MOBILIZING INVESTMENT FOR
ZERO TRANSMISSION of CHOLERA in HAITI

The opportunity for innovative finance in Haiti

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USAID
FROM THE AMERICAN PEOPLE
In 2016, the UN expressed its regrets for the suffering caused by the cholera outbreak and stated a moral responsibility to the victims and to support the country to overcome the epidemic.

The UN has committed to a three-pronged approach to supporting Haiti in overcoming the epidemic and building sound water, sanitation, and health systems:

1. ** TRACK 1A **
   - Intensify the immediate efforts to decrease the transmission of cholera and improve access to care and treatment.

2. ** TRACK 1B **
   - Address the longer-term issues of access to clean water, sanitation and health-care systems.

3. ** TRACK 2 **
   - Provide material assistance and support to those Haitians most directly affected by cholera.

Re-securing Haiti as a cholera-free zone is critical for the entire Western Hemisphere, as cholera can spread across borders with human travel/migration.

Significant investment has already been made in eliminating cholera transmission in Haiti, yet gaps in funding remain; this project focuses on filling those gaps (particularly the urgent financing gap for Track 1A), and is not intended to supplant existing efforts or funding streams.

The cholera epidemic in Haiti has been one of the worst in modern history.

Cumulative cholera cases by country 2000-2016 •

THOUSANDS

Non-fatal cases
Fatal cases

2010-Present: Haiti Cholera Epidemic

Cholera was introduced in Haiti following the 2010 earthquake.

There have been 819K suspected cases and 9,785 deaths to date.

The rapid spread was primarily due to limited access to safe water and sanitation.

The immediate response to the outbreak was insufficient to quickly and effectively contain secondary transmission.

The UN has expressed regret for the suffering caused by the cholera epidemic and has passed several resolutions affirming its commitment to ending the transmission of cholera.

Since implementation of a national strategy began (2012), there has been significant progress against both incidence and case fatality rates.

In 2012, Haiti began a national plan to eliminate cholera – the last phase of this plan launched in 2018.

Partners, including the United Nations, have aligned their strategies for the elimination of the transmission of cholera to each axis of the Government of Haiti’s National Plan for the Elimination of Cholera.

1 Plan National D’Elimination du Cholera, Developpment du moyen term (PNEC-MT), Juillet 2016-Decembre 2018 and Jan 2019-2022; Reunion Strategique Cholera, 2018
2 UN Secretary General Approach, 2016
The interventions are working – since 2011, the incidence rate of cholera in Haiti has drastically declined.

The rate of cholera incidence in Haiti has reduced more than 96 percent since 2011.

Current State of the Epidemic

Incidence of suspected cholera cases has declined from the peak of the epidemic (2011) from 34.4 to 1.1 cases per 1,000 person-years (2017); with the lowest annual incidence to date in 2018.1,2

Elimination is Possible

Cholera epidemics have been genetically traced to an origin, suppressing theories of local occurrence and suggesting elimination is possible with containment of the bacteria introduced to a region.3

The Global Cholera Task Force has outlined an integrated approach for elimination.4

“Elimination of cholera is within reach, but we need to maintain the momentum.”
The partners co-implementing this plan are well established international organizations with strong track records.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Relevant Activities</th>
<th>Track Record</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Center for Disease Control</strong></td>
<td>coordination, immunization, laboratories &amp; monitoring</td>
<td>CDC plays a critical role in building public health infrastructure for surveillance and reporting and funds and provides technical assistance to MSPP.</td>
</tr>
<tr>
<td><strong>GHESKIO</strong></td>
<td>immunization, home water treatment &amp; chlorination systems, promotion of health &amp; hygienic behavior, emergency medical care</td>
<td>GHESKIO is a critical and technically skilled implementing partner. They are well-equipped and willing for their role in these interventions to be expanded, if required.</td>
</tr>
<tr>
<td><strong>PAHO</strong></td>
<td>coordination, immunization, emergency medical care, laboratories &amp; monitoring</td>
<td>PAHO plays a critical role in immunization, surveillance, and support of emergency care.</td>
</tr>
<tr>
<td><strong>UNICEF</strong></td>
<td>coordination, immunization, home water treatment &amp; chlorination systems, promotion of health &amp; hygienic behavior, laboratories &amp; monitoring, rapid response, emergency activities for water &amp; sanitation</td>
<td>UNICEF has a strong track record of implementation in Haiti and cholera / WASH. UNICEF also has a strong management history with its team of implementing partners.</td>
</tr>
<tr>
<td><strong>Zanmi Lasante (Partners in Health)</strong></td>
<td>coordination, immunization, home water treatment &amp; chlorination systems, promotion of health &amp; hygienic behavior, emergency medical care</td>
<td>Zanmi Lasante is a strong, technically skilled implementing partner with a long history of working in Haiti.</td>
</tr>
</tbody>
</table>

Intervention delivery also involves several ministries of the Haitian government who would work closely with NGO partners to implement the strategy.

Source: Implementing partner data
The cost for the final phase of the Haitian Government’s National plan is ~$397M from 2019-2022

Source: Government of Haiti Long-term Plan, Dalberg and UNSEO analysis
Of this ~$62.4M, there is a gap of ~$26M urgently needed for short term interventions for 2020-2022

Gap in funding for the elimination of cholera transmission, short term interventions¹

<table>
<thead>
<tr>
<th>Intervention Pillar</th>
<th>Estimated Funding (USD Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination</td>
<td>$1.5</td>
</tr>
<tr>
<td>Immunization</td>
<td>$0.0²</td>
</tr>
<tr>
<td>Household water treatment and chlorination</td>
<td>$3.7</td>
</tr>
<tr>
<td>Promotion of health and hygienic behavior</td>
<td>$2.5</td>
</tr>
<tr>
<td>Emergency medical care</td>
<td>$4.0</td>
</tr>
<tr>
<td>Laboratories and monitoring</td>
<td>$2.3</td>
</tr>
<tr>
<td>Rapid response</td>
<td>$12</td>
</tr>
<tr>
<td>Emergency activities for water and sanitation</td>
<td>$0</td>
</tr>
</tbody>
</table>

**TOTAL** $26M

¹ This is the preliminary assessment of the funding gap for Short Term Intervention Activities; Subject to change pending the GoH’s finalization of the long-term plan and additional information from implementing partners and funders. ² Immunization interventions are planned to be completed by the end of 2019. Source: Implementing partner data; Dalberg and UNSEO analysis.
A pay-for-success mechanism would be an appropriate solution to fill the ~$26M gap based on key criteria:

- There are clear, measurable, and attributable metrics. Suitable metrics linked to intermediate outcomes are already being measured for most intervention pillars. However, additional investments in monitoring and evaluation are required before full program launch.

- Political will exists from the Government of Haiti. Clear leadership support exists for results-based approaches in Haiti. Moreover, there are likely opportunities to involve key ministries in both financing and implementing the ultimate program.

- Program size is in line with previous pay-for-success mechanisms. The portion of the financing gap for short-term interventions is in line with the average for World Bank healthcare PFS contracts (2007-present).

- Cholera interventions are well understood and have clear links to outcomes in Haiti. There is both a strong global evidence base, and track record to date in Haiti, which supports the efficacy of the current intervention strategy in eliminating the transmission of cholera. There are well-established implementing partners actively working in Haiti. The key implementation partners are well-established international organizations (UNICEF, GHSKIO, Zanmi Lasante, PAHO, and CDC), all of whom have a clear track record of performance in the fight against cholera in Haiti.

Source: Dalberg Analysis
Supporting this strategy could have wide-reaching benefits including cost-savings and health impact

**Additional Health Impact**

Haiti has the highest mortality rate due to unsafe water and sanitation in Latin America and the Caribbean

24:1

**HAITI VS. REGIONAL AVERAGE**

After the response to Mexico’s cholera outbreak in early 1991, under-five mortality from diarrheal diseases dropped by 17.8% between 1990 and 1993, due in part to the promotion of access to potable water, the widespread use of oral rehydration therapy, and the strengthening of sanitation systems.

**Contribution to SDGs**

The Haitian population practices nearly 20% open defecation.

In Nepal, a randomized trial examined coupling hygiene behavior change interventions with immunization programs and found that it increased immunization coverage, improved key hygiene indicators (e.g., handwashing with soap and water, toilet use, and food hygiene), and reduced the prevalence of diarrhea in children under one by 15%.

**Cost Savings**

Cholera has an estimated annual cost of $2B USD globally representing a significant economic burden for cholera endemic countries.

An analysis by the WHO found that the implementation of the Global Roadmap in the Democratic Republic of Congo, a country with endemic cholera, would lead to a 50% cost savings compared with the ongoing average yearly cost to continuously respond to emerging cholera outbreaks.

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1 UN stats, “Global SDG Indicators Database,” 2018
2 World Development Indicators
3 World Health Organization Global Task force for Cholera Control, “Ending Cholera: A Global Roadmap to 2030”
5 Average of all Latin America and Caribbean countries for which data is available, excluding Haiti; Rate per 100,000, 2016
6 **Percent of population in 2015 practicing open defecation was 35% Rural, 8% Urban, 19% Total  ***Cost savings data not available for Haiti

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It also would likely disproportionately benefit women and girls, who often bear more of the burdens of cholera

Household labor
Women and girls are more likely to do household work that increases risk of contracting cholera (e.g., fetching / treating water, preparing food, cleaning latrines).

"Carrying out these tasks puts women and girls at an increased risk of contracting cholera. Furthermore, the cholera outbreak makes these tasks more onerous, as water must be purified to drink and to prepare food."

Caregiving
Women and girls are more likely to care for sick family members (e.g., washing clothes) than men are, which can lead to a disproportionate physical and emotional toll.

"Women are often also the primary caretakers when family members fall ill with cholera ... there is an ‘emotional and physical impact of caregiving for sick relatives, resulting from sleepless nights, increased labor-intensive domestic chores ... and negative psychological and emotional reactions."

Economic Burden
Cholera can increase women’s economic burden by decreasing time available for income-generating activities, as leading to the death of family breadwinners.

"The death of male breadwinners has also presented significant economic burdens on women survivors ... Cholera thus threatens to further impoverish women and girls across Haiti, and further undermine their health."

"Vibrio cholera…is not gender-neutral. Women and girls are disproportionately affected by the epidemic as gender roles influence different patterns of exposure to cholera, disease incidence and outcome, and responsibility within families to prevent and respond to cholera."

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A development impact bond, a type of pay-for-success model, is a promising mechanism for this context.

DIBs differ from traditional development finance by including an investor and tying payment to results. DIBs use investor capital to shift implementation risk away from the implementing partners and outcome funders and provide upfront working capital to the program.

In a DIB, an investor’s repayment is dependent on the success of the program. Investor is paid by outcome funders depending on the achievement of specific program targets.

1 A more traditional time-staged pay-for-success instrument could also be used in this context. 2 Instiglio social impact bond database. Source: Dalberg analysis.
A DIB also has the potential to bridge the humanitarian-development divide and create new coordination platforms.

- **Bridge the humanitarian-development divide.**
  A DIB could set up an alternative model of bridge financing for other cholera persistent countries where weak healthcare systems, low WASH infrastructure and diminishing humanitarian funds create funding gaps in systems that prevent the spread of cholera.

- **Creates a new platform for UN cooperation.**
  The DIB creates a replicable structure on the UN platform. The same structure could be replicated in other countries and sectors.

- **Supports WHO Global Taskforce for Cholera Control in its global roadmap to end cholera and reduce cholera deaths by 90%.**
  The DIB is based on a multiagency, integrated approach advocated by the World Health Organization that can be used in future outbreaks.

- **Shifts the narrative in Haiti towards positive opportunities.**
This offers an opportunity for funders and investors to contribute to cholera elimination and advance the field.

**Investors**
- Contribute to the elimination of cholera transmission in Haiti
- Earn a return on investment while building the field of impact investing and innovative finance
- Explore the Haitian business and investment landscape
- Help high-impact organizations adopt flexible, efficient approaches to social change

**Outcome Funders**
- Contribute to the elimination of cholera transmission in Haiti
- Build the field’s learning around innovative finance
- Collaborate with the private sector
- Ensure scarce resources are deployed effectively and with accountability and transparency
- Help high-impact organizations and governments adopt results-oriented program approaches

Source: Dalberg analysis
There are three key next steps to complete before the DIB launches in 2020:

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Confirm outcome funders and investors</td>
<td>2019</td>
</tr>
<tr>
<td>2</td>
<td>Finalize outcome metrics and targets</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Negotiate and finalize investment terms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DIB Launches</td>
<td>2020</td>
</tr>
</tbody>
</table>
For more information, please contact a representative at USAID or the Office for the UN Special Envoy for Haiti

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