data and rapid response to alerts and outbreaks: Cholera does not kill if treated on time. In order to interrupt prevent the spread of the disease, dedicated response teams should respond to every alert within 48 hours. This requires timely information on suspected cases and a rapid response mechanism that ensures immediate investigation and intervention, which in Haiti requires support to strengthen the national alert system, reinforce the national epidemiological surveillance system, further increase and train human resources and ensure the prepositioning of material. Further investigations of reported cases are also needed to determine the prevailing conditions in their communities. That way, additional measures could be instituted to break the cycle of transmission at its origin.

Haitians wait in line to receive medical treatment outside the hospital of L'Estere 20 km north of Saint Marc, a town in Artibonite Department of Haiti. UNICEF in cooperation with other agencies supported the Haitian Government to respond to the alert.
© UNICEF



Sensitize and equip people with the knowledge of how to protect themselves, their families and their communities from cholera. Knowledge and practice of safe hygiene behavior is key to reduce the risk of being infected or infecting others. Simple and cheap hygiene practices such as hand washing after toilet use and before eating, preparing food in appropriate ways and chlorinating drinking water can save lives. In order to ensure people are aware of these important practices, mass sensitization campaigns through media and radio and door-to-door outreach must be conducted. World Bank research and pilot initiatives have demonstrated that increased attention to hygiene behavioral change can enhance impact in the health, education, social protection and water and sanitation sectors. For every dollar invested in activities targeting hygiene, sanitation and water yields savings from US$ 3 to US$ 46[2]on the response.

Large-scale investments are required to establish a functioning water, sanitation and sewage system. Though enough water is available in Haiti, it is estimated that 30 per cent of the Haitian population does not have access to safe drinking water and only 26 per cent has access to improved latrines. Although Haiti depends on its river system for drinking, washing, cleaning and waste disposal needs, the country does not have a water system that brings clean water from the water source to the individual household or village. Water trucks supply even some of the most affluent neighborhoods. Surveys demonstrate that the water quality in the country is often poor due to a lack of proper treatment. In addition, no solid waste management system exists, exacerbating the precarious situation. Further, according to the Ministry of Education's 2010-2011 school survey, only 32% of the primary and secondary schools have access to water while 66% possess a latrine and 7% a toilet. Large scale infrastructure projects are therefore required, in both urban and rural settings, involving the development of responsive water monitoring systems, rehabilitation and construction of water networks, waste management and the establishment of public and private hygiene and sanitation infrastructure.

[2] Florez R. Integrating Hygiene Promotion into World Bank Projects: Experiences from Colombia and Peru. Water and Sanitation Program. The World Bank 2011.

The Special Representative of the Secretary-General (SRSG) in Haiti inaugurates a newly constructed acute diarrhea treatment center in Artibonite.
© MINUSTAH

5. Efforts underway

Recognizing the scale of the challenge, the Government of Haiti launched its 10-year Cholera Elimination Plan and two-year Contingency Plan on 27 February 2013. The plan aims to limit the transmission of cholera by providing water, sanitation, hygiene and health care coverage to 80-90 per cent of the Haitian population.

UN Secretary-General (SG) Ban Ki-moon marked his support for the Government's efforts by launching the Initiative for the Elimination of Cholera on the Island of Hispaniola in December 2012 in support of the Government Plan to Eliminate Cholera from Haiti. As part of this, the SG appointed Assistant Secretary-General Pedro Medrano as Senior Cholera Coordinator in August 2013 to optimize UN system-wide efforts to eliminate cholera in support of the Government of Haiti. The SG also requested the development of a UN plan that captures the support the UN system intends to provide to the implementation of the two-year national operational plan reflecting the most urgent needs.

This renewed momentum builds on the efforts and gains made in cholera response and prevention since the beginning of the outbreak in 2010. The following pages provide an outline of key efforts and achievements to date.

Workers fill bottles with Gadyen Dlo (water guard), a chlorine product at the Gadyen Dlo house-turned-factory. The chlorinated water, which has been made by American NGO and UNICEF partner Deep Springs International (DSI) in the town of Leogane since 2002, is distributed cheaply for rural household use to fight against cholera.

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Acting fast on timely and accurate information

Given limited access and communication capacities in some areas of the country, obtaining timely information of suspected cases of cholera to enable a rapid response has been a key challenge. Since 2010, the UN has strengthened the surveillance system and established an alert and rapid response mechanism to treat cases and contamination sources.

Strengthening the surveillance system: Following the onset of the epidemic in 2010, the UN helped establish a national data collection and reporting system to monitor cholera cases, in partnership with CDC. Since 2013, an SMS-based reporting system has also been put in place to help health centers across the country collect and transfer data to the central office of the Ministry of Health in a timely manner. To improve the collection of information, the UN has trained epidemiologists and statisticians within the Ministry. It has provided materials to support diagnosis of suspected cholera cases through rapid diagnosis tests (RDTs) and strengthened laboratory capacities within the Ministry. In 2013, up to 42,000 rapid tests were purchased and distributed by the UN across the country. These efforts are yielding results: data collection and analysis is becoming more reliable, allowing the Ministry of Health to publish regular reports and partners to be able to respond accordingly. Many in the field are urging the distribution of RDTs to all health facilities at the departmental level. The systematic use of RDTs in combination with other investigation methods, in areas declaring new alerts will help the government and international partners differentiate between cases of cholera and of acute diarrhea. Such differentiation is critical in monitoring the evolution of the epidemic and in declaring its elimination.

Alert system and rapid response: If a community member learns about a suspected case of cholera, this information needs to be communicated as quickly as possible to all actors in the field by the Ministry of Health so that further contamination can be prevented. To ensure a response to every alert within less than 48 hours, the UN has helped establish a national alert and response system able to detect and respond to suspected cases of cholera with both health and water, sanitation and hygiene (WASH) interventions. The system relies on a network of experienced international and national NGOs in the field reporting cholera alerts via email or phone to the Ministry, which coordinates the response supported by NGO partners. A cholera coordination unit was established within the Ministry of Health to support the functioning of this

Since 2010, 1,150 alerts on suspected cases of cholera were received through the system and responded to.

system, with UN staff supporting the unit. The Ministry of Health has also nominated 10 cholera coordinators, one for each department. Under the leadership of these coordinators, the UN has established health and WASH rapid response teams in each department. The health teams are composed of medical doctors, epidemiologists and WASH engineers who are able to verify alerts and provide a coordinated, adequate health response. The WASH teams distribute water treatment products, investigate the origin of suspected cholera cases, chlorinate and repair water points and facilities, and carry out sensitization. Both teams are complementary and respond jointly to cholera alerts. They also conduct trainings of national health and water and sanitation technicians as well as community health workers. In 2013, MINUSTAH donated 24 vehicles to health and water and sanitation authorities to strengthen rapid response capacities.

The International Federation of the Red Cross and Red Crescent Societies

The International Federation of Red Cross and Red Crescent Societies (IFRC) was one of the first respondents to the cholera epidemic in support of the Haitian Red Cross (HRC). Since the beginning of the operation, the Red Cross partners mobilized all the resources available to address the emergency including 16 Partner National Societies (PNS) and the International Committee of the Red Cross (ICRC). The Federation has been providing co-ordination amongst the International Red Cross and Red Crescent Movement components in-country in addition to supporting cholera elimination efforts with technical expertise and through the implementation of health, water and sanitation activities. As part of these efforts, three Basic Health Care Emergency Response Units —Canadian Red Cross, Japanese Red Cross Society and Norwegian Red Cross— were quickly deployed in country and are still operational. Thanks to these teams many of the most affected and vulnerable populations were reached through water distributions, cholera prevention and control activities, including managing cholera treatment facilities, maintaining oral rehydration points and organizing hygiene promotion activities. An estimated 1.8 million Haitians have benefited so far from these efforts.

NGOs: at the forefront of the cholera response

NGOs have been in the frontline of the fight against cholera in Haiti since 2010, in support to national authorities. In the days and weeks following the outbreak, they were the first to set up the necessary response mechanisms in support of health authorities to save lives and implement prevention measures. In the early days following the declaration of the epidemic, up to 80 per cent of all cholera treatment centres were run by international NGOs.

Three years later, funds for the fight against cholera were drastically reduced, and many cholera facilities have been handed over to the Ministry of Health. Nevertheless, international NGO partners continue to support the national health and water and sanitation authorities to monitor and respond to alerts and build the capacities of community health workers and staff at local health centers to integrate cholera treatment into day-to-day health care management. In many high risk areas, NGOs are deploying mobile teams and providing emergency distributions of hygiene kits, interventions on water points and decontamination of affected areas. Other NGOs such as Doctors without Borders, Medecins du Monde and International Medical Corps continue to fund, staff or support CTCs in high risk areas.

An estimated 50 international NGOs remain engaged in health and/or water and sanitation activities to eliminate cholera in Haiti. Their engagement and contribution to complement national efforts remains essential.

The Cuban Medical Brigade

Cuban medical cooperation has saved thousands of lives in Haiti. Present in the country for the last 15 years and with over 700 people working closely with the Ministry of Health, the Cuban Medical Brigades have actively worked to fight cholera. The contingent has worked in 96 health care centers, 65 of which are part of a joint Cuban-Venezuelan program aimed at strengthening the health system in the country.

A doctor of the Cuban Medical Brigade gives intravenous fluids and electrolytes to a cholera patient at the cholera treatment center (CTC) established by the Cuban Medical Brigade, with the help of UNICEF, in Saint-Louis du Sud in the southern region of Haiti.
© UNICEF

Ensuring free and adequate treatment

The response to cholera alerts must be rapid and flexible. Even small gaps in staff and supplies can make a difference between life and death. The UN is supporting a broad range of activities relating to treatment of patient from providing supplies and training staff to improving infrastructure.

Upgrading infrastructure: In order to facilitate access to treatment, specific cholera facilities had to be established. Since the beginning of the epidemic, the UN contributed to this effort by establishing/upgrading over 150 cholera treatment facilities and setting up nearly 700 water chlorination points across Haiti.

In 2013, and in alignment with the national policy, increased focus has been placed on integrating cholera treatment into existing health facilities. This means establishing a specific space or structure (depending on the space available in the health facility) to treat waterborne and infectious diseases. It also means putting in place or improving water and sanitation conditions in health centers. An assessment of WASH conditions, supported by the UN, was carried out in 80 health centers around the country in 2011 and showed that 40 per cent did not have access to water and 80 per cent did not have functional latrines. To improve this situation, the UN has helped, since 2012, rehabilitate water and sanitation infrastructure in five department hospitals and improved water quality in 80 health centers. In 2013, the UN rehabilitated WASH infrastructures in 10 health centers and introduced a water-quality control system in 56 health centers. The system has been reinforced by training 80 MSPP staff at central and department level in charge of water surveillance. The UN is now supporting the expansion of the system to monitor more than 300 water systems across the country. The UN has also been supporting the water and sanitation authority (DINEPA) to start desludging cholera treatment facilities.

The World Bank's 15 million USD Cholera Emergency Response Project, which finishes in December 2013, has supported the rehabilitation of 16 treatment rooms to integrate diarrheal treatment services into the national health infrastructure. In collaboration with UNICEF and PAHO/WHO, MINUSTAH will construct nine other treatment centers for acute diarrhea cases (CTDAs) in early 2014. Four, were already built during 2013 with IOM. These CTDAs will be integrated into the departmental hospital structures. To improve minimum hygiene standards in cholera treatment facilities, MINUSTAH will rehabilitate WASH installations in cholera treatment facilities in areas of cholera persistence. The objective is twofold: to decrease the transmission of the disease in health facilities and to reduce the risk of contamination of the population living near those treatment centers.

Since 2010, more than 40 million critical items for the prevention and treatment of cholera, such as water purification tablets, soap and medical supplies and equipment have been distributed.

The UN has helped an estimated 400,000 people access a nearby cholera treatment facility in 2013

In 2013, medical supplies to treat 48,000 patients of cholera were distributed by PROMESS and PAHO/WHO to all health centers.

Providing medical supplies: The UN has also been supporting PROMESS, the national agency for the provision of medicines, to guarantee the availability of medical supplies in all cholera treatment centers **free of charge**. This is intended to facilitate the access of people to health care in a context of widespread poverty. In 2013, UNICEF distributed more than 4,700 kg of chlorine, more than 3.5 million Aquatabs, 500,000 bags of oral re-hydration salts, and 500,000 bars of soap through its NGO partners. UNICEF also provided medical supplies, tents and more than 6,000 hygiene kits to the Ministry of Health and NGOs to support the Global Handwashing Day on 15 October. In that same year, UNOPS also distributed over 16 000 cholera kits, 170,000 bars of soap, 500,000 aquatabs and oral re-hydration salts to health centers and cholera victims reaching over 270,000 people. In total, over the last three years, IOM distributed 40 million different cholera items such as lactated ringer solution, IV perfusion sets, cholera beds, soaps, Oral Rehydration Salts and aquatabs, through its NGO partners.

Training and maintaining qualified staff: Staff salaries, training and monitoring are the main needs identified to ensure effective cholera treatment during cholera alerts along with medical supplies for the management of cholera. The UN has funded salaries of Ministry of Health medical staff to guarantee service delivery across the country, strengthen the reach of mobile medical teams, monitor response activities, provide medical supplies and rehabilitate level I and II health structures. The UN has also supported the Ministry of Health to train and supervise medical staff in all 10 departments.

Vaccination in areas of cholera persistence

The UN (UNICEF and PAHO/WHO) and other partners are supporting the Ministry of Health to carry out a vaccination campaign targeting 600,000 people in areas of cholera persistence. The first phase of the campaign took place during the first week of August 2013, targeting 107,906 people in two affected communes. The second dose was given at the end of August-beginning of September 2013. Plans are underway to proceed with vaccination of the additional 500,000 people targeted by the Government's strategy. The national water authority, with US$300,000 from UNICEF, has started the rehabilitation of water points in the areas targeted for the vaccination. The Pan American Health Organization's (PAHO) Technical Advisory Group on Vaccinate-preventable diseases[2] recommends cholera vaccination, particularly in cases where other measures have had a limited impact. However, as vaccines are costly and availability is limited, the vaccination campaign in Haiti will be used as a complementary measure to other ongoing cholera elimination efforts in Government-identified priority areas. In addition to supporting the Government with technical and logistical support and supplies to run the campaigns, the UN will monitor the effectiveness of the campaign to add to the global stock of knowledge on the efficiency and utility of the cholera vaccine.

[2] Meeting Report on Cholera Vaccination PAHO/HQ, Washington DC, August 14, 2012.

A child reads the Global Handwashing Day Campaign banner at a refugee camp in Port-au-Prince.
© UNICEF

Promoting safe hygiene practices

In a country where cholera was unknown by the population before 2010, sensitization activities are essential to encourage the population to adopt appropriate hygienic practices and help stop the transmission of the disease. However, it is not easy to change behavior. Sensitization needs to reach the community level and be culturally sensitive, encompassing a wide range of activities including mass media, community mobilization, training of community workers and the supply of hand-washing points and hygienic materials.

In the past years, the UN system has supported these efforts by defining and disseminating messages on cholera prevention adapted to the Haitian context. The UN has also supported the Ministry of Health to develop a National Intersectoral Plan for hygiene promotion involving various key ministries such as education, interior, agriculture as well as health and water and sanitation. The Plan is expected to be launched in early 2014.

The UN has been supporting the Ministry of Health's new strategy for community health workers. According to this plan, there should be one multipurpose community health agent per 500 to 1,000 people in country, which would require approximately 10,500 community health workers nationally, of which about 50 per cent would be located in rural areas. A common training curriculum was developed by the Ministry of Health with UN support. So far, only 1,700 community health workers have received the training; an average of 400 community health workers shall be trained each year. The training and recruitment of additional community health workers is therefore essential, in particular in areas of cholera persistence.

The World Bank is funding a 20 million USD five year programme (2014-2018) to support community agents including DINEPA's water and sanitation technicians (TEPACS). These agents will report on the situation on the ground to central authorities, will increase access to knowledge for the most vulnerable, will enable positive behaviour change and will increase access to available services when needed.

Since 2010, UN-supported sensitization campaigns to increase awareness of necessary prevention and hygiene measures have reached more than 700,000 families. This was done via TV spots, national and local radios and theatre, among other means. UNICEF continues these mass sensitization campaigns through its various partners across the country. It is also increasing household visits to improve hygiene habits in affected communities and support the authorities to better prepare for mass events (like carnivals) to avoid the spread of cholera.

Since 2010, the UN and its partners have supported community-based hygiene campaigns that have reached over a million families.

The national water and sanitation authority has deployed more than 260 water and sanitation technicians - two per commune - to contribute to both prevention and response activities. These efforts are complemented by home visits and discussions with heads of households to ensure messages reach all residents. NGO partners have been very active on that front. From July to November 2013, more than 550,000 people benefited from sensitization campaigns conducted by NGO partners, and more than 80,000 people received cholera kits.

Efforts have also been made to make information more easily accessible to the population. UNOPS has recently established a free call center intended to provide health information to the general population and respond to their queries. In 2011, UNESCO produced a series of six short TV films on cholera with the character “Ti Joel “which are still being broadcasted by the national television. 2000 comics books based on the TV films were printed and distributed to partners of the public and private sectors to be used for sensitization. The International Organization for Migration (IOM) also distributed over 450,000 issues of the popular “Chimen Lakay” journal concerning cholera across the country reaching 601,761 persons with sensitization efforts and cholera-related materials.

During the Haiti celebration of World Water Day in March 2013, a march along a polluted river (Rivière Froide) that runs through several districts of Port-au-Prince was organized The objective was to raise awareness of the local communities on the critical state of the river and the actions that are needed to improve it. Hundreds of students took part in the march distributing over 1,000 leaflets to local residents. As a result, 50 residents registered to be part of a permanent committee for the safeguarding of the river.

Cholera in IDP camps

As of September 2013, an estimated 172,000 people remained displaced in 306 IDP camps as a result of the 2010 earthquake. Most camps have limited or no access to even the most basic services. People are living in conditions that are far below international standards and what would be sufficient to meet even the most basic needs. For example, open defecation was reported in 118 camps in September 2013[3]. The average number of people per latrine is 114 (compared to 74 in 2012, 50 as per Sphere standards, and 100 per latrine according to DINEPA's post-earthquake strategic document defining the infrastructures and minimal services required per site)[4]. Only 54 per cent of IDP camps (or 166 sites) have latrines, leaving more than 9,000 IDP households (20 per cent of total) without access to latrines[5]. This poses particular risks for women and girls who face the risk of gender-based violence when they use collective sanitation facilities. By the end of 2013, as hygiene promotion activities continued to diminish, only 49 per cent of people living in camps were able to identify three good practices to prevent cholera and had no access to basic hand washing facilities. These degraded sanitation conditions in camps increase the risk of cholera and other water-borne illnesses.

Out of the 267 camps monitored for WASH services (including cholera) through the DINEPA, roughly half had a cholera response mechanism (overseen by an NGO), accounting for 177 camps with cholera-related monitoring services and 128 with cholera-related sensitization[6]. Although efforts have been made to continue desludging and repairing broken latrines, resources have been insufficient to meet needs. In addition, the almost complete lack of services for solid waste management – with only 11 camps having waste management services, covering a population of 6,741 people (4 per cent of the total IDP population) –poses a serious health and environmental challenge. The large quantity of garbage found in toilets complicates the task of desludging and demotivates the popula-

[3] Source DINEPA – September 2013
[4] Source DINEPA – September 2013
[5] Source DTM - IOM October 2013.
[6] Source Cluster CCCM & Shelter & data collection Health Cluster

tion from improving their environment, leading to more waste and less hygienic practices. It also led to the premature temporary closure of the only two human waste treatment facilities in country, as these facilities were not designed to treat waste in such proportions.

The combination of limited sanitation services with a poor and vulnerable population that has limited means is creating a severe public health risk. There are limited statistics available on the incidence of cholera and other faeco-oral diseases such as diarrhea and typhoid in IDP camps, as the majority of affected people visit cholera treatment centers outside camps and do not declare their IDP status. However, the risk that the current conditions could trigger a resurgence of cholera cases, and/or other faeco-oral diseases, is high, which could affect not only the population in camps but also those in adjacent neighborhoods, many of which are also overcrowded, poor and with limited sanitation.

Against this backdrop, IOM has been supporting cholera response in 46 camps and responding to alerts of cases in surrounding communities. 58 Oral Rehydration Posts (ORP) were established in camps and communities in the West and Artibonite Departments. The ORP were managed by 96 brigadiers and auxiliary nurses from camps and communities trained in early recognition, treatment, community sensitization and referral to ensure that populations at risk are provided first line community care. Emphasis was placed on maintaining a rapid emergency response to hotspots and working closely with the Ministry of Health to integrate cholera response into primary health care.

In terms of WASH, UNICEF has been providing desludging services in 137 camps, covering an estimated 104,827 people. The American Red Cross, through its partner International Rescue Committee, has complemented these efforts by providing desludging in 20 camps, covering an estimated 18,824 people. In 2013, a critical moment was reached as funding to support desludging activities ran out which could have had devastating hygiene and health consequences. UNDP provided much-needed funding for UNICEF and PAHO to ensure the continuation of on-going efforts.

In terms of hygiene promotion, the NGO Solidarite has been working in 140 camps, covering an estimated 40,428 people. The French Red Cross provides training for camp committees on WASH, coupled with hygiene promotion and latrine repair in four camps, benefiting an estimated 21,109 people. The J/P Haitian Relief Organization provides a wide range of WASH services, including repairing and rebuilding WASH infrastructure, solid waste removal and watershed management in two camps, for a total of 2,865 people.

A member of the community inspects a water catchment system in Petit Bourg de Borgne, a remote village in the North of Haiti. This is one of the several water systems built by the community in the area.
© UNICEF

Improving water and sanitation nationwide

Clean water, proper sanitation and hygiene are the only means to control and eliminate cholera. An emergency WASH response to every suspected case is required to prevent further transmission. This is challenging in Haiti, as many rural communities are hard to access. The UN is supporting water authorities by providing staff and supporting a network of NGOs in each department that support coordination efforts and provide DINEPA technical and operational support and WASH supplies to respond to cholera alerts.

Improving access to water: In 2013, MINUSTAH initiated 51 Quick Impact Projects to enhance water supply and sanitation through the drilling and rehabilitation of wells and water points, the construction of latrines and septic tanks, and the cleaning of ravines. Water and sanitation projects were implemented across eight of the country's ten departments. Furthermore, military contingents delivered around 45 million liters of water to affected communities, particularly to schools and childcare centres. UNICEF and its partners have also rehabilitated more than 37 water sources and 13 water systems since July 2013 and a further 20 water points are currently being rehabilitated. DINEPA will rehabilitate a further 15 water sources in the most affected areas by January 2014. UNICEF's partner OXFAM/OSAPO started negotiations with the owners of water pumps in Port-au-Prince and Cap Haïtien (the second largest city in the country) to ensure all water is chlorinated before it is distributed to households. Advocacy efforts will focus on elaborating a law requiring all water providers to chlorinate water before distribution.

The World Bank Group has been working with DINEPA to improve water supply and sanitation provision in a number of departments in Haiti. From 2010 to 2013, 12 drinking water systems equipped with a chlorinator were constructed or rehabilitated and managed by a professional operator to provide safe drinking water to more than 50,000 people. The professional operator management model has since been adopted by the Inter-American Development Bank. Under the Cholera Emergency Response Project, more than 20 water points were rehabilitated and nearly 500,000 people were provided with water treatment products and soap. This Project also supported DINEPA through the mobilization of water and sanitation technicians at the commune level (TEPACs). Additionally, the Bank-administered Water Supply and Sanitation Program has been supporting rural water supply and sanitation efforts with technical assistance. The International Finance Corporation provided equity investments to Haitian entrepreneurs to pilot private water kiosks in urban areas.

The UN is supporting the salaries and training of all water and sanitation technicians deployed to all 140 communes in the country to respond to alerts.

Improving sanitation: With support from UNICEF and UNOPS, a human waste management site was built in Morne a Cabrit, a waste area north of Port-au-Prince. The site has a series of ponds to filter used water, allowing to decontaminate bacteria including the cholera vibrio. In combination with this project, a complete desludging fleet management system was set up to desludge the estimated 19,000 latrines installed throughout Port-au-Prince. A fleet of 32 desludging trucks was also established. Thanks to these efforts, an estimated 300 IDP camps and 27 cholera Treatment facilities were dislodged between April 2011 and February 2012. During that same period, 6700 drums of 55 gallons of waste were manually desludged by the ''Bayakou Team". The Bayakous teams were trained by several NGOs on wash protocol and hygiene promotion. In 2013, UNICEF further supported Dinepa with the rehabilitation of the site and the repair of 26 of the truck fleet to continue desludging operations in health facilities. The World Bank also supported a number of sanitation interventions: 13 public schools and 1 health centre in the South benefited from sanitation works, reaching more than 7,000 students and teachers. In the Port-au-Prince metropolitan area, over 50 latrines and 7 water pumps were rehabilitated and are now managed by local community organizations. Additionally, hygiene and sanitation promotion campaigns were launched on two regional radio stations in 2012 and training sessions on hygiene promotion and sanitation were organized in schools and health centres in the South.

Mitigation activities: To avoid floods, which often facilitate the spread of cholera, UNOPS has been carrying out several mitigation activities in camps and neighborhoods in the West Department. Activities included internal drainage, external drainage, drainage from latrines and water access points to prevent sewage and waste, construction of concrete canals and garbage removal.

Building a Coalition to Eliminate Cholera in the Island of Hispaniola

The emergence of cholera in Haiti underscores an inequitable situation in the Region of the Americas that requires a supportive, effective and sustained response through a broad partnership of willing actors. As cholera has also affected the Dominican Republic, and threatens to spread to other countries if left unchecked, control and elimination strategies must extend beyond Haiti.

The lack of universal drinking water and basic sanitation in Haiti and the Dominican Republic constitutes a severe public health issue that has exacerbated the cholera epidemic resulting

in increased rates of avoidable water and food-borne illness.

An urgent need exists to heighten international solidarity to eliminate cholera in Hispaniola.

As a result of the "Call for Action for a Cholera-Free Hispaniola," launched on January 11th 2013, PAHO/WHO, the Centers for Disease Control and Prevention (CDC), UNICEF and its partners proposed a Regional Coalition for Water and Sanitation to Eliminate Cholera in the Island of Hispaniola. This Coalition was officially established on June 4th, 2012, at the XXXIII AIDIS Congress, and reconfirmed at Rio + 20 on June 19th.

The goal of this coalition is to promote a new paradigm: "water and sanitation for all" and call for

Hemispheric responsibility and solidarity. Coalition members believe that such a Coalition can catalyze public opinion stakeholders in partnership with donors, governments, financial agencies and NGOs to work toward a common goal: to eliminate cholera and promote the sustainable development of both Haiti and the Dominican Republic.

The members of the Coalition are UN agencies, multilateral, bilateral organizations and selected members of civil society who are committed to focusing on the delivery of universal potable water and basic sanitation. They include: PAHO/WHO, UNICEF, CDC, the Spanish Cooperation, the Inter-American Association of Sanitary and Environmental Engineering, CARICOM, the Caribbean Water and Wastewater association (CWWA), Catholic Relief Services (CRS), the Haitian Association of medical physicians abroad, the International Federation of Red Cross and Red Crescent Societies (IFRC), the Inter-American Development Bank (IDB), the World Bank (WB), the Millennium Water Alliance, Partners in Health (PIH), the Veolia Foundation, and WASH advocates.

Since its creation, the Coalition has been active advocating, creating partnerships and mobilizing resources to support cholera elimination efforts in the region. The Coalition has so far published 10 scientific articles on the cholera outbreak in the region; it has also organized a series of high level meetings with Health Ministries and key partners to maintain momentum on cholera elimination efforts as well as a briefing in Capitol Hill to urge partners to increase WASH investments in Hispaniola and help prevent the spread of cholera to other countries of the hemisphere.

Students wash their hands at the Lycee de Bois Greffin in Port-au-Prince. The school building collapsed during the earthquake and was rebuilt by UNICEF.
© UNICEF

Cholera in Haiti.
An end in sight.

6. The way forward

There is no "quick fix" to the cholera problem in Haiti and expectations need to be realistic.

Building a robust nationwide water and sanitation infrastructure is the only sustainable solution to address all communicable diseases (including cholera) and improve the overall living standards of Haitians. Integrating cholera care into health facilities will require significant investments in infrastructure rehabilitation/construction and human resources. The introduction of competitive and regular salaries to stop the brain drain of trained professionals will also be crucial. Major donors are supporting the DINEPA and the Ministry of Health to design and build such infrastructure. But connecting individual households to the grid, both in urban densely populated contexts and in poor or remote areas, will take a decade, if not longer. Improved sanitation and hygiene promotion is of ongoing importance and needs continued support. As such, the Government of Haiti will need to dedicate greater resources from its national budget to ensure sustainable maintenance of health, water and sanitation infrastructures as well as payment of its civil servants.

Pending the big infrastructure works necessary to arrest the epidemic, short-term interventions supported by the UN and NGO partners will need to continue in the next two years to save lives and cut the transmission of cholera. This includes continuing to support existing cholera treatment centres and ensuring that the ongoing reduction of cholera treatment facilities does not put lives at risk as the national health service struggles to take over; mass distributions of chlorine tablets or decontamination of water sources; sensitization campaigns on television and radio channels as well as in the communities to raise awareness and improve hygiene practices; ensuring continued support to mobile teams so they can respond with both health and WASH interventions to every alert within 48 hours; and maintaining and expanding the system that uses mobile phone technology and community health workers to ensure daily water quality surveillance in health facilities.

"The scale of the challenge requires a comprehensive approach combining life-saving interventions with longer-term investments in the health and water and sanitation systems"

Mr. Peter De Clercq
DSRSG/RC/HC for Haiti

Rapid response to a cholera alert in Belle Fontaine, West Department.
© PAHO

7. What the UN and the international partners can do

The UN system in Haiti has been supporting Haitian authorities in responding to the epidemic since 2010 and its commitment to end it has never wavered.

At the request of the Secretary-General, and in view of optimizing UN system-wide efforts in support of the Government of Haiti to eliminate cholera, the UN system in Haiti has developed a two-year plan to support the implementation of the Haiti National Cholera Elimination Plan.

The plan aims to reduce infection rates by limiting and cutting the transmission of the epidemic i.e. reducing the annual incidence rate of cholera from 3 per cent to less than 0.5 per cent and meeting the lifesaving needs of the Haitian population. The plan requests US$70 million for two years. Of this, US$40 million is needed immediately to pursue on-going activities in 2014.

UN agencies, funds and programmes as well as their partners rely on voluntary donor funding to implement their activities. Without additional financial resources, the UN will not be able to scale up or even continue much-needed interventions to save lives and eliminate cholera in Haiti. Current capacities to respond are insufficient and the country cannot face this challenge alone.

The elimination of cholera in Haiti will take both short-term response and long-term actions to provide the people of Haiti with the basic infrastructure to ensure accessible, affordable and sustainable water, sanitation and health services. With sufficient resources, the UN and its partners could make a significant contribution to this goal.

List of partners involved in cholera elimination efforts in Haiti[7]

ACTED
Action Against Hunger
Americares
Canada
CARE international
Caribbean Water and Wastewater association (CWWA)
CARICOM
Catholic Relief Services (CRS)
CDC
Doctors without Borders
ECHO
FONDEFH
French Red Cross
OSAPO
Haitian Association of medical physicians abroad
Inter-American Association of Sanitary and Environmental Engineering
Inter-American Development Bank (IDB)
International Federation of Red Cross and Red Crescent Societies (IFRC)
International Rescue Comitee
IOM
Medecins du Monde
Merlin
Millennium Water Alliance
MINUSTAH
OCHA (Central Emergency Fund and Emergency Response Fund)
OXFAM
PAHO/WHO
Partners in Health (PIH)
Plan Haiti
Save the children
Solidarites International
Spanish Cooperation
The Cuban Medical Brigade
UNDP
UNICEF
UNOPS
Veolia Foundation
WASH advocates
World Bank (WB)
World Vision International
Zammi la Sante

[7] This list may not be exhaustive.

UNITED NATIONS IN HAITI

www.onu-haiti.org