

CORRESPONDENCE

Resurgence of Cholera in Haiti amidst Humanitarian Crises

TO THE EDITOR: On October 1, 2022, the Haitian Ministry of Health reported a resurgence of cholera in Port-au-Prince. This comes a decade after Haiti had one of the worst cholera epidemics in modern history in 2010, with more than 800,000 cases and 10,000 deaths. That epidemic was brought under control through a comprehensive response that included cholera treatment; improvements in drinking water, sanitation, and hygiene; case investigation; decontamination of water sources; and oral cholera vaccination of 2.5 million people. The resurgence of cholera coincides with recent political chaos, gang violence, and a blockade of the main port in Port-au-Prince that have led to a catastrophic shortage of food, potable water, and fuel.

As of November 12, 2022, there had been 8257 suspected cases of cholera and 155 deaths from cholera reported, with poor neighborhoods in downtown Port-au-Prince most severely affected. The epidemic has now spread, with suspected cases reported in eight of the ten geographic departments within Haiti.¹

GHESKIO, a Haitian nonprofit medical organization, has opened a cholera treatment center in downtown Port-au-Prince. This neighborhood suffers from extreme poverty, poor housing, a lack of clean water, and an absence of sanitation services. The neighborhood is controlled by gangs and is inaccessible to government health workers. Between October 1 and November 12, a total of 556 patients were admitted to the cholera treatment center with suspected cholera, and 494 were tested for cholera. Cultures were obtained in the first 164 suspected cases, and the results in 131 cases were positive. Rapid antigen-detection tests (Crystal VC, Arkray Healthcare) were performed in 330 cases, and the results in 280 were positive. In total, 411 of 494 suspected cases (83%) were confirmed to be positive either by culture or antigen test. Of the 411 confirmed cases, 214 (52%) were in children 14 years of age or younger. In the 2010 epidemic, the age distribution of patients at the same cholera treatment center closely mirrored the age distribution in the general population of Port-au-Prince.³ The age distribution in

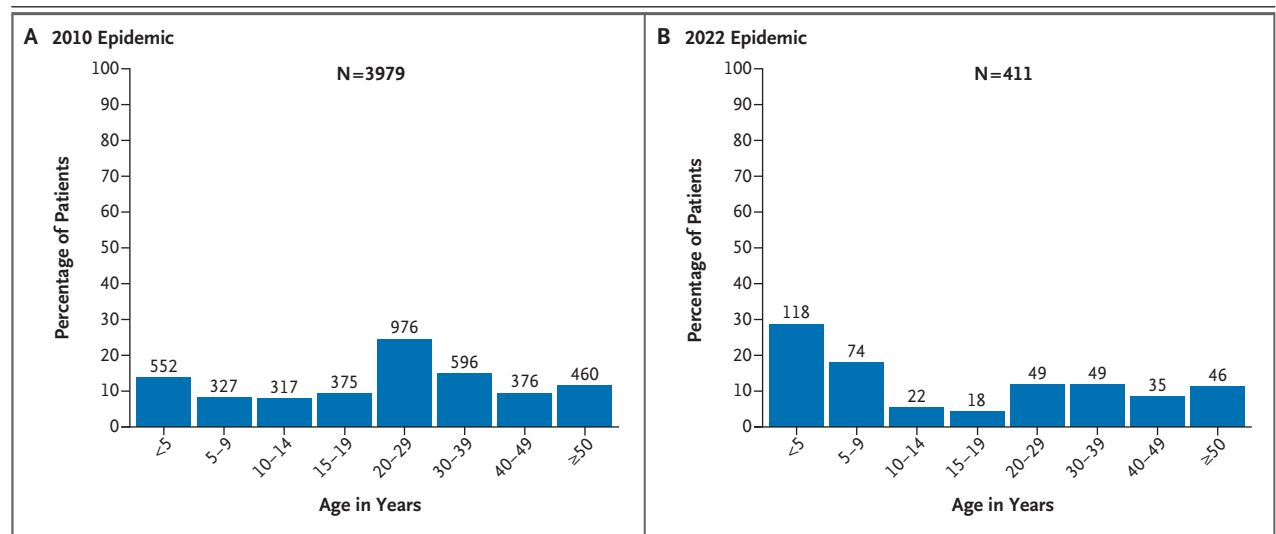


Figure 1. Ages of Patients with Cholera Admitted to the GHESKIO Bicentenaire Cholera Treatment Center during the 2010 and 2022 Epidemics.

the current epidemic is markedly skewed toward younger age groups (Fig. 1). The median age of the patients in 2010 was 24 years, as compared with 12 years in 2022.

These early data on the epidemic provide some important insights. This cholera epidemic is disproportionately affecting young children. This may be a result of the children never having been exposed to the bacteria and not having received a cholera vaccine. Furthermore, the United Nations reports that Haiti currently is in a state of level 5, or “catastrophic,” hunger,² and severe malnutrition is likely to be making children more susceptible to disease.⁴ Human-made insecurity and fuel shortages are affecting the current resurgence. Without fuel, the national water utility cannot pump potable water from its reservoirs to the most at-risk populations living in neighborhoods characterized by high levels of poverty, and these residents are now forced to drink from contaminated water sources. The garbage trucks in the city cannot pick up trash from the streets. Recent heavy rainfall has flooded downtown areas, including latrines, and has washed even more garbage into the low-lying neighborhoods, further contaminating water sources. Additional details are provided in the Supplementary Appendix, available with the full text of this letter at NEJM.org.

Until the appearance of these recent cases,

Haiti had not had a single confirmed case of cholera for more than 3 years. Despite the current challenges, this enormous accomplishment can be repeated again. Together, we can eliminate cholera from Haiti.

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Disclosure forms provided by the authors are available with the full text of this letter at NEJM.org.

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1. Haitian Ministry of Public Health and Population (<https://www.mspp.gouv.ht/>).
2. United Nations. ‘Catastrophic’ hunger reported in Haiti for the first time, UN warns. October 14, 2022 (<https://news.un.org/en/story/2022/10/1129537>).
3. Valcin C-L, Severe K, Riche CT, et al. Predictors of disease severity in patients admitted to a cholera treatment center in urban Haiti. *Am J Trop Med Hyg* 2013;89:625-32.
4. Nuzhat S, Hossain MI, Shaly NJ, et al. Different features of cholera in malnourished and non-malnourished children: analysis of 20 years of surveillance data from a large diarrheal disease hospital in urban Bangladesh. *Children (Basel)* 2022;9:137.

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