

<i>B. anth.</i> in poison	1(?)	2	3	4	5	6	7	8 hours
1.22% ph. + 10% NaCl (2.1)	1141	872	700	445	310	381	274	255 colonies
2.5% phenol	675	220	257	357	171	120	98	82 colonies
3.0% phenol	381	142	186	124	78	55	40	36 colonies
1.22% ph. + 15% NaCl (3.0)	117	40	10	2	3	0	0	0 colonies
3.5% phenol	140	106	41	25	25	16	13	11 colonies
4.0% phenol	58	14	34	32	16	8	8	— colonies
3.0% ph. + 5% NaCl	50	5	4	1	3	1	0	0 colonies
1.22% ph. + 20% NaCl (7+)	3	0	0	0	0	0	0	0 colonies

Effect of Salt on the Toxicity of Phenol towards *Staphylococcus*

This form was chosen for the experiments with lower concentrations of phenol. Colonies on agar, 24 hours old, were washed off with 0.6 percent brine, and suspensions made as already described; of course, the heating to 70° C was omitted. All infections were made with the "machine," using a small platinum tube as "loop." The poison acted at room temperature; 0.6 percent NaCl was used as control; the various cultures are distinguished by numbers.

Preliminary experiments with 1.0 percent phenol showed that the time required to kill all the cells was the same whether the poison was infected by a large or a small number of cells, and that a culture 47 hours old gave about the same results as one 24 hours old.

<i>Staph.</i> in poison	5	10	15	20	25	30	35	minutes
1.0% ph., cult. No. 4, 24.5° C	5	2	0	0	0	0	0	colonic
1.0% ph., cult. No. 5, 24.5° C	8	2	0	0	0	0	0	colonies
1.0% ph., cult. No. 6, 24.5° C	1402	29	0	0	0	0	0	colonies
1.0% ph., cult. No. 7, 24.5° C	512	5	0	0	0	0	0	colonies
1.0% ph., cult. No. 9, 24.5° C	2963	4	0	0	0	0	0	colonic
0.6% NaCl, cult. No. 7, 24.5° C	20491	18073	16514		15102			colonic
0.6% NaCl, cult. No. 9, 24.5° C	15082	15048	13048		—			colonies