

Cholera Outbreak in Haiti - November 2010

Although the World Health Organization (WHO) has never seen cholera in Haiti before, it's not a great surprise that an epidemic has spread through crowded makeshift camps where people have been living since the earthquake in January. Unsanitary conditions frequently lead to outbreaks of the disease and in situations where there is very limited access to healthcare and clean water, death rates are often high. The death rate in Haiti was nearly 10% at the beginning of the outbreak. It's now decreased to 7.7% which is still well above the 1% death rate threshold accepted by the United Nations (UN).

We can do a closer examination of the causes contributing to this issue in a Cause Map, or visual root cause analysis. The first step to the analysis is to capture information about the issue and define the problem with respect to an organization's goals. The problem can be defined as a cholera epidemic with a high death rate. It was first discovered, or at least reported, in November of 2010 at makeshift camps in Haiti. We'll use the goals of the Haitian government to determine impacts. At least 284 people have died and 3,600 people have been infected with cholera. This is an impact to the population safety goal. The high death rate indicates a failure of population services from the government. The environmental goal is impacted by the epidemic spread of the disease, and the financial goal is impacted by the cost of treatment of those afflicted.

Step 1. Outline

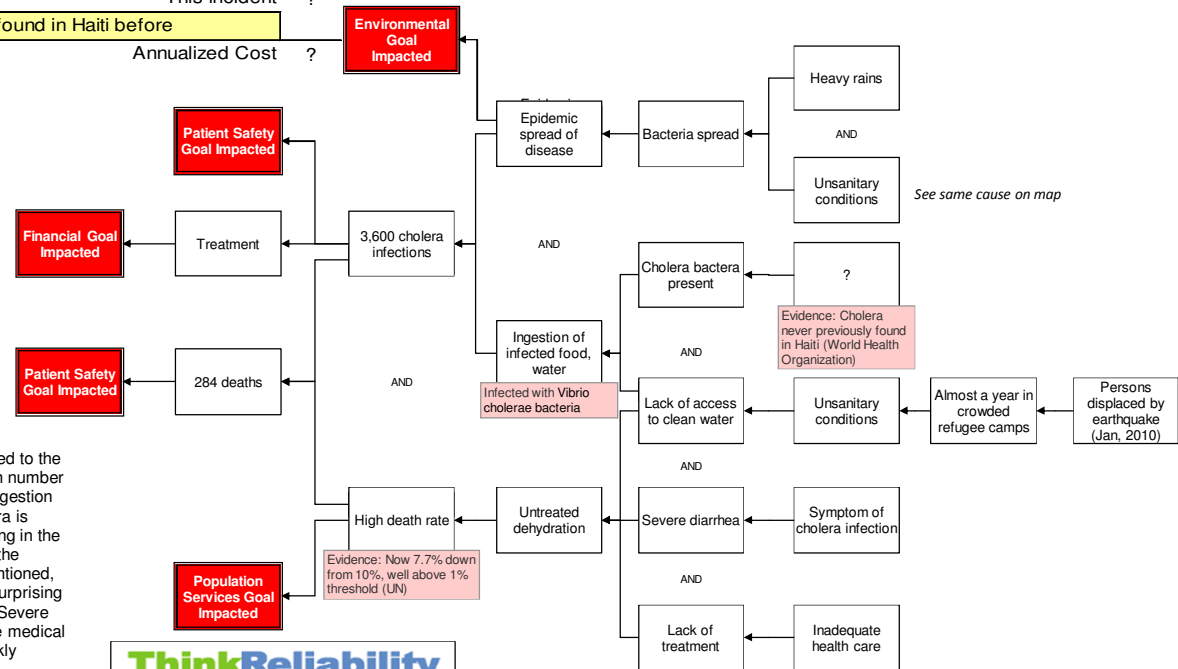
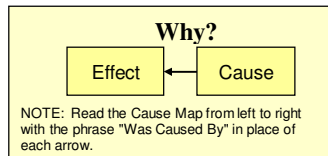
What	Problem(s)	Cholera epidemic, high death rate
When	Date	November, 2010
	Different, unusual, unique	Living in crowded makeshift camps
Where	State, city	Haiti
	Facility, site	Makeshift refugee camps
	Task being performed	Consuming contaminated food/water

Impact to the Goals

Population Safety	284 deaths (so far)	
	3,600 cholera infections (so far)	
Population Services	High death rate	
Environmental	Epidemic spread of disease	
Financial	Treatment	?

Frequency	Cholera never found in Haiti before	?
Annualized Cost		?

Step 2. Cause Map Detail Level



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The second step of the analysis is to determine the causes that led to the impacted goals. The high number of deaths results from the high number of infections and the high death rate. Infections are caused by ingestion of contaminated food and water. The bacteria that causes cholera is spreading due to heavy rains and the large number of people living in the unsanitary conditions. The overcrowding in the camps is due to the earthquake that hit Haiti on January 12, 2010. As previously mentioned, it's unclear how the bacteria got there in the first place, but not surprising that it did. The high death rate is due to untreated dehydration. Severe diarrhea is a symptom of a cholera infection, and with inadequate medical care and lack of access to clean water, the dehydration can quickly become severe enough to lead to death.

Support organizations like the WHO are desperately trying to stop the spread of the epidemic and reduce the rate of death. However, it's clear they have their work cut out for them, given the current circumstances.