

Transmission of Yellow Fever Virus Through Contaminated Donor Blood California, 2009

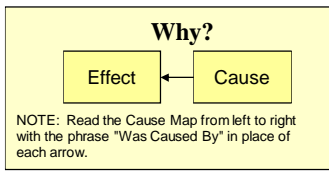
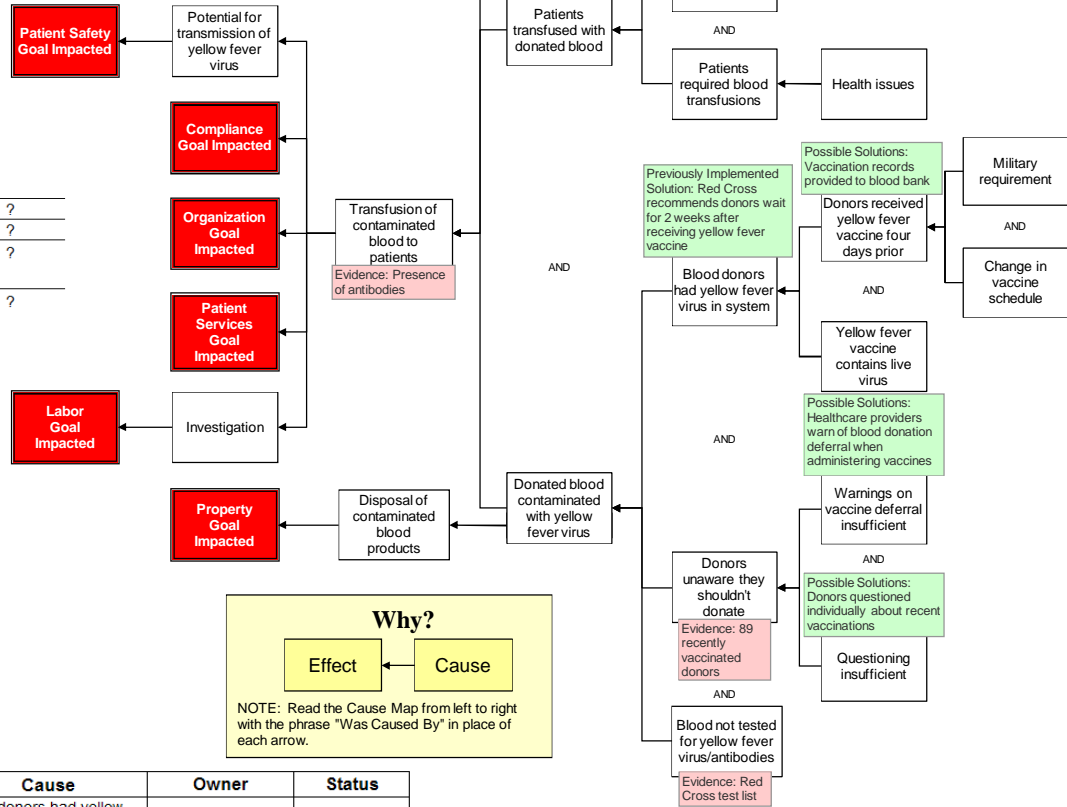
Step 1. Outline

What	Problem(s)	Transfusion of contaminated blood	
When	Date	2009 (see timeline)	
Where	Different, unusual, unique	Change in timing of vaccines	
	State, city	California	
	Facility, site	Hospital Blood Bank	
	Unit, area, equipment	Donor blood	
Impact to the Goals	Task being performed	Blood donation/blood transfusion	
	Patient Safety	Potential for transmission of yellow fever virus	
	Employee Impact	?	
	Compliance		
	Organization	Transfusion of contaminated blood to patients	
	Patient Services		
Environmental	?		
Property, Equip, Mtis	Disposal of contaminated blood product	?	
Labor, Time	Investigation	?	
	Frequency	Very rare	
		This incident	?
	Annualized Cost		?

Timeline

Date	Description
March 23, 2009	Active duty trainees receive live-virus yellow fever vaccines
March 27, 2009	Blood products collected from 89 active duty trainees
March 31, 2009	First contaminated blood product transfused
Transfusion +0 days	Total of 6 units of blood transfused into 5 patients
April 9, 2009	Last contaminated blood product transfused
April 10, 2009	Blood bank supervisor learns of donation by trainees who had recently received yellow fever vaccine during routine record review
	Remaining unused potentially infected blood product tracked and destroyed
April 20, 2009	Review of records of patients who received the potentially infected products
Transfusion +20 days	One blood product recipient dies in hospice care for terminal prostate cancer and end-stage, transfusion-dependent, B-cell lymphoma
Transfusion +26 to 37 days	Serum samples drawn; indicate that three of the four recipients had YFV-IgM antibodies

Step 2. Cause Map Detail Level



Step 3. Action Items

No.	Action Item	Cause	Owner	Status
1	Red Cross recommends donors wait for 2 weeks after receiving yellow fever	Blood donors had yellow fever virus in system	Red Cross	Implemented prior to event
2	Vaccination records provided to blood bank	Donors received yellow fever vaccine four days	Military	Implemented after event
3	Healthcare providers warn of blood donation deferral when administering vaccines	Warnings on vaccine deferral insufficient	Healthcare providers	Possible implementation
4	Donors questioned individually about recent	Questioning insufficient	Red Cross	Implemented after event

