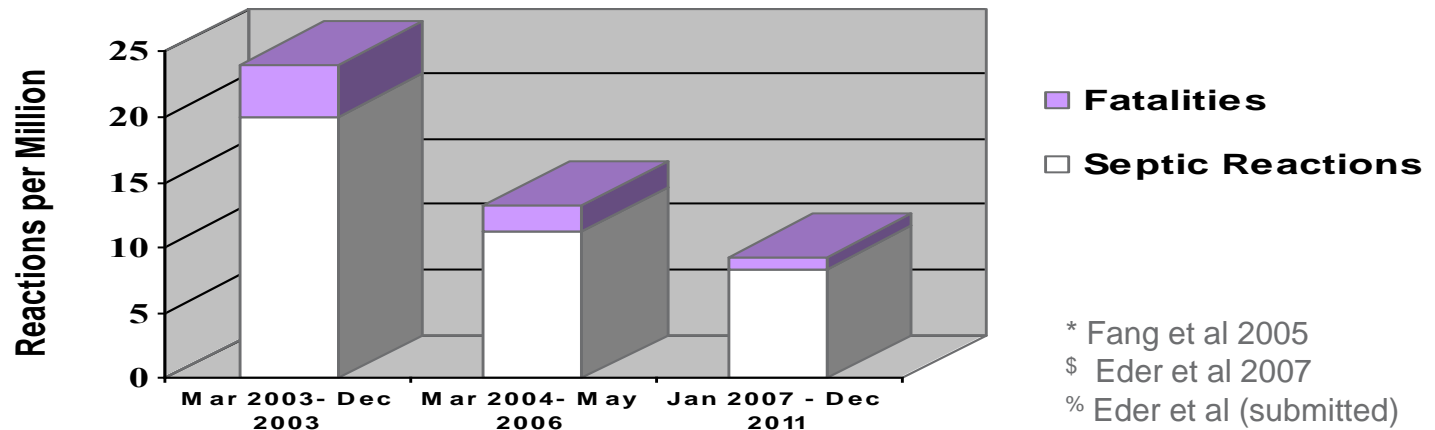


# Declining Risk of Sepsis in the Red Cross

	Before Culture*	39% Diversion & 4ml Culture <sup>\$</sup>	100% Diversion & 8ml volume <sup>%</sup>
	March 2003- Dec 2003	March 2004- May 2006	Jan 2007- Dec 2011
<b>Components</b>	~500,000	1,496,134	4,063,371
<b>Septic Reactions</b>	12 reactions ~1:40,000	20 reactions ~1:75,000	38 reactions ~1:107,000
<b>Deaths</b>	2 fatalities ~1:250,000	3 fatalities ~1:500,000	4 fatalities ~1:1,016,000



\* Fang et al 2005  
<sup>\$</sup> Eder et al 2007  
<sup>%</sup> Eder et al (submitted)

# Current Risk of Sepsis in the Red Cross

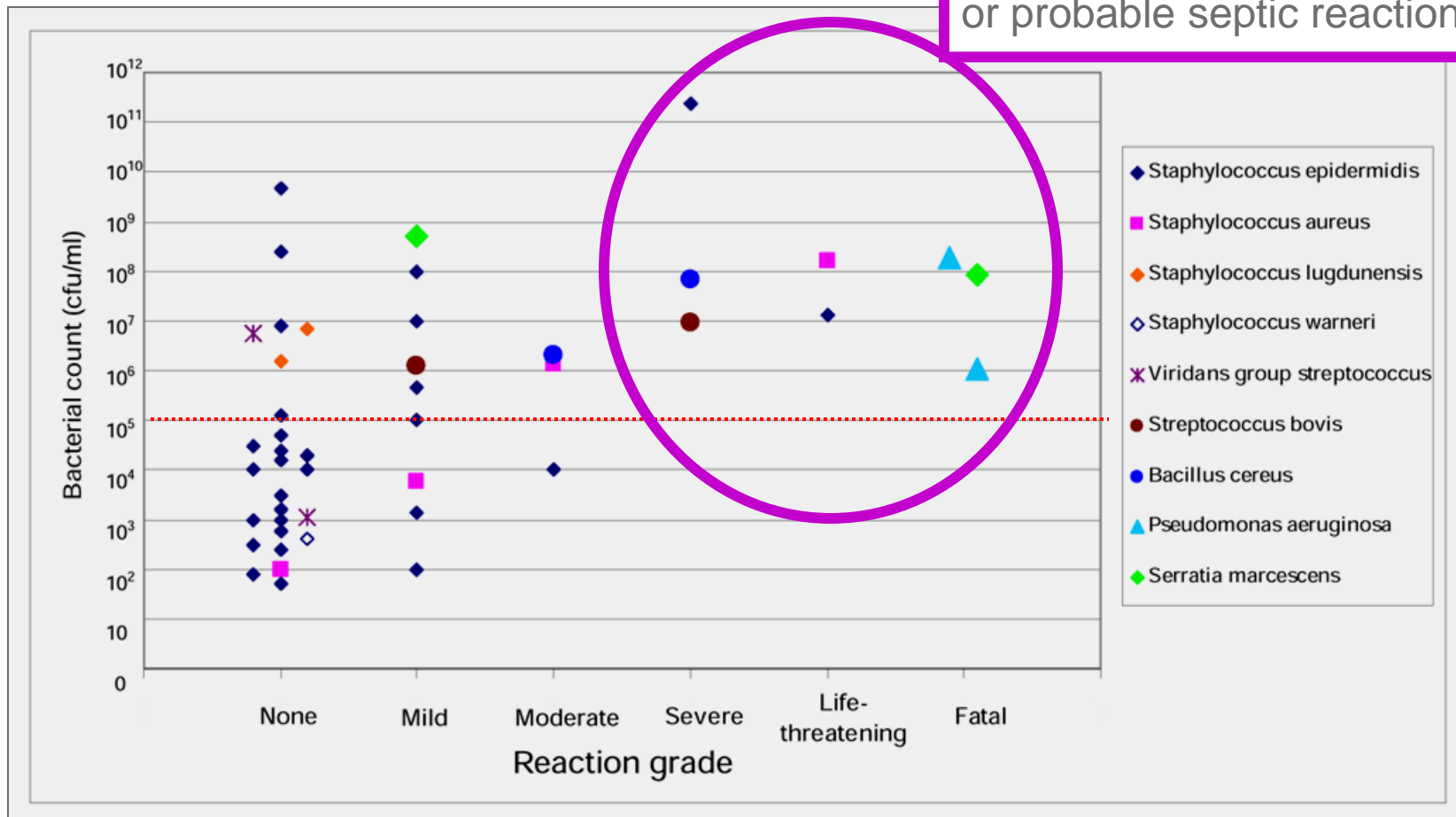
- Period of study: Jan 1, 2007-Dec 31, 2011
- Distributed apheresis platelets: 4,063,371
- Suspected septic reactions: 381
- Definite or probable sepsis: 38
- Fatality 4
- Suspected sepsis rate 1:10,665 94 per 10<sup>6</sup>
- Septic reaction rate: 1:106,940 9 per 10<sup>6</sup>  
(95% C.I. 7-13 per 10<sup>6</sup>)
- Fatality rate: 1:1,015,842 1 per 10<sup>6</sup>  
(95% C.I. 0-3 per 10<sup>6</sup>)



Benjamin & Eder, Platelet Transfusion,  
eds Sweeney & Lozano, AABB Press (in press)

# Reaction Severity vs. Bacterial Concentration

May meet definition of definite or probable septic reactions



Jacobs M, Yomtovian R CID 2008:46,1217