

Culture No. 14,
Staph. in

poison	14	15	23.5	24	34.5	35	44	45	etc., to 66 min.
0.70% phenol	—	1994	51	—	0	—	0	—	0 col.
Equivalent	1980	—	—	311	—	9	—	0	0 col.

Culture No. 16; temp. 22° C. Control: 5489 after 4 min., 5441 after 6 min.

<i>Staph.</i> in poison	10	20	30	40	50	60	70	85	100 min
0.70% phenol	2896	980	22	2	0	0	0	0	0 col.
Equivalent	2604	2198	1604	1591	680	135	66	5	0 col.

Culture No. 27; temp. 23-24° C. Control: avg. 9673 colonies

<i>Staph.</i> in poison	11	21	30	40	50	60	75	90 min.
0.70% phenol	1273	11	0	0	0	0	0	0 col.
Equivalent	167	40	0	0	0	0	0	0 col.

Culture No. 30; temp. 19-25° C. Control: avg. 10163 colonies

<i>Staph.</i> in poison	10	20	30	40	50	60	75	90	105 min.
0.70% phenol	7937	1400	37	0	0	0	0	0	0 col.
Equivalent	1273	19	0	0	0	0	0	0	0 col.

The five experiments with culture No. 14 were carried out at the same time and under the same conditions; those with Nos. 27 and 30, together with the experiments on 0.60 percent phenol given below. Towards cultures 14 and 27 the phenol solution and its equivalent are equally toxic; towards No. 16 the equivalent was very much less toxic, while towards No. 30 the equivalent seems to be somewhat more toxic than the pure phenol solution, though the unsteadiness of the temperature renders this conclusion uncertain. In comparison with the difference between the death rates with 0.7 percent and 0.6 percent phenol, however, the 0.7 percent phenol and its chemical equivalent come very close together, except in the experiments with culture No. 16.

Comparison of 0.60% Phenol with Its Chemical Equivalent

The equivalent contained 0.54 percent phenol and 2.0 percent salt. Owing to the unexpected results obtained, a large number of experiments were made in the course of which fresh solutions were made up and the old ones were re-analyzed, the tubes, etc., used in the experiments were