

During the year, owing to the production of influenza by the Southland Hospital Board.

and Mr. Pierard were made available from April to August to the Southland Hospital Board. The efficient manner in which the staff carried out the greatly increased amount of work, entailing considerable overtime, is deserving of great credit.

The tables given do not include the large quantities of T.A.B. vaccine prepared for the Defence Department, the mixed-influenza vaccine for the Health Department, nor the calf-lymph prepared at the vaccine-station. Particulars concerning these are given below.

T.A.B. Vaccine.—This was prepared in two dilutions, the second dose double the strength of the first. The first or primary dose contained *B. typhosus*, 500 millions; *B. paratyphosus A*, 250 millions; *B. paratyphosus B*, 250 millions. Of each dilution 15,120 doses were prepared for the Defence Department, and in addition a stock of 1,000 of each of first and second doses was always kept in hand available for immediate use when required.

Mixed Influenza Vaccine.—In accordance with instructions received from the Department in February of this year, supplies of this vaccine were prepared and issued to all hospitals in the North Island. In all 25,000 each of both first- and second-class doses were prepared, and 10,900 issued. In anticipation of a demand for this vaccine, the quantity available for immediate issue is kept up to 10,000 doses. The organisms of which the vaccine is composed, and the numbers of each, are similar to those in the mixed-catarrrhal vaccine used with considerable success in the New Zealand Expeditionary Force in England and France during the influenza epidemic. The work of preparing these vaccines has been carried out by Mr. P. L. Hickes.

A short account of the bacteriological findings during the epidemic of October–December, 1918, is appended.

It is becoming more and more an important factor in the life of the community and the time is fast approaching when a division into two Departments (Bacteriological and Pathological) will be necessary, if the laboratory is to give the assistance in the investigation of pathological conditions which the community has a right to expect.

The work carried out for the Public Health Department is expected to increase greatly in the near future, especially in the investigation of cases of venereal disease. The opening of clinics where such cases can obtain treatment will react on the laboratory and increase the work of an already fully occupied staff.

Table showing Results of Examinations of Specimens received from 1st April, 1918, to 31st March, 1919.

| Material. | Object of Examination. | Result. | | Total. |
|--|---------------------------------------|-----------|-----------|--------|
| | | Positive. | Negative. | |
| Morbid exudates (includes purulent discharges; empyema; pleuritic fluids; pyorrhœa; trench-mouth; synovial fluids; ascitic fluids) | <i>Staphylococcus</i> | 86 | .. | 86 |
| | <i>Streptococcus</i> | 41 | .. | 41 |
| | Tubercle bacillus | 11 | 39 | 50 |
| | <i>S. vincenti</i> | 140 | 72 | 212 |
| | <i>B. fusiformis</i> | | | |
| | <i>Gonococcus</i> | 63 | 161 | 224 |
| | <i>Spironema pallidum</i> (Schaudinn) | 4 | 4 | 8 |
| | <i>Pneumococcus</i> | 44 | .. | 44 |
| | <i>B. coli</i> | 3 | .. | 3 |
| | Ducrey's bacillus | .. | 3 | 3 |
| | <i>Actinomyces</i> | 1 | 4 | 5 |
| | <i>B. proteus</i> | 2 | .. | 2 |
| | <i>B. xerosis</i> | 12 | .. | 12 |
| | Abel's bacillus | 2 | .. | 2 |
| | <i>B. enteritidis</i> | 1 | .. | 1 |
| | <i>B. of leprosy</i> | 1 | .. | 1 |
| | <i>B. Welchii</i> | .. | 1 | 1 |
| | <i>Oidium albicans</i> | 2 | .. | 2 |
| | Negative examinations | .. | 118 | 118 |
| | Total | .. | .. | 815 |
| Sputum | Tubercle bacillus | 218 | 764 | 982 |
| | <i>Pneumococcus</i> | 57 | .. | 57 |
| | <i>B. influenzae</i> | 59 | 8 | 67 |
| | Hydatids | 5 | 22 | 27 |
| | Total | .. | .. | 1,133 |
| Throat-swabs | <i>B. diphtheriæ</i> | 1,608 | 3,171 | 4,779 |
| | <i>Meningococcus</i> | .. | .. | 15,784 |
| | Organisms of Vincent's angina | 20 | 21 | 41 |
| | Total | .. | .. | 20,604 |