

1 Problem

What	Problem(s)	Ebola epidemic; deaths of public & medical staff
When	Date	2014: Spring ongoing
	Different, unusual, unique	Most widespread & deadliest outbreak yet
Where	Facility, site	Sierra Leone, Guinea, Liberia & Nigeria
	Unit, area, equipment	All healthcare facilities
	Task being performed	Treating public infected with Ebola virus

Impact to the Goals

Patient Safety	1603 people infected (as of August 1)	
	887 people killed (as of August 1)	
Employee Safety	Medical staff infected (number unknown)	
	>90 medical staff killed	
Patient Services	Concern about further spread of disease	
Property/ Equipment	Campaign to end outbreak	\$100 M
Labor/ Time		

Frequency: This incident >\$100 M
Annualized Cost: ?

Most widespread & deadliest outbreak yet

EBOLA CLAIMING LIVES OF MEDICAL STAFF

On July 29, 2014, the ongoing Ebola epidemic in west Africa was hit a hard blow when Dr. Sheik Humarr Khan, a leading doctor who treated Ebola patients and national hero in Sierra Leone, died from the deadly virus. The outbreak, which began this spring, has now infected thousands and killed nearly 900 people across Sierra Leone, Liberia, Guinea and Nigeria, including more than 90 healthcare workers who were treating victims. Because of the deadly and quick-spreading nature of the Ebola virus, many precautions are taken to protect healthcare workers from the disease. Yet workers are still getting sick - and dying.

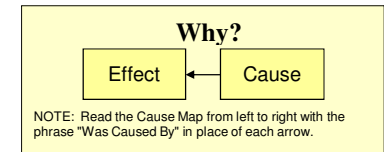
Cause Map

"We work actively to educate American health-care workers on how to isolate patients and how to protect themselves against infection."

- Dr. Tom Frieden, Director
Centers for Disease Control and Prevention (CDC)

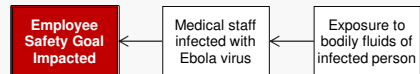
"As well as the personal protective equipment that our staff wears, we have a series of strict procedures and protocols. Our treatment centers are designed to ensure the safest possible working environment for our staff."

- Marie-Christine Ferir, Emergency Coordinator
Médecins Sans Frontières/ Doctors Without Borders



2 Analysis

Basic Level Cause Map - Start with simple Why questions.



3 Solutions

Though there are no vaccines or currently approved treatment for Ebola, the infected American personnel received experimental treatment while still in Liberia. The treatment attempts to use antibodies produced by animals exposed to Ebola to help the immune system fight off the virus. Dr. Brantly received a blood transfusion from a boy who survived Ebola under his care (surviving Ebola appears to provide immunity against re-infection). Both vaccines and treatments are in development, but funding is difficult given the relative rarity of Ebola.

In the ongoing attempt to contain the spread of the virus, Sierra Leone has quarantined neighborhoods, cancelled public meetings and overseas trips, while Liberia has closed schools, most borders, and put state employees on leave. The CDC has issued a Level 3 Travel Warning to Guinea, Liberia and Sierra Leone. The World Health Organization has launched a \$100 million campaign with the aim of bringing the epidemic under control, partially by providing new doctors.

