

## Colony Counts and Survival Fraction

Tube.dilution	Colony 1	Colony 2	Colony 3	Avg Colony	SF
1.2	26	28	14	22.7?	1.0
2.2	34	40	39	37.7)	
3.3	71	104	106	93.7	0.31
4.3	165	161	169	165	0.55
5.3	26	23	19	22.7	0.075
6.2	46	66	61	57.7	1.0
7.2	72	43	46	53.7	
8.2	32	35	36	34.3	0.62
9.3	65	47	68	60	0.11
10.4	80	81	78	79.7	0.014

← 1.1  
 If standard.

0.17

The 10μL of medium resulted in too many counts for tubes 3-5 and 8-10. To circumvent this problem, 50μL of the cocktail was removed from each tube and mixed with 3μL fresh cocktail. This is equivalent to taking  $\frac{10\mu\text{L}}{3000} \times 50 = 0.167 \mu\text{L}$