International Medical Corps

CHOLERA IN HAITI: STILL AN EMERGENCY

A history of poverty, natural disaster, neglected public water and sanitation systems, and under-resourced health infrastructure has magnified the impact of cholera in Haiti. The Centers for Disease Control and Prevention (CDC) have called these conditions a "perfect storm for a massive epidemic of cholera." As of June 20, 2011, Haiti's Ministry of Health (MSPP) reported 363,117 cases of cholera and 5,506 deaths attributed to cholera across all 10 of Haiti's departments.

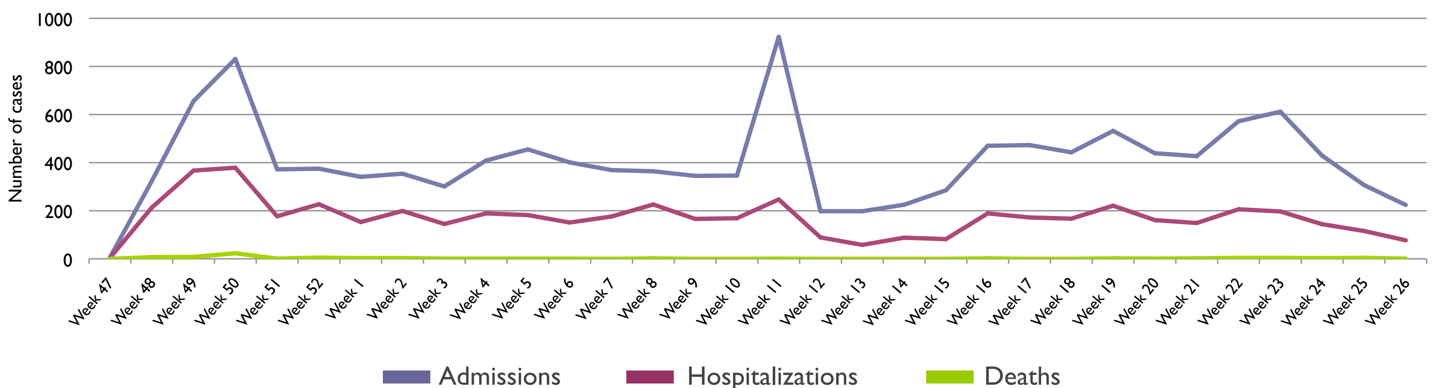
Now endemic in Haiti, cholera is tragically facilitated by the country's environment and lack of water and sanitation infrastructure. An island prone to floods and hurricanes, Haiti's geography will continue to make it susceptible to outbreaks each year, with the start of the rainy season in the spring and the end of the hurricane season in the fall. Until Haiti has extensive water and sanitation systems in both rural and urban areas, cholera cases will spike each year during the wet months, as an estimated 90 percent of Haitians do not have access to latrines and 40 percent do not have access to safe drinking water.

This trend can already be seen in the spike in cases that occurred during this year's rainy reason. After severe rains across the country, the cholera epidemic peaked again in June with a significant increase in severe cases, with some parts of the country seeing new cases double over a two-week period.

In the Artibonite Department, where the outbreak started in October of 2010, International Medical Corps saw a sharp rise in the incidence of cholera cases from April 3 to June 18. To handle the increased caseload, which also included a higher number of moderate and severe cases, International Medical Corps scaled up its cholera response activities in the region, and by June 18 its facilities in Artibonite admitted more than 3,000 cases, 24 percent of which required hospitalization. Three-thousand patients were admitted and there was a low mortality rate, underscoring a high—though not perfect— level of effectiveness in increasing the number of mechanisms available for treatment and in educating communities not to delay in seeking lifesaving care.

Similarly, the South Department saw an increase in cases starting in April. From April 14-20, the region saw between 10-20 mm of rain. In the days following the rains (April 24-30), International Medical Corps' CTC at the Hôpital Immaculée Conception saw a 92 percent increase in cases from the previous week. The South department is one of Haiti's most flood-prone areas, and with the hurricane season having started on June 1, this pattern is expected to continue as the increase in water forces fecal matter in ground or sewer water to overflow and contaminate wells, boreholes, and surface waters. The country's lack of a drainage system further compounds the problem, as much of the population in the South department lives on low-lying flood plains.

Admissions, Hospitalizations and Deaths at International Medical Corps Supported Cholera Treatment Facilities, South Department, Epidemiological Week 47, 2010 to 26, 2011.



National Challenges in Responding to the Cholera Outbreak

Total damages from the 2010 earthquake are estimated at $7.8 billion, making it one of the most costly disasters of modern history and the only one to affect a capital city in such a profound way. As a result of the earthquake, 60 percent of government, administrative, and economic infrastructure was destroyed, bringing the central government to its knees.

Later in 2010, Haiti was rocked by political instability as it prepared to elect a new president to lead the rebuilding process. In May 2011, Michel Martelly became Haiti's president. While that political crisis abated, Martelly has not been able to form a government and start to address the enormous challenges facing Haiti.

In addition to the events of 2010, Haiti continues to face long-standing and chronic needs, including decades of underinvestment in its health system. Even before the earthquake, only 47 percent of Haitians had access to health care, much of which was available through private practices that most Haitians, who live on $2 a day, could not afford.

Ongoing efforts led by the Haitian government and local and international relief teams have already reduced incidence and case-fatality rates across the country. However, the Government of Haiti, still reeling from the earthquake and still in the process of forming a new administration, faces significant challenges in meeting the increased cholera caseloads during the country's rainy season. Many medical and public health teams lack the necessary tools to be effective, including oral rehydration salts (ORS), intravenous fluids, antibiotics, vaccines, soap, cholera cots, and ambulances.

Recently, International Medical Corps handed over several cholera treatment facilities to MSPP due to lack of funding. In recent weeks, International Medical Corps has been asked by MSPP to return and provide support in some locations. In addition, the closing of oral rehydration points, ambulance systems, and mobile medical units (MMUs) has meant that those living in remote, hard-to-access areas no longer have the support systems they need to access care, further jeopardizing the health of thousands.

Bridging Emergency Response and Development

While cholera ultimately is a development issue, the establishment of a nationwide water and sanitation system will take time and significant investment. Until Haitians living in both rural and urban areas have access to latrines and safe drinking water, there will be a need for cholera treatment and prevention services, something MSPP is unprepared to provide at the scale currently required.

As rain and hurricane seasons spark new surges in cholera cases, the international community must ensure that Haitian communities, particularly those living in flood-prone or remote areas, have access to a network of care, including ORPs, MMUs, CTCs, and emergency transport. International Medical Corps strongly believes that without continued funding for cholera treatment and prevention activities, in addition to long-term funding for water and sanitation infrastructure, cholera-related morbidity and mortality indicators will remain high.

While government sustainability and handover should remain the ultimate goal, the transition must be managed in a way that does not overwhelm the local health system and lead to more cholera-related infections and deaths. Therefore, INGOs, including International Medical Corps, should work alongside MSPP at all levels, from departmental management, disease surveillance, and program implementation so that cholera response efforts are not duplicated and all activities are fostering a government-led response.

"I came with my child, he was dead, and they revived him. He couldn't sit and now he sits."
- A mother of a cholera patient

From Relief to Self-Reliance: International Medical Corps' Cholera Response

When reports of acute diarrhea emerged from the north in October 2010 in the rural, rice-growing region of Artibonite, International Medical Corps doctors and nurses immediately deployed to the region. Within days, the Government of Haiti confirmed that it was cholera, and quickly rolled out a network of cholera treatment centers (CTCs), oral rehydration points (ORPs), MMUs, and water and sanitation systems in some of Haiti's hardest-to-reach areas.

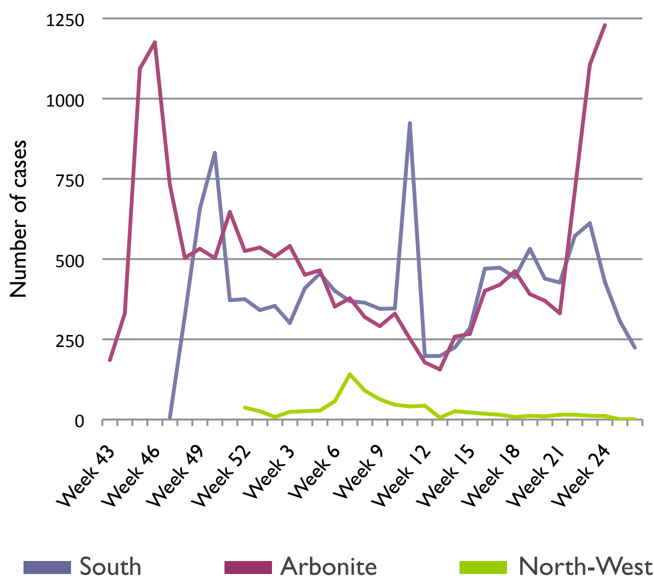
International Medical Corps was soon running cholera treatment and prevention activities in five of the departments most vulnerable to cholera, including five CTCs, 25 ORPs, and three MMUs. International Medical Corps also built a network of 820 community health volunteers to educate communities on how to prevent and identify cholera. Because of these efforts, more than 30,000 cholera patients received lifesaving treatment and more than 800,000 people were educated on the disease and on good hygiene practices. Today, International Medical Corps is caring for an estimated 80 percent of all cholera cases in South department.

Consistent with its mission of fostering self-reliance, International Medical Corps made capacity-building central to all of its cholera response interventions, even at the start of the outbreak. Because cholera was a new disease to Haiti, International Medical Corps made it a priority to train local doctors and nurses in how to handle, treat, prevent, and contain cholera cases. Today, 100 percent of International Medical Corps CTCs, ORPs, and MMUs are staffed and run by Haitian doctors and nurses, with expatriate staff providing technical assistance.

With every cholera and health intervention, International Medical Corps works side-by-side with the Haitian Government so that health professionals are engaged and fully invested. To ensure sustainability, International Medical Corps has provided capacity-building trainings to hospital and dispensary staff on cholera management and prevention, infection control, and hospital medical waste. Responding to the cholera outbreak, with MSPP taking the lead, International Medical Corps quickly deployed teams to areas identified as in greatest need of assessment and potential support. Volunteers have distributed cholera prevention kits with MSPP and International Medical Corps informational flyers, soap, and water treatment supplies to communities.

The effectiveness of this approach, which bridges emergency response with capacity building and development, can be seen in International Medical Corps' cholera interventions in the South department. When International Medical Corps arrived in the South department last year, 14 percent of cholera cases resulted in death. One month after International Medical Corps took over the areas two largest CTCs, the case fatality rate fell to 2.5 percent, and two months later it was 0.5 percent. This is not only because International Medical Corps made care available in CTCs but also because it established a network that made cholera care accessible to even those living in very hard-to-access areas, and trained communities how to identify and prevent the disease.

Admissions in International Medical Corp cholera treatment facilities, EPI Week 43 2010 to Week 23 2011



International Medical Corps
Cholera Treatment Sites in Haiti - July 2011

Recommendations

International Medical Corps' vision is one of a cholera-free Haiti. Cholera is a 100 percent preventable, highly treatable disease and--as amply documented above--International Medical Corps' work thus far has been highly effective despite enormously challenging and frequently changing conditions on the ground. However, these gains are fragile and need to be protected though focused, transitional investments in sustainable water and sanitation infrastructure, improved coordination among stakeholders, and a strong push for capacity building.

To address the current needs and prevent future cases, International Medial Corps recommends the following:

1. Continue aggressive case finding and scale-up treatment efforts, including oral rehydration therapy, intravenous rehydration, antibiotic therapy (for moderate and severe cases), and complementary supplementation with zinc.

2. Shore up Haiti's water infrastructure by building systems for consistent chlorination and filtration at public water sources and by distributing point-of-use water purification technologies. We must also strengthen sanitation infrastructure by improving and expanding waste management facilities (such as sewage systems and latrines) and waste monitoring.

3. Link prevention to care by bolstering surveillance, education campaigns (about hand-washing, for example), and water, sanitation, and hygiene (WASH) efforts.

4. Support the government of Haiti to manage cholera response at the national, departmental and local level through training, supervision, calculated hand-over, logistical and administrative support, and through increasing surge capacity to respond to new outbreaks.

"If there was no International Medical Corps, we would have died." - A cholera patient

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