

Source of Water.	Organisms per Cubic Centimeter.		<i>Bacillus coli.</i>	<i>Bacillus sporogenes.</i>
	At Normal Temperature.	At 37°.		
Wellington,—				
Tap No. 1	400	..	..	..
Tap No. 2	350	75	..	..
Stratford—Tap	1,220	115	..	..
Featherston,—				
Tap	710	154	1	..
Stream	433	80	1	..
Auckland,—				
Tap	380	80	1	..
Western Springs	650	..	1	..
Waitakeri Ranges Main	420	..	..	..
Palmerston North—Tap	1,100	450	1	..
Hamilton,—				
Tap	150	5	..	..
Intake	270	3	..	..
Hospital Creek	..	32	1	..
Petone,—				
Tap	230	..	1	..
Intake	195	36	1	..
Reservoir	230	81	1	..
Hastings,—				
Maraetotara River	193	60	1	..
Artesian well	17	18	..	..
Hawera,—				
Tap	213	..	1	..
Intake	800	..	1	..
Eketahuna—Makakahi Stream	100	24	..	..
Pahiatua—Intake	..	..	..	..
Hunterville—Stream	6,000	500	..	..
Devonport,—				
Tap	80	40	..	..
Lake Takapu Intake	65	56	..	..
Okura Farm,—				
Creek	180	100	..	..
Spring	300	..	..	..
Fort Bastian	..	..	..	..

In addition to these, eight samples from other sources were examined at the laboratory, and two filters were tested for efficiency. The deposits in the reservoir at four places were examined for special organisms. Much difficulty was experienced during the hot weather in getting the cultures back to the laboratory. To avoid this in future a special type of ice-chest is being designed.

VACCINE LABORATORY.

The results obtained by the Public Vaccinators this year with the lymph prepared by this Department have been most disappointing. A great deal of time has been devoted to this branch of the work, and many attempts have been made to ascertain where the fault lies and introduce remedies. Latterly the lymph has regained its potency, but results are still somewhat uncertain. The dilution has been reduced, and the method of sterilising the lymph with chloroform-vapour has been introduced without very marked improvement. The Public Vaccinators have very naturally complained frequently of the uncertainty of getting a good reaction, but until we have a vaccination station attached to the laboratory so that the potency of the lymph can be ascertained before we issue it, we cannot do more than guarantee that the lymph is free from harmful properties. It is some satisfaction at least that the complaints have been only as to weakness, and never as to unpleasant results. A detailed special report on the frequent failures has been prepared and submitted to you. The case-success has been 75 per cent., and the insertion-success only 65·5 per cent. during the year, showing a great falling-off from the 91 per cent. and 95 per cent. of case-success in previous years. In all, twenty-one calves have been vaccinated during the year, and about 3,000 cubic centimeters of lymph prepared. As before, we have been handicapped by the carelessness of many vaccinators in sending in their returns. It is more especially important when the lymph is uncertain in action that we should get these results in early, so that a weak issue may be withdrawn as soon as possible. In all, 9,015 tubes of lymph have been issued, but reports on only 1,467 have been received, showing how lax some are in this matter.