

BATTLING CHOLERA

Cause Map

New study finds that cholera vaccine helps protect community

There are an estimated 3 to 5 million cases of cholera worldwide each year, believed to cause more than 100,000 deaths annually. Cholera is rare in developed nations, but has been pandemic in Asia, Africa and Latin America for decades. Researchers continue to search for an effective method to prevent cholera outbreak. A recent study found that a cheap oral vaccine was an effective tool to help prevent the spread of cholera. The vaccine is not a perfect solution, but the study found that when two-thirds of the population was given the vaccine, cholera infections in an urban slum were reduced by nearly 40 percent.

Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

CAUSE MAPPING

Problem Solving • Incident Investigation • Root Cause Analysis

- Step 1 Problem** What's the Problem?
- Step 2 Analysis** Why did it happen?
- Step 3 Solutions** What will be done?

Step 1 - Defining the Problem

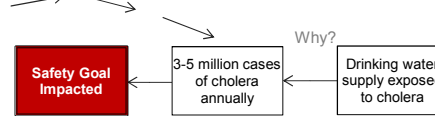
The first step in the Cause Mapping process is to fill in an Outline with the basic background of an issue to define the problem. The bottom portion of the Outline has space to list impacts to the goals. Most issues will have multiple impacted goals, but only the safety goal is going to be used in this example for simplicity. Once the Outline is completed, one of the impacted goals is used to begin the Cause Map.

What	Problem(s)	Millions are infected with cholera each year
	Date	Ongoing
When	Different, unusual, unique	Ongoing cholera pandemic in Asia, Africa and Latin America
		Worldwide
Where	Facility, site	Worldwide
	Task being performed	Working to fight cholera infections
Impact to the Goals		
	Safety	3-5 million estimated cases of cholera annually

Step 2 - Building the Cause Map

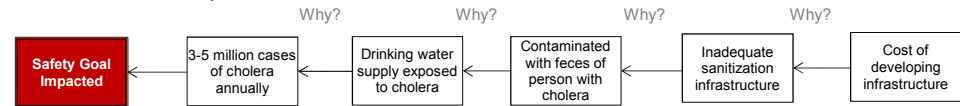
Start with one impacted goal and ask simple Why questions.

What is listed as an impact to the goal on the Outline is the first box on our Cause Map. Ask a "why" question to create the next Cause box.



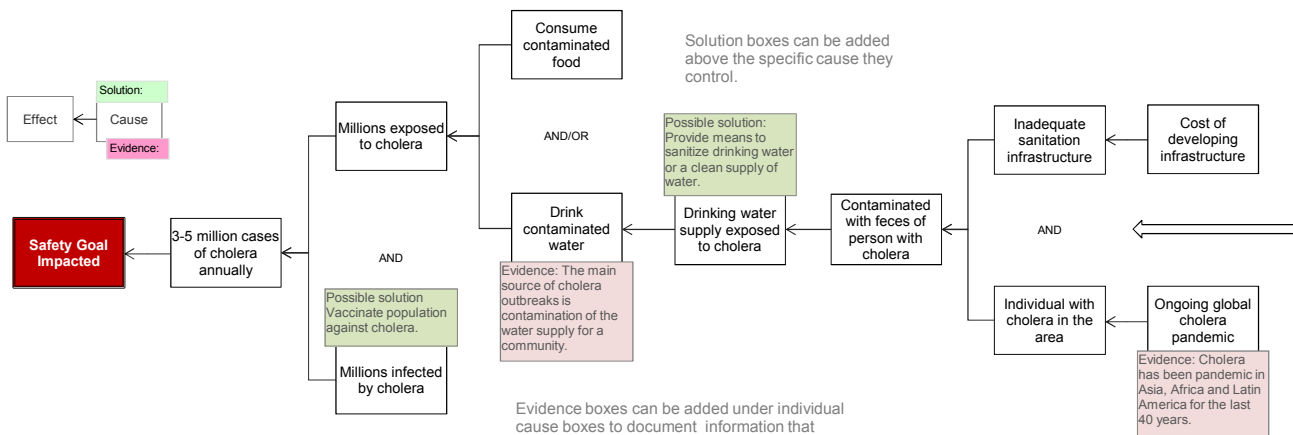
Continue asking why questions to build the Cause Map. This is what a 5 why Cause Map might look like.

Basic Level Cause Map



Intermediate Cause Map

You can continue building the Cause Map past 5 whys by asking more why questions. As more details are added, the Cause Map will often expand beyond one simple line of cause-and-effect relationships. When two causes contribute to one effect, they are listed vertically and separated by an "and".



In this specific example, drinking water would be contaminated with the feces of a infected person with cholera only if there was an individual with cholera in the area AND there was inadequate sanitation infrastructure.

For a free copy of our Root Cause Analysis Template in Microsoft Excel, used to create this page, visit our web site.

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