

Call to Action: A Cholera-Free Hispaniola

Moving from cholera control to cholera elimination through essential investments in water, sanitation, and hygiene infrastructure

Current Status of Cholera in Hispaniola

One of the largest cholera epidemics in modern history began in the Center and Artibonite Departments of Haiti in October 2010, just 10 months after the devastating earthquake of January 2010. Within 1 month, cholera had spread throughout Haiti and cases were being reported by its neighbor in the Dominican Republic. As of December 25, 2011, Haiti has reported 522,335 cases, 281,440 hospitalizations, and 7,001 deaths,¹ making this the largest cholera epidemic in the world in decades. In the Dominican Republic, 21,432 cases have been reported, with 363 deaths (152 laboratory confirmed).²

The 2-year anniversary of the earthquake is a time for the international community to call a halt to cholera and focus on short and long-term actions to help the people of Haiti and the Dominican Republic fight this scourge. **Our goal is to ensure that cholera does not remain endemic in Hispaniola.**

Prevention and Control of Cholera on Hispaniola

Over the past year, the Governments of Haiti and the Dominican Republic supported by the international community, put in place crucial prevention and control strategies to reduce the debilitating toll of cholera and save lives.^{3,4}

These strategies include:

- Coordination and engagement of partners
- Improving surveillance, early warning to monitor the spread of disease and determine actions
- Improving access to safe drinking water via chlorinating water at the source and in the home, schools and other key locations.
- Promoting safe hygiene and other public health preventive practices
- Encouraging safe food handling practices and policies
- Improving safe management of excreta and solid waste
- Clarifying a role for oral cholera vaccines through vaccine pilot projects
- Ensuring quality clinical care and treatment at health facility and community levels
- Informing, mobilizing and engaging the community

These life-saving interventions must be sustained and strengthened, embracing integrated prevention and control strategies through primary health and preventive care. For example, in the Dominican Republic, response strategies improved access to safe water and were combined with social mobilization and education to improve conditions in vulnerable areas.

To eliminate cholera from the Island of Hispaniola, we must urgently increase access to improved water and sanitation in Haiti, aiming to reach regional levels of coverage in Latin America and the Caribbean, as part of an integrated approach to the control of diarrhea. **Controlling cholera in Hispaniola over the long-term will**

be only possible through investments in water, sanitation, and hygiene infrastructure and by developing the institutional capacity to operate and maintain that infrastructure.

Current Water, Sanitation and Hygiene Conditions in Haiti and Dominican Republic

Haiti is by far the most underserved country in the Western Hemisphere in terms of water and sanitation infrastructure.⁵ Before the devastating earthquake of 2010, 63% of the 10 million residents in Haiti had access to an improved drinking water source (e.g., piped water into dwelling or yard, public standpipe, tubewell or borehole, protected dug well). Access to an improved sanitation facility (e.g., a flush toilet, piped sewer system, septic tank, ventilated improved pit latrine, composting toilet) in Haiti is significantly lower and actually declined from 26% of the total population in 1990 to 17% in 2008. Access to improved sanitation in rural areas is low at 10%, but coverage in urban areas is also strikingly low at 24%. Port au Prince, where more than 2 million people live, is one of the largest cities in the world with no municipal sewage system.

Water and sanitation figures for Haiti are much lower than the regional averages for Latin America and the Caribbean, and place Haiti among the lowest 12 countries worldwide in terms of sanitation coverage, according to data from the 2010 WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation. In addition, Haiti is one of the few countries in the world where overall coverage for sanitation has *declined* during the Millennium Development Goal campaign for reasons other than simple population growth.

Improved Water and Sanitation Coverage in Haiti and Dominican Republic vs. Regional Averages

Indicator	2008		
	Haiti	Dominican Republic	Latin America and Caribbean
Water	63%	86%	93%
Sanitation	17% (was 26% in 1990)	83%	80%

Elimination of Cholera from Latin American Countries (LAC): Lessons Learned

During the Latin America epidemic of the 1990s, cholera spread to over 20 countries in the first 2 years. Aggressive investment by the international community in water and sanitation infrastructure and health promotion resulted in improvements to drinking water quality, and rapidly expanded access to safe drinking water and sanitation. These actions contributed to the virtual elimination of epidemic cholera from Central and South America within 8 years,⁶⁻⁷ by which time the epidemic had caused some 10,000 deaths and over 1 million cases of cholera. These increases in water and sanitation coverage, along with strong political commitment, resources, and development of surveillance systems to detect and monitor disease, helped to stem the cholera epidemic in Latin America. These efforts also led to well-documented decreases in other waterborne diseases, such as typhoid fever and Hepatitis A in some countries, and dramatic improvements in infant and child mortality.⁷⁻⁸ **Most importantly, epidemic cholera has not recurred in Latin America after these gains were made.**

A way forward for Hispaniola: Investing in Water, Sanitation, and Hygiene

The current water, sanitation, and hygiene situation in Haiti is the result of decades of neglect and under-investment. We have an exciting opportunity to reverse that failure. This will take a long term, sustained commitment, and large scale investments from multiple partners. To control the current cholera epidemic and prevent recurrence, we must continue WASH investments with emphasis on long term infrastructure and increased capacity within Haiti to operate and maintain that infrastructure.

The needs are well-known and not inexpensive, but are essential to avoid disease.⁹ Estimated rough costs from the Inter-American Development Bank (IADB), the Office of the Haitian Prime Minister in Haiti, and the World Bank have ranged from \$746 million to \$1.1 billion.¹⁰⁻¹¹

In March 2010, the international community pledged billions to assist Haiti in post-earthquake reconstruction,¹² with major WASH projects underway in strengthening municipal water supplies, providing water and sanitation for displaced populations and in health facilities, improving water quality control, purchasing WASH commodities, and providing health worker training. The United States set committed more than \$3 billion in humanitarian relief, recovery and reconstruction assistance. IADB has also committed \$65 million in funding to expand water and sanitation coverage since the earthquake. However, other partners are needed to address the funding gap for water and sanitation infrastructure. In addition, Haiti's water and sanitation agency, DINEPA, also developed a strategic plan in response to cholera that focused on household and community water chlorination, sanitation, hygiene and health education.

Significant commitments to water, sanitation and hygiene projects in Haiti have been made by non-governmental organizations, although most of these investments have gone toward short-term measures such as water trucking to temporary, make-shift settlements set up after the earthquake. Additional projects are also underway, such as improving small-scale water supplies, expanding coverage with household latrines, and improving water and sanitation supplies in health facilities. These activities are slowly improving the water and sanitation situation, especially in Port-au-Prince. In Dominican Republic as well, significant efforts have been done to reduce the impact of the cholera outbreak in Haiti over this country, such as sectoral coordination, communication and community mobilization, and sanitation and hygiene interventions at the community and school level, among others.

PAHO, CDC and UNICEF believe there are four key processes that must happen:

- **Improve water, sanitation, and hygiene infrastructure as a priority** for governments and the international community. This event is the first part of an international dialogue that must continue to build support and political will for this investment.
- **Create a task force for water, sanitation, and hygiene infrastructure.** With leadership by the Dominican Republic and Haitian governments, we encourage a key group of international water and sanitation experts from governments, NGOs, and private foundations to discuss and develop a detailed infrastructure plan for both Haiti and Dominican Republic.
- **Develop a detailed plan and timeline for water, sanitation, and hygiene infrastructure.** An integrated strategy should be produced by Haitian and Dominican Republic Governments, with assistance from the task force. This should be based on a detailed analysis of existing infrastructure, identifying geographical and sectorial priorities for WASH investments. Along with infrastructure, this plan should take into account complimentary WASH interventions including behavioral changes and community mobilization efforts. A detailed implementation plan and timeline should follow this, with existing commitments for water and sanitation investments to be reviewed in the context of this plan.
- **Honor pledged post-earthquake funds and recruit new partners.** The international community has pledged billions in post-earthquake reconstruction.¹² Allotting a significant proportion of pledged funds to meet critical needs in water, sanitation, and hygiene represents an essential investment in the future of both the Dominican Republic and Haiti.

With collaboration from partners and use of funds already pledged, we can make an incredible difference in saving more lives and reducing disease well into the future.

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