COMBATING THE CHOLERA OUTBREAK IN HAITI

THE STORY

In October 2010, a cholera outbreak was confirmed in Haiti. The U.S. Centers for Disease Control and Prevention (CDC) and other U.S. government and international organizations intervened, working with the Haitian government to contain the outbreak. As the crisis unfolded, CDC epidemiologists relied on open source data for situational awareness due to the limited availability of official data from the field. The CDC required a platform to combine this open source information, including Twitter, blog posts, websites, and SMS messages, with official epidemiological data from the field in order to analyze all data in a single environment.

OUR SOLUTION

The CDC used Palantir to monitor the situation and inform their response efforts. Our engineers had Palantir up and running less than one week after we received the request from the CDC. Analysts were able to search and analyze all data from within a single workspace, as well as explore text messages published by Noula from Haitians affected by the outbreak and drill down on health-related messages. This raw field data gave epidemiologists in the CDC Emergency Operations Center a vastly improved understanding of the operating picture and conditions on the ground.

Base analysts integrated the data from the field into Palantir to perform survery analysis, which informed the epidemiologists' research. Using this approach, analysts investigated how distance from treatment facilities influenced Haitian citizens' decisions to seek care. They studied people living in close proximity to the Artibonite River and determined that the most common water sources cited were nearby rivers or streams, which are primary cholera transmission agents. They also used Palantir's geospatial capabilities to explore surveillance data and inform decision-making about the next region in which to conduct an epidemic study.

IMPACT & RESULTS

The CDC was able to combine open source information with epidemiological data from the field to gain improved situational awareness about the cholera outbreak.

Epidemiologists in Haiti received daily reports from analysts in Atlanta and used the analysis to inform decisions on the ground.

Geospatial exploration and analysis of survey data helped support epidemiological studies, examine Haitian behavioral patterns related to cholera, and evaluate NGO and U.S. government efforts.