

# Testing sera and vaccines

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B	17	1
C	23	2



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**The (macabre) model:** Infections in an unvaccinated control group arise via a Bernoulli process with 'success' probability  $p = 0.25$ . # infected in a group of size  $n$ :  $S_n \sim \text{Binomial}(n, 0.25)$ .

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Serum	Inoculated (n)	Infected (k)	$B_n(k)$
A	10	0	0.056
B	17	1	0.050
C	23	2	0.049



## Slogan

The more unlikely it is for claimed (positive) results for a serum to be replicated in an unvaccinated control group, the greater the grounds for belief in the efficacy of the serum.