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# Efficient Cholera Surveillance Saves Lives


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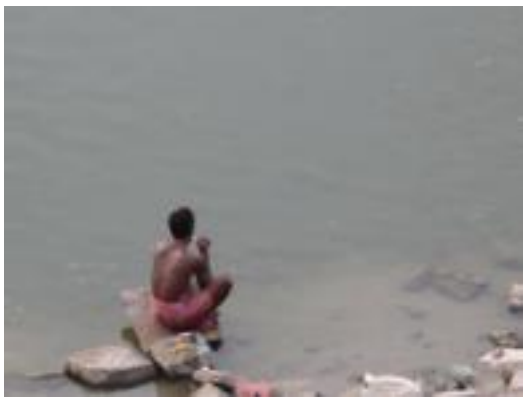
[2]
Man brushing his teeth in the Ganges River in India. Photo: Heather Fay, Courtesy of Photoshare (2009)

Disease surveillance is often considered to be a luxury, especially for developing countries which must carefully weigh priorities for their limited health budgets. In the case of infectious diseases, with the potential to spread rapidly and kill quickly, efficient and reliable surveillance can guide rapid response and be critical to save lives. This is true for many types of outbreaks, including meningitis and Ebola, but also for cholera.

Imagine a patient is admitted for severe, life threatening diarrhea. This case could be due to one of several pathogens, but Vibrio cholerae is prominent on the list. However, a diagnosis of cholera depends on a laboratory-based confirmatory test. In many developing countries, confirming the case can take more than a week since the fecal specimen will be transported to a central lab where it will take two to three days to process. It then takes another day or two for the report to be registered at the treating hospital and the district health office. By the time the case is confirmed, the pathogen will have spread in the environment, and many more people will have become infected, each of whom will have added to the environmental contamination, infecting others.

However, if the first case had been confirmed on day one, interventions could have started the following day, including enhancing treatment preparedness, WASH activities, health education and vaccination. These effective interventions can prevent future infections and save lives, but these emergency actions can only be initiated if the first case is confirmed quickly and the health officials are prepared to respond.

The DOVE Stop Cholera project stresses the development of efficient surveillance, combined with rapid and reliable confirmation using a modified dipstick rapid test [3]. This test confirms the diagnosis on the same day that the sample is taken, and can be carried out at the treating hospital. With this information, a report can be made to national health officials trained in rapid response.

Specimens can still be sent to the laboratory for culture confirmation and for antibiotic sensitivity testing, but the rapid test provides sufficiently reliable information to begin cholera control measures promptly.

Efficient surveillance and rapid action are two sides of the same coin to stop cholera.



**Links**
[1] https://stopcholera.org/blog/authors/david-sack-md
[2] https://stopcholera.org/sites/default/files/styles/content-zoom/public/man_brushing_his_teeth_in_the_ganges_river_in_india.jpg?itok=4SHstQ20
[3] https://stopcholera.org/resources/manual-detecting-vibrio-cholerae-o1-and-o139-fecal-samples-and-environmental-water-using