

1946  
NEW ZEALAND

# MENTAL HOSPITALS OF THE DOMINION

(REPORT ON) FOR 1945

*Presented to both Houses of the General Assembly pursuant to Section 78 of the Mental Defectives Act, 1911*

The Hon. A. H. NORDMEYER, Minister in Charge of Mental Hospitals, Wellington.

Wellington, 11th June, 1946.

SIR,—

I have the honour to present my annual report upon the work of the Mental Hospitals Department for the year ended 31st December, 1945.

## STATISTICAL

At the end of the year there were 8,794 names of persons upon our registers, including 40 patients at Ashburn Hall private licensed institution and 713 patients who were absent on probation in the care of relatives and friends.

In actual residence on 31st December there were 8,041 persons—a decrease of 79 compared with last year—and of this number 7,673 were patients who had been committed and 368 were voluntary boarders.

There were 1,477 patients and boarders admitted for the first time, an increase of 54 over the previous year, of whom 1,118 were the subject of a reception order and 359 were voluntary boarders.

Of all classes of admissions we were able to discharge 1,200, or 62.08 per cent. calculated upon the number admitted, but no more than 760, or 39.32 per cent., were fully recovered at the time of discharge. This number does not represent the true recovery rate, as patients who are sent home to convalesce on probation often omit to send a medical certificate, in the absence of which we require to regard them for statistical purposes as “unrecovered.”

## VOLUNTARY BOARDERS

Statutory provision for the admission of patients as voluntary boarders was first made in 1911, and the subjoined table shows how increasingly this method of admission has been used. The fact that the discharge rate for voluntary boarders was 85 per cent. calculated upon the admissions indicates that advice and treatment are being sought at the stage of illness when they can be most effective.

One gratifying feature disclosed in the table is that in only a very small and diminishing number of cases does the illness progress to such a degree that the person is no longer fit to remain as a voluntary boarder and requires committal; it may well be that this is related to the efficacy of the more recently introduced physical methods of treatment.

There is no doubt that the increased number of people seeking admission as voluntary boarders is in part due to the knowledge that such treatment is available and is likely in suitable cases to have surprisingly favourable results.

Year.	First Admission.			Not First Admission.			Total Admissions.			Transferred to Register of Patients.			Died.			Discharged.			Remaining on 31st December.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1912	6	17	23	0	0	0	6	17	23	1	3	4	0	0	0	4	3	7	1	11	12
1913	18	19	37	0	2	2	18	21	39	2	5	7	0	1	1	12	12	24	5	14	19
1914	17	19	36	3	2	5	20	21	41	7	5	12	1	1	2	11	15	26	6	14	20
1915	15	17	32	1	2	3	16	19	35	3	4	7	0	1	1	8	14	22	11	14	25
1916	13	23	36	5	8	13	18	31	49	4	4	8	1	2	3	14	14	28	10	15	25
1917	14	21	35	1	13	14	15	34	49	6	6	12	0	1	1	10	23	33	9	19	28
1918	23	38	61	5	11	16	28	49	77	1	4	5	2	2	4	15	30	45	19	32	51
1919	31	39	70	5	19	24	36	58	94	3	3	6	0	2	2	26	42	68	26	43	69
1920	26	38	64	16	12	28	42	50	92	3	4	7	1	2	3	33	33	66	31	54	85
1921	39	39	78	11	15	26	50	54	104	2	3	5	5	1	6	38	41	79	36	63	99
1922	47	38	85	10	16	26	57	54	111	6	5	11	4	4	8	40	48	88	43	60	103
1923	44	50	94	15	21	36	59	71	130	3	6	9	3	3	6	47	47	94	49	75	124
1924	38	44	82	16	20	36	54	64	118	4	8	12	6	3	9	39	48	87	54	80	134
1925	64	59	123	15	34	49	79	93	172	10	15	25	6	3	9	60	63	123	57	92	149
1926	71	60	131	11	29	40	82	89	171	10	11	21	7	2	9	49	71	120	73	97	170
1927	70	70	140	25	32	57	95	102	197	8	6	14	5	12	17	75	58	133	80	123	203
1928	120	94	214	37	39	76	157	133	290	8	10	18	10	8	18	102	97	199	117	141	258
1929	102	63	165	50	43	93	152	106	258	11	3	14	9	9	18	119	110	229	130	125	255
1930	152	84	236	41	35	76	193	119	312	15	9	24	8	6	14	130	79	209	170	150	320
1931	166	98	264	43	36	79	209	134	343	11	14	25	11	7	18	159	102	261	198	161	359
1932	150	85	235	50	40	90	200	125	325	24	32	56	14	5	19	190	108	298	170	141	311
1933	112	109	221	53	32	85	165	141	306	11	14	25	5	4	9	121	107	228	198	157	355
1934	132	90	221	56	33	89	188	123	311	7	11	18	10	6	16	152	99	251	217	164	381
1935	130	87	217	40	55	95	170	142	312	18	20	38	19	10	29	151	116	267	199	160	359
1936	98	99	197	62	44	106	160	143	303	21	20	41	7	10	17	137	111	248	194	162	356
1937	103	91	194	64	45	109	167	136	303	14	7	21	6	10	16	163	122	285	178	159	337
1938	111	105	216	60	53	113	171	158	329	11	15	26	11	8	19	144	125	269	183	169	352
1939	131	103	234	63	72	135	194	175	369	22	21	43	16	15	31	157	130	287	182	178	360
1940	128	124	252	65	63	128	193	187	380	18	18	36	10	12	22	176	167	343	171	168	339
1941	93	104	197	48	58	106	141	162	303	11	9	20	10	13	23	140	151	291	151	157	308
1942	88	108	196	44	74	118	132	182	314	14	15	29	15	8	23	124	160	284	130	156	286
1943	95	126	221	66	87	153	161	213	374	2	8	10	13	14	27	115	159	274	161	188	349
1944	146	168	314	70	104	174	216	272	488	4	7	11	11	10	21	172	243	415	190	200	390
1945	178	181	359	90	112	202	268	293	561	9	8	17	20	8	28	244	272	516	185	205	390

#### ACCOMMODATION

The position in regard to accommodation was dealt with in some detail in my last annual report, which disclosed a deficiency of 751 beds, not taking into account the 265 patients then accommodated temporarily at The Chateau and Wairakei.

Towards the end of the year the essential services of water-supply, sewerage, and lighting at The Chateau were put out of action by the deposit of ash from the active eruption of Mount Ruapehu, and the matter of evacuation became an urgent necessity. It was indeed fortunate that at the moment when we required the accommodation the military convalescent depot at Raventhorpe, near Auckland, became available, and our patients were transferred there at a few hours' notice.

A few weeks later we had similarly to evacuate Wairakei, which was situated in the centre of the extensive bush fires which swept the thermal area of the North Island, and our patients went to Raventhorpe, which now has approximately 300 of a patient population in addition to staff. It is unlikely that Raventhorpe can be adapted as a permanent mental hospital for adult patients, but it would be suitable, after the necessary alterations and repairs and additions, for housing cases of congenital mental deficiency, and in this regard it will meet a pressing need.

Porirua is being rebuilt on modern villa lines, and two of the new villas constructed in concrete each to house fifty patients are almost ready for occupation, but much requires to be done before those evacuated after the earthquake can be returned to Porirua.

A commencement has been made with the erection of Lake Alice Hospital, near Marton, but it must be some considerable time before we can get relief by its occupation.

We have fifty boys at Levin Farm, and, as soon as alterations now in progress are completed, we shall transfer more children from Nelson, which we hope to vacate at an early date.

#### ALTERATIONS, ADDITIONS, AND IMPROVEMENTS

Capital expenditure on new buildings and improvements amounted to £208,987 during the year, and the following summary shows the principal items making up the total :—

(1) *Auckland* (£7,307).—New building as training school for nursing staff and occupational therapists has been erected, and additional class-rooms for occupational therapy have been completed.

(2) *Kingseat* (£1,487).—Wood and coal sheds have been erected at staff residences, and roading and water supply services have been extended.

(3) *Marton* (£44,696).—A new villa is in course of erection and several staff residences have been erected. A water-tower is being erected, and roading, water-supply, and drainage work carried out.

(4) *Levin* (£83,966).—The R.N.Z.A.F. station at Levin has been purchased for use as an institution for children whose parents are in the North Island.

(5) *Porirua* (£45,867).—Demolition of the old main building has continued. Two new villas have been erected and equipped, and a start made on the erection of a new laundry.

(6) *Seacliff* (£24,918).—A new villa at Waitati has been erected and equipped, and preliminary work at Cherry Farm was undertaken during the year.

#### SHORTAGE OF NURSES

The work of the Department is overshadowed by the continued shortage of nursing staff, and I regret to report that there has been no improvement, but rather the reverse, since this time last year. At present we are 253 nurses and 85 men short of our authorized establishment, which throws an undue burden on existing staff and prevents them from receiving the amount of leave which is so necessary in the nursing profession.

The status of our nurses was greatly enhanced by the recent legislation, which accords to them State registration, and a great deal has been done to improve their training, which is now subject to inspection by the Nurses and Midwives Registration Board. The standard of our training is reflected in the fact that our certificated nurses who proceed to general nursing training in the hospitals almost invariably do well above the average, and in this connection it is gratifying to record that Miss M. E. Little, now appointed Matron at Raventhorpe, was awarded the Silver Medal at Waikato Hospital as being the best nurse of her course.

Salaries have recently been substantially raised, so that commencing trainees receive approximately £3 5s. per week in addition to board and lodging after deduction of all taxation. Unless there is an early improvement in the situation it may be necessary to extend our area of recruitment.

## SERVICE PATIENTS

The movements of Service patients and boarders from the beginning of the war until the end of last year are shown in the following table :—

Admitted after Overseas Service.					Admitted from Camps, &c., in New Zealand.				
Admitted	..	..	..	287	Admitted	..	..	..	194
Discharged, recovered	..	..	129		Discharged, recovered	..	..	92	
Discharged, not recovered	..	..	46		Discharged, not recovered	..	..	38	
Died	..	..	8		Died	..	..	9	
			—	183				—	139
Remaining	..	..	..	104	Remaining	..	..	..	55

In addition to service patients and boarders admitted to our hospitals, our Medical Officers are seeing and treating many cases of psychoneurosis, but, as previously stated, these cases are mainly reactive in origin, and the numbers may safely be expected to fall off before long.

## MEDICAL STAFF

In July last I went to England in an endeavour to select suitable psychiatrists to fill the depleted ranks of our medical staff. The position in Britain was rather difficult, because there was there also a serious shortage of men with the necessary qualifications, and applications were all subject to embargo by the Central Medical War Committee. My representations were greatly helped by the sympathetic consideration of Sir Wilson Jameson, Principal Medical Officer at the Ministry of Health, and I was able to appoint six highly qualified medical men, who have now joined our service.

It has been the practice in the Department in recent years to appoint final-year medical students as locums during the vacation period, and some of the men who first became interested in this way in psychiatry have also joined the service, so that we are now better situated for medical staff than we have been for years.

## NURSING EXAMINATIONS

The following passed the Senior Mental Nursing Examination held in November, 1945 :—

Passed top for Dominion : Nurse E. M. Wedding (Auckland).

Auckland—

Attendant : S. A. Nicklin.

Nurses : I. Nelson, \*E. M. Wedding.

Kingseat—

Attendants : R. J. G. Mack, D. J. Williams.

Tokanui—

Attendants : J. A. Steele, D. Young.

Nurses : S. Bristowe, M. P. A. Power, B. M. Solly.

Porirua—

Attendant : G. D. Cathro, J. S. Shaw.

Nurses : A. R. Biggs, E. I. McAuley, S. K. O'Donnell.

Nelson—

Attendants : A. C. Cole, K. Davis, D. W. Gill, J. Graham, P. L. Judge; E. L. Quinney, M. Thompson.

Nurses : J. C. Cowan, P. M. Hayes, J. L. Russ, D. K. Roughton.

Hokitika—

Attendants : R. D. D. Monks.

Nurses : B. E. Milner, M. Mulrennan, M. M. Williams.

\* Passed with distinction.

## Christchurch—

Attendants : J. F. Cullen, W. C. Grigor, R. F. McKersey, G. W. Robinson,  
W. G. Smith, R. D. Underwood.

Nurses : S. E. Cheals, \*M. W. Ellwood, B. M. James, D. L. Simmonds, M. P.  
Walker.

## Templeton Farm—

Nurse : L. E. Frame.

## Seacliff—

Nurses : G. M. Hill, \*R. M. McGregor, K. H. McLeod, T. Burke.

## APPRECIATION

It gives me pleasure to express my appreciation of the loyal service rendered to the Department by my medical colleagues, by Mr. Sinclair, Chief Clerk, and the members of Head Office staff during the year.

THEO. G. GRAY, Director-General.

## AUCKLAND MENTAL HOSPITAL

## DR. BUCHANAN reports :—

I have the honour to present my annual report for the year ended 31st December, 1945.

During the war years and up to this last year much clinical and constructive work has been carried out, in spite of the serious shortage of staff and the increasing demands on the Medical Officers' time for extra mural work. Included in this latter are the Auckland Hospital Clinic, more and more requests for examinations of prisoners awaiting sentence, examinations of prisoners serving sentences, Military Pension Boards, and the review of old military pensioners.

## PHYSICAL TREATMENTS

*Electric Convulsive Therapy.*—This method has almost entirely supplemented the use of cardiazol, only 34 patients being treated with this drug. The electric convulsive therapy is quicker, safer, and not so frightening. During the year considerable use was made of it, and in all, 130 patients were so treated.

The results in many cases have been dramatically successful, and, this being known, many demands have been made by relatives to have electric convulsive therapy applied to unsuitable and deteriorated patients. This, at first, was acceded to in some instances, and naturally such groups bring down the percentage of cures. For this reason I have been unable to arrive at accurate statistics.

The most striking results, as found elsewhere, are obtained in depressive cases including one or two G.P.I.s where depression has been a factor retarding recovery after malarial therapy.

*Malarial Therapy.*—This has been applied in all cases of G.P.I. When malaria was temporarily unobtainable for one case, penicillin was substituted. No improvement in the mental state resulted until later on we were able to institute malarial therapy.

*Pentothal Narcosis.*—An increasing number of cases have been examined under this drug, which has been found most useful in eliciting suppressed material and so giving a lead in the treatment in psychoneurotics, hysterics, and schizophrenia. The results often shorten the time taken in investigation.

*Occupational Therapy.*—This work has been steadily expanding since its inauguration, and now there are nine classes in operation, each suited to the requirements of the type of cases to be treated.

---

\* Passed with distinction.

From these classes many persons are discharged outright, cured, or ready for probation, and an average of thirteen a month are passed on to general utility work such as sewing-room, kitchens, laundry, carpenter's, plumber's, or engineer's shops, &c. All boot-repairs are now done by an occupational class.

The most striking benefits that are observable are that many wards are emptied of patients during occupational hours, that in deteriorated patients habit-training results in interest being evoked, that there is decreased necessity for restraint, and altogether there is a much more contented and happy community, which is good for both staff and patients.

We have benefited from the fact that the New Zealand Occupational Therapy School is established here. After a suitable amount of preparatory training, students are sent to many of the patients' classes, and this is of benefit to both trainees and patients—the former gain practical knowledge in the art of instruction, whilst the latter gain individual attention, which is of inestimable value, especially in recent cases.

Since the inauguration of the Occupational Therapy School in 1940, twenty trainees have been passed out, qualified by examination, to take up positions in mental and public hospitals throughout New Zealand. Sixteen students are at present undergoing their course of training.

*Construction.*—The Nurses' lecture-room and Occupational Training School block have been completed, and this undoubtedly facilitates training.

Some of the wards have been improved by the installation of sterilizers, and, in one case, a refrigerator. In this climate refrigerators are a real necessity throughout the hospital.

A modern kitchen is now in use in female 6 ward, providing better and hotter meals for the patients. I hope soon to be in the position to forward you suggested plans for the installation of similar kitchens in other parts of the institution, and also comprehensive plans for reconstruction of the more undesirable features in the hospital. Decentralization of the cooking is one of the first objectives. Once that is done, then we will be able to tackle the demolishing of the present main kitchen, and alter and improve the adjoining block containing the store and attendants' mess and sitting rooms.

I am assured by the District Public Works Architect that there are great possibilities for modernizing the whole hospital, and that this could be done at considerably less cost than the construction of a new hospital elsewhere.

During the year two new fowl-houses and a feed-shed were erected to replace buildings which had outlived their usefulness, and it is hoped that with the modern type of building and conditions there will be an improvement in the production of eggs for the hospital.

Two cinema machines are now installed, thanks to the generosity of Mr. D. Stern and members of the Grey Lynn Ladies' Committee. Weekly programmes are carried out, and every help has been given towards this form of entertainment by Mr. Norman Hayward, Mr. D. A. Turner, and the Film Exchange Association. The patients thoroughly enjoy the sessions.

We have lost, by retirement, the services of Matrons Mayze and Redman, and Head Attendants McKenzie and Mackie. All these people had been here for many years and very definitely left their mark on, and to the advantage, of the hospital. It was very hard to let them go, but they certainly deserved a very well earned rest.

*Acknowledgments.*—It is a great relief to have now a full staff of Medical Officers, but the shortage of other members of the staff continues to be serious. It puts a very great strain on those working, and I feel deeply grateful to them all for the unselfish manner in which they have continued to carry out their work.

I will also take the opportunity of thanking the Official Visitors and other friends interested in the welfare of the hospital for their continued helpful and encouraging support. I would specially like to mention the name of Mrs. Teape (Official Visitor), who has been very regular in her visits to the hospital.

## KINGSEAT MENTAL HOSPITAL

DR. TOTHILL reports :—

I have the honour to submit my annual report for the year ended 1945.

The total number of cases under care during the year was 974 with a weekly average of 798. Admissions numbered 167, of whom 56 were committed patients, 29 voluntary boarders, and 82 transfers from other institutions, mainly the Auckland Mental Hospital. The relatively high voluntary boarder admission rate shows an increased confidence in seeking treatment. Discharges numbered 44, 19 being committed patients and 25 voluntary boarders. In addition, 12 patients were transferred to other mental hospitals. A total of 46 deaths occurred, senility and circulatory diseases being the main causes.

The weekly clinic at the Auckland Public Hospital has greatly increased, and many servicemen were given treatment. Consultations reached 840, with 171 initial examinations.

Reports have been made on juvenile delinquents referred from the Children's Court and subsequent child guidance given when necessary.

Several people have visited Kingseat Hospital for consultation and psycho-therapy as out-patients.

The bulk transfer of patients has resulted in some overcrowding, and in several villas a day-room has had to be utilized to provide additional accommodation. As many of the older female patients have become too feeble to negotiate the stairs of the villas, an infirm dormitory has been created out of a day-room, and the vacated dormitory used for occupational therapy. It is hoped that single-storied infirm villas will be erected as soon as the building programme permits.

In addition to the usual maintenance, the fire-fighting service has been improved, permanent water-mains extended, and more equipment installed in the sterilizing-rooms. The internal roading system is being tar-sealed in sections. Lawns have been laid down, and more trees planted in the orchard. The water-supply has been augmented by the installation of a pumping-station. A steam-boiler at the cow-byres now enables all cans to be sterilized. The vegetable-shed has been concreted and the gardens extended. Many thousands of shelter trees have been planted. A telephone has been installed in the nurses' home and wooden beds substituted for iron bedsteads. It is proposed to furnish the sun-room with suitable furniture. The Country Library Service is providing reading material at regular intervals. Concrete footpaths and coal-sheds have added to the amenities at the staff cottages.

The occupational department has made steady progress, but accommodation is limited, more especially since day-rooms were converted into dormitories.

Patients have enjoyed visits to the pictures, picnics, fishing expeditions, and bowling tournaments. Cricket, hockey, and tennis have been popular throughout the year. Until a recreation hall is provided, dances and picture shows for the patients cannot be held.

Throughout the war a shortage of staff has prevailed in spite of every effort by the Man-power authorities. The distance of this hospital from Auckland and the expense in travelling are likely to hinder the recruitment of staff, though the provision of indoor recreational facilities will no doubt have some beneficial effect.

Since the last report Dr. Crawshaw has replaced Dr. Howie. Mr. Fowlie, who had been at this hospital since its inception, died in 1944. He devoted his life to its development, and nobody could have given more loyal service.

To the visiting clergy, Official Visitor, hospital auxiliary, and ladies who conducted the arts and crafts classes I tender my sincere thanks.

The nursing staff has worked long hours without complaint and deserve the highest praise for services well done.

## TOKANUI MENTAL HOSPITAL

DR. HUNTER reports :—

I have the honour to submit my annual report for the year ending 31st December, 1945.

The total number of cases under care during the year was 1,236, including 73 voluntary boarders.

Admissions numbered 164, of whom 17 were transfers from other institutions and 39 voluntary boarders.

Discharges were 56 patients under certificate, 30 voluntary boarders, and 13 transferred.

There were 66 deaths.

At the end of the year 1,031 patients, including 42 on probation and 40 voluntary boarders, remained on the register. These figures include Chateau and Wairakei.

The out-patient clinic of the Waikato Hospital has been extended to two days per week and has served a useful purpose. It is appreciated by the patients and by the medical practitioners, who send cases for opinion and diagnosis.

Consultations are also held once monthly at Rotorua Convalescent Home for returned servicemen.

Examinations and reports are made also for the Waikeria Borstal Institution and the Child Welfare Department.

The appointment of the Occupational Therapist has allowed the formation of three classes for women and one for the men. The interest which the patients have taken in these classes is revealed in the improvement in their mental condition. The building of an occupational centre will benefit a larger number of patients and increase the usefulness of the occupational therapy.

During the year the hospital has lost a true friend in the death of the Official Visitor, Mr. Frank Findlay, M.P. His monthly visits were looked forward to, and patients appreciated very much his interest and advice in their welfare.

It has been increasingly difficult to obtain sufficient nursing and attendant staff, and much overtime has been necessary. In my opinion, the only solution for a real improvement in the staffing position for attendants at this hospital lies in the erection of sufficient houses. A building-site has been selected near the hospital, and I hope that the erection of houses will be proceeded with as soon as possible.

I hope that the new buildings which were under consideration when the war started will be proceeded with in the near future. The new boiler-house, laundry, bakery, and butcher-shop are a real necessity, as our present buildings and equipment are out of date and should be replaced as soon as possible.

The building of the new boiler-house will necessitate the erection of separate kitchens and bathing facilities in the male wards, A, H, and C. This will bring the male side in line with the women's side, in which wards are self-contained. A new kitchen for male staff, with dining-room and recreation-room (large enough to accommodate a billiard-table) will be necessary and should be provided as soon as possible. The hospital is overcrowded to the extent of approximately 100 patients; and two new villas, one for the men and one for the women, is urgently required.

The access road to the hospital from the main highway remains in a very bad state, is corrugated, and a menace to any sick persons who require transport along it.

The only solution appears to be to have this road tar-sealed.

*Wairakei and Chateau*, which were branches of the Tokanui Mental Hospital, and were for women patients, continued to serve a useful purpose, but the eruption of Mount Ruapehu interfered so much with the light and water systems at the Chateau that it was necessary in December to transfer all the Chateau patients to Ravelthorpe.

With the exception of the gastro-enteritis epidemic from which the rest of New Zealand was suffering, the general health of the patients has been satisfactory.

Special thanks are due to all members of the staff, who have worked under trying conditions and who have done their best throughout the year.



## PORIRUA MENTAL HOSPITAL

DR. HART reports :—

I have the honour to submit my report for the year ending 31st December, 1945.

The number of cases under care during the year was 1,691, of which 1,456 were committed patients, 232 voluntary boarders, and 3 remanded for psychiatric observation. Admissions, including 20 patients transferred from other hospitals, totalled 527, of which number 137 were voluntary boarders. It is worthy of note that, excluding the usual transfers from other hospitals, over 27 per cent. of the admissions personally sought admission and treatment as voluntary boarders. During the year 312 persons were discharged and 125 deaths occurred.

During the year considerable and additional extramural psychiatric work has been carried out by the medical staff in the psychiatric wards and clinics at the Wellington and Palmerston North Public Hospitals. These clinics enable the community to seek advice and treatment for incipient mental disorders, psychoneuroses, and many of the minor and major social maladjustments common to any community. These clinics have provided advice and treatment for many ex-servicemen. Throughout the war the Army, Air Force, and Naval medical services have used the facilities of these clinics for advice and treatment in relation to their personnel.

During the past four years annual reports have not been made, and it has been a period of new psychiatric methods and treatment. The hospital has kept abreast of the times and progress, and in one instance (electric narcosis) we have been the first in the Southern Hemisphere to institute this form of treatment. We have now treated over 500 cases with electric convulsive therapy, with excellent and, on occasions, dramatic results. A careful study has been made of the indications for the use of this treatment, and the extramural adjustment of these discharged patients has been followed whenever possible. The use of curare in conjunction with E.C.T. was instituted last year which enabled many elderly persons, or persons with impaired physical health or physical abnormality, to have treatment which without curare would have been, to say the least, hazardous. Apart from the curable effect of this treatment, E.C.T. has been found of considerable benefit in chronic disturbed patients. As previously mentioned, electro-narcosis, or electricocoma, treatment was recently instituted. To date 35 patients have had or are receiving treatment. The results so far have not been co-related, and it is yet too soon to give a definite opinion as to the treatment value in psychiatry. Extensive use is being made of sub-coma insulin therapy, and of insulin and vitamin therapy in a wide variety of cases. The results of both types of treatment have been encouraging. Some results of the treatments given in this hospital have been from time to time published in the *New Zealand Medical Journal*.

Since my last annual report a large section of the hospital has been demolished as a result of the earthquake of 1942. Although a number of our patients were at that time, or shortly afterwards, transferred elsewhere, we still have to cope with the largest mental hospital admission rate in New Zealand. With reduced facilities and amenities and obvious inconveniences associated with demolishing and rebuilding, it has been an extreme tax and trial to all sections of the hospital staff to cope with an admission rate of over 500 per year, and at the same time endeavour to maintain a desirable standard of psychiatric treatment and care. Although during this period the living-conditions for patients have naturally fallen below what we would have wished, the period has been one of psychiatric progress. More positive and active psychiatric treatments have been given than ever before.

At present the overcrowding is greater than at any time during recent years, the resident population being 1,152, whereas the scheduled accommodation is for only 821 persons. The building programme is being pushed on as fast as materials and labour will allow. An additional 100 beds should be available within two months. In addition to overcoming arrears of accommodation and making provision for the normal increases, it is hoped that the completion of the building programme will enable the return of many

patients who were transferred in the emergency period following the earthquake, meeting as it would the wishes of the relatives, who are constantly asking, and as is only natural, desiring that their relatives be brought within visiting distance of their homes.

The staff shortage remains acute and, as far as nurses are concerned, is now as bad as at any time during the war period. The shortage of psychiatric nurses, or of women wishing to train as psychiatric nurses, would appear to be chronic and associated with the Dominion-wide shortage of female labour. Despite progressively liberal improvements in relation to pay and conditions, no improvement has occurred. The standard of treatment and care, in harmony with modern psychiatric methods, cannot be maintained unless some means are found to provide adequate female staff. Perhaps an immigration policy would attract from the British Isles a suitable type of prospective psychiatric nurse as it has done in the past.

The progress in relation to the rebuilding is as follows: Villas 1, 2, 3 completed and occupied; Villas 4 and 5 nearing completion, and should be occupied within two months. These five villas represent accommodation for over 250 patients. A new laundry block is at present under construction, and the contractors have made a start with Villas 7 and 8.

Owing to the lack of labour and materials during the war years, the permanent hospital buildings have not been maintained at the required standard, and as soon as possible the accumulated work will be overcome. The obsolete telephone system requires renewing, and it is hoped that the Post and Telegraph Department's recommendation concerning this will receive attention. Certain permanent hospital roads not involved in the new lay-out require repairs and sealing.

Numerous minor works have been carried out during the year, such as the erection of a kitchen for F. Ward, a temporary fire-station, T.B. shelter at Montrose, &c. These and numerous other minor constructions and alterations were necessary following the demolition of the main building.

Occupational work has been extended during the year, and a better organization of the work has followed the appointment of two qualified occupational therapists to the hospital staff, but the work is hampered and made difficult for patients and staff by the lack of accommodation.

Additions to the medical staff during the year have placed this hospital in this respect in a better position that it has been in for many years.

In conclusion, I wish to thank the members of the staff for their good work during the most difficult period in the history of this hospital.

---

### NELSON MENTAL HOSPITAL

DR. WILLIAMS reports:—

I have the honour to submit my Annual Report for the year ended 31st December, 1945.

The number of patients under care during this period was 1,203 of whom 1,162 had been admitted under a reception order and 41 were voluntary boarders.

The admissions totalled 126, including 2 transferred from other hospitals and 22 voluntary boarders.

We were able to discharge 42 patients, including 14 voluntary boarders, and 47 were transferred to other mental hospitals.

There were 75 deaths, including 1 voluntary boarder.

War and post-war conditions have inevitably been reflected in a postponement of many very desirable additions and improvements, and little more than maintenance work has been possible.

The majority of our male staff who left us for active service have returned, but there is a marked shortage of nurses, which has prevented the development of occupational therapy as we would have liked, and we hope that the prospective appointment of a trained occupational therapist will enable us to make greater progress in this direction.

In this connection I must mention that a small orchard and garden has been established under the direction of the Matron, and this form of outdoor activity is very popular with our female patients.

The old buildings at Nelson—they were erected in 1874—are in a state of dilapidation, and as they are virtually beyond repair it is hoped that the plan for evacuating the children elsewhere can soon be carried into effect.

I would draw attention to the antiquated telephone system at Ngawhatu and urge its replacement by a modern automatic system with fire-alarm connection ; as it is, both telephone and the existing alarm are unreliable.

An extra telephone-line to Ngawhatu is necessary so that a connection can be established between York's Valley and the nurses' home.

A number of individuals and organizations continue to be generous with monetary and other gifts, particularly to our children, and this is very much appreciated. The revenue from the canteen has enabled us to increase recreational facilities for the patients, a matter of no small importance in view of the fact that we have not yet an entertainment or cinema-hall.

To the staff generally for their co-operation I have to offer my sincere thanks.

### HOKITIKA MENTAL HOSPITAL

DR. CHILDS reports :—

I have the honour to submit my report for the year ending 31st December, 1945.

The number of cases under care during the year was 562 (267 males and 295 females).

The admissions numbered 19 (10 males and 9 females) there were 14 transfers (1 male and 13 females), and 5 voluntary boarders, all males.

Patients discharged were 18 (10 males and 8 females), voluntary boarders 7 (5 males and 2 females), while there was 1 transfer, a male.

There were 33 deaths (14 males and 19 females). At the end of the year 5 males and 3 females remained on probation.

The health of the patients generally has been satisfactory.

Dr. R. T. Hay was in charge of the hospital from 23rd August, 1945, to the end of the year.

The Grey River Hospital Clinic has been held monthly, occasional visits made to patients at their homes, visits paid to the Westland Hospital, and consultations held here at the hospital.

Owing to the shortage of staff there has been little opportunity for occupational therapy classes, but all patients capable have been suitably occupied in some way.

The clergy have made frequent visits and held regular services. Mrs. Fane has performed the duties of Official Visitor in a capable manner.

The usual routine of farming and gardening has been carried on with the usual satisfactory results.

The painting gang has been fully occupied during the year and has done very useful work. The exterior of two villas "Wio" and "Porere" have been painted under Public Works Department contract. The usual maintenance work has been carried out, including the rebuilding of two chimneys at Iringatau.

The switch-receiver house was finished in February, but electrical apparatus has not yet been installed. "Egmont," a very old building, was demolished, and the site is to be used for a Medical Officer's residence.

Recreations and amusements have played a substantial part in the life of the hospital, and I would like to thank the Hokitika Band for playing for the dances, and the Revue Society and others for entertaining the patients.

A very successful picnic was held.

I would like to thank various ladies' committees for holding outside functions for women patients.

All returned men were welcomed back by the staff in a series of social functions.

A telephone has been installed in the nurses' home.

The canteen is now firmly established, and very popular.

## SUNNYSIDE MENTAL HOSPITAL

DR. McKILLOP reports :—

I have the honour to submit my report for the year ending 31st December, 1945.

There were 1,735 persons (897 men and 838 women) under care during the year. The admissions by committal totalled 230 (112 men and 118 women), and 44 men and 6 women were transferred to us from other hospitals.

We were able to discharge 126 patients (55 men and 71 women), and 73 were transferred to other institutions, leaving 1,441 patients under care at the close of the year. In addition to these committed patients, 170 voluntary boarders were admitted, of whom 152, or 89·4 per cent. were discharged, 6 required committal, and 7 died, leaving 75 under care on 31st December, 1945. The number of deaths was 95, the cause in 58 cases being senile decay.

The large increase in the number of voluntary boarders is due to the known favourable results of electro convulsive therapy, which was introduced to this hospital in 1943. These results have continued to be very satisfactory and indicate that involutional melancholics in particular have responded to treatment. The cases referred to in my report of 1943 have kept well and have resumed their usual occupations. During the year 191 cases were treated by electric convulsive therapy and 113 were discharged as recovered.

The usual maintenance work has been carried out, and the painting gang has been employed continuously throughout the year. Two villas at Templeton, the Lodge and Villa at Hornby, and several wards at Sunnyside have been renovated throughout.

Now that the war is over it is hoped that money will be available to provide accommodation for male tubercular cases, senile patients, and better hospital facilities. The occupational therapy building is much too small for its purpose, and it will be necessary to extend this very considerably if we hope to attain the standard of some of the other institutions in this respect.

The farm and gardens have had a very successful year, though the drought during the latter part of the year affected the vegetable situation very seriously.

Clinics have been held twice weekly at the Christchurch Hospital and once a month at Timaru Hospital. So many patients are now being referred to the clinic that it is quite impossible to do justice to them in the time allotted.

For the greater part of the year the medical staff consisted of Dr. O'Reilly and myself, but, fortunately, December brought a full medical complement. On the male side we are practically at full strength, but on the female side the staffing question has become very difficult. I cannot speak too highly of the way our nurses have faced the situation—working long hours and giving up their leave-days cheerfully when required to do so.

To the Official Visitors and to the chaplains I tender my thanks for their regular visits and for the interest they have taken in the welfare of the patients.

## SEACLIFF MENTAL HOSPITAL

DR. BROWN reports :—

I have the honour to present my report for the year ending 1945.

There were 1,023 patients on the register on the 21st January, 1945. During the year 197 patients were admitted, 92 were discharged, and 5 transferred to other hospitals. The total number of patients under care during the year was 1,220.

Voluntary boarders under care were 76, and 27 remain.

There were 110 deaths, the chief causes being senility.

Because of the nature of the hospital, its age, and the insecurity of the ground, the maintenance of the fabric has always been difficult and costly. The war years, with their shortage of labour and supplies, have added to these difficulties. While the maintenance and engineering staffs have been fully occupied in making repairs and renovations, much

remains to be done. The provision of a pumping system in the Evansdale Glen has relieved much of the anxiety about the water-supply; in periods when the reservoir at Double Hill has failed it has provided a supply which, if not ample, is sufficient for the needs of the hospital if great care is exercised in its use. The contractors have started on the demolition of the unsafe parts of the administrative block, and shortly the tower, with many of the ornamental turrets and battlements which made the building picturesque, will have disappeared.

At Waitati a villa to accommodate 56 patients is nearing completion, and it is hoped to occupy it early next year. It will give comfortable and adequate accommodation for the elderly male patients for which it is intended and at the same time provide much needed relief in the male side at Seacliff. On its occupation, I hope to be able to evacuate the worst dormitory of D Ward. At the rear of the new villa comfortable quarters are provided for the staff.

The farm has had a satisfactory year, and the provision of a tractor has been a great boon. The gardener has kept the hospital well supplied with fresh vegetables.

On the arrival, at the beginning of the year, of the necessary apparatus, electro-convulsant treatment was begun, and by now quite a number of patients have been given this form of treatment. It is too soon to give figures or statistics in regard to it, but the results here are much in keeping with those recorded in medical literature; the results in the affective psychosis have been very good, and, in the case of involutional melancholias, almost startling. In cases of schizophrenia, the results have been disappointing, and I am still of the opinion that insulin shock, despite its difficulties and dangers, affords a better chance of recovery or of relief.

Prefrontal leucotomy has been performed on three of our cases by Mr. Murray Falconer, Neurosurgeon. These patients suffered from, apparently, chronic mental illnesses, they had not responded to other forms of treatment, and they showed great mental tension and grave depression. The operations were preformed in the neuro-surgical unit of the Dunedin Hospital, and the patients were brought back to Seacliff afterwards as soon as they were fit to travel. None of them showed the dramatic and almost immediate recovery reported in some of these cases, but all three required a long spell of careful psychiatric nursing and re-education. Two of the cases have left the hospital, and the third was transferred to another hospital. While I am prepared to advise leucotomy only in a restricted number of cases, more cases might have been done if accommodation in Dunedin Hospital had been available. I would urge that in the new hospital at Cherry Farm the surgical unit be such that the operation can be done by a visiting neurosurgeon and the post-operative treatment carried out by the resident medical and nursing staff.

I would like to emphasize that I do not think that any of these forms of treatment, be it insulin shock, electro convulsive therapy, or leucotomy, is in itself a complete treatment; in my opinion, far from it. The other resources of a mental hospital, psychiatric treatment from the medical staff, occupational therapy, and, above all perhaps, the proper nursing from a trained staff of psychiatric nurses and attendants, contribute a very large factor in the care of patients even when they undergo these more specialized forms of treatment. I should like to resume insulin shock treatment, but until such time as there is a full nursing staff that is quite impossible.

During this year, as during the other war years, the entertainment of the patients has not been what I would have liked. Petrol and travel restrictions have prevented the many concert parties and bands that entertained as in the past from visiting. While the weekly picture-show has gone on, a depleted and overworked staff has caused the cessation of dances except on very special occasions. The two victory days were such occasions, and we did out best to let our patients rejoice with their fellow-citizens. The annual sports were held as usual. A very occasional entertainment has been provided by Mr. Steven, of the Patients' and Prisoners' Aid Society, and I am deeply grateful to him for his help in this, as well as in many other directions.



TABLE II.—ADMISSIONS, DISCHARGES, AND DEATHS WITH THE MEAN ANNUAL MORTALITY AND PROPORTION OF RECOVERIES, ETC., PER CENT. ON THE ADMISSIONS DURING THE YEAR 1945

Mental Hospitals.	In Mental Hospitals on 1st January, 1945.			Admissions in 1945.									Total Number of Patients under Care.		
				Admitted for the First Time.			Not First Admissions.			Transfers.					
Auckland ..	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Kingseat ..	683	697	1,380	117	116	1,233	24	37	61	10	10	20	834	860	1,694
Tokanui ..	446	335	781	22	22	44	3	9	12	6	76	82	477	442	919
Levin Farm ..	409	629	1,038	48	49	97	3	8	11	7	10	17	467	696	1,163
Porirua ..	..	..	..	1	..	1	..	..	..	51	0	51	52	0	52
Nelson ..	626	443	1,069	146	145	291	25	51	76	10	10	20	807	649	1,456
Hokitika ..	632	426	1,058	52	42	94	2	6	8	1	1	2	687	475	1,162
Christchurch ..	256	273	529	7	8	15	3	1	4	1	13	14	267	295	562
Seacliff ..	741	714	1,455	94	92	186	18	26	44	44	6	50	897	838	1,735
Ashburn Hall*	610	413	1,023	68	83	151	21	16	37	2	7	9	701	519	1,220
Totals ..	8	22	30	2	4	6	1	0	1	2	0	2	13	26	39
Totals .. 4,411 3,952 8,363 557 561 1,118 100 154 254 134 133 267 5,202 4,800 10,002															

Mental Hospitals.	Discharged recovered.			Patients discharged, transferred, and died.											
				Discharged not recovered.			Transferred.			Died.			Total discharged, transferred, and died.		
Auckland ..	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Kingseat ..	33	51	84	27	40	67	12	87	99	49	61	110	121	239	360
Tokanui ..	3	12	15	2	2	4	5	7	12	27	18	45	37	39	76
Levin Farm ..	15	28	43	5	8	13	7	6	13	26	37	63	53	79	132
Porirua ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nelson ..	47	100	147	24	23	47	8	6	14	74	45	119	153	174	327
Hokitika ..	9	11	20	5	3	8	42	5	47	50	24	74	106	43	149
Christchurch ..	3	2	5	7	6	13	1	..	1	14	19	33	25	27	52
Seacliff ..	35	56	91	20	15	35	56	17	73	35	60	95	146	148	294
Ashburn Hall*	20	35	55	16	21	37	3	2	5	52	55	107	91	113	204
Totals ..	..	..	..	..	..	..	0	3	3	0	1	1	0	4	4
Totals .. 165 295 460 106 118 224 134 133 267 327 320 647 732 866 1,598															

Mental Hospitals.	In Mental Hospitals on 31st December, 1945.			Average Number resident during the Year.			Percentage of Recoveries on Admissions during the Year.			Percentage of Deaths on Average Number resident during the Year.		
Auckland ..	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Kingseat ..	713	621	1,334	657	604	1,261	23.40	33.33	28.57	7.46	10.10	8.72
Tokanui ..	440	403	843	432	343	775	12.00	38.71	26.79	6.25	5.25	5.81
Levin Farm ..	414	617	1,031	400	605	1,005	29.41	49.12	39.81	6.50	6.12	6.27
Porirua ..	52	0	52	19	0	19	..	..	..	..	..	..
Nelson ..	654	475	1,129	616	426	1,042	27.49	51.02	40.05	13.03	10.56	11.42
Hokitika ..	581	432	1,013	596	397	993	16.67	22.92	19.61	8.39	6.05	7.45
Christchurch ..	242	268	510	245	265	510	30.00	22.22	26.32	5.71	7.17	6.47
Seacliff ..	751	690	1,441	672	647	1,319	31.25	47.46	39.57	5.21	9.27	7.20
Ashburn Hall*	610	406	1,016	582	381	963	22.47	35.35	29.26	8.93	14.44	11.11
Totals ..	13	22	35	10	21	31	..	..	..	0.00	4.76	3.23
Totals .. 4,470 3,934 8,404 4,229 3,689 7,918 25.11 41.26 33.53 7.73 8.67 8.17												

\* Private mental hospital.

TABLE III.—NATIVE COUNTRIES

Countries.	Auckland.			Kingsseat.			Tokanui.			Levin Farm.			Porirua.			Nelson.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
England and Wales ..	82	62	144	74	51	125	45	65	110	1	0	1	79	54	133	41	36	77
Scotland ..	17	7	24	15	12	27	15	14	29	2	0	2	22	15	37	23	8	31
Ireland ..	19	7	26	21	18	39	17	22	39	..	..	..	23	11	34	8	4	12
New Zealand ..	480	475	955	254	284	538	290	445	735	47	0	47	446	351	797	451	356	807
Australian States ..	29	16	45	19	13	32	7	25	32	2	0	2	29	11	40	9	7	16
France ..	1	0	1	..	..	..	1	0	1	..	..	..	0	1	1	..	..	..
Germany ..	1	1	2	1	0	1	1	2	3	..	..	..	1	0	1	1	0	1
Austria ..	4	0	4	7	0	7	2	0	2	..	..	..	..	..	..	1	0	1
Norway ..	..	..	..	4	0	4	1	0	1	..	..	..	..	..	..	1	0	1
Sweden ..	2	1	3	2	1	3	..	..	..	..	..	..	..	..	..	..	..	..
Denmark ..	..	..	..	..	..	..	2	2	4	..	..	..	1	0	1	3	0	3
Italy ..	2	0	2	1	1	2	1	0	1	..	..	..	2	1	3	1	1	2
China ..	3	2	5	2	0	2	2	1	3	..	..	..	1	2	3	1	0	1
Maoris ..	32	26	58	8	8	16	16	23	39	..	..	..	33	20	53	11	9	20
Other countries ..	41	24	65	23	15	38	11	11	22	..	..	..	17	9	26	7	1	8
Unknown ..	..	..	..	9	0	9	3	7	10	..	..	..	..	..	..	23	10	33
Totals ..	713	621	1,334	440	403	843	414	617	1,031	52	0	52	654	475	1,129	581	432	1,013

Countries.	Hokitika.			Christchurch.			Seacliff.			Ashburn Hall (Private Mental Hospital).			Totals.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
England and Wales ..	23	19	42	41	66	107	36	23	59	1	2	3	423	378	801
Scotland ..	8	4	12	20	10	30	34	21	55	1	0	1	157	91	248
Ireland ..	13	9	22	13	10	23	18	9	27	..	..	..	132	90	222
New Zealand ..	166	194	360	655	574	1,229	487	342	829	10	20	30	3,286	3,041	6,327
Australian States ..	7	8	15	10	14	24	12	3	15	1	0	1	125	97	222
France ..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	3
Germany ..	..	..	..	1	0	1	2	0	2	..	..	..	8	3	11
Austria ..	..	..	..	..	..	..	..	..	..	..	..	..	14	0	14
Norway ..	..	..	..	..	..	..	..	..	..	..	..	..	6	0	6
Sweden ..	1	0	1	..	..	..	2	0	2	..	..	..	7	2	9
Denmark ..	1	0	1	..	..	..	1	0	1	..	..	..	8	2	10
Italy ..	3	0	3	..	..	..	..	..	..	..	..	..	10	3	13
China ..	..	..	..	..	..	..	..	..	..	..	..	..	9	5	14
Maoris ..	1	2	3	7	12	19	..	..	..	..	..	..	108	100	208
Other countries ..	4	0	4	4	4	8	6	2	8	..	..	..	113	66	179
Unknown ..	15	32	47	..	..	..	12	6	18	..	..	..	62	55	117
Totals ..	242	268	510	751	690	1,441	610	406	1,016	13	22	35	4,470	3,934	8,404

TABLE IV.—AGES OF PATIENTS ON 31st DECEMBER, 1945

Ages.	Auckland.			Kingsseat.			Tokanui.			Levin Farm.			Porirua.			Nelson.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
From 1 to 5 years ..	..	..	..	1	0	1	2	0	2	..	..	..	..	..	..	20	14	34
" 5 " 10 ..	3	2	5	2	1	3	2	5	7	..	..	..	3	5	8	47	36	83
" 10 " 15 ..	7	0	7	2	3	5	6	7	13	1	0	1	2	11	13	45	29	74
" 15 " 20 ..	18	12	30	11	5	16	8	10	18	12	0	12	21	10	31	40	27	67
" 20 " 30 ..	101	72	173	26	26	52	60	57	117	35	0	35	81	78	159	67	48	115
" 30 " 40 ..	142	115	257	62	58	120	75	93	168	4	0	4	138	80	218	107	58	165
" 40 " 50 ..	154	127	281	78	75	153	70	124	194	..	..	..	123	87	210	77	55	132
" 50 " 60 ..	106	144	250	103	95	198	61	142	203	..	..	..	127	89	216	70	74	144
" 60 " 70 ..	113	98	211	100	89	189	85	111	196	..	..	..	105	68	173	65	50	115
" 70 " 80 ..	50	36	86	44	36	80	39	59	98	..	..	..	48	37	85	28	35	63
" 80 " 90 ..	11	7	18	6	12	18	3	5	8	..	..	..	6	10	16	6	6	12
Upwards of 90 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unknown ..	8	..	16	5	3	8	3	4	7	..	..	..	..	..	..	9	0	9
Totals ..	713	621	1,334	440	403	843	414	617	1,031	52	0	52	654	475	1,129	581	432	1,013



TABLE IV.—AGES OF PATIENTS ON 31ST DECEMBER, 1945—*continued*

Ages.	Hokitika.			Christchurch.			Seacliff.			Ashburn Hall (Private Mental Hospital).			Totals.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
From 1 to 5 years ..	..	..	..	..	..	..	3	0	3	..	..	..	26	14	40
5 " 10 " ..	1	0	1	30	16	46	3	5	8	..	..	..	91	70	161
10 " 15 " ..	1	3	4	50	24	74	3	4	7	..	..	..	117	81	198
15 " 20 " ..	3	3	6	67	46	113	20	10	30	..	..	..	200	123	323
20 " 30 " ..	12	18	30	178	140	318	71	39	110	3	2	5	634	480	1,114
30 " 40 " ..	40	28	68	110	115	225	112	53	165	..	..	..	790	600	1,390
40 " 50 " ..	49	42	91	109	80	189	130	63	193	2	1	3	792	654	1,446
50 " 60 " ..	55	77	132	88	107	195	116	81	197	2	4	6	728	813	1,541
60 " 70 " ..	57	65	122	78	99	177	89	85	174	2	7	9	694	672	1,366
70 " 80 " ..	18	23	41	35	46	81	52	56	108	1	4	5	315	332	647
80 " 90 " ..	3	4	7	5	14	19	11	10	21	3	2	5	54	70	124
Upwards of 90 ..	0	1	1	1	3	4	..	..	..	0	2	2	1	6	7
Unknown ..	3	4	7	..	..	..	..	..	..	..	..	..	28	19	47
Totals ..	242	268	510	751	690	1,441	610	406	1,016	13	22	35	4,470	3,934	8,404

TABLE V.—LENGTH OF RESIDENCE OF PATIENTS DISCHARGED "RECOVERED" DURING 1945

Length of Residence.	Auckland.			Kingseat.			Tokanui.			Levin Farm.			Porirua.			Nelson.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Under 1 month ..	2	0	2	1	..	..	..	..	..	1	6	7	..	..	..	..	..	..
From 1 to 3 months ..	3	2	5	1	3	4	0	1	1	..	..	..	15	23	38	..	..	..
3 " 6 " ..	3	2	5	0	2	2	0	1	3	4	..	..	17	35	52	1	0	1
6 " 9 " ..	7	20	27	0	1	1	3	5	8	..	..	..	4	17	21	2	0	2
9 " 12 " ..	5	9	14	0	3	3	3	8	11	..	..	..	2	7	9	1	3	4
1 " 2 years ..	8	10	18	0	2	2	5	5	10	..	..	..	6	9	15	1	5	6
2 " 3 " ..	0	3	3	1	0	1	2	4	6	..	..	..	1	1	2	1	1	2
3 " 5 " ..	3	3	6	..	..	..	1	2	3	..	..	..	1	1	2	2	1	3
5 " 7 " ..	0	1	1	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..
7 " 10 " ..	0	1	1	..	..	..	..	..	..	..	..	..	0	1	1	0	1	1
10 " 12 " ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12 " 15 " ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	0	1
Over 15 years ..	2	0	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	33	51	84	3	12	15	15	28	43	..	..	..	47	100	147	9	11	20

Length of Residence.	Hokitika.			Christchurch.			Seacliff.			Ashburn Hall (Private Mental Hospital).			Totals.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Under 1 month ..	..	..	..	..	..	..	..	..	..	..	..	..	3	6	9
From 1 to 3 months ..	1	0	1	4	3	7	4	5	9	..	..	..	28	37	65
3 " 6 " ..	1	0	1	5	7	12	3	5	8	..	..	..	31	54	85
6 " 9 " ..	0	1	1	11	7	18	1	8	9	..	..	..	28	59	87
9 " 12 " ..	..	..	..	2	17	19	8	7	15	..	..	..	21	54	75
1 " 2 years ..	1	1	2	8	13	21	3	6	9	..	..	..	32	51	83
2 " 3 " ..	..	..	..	2	1	3	0	1	1	..	..	..	7	11	18
3 " 5 " ..	..	..	..	0	5	5	1	2	3	..	..	..	8	14	22
5 " 7 " ..	..	..	..	0	2	2	..	..	..	..	..	..	1	4	5
7 " 10 " ..	..	..	..	1	0	1	..	..	..	..	..	..	1	3	4
10 " 12 " ..	..	..	..	1	0	1	..	..	..	..	..	..	1	0	1
12 " 15 " ..	..	..	..	0	1	1	..	..	..	..	..	..	1	1	2
Over 15 years ..	..	..	..	1	0	1	0	1	1	..	..	..	3	1	4
Totals ..	3	2	5	35	56	91	20	35	55	..	..	..	165	295	460

TABLE VI.—CAUSES OF DEATH, 1945

Causes.	Auckland.			Kingscat.			Tokanui.			Porirua.			Nelson.		
I.—GENERAL DISEASES	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Tuberculosis—	0	2	2	..	..	..	..	..	..	..	..	..	..	..	..
General .. .. .	1	1	2	1	2	3	0	3	3	2	1	3	4	0	4
Lungs .. .. .	1	0	1	0	2	2	0	1	1	1	2	3	0	1	1
Cancer .. .. .	1	3	4	..	..	..	0	4	4	..	..	..	..	..	..
Toxæmia .. .. .	0	1	1	..	..	..	..	..	..	1	1	2	..	..	..
Bacillary dysentery .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diabetes .. .. .	0	2	2	..	..	..	..	..	..	..	..	..	..	..	..
Typhoid .. .. .	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..
Septicæmia .. .. .	0	1	1	..	..	..	..	..	..	..	..	..	1	0	1
Graves disease .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	3	0	3
Diphtheria .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Congenital inanition .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ascariasis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
II.—DISEASES OF THE NERVOUS SYSTEM															
Exhaustion .. .. .	1	2	3	..	..	..	1	2	3	..	..	..	0	1	1
Exhaustion of mania .. .. .	0	1	1	..	..	..	..	..	..	4	0	4	..	..	..
Exhaustion of melancholia .. .. .	2	0	2	1	0	1	2	0	2	7	1	8	0	1	1
General paralysis of the insane .. .. .	6	5	11	0	1	1	2	2	4	0	1	1	..	..	..
Cerebral hemorrhage .. .. .	2	0	2	6	2	8	1	0	1	2	2	4	2	0	2
Cerebral thrombosis .. .. .	1	0	1	..	..	..	..	..	..	2	1	3	10	1	11
Epilepsy .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	1	0	1
Post encephalitic Parkinsonism .. .. .	1	1	2	..	..	..	..	..	..	..	..	..	0	1	1
Organic brain disease .. .. .	0	1	1	..	..	..	0	1	1	..	..	..	..	..	..
Meningitis .. .. .	..	..	..	..	..	..	..	..	..	1	0	1	..	..	..
Hemiplegia .. .. .	..	..	..	..	..	..	..	..	..	1	0	1	..	..	..
Huntingdon's chorea .. .. .	..	..	..	..	..	..	..	..	..	1	0	1	..	..	..
III.—DISEASES OF THE RESPIRATORY SYSTEM															
Pneumonia—															
Broncho .. .. .	16	8	24	1	1	2	5	4	9	3	4	7	3	0	3
Hypostatic .. .. .	1	5	6	1	0	1	0	1	1	..	..	..	..	..	..
Lobar .. .. .	0	2	2	..	..	..	..	..	..	2	3	5	..	..	..
Bronchitis .. .. .	..	..	..	..	..	..	0	1	1	..	..	..	2	3	5
Pulmonary oedema .. .. .	..	..	..	..	..	..	..	..	..	1	4	5	..	..	..
IV.—DISEASES OF THE CIRCULATORY SYSTEM															
Heart disease .. .. .	11	15	26	12	4	16	4	3	7	27	6	33	7	3	10
Arterio-sclerosis .. .. .	..	..	..	1	1	2	..	..	..	0	1	1	..	..	..
V.—DISEASES OF THE DIGESTIVE SYSTEM															
Enteritis .. .. .	0	3	3	0	1	1	5	6	11	9	6	15	8	3	11
Intestinal obstruction .. .. .	0	2	2	..	..	..	..	..	..	..	..	..	..	..	..
Hepatitis .. .. .	..	..	..	1	0	1	..	..	..	..	..	..	..	..	..
Gastric ulcer .. .. .	..	..	..	1	0	1	..	..	..	..	..	..	..	..	..
Peritonitis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
VI.—DISEASES OF THE URINARY SYSTEM															
Uræmia .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nephritis .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cystitis .. .. .	..	..	..	1	0	1	..	..	..	..	..	..	..	..	..
VII.—OLD AGE															
Senile decay .. .. .	1	1	2	1	4	5	4	7	11	4	10	14	8	10	18
VIII.—EXTERNAL CAUSES															
Head injury .. .. .	0	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Suicide .. .. .	1	0	1	..	..	..	..	..	..	1	0	1	..	..	..
Asphyxia .. .. .	..	..	..	..	..	..	1	0	1	..	..	..	..	..	..
IX.—Died whilst on probation	2	3	5	..	..	..	1	2	3	6	2	8	1	0	1
Totals .. .. .	49	61	110	27	18	45	26	37	63	74	45	119	50	24	74

TABLE VI.—CAUSES OF DEATH, 1945—*continued*

Causes.	Hokitika.			Christchurch.			Seacliff.			Ashburn Hall (Private Mental Hospital).	Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
<b>I.—GENERAL DISEASES</b>													
Tuberculosis—													
General .. .. .	0	1	1	..	..	..	1	0	1	..	1	3	4
Lungs .. .. .	2	0	2	1	0	1	1	3	4	..	12	10	22
Cancer .. .. .	..	..	..	0	2	2	2	2	4	..	4	10	14
Toxæmia .. .. .	..	..	..	..	..	..	..	..	..	..	1	7	8
Bacillary dysentery .. .. .	..	..	..	..	..	..	..	..	..	..	0	1	1
Diabetes .. .. .	..	..	..	..	..	..	..	..	..	..	1	1	2
Typhoid .. .. .	..	..	..	..	..	..	..	..	..	..	0	2	2
Septicæmia .. .. .	..	..	..	..	..	..	1	1	2	..	2	2	4
Graves disease .. .. .	..	..	..	..	..	..	..	..	..	..	0	1	1
Diphtheria .. .. .	..	..	..	..	..	..	..	..	..	..	1	0	1
Congenital inanition .. .. .	..	..	..	..	..	..	..	..	..	..	3	0	3
Ascariasis .. .. .	0	1	1	..	..	..	..	..	..	..	0	1	1
<b>II.—DISEASES OF THE NERVOUS SYSTEM</b>													
Exhaustion .. .. .	..	..	..	..	..	..	0	1	1	..	1	3	4
Exhaustion of mania .. .. .	..	..	..	0	1	1	..	..	..	..	5	4	9
Exhaustion of melancholia .. .. .	..	..	..	0	1	1	..	..	..	..	0	2	2
General paralysis of the insane .. .. .	..	..	..	..	..	..	1	0	1	..	13	2	15
Cerebral hemorrhage .. .. .	..	..	..	0	2	2	1	0	1	..	9	11	20
Cerebral thrombosis .. .. .	0	2	2	0	1	1	0	1	1	..	13	8	21
Epilepsy .. .. .	0	1	1	..	..	..	..	..	..	..	13	3	16
Post encephalitic Parkinsonism .. .. .	..	..	..	..	..	..	..	..	..	..	1	0	1
Organic brain disease .. .. .	..	..	..	0	1	1	..	..	..	..	1	3	4
Meningitis .. .. .	..	..	..	..	..	..	..	..	..	..	0	2	2
Hemiplegia .. .. .	..	..	..	..	..	..	..	..	..	..	1	0	1
Huntingdon's chorea .. .. .	..	..	..	..	..	..	..	..	..	..	1	0	1
<b>III.—DISEASES OF THE RESPIRATORY SYSTEM</b>													
Pneumonia—													
Broncho .. .. .	1	1	2	2	1	3	3	2	5	..	34	21	55
Hypostatic .. .. .	..	..	..	..	..	..	2	2	4	..	4	8	12
Lobar .. .. .	2	0	2	2	1	3	..	..	..	..	6	6	12
Bronchitis .. .. .	..	..	..	..	..	..	..	..	..	..	2	4	6
Pulmonary œdema .. .. .	..	..	..	..	..	..	..	..	..	..	1	4	5
<b>IV.—DISEASES OF THE CIRCULATORY SYSTEM</b>													
Heart disease .. .. .	2	6	8	5	9	14	14	9	23	..	82	55	137
Arterio-sclerosis .. .. .	..	..	..	2	0	2	..	..	..	..	3	2	5
<b>V.—DISEASES OF THE DIGESTIVE SYSTEM</b>													
Enteritis .. .. .	..	..	..	0	1	1	..	..	..	..	22	20	42
Intestinal obstruction .. .. .	..	..	..	..	..	..	..	..	..	..	0	2	2
Hepatitis .. .. .	..	..	..	..	..	..	..	..	..	..	1	0	1
Gastric ulcer .. .. .	1	0	1	..	..	..	..	..	..	..	2	0	2
Peritonitis .. .. .	1	0	1	..	..	..	..	..	..	..	1	0	1
<b>VI.—DISEASES OF THE URINARY SYSTEM</b>													
Uræmia .. .. .	..	..	..	..	..	..	1	0	1	..	1	0	1
Nephritis .. .. .	1	0	1	..	..	..	..	..	..	..	1	0	1
Cystitis .. .. .	..	..	..	..	..	..	..	..	..	..	1	0	1
<b>VII.—OLD AGE</b>													
Senile decay .. .. .	4	6	10	23	35	58	24	32	56	0 1 1	69	105	174
<b>VIII.—EXTERNAL CAUSES</b>													
Head injury .. .. .	..	..	..	..	..	..	..	..	..	..	0	1	1
Suicide .. .. .	..	..	..	0	2	2	0	1	1	..	2	3	5
Asphyxia .. .. .	..	..	..	..	..	..	..	..	..	..	1	0	1
IX.—Died whilst on probation .. .. .	..	..	..	0	3	3	1	1	2	..	11	11	22
Totals .. .. .	14	19	33	35	60	95	52	55	107	0 1 1	327	320	647

TABLE VII.—PRINCIPAL ASSIGNED CAUSES OF INSANITY, 1945

Causes.	Auckland.			Kingseat.			Tokanui.			Levin Farm.			Porirua.			Nelson.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Alcohol .. ..	2	1	3	2	0	2	1	0	1	..	..	..	3	0	3	1	0	1
Arterio-sclerosis ..	3	4	7	..	..	..	0	1	1	..	..	..	4	6	10	..	..	..
Congenital .. ..	23	12	35	10	4	14	7	7	14	1	0	1	14	10	24	36	24	60
Climacteric .. ..	..	..	0	0	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Constitutional ..	47	47	94	3	8	11	2	2	4	..	..	..	51	39	90	..	..	..
Endocrine disorder ..	..	..	..	..	..	..	..	..	..	..	..	..	0	3	3	..	..	..
Epilepsy .. ..	1	2	3	2	1	3	2	1	3	..	..	..	2	4	6	0	3	3
Ill-health .. ..	1	2	3	..	..	..	..	..	..	..	..	..	..	..	..	1	0	1
Involution .. ..	4	9	13	1	0	1	0	4	4	..	..	..	9	7	16	1	0	1
Heredity .. ..	..	..	..	1	1	2	13	12	25	..	..	..	2	4	6	5	4	9
Mental stress ..	0	2	2	0	2	2	14	12	26	..	..	..	19	19	38	4	4	8
Organic brain-disease	3	4	7	..	..	..	6	3	9	..	..	..	2	1	3	..	..	..
Previous attack ..	24	37	61	3	9	12	0	2	2	..	..	..	25	51	76	1	4	5
Puberty or adolescence	..	..	..	..	..	..	..	..	..	..	..	..	1	0	1	1	0	1
Puerperal .. ..	..	..	..	..	..	..	0	3	3	..	..	..	0	4	4	..	..	..
Senility .. ..	26	29	55	2	5	7	5	7	12	..	..	..	33	46	79	4	9	13
Syphilis .. ..	6	2	8	1	0	1	1	0	1	..	..	..	4	1	5	..	..	..
Toxic .. ..	1	2	3	..	..	..	0	3	3	..	..	..	1	0	1	..	..	..
Trauma .. ..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	..	..	..
Transfers .. ..	10	10	20	6	76	82	7	10	17	51	0	51	10	10	20	1	1	2
Totals .. ..	151	163	314	31	107	138	58	67	125	52	0	52	181	206	387	55	49	104

Causes.	Hokitika.			Christchurch.			Seacliff.			Ashburn Hall (Private Mental Hospital).			Totals.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Alcohol .. ..	..	..	..	1	0	1	4	0	4	..	..	..	14	1	15
Arterio-sclerosis ..	..	..	..	6	4	10	1	1	2	..	..	..	14	16	30
Congenital .. ..	3	0	3	35	10	45	8	7	15	0	1	1	137	75	212
Climacteric .. ..	..	..	..	..	..	..	..	..	..	..	..	..	0	1	1
Constitutional ..	5	4	9	12	11	23	21	11	32	..	..	..	141	122	263
Endocrine disorder ..	..	..	..	..	..	..	..	..	..	..	..	..	0	3	3
Epilepsy .. ..	1	1	2	2	2	4	1	2	3	..	..	..	11	16	27
Ill-health .. ..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	4
Involution .. ..	0	1	1	2	5	7	0	8	8	..	..	..	17	34	51
Heredity .. ..	..	..	..	2	0	2	..	..	..	0	2	2	23	23	46
Mental stress ..	..	..	..	13	23	36	15	22	37	..	..	..	65	94	159
Organic brain-disease	..	..	..	..	..	..	..	..	..	..	..	..	11	8	19
Previous attack ..	0	2	2	17	29	46	21	17	38	1	0	1	92	151	243
Puberty or adolescence	..	..	..	1	1	2	..	..	..	..	..	..	3	1	4
Puerperal .. ..	..	..	..	0	5	5	0	1	1	..	..	..	0	13	13
Senility .. ..	1	1	2	21	27	48	15	30	45	2	1	3	109	155	264
Syphilis .. ..	..	..	..	..	..	..	3	0	3	..	..	..	15	3	18
Toxic .. ..	..	..	..	0	1	1	..	..	..	..	..	..	2	6	8
Trauma .. ..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
Transfers .. ..	1	13	14	44	6	50	2	7	9	2	0	2	134	133	267
Totals .. ..	11	22	33	156	124	280	91	106	197	5	4	9	791	858	1,649

TABLE VIII.—SHOWING THE ADMISSIONS, DISCHARGES, AND DEATHS FROM  
1ST JANUARY, 1876, TO 31ST DECEMBER, 1945 (EXCLUDING TRANSFERS)

							M.	F.	T.
In hospital, 31st December, 1875	..	..	..	..	..	..	482	254	736
Admissions	..	..	..	..	..	..	28,260	23,195	51,455
							28,742	23,449	52,191
Discharged—							M.	F.	T.
Recovered	..	..	..	..	..	..	9,483	8,934	18,417
Not recovered	..	..	..	..	..	..	3,406	3,102	6,508
Died	..	..	..	..	..	..	11,383	7,479	18,862
							24,272	19,515	43,787
Remaining on 31st December, 1945	..	..	..	..	..	..	4,470	3,934	8,404

TABLE IX.—SUMMARY OF TOTAL ADMISSIONS: PERCENTAGE OF CASES SINCE THE  
YEAR 1876

—				Males.	Females.	Both Sexes.
Recovered	..	..	..	32·99	38·10	35·29
Unrecovered	..	..	..	11·85	13·23	12·47
Died	..	..	..	39·61	31·89	36·14
Remaining	..	..	..	15·55	16·78	16·10
				100·00	100·00	100·00

TABLE X.—SHOWING THE ADMISSIONS, DISCHARGES, AND DEATHS, WITH THE MEAN ANNUAL MORTALITY AND PROPORTION OF RECOVERIES PER CENT. OF THE ADMISSIONS, FOR EACH YEAR SINCE 1ST JANUARY, 1904

Year.	Admitted.			Discharged.			Died.	Remaining 31st December in each Year.			Average Numbers resident.			Percentage of Recoveries on Admissions.			Percentage of Deaths on Average Numbers resident.				
	Recovered.			Believed.				Not Improved.													
M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.				
1904	332	236	568	263	106	369	120	67	214	1,801	1,257	3,058	1,780	1,198	2,978	47.39	44.91	46.30	6.74	5.84	6.38
1905	360	251	611	270	126	396	131	67	214	1,836	1,276	3,112	1,796	1,232	3,028	41.39	48.21	44.19	8.18	5.44	7.07
1906	395	284	679	283	139	422	146	64	232	1,900	1,301	3,206	1,823	1,265	3,088	39.75	47.73	42.94	8.01	6.71	7.43
1907	359	241	600	229	133	362	168	64	232	1,931	1,351	3,240	1,851	1,285	3,136	44.29	47.68	44.84	8.08	4.98	7.39
1908	426	318	744	326	149	475	1	1	222	1,997	1,417	3,414	1,894	1,346	3,240	42.25	45.91	43.82	7.81	5.50	6.85
1909	419	297	716	349	171	520	1	1	136	2,083	1,463	3,548	1,970	1,404	3,374	42.72	45.74	48.74	6.90	4.84	6.00
1910	474	314	788	382	146	528	1	1	186	2,160	1,510	3,670	2,028	1,445	3,473	38.40	46.18	41.50	9.17	6.02	8.41
1911	448	317	765	368	168	536	4	2	198	2,220	1,536	3,756	2,105	1,496	3,601	36.38	43.80	40.09	9.41	7.02	8.41
1912	458	381	839	441	182	623	11	5	16	2,273	1,643	3,913	2,146	1,513	3,659	40.17	47.37	43.74	8.99	5.41	7.57
1913	466	318	784	357	162	519	1	5	196	2,332	1,682	3,964	2,252	1,597	3,849	37.55	50.94	42.98	8.70	6.96	7.98
1914	509	369	868	297	162	469	6	9	15	2,408	1,703	4,111	2,309	1,641	3,950	40.47	45.12	42.51	8.36	5.36	7.11
1915	450	361	811	331	157	488	10	11	172	2,543	1,752	4,295	2,391	1,703	4,094	44.89	43.21	44.88	7.19	6.58	6.94
1916	518	364	879	381	169	550	8	11	209	2,555	1,829	4,375	2,453	1,768	4,221	30.89	47.37	37.66	8.42	4.52	6.80
1917	470	374	844	359	173	532	6	5	11	2,611	1,904	4,515	2,543	1,825	4,368	36.38	44.64	38.27	8.06	6.19	7.28
1918	437	342	779	274	144	418	12	24	274	2,663	1,943	4,546	2,602	1,899	4,501	32.49	33.71	39.62	10.53	9.16	9.95
1919	477	402	879	353	147	500	13	22	212	2,717	1,980	4,647	2,620	1,907	4,527	37.11	39.62	38.73	8.09	6.82	7.55
1920	455	418	873	310	162	472	10	16	201	2,772	2,037	4,754	2,674	1,980	4,654	35.63	35.22	35.51	7.85	8.40	8.08
1921	479	402	881	310	162	472	10	16	201	2,772	2,037	4,754	2,674	1,980	4,654	35.63	35.22	35.51	7.85	8.40	8.08
1922	453	386	839	336	157	493	15	9	184	2,816	2,116	4,932	2,727	2,062	4,789	34.44	40.67	37.31	7.67	8.92	8.21
1923	442	366	808	319	144	463	15	5	184	2,839	2,116	4,932	2,727	2,062	4,789	34.44	40.67	37.31	7.67	8.92	8.21
1924	446	370	816	319	144	463	15	5	184	2,839	2,116	4,932	2,727	2,062	4,789	34.44	40.67	37.31	7.67	8.92	8.21
1925	446	370	816	319	144	463	15	5	184	2,839	2,116	4,932	2,727	2,062	4,789	34.44	40.67	37.31	7.67	8.92	8.21
1926	508	439	947	359	158	517	23	35	82	2,923	2,238	5,131	2,808	2,146	4,953	34.38	35.34	34.02	7.45	4.42	6.37
1927	531	414	945	359	158	517	23	35	82	3,044	2,453	5,467	2,926	2,287	5,213	26.18	30.70	29.67	7.16	6.46	6.77
1928	506	450	956	359	158	517	23	35	82	3,044	2,453	5,467	2,926	2,287	5,213	26.18	30.70	29.67	7.16	6.46	6.77
1929	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1930	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1931	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1932	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1933	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1934	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1935	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1936	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1937	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1938	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1939	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1940	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1941	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1942	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1943	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1944	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1945	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1946	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1947	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1948	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1949	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1950	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1951	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1952	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1953	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1954	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1955	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1956	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1957	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375	5,395	26.18	30.70	29.67	7.16	6.46	6.77
1958	549	471	1,020	359	158	517	23	35	82	3,147	2,525	5,673	3,022	2,375							

TABLE XI.—DEBITS FOR THE FINANCIAL YEAR 1945-46

	Auckland.			Kingseat.			Tokanui.			Levin.			Porirua.			Nelson.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Salaries, including overtime	82,074	11	8	42,564	6	3	61,066	0	5	2,301	13	10	92,248	4	4	63,357	11	4
Official visitors	46	4	0	..	..	..	..	..	..	..	..	..	14	11	8	..	..	..
Advertising, books, &c.	42	1	2	18	6	5	112	16	5	2	1	7	4	14	1	3	18	9
Bacteriological research	221	5	0	5	12	6	8	2	6	..	..	..	226	1	6	32	1	6
Bedding and clothing	11,292	2	11	4,955	13	5	5,748	3	0	1,490	8	6	10,556	0	11	6,894	10	11
Buildings, including additions, &c.	893	3	7	975	18	2	1,221	3	7	89	16	3	476	1	0	706	17	9
Dental services	48	14	7	1	0	0	0	8	6	0	10	6	150	17	11	39	17	2
Farms, maintenance of	1,606	18	7	1,502	19	1	4,837	12	5	50	19	7	3,186	12	10	1,549	14	7
Fencing, draining, and roading	53	16	8	159	1	8	87	3	0	..	..	..	162	0	8	61	19	0
Freight, cartage, and transport	112	3	11	327	19	6	699	1	2	52	6	3	393	17	2	366	11	4
Fuel, light, water, &c.	8,402	13	3	4,500	7	10	8,121	19	4	366	18	6	8,669	7	1	7,617	9	11
Funeral expenses	109	0	0	142	10	0	134	12	6	..	..	..	139	17	3	215	10	0
Furniture and fittings	1,056	8	11	1,645	12	9	627	16	11	247	11	8	508	14	2	1,204	14	2
Gardens and shrubberies	55	15	6	93	19	0	27	9	7	35	11	4	80	2	1	54	0	1
Laundry	337	12	6	265	12	7	532	15	2	22	10	2	356	2	2	301	12	2
Machinery repairs and stores	156	4	3	140	16	5	517	4	7	1	7	2	204	8	1	165	12	9
Medical fees	758	13	1	135	10	10	254	5	9	0	10	6	886	12	7	147	2	9
Motor-vehicles—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maintenance of	30	13	2	96	18	8	365	14	2	20	0	9	285	14	5	180	5	2
Purchase of	..	..	..	..	..	..	283	13	0	119	0	4	719	12	6	722	13	11
Nursing staff uniforms	777	2	5	252	14	4	525	13	6	84	8	3	698	12	7	462	18	2
Office equipment	4	16	4	2	10	7	6	11	9	29	16	5	33	11	4	3	19	6
Patients, expenses connected with—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Friends	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gratuities	0	10	0	..	..	..	3	5	0	..	..	..	69	10	0	131	6	9
Recreation	1,783	13	3	751	11	2	867	7	11	80	19	4	886	18	8	856	6	5
Transfer	37	1	0	6	0	0	179	8	2	19	0	6	34	15	10	31	16	4
Postages, telegrams, &c.	136	19	3	114	18	7	257	11	11	15	8	6	214	1	11	86	0	8
Printing and stationery	236	7	9	226	2	3	212	4	5	41	12	9	278	12	2	192	15	0
Rations	21,937	3	1	14,562	3	11	15,789	14	4	945	12	0	22,961	0	10	16,094	3	3
Rents and rates	5	11	2	..	..	..	1,303	11	1	..	..	..	..	..	..	7	12	6
Stores	2,602	5	4	1,096	14	5	1,024	17	1	356	3	11	2,651	1	6	970	12	2
Surgery and dispensary	1,217	13	6	272	2	4	415	16	2	20	6	9	1,788	8	1	540	6	1
Telephone services	95	16	0	190	10	5	229	13	3	9	5	3	253	19	6	117	1	3
Transfer and removal expenses	187	6	11	4	3	4	286	13	8	10	1	8	107	12	7	33	0	7
Travelling-allowances	91	2	7	94	13	4	184	18	6	2	11	1	20	2	1	86	2	5
Travelling-expenses	338	15	11	28	5	9	328	10	10	19	8	7	129	9	2	69	2	6
Treatment in general hospitals—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Patients	20	0	0	7	0	0	11	5	6	..	..	..	55	1	0	..	..	..
Staff	3	0	0	2	2	0	33	13	0	..	..	..	5	10	0	3	2	0
Compensation under Workers' Compensation Act	..	..	..	..	..	..	..	..	..	..	..	..	1,000	0	0	..	..	..
Payment of monetary equivalent of leave due to deceased officers	..	..	..	..	..	..	..	..	..	..	..	..	48	19	4	..	..	..
Grants to widows or relations of deceased officers	..	..	..	..	..	..	..	..	..	..	..	..	82	15	0	..	..	..
Contingencies and miscellaneous	251	19	11	36	11	11	11	15	8	..	..	..	526	18	0	66	8	10
Totals	137,025	7	2	75,180	9	5	106,318	13	9	6,436	1	11	151,116	12	0	103,374	17	8

TABLE XI.—DEBITS FOR THE FINANCIAL YEAR 1945-46—*continued*

	Hokitika.	Christchurch.	Seacliff.	Head Office.	Totals.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Salaries, including overtime ..	35,818 16 5	94,468 2 6	90,064 19 3	12,889 19 5	576,854 5 5
Official visitors ..	11 11 0	14 14 0	..	..	87 0 8
Advertising, books, &c. ..	16 8 6	17 15 2	16 16 4	62 1 6	296 19 11
Bacteriological research ..	..	14 6 11	14 19 10	..	522 9 9
Bedding and clothing ..	3,617 5 5	11,237 15 5	6,268 9 0	..	62,060 9 6
Buildings, including additions, &c. ..	470 19 1	1,163 8 11	964 15 2	..	6,962 3 6
Dental services ..	8 16 6	98 16 0	21 5 0	..	370 6 2
Farms, maintenance of ..	868 1 6	2,427 3 2	4,138 2 2	..	20,168 3 11
Fencing, draining, and roading ..	3 18 11	98 17 0	162 7 3	..	789 4 2
Freight, cartage, and transport ..	57 19 1	548 13 0	535 14 4	..	3,094 5 9
Fuel, light, water, &c. ..	3,219 6 2	11,088 17 11	6,795 0 5	50 3 2	58,832 3 7
Funeral expenses ..	123 10 0	40 0 0	102 10 0	..	1,007 9 9
Furniture and fittings ..	266 4 6	837 13 11	746 19 3	12 0 6	7,153 16 9
Gardens and shrubberies ..	12 14 8	106 3 6	40 18 3	..	506 14 0
Laundry ..	101 6 6	252 1 2	342 10 6	..	2,512 2 11
Machinery repairs and stores ..	101 12 10	273 17 8	497 17 1	..	2,059 0 10
Medical fees ..	66 19 0	584 14 1	434 4 10	..	3,268 13 5
Motor-vehicles—					
Maintenance of ..	81 14 7	370 19 5	347 13 8	17 11 0	1,797 5 0
Purchase of ..	..	1,252 18 9	172 8 4	..	3,270 6 10
Nursing staff uniforms ..	298 7 0	237 11 9	981 12 9	..	4,319 0 9
Office equipment ..	3 7 9	2 3 4	34 5 7	41 12 1	162 14 8
Patients, expenses connected with—					
Friends ..	..	..	100 0 0	..	100 0 0
Gratuities ..	..	..	13 1 3	..	217 13 0
Recreation ..	382 13 2	1,238 2 0	1,125 0 7	..	7,972 12 6
Transfer ..	..	83 13 0	0 5 0	..	391 19 10
Postages, telegrams, &c. ..	41 1 0	151 7 3	152 7 6	143 16 7	1,313 13 2
Printing and stationery ..	130 3 3	262 13 5	161 4 1	78 10 6	1,820 5 7
Rations ..	9,453 1 5	22,608 7 1	17,810 16 6	..	142,162 2 5
Rents and rates ..	..	520 15 0	2 0 0	757 11 11	2,597 1 8
Stores ..	706 5 4	2,667 18 2	1,995 8 3	..	14,071 6 2
Surgery and dispensary ..	307 2 5	563 13 8	354 18 2	..	5,480 7 2
Telephone services ..	75 10 10	175 15 11	212 1 6	137 7 3	1,497 1 2
Transfer and removal expenses ..	165 15 5	87 3 0	33 9 4	4 3 9	919 10 3
Travelling-allowances ..	34 10 3	106 3 5	316 5 9	371 11 6	1,308 0 11
Travelling-expenses ..	83 7 4	80 15 5	137 15 9	294 15 7	1,510 6 10
Treatment in general hospitals—					
Patients ..	5 18 6	0 12 9	5 0 0	..	104 17 9
Staff ..	12 1 6	0 5 0	..	..	59 13 6
Compensation under Workers' Compensation Act ..	..	..	..	..	1,000 0 0
Payment of monetary equivalent of leave due to deceased officers ..	..	38 4 1	..	..	87 3 5
Grants to widows or relatives of deceased officers ..	..	..	148 6 8	..	231 1 8
Contingencies and miscellaneous ..	6 9 4	61 4 7	28 15 9	236 12 6	1,226 16 6
Totals ..	56,552 19 2	153,783 7 4	135,280 5 1	15,097 17 3	940,166 10 9

TABLE XIA.—CREDITS FOR THE FINANCIAL YEAR 1945-46

	Auckland.	Kingseat.	Tokanui.	Levin.	Porirua.	Nelson.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Receipts from maintenance*	834 19 1	151 0 0	450 15 6	..	2,276 6 1	617 10 0
Receipts from farms ..	1,481 10 3	1,772 6 10	3,903 15 8	..	1,792 5 10	2,143 8 10
Miscellaneous ..	7,717 11 7	3,557 8 10	5,436 12 0	10 3 0	9,149 16 0	5,652 6 10
Totals ..	10,034 0 11	5,480 15 8	9,791 3 2	10 3 0	13,218 7 11	8,413 5 8

  

	Hokitika.	Christchurch.	Seacliff.	Head Office.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Receipts from maintenance*	325 0 0	678 2 0	524 18 11	..	5,858 11 7
Receipts from farms ..	553 0 4	3,513 3 3	5,318 14 11	..	20,478 5 11
Miscellaneous ..	2,750 3 9	8,132 13 6	7,579 4 3	35 16 1	50,021 15 10
Totals ..	3,628 4 1	12,323 18 9	13,422 18 1	35 16 1	76,358 13 4

\* Outstanding accounts as at 31st March, 1939.



TABLE XII.—AVERAGE COST OF EACH PATIENT PER ANNUM

Mental Hospital.			Average Number resident (inclusive of Boarders).	Salaries.	Bedding and Clothing.	Buildings and Repairs.	Farm.	Fuel, Light, Water, and Cleaning.	Provisions
				£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Auckland	..	..	1,337	61 7 9	8 8 11	0 13 4	1 4 0	6 5 8	16 8 2
Kingseat	..	..	814	52 5 10	6 1 9	1 3 11	1 16 11	5 10 7	17 17 10
Tokanui	..	..	1,062	57 10 0	5 8 3	1 3 0	4 11 2	7 12 11	14 17 4
Levin	..	..	32	71 18 7	40 11 6	2 16 2	1 11 10	11 9 4	29 11 0
Porirua	..	..	1,145	80 11 4	9 4 4	0 8 4	2 15 8	7 14 5	20 1 1
Nelson	..	..	1,003	63 3 4	6 17 6	0 14 1	1 10 11	7 11 11	16 0 11
Hokitika	..	..	508	70 10 2	7 2 5	0 18 6	1 14 2	6 6 9	18 12 2
Christchurch	..	..	1,404	67 5 8	8 0 1	0 16 7	1 14 7	7 18 0	16 2 1
Seacliff	..	..	985	91 8 9	6 7 3	0 19 7	4 4 0	6 18 0	18 1 8
Head Office	..	..	8,290	1 11 2	..	..	..	0 0 1	..
Total average cost			8,290	69 11 8	7 9 9	0 16 10	2 8 8	7 1 10	17 3 0

  

		Surgery and Dispensary.	Miscellaneous.	Total Cost per Patient (a).	Repayments (b) (c).	Net Cost per Patient (b).	Net Cost previous Year.	Decrease in 1945-46.	Increase in 1945-46.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Auckland	..	0 18 3	7 3 7	102 9 8	6 17 7	95 12 1	59 4 11	..	36 7 2
Kingseat	..	0 6 8	7 3 8	92 7 2	6 10 11	85 16 3	58 4 8	..	27 11 7
Tokanui	..	0 7 10	8 11 9	100 2 3	8 15 11	91 6 4	59 3 6	..	32 2 10
Levin	..	0 12 9	36 11 5	201 2 7	0 6 4	200 16 3	..	..	..
Porirua	..	1 11 3	9 16 2	131 19 7	9 11 2	122 8 5	90 7 0	..	32 1 5
Nelson	..	0 10 9	6 11 11	103 1 4	7 15 5	95 5 11	60 18 9	..	34 7 2
Hokitika	..	0 12 2	5 10 2	111 6 6	6 10 1	104 16 5	69 15 5	..	35 1 0
Christchurch	..	0 8 0	7 5 8	109 10 8	8 5 11	101 4 9	65 1 3	..	36 3 6
Seacliff	..	0 7 3	9 0 4	137 6 10	13 1 11	124 4 11	82 14 5	..	41 10 6
Head Office	..	..	0 5 2	1 16 5	0 0 1	1 16 4	1 6 3	..	0 10 1
Total average cost..		0 13 3	8 3 2	113 8 2	8 10 1	104 18 1	69 6 8	..	35 11 5

NOTES.—(a) Cost does not include interest and depreciation on land, buildings, &c. (b) Receipts from maintenance shown in Table XIa not included. (c) Contributions from Social Security Fund ceased as from 1st April, 1945.

TABLE XIII.—EXPENDITURE OF PUBLIC WORKS FUND ON MENTAL HOSPITAL BUILDINGS, ETC., DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1946

Mental Hospitals.				Net Expenditure for Year ended 31st March, 1946.
				£
Auckland	..	..	..	7,307
Christchurch	..	..	..	701
Hokitika	..	..	..	43
Nelson and Stoke	..	..	..	1
Porirua	..	..	..	45,866
Kingseat	..	..	..	1,487
Seacliff	..	..	..	24,918
Tokanui	..	..	..	1
Marton	..	..	..	44,696
Levin	..	..	..	83,967
				208,987

TABLE XIV.—TOTAL EXPENDITURE OF PUBLIC WORKS FUND FOR BUILDING AND EQUIPMENT AT EACH MENTAL HOSPITAL FROM 1ST JULY, 1877, TO 31ST MARCH, 1946

Mental Hospitals.	1877-1936.	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.
	£	£	£	£	£	£
Auckland .. ..	234,122	842	5,658	907	7,118	2,659
Christchurch .. ..	343,313	23,970	16,397	6,784	17,252	13,326
Dunedin (The Camp) .. ..	4,891	..	..	..	..	..
Hokitika .. ..	92,487	7,580	2,097	1,140	26,793	10,233
Hornby .. ..	11,102	..	..	..	..	..
Motuihi Island .. ..	561	..	..	..	..	..
Napier .. ..	147	..	..	..	..	..
Nelson and Stoke .. ..	189,429	16,218	2,234	15,458	39,469	34,119
Puhitahi (Kingsseat) .. ..	130,036	65,192	52,144	71,149	62,896	45,095
Seacliff .. ..	312,148	2,958	570	2,527	1,082	707
Tokanui .. ..	239,643	18,839	2,855	6,903	9,922	13,662
Waitati .. ..	32,321	..	..	..	..	..
Wellington .. ..	29,641	..	..	..	..	..
Wellington (Porirua) .. ..	346,529	6,510	20,502	23,948	10,894	6,843
Marton .. ..	..	..	..	..	..	..
Levin .. ..	..	..	..	..	..	..
Totals .. ..	1,966,370	142,109	102,457	128,816	175,426	126,644

  

Mental Hospitals.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.	Total Net Expenditure 1st July, 1877, to 31st March, 1946.
	£	£	£	£	£	£
Auckland .. ..	885	327	1,983	2,504	7,307	264,312
Christchurch .. ..	6,815	1,885	2,210	766	701	433,419
Dunedin (The Camp) .. ..	..	..	..	..	..	4,891
Hokitika .. ..	23,944	3,842	125	180	43	168,464
Hornby .. ..	..	..	..	..	..	11,102
Motuihi Island .. ..	..	..	..	..	..	561
Napier .. ..	..	..	..	..	..	147
Nelson and Stoke .. ..	11,957	1,010	4	37	1	309,936
Puhitahi (Kingsseat) .. ..	25,052	3,569	637	424	1,487	457,681
Seacliff .. ..	1,855	1,301	..	6,526	24,918	354,592
Tokanui .. ..	2,128	112	1	1	1	294,067
Waitati .. ..	..	..	..	..	..	32,321
Wellington .. ..	..	..	..	..	..	29,641
Wellington (Porirua) .. ..	7,191	3,485	83,253	20,623	45,866	575,644
Marton .. ..	..	..	519	6,680	44,696	51,895
Levin .. ..	..	..	..	..	83,967	83,967
Totals .. ..	79,827	15,531	88,732	37,741	208,987	3,072,640

*Approximate Cost of Paper.*—Preparation, not given ; printing (518 copies, £105)

By Authority: E. V. PAUL, Government Printer, Wellington.—1946.

Price 9d.]