

Annual report on the health and medical services of the state of Queensland.

Contributors

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1948.

QUEENSLAND.

ANNUAL REPORT
ON THE
HEALTH AND MEDICAL SERVICES
OF THE
STATE OF QUEENSLAND
FOR THE
YEAR 1947-48.

PRESENTED TO PARLIAMENT BY COMMAND.

BRISBANE :
BY AUTHORITY: A. H. TUCKER, GOVERNMENT PRINTER.

A. 30—1948.

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ANNUAL REPORT OF THE DIRECTOR-GENERAL OF HEALTH AND MEDICAL SERVICES, 1947-48.

The Honourable the Minister for Health and Home Affairs.

SIR,—I have the honour to submit for your information the annual report of the activities of the Health and Medical Services Branch of the Department of Health and Home Affairs (Queensland) during the year ended 30th June, 1948.

STAFF.

Shortage of suitable trained medical staff has been responsible for the limited expansion during the year. The positions of Deputy Director-General of Health and Medical Services, Deputy Director of the Laboratory of Microbiology and Pathology, and the Deputy Director of the Section of Maternal and Child Welfare are all vacant, but it is anticipated that all positions will be filled by trained practitioners before the end of 1948.

Dr. T. H. R. Mathewson retired as Director of Maternal and Child Welfare on 31st December, 1947. He has been interested in child health for many years. Previous to becoming Director he was senior physician at the Hospital for Sick Children. Under his control the various activities of the Section greatly expanded, and in this regard I would particularly refer to the Toddlers' Centres which care for children between the ages of one and five years. He has consented to accept a part-time position, so his services are not lost to the children of the State. He was succeeded by the Deputy Director, Dr. H. C. Murphy.

Dr. D. W. Johnson has not yet returned from sick leave, but it is anticipated that he will resume duty on 1st September, 1948.

Dr. J. I. Tonge had his acting appointment as Director of the Laboratory of Microbiology and Pathology confirmed on 29th May, 1948.

Dr. L. Archibald transferred to School Health Services from the Women's Clinic, and was granted leave to attend the course for the Diploma in Dermatology at the Sydney University.

Miss J. McNae, B.Sc., resigned from the position of Nutrition Adviser on 28th February, 1948.

SECTION OF MATERNAL AND CHILD WELFARE.

Further extension of this service has taken place with the opening of new centres. There is still a big shortage of permanent staff and it would appear that this will be the case for some years. The main difficulty is in inducing nurses to go to the country. The work in

these areas, which necessitates constant travelling, is very strenuous and the staff is to be congratulated on the way in which it has managed to keep the sub-centres open, despite the weather and the railway strike.

The statistics for deaths from prematurity do not show any decrease on last year. A survey of facilities in the country shows there is room for improvement and it is hoped that this improvement will take place in the immediate future, but I am of the opinion that the chief reason is lack of nurses who have specialised in infant welfare. Until such time as sufficient trained personnel are available, a marked improvement in the figures cannot be anticipated.

The suggestion that a "mothercraft section" should be established in maternity hospitals has much to commend it and discussion will take place in this regard during the coming year.

SECTION OF INDUSTRIAL HYGIENE.

This section continues to expand. A conference between officers of the Department of Mines, Department of Labour and Industry, and Department of Health and Home Affairs took place to consider the best means of securing co-operation and preventing overlapping. It was agreed that the Section of Industrial Hygiene would act in an advisory capacity, leaving the implementation of recommendations to the Departments concerned. As a result, the liaison that was hoped for last year has been achieved.

An approach was made, on the recommendation of the Medical Officer in Industrial Hygiene, to the Faculty of Engineering and the Director-General of Education with the suggestion that students be taught the elements of prevention of industrial hazards. Approval has been given for this, and it is hoped that instruction will be given in the near future.

SCHOOL HEALTH SERVICES.

Limited medical examinations of school children have been continued as previously. It is essential that a full medical examination should be carried out periodically during the child's school life, but until medical practitioners are available this cannot be done.

The dental staff has been increased by one dentist. This branch of School Health Services is to be commended for the excellent work it is doing for the children in isolated areas.

SECTION OF ENTHETIC DISEASES.

It is pleasing to see there is a big decrease in the number of cases of gonorrhoea notified as compared with the previous year, while notifications for syphilis have not increased significantly. While penicillin is a factor in this decrease in gonorrhoea, I am of the opinion that the care taken by the medical officers in endeavouring to trace the source of infection so that treatment may be given before further spread occurs is the main factor. It would be wishful thinking to suggest an improvement in moral standards is a factor in the decrease.

VITAL STATISTICS.

The estimated population of the State at 1st January, 1948, was 1,106,279, an increase of

7,944. That of Brisbane at the same date was approximately 402,172, an increase of 2,172.

The crude birth rate is 25.7, which shows an increase of 0.9 per 1,000 population. It was only exceeded in Australia by Tasmania for the year, as was also the case in 1946.

The crude death rate is 9.2, and is the lowest in Australia, being equalled only by Tasmania.

The infant mortality rate, 30.8, is an increase of 1.5 on that of 1946. The increased number of deaths from gastro-enteritis will explain this. Accurate figures are not available but if allowances are made for the increase due to the epidemic the figure would be 28.8. This figure is still too high, and research must be carried out during the coming year to ascertain the reason.

TABLE I.
CRUDE BIRTH RATE (PER 1,000 POPULATION).

—	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.	1947.
Commonwealth of Australia ..	17.6	17.9	18.9	19.1	20.6	21.0	21.7	23.6	24.1
Queensland	20.0	19.9	20.8	20.4	22.2	23.1	24.8	24.8	25.7
New South Wales	17.5	17.8	18.5	18.6	20.0	20.7	21.1	22.8	23.2
Victoria	16.2	16.8	17.8	18.3	19.7	19.8	20.5	23.1	23.1
South Australia	16.1	16.7	18.2	18.5	21.4	21.5	22.3	24.8	25.2
Western Australia	19.2	19.3	21.4	20.8	22.0	22.6	21.9	24.6	25.6
Tasmania	20.5	20.7	21.7	22.0	23.0	21.2	23.3	27.2	27.7
New Zealand	18.7	21.2	22.8	21.7	19.7	21.6	23.2	25.2	26.4
England and Wales	14.9	14.5	14.1	15.6	16.2	17.5	16.1	19.1	20.5
Scotland	17.4	17.1	17.5	17.6	18.4	18.5	16.9	*	*
Eire	19.1	19.1	19.0	22.3	22.3	22.0	22.3	*	*
North Ireland	19.5	19.6	20.8	22.8	24.2	23.5	22.0	*	*
Canada	20.3	21.4	22.3	23.4	24.0	23.8	23.8	*	*

* Not available.

TABLE II.
CRUDE DEATH RATE (PER 1,000 POPULATION).

—	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.	1947.
Commonwealth of Australia ..	9.9	9.7	10.0	10.5	10.3	9.5	9.5	10.0	9.7
Queensland	9.4	9.0	9.2	9.3	10.1	8.8	8.8	9.8	9.2
New South Wales	9.8	9.4	9.8	10.3	10.1	9.2	9.2	9.7	9.5
Victoria	10.7	10.7	10.6	11.2	10.8	10.3	10.2	10.6	10.4
South Australia	9.6	9.5	10.4	11.0	10.6	9.7	9.6	10.2	9.6
Western Australia	9.2	9.6	10.1	10.7	9.6	9.3	9.7	9.6	9.4
Tasmania	10.2	9.9	10.7	10.1	10.4	10.2	9.7	10.1	9.2
New Zealand	9.2	9.2	9.8	10.6	10.0	9.9	10.1	9.7	9.4
England and Wales	12.1	13.9	12.8	11.5	11.9†	11.6†	11.4†	11.5†	12.0
Scotland	12.9	14.9	14.7	13.3	14.0	13.6	13.2	*	*
Eire	14.2	14.2	14.6	14.0	14.7	15.4	14.4	*	*
North Ireland	13.5	14.6	15.2	13.3	13.4	12.8	12.3	*	*
Canada	9.6	9.7	10.0	9.7	10.1	9.7	9.3	*	*

* Not available.

† Provisional.

TABLE III.
INFANT MORTALITY RATE (DEATHS UNDER 1 YEAR PER 1,000 BIRTHS.)

—	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.	1947.
Commonwealth of Australia ..	38.2	38.4	39.7	39.5	36.3	31.3	29.4	29.0	28.6
Queensland	35.5	35.3	39.1	34.8	37.8	31.3	29.8	29.3	30.8
New South Wales	41.0	39.0	43.8	40.2	36.2	30.7	30.6	30.2	29.8
Victoria	35.6	39.4	36.2	41.7	35.8	33.0	28.0	27.2	26.2
South Australia	34.9	35.5	32.5	39.7	36.7	28.8	28.1	27.1	24.3
Western Australia	40.8	44.2	35.3	36.9	32.6	32.7	29.5	31.1	30.9
Tasmania	40.6	35.2	49.0	42.4	40.6	38.3	27.5	30.1	27.3
New Zealand	31.1	30.2	29.8	28.7	31.4	30.1	28.0	26.1	25.0
England and Wales	50.0	55.0	58.0	49.0	49.0	46.0	46.0	43.0	41.0
Scotland	68.5	78.3	82.7	69.3	65.2	65.0	56.0	*	*
Eire	66.0	66.0	73.0	68.0	80.0	79.0	69.0	*	*
North Ireland	70.0	86.0	77.0	76.0	78.0	67.0	68.0	*	*
Canada	61.0	56.0	60.0	54.0	54.0	55.0	51.0	*	*

* Not available.

TABLE IV.

EXPECTATION OF LIFE AT VARIOUS AGES IN YEARS (AVERAGE OF MALE AND FEMALE EXPECTATIONS).

Country.	Period on which Data Calculated.	Expectation of Life, in Years, at Age.							
		0	1	10	20	30	40	50	60
Commonwealth of Australia..	1932-34	65.3	67.1	59.5	50.2	41.3	32.6	24.2	16.7
Queensland	1932-34	64.9	66.8	59.3	50.0	41.3	32.7	24.4	16.9
New Zealand	1934-38	67.0	68.2	60.3	51.0	42.0	33.0	24.6	16.8
England and Wales	1937	62.3	65.1	57.9	48.8	40.0	31.2	22.8	15.4
Scotland	1930-32	57.8	61.9	56.1	47.2	38.6	30.3	22.3	15.0
Canada	1940-42	59.8	67.4	59.9	50.6	41.8	32.9	24.5	16.8
Ireland	1935-37	58.9	62.4	55.9	47.0	38.9	30.7	22.8	15.8

COMMUNICABLE DISEASES.

An epidemic of what has been popularly known as gastro-enteritis occurred during the year. The causative organisms were members of the *Salmonella* group, the main one being the *Salmonella bovis-morbificans*. A total of 484 cases under two years of age was admitted to the Brisbane Children's Hospital, with 57 deaths. The epidemic was investigated by the Queensland Institute of Medical Research, who made recommendations for its control.

Twenty-six cases of poliomyelitis have been reported, 20 notifications being received during the first five months of this year. This is noted because it is unusual to get cases during the late autumn. In 1945, odd cases which occurred during the cold months presaged the epidemic which occurred later in the year. For the years 1938-1947, inclusive, 816 cases of poliomyelitis were reported, with 91 deaths. A large number of these cases recovered. For the same period there were 1,512 deaths from motor accidents, so it can be well imagined the amount of crippling which must take place from this cause. This is mentioned in the hope that in any future epidemic poliomyelitis will be kept in its right perspective and any publicity given will be such that it will not cause panic amongst parents.

It is pleasing to see a decrease of 47 in the number of notifications received for tuberculosis. A conference of Health Ministers of the Commonwealth and States was held during the year and a plan for the control of this disease was approved for recommendation to the Premiers' Conference in August. It is hoped that the implementation of the plan will be commenced before the end of the year.

There has been no epidemic occurrence of the notifiable communicable diseases during the past year.

Typhoid fever and paratyphoid fever.—The number of cases notified was Brisbane 5, outside areas 11, total 16, as against Brisbane 5, outside areas 7, total 12, for the previous year.

Malaria.—There has been a marked decrease in the number of malaria notifications. This is as expected and is due to the adequate treatment of ex-members of the Armed Forces with paludrine, and to the fact that *Plasmodium vivax* dies out after two or three years. There have been no epidemics of primary malaria, i.e., first infections, in the State. *Anopheles punctulatus farauti* was found at Palm Island. This is a good vector of malaria and care must be taken to see that natives suffering from malaria are isolated.

The Cairns City Council is doing excellent work in mosquito control. While this continues, an epidemic in Cairns similar to that of 1942 should not occur. Local Authorities have continued to take advantage of the Government's loan subsidy scheme in mosquito eradication, and Cabinet has decided that this subsidy will be granted to Councils during the year 1947-48.

Poliomyelitis, acute anterior.—As mentioned above, there were 26 notifications of poliomyelitis, 6 being from the metropolitan area and 20 from outside areas. The figures for 1946-47 were, 14 metropolitan, 9 extra-metropolitan, total 23.

Tuberculosis.—The number of cases reported was 282 in the metropolitan area and 194 from outside areas, bringing the total to 475 as against 301 and 222 respectively for the previous year. The figure of 282 for the metropolitan area includes 60 ex-servicemen who were reported from the Repatriation Hospital.

Plans for a sanatorium for Brisbane were completed and a start was made on the foundations, but little progress has taken place due to shortage of materials and tradesmen.

Diphtheria.—A total of 271 cases was reported, 222 being from the extra-metropolitan area and 49 from the metropolis. This represents a considerable decrease when compared with last year's figures of 81 metropolitan, 368 extra-metropolitan, total 449. It would appear that in most Local Authority areas the number of children immunised is over 75 per cent.

TABLE V.

COMMUNICABLE DISEASES (EXCLUSIVE OF VENEREAL DISEASES) 1ST JULY, 1947, TO 30TH JUNE, 1948.
METROPOLITAN AREA (POPULATION AT 1ST JULY, 1947—402,172).

Diseases.	Months.												Totals 1947- 1948.
	1947.						1948.						
	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.	
Anchylostomiasis ..	1	1	..	..	..	..	..	..	1	1	..	1	5
Anthrax	..	..	..	..	..	..	..	..	..	..	..	..	..
Bilharziasis	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..
Coastal Fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	6	5	..	7	7	8	1	5	7	2	1	..	49
Dysentery, Amoebic ..	..	..	..	1	..	..	..	..	1	..	1	..	3
Dysentery, Bacillary ..	..	1	..	2	6	1	1	..	..	..	..	..	11
Encephalitis Lethargica	..	..	..	..	..	..	..	..	..	..	..	..	..
Filariasis	..	..	..	..	..	..	..	..	..	..	..	..	..
Lead Poisoning	1	1	..	1	..	..	..	3	..	..	..	..	6
Leprosy	..	..	..	..	..	..	..	..	..	..	..	..	..
Leptospirosis (Weil's Disease, Parav Weil's Disease, Seven-day Fever)	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria	41	46	17	35	3	16	8	10	4	5	7	..	192
Meningitis, Cerebro-spinal	2	3	2	..	1	..	..	..	..	..	..	2	10
Mossman Fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague, Bubonic or Oriental	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis, Acute Anterior	..	1	..	..	..	..	..	1	1	..	3	..	6
Puerperal Fever	..	..	..	..	..	1	..	..	..	..	..	..	1
Puerperal Pyrexia	8	3	9	9	3	3	3	4	1	2	9	2	56
Relapsing Fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Sarina Fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever or Scarlatina	19	22	22	12	18	17	14	18	11	9	6	11	179
Smallpox (including Anas or Alastrim)	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis (all forms)	30	31	20	21	23	26	18	18	20	28	22	25	282
Tetanus	..	..	..	2	2	4	1	1	1	1	1	3	16
Typhoid Fever(including Paratyphoid Fevers)	..	..	1	..	1	2	..	..	..	..	1	..	5
Typhus Fever (including Rural and Urban forms and Japanese River Fever)	..	1	1	1	4	..	1	3	2	1	..	1	15
Undulant (Malta) Fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Yellow Fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	108	115	72	91	68	78	47	63	49	49	51	45	836

TABLE VI.

COMMUNICABLE DISEASES (EXCLUSIVE OF VENEREAL DISEASES) 1ST JULY, 1947, TO 30TH JUNE, 1948.
EXTRA-METROPOLITAN AREA (POPULATION AT 1ST JULY, 1947—704,097).

Diseases.	Months.												Totals 1947- 1948.
	1947.						1948.						
	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.	
Anchylostomiasis ..	..	..	..	..	3	2	..	2	6	..	1	..	14
Anthrax	..	..	..	..	..	..	..	..	..	..	..	..	..
Bilharziasis	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..
Coastal Fever ..	1	..	..	..	..	2	..	1	..	1	1	1	7
Diphtheria	27	28	28	26	15	15	12	6	12	18	15	20	222
Dysentery, Amoebic ..	..	..	..	18	..	..	..	1	..	..	..	..	19
Dysentery, Bacillary ..	1	..	..	1	..	3	..	..	..	1	..	..	6
Encephalitis Lethargica	..	..	..	..	1	..	..	..	..	..	..	..	1
Filariasis	..	..	..	..	..	..	..	..	..	..	..	..	..
Lead Poisoning ..	..	..	..	..	1	1	..	2	..	..	..	3	7
Leprosy	..	4	..	..	..	..	3	1	3	..	1	..	12
Leptospirosis (Weil's Disease, Paraweil's Disease, Seven-day Fever)	2	..	..	1	..	3	..	1	..	..	..	..	7
Malaria	20	9	14	..	2	5	6	5	2	6	1	4	74
Meningitis, Cerebrospinal	1	1	1	1	1	1	1	..	1	..	2	5	15
Mossman Fever ..	..	..	..	..	..	..	..	1	2	..	2	..	5
Plague, Bubonic or Oriental	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis, Acute Anterior	2	1	..	1	1	..	2	5	3	5	..	..	20
Puerperal Fever ..	..	1	1	..	..	..	..	1	..	..	..	..	3
Puerperal Pyrexia ..	2	..	2	1	..	..	1	2	..	2	..	..	10
Relapsing Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sarina Fever.. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever or Scarletina ..	22	27	15	15	20	25	29	28	25	24	16	19	265
Smallpox (including Amaas or Alastrim) ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis (all forms)	6	25	30	8	22	12	9	18	20	22	13	9	194
Tetanus	1	1	2	1	..	6	1	..	..	..	1	1	14
Typhoid Fever (including Paratyphoid Fevers)	..	..	..	..	..	3	1	..	2	3	2	..	11
Typhus Fever (including Rural and Urban Forms and Japanese River Fever)	9	4	5	2	1	1	1	9	6	5	5	2	50
Undulant (Malta) Fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Yellow Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	94	101	98	75	67	79	66	83	82	87	60	64	956

TABLE VII.
NOTIFIED INCIDENCE OF COMMUNICABLE DISEASES IN QUEENSLAND (EXCLUSIVE OF VENEREAL DISEASES),
SECTION 29 OF "THE HEALTH ACTS, 1937-1946," DURING THE CALENDAR YEAR 1947.

Disease.	Cases Reported on Prescribed Form.			
	Metropolis.	Outside Areas.	Total Whole State, 1947.	Total Whole State, 1946.
Anchylostomiasis	4	8	12	21
Anthrax	..	..	..	..
Bilharziasis	..	..	..	..
Cholera	..	..	..	..
Coastal Fever	..	4	4	6
Diphtheria	79	377	456	461
Dysentery, Amoebic	2	3	5	2
Dysentery, Bacillary	12	12	24	2
Encephalitis Lethargica	..	2	2	2
Filariasis	2	..	2	1
Lead Poisoning	5	3	8	9
Leprosy	..	8	8	12
Leptospirosis (including Weil's Disease, Paraweil's Disease, Seven-day Fever)	..	8	8	..
Malaria	537	252	789	1,994
Meningitis, Cerebrospinal	19	17	36	36
Mossman Fever	..	4	4	5
Plague, Bubonic or Oriental	..	..	..	..
Poliomyelitis, Acute Anterior	11	8	19	149
Puerperal Fever	1	4	5	9
Puerperal Pyrexia	109	15	124	136
Relapsing Fever	..	..	..	1
Sarina Fever	..	..	..	..
Scarlet Fever or Scarlatina	210	263	473	491
Smallpox (including Amaas or Alastrim)	..	..	..	..
Tetanus	16	17	33	41
Tuberculosis (all forms)	328	230	558	398
Typhoid Fever (including Paratyphoid Fevers)	6	8	14	11
Typhus Fever (including Rural and Urban Forms, and Japanese River Fever)	23	40	63	75
Undulant (Malta) Fever	..	1	1	1
Yellow Fever	..	..	..	..
Totals	1,364	1,284	2,648	3,863

LEPROSY.

ERIC J. REYE, M.B., B.S. (Qld.) Medical Officer in Charge. F. MAHONY, Superintendent.

(A) LEPROSY AMONG WHITES.

Population Statistics.—There are at present 52 patients on Peel Island, and Table VIII. shows the number there on first, second, and third admissions:—

TABLE VIII.

Admission.				Number.	Re-admissions.
First	..	..	..	27	25
Second	..	..	..	22	
Third	..	..	..	3	
Total	..	..	..	52	

Table IX. shows the admissions for the last three years, and it will be seen that the total number of patients has increased by four over the period:—

TABLE IX.

—	1945-46.			1946-47.			1947-48.			Total for 3 years.
	M.	F.	T.	M.	F.	T.	M.	F.	T.	
Admitted	4	3	7	11	3	14	7	1	8	29
Discharged	4	2	6	4	0	4	5	3	8	18
Died	1	2	3	0	1	1	1	2	3	7
Increase	..	..	..	7	2	9	1	0	0	4
Decrease	1	1	2	..	..	..	4	3	..	..

Table X. shows the number of patients at 30th June, 1948, as compared with the number at the beginning of the financial year.

TABLE X.

—	Males.	Females.	Totals.
As at 1-7-47	41	14	55
Admitted	7	1	8
Discharged	5	3	8
Died	1	2	3
As at 30-6-48	42	10	52

In a survey of the ages of all patients at 30th June, 1948, it was found that 32 were over the age of 40, and of these 6 were over 70; of these 6, two were over 80. The highest incidence was found in the 30-40 age group, with 14 cases. The average age of the patients was 47.3 years, i.e., six years lower than the average found one year before.

Causes of Death.—The three deaths during the year occurred in two females and one male. The females were aged 84 and 90 years and both died from broncho-pneumonia complicating hypertensive cardiac failure. The male was aged 74 years and died from acute heart failure due to hypertension and coronary atheroma.

Treatment.—Once more the passing of a year has seen a considerable change in the treatment of leprosy at Peel Island, in that all patients who are co-operating are now receiving sulphone therapy. Unfortunately, due to continued shortage of medical staff, this has been more in the nature of emergency treatment, with but scant observation and record of progress under these treatments.

(a) *Promin.*—The treatment with promin, which began in January, 1947, was carried through under difficulty to the end of January, 1948. Fourteen of the cases who started, completed the full twelve months' treatment and six who started in January, 1947, were displaced after six months' treatment in favour of six other patients whose condition had been deteriorating. The use of promin was abandoned in view of the time required for its administration. The giving of intravenous injections took too long, interfered with other necessary work, and the continuity of treatment depended on too many factors for surety. From 1st July, 1947, to 30th January, 1948, 10,470 gm. of promin were given in 2,514 intravenous injections thus making the total for the twelve months' course 18,474 gm. given in 4,191 intravenous injections. The results of promin therapy may be regarded as highly satisfactory in view of the fact that a number of cases receiving it were in a very serious condition and that at the end of twelve months all were out of danger. The effect of promin was characterised by rapid healing of numerous ulcers, subsidence of macules, and by increase in weight, appetite, and morale.

(b) *Diasone.*—Treatment with diasone was commenced for those patients not on promin in November, 1947, and for those who had been on promin for the full twelve months in February, 1948. As this drug is given by mouth, its administration was possible to all those who would co-operate (the overwhelming majority), and the results of its use have so far been quite satisfactory. As diasone was reported to cause severe anaemia in the early stages of its administration the Brisbane Branch of the Red Cross Blood Transfusion Service very kindly made blood available so that a continual supply was on hand in case of emergency. Fortunately no such emergency occurred, cases of anaemia either recovering spontaneously or responding favourably to ordinary haematinics. In one case of severe granulopenia, recovery was effected on the first occasion by the use of pentosenucleotide and on the second occasion by pentosenucleotide with the addition of penicillin and liver extract.

All patients who have been discharged since the inception of diasone therapy are continuing treatment outside under the care of their own doctor. It is hoped in the course of time that the majority of patients on parole will be receiving treatment with diasone, as also those cases in whom leprosy is diagnosed in a non-infectious stage. Providing results are up to expectations, this should result in a great saving as the cost of segregation at Peel Island is over £500 per patient per year.

To the end of December, 1947, 3,045 tablets of diasone were used. From 1st January, 1948, to 30th June, 1948, 22,857 tablets were used on patients at Peel Island and 2,051 were sent out for patients on parole, making the total for the whole year 27,953 tablets, equivalent to approximately 9,320 gm.

Laboratory.—Laboratory activities have been extended during the past year, firstly by the addition of a part-time assistant in September, 1947, and in January, 1948, by the addition of a laboratory technician. This was necessary in view of the increased work due to the use of diasone, and has also made it possible to do

differential leucocyte counts on the island, relieving the strain on the Laboratory of Pathology and Microbiology. Table XI. shows the work carried out by the Laboratory during the year. A start has been made on diasone estimations in urine in an attempt to control dosage.

TABLE XI.

—			Haemoglobin Estimations.	Red Cell Counts.	White Cell Counts.	Differential Leucocyte Counts.	Arneth Counts.	Microscopic Examinations of Urine.
1-7-47 to 31-12-47	..	..	1,174	533	536	..	..	459
1-1-48 to 30-6-48	..	..	1,054	914	910	627	7	568
Total, 1947-48	..	..	2,228	1,447	1,446	627	7	1,027

Staff (Medical).—The medical staff remains at the same strength as at the end of last year.

Medical Records.—Practically no improvement in the medical records has occurred during the year, and no improvement is anticipated until more staff is available.

(B) LEPROSY AMONG ABORIGINALS.

It has not been possible to do any surveys during the year, though a number of admissions to Fantome Island during the year have been cases in which the disease was suspected in the last survey.

It is hoped that next year will see marked advances in the treatment of the disease among natives.

(C) GENERAL REMARKS.

Records.—The task of catching up on past records is still a large one and work done during the year has only served to emphasise their incompleteness.

Epidemiology.—No new data have emerged from the year's work and the present state of the disease in Queensland remains virtually unknown. The disease is a difficult one for the general practitioner to diagnose. The arrest of the disease still appears to lie in diagnosis and treatment as early as possible. It is known that in whites infection is transmitted in the majority of cases only by close and prolonged contact with a case and that the incubation period may be up to twenty years or more. In natives, both contact and incubation periods are shorter. The solution to the problem in both cases is, however, the same; repeated thorough examinations of known close contacts over a long period.

The longer the delay in doing this the more dispersed become the known contacts and the more widespread the disease.

The past twelve months have seen a big change in general amenities at Peel Island. The year has been marked by increased Public Works activity; the acquisition of six army huts for conversion into the following:—Temporary ward, medical officer's quarters, male staff quarters, and dining room, patient accommodation. The work of conversion is still going on. Accommodation has been further augmented by the transfer of several buildings from the old institution at Dunwich.

Just before Christmas the electric light plant which had been installed during the first half of the year came into action and is very greatly appreciated. Shortly afterwards, the motion picture equipment was installed and weekly programmes have been much enjoyed ever since.

In August, 1947, a visit was paid by the Honourable the Minister, the Under-Secretary, and the Director-General, and several Members of Parliament, to discuss various matters with patients and staff.

During the year much planning has been done following the decision of Cabinet to rebuild the institution on another site on the island. The plans are still in the hands of the architects and a new road is under construction from the present site to the new site to link up with a proposed new jetty.

Visits by the Salvation Army and others have been much appreciated.

SECTION OF ENTHETIC DISEASES.

(GEOFFREY HAYES, M.B., Ch.M. (Syd.), Medical Officer in Charge;
BEATRICE WARNER, M.B., B.S. (Melb.), Medical Officer).

During the year 1,000 persons were notified as suffering from venereal disease, as compared with 1,373 for the previous year. Of these 243 were females and 757 males as compared with 346 and 1,027 respectively in the previous year. So that secrecy might be observed notification was by number, not name.

Of the 1,000 persons, 4 had double infections, representing 1,004 actual cases of disease. Of

these cases 317 were syphilitic and 670 gonorrhoeal as compared with 304 and 1,046 respectively for the previous year.

It should be noted that in contrast to the big fall in notification figures for gonorrhoea, those for syphilis show an increase, and this is a subject for special comment later in this report.

The following table summarises the notifications received by the Department:—

TABLE XII.

				Brisbane.		Rest of State.		Whole State.		Total.
				Males.	Females.	Males.	Females.	Males.	Females.	
Gonorrhœa—										
Unspecified	..	..	..	8	11	24	4	32	15	47
Acute	..	..	..	395	57	76	13	471	70	541
Sub-acute	..	..	..	4	22	3	7	7	29	36
Chronic	..	..	..	4	19	7	5	11	24	35
Vulvo-vaginitis	..	..	..	..	..	..	5	..	5	5
Ophthalmia (Gonorrhœal)	..			..	..	..	1	..	1	1
Proctitis (Gonorrhœal)	..			1	..	..	..	1	..	1
Syphilis—										
Unspecified	..	..	..	26	17	2	3	28	20	48
Primary	..	..	..	93	21	20	8	113	29	142
Secondary	..	..	..	23	20	8	8	31	28	59
Tertiary	..	..	..	4	3	..	7	4	10	14
Latent	..	..	..	26	5	4	3	30	8	38
Heredo	..	..	..	5	1	..	..	5	1	6
Neuro	..	..	..	5	..	1	..	6	..	6
Ulcerative Granuloma	..	..		..	1	..	..	..	1	1
Venereal Warts	..	..	..	14	..	..	..	14	..	14
Soft Sore	..	..	..	..	1	1	..	1	1	2
Gonorrhœa and Syphilis	..	..		2	1	..	..	2	1	3
Gonorrhœa and Secondary Syphilis				1	..	..	..	1	..	1
				611	179	146	64	757	243	1,000

One would like to think that these figures are truly representative and point to a decreased incidence of venereal disease. Possibly so far as gonorrhoea is concerned this may be the case as modern treatment has markedly curtailed the infectious period and has resulted in fewer incomplete cures. However, over the years, the figures for syphilis have shown a steady

increase, especially in the early forms of syphilis (primary and secondary). Modern treatment has lessened the period required for cure of syphilis, but it has not in any way lessened the infectious period, because syphilis, unlike gonorrhoea, is a disease with a long incubation lag, during which time it is symptomless but infectious.

The following table for the past sixteen years illustrates this tendency.

TABLE XIII.

	Total Syphilis.	Early (Infectious) Syphilis.	Gonorrhoea.
1932-33 ..	344	64	1,087
1933-34 ..	343	77	1,196
1934-35 ..	228	51	998
1935-36 ..	123	28	993
1936-37 ..	187	44	1,014
1937-38 ..	183	56	1,042
1938-39 ..	196	59	930
1939-40 ..	261	98	806
1940-41 ..	293	90	975
1941-42 ..	215	88	637
1942-43 ..	244	88	1,310
1943-44 ..	348	67	861
1944-45 ..	204	64	659
1945-46 ..	240	114	746
1946-47 ..	304	195	1,046
1947-48 ..	317	201	670

The figures for gonorrhoea are probably not truly representative as the disease is so easily and quickly cured with modern facilities that much fewer cases come to notification. Even with self-treatment with the host of sulfa drugs available, and with oral penicillin tablets, most cases are probably more quickly and completely cured than by the older methods, so that ultimately it might be expected that the incidence of gonorrhoea would decline. To this extent, then, generalised self-treatment, &c., might not be deplored, but on the other hand it may happen that a sulpha-resistant or penicillin-resistant strain of the organism will be developed, and this would certainly be harmful.

In regard to syphilis, however there is no self-treatment which will cure the disease or even reduce the infectious period and so most cases are notified, and as the table shows the incidence is apparently increasing.

In an effort to combat this tendency much attention has been given at Hope Street to contact case finding. In addition to tracing the source of several syphilitic infections and bringing them to treatment, many others who have been contacts of infectious lesions have been brought under surveillance, and at least 14 women who had been intimate with men suffering from early incubating syphilis, but who had as yet not developed lesions, were given a course of treatment sufficient to abort the presumably developing disease.

This epidemiological control is the best counter to the spread of syphilis, but it entails a good many trying interviews, very often of a surreptitious and secret nature, if any degree of success is to be obtained.

As will be seen in the statistics for the female clinic, 14 women—apart from those diagnosed clinically as suffering from syphilis—were given adequate abortive therapy. There are others who have had treatment privately.

These facts are mentioned because this work cannot be publicised and it is felt at times that the amount of work and diplomatic effort entailed would have produced more obvious rewards in other spheres of public health work.

CONTACT CASE-FINDING.

During the year particulars concerning 119 alleged sources or contacts of infections attending Hope Street (male) clinic were obtained. Subsequent action regarding them was as follows:—

- 57 forwarded for police co-operation in tracing.
- 42 contacted directly or with co-operation of consorts.
- 1 forwarded to New South Wales Department of Health.
- 1 forwarded to Department of Native Affairs.
- 18 no action (usually insufficient data).

119

Of the 57 forwarded for police co-operation—

- 34 were identified.
- 12 could not be traced.
- 11 outstanding at 30th June.

57

As a result of these activities some 75 cases attended the William Street (female) clinic, with the following results:—

Found positive for venereal disease ..	54
Found negative for venereal disease ..	6
Prophylactic treatment ..	2
Doubtful (at date of report) ..	2
Results in abeyance ..	11
	75

Of the 75 cases who attended William Street, 53 attended voluntarily on being advised and 22 had to be served with formal orders to attend.

The Director-General has power to order any suspected sufferer to attend, but these powers—as can be seen—are only exercised where personal and unofficial contacts are of no avail.

These figures compare more than favourably with any similar contact case-finding statistics published elsewhere, and this activity has undoubtedly resulted in an incidence of disease considerably less than might otherwise have been the case.

FEMALE CLINIC (WILLIAM STREET).

Under this heading is also included statistics for the Examination Room for prostitutes and for the Women's Section of H.M. Prison, Annerley.

Female Clinic—

New cases ..	245
Notified cases ..	153

Injections—

Arsenic ..	605
Bismuth ..	696
Penicillin ..	654
Smears to Laboratory ..	3,514
Bloods to Laboratory ..	710
Dark ground tests to Laboratory ..	52
Trichomonas slides to Laboratory ..	71
Cultures for Neisseriae to Laboratory ..	2,545

Examination Room (Prostitutes)—

Routine examinations ..	1,602
Bloods submitted to Laboratory ..	252
Dark ground tests to Laboratory ..	13
Smears submitted to Laboratory ..	4,723
Cultures for Neisseriae ..	47

Injections—

Arsenic ..	19
Bismuth ..	23

Notifications for the William Street Clinic for 1947-48 totalled 153, as follows:—

Gonorrhoea	99
Acute	52
Sub-acute	20
Chronic	19
Treated	8
Syphilis	51
Primary	15
Secondary	5
Tertiary	3
Latent	6
Treated	22
Primary Syphilis and Chronic	
Gonorrhoea	1
Soft sore	1
Granuloma inguinale	1
	153

Of these 153 notifications, 6 were those of prostitutes:—

Gonorrhoea—	
Acute	1
Sub-acute	1
Chronic	1
Syphilis—	
Primary	2
Latent	1
	6

Notifications from H.M. Prison for 1947-48 totalled 5, being made up as follows:—Gonorrhoea 4 (subacute 3, chronic 1), and secondary syphilis 1.

Fourteen contacts of male patients suffering from early syphilis were given prophylactic treatment.

HOPE STREET CLINIC (MALES).

New cases	1,312
Notified cases	542
Injections—	
Arsenic	1,398
Bismuth	1,530
Penicillin	2,123
Smears to Laboratory	560
Smears performed at Clinic	2,005
Dark ground performed at Clinic	116
Bloods to Laboratory	3,302
Sounds, urethroscopies, prostatic and vesicular massages, diathermy treatments, minor operations (circumcisions, &c), wet smears and sperm counts	not statistically recorded

Notifications from Hope Street Clinic were as follows:—

Gonorrhoea—	
Acute	370
Chronic	5
Rectal	1
Syphilis—	
Primary	104
Early secondary	16
Tertiary	2
Latent	26
Neuro	3
Heredo	1
Venereal warts	14
	542

During the year an official liaison was established with the Brisbane General Hospital whereby the Medical Superintendent of the Hope Street Clinic was appointed to a urological position at the General Hospital. This has been a most helpful step in being able to cope more intelligently with certain complications needing hospitalisation and with further investigations of certain genito-urinary but non-venereal infections; and in giving a better and truer perspective to the work. These arrangements had been

sought for some years and a more or less unofficial liaison existed, but thanks are due to the present administration of the Department for placing the relationship on a more satisfactory and official basis.

The appointment during the fiscal year of a part-time medical officer to the Hope Street Clinic has also been a big help. The clinic is open for 12 hours daily, during which time the medical officers are responsible and on call for anything that may turn up, and this extra help has meant a more even distribution of work.

MARITAL STATUS.

	M.	F.
Married	166	82
Single	559	112
Separated	17	25
Divorced	4	10
Widowed	6	9
Unstated	5	5
	757	243 = 1,000

SOURCES OF INFECTION.

Prostitutes	37
Amateurs	491
Wives	29
Husbands	11
Parents	4
Aboriginals	1
Occupational	3
Unknown	424
	1,000

SOURCES OF NOTIFICATION.

	Males.	Females.	Total.
Private Practitioners	76	27	103
Clinics	618	156	774
Hospitals	63	60	123
	757	243	1,000

Ratio private cases to public cases—1 : 8.7

BLOOD TESTS AND CULTURES FOR VENEREAL DISEASE.

With the apparent increase of syphilis, the need for reliable serological tests for syphilis becomes more urgent and important. Although the tests are empirical, there is no reason why a high degree of specificity should not be attained, but one has only to submit a sufficient number of bloods to any laboratory in Australia to realise the conflicting number of reports it is possible to receive. Not only will various laboratories differ in their reports upon samples from the same blood, but the one laboratory will also supply conflicting reports as between Complement Fixation and Precipitation tests on the same sample far more frequently than is usually conceded by the admitted variations in sensitivity and specificity of the various tests.

Culture tests for gonorrhoea have now reached a stage where they should be routinely employed, and a considerable increase in work of this nature is to be expected from the Hope Street Clinic in the next twelve months when suitable incubation facilities become available.

The Department's laboratory has recently been modernised and the Enthetic Diseases Section will be looking to it for considerable help in the coming years, particularly in serological work and in more complete culture and classification of genito-urinary material.

SECTION OF PUBLIC HEALTH SUPERVISION.

Deputy Director-General of Health and Medical Services (vacant).
 State Health Officer: G. M. REID, M.B., Ch.B., D.P.H.
 Chief Inspector of Food and Drugs: C. M. CATO.
 Chief Sanitary Inspector: W. McNEIL.
 Clerical and Statistical Branches: T. O'SHEA, M.R.San.I. (Lond.).
 Welfare Officer: Mrs. V. WILLS.

SANITATION SECTION.

LOCAL AUTHORITY ADMINISTRATION.

Local Authority administration of "*The Health Acts, 1937 to 1946*," and the Regulations made thereunder is controlled and supervised by sanitary surveys, inspections, and visits of State Health Inspectors stationed at Brisbane, Toowoomba, Rockhampton, Mackay, Townsville, and Cairns, and also by the checking of quarterly and annual reports which health inspectors are required to submit to their Councils and to the Director-General. These reports are on special forms drawn up by this Department, and cover all phases of an inspector's duties.

The Departmental plan for the rearrangement of large joint health areas into smaller and more easily controlled ones advanced a further stage during the year. A number of Local Authorities accepted the recommendations and made their adjustments accordingly.

Several joint areas contested the plan, and as a result an officer of the Department attended three conferences at which mutual agreements were reached to the satisfaction of all parties.

The shortage of qualified health inspectors has delayed the full execution of the plan, and has also prevented the filling of a number of vacancies due to death, retirement, and change of occupation. It is expected that the lag will be overcome to a great extent during 1948-49.

Material shortages and the scarcity of suitable labour continued to be a severe handicap on Local Authorities, and as a result difficulty has been experienced in maintaining a high standard in the equipment and plant for the essential sanitary services. The meagre supplies have starved these services of nightsoil pans, refuse bins, and other plant and materials. At the present time no reserve stocks are held, and many of the services are on a hand-to-mouth existence. Refuse bins, so essential as a plague precautionary measure as well as for domestic sanitation, are almost unprocurable. It is to the credit of Local Authorities that no serious breakdowns occurred during the year.

Reports from visiting State inspectors show that, generally, the administration of the health laws under present circumstances is reasonably satisfactory, and that the majority of Councils and their officers are desirous of improving the sanitary environment of their areas.

Reticulated water supplies are being provided by a number of Local Authorities under the direction of the Department of Local Government, and a number of schemes are in hand and under consideration for the purification of existing supplies. Balonne Shire Council completed their schemes at St. George, and Dirranbandi; Stanthorpe Shire Council have schemes in hand for Stanthorpe and Wallangarra; and Biggenden Shire Council have plans and estimates under consideration for the township of Biggenden.

The necessity for modern sanitation and the elimination of the conservancy system of nightsoil removal and disposal, which is now regarded as obsolete for cities and towns, is being widely recognised and plans for sewerage schemes have been completed or are in course of preparation for the chief cities and towns throughout the State.

A number of Local Authorities are meeting the demand for public conveniences which are essential for the comfort and health of any community.

The Brisbane City Council has made provision for an expenditure of £12,000. Applications for loans and subsidies were lodged by Coolangatta, £3,500; Toowoomba, £3,000; Beaudesert, £1,500; Livingstone, £500; Cleveland, £1,500; Noosa, £1,000; Crow's Nest, £700; Millmerran, £450; Pittsworth, £900; Mackay, £5,000; Johnstone, £750; Woongarra, £2,000.

The following applications have already been received for 1948-49 programme:—Toowoomba, £16,000; Inglewood, £1,000.

For other works applications for estimated expenditure of £54,964 were received from twenty-three Local Authorities. Such works included improvements to sanitary depots, new sanitary vehicles, camp and beach improvements, drainage works, extension of sanitary services, crematorium, water supply, kerbing and street channelling.

For the 1948-49 programme nine applications have been received to date for similar works at an estimated cost of £36,800.

The establishment of new or the extension of existing nightsoil and refuse removal services have been delayed by a number of Local Authorities until conditions are more stable and materials and equipment are obtainable. Pioneer Shire Council extended their nightsoil removal service to include Beaconsfield, and Hinchinbrook Shire Council included Trebonne, Cordelia, Macknade, and Bemerside in their new contracts.

Thirty-nine draft sanitary contracts, covering sixty-eight services, were submitted by Local Authorities for the approval of the Director-General. All were checked, and where amendment was found necessary the Local Authority concerned was required to make the alteration before approval was given.

Mosquito control and eradication measures were undertaken by many Local Authorities. The greater activity is due to the incentive given by the Government in granting a 50 per cent. subsidy on all approved mosquito eradication works, which generally consist of large and small drainage schemes, reclamation of low-lying lands, spraying of swampy lands, cleaning watercourses and channels so as to permit of a free flow, house to house inspections for the

control of breeding in rainwater tanks and other water-holding receptacles, and other precautionary measures.

In Brisbane a well-organised and efficient system is in operation. Twelve locators and supervisors are employed. Extensive survey work (167 sq. miles) has been covered and breeding grounds (2,279) discovered as well as potential breeding grounds (2,720). In control measures breeding grounds (5,009) were sprayed and gully traps (161,937) oiled. For the control of the domestic types house to house inspections (3,029) were made; 80 per cent. of notices issued received attention. A compressor sprayer was obtained and this unit is used to cover large water surfaces which previously could not be effectively treated by hand methods.

The following statement gives the total subsidies granted since February, 1943:—

Local Authority.	Period.	Subsidies.	Total Subsidies.
		£ s. d.	£ s. d.
Brisbane ..	1943-7	140,131 0 0	200,694 10 0
	1947-8	60,563 10 0	
Townsville ..	1943-7	6,594 10 0	12,751 10 0
	1947-8	6,157 0 0	
Rockhampton	1943-7	11,384 0 0	11,384 0 0
	1947-8	..	
Ipswich ..	1943-7	9,925 0 0	17,425 0 0
	1947-8	7,500 0 0	
Gympie ..	1943-7	1,404 10 0	1,404 10 0
	1947-8	..	
Maryborough	1943-7	4,778 6 6	10,778 6 6
	1947-8	6,000 0 0	
Bundaberg ..	1943-7	3,966 5 0	4,366 5 0
	1947-8	400 0 0	
Charters Towers ..	1943-7	312 0 0	312 0 0
	1947-8	..	
Warwick ..	1943-7	2,600 0 0	2,600 0 0
	1947-8	..	
Mackay ..	1943-7	5,925 0 0	5,925 0 0
	1947-8	..	
Redcliffe ..	1943-7	2,030 12 0	4,194 14 8
	1947-8	2,164 2 8	
Charleville ..	1943-7	2,000 0 0	2,178 0 0
	1947-8	178 0 0	
Roma ..	1943-7	693 0 0	992 0 0
	1947-8	299 0 0	
Dalby ..	1943-7	2,207 0 0	2,394 0 0
	1947-8	187 0 0	
Coolangatta ..	1943-7	3,000 0 0	5,000 0 0
	1947-8	2,000 0 0	
Gladstone ..	1943-7	2,500 0 0	5,515 0 0
	1947-8	3,015 0 0	
Goondiwindi ..	1943-7	..	13,570 0 0
	1947-8	13,570 0 0	
Bowen ..	1943-7	..	1,250 0 0
	1947-8	1,250 0 0	
Toowoomba ..	1943-7	..	5,030 0 0
	1947-8	5,030 0 0	
Southport ..	1943-7	..	12,140 0 0
	1947-8	12,140 0 0	
Aramac Shire	1943-7	27 0 0	27 0 0
	1947-8	..	
Barcaldine Shire ..	1943-7	335 0 0	385 0 0
	1947-8	50 0 0	
Beaudesert Shire ..	1943-7	2,500 0 0	2,500 0 0
	1947-8	..	
Blackall Shire	1943-7	230 0 0	230 0 0
	1947-8	..	
Boonah Shire	1943-7	788 15 0	1,087 15 0
	1947-8	299 0 0	
Burrum Shire	1943-7	400 0 0	1,680 0 0
	1947-8	1,280 0 0	
Cardwell Shire	1943-7	500 0 0	500 0 0
	1947-8	..	
Chinchilla Shire	1943-7	..	500 0 0
	1947-8	500 0 0	
Caboolture Shire ..	1943-7	..	1,068 0 0
	1947-8	1,068 0 0	
Esk Shire ..	1943-7	153 0 0	153 0 0
	1947-8	..	
Emerald Shire	1943-7	..	150 0 0
	1947-8	150 0 0	
Herberton Shire ..	1943-7	67 0 0	265 0 0
	1947-8	198 0 0	
Hinchinbrook Shire ..	1943-7	1,000 0 0	4,138 0 0
	1947-8	3,138 0 0	
Isis Shire ..	1943-7	1,000 0 0	2,600 0 0
	1947-8	1,600 0 0	
Jondaryan Shire ..	1943-7	11 10 0	11 10 0
	1947-8	..	
Kingaroy Shire ..	1943-7	323 0 0	323 0 0
	1947-8	..	
Livingstone Shire ..	1943-7	2,553 0 0	4,553 0 0
	1947-8	2,000 0 0	
Longreach Shire ..	1943-7	310 5 0	593 5 0
	1947-8	283 0 0	
Mirani Shire ..	1943-7	918 15 0	918 15 0
	1947-8	..	
Monto Shire	1943-7	111 4 0	111 4 0
	1947-8	..	
Munduberra Shire ..	1943-7	357 0 0	357 0 0
	1947-8	..	
Mulgrave Shire	1943-7	1,000 0 0	6,000 0 0
	1947-8	5,000 0 0	
Nerang Shire	1943-7	250 0 0	250 0 0
	1947-8	..	
Pioneer Shire	1943-7	1,410 0 0	1,831 0 0
	1947-8	421 0 0	
Paroo Shire ..	1943-7	..	1,500 0 0
	1947-8	1,500 0 0	
Proserpine Shire ..	1943-7	..	1,925 0 0
	1947-8	1,925 0 0	
Rosewood Shire ..	1943-7	1,500 0 0	2,500 0 0
	1947-8	1,000 0 0	
Sarina Shire	1943-7	..	960 0 0
	1947-8	960 0 0	
Tingalpa Shire	1943-7	..	125 0 0
	1947-8	125 0 0	
Widgee Shire	1943-7	1,081 0 0	1,211 0 0
	1947-8	130 0 0	
Woothakata Shire ..	1943-7	107 16 5	107 16 5
	1947-8	..	
		£ 358,466 1 7	
Subsidies Approved, 1947-8 ..		£ 142,080 0 0	

For the 1948-49 programme of works the undermentioned applications have already been received for mosquito eradication projects, which shows a continued interest by Local Authorities in dealing with the mosquito problem:—

Local Authority.	Estimated Cost.		
	£	s.	d.
Ayr	2,677	0	0
Bundaberg	800	0	0
Barcaldine	100	0	0
Boonah	500	0	0
Bowen	1,450	0	0
Burrum	100	0	0
Coolangatta	2,000	0	0
Cloncurry	8,150	0	0
Chinchilla	2,000	0	0
Cardwell	400	0	0
Dalby	400	0	0
Douglas	4,800	0	0
Emerald	300	0	0
Gladstone	2,500	0	0
Hinchinbrook	8,000	0	0
Ipswich	3,800	0	0
Inglewood	5,073	0	0
Johnstone	1,000	0	0
Livingstone	2,470	0	0
Mackay	20,000	0	0
Murgon	1,000	0	0
Mulgrave	7,259	0	0
Maryborough	19,988	0	0
Paroo	6,000	0	0
Redcliffe	58,656	0	0
Townsville	8,063	4	0
Tingalpa	1,000	0	0
Woongarra	1,500	0	0
Warwick	500	0	0
Widgee	300	0	0
Total	£170,786	4	0

Plague precautionary measures are in active operation in all the shipping centres, and the operations for the destruction of rats and their harbourages are carried out by the majority of Local Authorities throughout the State.

The Brisbane City Council employs 49 men and 29 trained dogs within the metropolitan area, which is subdivided into subareas to which gangs and men are allotted for house to house visitation. Special attention is paid to the shipping frontages, which are included in a defined area called the "Plague Danger Zone," the boundaries of which were fixed in collaboration with the Chief Inspector of the Brisbane City Council a number of years ago.

Cairns, Townsville, Mackay, Rockhampton, Bundaberg, and Maryborough employ men and dogs on full time for rodent-control work.

21,936 smears were forwarded by the various Local Authorities for bacteriological examination for the detection of rat-borne diseases. Twenty-one leprosy rats were reported from Rockhampton.

Centres from which smears were received:—

RAT SMEARS.		
	Rats.	Mice.
Brisbane	18,568	272
Bundaberg	649	..
Gympie	100	..
Ipswich	551	..
Mackay	1,362	..
Maryborough	434	..
Totals	21,664	272

The table hereunder gives an analysis of the operations of Local Authorities in regard to rat-destruction work within their respective areas:—

RAT RETURN, 1947-48.

Local Authority.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	Totals.
Brisbane	4,566	3,491	4,774	5,886	5,633	4,432	4,491	4,402	5,459	5,823	5,876	4,399	59,232
Bundaberg	47	47	56	62	58	45	58	62	57	68	33	56	649
Cairns	94	118	102	124	179	161	93	114	112	154	118	130	1,499
Gympie	8	10	6	4	5	3	8	6	15	19	11	7	102
Ipswich	97	83	55	88	60	54	46	93	79	69	70	62	856
Mackay	74	62	92	113	42	114	117	110	75	71	115	42	1,027
Maryborough	126	18	85	54	70	82	114	141	75	103	98	82	1,048
Rockhampton	215	198	278	332	288	315	175	263	226	262	162	200	2,914
Townsville	27	23	35	55	225	130	102	154	179	241	205	72	1,448
Totals	5,254	4,050	5,483	6,718	6,560	5,336	5,204	5,345	6,277	6,810	6,688	5,050	68,775

MOUSE RETURN, 1947-48.

Local Authority.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	Totals.
Brisbane	329	281	196	200	255	217	244	316	362	360	297	304	3,361
Bundaberg	..	..	..	..	..	..	..	..	14	24	..	..	38
Cairns	18	19	16	44	12	14	23	22	27	27	30	30	282
Gympie	..	..	..	..	..	..	..	..	..	..	..	..	..
Ipswich	112	306	14	..	..	8	19	..	..	9	..	32	500
Mackay	120	116	115	113	46	114	122	83	33	128	147	83	1,220
Maryborough	..	..	..	..	..	..	..	..	..	..	..	..	..
Rockhampton	..	..	..	..	..	..	..	..	..	..	..	..	..
Townsville	..	..	..	..	16	7	17	48	38	37	107	6	276
Totals	579	722	341	357	329	360	425	469	474	585	581	455	5,677

DEPARTMENTAL ADMINISTRATION.

General sanitary inspection work carried out by the sanitation section is analysed hereunder—

Area.	First Inspections.	Re-inspections.	Official Calls.	Towns Visited.
Metropolitan ..	3,028	183	339	..
Country ..	2,486	..	164	..
Totals ..	5,514	183	503	..
Grand Total ..	6,200			..
Number of Miles Travelled ..	..			6,211

The first inspections within the metropolitan area include common laneways and yards (172), drainage and sewerage (115), housing camp (97), mosquito infestation (21), public conveniences (483), barbers (72), refuse tips (445), proposed refuse tips (117), rat infestation (101), showgrounds (285), sanitary depots (49), and many others of a miscellaneous nature too numerous to list.

In addition to the above, 285 inspections were carried out on 50 sections of both sides of the Brisbane River in two rat surveys.

The country towns visited were: Amity Point, Aratula, Beechmere, Beenleigh (2), Bilinga (2), Burleigh (2), Burleigh Heads (2), Caboolture, Caloundra, Coolangatta (3), Cooroy, Currumbin, Cleveland, Cribb Island, Deception Bay, Dayboro, Ipswich (6), Kileoy (4), Kalbar, Logan Park, Maroochydore (3), Mooloolabah (3), Mirani, Mount Tamborine, Mount Alford, Maryborough, Nambour (2), Noosa Heads, Palm Beach, Redcliffe (7), Rosewood, Redbank, Redland Bay (2), Southport (6), Strathpine,

Surfers' Paradise, Tamborine, Tewantin (2), Tugun, Thornside, Victoria Point, Woombye.

Tours of inspection were carried out in the following districts, in which 56 places were visited:—Nanango, Kingaroy, Murgon, Wondai, Beaudesert, Beenleigh, Tamborine, Waterford, Roma, Charleville, Gympie, Biggenden, Isis, Eidsvold, Gayndah, Monto, Mundubbera, Harrisville, Boonah, Ipswich, Maryborough, Burrum, Noosa, Bundaberg, Woongarra.

Public sanitary accommodation within the city and nearby areas, including parks and sports grounds, were subject to inspection (483). Insanitary conditions and defects due in most instances to misuse by the public were reported to the Council for attention.

Licensed premises have been examined from time to time during the year in regard to sanitary conditions and reports have been submitted to the Licensing Commission for necessary action; 185 such inspections were made, in addition to 42 annual inspections, for which full and detailed reports were forwarded to the Commission.

Inspectors were employed on full-time duty at the showgrounds during the period of the Royal National Exhibition.

Extra accommodation has been erected and further improvements are in hand.

Fifty-seven city and suburban theatres were visited and found to be maintained in a satisfactory state. The following is a summary of information obtained. Insanitary and defective conditions were reported to the Local Authority for attention.

Sanitary Accommodation.						Ventilation.			Rodent Control.		Vermin Control.									
W.Cs.		E.Cs.		Urinals.		Air Conditioned.	Mechanical.	Natural.	Satisfactory.	Unsatisfactory.	Insecticide.				Treatment.					
Satisfactory.	Insanitary and Defective.	Satisfactory.	Insanitary and Defective.	Satisfactory.	Insanitary and Defective.						D.D.T.	D.D.T. and Pyrethrum.	Miscellaneous.	Nil.	Daily.	Bi-weekly.	Weekly.	Fortnightly.	Monthly.	Nil.
40	1	11	5	51	6	9	3	45	55	2	26	18	9	4	12	7	26	3	5	4

During the swimming season, regular testing of the water at all State Schools and municipal swimming pools in the metropolitan and Ipswich areas was carried out, and when necessary samples of the water were taken for bacteriological examination.

The procedure adopted during the year was to test the water by means of the Chlorotex Reagent Outfit on the spot. Samples for bacteriological examination were taken only when the residual chlorine was found to be below 0.2 ppm.

Generally a high standard of purity was maintained at all pools. At one pool only was *B. coli* detected, which was due to careless application of the disinfectants. The breach was immediately rectified.

Four samples taken from baths using untreated salt water proved satisfactory. Summary of results of testing and sampling shown hereunder:—

Name.	Chlorine.			Bacteriological.	
	No. of Samples	No. of Tests	No. Satisfactory	No. of Tests	No. Satisfactory
<i>Municipal Pools.</i>					
Booroodabin ..	14	10	9	2	2
Davies Park ..	10	8	8	1	1
Ithaca ..	9	9	9	..	..
Spring Hill ..	12	10	9	1	1
Toowong ..	8	8	8	..	..
Sandgate* ..	2	..	..	1	1
Manly* ..	2	..	..	1	1
Totals ..	57	45	43	6	6

* Untreated seawater baths.

Name.	Chlorine.			Bacteriological.	
	No. of Samples	No. of Tests	No. Satisfactory	No. of Tests	No. Satisfactory
<i>State Schools Metropolitan Area.</i>					
Ascot	6	4	3	1	1
Buranda	10	4	1	3	3
Cannon Hill ..	10	8	7	1	1
Coorparoo	10	6	4	2	2
Greenlanes	12	8	6	2	2
Greenslopes ..	11	8	4	3	..
Junction Park ..	6	6	6	..	..
Milton	4	4	4	..	..
Wilston	4	4	4	..	..
Windsor	5	5	5	..	..
Wooloowin	6	6	6	..	..
Totals	84	63	50	12	9
Silkstone State School	7	7	7	..	..
Ipswich Municipal Pool	8	8	8	..	..
Totals	15	15	15	..	..

Inspections totalled, 182.

Departmental action was taken well in advance of the Christmas and New Year holiday period in regard to Local Authority arrangements for

the improving of the accommodation and amenities, supervision and control of sanitation, and the provision for increased conveniences at sea-side resorts, especially of the camping grounds.

A circular letter was issued to all Local Authorities concerned, and this was followed up by visits of inspections and notifications to Councils where camps did not comply with "The Camp Regulations, 1947."

During the Christmas and New Year holiday period all main camping areas from the border to Cairns were policed by Departmental inspectors.

The sanitation of the camps, regular sanitary and refuse removal services, and the control of the camping areas were more satisfactory than that of previous years, but many of the camps are not up to the minimum standard laid down by the Regulations. Recommendations for more modern accommodation and better planned camps were submitted to Local Authorities concerned for their consideration.

A number of Local Authorities have plans in hand for improvements and have applied for loans and subsidies for carrying out the work.

The following is a brief summary of the camps policed by Departmental officers:—

Local Authority Area.	Estimated Number of Campers.	Number of Camps.	Sanitary Accommodation Adequate. Number of Camps.	Accommodation for Campers only. Number of Camps.	Adequate Water Supply. Number of Camps.	Nightsoil and Refuse Removal Services.
Coolangatta—						
Local Authority	2,320	10	6	5	9	
Private	752	18	1	9	9	
Nerang—						
Local Authority	1,308	4	1	3	2	
Private	490	8	2	6	6	
Southport—						
Local Authority	1,262	6	2	4	5	
Private	512	7	5	7	5	
Redcliffe—Local Authority	2,223	12	4	7	9	
Cleveland—Local Authority	64	3	3	..	2	
Tingalpa—Local Authority ..	48	1	1	..	1	
Caboolture—Local Authority	92	2	2	..	2	
Landsborough—						
Local Authority	1,072	5	..	..	..	
Private	352	5	1	2	2	
Noosa—Local Authority ..	1,040	3	2	1	2	
Maroochy—Local Authority	2,250	2	..	..	2	
Burrum—Local Authority ..	1,966	8	1	..	2	
Livingstone—Local Authority	1,158	5	4	3	2	
Townsville—Local Authority	40	1	1	1	1	
Mulgrave—Local Authority	186	5	2	..	2	
Cairns—National Park ..	150	3	..	..	3	
Douglas—Local Authority ..	52	2	1	..	1	
Johnstone—Local Authority	320	3	1	..	1	
Totals	17,657	113	40	48	68	

Reports indicated that all camps were serviced regularly and efficiently daily, twice daily or more often when required.

Estimated population of—

75 Local Authority camps	15,551
38 private camps	2,106
Total	17,657

Septic tank systems are provided at only 7 camps—i.e., Coolangatta (2), Nerang (1), Redcliffe (2), Burrum (2).

"The Bedding and Upholstery Regulations, 1943," were repealed and new Regulations dated 19th February, 1948, were gazetted.

Thirty-seven inspections under these Regulations were made, and samples of various materials were obtained for examination, the results of which are as tabled below—

Material.	Chlorine as Chloride Parts per 100,000.	Free and Saline Ammonia per 100,000.	Turbidity Parts per 100,000.
Flock (India) ..	204	8.0	40
Flock (N.S.W.) ..	16	3.2	Below 10
Flock (Qld.) ..	32	3.2	75
Flock (Qld.) ..	60	4.8	17
Flock (Qld.) ..	16	3.2	17
Flock (Qld.) ..	84	4.0	29
Flock (Qld.) ..	16	4.0	36
Flock (Qld.) ..	32	4.8	20
Fibre (Ceylon) ..	204	5.6	Below 10
Fibre (Ceylon) ..	184	5.6	Below 10
Kapok (Java) ..	44	..	Below 10
Flock (Qld.) ..	100	3.2	11
Cotton Linters (Qld.) ..	56	..	Below 10
Flock (N.S.W.) ..	148	4.8	40
Fibre (Ceylon) ..	132	2.4	13
Flock (Qld.) ..	52	4.0	18
Flock (Qld.) ..	128	2.4	33
Fibre (India) ..	40	4.0	13
Flock (N.S.W.) ..	108	6.4	31
Flock (Qld.) ..	64	4.0	27
Fibre (Ceylon) ..	360	8.8	18
Flock (Qld.) ..	80	4.0	24
Fibre (Ceylon) ..	168	16.0	27

SUMMARY.

—	Samples Number.	Chlorine Standard.		Ammonia Standard.		Turbidity Standard.	
		150 Parts per 100,000 Maximum.		6 Parts per 100,000 Maximum.		30 Parts per 100,000 Maximum.	
		Passed.	Failed.	Passed.	Failed.	Passed.	Failed.
Australian—							
Cotton Linters ..	1	1	..	..	..	1	..
Flock ..	14	14	..	13	1	9	5
Foreign—							
Fibre ..	6	2	4	4	2	6	..
Flock ..	1	..	1	..	1	..	1
Kapok ..	1	1	..	..	..	1	..
Total ..	23	18	5	17	4	17	6

Forty-seven inspections were made.

Water-sampling outfits were despatched, received, and delivered at the respective laboratory as follows:—

From Local Authorities, 230 chemical and 277 bacteriological samples;

From other sources, 58 chemical and 68 bacteriological samples.

CAIRNS SUB-OFFICE.

LOCAL AUTHORITY SUPERVISION.

Area.	First Inspections.	Re-inspections.	Official Calls.	Number Reports Submitted.	Number of Towns Visited.
Headquarters	546	8	192	..	..
Country ..	1,371	29	180	154	70 (152 visits)
Totals ..	1,917	37	372	154	70
Grand Total	2,326				

The above inspections included the following:—Anti-malaria or anti-mosquito drainage (18), barbers (20), camps (41), chemists (64), cold stores (7), drainage (70), fly infestation (21), food factories (116), food premises (728), hospitals (14), incinerators (2), insanitary premises (1), lead in toys (12), milk premises (41), mosquito infestation (37), premises (66), rat infestation (33), rubbish (55), sanitary conveniences (440), sanitary depots (24), warehouses (51), and water supplies, &c. (47).

LICENSED PREMISES.

Area.	First Inspections.	Re-inspections.	Number of Reports Submitted.	Number of Plans Examined.
Headquarters ..	9	2	2	5
Country ..	9	..	5	1
Totals ..	18	2	7	6
Grand Total ..	20			

In the course of these inspections a distance of 9,679 miles was travelled by truck, rail, boat, and aeroplane.

The year under review saw a further return to normality, hampered though it was by a still apparent shortage of material and labour. Progress has been steady and the Local Authorities are to be congratulated on their efforts to maintain a high standard of sanitation. Their efforts are very gratifying.

A feature of the year's work was the carrying out of the new Camping Regulations. An extensive survey was made of all beach resorts and camping areas and complete information of conditions acquired. From this information, instructions were conveyed to the relevant authorities to take the steps necessary to improve conditions and amenities for campers at the various resorts. A ready response by Local Authorities guarantees a definite improvement in these matters and conditions should be infinitely better for holiday-makers in the future.

Cairns City.

The essential services of nightsoil and refuse removal and disposal have been carried on effectively, complaints in this regard being very few. The new nightsoil incinerator was closed for necessary repairs during the year, but the work was ably handled at the old incinerator. Repairs are now complete at the new incinerator and it will be back in action in the very near future.

The consulting engineers for the sewerage installation are now established in the city and are proceeding with detailed plans. The installation of sewerage will prove a boon, not only because of the more modern disposal of nightsoil but also because of the correction it will provide for many unavoidable sewage nuisances in the area.

Anti-malarial drainage and work has been carried out by the Local Authority with as large a staff as its finances have permitted and a good job has been done throughout the year. There has been a deal of levelling and reclamation done and a continuance of this work will add to the general improvement. The Local Authority and other local bodies have definite plans in this regard.

Rat control has been carried on during the year, baiting and poisoning being done, whilst opportunities to correct harbourages, &c., have not been missed.

Immunisation against diphtheria is also in hand and is now a permanent feature of the Local Authority's health work.

Mulgrave Shire.

This Local Authority has carried on its essential services during the year in its usual effective manner. Finality was reached in regard to the nightsoil disposal installation for Gordonvale and the loan for such work has been approved. This work will correct an unsatisfactory state of affairs in the matter of disposal of nightsoil.

Anti-mosquito work at Babinda has been carried on and this ambitious scheme is now beginning to show results. The work already done has made available an area of land previously of no account and definitely reflects the value of such drainage works. The completion of the drainage envisaged will be of much import to the town of Babinda.

There has been an extension of kerbing and channelling in townships throughout this shire, with definite advantages in regard to the effective disposal of stormwaters and drainage.

Immunisation has not been neglected and a constant campaign is in progress.

Johnstone Shire.

This is a very progressive shire in regard to health work, and essential services are carried out in an effective and capable manner.

Detailed plans for sewerage installation at Innisfail are practically complete and it should not be long before a start is made with this very desirable amenity.

Anti-mosquito work has received attention and one loan has been approved and another is under consideration for works for mosquito eradication at Innisfail.

Rat and other vermin control is continually carried on, whilst immunisation against various diseases is freely available in this area.

Cardwell Shire.

Little trouble has been encountered in regard to the carrying out of essential services. Other features of health work, such as vermin control, immunisation, &c., have not been neglected. Anti-mosquito work is the subject of applications for loan and subsidy for the necessary works.

The water supply is being augmented and this should be a prelude to the installation of the desirable amenity of sewerage.

Mareeba (late Woothakata) Shire.

Little trouble was encountered in the carrying out of essential services by this Local Authority, which showed a ready desire to maintain a reasonable standard.

Vermin control has not been lost sight of, whilst mosquito subsidy works seem to be functioning effectively.

Immunisation is also a matter constantly receiving the attention of this Local Authority.

Atherton Shire.

This Local Authority, since the appointment of its own inspector, has made effective control possible. Essential services have functioned well, and all other aspects of health work receive their due attention.

Eacham Shire.

This Local Authority has a full-time inspector and health work is well controlled.

Herberton Shire.

This Council is at present without the services of a qualified inspector, but arrangements have been made for trained assistance until a permanent inspector is available.

Essential services have been well maintained. Efforts are being made to secure a more satisfactory site for the Ravenshoe sanitary depot than the present site.

Anti-mosquito work has not been lost sight of and applications for the loans for requisite work have been obtained.

Etheridge Shire.

Considering its scattered population and lack of trained inspectorial staff, conditions were found to be reasonably satisfactory.

Douglas Shire.

This shire is now feeling the effect of the loss of the trained inspector and a deterioration in general conditions was apparent. That this matter is to be remedied is apparent by the efforts of the local authority to secure a full-time qualified inspector.

Essential services have been well maintained and with the advent of a qualified inspector, this shire will again reach its usual high standard.

Cook Shire.

Essential service of nightsoil disposal was found to be well carried out, whilst a further step forward was made by this Local Authority in the installation of a garbage service.

Advice was tendered this Local Authority in the matter of securing a more suitable garbage disposal site than the present one.

Thursday Island.

Two visits were paid to this island and reports furnished on conditions. A full-time departmental inspector has been appointed for the island.

Mackay Sub-office.

For the period under review sanitary inspections were carried out at Mackay, North Mackay, Bowen, Sarina, Carmila, and Proserpine. The sanitary conditions of premises, yards, and conveniences were found to be satisfactory.

Mosquito Eradication and Control.—Inspections were made in regard to applications for loans and subsidies in connection with drainage systems for the eradication of mosquito-breeding grounds. Applications were received from Mackay City Council, Bowen Town Council, and Sarina Shire Council.

During the period the Pioneer Shire Council sought expert advice in relation to the combating of the mosquito nuisance in certain portions of their area. An intensive survey of the areas within the Shire and City of Mackay was carried out by Miss E. N. Marks, M.Sc., Senior Inspector Pryor from headquarters, and Inspector Lowe, District Inspector.

Health Education Campaign.—Mackay City Council, in conjunction with the Queensland Health Education Council, conducted a health campaign within the area from 21st July to 21st August, 1947. Thousands of pamphlets were distributed and lectures given over the local radio station by several speakers, including the district Departmental Inspector. Films on health matters were screened at the several theatres. At the conclusion of the campaign, which was considered successful, the City Council expressed its appreciation of the co-operation given by the representative of the Department.

Australian National Power Alcohol Co., Sarina.—Two visits were made to the above company's effluent disposal area at Oonooie in company with their chemist and the local Health Inspector relative to complaints regarding the fly nuisance. On each occasion (summer and autumn season) no fly menace was discernible and the disposal of the effluent was being conducted satisfactorily.

Sanitary Depots.—Pioneer Shire Council: An inspection of a site for a new sanitary depot at Andergrove was made. The present site at North Mackay will not cope with future requirements. The new site selected at Andergrove is situated within the Pioneer Shire, approximately five miles north-west of the city of Mackay, and should meet future requirements for some considerable time.

Proserpine: Two sites were inspected at Proserpine for a new sanitary depot and recommendations submitted to headquarters thereon.

Licensed Premises (Hotels).—Inspections of licensed premises at Cremorne, Mackay, Carmila, and Bowen regarding alterations, &c., to hotel premises were made, and reports and recommendations submitted.

INSPECTIONS.

First Inspections..	..	..	325
Reinspections ..	..	..	90
Official Calls ..	..	..	212
Total ..	..	..	627

Number of Reports Submitted..	78
Towns Visited ..	7

Miles travelled by car ..	551
Miles travelled by train ..	504
Total ..	1,055

ROCKHAMPTON SUB-OFFICE.

GENERAL.

The year was one of increasing activity in the sanitary sphere. This was due mainly to Local Authorities taking advantage of Government loans and the specific subsidy grants applicable thereto for such works as mosquito eradication, drainage, provision of public amenities, &c. Continued shortages of materials and labour prevented an early start on most of these projects, but the coming year is expected to see some real advancement.

HEADQUARTERS AREA (City of Rockhampton).

During the year the Local Authority's inspection staff was increased numerically and now consists of a City Inspector, a full-time inspector, a part-time inspector, and a trainee inspector. Although this is by no means a high figure for a city with a population approaching 40,000, an upward trend in sanitation is apparent, and it is felt that the Council as a whole is out for progress.

The sewerage system was extended by 5.3 miles of sewers, and connection of 232 additional premises.

Nightsoil and refuse collection and disposal services were operated efficiently. The expected change-over from horse-drawn vehicles did not eventuate but is likely to take place in the near future.

Increased inspection is resulting in a continued improvement in the general cleanliness of premises and the few accumulations of refuse which occur soon come under notice for removal.

In last year's report mention was made of a number of sinks and hand basins discharging to street water channels in the city proper. Several of these were connected to the sewerage system and the remainder should receive attention in the near future.

Some of the city's laneways are in a bad state due to the water channels having become eroded and overgrown with grass and weeds. In their present condition they are not conducive to civic pride in holders of adjoining properties. It is hoped that the City Council will not long delay the cleaning up, reforming, and draining of these lanes.

Provision has been made for covering in a further section of a large stormwater drain—known as the main drain. The Government has granted a loan of £6,000, inclusive of a subsidy grant of 25 per cent. for this work in the fiscal year 1948-49.

The Park Avenue and Queen's Park areas, comprised mostly of "melon-hole country," are much in need of stormwater drainage. During 1946 the City Council intimated that an engineering report on a comprehensive drainage proposal for these areas would be obtained. It is understood that the matter will soon be under discussion by the Council.

The Jardine Lagoon drainage/mosquito eradication works were finalised during the year. The completed cost was £7,648 19s. 8d. (subsidy 50 per cent.) as against the original estimate of £12,990 12s. 8d. Use of modern earth moving plant which the City Council procured was chiefly responsible for the saving.

Improvement to mosquito eradication measures on the town common where a previous scheme terminated will result from a further Government loan of £425 and subsidy of a similar amount which have already been granted.

The mosquito reduction gang continued the spraying of collections of surface water and storm water gullies.

The rat destruction gang carried on along the usual lines, comprising systematic visitations to premises, using dogs, trapping and poisoning. Rat proofing work was completed at a large city wholesale produce merchant's premises. Builders of new premises were required to conform to rat-proofing measures specified in "The Plague Prevention Regulations." Rat harbourage was removed where encountered. Considerable reduction in the rat population should result when the Council is able to procure standard garbage containers of which several thousands are required to protect edible food wastes from rats on many premises.

Although the city is on the whole normally free from undue prevalence of flies, occasional complaints come from areas in which racing and other stables are located. With the enlarged inspection staff more attention is being paid to stables and fly-breeding.

Regular inspection and enforcement of the Regulations should have the desired result in these localities.

Sanitary conditions at the Show Grounds were kept under notice during the Carnival Week, and at other times when the grounds were in use. Cleansing services were well maintained. Improvements to some of the sanitary conveniences are due and the matter will be taken up with the controlling body.

Barbers shops were inspected and re-inspected by an assistant inspector during his attachment to the sub-office for a period of three months. This inspection was much needed and many minor improvements were effected. However, regular inspection is necessary to ensure that specified equipment including sterilizing agents are not only provided, but used as prescribed in "The Barbers Shops Regulations."

COUNTRY AREAS.

With few exceptions country towns throughout the area were paid inspection visits on at least one occasion. The task of visiting the whole of the area and completing reports on numerous diverse matters is an arduous one.

Local Authority areas visited were: Banana, Barealdine, Bauhinia, Barcoo, Belyando, Blackall, Calliope, Duaringa, Emerald, Fitzroy, Gladstone, Ilfracombe, Isisford, Jericho, Livingstone, Longreach, Miriam Vale, Mt. Morgan, Peak Downs, Tambo, and Theodore.

Towns visited were: Anakie, Bajool, Baralaba, Barcaldine, Berajondo, Biloela, Blackall, Blackwater, Blair Athol, Bluff, Bororen, Bouldercombe, Builyan, Burua, Calliope, Capella, Clermont, Comet, Craew, Dingo, Duaringa, Dululu, Emerald, Emu Park, Gladstone, Gogango, Goo-vigen, Gracemere, Ilfracombe, Isisford, Jambin, Jericho, Jundah, Kabra, Keppel Sands, Kokotungo, Littlemore, Longreach, Lowmead, Many Peaks, Marlborough, Marmor, Miriam Vale, Mt. Lareom, Mt. Morgan, Moura, Nagoorin, Ogmoo, Port Alma, Raglan, Rannes, Rolleston, Rosedale, Rubyvale, Sapphire, Springsure, Stonehenge, Tambo, Thangool, Theodore, The Caves, The Springs, Tocal, Ubobo, Westwood, Windorah, Wowan, Yaamba, and Yeppoon. Total number of visits made was 112. Distances travelled by train and motor vehicle in making these visits totalled 9,722 miles. In addition the assistant inspector travelled 310 miles on inspection visits to near country towns.

Some Local Authorities continued to be unable to secure the services of qualified health inspectors and sanitary progress was retarded accordingly. Shortages of labour and/or materials prevented repairs being effected to sanitary conveniences and mosquito-proofing of domestic water storage tanks, &c., in most areas.

Several Local Authorities took advantage of Government loans and subsidy grants to budget for drainage and mosquito-eradication works, and provision of public amenities.

Proposed town sewerage systems of several years standing have had to be reconsidered in view of revised estimated costs under present day circumstances.

Aramac Shire.

The Local Authority intimated that the refuse tip at Aramac which had been reported to be out of control had been put in order, and the one at Muttaborra would receive attention when a bulldozer was being operated in the vicinity.

Banana Shire.

Nightsoil and refuse removal services were performed efficiently in the several townships in this area. Action is being taken to provide standard garbage containers on premises where still required. Requests made to the Council following inspection of the area included improved method of nightsoil trenching at Biloela, and attention to refuse tips. It is reported that the tips at Biloela and Baralaba have been put in order.

Barcaldine Shire.

General sanitation and conduct of the cleansing services was found to be good. Two matters recommended to be brought to the notice of the Council were the necessity of keeping the covering of the refuse tip up-to-date, and a drainage nuisance to be abated. The Local Authority intimated that these matters would receive attention.

An application for subsidy of £100 to carry out mosquito-eradication work was recommended for approval.

Barbers' shops in the town were found to be much improved compared to the conditions on a previous inspection. One was given notice to repaint the premises and renew hair brushes; another was instructed to connect water supply and trap and drain the hand basin.

Barcoo Shire.

Sanitary conditions were found to be similar in each of the three townships of Jundah, Windorah, and Stonehenge. Recommendations submitted for attention by the Council included:—Adoption of the pan system of nightsoil disposal in place of the cesspit system; in the meantime cesspits to be sprayed every three months to control cockroach and fly breeding; the refuse removal services to be put on a proper basis, with regularity of collections; continuance of issuing standard garbage containers to all premises; improvement in control of refuse tips; treating of the water supplies to render them safe; repair of water storage tank at Jundah, the water leaking from which was creating a mosquito-breeding area.

Bauhinia Shire.

Sanitation in the towns of Springsure and Rolleston were found to be reasonably good. Minor details requiring attention were brought under the notice of the Council's health inspector on the spot. Necessary repairs to sanitary conveniences were awaiting the availability of tradesmen.

The proprietor of a barber's shop at Springsure was instructed to attend to five items. He subsequently intimated that the action required had been taken.

Belyando Shire.

As the result of an inspection visit to the town of Clermont the Local Authority was requested to give effect to the following matters:—That the nightsoil removal vehicle be placed in good repair; that an additional supply of nightsoil pans be secured and put in service; that action be taken to bring the refuse tip under proper control; that action be taken to exterminate mice infesting shops in the town. Information came to hand that the pans had been secured and the other matters were being attended to.

The proprietors of three barbers' shops in the town were instructed to effect a total of eleven items covering improvements.

Blackall Shire.

Matters at the nightsoil disposal depot which were required to be attended to following a previous inspection visit were found to be in order, with the exception of trenching of nightsoil. Instruction in the correct method was given to the newly engaged employees. Town drains had also been put in order. Refuse deposited at a new tipping site was due for covering with earth. It was recommended to the Council that when the services of a health inspector were secured a check up on sanitary conveniences and refuse removal be made.

With the exception of improvements required to one barber's shop in the town, conditions were found to be satisfactory.

Calliope Shire.

On the whole, nightsoil and refuse removal services operated in the several townships in this area were found to be carried out efficiently. Refuse tips required attention as regards earth covering. Sanitary conveniences in some townships were listed for repair when labour became available. The Local Authority proposed to abandon nightsoil depots in use at Nagoorin and Builyan in favour of a depot at Littlemore to serve several townships. A suggested site at the latter place was subsequently inspected and reported to be suitable for disposal of nightsoil.

Instructions were given to the proprietor of a barber's shop at Mount Larcom to effect seven detailed improvements. The Local Authority's inspector subsequently reported that these had been complied with.

Duaringa Shire.

Duaringa Township.—Recommended that a new site for a refuse tip be selected. Railway cattle-trucking yards were inspected following a complaint by townspeople. It was obvious that the yards should be located outside the town, and a report to this effect was submitted to Head Office.

Dingo Township.—Recommended that nightsoil and refuse removal services be inaugurated.

Bluff Township.—There was a danger of fly-borne disease due to the number of defective sanitary conveniences, and the lack of such conveniences in some instances. It was recommended that action be taken in this respect, that covering of the refuse tip be kept up-to-date, that standard garbage receptacles be supplied to all premises, and that dual nightsoil removal services be insisted upon where over-full pans occurred.

Blackwater Township.—Recommended that nightsoil and refuse removal services be inaugurated for the township.

Also recommended that sanitary conveniences in all townships be brought into conformity with "The Sanitary Conveniences and Nightsoil Disposal Regulations."

In several letters the Council intimated that these matters had been attended to or were receiving attention.

Nightsoil and refuse removal services for the townships of Blackwater and Dingo are being arranged.

Emerald Shire.

Resulting from a survey of sanitation in this town the following recommendations were submitted to the Local Authority:—That the fence surrounding the nightsoil disposal ground be repaired; that a water storage tank be provided at the depot to overcome the trouble of intermittent supply; that the method of trenching nightsoil be corrected; that the methods of cleansing nightsoil pans be improved; that the supply of nightsoil pans, lids, &c., be increased to a sufficient number; that the nightsoil removal vehicle be fitted with a proper sanitary body; that dual nightsoil services be provided to premises where over-full pans occurred; that standard garbage containers be provided on all premises requiring them; that additional public refuse receptacles be provided in the main street; that extermination of mice infesting stores in the town be undertaken; that purification works for the reticulated town water supply be installed.

Reports submitted by the town health inspector and forwarded on to the Department by the Council intimated that these matters were receiving attention.

An application by the local authority for a Government loan of £150 and subsidy grant of a similar amount to carry out mosquito eradication work was recommended for approval.

The proprietors of two barbers shops in the town were called upon to carry out a total of ten itemised improvements to conform with the Regulations. These later notified that instructions had been given effect to.

Fitzroy Shire.

The adoption of nightsoil removal services for additional townships in the area did not materialise. The local authority was again without the services of a health inspector for the greater part of the year. Now that an officer has been appointed to the position the subject is receiving attention.

Samples of water were obtained from the source of the Westwood Sanatorium's supply, and also at the institution after treatment there. Analyses revealed that the samples were chemically suitable for human consumption, whilst bacteriological examinations showed that only the sample of treated water could be regarded as safe. Results were conveyed to the controlling body.

Gladstone Town.

Recommendations submitted for action by the Town Council after an inspection visit included: Provision of a water supply at the nightsoil disposal ground; supply of 200 additional nightsoil pans to the service, together with an adequate number of pan lids; improvement in control of refuse tipping; expediting distribution of standard garbage containers; removal of accumulations of refuse from premises; renewal of all defective street water channels; effective drainage of a spade-cut street water channel in which mosquitoes were breeding; spraying surface waters to eliminate mosquito breeding; appointment of a second man to the refuse removal service.

The Council in due course advised that the majority of the recommendations received or were receiving attention.

On a subsequent visit flies were found to be breeding at the sanitary depot as the result of improper disposal of nightsoil. The matter was brought to the attention of the local authority.

The Council was granted a Treasury loan of £850 to effect improvements at the depot, but later requested permission to use the loan for providing improved buildings and pan-cleansing facilities at the pan treatment depot. Approval was recommended after the circumstances had been investigated.

An early start on the Happy Valley drainage-mosquito eradication scheme was expected when the town was last visited. Only the most urgent portion will be carried out for a start. The work will be done on a debenture loan of £2,500 and Government subsidy grant of a similar amount.

An application by the Local Authority for loan and subsidy of £2,500 for proposed drainage-mosquito eradication work in Seenery street from White street to Tank street was investigated. Head office was advised that the project could be recommended for approval provided it were extended to include the section from Tank street to Dawson road.

Barbers' shops in the town were inspected and instructions given for compliance with the Regulations with respect to several details in each instance. The Council later advised that with one exception the items had been attended to.

Ilfracombe Shire.

Consequent on an inspection of the township of Ilfracombe the following matters were submitted for action by the Local Authority:—Nightsoil trenches to be of suitable depth to reduce fly breeding; improvement in control of tipping and covering at the refuse tip; removal of accumulated garbage from premises named, and of unsatisfactory crude domestic refuse incinerators; supply of sufficient standard garbage containers to all premises; action to prevent fly-breeding in evaporation basins at the local woolseour.

Inspector Barlow of Longreach, who later visited the area by arrangement, reported that the necessary action had been taken at the scour and no live fly larvae or pupae could be found in the evaporation basins. He also reported that the other items were being attended to.

The Local Authority constructed a swimming pool for the use of townspeople and later applied to the Government for a subsidy on the expenditure incurred. After inspection approval was recommended. This amenity is an acquisition for the local people.

Isisford Shire.

After inspection it was recommended to the Council that the cesspit system in the town of Isisford be replaced with the pan removal system; that the refuse tip be tidied up and properly controlled; that a weekly garbage service to all premises be instituted; that the water supply be chlorinated before reticulation.

The Local Authority was not favourable to the pan system, but undertook to give effect to the other recommendations.

Jericho Shire.

Items brought to the attention of the Local Authority for action were as follows:—

Alpha township: Nightsoil in trenches at the depot left uncovered; earth covering of refuse tip not kept up-to-date; accumulation of refuse on premises due to non-supply of garbage containers.

Jericho township: Fly-breeding at the nightsoil depot due to trenches insufficiently covered in; earth covering of refuse tip not kept up to date.

Longreach Shire.

A survey of the town of Longreach resulted in the following recommendations being made to the Local Authority: That additional nightsoil pans be secured for the service, together with suitable lids; that an extra nightsoil trench be used each day to eliminate overdosing of the trenches; that placing the refuse tip in order by dealing with previous years' accumulations be continued with; that refuse removal services to fish shops be increased; that tank incinerators on private premises be removed, and sufficient numbers of standard garbage containers be supplied.

The Treasury approved of a subsidy of £146 for mosquito control work in the town, a like amount being contributed from Council revenue.

A complete sewerage system for the town has not yet been commenced, but formalities are being completed. In the meantime a very efficient service for emptying "covered places" is operated.

Livingstone Shire.

Some three months prior to the Christmas-New Year holidays the Department requested that the Council advise what steps were contemplated to ensure proper sanitation at camps and picnic places during the summer vacation period. The Council in replying enumerated details which were listed for attention, and anticipated there would be no serious cause for complaint.

Although the Local Authority was again unfortunate in losing the services of its health inspector at the approach of the holiday season, the new appointee on taking up duty immediately gave attention to seaside sanitation. As this was his first experience in this regard at the behest of the Council he conferred with the Department's officer for guidance.

Over the main holiday period the Department's officer as usual was on duty daily at seaside places, which included the resorts of Yeppoon, Emu Park, and Keppel Sands; the camps at Yeppoon, Kemp Beach, Mulambin Beach, Emu Park, and Keppel Sands; the several picnic grounds.

At the conclusion a separate detailed report was submitted to head office in respect to each camp, while a general report dealt with seaside sanitation as a whole. These disclosed that with few exceptions the camps and picnic grounds were maintained in a clean and tidy condition throughout. Nightsoil and refuse removal services were operated efficiently, and complaints were few. Almost all cabinets in earth closets provided for public use had been made flyproof. The interiors of some which could not be replaced with the standard type became fouled occasionally, but the conveniences were subjected to daily cleansing. Several new sets of conveniences of brick construction were in use. Others were to be constructed from an unexpended amount of £1,112 loan and subsidy.

Recommendations brought under the notice of the Local Authority for attention included: That all earth-closet pansteads be brought up to regulation standard, where necessary substituting with new ones; that repairs be effected to sets of closets of wood construction where retained, and that these be painted; that standard type lidded garbage containers when obtainable be substituted for those in use; that certain urinals be provided with effective drainage and vents; that certain wells be effectively covered; that water supplies be reticulated for the use of campers; that additional sanitary conveniences be provided in places named; that action be taken to exclude straying horses from Phillip street (Emu Park) camping area; that specific arrangements be made to cleanse picnic grounds daily; that an early start be made on the Yeppoon drainage scheme whereby street water-channels would be relieved of waste waters which gave offence; that refuse tips be covered with earth. When replying the Council intimated that its health inspector and other officers concerned had been instructed to prepare plans of camping areas and give serious attention to permanent improvements with a view to bringing such areas to as high a standard as possible; the expenditure necessary for permanent improvements, such as bores, windmills, &c., was to be estimated and plans submitted. The other matters had also been brought under notice of the health inspector for attention.

Since then much progress has been made, plans have been prepared, new sets of brick conveniences have been constructed, standard lidded garbage containers secured, and delivery of a large number of standard earth-closet pansteads arranged for.

A proposal by the Council to convert earth-closets of brick construction at Bell Park to septic conveniences, and to provide water facilities for visitors to the park, was recommended for approval. The Treasury granted a loan of £413 and free subsidy grant of £87 for the purpose.

A further proposal to replace the obsolete bathers' dressing shed at Emu Park with a modern structure combining dressing room, shower, and septic conveniences at a cost of £800 (loan and subsidy) was also recommended for approval. The Council's inspector has prepared the plans for this project.

Plans were examined in connection with an application by the Local Authority for Government loans and subsidies, including 50 per cent. mosquito eradication subsidies, for drainage works in the main part of the town of Yeppoon, and in Arthur street of the same town. These proposals had been reported and recommendations submitted in June of the previous year. Certificates were issued to the effect that the plans covered the works recommended.

Plans covering a third proposal consisting of road construction, combined with drainage works, for Adelaide Park road and Normanby street (Yeppoon) were also examined and commented on. The Council sought Government loan and subsidy totalling £2,470 for these works.

Reports were furnished to head office concerning mosquito breeding areas at Yeppoon. Suggestions for eradication methods were included. After consideration the Council decided that the necessary works would be too costly to be undertaken at present. It is understood that spraying of the waters in these areas to control mosquito breeding has been arranged for.

Good progress is being made in supplying standard garbage containers to occupiers of premises in Yeppoon.

Special attention is being paid by the Council's inspector to housing conditions, bathroom facilities, and sanitary conveniences, &c., at boarding-houses and flats.

A barber's shop at Emu Park was closed due to unsuitability of premises and lack of approved equipment.

Barbers' shops in Yeppoon were inspected, resulting in a number of improvements.

At Ogmoo, where several cases of malaria occurred during the year 1945-46, anopheline mosquitoes were found breeding in water near the mine. Immediate spraying was arranged for. Works scheduled for mosquito eradication in the vicinity of the mine were completed this year.

The nightsoil service at Ogmoo, upon which it has been necessary to comment unfavourably in the past, is at last to come under the direct control of the Local Authority, a step which has been consistently recommended. A more suitable site for establishing the sanitary depot was selected in June of the present year. Plans for equipping the new depot have been prepared by the Council's inspector, who is completing arrangements for co-ordinating the Ogmoo and Marlborough services, and including one or two other settlements where no service was formerly in vogue.

Miriam Vale Shire.

This Council was requested to exercise proper control in the conduct of refuse tips at the different townships in the area, and to inaugurate the pan system of nightsoil removal at the townships of Lowmead and Rosedale. The service for Rosedale was expected to commence on 1st July, 1948.

Mount Morgan Shire.

The area was again without the services of a health inspector, and sanitation on the whole, remained in a backward state. The Council proposed to secure the services of an inspector from Rockhampton City for one day a week. This was not approved as the most recent survey of conditions showed that a full-time inspector was necessary. Applications for the vacancy have been advertised on two or three occasions, and the position is likely to be filled in the near future.

Peak Downs Shire.

The nightsoil and refuse services at the township of Capella were found to be performed satisfactorily. Matters which would require attention when the services of a health inspector were again secured were repairs to sanitary conveniences and the screening of domestic water supply tanks against mosquitoes.

Tambo Shire.

On completion of a sanitary survey of the township of Tambo the following recommendations were submitted for attention by the Local Authority:—The new site for nightsoil disposal to be put into use as early as possible; provision of a water supply at the new site so as to co-ordinate all depot operations at the one place; supply of standard garbage containers to all premises; institution of a weekly removal service to all premises; the covered-place system of waste water removal to be adopted for the hospital, hotels, shire clerk's residence, cafes, and other premises where nuisances occur; in the meantime to reduce mosquito breeding, all stagnant waters to be regularly treated with an effective larvicide; purchase of a motor truck with removable sanitary body to be used for carrying out the nightsoil and garbage removal services, and removal of wastes from covered-places; action to eradicate mice infesting business premises.

It is understood that action is being taken to give effect to these recommendations.

Theodore Shire.

Some improvement in sanitation in this area was noted, although conduct of the nightsoil depot and refuse tip left something to be desired. It was recommended that the Local Authority endeavour to have delivery of equipment for the depot expedited, that earth covering of the refuse tip be kept up-to-date, and that control of mosquito breeding be undertaken by spraying surface waters with an effective larvicide.

DETAILED SUMMARY OF INSPECTIONS MADE.

Area.	Number of First Inspections.	Number of Re-inspections.	Official Calls.	Number of Reports Submitted.	Number of Towns Visited.
Headquarters	465	91	188	34	..
Country	2,792	..	50	69	69 (112 visits)
Totals ..	3,257	91	238	103	69
Grand Total	3,586				

The above inspections were made in connection with—Barbers' shops 164, camps 46, drainage 136, flies 6, hotels 67, laneways 4, meat-works 1, mosquitoes 264, nightsoil depots 66, picnic grounds 29, rats 99, refuse removals 755, refuse tips 67, sanitary conveniences 1,430, sewerage 25, swimming pools 6, trucking yards 1, water supplies 39, wharves (visits re shipping) 141. The figures include 469 inspections, 41 reinspections, and 9 official calls by the assistant inspector.

LICENSED PREMISES.

Area.	First Inspections.	Re-inspections.	Number of Reports Submitted.
Headquarters	15	6	..
Country	44	..	..
Totals	59	6	..
Grand Total	65		..

General reports were not submitted as notices had not been served in connection with the previous year's reports. A number of reports were made in connection with specific matters which came up for attention, and plans for alterations and additions were examined and commented upon.

TOOWOOMBA SUB-OFFICE.

PLACES VISITED.

Inspections were carried out at Toowoomba and at fifty-six country centres as follows:—Acland, Allora, Amiens, Applethorpe, Ballandean, Bell, Bowenville, Cabarlah, Cambooya, Cottonvale, Crows Nest, Cecil Plains, Clifton, Cooyar, Dalby, Dalveen, Dirranbandi, Drayton, Glen Aplin, Goombungee, Goondiwindi, Gowrie Junction, Haden, Hampton, Highfields, Inglewood, Jandowae, Jondaryan, Kaimkillenbun, Killarney, Kingsthorpe, Kogan, Kulpi, Merindangan, Mungindi, Nindi Gully, Oakey, Omana, Peehey, Peranga, Pozieres, Stanthorpe, St. George, Talwood, Tara, Thallon, The Summit, Thulimbah, Texas, Toobeah, Wallangarra, Warra, Warwick, Wytul, Wyreema, Yelarbon.

Some centres, particularly those having large populations, were visited on a number of occasions, and the distance travelled by road outside Toowoomba on sanitation work totalled 4,287 miles.

LOCAL AUTHORITY SUPERVISION.

The summary of work carried out under this heading is as follows:—

Area.	First Inspections.	Re-inspections.	Official Calls.	Number of Reports Submitted.	Number of Towns Visited.
Headquarters	761	7	104	60	..
Country	859	1	37	113	56
Total	1620	8	141	173	56
Grand Total	1,769		..	..	..

These inspections included aged people's home 1, aerated water factory 19, bakers 59, barbers 39, cafes and stores 603, chemists 39, drainage 44, flies 1, food factory 49, incinerator 11, laneway 5, mosquitoes 20, public conveniences 60, rats 4, refuse tip 42, sanitary conveniences 341, sanitary plant 7, sanitary depot 32, sanitary area 1, saleyard 4, septic tank 1, sewerage treatment works 1, showground inspections 140, swimming pool 5, trucking yards 2, vacant land 1, water samples 2, and water supply 5.

LICENSED PREMISES.

Area.	Hotels.	Reports.
Headquarters	49	40
Country	90	90
Total	139	130

While there has been some individual improvement in a number of cases, the general standard of hotels in the district remains much as it was when last reported upon, and there is no indication that an early resumption of normal replacement or improvement can be expected. Acting on recommendations submitted from this Office, the Licensing Commission has issued orders on a number of hotels calling for the correction of faults, principally where discomfort or nuisance was being caused, but generally speaking recommendations for improvement in the standard of accommodation, as distinct from the correction of faults submitted in the normal manner after annual inspections have not been made the subject of orders. There is much to be done if accommodation is to be raised to a standard in keeping with the times, but until the current housing shortage has been overcome and materials now rightly diverted are freely obtainable it would seem that a maintenance of present standards is all that can be achieved, and recent recommendations concerning hotels have been confined to elimination of nuisances or other urgent matters.

At the request of the Licensing Commission a special survey was made of all hotels at Dalby for the purpose of determining the numbers and positions of bathrooms and sanitary facilities in preparation for the introduction of sewerage in the town. While the system will not be in operation for several years, the survey enabled house connection plans to be finalised, and will give the various owners ample time to plan the alterations and additions they will be required to make.

A number of hotels at Warwick and one at Toowoomba have been delicensed during the year following inquiries by the Licensing Commission as to their necessity or otherwise. A further number have been listed for extensive alterations at the earliest opportunity in order that their licenses may remain in force.

Notices have been served on twenty-one Toowoomba hotels requiring them to instal mechanical glass-washing apparatus of a type approved by the Director-General.

SEWERAGE.

Sewerage systems are in operation at Toowoomba, Warwick, and Goondiwindi. While the reticulation is practically complete in respect of the latter two towns, much of Toowoomba remains to be sewered, and any rapid extension of the system seems remote. Much difficulty is being experienced in obtaining materials for the completion of installations in areas already sewered, and, in consequence, the full health value of the utility has not been achieved.

Plans are well advanced for the installation of sewerage at Dalby, and an early start on the actual reticulation is anticipated. Preliminary work has commenced at St. George on plans for a proposed sewerage scheme, while at Bollon, also in the Balonne Shire, the Council has drawn up plans for the installation of the septic system in each premises—the smallness of the centre rendering a reticulated sewerage scheme impracticable.

As more of the larger centres acquire permanent water supplies, and a number have these projects in view, it is expected that further sewerage proposals will be formulated.

NIGHTSOIL AND REFUSE REMOVAL.

Generally speaking, these essential services were performed in a satisfactory manner. Most of the faults detected in the course of sanitary surveys at the various centres were of a minor nature and were rectified without delay. In only one instance was it found that conditions warranted an official Departmental reprimand. This was at Yelarbon, a small centre in the Waggamba Shire, which is without the services of a Local Authority health inspector, and defects included failure to cover trenches and delay in burial of nightsoil after collection.

At Tara and Jandowae exception was taken to the type of vehicle used in nightsoil collection, and arrangements have been made for their replacement with suitably enclosed vehicles.

Following representations by this Department the township of Warra and several other small places in the Wambo Shire have been listed for inclusion in the sanitary area, and an early commencement of the service is indicated. In the Stanthorpe Shire the new service to small settlements along the railway line is now operating.

At Drayton, where all arrangements had been completed for the institution of a nightsoil service, the only tender received was prohibitive and the scheme has been temporarily shelved. As there has been much building activity in the Drayton Shire in recent years, particularly in the vicinity of the Toowoomba city boundary, every effort should be made to commence the service at the earliest possible date.

In the matter of provision of public sanitary conveniences in the various towns in the district the prospects are much better than ever before. In Toowoomba new conveniences for both sexes, operating on the septic system, have been completed at the picnic area at the Cooby Creek Dam, new conveniences are proposed for Picnic Point, and a general scheme for conveniences in parks and city streets costing £6,000 is now in course of preparation. Public conveniences have

been approved for Millmerran and Allora, while the Inglewood Shire proposes to erect blocks at Inglewood and Texas.

The Toowoomba incinerator continues to function satisfactorily, and the Bridge street dry-refuse tip has been maintained in good condition throughout the year. The public refuse tip at Warwick was found to be out of control, and a report containing recommendations for improvement was submitted.

WATER SUPPLY.

There has been marked progress throughout the district in the furtherance of schemes for the reticulation of water in the various larger centres of population. The Dirranbandi project has been completed and the town of Dirranbandi now possesses a permanent supply drawn from the Balonne River. A modern treatment plant has been incorporated in the system and the water should be very suitable for all purposes. At St. George, which already has hot bore water reticulated to all premises, a start has been made on a second system which will supply cold water from the Balonne River. This water will be subjected to modern purification methods, and, when work is completed, St. George will be in the happy position of having both hot and cold water reticulated to all premises in the town.

The Stanthorpe Shire has approved of schemes to provide Stanthorpe and Wallangarra with water, and an early start is expected in both cases. The Stanthorpe project entails the construction of a dam and will take several years to complete, but the Wallangarra supply should not be long delayed. This latter is to be drawn from a dam constructed during the war to provide a water supply for military installations and purchased by the Council for only part of its original cost. As the dam is fully equipped, and mains are laid to a point close to Wallangarra township, only the actual reticulation remains to be done.

The Pittsworth and Wambo Shire Councils are at present engaged on preliminary surveys at Pittsworth and Jandowae respectively for sources of permanent supply. In both cases bores have been sunk to determine the possibility or otherwise of underground supplies. Millmerran and Oakey are also centres where the possibility of securing permanent supplies of water are under consideration.

When these projects have been completed most of the larger centres of population on the Downs and in south-western Queensland will have permanent supplies of water. While some of those already in existence are, for various reasons, unsuitable or not favoured for drinking purposes, the majority can be made so by the installation of modern plants, and it should be the aim of the Local Authorities concerned to provide these facilities at the earliest opportunity.

With the increase in the number of places served by permanent water supplies, it is confidently expected that some sewerage schemes, previously held up because of uncertainty of water supplies, will be embarked upon in due course.

MOSQUITOES.

The city of Toowoomba remains comparatively free of mosquitoes—a condition which is maintained only by constant vigilance on the part of the City Council in spraying of casual water, regular house-to-house inspections, and the immediate investigation of any complaints.

Warwick has maintained its progress in mosquito elimination, and the completion of desnagging operations designed to allow the free passage of water in the city reaches of the Condamine River has removed a number of prolific breeding areas. Good reports of reduced mosquito population have also been received from Dalby and St. George.

Several centres have applied for the inclusion of works under the mosquito subsidy scheme during the year, and reports and recommendations concerning these projects have been forwarded for consideration. Of these, the proposed town storm-water drainage scheme for Goondiwindi is probably the largest undertaking, and its ultimate completion will be of great benefit in mosquito control. Work has now commenced on the delayed £10,000 Toowoomba project (subsidy £5,030) for the further improvement of Gowrie Creek in the city reaches.

Throughout the district conditions are fair, but it is considered that many of the smaller centres could achieve much greater immunity from mosquitoes than they enjoy at present. In this regard, the allocation of smaller areas to the various Local Authority inspectors should facilitate intensive house-to-house campaigns which must have beneficial results.

RATS.

Except in the several large centres of population, rats are not prevalent in the district, and the general position calls for no especial comment. At Goondiwindi, however, a town previously untroubled to any extent, the rat population was found to be greatly increased, and a stage of infestation had been reached where vigorous counter measures were urgently necessary. As the Town Council was, and still is, without the services of a health inspector—and this was probably the principal factor leading to the unfavourable state of affairs—recommendations and advice were tendered for the Council's guidance in controlling and eliminating the nuisance.

Towards the end of summer a plague of mice swept across the territory from the south-west, invading most centres throughout the Downs and adjacent areas. Countless thousands were trapped or otherwise destroyed but the collective damage done was considerable. Recent heavy floods have served to eliminate the vast majority, but some places still report abnormal mouse populations.

FLIES.

The summer incidence of flies remains heavy throughout the district. Control of domestic flies in towns has been reasonably effective, but the seasonal influx from the pastoral and agricultural areas has not diminished to any extent and must be regarded as a major problem.

RAILWAY TRUCKING YARDS.

During the year complaints were received from several centres concerning the conduct of railway trucking yards, and, in all cases, the removal of the yards to more distant localities was sought by those lodging the complaints. This agitation for the removal of trucking yards appears to be general rather than confined to any particular places, and it is expected that further complaints and petitions will be received. The position is a difficult one in that, in most cases, the yards were established many years ago in what were then unsettled areas but which are now built-up town allotments. Whether or not building was carried out in their vicinity primarily because of convenience to the yards is not known, but the fact remains that major nuisances are caused in the vicinity of many of these trucking yards, and agitations for their removal have some justification in fact.

CLOSURE OF HOME FOR AGED.

Departmental action was taken during the year to close a home for aged persons which had been operating in Toowoomba for a number of years. The home had been the subject of numerous unfavourable reports to head office because of its lack of drainage facilities and general unsuitability for the purpose. Its elimination was justified in the interests of the occupants and of public health generally.

TOOWOOMBA SHOW.

Sanitary conditions at the Toowoomba Showgrounds during the staging of the annual show were given the usual careful supervision, and no untoward incident occurred. The projected transfer of the showgrounds to a new site at Harristown has not yet eventuated, and it seems likely that one or more shows will be held at the old site.

HEALTH EDUCATION.

Both Toowoomba and Dalby held health weeks during the year, while the Toowoomba City Council staged a health exhibit at the Toowoomba Show. In other centres, advantage was taken of the literature supplied by the Health Education Council for display or distribution. This field presents big possibilities and should be exploited to its fullest extent.

GENERAL.

The year has been marked by general progress in several directions, particularly in projects for water supply, sewerage and town drainage schemes. The various Local Authorities and their officers have given every assistance in the maintenance or improvement of health standards.

The smaller areas allotted to Local Authority health inspectors on the Downs, which operate from the close of this financial year, should facilitate much greater supervision than formerly, and a consequent improvement in general sanitation is confidently expected. The inability of several Councils to fill vacant positions for health inspectors gives cause for concern—at the present time there is no Local Authority health inspector in this district west of Warwick, and the resulting additional work thrown upon this district office has been considerable.

TOWNSVILLE SUB-OFFICE
SUMMARY OF INSPECTIONS MADE.

Area.	Inspections.	Re-inspections.	Official Calls.	Towns Visited.
Local ..	743	88	380	..
Country	361	29	28	21
	1,104	117	408	21
Grand Total, 1,629.		Miles Travelled, 5,562.		

SUMMARY OF INSPECTIONS MADE BY ASSISTANT INSPECTOR

Area.	Inspections.	Re-inspections.	Official Calls.	Towns Visited.
Local ..	214	44	158	..
Country	94	..	15	5
	308	44	173	5
Grand Total, 525.		Miles Travelled, 902.		

Towns visited included Charters Towers, Pentland, Prairie, Torrens Creek, and Winton.

SANITATION GENERALLY.

Matters of general sanitation within the city area have received attention at all times and the co-operation of the officers of the Council has always been satisfactory.

Major works such as the extension of the sewerage in North Ward, the Mount Spee water scheme, and the retaining wall along the sea front on the Strand have all been retarded as a result of shortage of materials.

In respect to the former, quite a number of premises in that area have been connected to the sewer, the most important being the Townsville General Hospital. With the new General Hospital gradually approaching the stage of completion it is pleasing to realise that sewerage facilities are already available.

As a result of recommendations made by this Department to the Townsville Pastoral, Agricultural, and Industrial Association during the year in respect to the unsatisfactory sanitary appointments at the Exhibition Grounds the recommendations as outlined have since been acted upon. Water-closets have replaced the pan system and one entirely new lavatory block with retiring-room adjoining has been erected for the convenience of females.

At one end of the grounds where showmen reside during the show week a shower-room and dressing-room have been erected for each sex.

Sewerage Generally.—The total number of premises now actually connected to the Council sewerage system is 4,948 and the number of pedestals in use is 6,813. There still remains approximately 120 premises within the defined area not connected.

Sanitary Service.—A new contract was entered into by the City Council as from the 1st May, 1948, for the removal of nightsoil and garbage, the term of the contract being three years with the option of a further two years.

The number of removals (sanitary) per month is an average of 13,600, which shows an increase of roughly 700 over the previous year, such increase being due to the erection of many new residences outside the sewered area.

Rat Control.—Continued requests by this department to the City Council to increase the strength of the rat gang resulted in the appointment of two additional men, bringing the total to three. During the period in which the three men had been engaged the number of

rats destroyed monthly had increased, giving evidence of the necessity for an efficient rat-catching gang.

Hotel Licensing.—Inspectorial and other duties in connection with hotel licensing on behalf of the Licensing Commission continues to be an important part of the work of a district office. Many of the hotels previously reported on have had extensive alterations carried out, whilst plans are being prepared by architects in respect to several others.

COUNTRY.

The following towns and townships were visited during the year:—Ayr, Bemerside, Charters Towers (5), Cloncurry (2), Forest Beach, Halifax, Hawkins Creek (2), Home Hill, Ingham (6), Julia Creek, Kurukan, Long Pocket, Lucinda Point, Macknade, Magnetic Island, Mount Isa (2), Ravenswood, Roseneath, Stone River, Trebonne, and Winton.

Diseases.—Owing to the Thuringowa Shire Council not having a health inspector on the staff this office attended to all matters of general sanitation within that Shire. Action was taken in respect to one case of poliomyelitis and one case of diphtheria. The former case resided at Kurukan, approximately 30 miles from Townsville, and the latter from Roseneath, about 9 miles from the city. In both instances inspections were made, disinfection carried out, and all necessary action regarding the contacts, &c., was taken.

Mount Isa.—Sewerage reticulation of sections 1 and 2 of the town was completed during the year and practically all premises within those sections have been connected to the scheme. The project had been one of this Department's objectives for many years, and with its completion much better sanitary conditions prevail and many objectionable nuisances have been removed.

Winton and Hughenden.—Both these towns have decided to introduce a sewerage system and arrangements are well in hand towards making a start with the preliminary stages. Drainage facilities at present are bad and a comprehensive sewerage system is the only satisfactory method of bringing about an improvement.

Charters Towers.—A general inspection of this city was carried out during the year, when a sanitary survey was made and reports with recommendations were submitted to headquarters.

It is the intention of this Council to install a water-purification plant to improve the water supply, which is very much subjected to discoloration, &c., particularly immediately following the flooding of the Burdekin River, from which the supply is drawn.

Ingham (Hinchinbrook Shire).—Two extensive works in connection with mosquito eradication have been undertaken in this Shire under the 50-50 loan and subsidy scheme. One to the extent of £6,276 includes drainage, filling, &c., of the Selby Estate in the town of Ingham (still in progress) and the other included the elimination of mosquito-breeding grounds at Lucinda Point, where an outbreak of malaria fever occurred in 1946 and which was reported upon in detail in the annual report of that year.

THURSDAY ISLAND SUB-OFFICE.

Report on the general conditions of Thursday Island's sanitation since the inception of the sub-office in February last.

Nightsoil Disposal Depot.—The pre-war trolley line used for the disposal of nightsoil has now been abandoned as insanitary. A strong tidal wash constantly striking the pier carrying the rails caused such damage to the line that the pan contents could not be emptied into the necessary deep water. This damage would be recurrent on such a pier, and the cost of maintenance very heavy.

Use is now made of a sewer installed during army occupation which discharges into the sea, and this has proved to be much more satisfactory. Full facilities for pan washing and tarring, vehicle cleansing, &c., have been constructed to further improve the method of disposal.

The past practice of washing pans in salt water has caused serious deterioration to the pans. The damage was further accentuated by inconsistent tarring. The improved conditions at the new depot for the above functions will result in maintaining equipment in good condition.

Refuse-Removal Service.—Refuse-removal services were regularly carried out, although, owing to the shortage of regulation bins, a large number of improvised drums are in use. The service cannot be called satisfactory. Householders—mainly amongst the native population—using such drums have been instructed to provide temporary wooden lids for them.

The refuse dump was in very bad condition due to indiscriminate dumping and irregular burning, covering, and facing, and provided admirable grounds for flies and rats. The dump has now been burnt off, levelled, covered, and fenced in such a manner that it can be more satisfactorily controlled. The contractor has been instructed in the correct methods of dumping and blinding, but despite constant supervision the dump is still not operating in the desired manner.

Mosquito Control.—Mosquito-control measures during the last five months have included drainage, clearing, spraying, and the oiling of unscreened household tanks and all other open receptacles. Two native labourers have been employed constantly for these works. Larva-eating fish—introduced during army occupation—were found in some water accumulations which could not be satisfactorily drained, and these fish have now been deposited in all such water accumulations and streams, resulting in complete control of mosquito breeding in these places.

The above measures have considerably reduced the mosquito population, but have not eradicated them completely. This is due to the very bad condition of the buildings and houses on the island. In many instances defective roof guttering and inadequate disposal methods of household drainage provide breeding grounds, while unclean, overgrown yards provide admirable daylight harbourage for mosquitoes.

Rat Control.—Phosphorus baits were regularly prepared and distributed throughout the premises of the island. In all, 5,340 baits were laid, and although only approximately 200 bodies

were recovered, 95 per cent. of the baits were taken. Judging from the marked decrease in the rat population it can be assumed that the baits taken were effective.

Water.—No filtration equipment or mechanical chemical treatment process is installed for the treatment of the town water supply, although previous samples taken revealed the water to be of fair quality. Samples taken recently, however, show that stricter treatment measures are required, and this will be given immediate attention.

Native Camps.—The three native camps on the island, consisting of disorderly collections of army huts, have been kept under constant supervision and are now in fair sanitary condition. New sanitary conveniences have been constructed and existing cabinets fly-proofed (pending installation of regulation cabinets), and refuse bins have been provided where directed. Care was taken to see that no huts within the water catchment area were occupied.

Sanitary Conveniences.—Private sanitary conveniences were generally found to be constructionally unsatisfactory, particularly in the native dwellings. These latter have been rectified in that they have been fly-proofed, but existing cabinets have yet to be replaced by regulation cabinets in many instances. Time was not at my disposal to complete a full inspection of all the sanitary conveniences of the white population, but several badly defective conveniences have been rebuilt and necessary repairs carried out in other cases.

Apart from those at the picture theatre and the hotels, there are no public conveniences on the island. A tender for the construction of two public conveniences on the waterfront has been accepted, however, and it is expected that these will be completed as soon as materials come to hand. Existing conveniences at the hotels and the theatre have been inspected, and reconstruction work is now in progress to bring each up to the required standard.

Licensed Premises.—The four hotels were inspected in conjunction with the Thursday Island licensing inspector and reports submitted in each case. Despite the fact that this was the first inspection made of the hotels for some years, two of them, apart from minor necessary alterations or repairs, were found to be in fairly satisfactory condition. Of the remaining two, one was found to require extensive large-scale alterations and repairs in almost all sections of the premises, and the other required the same in two sections only, namely the kitchen and the bathrooms.

GENERAL.

Details of inspections are as follows:—Licensed premises: First inspections, 4; reports submitted, 4. General: First inspections, 424; reinspections, 353; official calls, 72. Total, 849.

Since the opening of this sub-office in February last, a great deal has been done through the representative of the Corporation of the Director of Local Government to restore the island to satisfactory health standards. The advance in this respect should be greatly accelerated with the restoration of the Town Council as from 1st July, particularly with regard to control of private dwellings, improvements to the water supply, and improvement in the refuse and nightsoil removal services.

WEIL'S DISEASE CAMPAIGN.

NORTHERN CANE AREAS.

Inspector in Charge: J. M. KENNEDY.

During the year just ended the operations of the Campaign extended over all sugar-cane areas north of Townsville. Mill areas affected by direct field control measures were South Johnstone, Goondi, Mourilyan, Mulgrave, Babinda, Tully, Victoria, and Macknade, while Hambleton, Mossman, and that part of Giru mill area within the boundary of Hinchinbrook Shire received necessary attention as required.

Throughout the harvesting period, covering the months from June to January, inspection of cane before harvesting was carried out and all sections likely to carry risk to health were covered by orders to burn before being harvested.

In addition to areas thus covered by the Campaign staff, substantial sections were burned under the heading of health risk by mill field officers and farmers who in the main have co-operated fully, thus contributing to industrial harmony and promoting the efficiency of harvesting operations.

Through the co-operation of farmers and mills the special grouping of certain farms has been continued with satisfactory results, but it is felt that this policy could be developed much further with definite advantage as a preventive measure. The inclusion of farms with high, well-drained land which can be harvested while low river flats in the same group are drying out would certainly reduce the incidence of disease. Perhaps some form of consultation, prior to the formation of groups, between mills, farmers, and health authorities could lead to a suitable scheme on a larger scale.

Harvesting conditions generally throughout the season were better than the previous year, but labour difficulties in field and factory were still rather acute, while shortages of necessary farm materials retarded return to normalcy.

Reference to Table 1 indicates a substantial increase in tonnage harvested over the previous season in all districts except Ingham, where at both Victoria and Macknade mill crops were much below normal.

A proportion of cane burned for health risk was under 10 tons per acre and as such usually carried heavy rat harbourage. Low tonnage under this heading was relatively high in Mulgrave mill area.

RODENT CONTROL.

Infestation of fields by rodents reached only moderate proportions during the period under review, and then only towards the end of the harvest period, when concentration in remaining blocks became manifest. The absence of serious flooding or high winds during early 1947 and the consequent low ratio of lodged cane, together with a remarkably low rat population at that period, militated against any excessive increase in infestation during the months of harvesting.

The various Pest Boards functioning in sugar-cane areas maintained distribution of poison baits throughout most of the year.

The recent railway strike held up delivery of poison supplies required for distribution earlier this year, and as several Boards were

completely out of stocks and the others short of requirements effective control was lost with a consequent rapid increase of the rat population in all mill areas.

Recent heavy rain accompanied by high wind has caused very extensive lodging of the generally heavy crops, thus producing one of the most important factors governing the degree of rat infestation in the canefields. Extensive lodging promotes ideal conditions for the expansion of an already abnormal rat population during the coming harvest.

Phosphorus on bread continues its popularity as an effective bait in the canefields, but it is considered that a change of bait is desirable during the wet conditions. It is considered that zinc phosphide wheat during wet weather and bread and phosphorus during dry periods would be the most effective combination, if labour and other difficulties associated with the preparation and distribution of the latter could be overcome generally by Pest Boards.

Inspections to stimulate the cleaning of farms were carried out by staff members during the period between harvests with attention to farms adjacent to scrubs and watercourses. This activity resulted in much good work being done.

SANITATION.

During the period between harvests sanitary inspections of farms and barracks were continued from the previous year. This series of inspections was carried out as part of a scheme of co-operation with the Hookworm Campaign, which included a house to house intensive survey of sections of Babinda (Mulgrave Shire) and Tully (Cardwell Shire).

The figures thus obtained, representing cross sections of these communities, will provide most useful information.

In conjunction with necessary visits during the harvesting season by members of the Weil's staff and in full co-operation with the Local Authority Inspectors, follow-up, directed towards the improvement of sanitary standards, will be made.

GENERAL.

The Campaign staff has been below required strength for some time and with the gradual transition to normal field conditions much additional work devolves on the present staff.

Provision of improved means of transport for two officers who now depend on push bicycles would, it is believed, adequately meet the situation.

It is recommended, therefore, that consideration be given to the provision of motor cars for use by these officers, as dependence on bicycles in our tropical conditions retards the efficient discharge of their duties, particularly as speed in attention to field calls is essential.

I have again to record the fullest co-operation from mill officials, canegrowers' executives, and A.W.U. representatives, and to report that the year's operations have been completed without hold-up of harvesting or serious divergence of opinion.

TABLE 1.

Mill Area.	Total Area Harvested.	Total Crushed.	Total Burned.	Total Burned.	Burned under Health Regulations (including under 10 Tons P. Ac.)	
	Acres.	Tons.	Acres.	Tons.	Tons.	Acres.
Johnstone	10,490	216,298	10,215	210,639	25,668	1,246
Goondi	7,249	174,871	6,938	167,311	15,958	546
Mourilyan	8,047	147,826	7,977	146,435	1,500	70
Mulgrave	9,600	185,514	9,220	179,263	123,006	8,200
Babinda	10,432	252,987	9,950	238,690	22,250	927
Tully	12,316	221,675	12,012	215,014	7,021	906
Victoria	11,718	207,293	9,123	164,778	14,839	1,976
Macknade	10,948	197,538	8,848	160,337	19,553	1,866
Hambledon	6,516	133,754	6,104	123,200	6,155	953
Totals	87,316	1,737,756	80,387	1,605,667	235,950	16,690

TABLE 2.
LEPTOSPIROSIS CASES NOTIFIED.
DISTRIBUTION, OCCUPATION, AND NATIONALITY.

District.	Canecutters.	Farmer.	L. A. Employee.	Domestic Duties.	British.	Italian.
Innisfail	2	1	..	..	..	3
Tully	..	..	1	..	1	..
Ingham	..	..	..	..	..	..
Babinda	..	..	..	..	..	..
Gordonvale	..	..	..	1	1	..
Cairns	..	..	..	..	..	..
Totals	2	1	1	1	2	3

TABLE 3.
BAITS DISTRIBUTED BY PEST BOARDS FOR RODENT DESTRUCTION.
NUMBERS AND TYPE.

Mill Area.	Phosphorus on Bread.	Thallium Sulphate. (Wheat.)	Zinc Phosphide. (Wheat.)	Other.
Johnstone	..	38,000	120,000	Phosphorus
Mourilyan	6,772,000	..	..	..
Goondi	..	..	274,000	..
Babinda	991,760	..	..	..
Mulgrave	540,000	..	283,200	..
Tully	..	434,500	..	..
Victoria	..	..	800,000	..
Macknade	..	598,400	1,020,928	..
Hambledon	..	..	881,024	..
Mossman	..	..	870,000	..
Totals	8,303,760	1,070,900	4,249,152	..

TABLE 4.
SANITATION (RURAL SECTIONS).
CARDWELL SHIRE.

	Classification.						Type.		
	D.	E.	F.	G.	H.	Total.	Pans.	Pits.	Septic.
Homes	10	38	5	22	4	79	43	27	5
Barracks	2	7	1	5	1	16	6	8	..
Totals	12	45	6	27	5	95	49	35	5

MULGRAVE SHIRE.

	Classification.						Type.		
	D.	E.	F.	G.	H.	Total.	Pans.	Pits.	Septic.
Homes	55	40	6	96	..	197	66	112	13
Barracks	14	17	4	48	..	83	17	62	..
Totals	69	57	10	144	..	280	83	174	13

D.—Regulation Cabinet; E.—Allowing soil pollution; F.—No Sanitary convenience; G.—Below standard, but not allowing soil pollution; H.—Soil pollution in evidence at time of inspection.

HOOKWORM CAMPAIGN.

S. THOMPSON, Microscopist-in-Charge.

The staff working for field hookworm control at the beginning of July, 1947, comprised a microscopist and two residential sisters at Cairns, one residential sister at Innisfail, and one field inspector at Ingham. The services of the inspector with the Hookworm Campaign terminated in September, 1947, and despite repeated advertisements no applications have been received for the vacancy.

During the past year the microscopist visited Yarrabah, Monamona, and Daintree Missions and mass-treated aborigines for hookworm disease. All children at Yarrabah and Monamona Missions were given containers, and all hookworm hosts found are being treated to a cure.

The examination of the specimens from Monamona Mission showed a very high infestation rate of hookworm. This is a polluted area, and will continue as such until a high standard of hygiene is maintained.

In the Cairns, Mossman, Innisfail, and Tully areas the sisters have carried out at schools, hookworm surveys together with general school medical duties. At the beginning of May, Sister A. E. Blyde commenced a survey of the schools on the tablelands north of Cairns, for general school medical work only.

There has been close co-operation between the staff of the Campaign and the Weil's disease staff. Inspector Rodgers visited the prison farm at Stone River, in the Ingham area. Containers were given out to 16 prisoners and 2 of the staff. The microscopical examinations showed that two of the prisoners were harbouring hookworms. The treatments, with directions for taking same, have been forwarded to the Superintendent. Two other inspectors carried out a house-to-house hookworm survey in the Babinda and Tully areas, delivered treatments, and collected re-examination specimens.

When the Weil's disease inspectors finished the intensive survey, a school survey was commenced by the sisters in the Tully and Mossman areas.

The Hookworm Campaign office at Ingham was closed during the year, and when the new inspector is appointed his headquarters will be located at Tully.

Of the 4,787 specimens examined, 622 showed positive hookworm results; 320 of the hookworm hosts have been treated to a cure. Seven hundred and fifty-six specimens contained ova of other parasitic worms, namely *Oxyuris vermicularis*, *Trichuris trichiura*, *Hymenolepis nana*, and *Taenia saginata*. Only a few of the last form were found.

Arrangements were made with the medical officer of the district hospital in each centre for 25 children under three years of age to be treated in hospital and kept under observation.

Of the 1,977 school children examined in all areas, 88 were found positive hookworm hosts and 252 with other parasitic worms. Of these positive hookworm hosts 40 have been treated to a cure.

The microscopist visited the aboriginal reserve in Cairns and supervised the spreading of lime on the soil where a few full pans of infected hookworm faeces were buried.

A good number of specimens have been received for examination from the Mossman, Babinda, and Tully hospitals, and also from local practitioners in the Cairns area.

In all areas a close watch is being kept on the sanitation at the homes of positive hookworm hosts so as to prevent the spreading of hookworm disease.

During the absence of the microscopist from Cairns, Sister C. A. Vincent carried out all duties in the office and laboratory. The microscopist visited each centre and discussed hookworm matters with the residential sister and Local Authority inspectors.

Medical practitioners, school teachers, superintendents of missions, and the Local Authority health inspectors have given every assistance to the Hookworm Campaign in its efforts to eradicate hookworm disease.

ENDEMIC AREA UNDER RESIDENTIAL CONTROL.

Name.	Census.	Specimens.					Treatments.			
		Received.	Examined.	Re-examined.	Positive.		Notices.	Delivered.	Posted.	Cured.
					H.W.	Others.				
<i>Cairns Area—</i>										
Schools	1,037	1,070	1,024	46	50	141	141	27	16	25
<i>Mossman Area—</i>										
Schools	204	202	196	6	11	19	19	6	1	1
<i>Daintree Area—</i>										
Schools	38	38	38	..	5	8	8	..	5	..
<i>Cooktown Area—</i>										
School	57	56	53	3	5	8	8	..	5	1
<i>Innisfail Area—</i>										
Schools	418	415	405	10	11	62	56	10	..	10
<i>Tully Area—</i>										
Schools	196	180	176	4	6	12	12	4	1	2
<i>Ingham Area—</i>										
School	15	16	15	1	..	2	2	..	..	1
School Total ..	1,965	1,977	1,907	70	88	252	246	47	28	40
<i>Pre-School Children—</i>										
Daintree Area ..	6	6	6	..	1	1	1	..	1	..
Cooktown Area ..	16	16	16	..	2	5	5	..	2	..
Pre-School Total ..	22	22	22	..	3	6	6	..	3	..
<i>Intensive Survey—</i>										
Innisfail Area ..	716	636	636	..	35	30	30	35	..	..
Tully Area	279	264	264	..	17	..	..	..	15	..
Ingham Area	111	105	105	..	..	2	2	..	..	..
Intensive Survey Total	1,106	1,005	1,005	..	52	32	32	35	15	..
<i>Other Hosts in—</i>										
Cairns Area	..	13	..	13	4	..	..	2	2	9
Mossman Area	..	1	..	1	..	..	..	..	..	1
Cooktown Area ..	..	4	..	4	..	..	..	..	..	4
Innisfail Area	..	25	..	25	3	4	4	3	..	22
Tully Area	..	12	..	12	2	..	..	..	2	10
Ingham Area	..	135	..	135	34	..	..	25	9	101
Other Hosts Total ..	..	190	..	190	43	4	4	30	13	147
<i>Aborigines—</i>										
Cairns Area	163	167	153	14	38	44	35	13	4	6
Yarrabah Mission ..	250	327	250	77	84	218	218	299	..	40
Mona Mona Mission ..	138	312	138	174	216	132	132	289	..	64
Mossman Area	6	8	6	2	6	4	4	3	3	..
Daintree Area	..	..	..	..	..	..	..	44	..	..
Innisfail Area	29	54	28	26	22	8	8	14	..	20
Tully Area	39	47	38	9	34	..	..	3	..	3
Aborigines Total ..	625	915	613	302	400	406	397	665	7	133
<i>Miscellaneous—</i>										
Cairns Area	324	324	324	..	13	36	36	7	6	..
Yarrabah Mission ..	4	4	4	..	..	..	..	..	..	..
Mona Mona Mission ..	5	5	5	..	1	..	..	1	..	..
Mossman Area	55	55	55	..	5	3	3	5	..	..
Cooktown Area	7	7	7	..	..	..	..	..	..	..
Innisfail Area	154	154	154	..	12	9	9	10	..	..
Tully Area	20	20	20	..	1	3	3	..	1	..
Ingham Area	109	109	109	..	4	5	5	1	2	..
Miscellaneous Total ..	678	678	678	..	36	56	56	24	9	..
<i>All Areas—</i>										
Cairns Area	1,524	1,574	1,501	73	105	221	212	49	28	40
Yarrabah Mission ..	254	331	254	77	84	218	218	299	..	40
Mona Mona Mission ..	143	317	143	174	217	132	132	290	..	64
Mossman Area	265	266	257	9	22	26	26	14	4	2
Daintree Area	44	44	44	..	6	9	9	44	6	..
Cooktown Area	80	83	76	7	7	13	13	..	7	5
Innisfail Area	1,317	1,284	1,223	61	83	113	107	72	..	52
Tully Area	534	523	498	25	60	15	15	7	19	15
Ingham Area	235	365	229	136	38	9	9	26	11	102
Grand Total	4,396	4,787	4,225	562	622	756	741	801	75	320

Hookworm hosts treated in hospital—Cairns 9, Mossman 4, Innisfail 2, Babinda 7, Tully 1.

SANITATION.

HINCHINBROOK SHIRE.

	Ingham Area.
Number of places visited	172
Number of sanitary conveniences inspected	172
Privies no action required	166
Number of defective privies	6
Number of sanitary re-inspections	10
Septic tanks	11

D. Class—Regulation cabinet.

G. Class—Below standard, but not allowing soil pollution.

E. Class—Allowing soil pollution.

F. Class—No sanitary convenience.

H. Class—Soil pollution in evidence at time of inspection.

HINCHINBROOK SHIRE.

D. Class.	G. Class.	E. Class.	F. Class.	H. Class.
Pans 119	26	6	..	..
Septic 11	..	..	..	..

FOOD AND DRUGS.

During the period under review (1947-48) the Division of Foods and Drugs has continued its operations under the Pure Food and Drug Sections of the Health Acts, the Health (Food Supply) Regulations, the Food and Drug Regulations, Milksellers' Regulations, Health (Insecticides) Regulations, and the Poisons Regulations.

Visits to Country Centres.—Apart from inspectorial work carried out in the metropolis, visits by the headquarters staff were made to the following outside centres:—Alberton, Amity Point, Appletree Creek, Aratula, Beaudesert, Beechmere, Beenleigh, Biggenden, Bilinga, Boonah, Booval, Broadbeach, Bundaberg, Bundamba, Burleigh Heads, Burnett Heads, Caboolture, Caloundra, Charleville, Childers, Cleveland, Coolangatta, Cooroy, Cordalba, Dallarnil, Dayboro, Deception Bay, Eidsvold, Elliott Heads, Gayndah, Goodna, Goomeri, Gooroolba, Gympie, Harrisville, Howard, Ipswich, Kalbar, Kileoy, Kingaroy, Maroochydore, Maryborough, Miami, Monto, Mooloolaba, Mount Alford, Mount Tamborine, Mulgeldie, Mundubbera, Murgon, Nambour, Nanango, Neilsen Park, Noosa, Palm Beach, Pialba, Point Vernon, Rathdowny, Redcliffe, Redbank, Redland Bay, Roma, Rosewood, Scarness, Southport, Strathpine, Surfers' Paradise, Tamborine, Tewantin, Thornside, Torquay, Tugun, Uranang, Victoria Point, Waterford, Wondai, Woombye, Woodford, Yatala.

Milk Supply.—The control of the public milk supply is an important duty undertaken by this Division, and the work has received constant attention throughout the year, which included the sampling of milk and the inspection of milksellers' vehicles and premises. In all, 2,014 samples were secured by the headquarters staff, and of these 3.6 per cent. were found to be adulterated with added water. (Detailed particulars of these samples are contained in the report of the Government Analyst.) It is of interest to note that where milk was found to be "watered" the actual adulteration in most instances took place at the point of production.

An investigation conducted in connection with the incidence of bacillary dysentery focussed attention to the fact that two of the patients obtained their milk supply from the same dairy. Samples of milk subsequently

obtained from this dairy were found to have an organism resembling a typical dysentery bacillus present. Insanitary conditions were found to exist throughout the dairy premises, and the sale of milk produced on the place was immediately prohibited. The ban on the sale of milk was lifted only after the premises had been put into a sanitary state and three consecutive samplings of the milk were found to be free from dysentery bacilli.

In view of the foregoing experience it is reassuring to report that the demand for bottled pasteurised milk is rapidly increasing in the Brisbane Metropolitan area approximately 63 per cent. of the milk consumed is this bottled milk, whilst another 12 per cent of the supply is pasteurised and sold as bulk milk. It is expected, with the early opening of an additional milk factory, that the proportion of pasteurised milk sold will be further increased. Supervision of the pasteurising of milk has been maintained, and samples of pasteurised milk regularly submitted to bacteriological examination. The progress made over the last few years in the methods of pasteurising milk has quickly rendered machinery in use obsolete, necessitating the replacement by milk companies of costly apparatus and appliances in order to ensure that only the most modern equipment is employed.

The unsatisfactory method of delivery of milk supplies from the factories to retail vendors in the suburbs of Brisbane by leaving cans of milk at street corners and on vacant allotments, often to the annoyance of nearby residents, has been a matter of concern to this division for some time. Whilst the milk companies are prepared to provide depôts at distribution points, it has not yet been found possible for them to secure suitable situations for such depôts which are removed from the immediate vicinity of residential areas and which may be safely used in the handling of milk.

Remarks on Prosecutions.—There were twenty-eight prosecutions for the sale of milk adulterated with water, thirteen of which were in connection with the milk supply of the metropolis and its environs. The other fifteen were related to samples collected from milk supplies of Buderim, Bundaberg, Caboolture, Childers, Harrisville, Maryborough, Monto, Mt. Walker, Rosewood, Woodford, and Yandina.

PROSECUTIONS FOR MILK ADULTERATION (ADDED WATER) FOR THE YEAR ENDING 30TH JUNE, 1948.
(HEADQUARTERS).

Date.	Place.	Percentage of Added Water.	Fines.	Costs.
1947—		Per Cent.	£ s. d.	£ s. d.
1st July	Woodford	8.8	9 0 0	1 7 0
1st July	Woodford	7.0	7 0 0	1 7 0
1st July	Woodford	12.7	13 0 0	1 7 0
30th July	Brisbane	16.4	16 0 0	1 7 0
1st August	Amberley	12.0	12 0 0	1 7 0
20th August	Brisbane	16.1	16 2 0	1 7 0
16th September	Monto	9.6	15 0 0	1 7 0
25th September	Childers	10.6	10 0 0	1 7 0
15th October	Chevallum	5.0	5 0 0	1 7 0
15th October	Buderim	5.0	5 0 0	1 7 0
27th October	Mt. Walker	9.0	9 0 0	1 7 0
21st November	Brisbane	18.2	18 0 0	5 11 0
3rd December	Tingalpa	6.9	7 10 0	1 7 0
10th December	Chevallum	5.0	5 0 0	3 9 0
1948—				
15th January	Bundaberg	6.7	7 0 0	3 9 0
21st January	Brisbane	5.0	5 0 0	1 7 0
9th March	Brisbane	11.8	11 0 0	1 7 0
10th March	Yandina	14.8	14 0 0	1 7 0
15th March	Harrisville	12.3	18 0 0	1 7 0
19th March	Brisbane	10.4	10 0 0	2 8 0
2nd April	Rosewood	6.8	12 0 0	1 7 0
6th April	Maryborough	28.0	20 0 0	2 8 0
6th April	Maryborough	22.7	20 0 0	2 8 0
6th April	Maryborough	12.8	13 0 0	1 7 0
14th April	Oxley	6.4	7 0 0	1 7 0
21st April	Caboolture	20.0	20 0 0	1 7 0
6th May	Kallangur	15.4	16 0 0	1 7 0
2nd June	Brisbane	7.8	8 0 0	1 7 0
			£328 12 0	£49 7 0

PROSECUTIONS FOR MILK ADULTERATION (FAT DEFICIENCY).

Date.	Place.	Percentage Deficiency.	Fines.	Costs.
1947—		Milk Fat.	£ s. d.	£ s. d.
26th November	Brisbane	30.4	5 0 0	3 9 0
1948—				
14th January	Woody Point	51.5	3 0 0	1 7 0
			£8 0 0	£4 16 0

MISCELLANEOUS MILK PROSECUTIONS.

Date.	Place.	Basis of Prosecution.	Fines.	Costs.
1947—			£ s. d.	£ s. d.
30th July	Darra	Unsuitable milk vehicle	2 0 0	0 6 0
24th September	Brisbane	Unsuitable milk vehicle	3 0 0	0 6 0
24th September	Brisbane	Dirty vehicle	15 0 0	0 6 0
24th September	Brisbane	Name, address, and license number not on vehicle	2 0 0	0 6 0
24th September	Brisbane	Name, address, and license number not on vehicle	10 0 0	0 6 0
24th September	Brisbane	Unsuitable vehicle	2 0 0	0 6 0
24th September	Brisbane	Measures without close fitting lids	3 0 0	0 6 0
24th September	Brisbane	Measure without handle	3 0 0	0 6 0
1948—				
14th January	Brisbane	Milk falsely described	3 0 0	1 7 0
15th January	Bundaberg	Name and address not on vehicle	0 10 0	0 16 6
15th January	Bundaberg	Measure without close fitting lid	1 0 0	0 16 6
15th January	Bundaberg	Extended pipe from milk can to tap	1 0 0	0 16 6
15th January	Bundaberg	Milk tap not protected	1 0 0	0 16 6
15th January	Bundaberg	Milk vehicle not properly constructed	2 0 0	0 16 6
6th April	Maryborough	Unsuitable milk vehicle	2 0 0	0 6 0
6th April	Maryborough	Milk tap not protected	2 0 0	0 6 0
6th April	Maryborough	Milk tap not protected	2 0 0	2 8 0
9th June	Brisbane	Milk tap not protected	7 0 0	2 8 0
9th June	Brisbane	Milk tap not protected	7 0 0	2 8 0
			£68 10 0	£15 13 6

Cafes.—Cafes and refreshment-rooms have received special attention, and a steady improvement in the conditions at these premises realised. Inspection was made of methods of food preparation, protection of food, and cleanliness of tableware, appliances, and utensils. Cracked and chipped crockery was checked, and the detection of cockroaches and other vermin carried out.

Food Factories, &c.—Food factories of every description and retail and wholesale food premises have received visits from the head-

quarters staff. Many small food factories have been established as post-war ventures and in some cases have been set up in dilapidated and unsuitable buildings. In a few instances the proprietors of these establishments were required to cease the use of the premises for the preparation of food for sale.

Where shopkeepers failed to comply with the provisions of the Food and Drug Regulations, prosecutions were launched for such breaches and penalties obtained.

PROSECUTIONS FOR MISCELLANEOUS BREACHES BY SHOPKEEPERS FOR THE YEAR ENDING 30TH JUNE, 1948.
(HEADQUARTERS STAFF.)

Date.	Place.	Basis of Prosecution.	Fines.	Costs.
1947—			£ s. d.	£ s. d.
18th July ..	Brisbane ..	Food exposed to contamination ..	2 0 0	0 6 0
18th July ..	Brisbane ..	Dirty food premises ..	1 0 0	0 6 0
27th October ..	Ipswich ..	Food exposed to contamination ..	5 0 0	0 6 0
1948—				
2nd March ..	Brisbane ..	Food exposed to contamination ..	3 0 0	0 6 0
			£11 0 0	£1 4 0

Bread.—Both the quality and weight of bread received attention, resulting in the prosecution of bakers, and the details of the cases are set out below.

Foreign articles have been found in bread from time to time, due to carelessness on the

part of the baker or his employee. During the year two loaves of bread from the same bakery were discovered to contain small pieces of broken glass, and the baker was proceeded against for a breach of the Health Acts.

BREAD PROSECUTIONS FOR THE YEAR 1947-48—(HEADQUARTERS STAFF.)

Date.	Place.	Basis of Prosecution.	Fines.	Costs.
1948—			£ s. d.	£ s. d.
15th January ..	Bundaberg ..	Brown bread deficient in wholemeal ..	2 10 0	1 7 0
15th January ..	Bundaberg ..	Brown bread deficient in wholemeal ..	3 0 0	1 7 0
24th March ..	Brisbane ..	Foreign substance (glass) in bread ..	5 0 0	0 6 0
31st March ..	Brisbane ..	Bread, 5 lb., 4½ oz. short-weight ..	10 0 0	0 6 0
			£20 10 0	£3 6 0

Preservatives in Meat.—Notwithstanding proceedings taken by this Department, butchers continue to use a preservative substance in fresh meat in contravention of the provisions of the Food and Drug Regulations. Stale meat so treated becomes bright red in colour with every evidence of freshness.

In addition to the following list of prosecutions for having sold adulterated minced meat, two Brisbane butchers were fined for having sold sausage meat containing 15 and 15.6 per cent. per lb. respectively of the preservative substance, sulphur dioxide, when fines and costs totalling £18 15s. were secured.

PROSECUTIONS FOR ADULTERATED MINCED MEAT FOR YEAR 1947-48—(HEADQUARTERS STAFF.)

Date.	Place.	Quantity of Preservative (Sulphur Dioxide).	Fines.	Costs.
1948—			£ s. d.	£ s. d.
14th April ..	Sandgate ..	5.3 grains per lb. ..	7 0 0	1 7 0
14th April ..	Brisbane ..	2.0 grains per lb. ..	7 0 0	1 7 0
21st April ..	Nundah ..	6.0 grains per lb. ..	7 0 0	1 7 0
21st April ..	Morningside ..	2.2 grains per lb. ..	1 0 0	1 7 0
21st April ..	Nundah ..	7.0 grains per lb. ..	7 0 0	1 7 0
28th April ..	Camp Hill ..	2.3 grains per lb. ..	5 0 0	1 7 0
28th April ..	Camp Hill ..	2.2 grains per lb. ..	5 0 0	2 8 0
13th May ..	Coorparoo ..	4.0 grains per lb. ..	3 0 0	1 7 0
28th May ..	Brisbane ..	8.5 grains per lb. ..	10 0 0	1 7 0
28th June ..	Brisbane ..	11.3 grains per lb. ..	12 0 0	1 13 0
28th June ..	Brisbane ..	4.3 grains per lb. ..	4 0 0	1 10 0
			£68 0 0	£16 7 0

Fish Supply.—The condition of Brisbane's fish supply and of fish sold in retail shops was supervised by the two inspectors stationed at the fish markets. Some 61 tons of different species of fish were condemned by these officers, and its destruction witnessed, on the score of being unfit for human consumption. In addition, 948 crabs, 11 lobsters, 1,825 lb. of prawns, 6 lb. squid, and 1½ lb. and 4 bottles of oysters were condemned for the same reason.

FISH CONDEMNED AND DESTROYED AT THE FISH BOARD MARKETS, SOUTH BRISBANE.

Class of Fish.	Weight.			
	T.	C.	Q.	L.
Barramundi	0	1	1	0
Bass	0	0	0	15
Black King	0	0	3	19
Bonito	0	0	1	0
Bream	2	17	2	6
Catfish	0	0	3	14
Chinaman	0	0	1	27
Cod	0	1	0	25
Coral Bream	0	0	0	10
Flathead	0	4	0	26
Gar	0	6	0	15
Herrings	0	0	1	18
Jew	0	1	3	9
John Dory	0	15	1	14
Leather Jacket	0	3	3	20
Long Tom	0	0	3	20
Mackerel	0	18	2	6
Mauri Cod	0	0	0	3
Mixed Fish	1	13	2	15
Morwong	0	0	0	15
Mullet	48	16	1	8
Parrot	0	0	2	0
Perch	0	0	1	21
Pike	0	0	0	11
Pilchards	0	0	0	24
Ray	0	6	2	0
Red Emperor	0	3	0	12
Red Jew	0	0	1	4
Salmon	0	0	1	2
Sawfish	0	1	3	13
Schnapper	0	18	3	23
Shark	0	7	1	27
Squire	0	1	0	4
Sweetlip	1	0	3	8
Tailor	1	14	1	0
Trevalli	0	0	2	19
Trout	0	2	3	4
Trumpeter	0	0	0	10
Turrun	0	0	2	8
Whiting	0	8	0	17
Yellow Tail	0	2	0	7
	61	14	1	23

INSPECTIONS GENERALLY.

Foods and drugs offered for sale have been under constant supervision by the headquarters staff, which work has entailed inspections at warehouse, factories, auction marts, wharves, &c.

Shipments of foodstuffs from overseas were inspected in bond on the wharf before the food was permitted to be distributed. A consignment of walnuts from India was found to be heavily insect-infested, and the sale was pro-

hibited by our officer who subsequently witnessed their destruction by fire.

Attention was focused on the storing of foods in the holds of shipping, where it was found, in some instances, that greater care was required to ensure that food cargoes were not contaminated by stowing in close proximity to poisonous or potentially dangerous goods. Representations were made to shipping companies, and they agreed to exercise greater care in such matters.

The existence of vermin infestation on wharves where food is handled was also investigated, and in one instance a very heavy cockroach infestation was evident. On representations being made to the shipping company concerned, immediate steps were taken to have the matter satisfactorily dealt with.

The conditions under which damaged consignments of foods are handled and repacked on some of the wharves were not satisfactory, and further attention to this angle in food contamination must be undertaken in the near future.

Spirituuous Liquors.—The testing of alcoholic liquors on licensed premises has been continued, and at the end of the period under review, two prosecutions were pending against a hotel-keeper for the offences of selling adulterated whisky and misdescribed rum.

Owing to the shortage of supplies of bottled beer from the breweries, licensed victuallers have been bottling considerable quantities of draught beer to satisfy this trade. The conditions of bottling were found in the main to be unhygienic, and in certain instances the bottling technique included the unsanitary practice of establishing syphonic action in the rubber tube used in the filling of the beer from cask to bottle by the suction of the operator after inserting the tube in his mouth.

In the light of these discoveries, arrangements were made for a special circular to be issued by the Licensing Commission in which the requirements in the case of bottlers' licenses were prescribed, and, as a result, many hotel-keepers have now installed satisfactory bottling appliances.

Soft Drinks.—Special attention has been given to the labelling and composition of aerated waters and cordials for the express purpose of detecting whether the legal standards, which were designed to a large extent to promote the consumption of fruit juices, were given effect to by the manufacturer. Suitable action was taken to correct labelling found to be faulty.

A Brisbane company was convicted and fined £10 with £1 7s. costs for having sold "Lime" essence which was falsely described.

Brisbane Show.—At the Brisbane Exhibition the conditions under which food for sale is prepared and served are given constant supervision by officers of this division. The temporary nature of such ventures, particularly in vicinity of sideshows, accounts for attempts to prepare food under conditions which transgress all the principles upon which the Food and Drug Regulations have been designed. At the last Show it was found that, although an improvement on conditions found in previous

years was realised, there is still room for greater improvement. It is anticipated that representations made to the National Association in such matters will result in still greater improvement at future shows.

Wrapping of Foods.—The checking of the tendency, on the part of purveyors of unwrapped contaminable foods, to disregard the requirements of the Food and Drug Regulations to provide approved glass cases for the storage of such foods has been given active attention and flagrant breaches of the relevant regulations are as a result less prevalent.

Wrapping paper for foods sold over the counter continues to be in short supply, so that in the year now under review the unsatisfactory position experienced in these matters during the wartime period still prevails.

Unsound Food.—Reference to the following table of unsound foods which were certified to by officers of this Department after destruction by the respective owners, indicates that such duty has called for considerable attention throughout the year. As in past years, regular inspections have been made for such purposes, on the waterfront, auction rooms, salvage stocks from fires, and contraband goods seized by the Customs Department.

UNSOOUND FOODS DESTROYED, HEADQUARTERS STAFF,
FOR THE YEAR ENDING 30TH JUNE, 1948.

Article.	Quantity.	Weight.			
		T.	C.	Q.	L.
Baking Powder ..	9 tins	0	0	0	9
Biscuits ..	514 packets	0	2	1	9
Bread Crumbs ..	18 packets	0	0	0	9
Cereals ..	36 packets	0	0	1	7
Chewing Gum ..	72 packets	0	0	0	7
Chutney ..	32 bottles	0	0	1	18
Cocoa ..	142 packets	0	0	2	16
Confectionery ..	50 packets	0	0	1	12
Cordial Crystals ..	362 packets	0	0	3	2
Cornflour ..	2 packets	0	0	0	2
Currants ..	96 tins	0	0	3	12
Dates ..	74 cases	2	6	0	0
Essence of Lemon ..	3,516 bottles	0	1	3	23
Fish Frankfurts ..	22	0	0	0	5
Flour ..	41 packets	0	0	1	11
Fruit (tinned) ..	58 tins	0	0	2	16
Honey ..	3 jars	0	0	0	4
Honey Nut Spread ..	3 jars	0	0	0	3
Ice Cream Mixture ..	14 packets	0	0	0	14
Ice Sugar ..	15 bags	0	11	3	10
Jam ..	327 tins	0	3	3	19
Junket Powders ..	79 packets	0	0	0	6
Lemon Butter ..	7 jars	0	0	0	15
Macaroni ..	10 packets	0	0	0	10
Malt Extract ..	1 tin	0	0	0	1
Meat (tinned) ..	134 tins	0	1	0	22
Mustard ..	448 jars	0	2	0	1
Nuts ..	183 cases	7	4	2	20
Olives ..	1 cask	0	2	3	12
Paste (Date) ..	10 cases	0	6	1	0
Paste (Peanut) ..	29 jars	0	0	0	9
Pickles ..	106 bottles	0	1	0	9
Powdered Milk ..	89 tins	0	2	1	15
Puddings ..	105 packets	0	0	3	2
Rice ..	9 packets	0	0	0	9
Salmon ..	439 tins	0	3	2	14
Sauce ..	220 bottles	0	1	1	10
Sauce ..	15 cases	0	1	0	15
Sild ..	2,206 tins	0	2	3	4
Soup Powders ..	44 packets	0	0	1	11
Spaghetti ..	74 packets	0	0	1	18
Tea ..	4 packets	0	0	0	4
Vegetables (pre-served) ..	20 tins	0	0	1	8
Vegetables (pre-served) ..	30 jars	0	0	0	14
Vinegar ..	1 bottle	0	0	0	1
		12	2	2	18

In addition, 129 packets of headache powders, 447 bottles of patent medicines, 1,513 cigarette papers, 136,411 cigarettes, 1,191 cigars, and over 2 cwt. of tobacco were found to be deteriorated and unfit for use, and were destroyed under the supervision of our officers.

Sampling.—During the year a total of 4,474 samples of foods, drugs, and poisons were obtained by our officers and submitted to the Government Chemical Laboratory for examination. These samples include:—Beverages and cordials, bread, cereals, confectionery, condiments, cosmetics, disinfectants, drugs and medicines, dyes, essences, fish, fruit and fruit juice, gelatine, ginger, jam and jelly, meat, milk, milk products, methylated spirits, nally-ware, nuts, paint, paper, soap, sugar, tobacco, toys.

Bacteriological Sampling.—A total of 454 specimens, including the following articles, was collected and submitted by headquarters inspectors to the Director of the Laboratory of Microbiology for examination, viz.:—bottles, bread, bread improvers, condensed milk, disinfectants, fairy floss, flour, ice cream, lemonade, lettuce, meal, milk, minced meat, mussels, mutton, oysters, pollard, salt, vanilla essence, yeast.

Paint.—The provisions of the Health Acts controlling the use and labelling of paint are receiving attention. The declaration of the ingredients contained in the paint in a statement on the label attached to packages of paint is insisted upon in all instances.

One hundred and fifty-two samples of paint scrapings were removed from residences in the Metropolis, and where these were found to contain over 5 per cent. soluble lead, in contravention of the Acts, the owner of the property concerned was required to have the offending paint removed.

Toys.—A close watch has been kept on toys for the detection of the use of lead metals or lead paint in the manufacture of these articles, and only in a few instances were they found not to comply with the provisions of the Health Acts.

Poisons and Poisonous Drugs.—The policing of the provisions of the Poisons Regulations, which control the sale and use of poisons and dangerous drugs and require the licensing of all persons dealing in such substances, has formed an important part of the numerous duties carried out by the department's officers. Apart from routine inspection of the premises of licensed dealers in poisons, and the checking of chemists' records, &c., special investigations into the illegal use of dangerous drugs by professional persons have been undertaken.

During the year some 2,484 first-aid and emergency kits issued by the American services were sold by the Disposal Stores to a Brisbane dealer. These kits were found to contain both dangerous and restricted drugs which may in the ordinary course be lawfully obtained only on the prescription of a doctor. It was fortunate that the drugs were located before any had been distributed to the public as their use other than under medical supervision may have had dire results.

PROSECUTIONS UNDER "POISONS REGULATIONS 1940."

Date.	Place.	Basis of Prosecution.	Fines.	Costs.
1947—			£ s. d.	£ s. d.
12th November	Brisbane ..	Poison packed in food container	2 0 0	1 7 0
1948—				
23rd February	Brisbane ..	Supplying dangerous drugs without a doctor's prescription	3 0 0	0 6 0
15th April	Brisbane ..	Chemists failure to keep dangerous drug records	3 0 0	0 6 0
			£8 0 0	£1 19 0

General.—In the publication of the Department's Annual Report for the year 1946-47 considerable publicity was given to the matter of the sale of falsely described articles, and in this matter it might also be claimed that the Health Acts of this State are designed to adequately control offences of this nature. It is felt that the mutual desire existing between local food distributors and this Department to keep the descriptions and claims made for foods, drugs, and articles sold in Queensland up to a reasonable compliance with the law, results in an undoubtedly good ethical standard in such matters. Many articles adversely commented upon in contemporary reports in the past were products of other States which had been banned from the Queensland market by the mutual collaboration of locally concerned parties.

TOOWOOMBA SUB-OFFICE.

Inspections under the Health Acts and various Regulations were carried out in Toowoomba and at the following country centres:—Aeland, Allora, Amiens, Applethorpe, Ballandean, Bell, Bowenville, Cabarlah, Cambooya, Cottonvale, Crow's Nest, Cecil Plains, Clifton, Cooyar, Dalby, Dalveen, Dirranbandi, Drayton, Glen Aplin, Goombungee, Goondiwindi, Gowrie Junction, Haden, Hampton, Highfields, Inglewood, Jandowae, Jondaryan, Kaimkillenbun, Killarney, Kingsthorpe, Kogan, Kulpi, Meringandan, Mungindi, Nindi Gully, Oakey, Oman-ama, Pechey, Peranga, Stanthorpe, St. George, Talwood, Tara, Thallon, The Summit, Thulimbah, Texas, Toobeah, Wallangarra, Warra, Warwick, Wutul, Wyreema, Yelarbon.

A number of these centres were visited on more than one occasion, and the number of miles travelled outside Toowoomba on work in this section totalled 4,860.

Food Premises Generally.—The general standard of food premises throughout the district was found to be good, and no flagrant breaches of the Acts or Regulations were encountered. Some premises were found to be in need of structural repairs or alterations, and the necessary notices requiring these were issued. The condition of cafes throughout the district was maintained at a high standard, and the benefit of the continued strict supervision of these public eating-places is now being shown. The principal fault found in food premises in country centres was the failure to protect unwrapped foods displayed for sale from contamination by flies and dust—it was common to find one or two such lines exposed on counters. Generally speaking, however, defects

were of a minor nature and call for no special comment.

Milk Supply.—The milk supplies of Toowoomba and the larger country centres have been subjected to the usual supervision. In all, 118 official samples of milk were submitted for chemical analysis, obtained as follows:—Toowoomba and district, 85; Warwick, 23; Dalby, 10.

The sampling of supplies in some other centres usually included in the yearly tally was made impossible because of lack of transport for forwarding the samples for analysis. Visits to these centres coincided with the prolonged rail stoppage.

Of the samples submitted, two contained added water (8.1 per cent. and 3 per cent.), while several were deficient in butter-fat and otherwise below the standard. Legal proceedings were instituted in the case of the larger adulteration, and a fine and costs totalling £11 7s. were imposed.

Considerable difficulty has been experienced in maintaining milk delivery vehicles, particularly those engaged for the sale of warm milk, at a reasonable standard. A large number of notices were issued calling for the correction of various faults, and three charges brought in respect of Regulation breaches yielded £5 18s. in fines and costs.

The milk pasteurisation plant of the company holding the franchise for Toowoomba functioned well during the year, and check samples of the supply proved satisfactory. Alterations to the plant, which operates under the high-temperature short-time method, have been approved, and new machinery, including a modern bottle washer, have been purchased, and delivery is awaited.

A new plant for the treatment of milk was established at Toowoomba during the year. This plant, although not of the latest design, is in good condition and should give satisfactory results. At present its activities are confined to the sale of bulk milk to Brisbane firms and to local milk vendors, cafes, &c.

Hotels and Liquor Testing.—Inspections and liquor testing were carried out at all hotels in Toowoomba and at the country centres visited during the year. All spirits tested were found to conform to the various standards set down for them.

Particular attention was paid to the washing of glassware, and a number of orders were issued by the Licensing Commission, on recommendations from this office, requiring improved glass-washing facilities.

In Toowoomba, notices have been served on the licensees of twenty-one hotels requiring them to install mechanical glass-washing apparatus of a kind approved by the Director-General. Several hotels at Toowoomba and elsewhere are already so equipped, and action will be taken during the coming year to ensure that, in all the larger centres at least, these mechanical washers are installed.

Bread.—The condition of bakehouses in the district remains satisfactory. A number of notices were issued requiring the fly-proofing or painting of the bakehouses concerned, or the elimination of other defects.

Several bakehouses in the district have been rebuilt during the year, following notices calling for extensive repairs, while others are listed by their owners for overhaul at the earliest opportunity.

In Toowoomba, deliveries of bread to householders are now operated under the pool system, the bakers having formed a co-operative company for the purpose. The vehicles in use, apart from feeder trucks, are principally horse-drawn, procured from various sources, and the matter of bringing them to a satisfactory standard is at present receiving attention. Considerable difficulty has been experienced in securing the necessary materials, but two men are now engaged in making and renovating vehicles, and an early improvement is expected.

Condemned Foods.—The following foods were found to be unfit for human consumption and were destroyed by mutual consent:—

		cwt.	qr.	lb.
Fish	..	6	2	0
Jam	..	0	1	7
Cherries ..	..	0	0	3
Tinned soup	..	0	0	23
Total	..	7	0	5

Labelling.—In the course of inspections, a number of improperly or insufficiently labelled foods and poisons were encountered. As these were packed elsewhere than in the district the

facts were reported to head office for correction. Eighteen unofficial samples of aerated waters, principally fruit drinks and procured from various sources, were forwarded for analysis, and action was subsequently taken to correct any faults or extravagant claims in the labels.

Toowoomba Show.—The usual supervision was exercised over the production and sale of foodstuffs at the Toowoomba Showgrounds on the occasion of the annual show. As a result of preliminary inspections, the majority of food booths fulfilled requirements prior to engaging in business, and the week passed with only minor corrections having to be made. The dust nuisance was severe, and some alterations will be necessary to the main dining hall to counteract it if further shows are to be staged on these grounds.

Wine Regulations.—Following the survey of conditions of wine manufacture in the Stanthorpe district, regulations were gazetted during the year to provide for a suitable standard of hygiene in the manufacture of wine for sale.

Poisons and Dangerous Drugs.—Inspections were made at all chemists' shops, poisons dealers, and stores throughout the district to ensure the safe storage and correct sale of poisons and drugs, and the keeping of the necessary records. A number of the more common Schedule I. and II. poisons were found in the stocks of stores not eligible to sell these lines, and suitable action was taken to stop this practice.

Chemists generally were found to be observing the requirements of the Poisons Regulations concerning the keeping of proper records, and the cancellation or forwarding of prescriptions. In two cases where chemists were not fulfilling their obligations in this regard official warnings were issued by the Department.

During the year an investigation was made into the dangerous drug transactions of a medical practitioner, and a full report of the findings was forwarded for consideration by the Director-General.

SUMMARY OF PROSECUTIONS.

Date.	Place.	Charge.	Fine.	Costs.	Analysts Fee.
1947—			£ s. d.	£ s. d.	£ s. d.
15th December ..	Warwick ..	Adulterated milk 8-1	10 0 0	0 6 0	1 1 0
1948—					
19th April	Warwick ..	No tap covers	2 0 0	0 6 0	..
19th April	Warwick ..	Unprotected cans	2 0 0	0 6 0	..
19th April	Warwick ..	No name and address	1 0 0	0 6 0	..
		Totals	15 0 0	1 4 0	1 1 0

Total fines and costs £17 5s.

ROCKHAMPTON SUB-OFFICE.

Food and Drug inspections continued to be limited in many respects by inadequacy of staff.

Townships beyond headquarters area visited were:—Anakie, Bajool, Baralaba, Barcaldine, Berajondo, Biloela, Blackall, Blackwater, Blair Athol, Bluff, Bororen, Boulderecombe, Builyan, Burua, Calliope, Capella, Clermont, Comet, Cracow, Dingo, Duaringa, Dululu, Emerald, Emu Park, Gladstone, Gogango, Goovigen, Graemere, Ilfracombe, Isisford, Jambin, Jericho, Jundah, Kabra, Keppel Sands, Kokotungo, Littlemore, Longreach, Lowmead, Many Peaks, Marlborough, Marmor, Miriam Vale, Mt.

Larcom, Mt. Morgan, Moura, Nagoorin, Ogmoo, Port Alma, Raglan, Rannes, Rolleston, Rose-dale, Rubyvale, Sapphire, Springsure, Stonehenge, Tambo, Thangool, Theodore, The Caves, The Springs, Tocal, Ubobo, Westwood, Windsor, Wowan, Yaamba, and Yeppoon.

Resultant legal proceedings and other matters necessitated visits to some of the above on more than one occasion. Total number of visits made was 112. Distances travelled on country inspection tours alone totalled 9,722 miles. In addition an assistant inspector who was attached to the sub-office for a period of three months, travelled 310 miles on inspection visits to near country towns.

Notices requiring alterations and improvements to premises were served as follows:—At Rockhampton (12), Anakie (1), Barealdine (1), Biloela (3), Blackall (1), Bluff (1), Clermont (3), Cracow (2), Emerald (2), Gladstone (9), Ilfracombe (1), Isisford (4), Jericho (3), Keppel Sands (3), Longreach (3), Many Peaks (1), Marlborough (1), Marmor (1), Mount Lareom (1), Mount Morgan (2), Rosedale (1), Springsure (2), Tambo (1), Theodore (1), and Wowan (2); total 62.

On recommendations of sub-office notices under the hand of the Director-General were served calling for complete reconstruction of nine food premises deemed to be incapable of effective repairs. Those were at Biloela (1), Ilfracombe (1), Isisford (2), Jundah (1), Mount Lareom (1), Mount Morgan (1), Tambo (2).

Milk Supply.—The reduced number of samples secured was due to increased demands on time for other functions of the sub-office. Fortunately no serious drought conditions occurred during any part of the year so that extensive adulteration of milk supplies was improbable.

The majority of milk delivery vehicles in use comply with the provisions of the Regulations. In a few country towns vendors have been slow to adopt the prescribed enclosed compartment vehicles, but insistence is having the desired effect. More regular inspection in both city and country centres is essential to ensure hygienic handling of milk delivered to the public.

Eighty-nine official samples of milk submitted to chemical analysis were secured from the following places:—Rockhampton 47, Blackall 3, Clermont 3, Emerald 2, Emu Park 2, Gladstone 8, Longreach 1, Mt. Morgan 3, and Yeppoon 20.

Prosecutions were instituted in respect to the following breaches:—Milk, adulterated with added water, 2; milk, fat deficiency, 1; milk, delivery vehicle not fitted with an enclosed compartment, 1; milk, rag used under lid of can, 1. Conviction resulted in each case: fines and costs imposed totalled £43 13s.

Pasteurised Milk.—Three official samples submitted to the departmental laboratory conformed to standard both as regards plate count and *E. coli*. Of fifteen unofficial samples submitted to the Commonwealth Health Laboratory two gave slightly excessive plate counts, one was heavily contaminated with organisms (possibly airborne saprophytes), and two failed to comply with the *E. coli* standard. A check on the producing company's premises and plant was made in the case of each unsatisfactory sample.

Ice Cream.—Eighteen samples of locally manufactured ice creams were submitted to bacteriological examination and 11 to chemical analysis. Of the former in five samples the permissible number of micro-organisms was exceeded. All chemically examined conformed to standard.

Bread.—Repairs and improvements were effected to several bakehouses under instructions given. The owners of three bakehouses in country towns were issued with written notices to reconstruct same.

Of a number of samples of bread submitted to analysis three failed to conform to the standard for wholemeal bread. The respective bakers were warned to correct the composition.

All bread delivered to householders in the city of Rockhampton continued to be controlled and handled by a central pool. This system of operating is not without some disadvantages as recounted in last year's report. However, the management has proved co-operative in maintaining proper standards in so far as lay within its powers.

A few complaints arose regarding the quality of bread delivered. As these reached the sub-office only in a round-about way and no specific information was supplied effective investigation was not possible.

Fewer outbreaks of rope (*B. mesentericus*) occurred, and these were of short duration only.

Legal proceedings against two country bakers with regard to loaves found to be deficient in the due weight are pending.

Cafes, Milk Bars, Restaurants.—These were inspected in all country towns visited. Verbal or written notices to effect necessary repairs or improvements were issued. Similar attention was given to a number of such premises in the city area, and one cafe was closed down on account of unsuitable premises.

Fish, Fish Shops.—Fish offered for sale was of uniformly good quality. Shops were inspected as frequently as practicable. Visits were paid to the Fish Board's premises as required to inspect consignments of fish received.

The owner of a fish cafe in a country town was ordered to reconstruct the premises.

Repairs and improvements were effected to several fish shops and cutting-up rooms in the city area.

Fruit and Vegetables.—A reasonable degree of supervision was exercised over the handling for sale of fruit and vegetables in markets and shops. Occasional exposure of these commodities on street frontages within the reach of animals was the chief defect necessitating action.

Grocers, Mixed Businesses.—Special attention was accorded these in country towns. Improvements to a number of shops were demanded, and four were ordered to be completely reconstructed. In the city area an assistant inspector during his attachment to the sub-office, carried out a check-up on this class of business.

Hotels.—Testing of alcoholic liquors on sale in hotel bars resulted in two proprietors being proceeded against and convicted in respect to the sale of rum adulterated with added water. Fines and costs imposed totalled £16 14s. Legal proceedings against two others for similar breaches are pending.

One line of brandy packed for sale in a southern State, where the prescribed standard of alcoholic strength is below that of this State, came on to the market and was withdrawn when detected.

Automatic glass-washing apparatus was installed in a few city hotel bars. Notices requiring the installation of such apparatus were served on the licensees of another eighteen hotels in the city area.

At the behest of the Hotel Licensing Commission the premises of all licensed bottlers of ales, wines, and spirits were inspected and reports thereon submitted.

Warehouses.—No time was available for making comprehensive inspections of these premises and the lines handled for sale. However, many visits were paid in regard to specific matters which required attention.

Food Deliveries.—A good deal of time was spent in checking up on these, resulting in improved protection and handling of various commodities. Nevertheless, there is still room for improvement.

Racecourse Booths.—These were inspected from time to time to ensure proper care in the preparation and serving of refreshments. Liquors tested conformed to standards. The bar at the Rockhampton racecourse was improved by the provision of a concrete floor throughout.

Show Grounds.—Supervision over the preparation and handling for sale of food was maintained throughout the duration of the show. Some trouble was experienced with a minority of itinerant stall proprietors selling popular confections. These complied with instructions only after warnings of legal proceedings had been given.

Liquor tested at booths disclosed no adulteration.

Seaside Resorts.—At Yeppoon, Emu Park, Keppel Sands, and smaller intermediate resorts food premises and deliveries were inspected during the Christmas-New Year and Easter holiday periods. Milk samples were obtained from vendors and spirits on sale in hotel bars were tested.

Legal proceedings resulting in convictions were taken against a Yeppoon milk vendor with regard to an unsatisfactory delivery vehicle and the lid of a milk can stopped with rag. Fines and costs amounting to £6 12s. were imposed.

Samples.—Unofficial samples submitted to head office for chemical analysis or bacteriological examination were:—Aerated waters 17, bread 6, cough lozenges 1, custard powders 3, flour 3, ice cream 29, milks 2, sild 1, tomato puree 1, vegetable spread 1, water 2, poisonous bait card 1, poisonous ant destroyers 2; total 69.

Unsound Food.—Food of a total weight of 1 ton 11 cwt. 3 qr. 2 lb. 14 oz. found unsound and destroyed was as follows:—

	C.	Q.	L.	O.
Breakfast foods	0	0	8	0
Cake and pudding mixtures ..	0	0	21	14
Canned meats	0	3	21	6
Canned vegetables	1	1	22	8
Canned fish	0	0	14	7
Chutney, pickles, relishes ..	0	2	12	15
Condensed milk	0	0	0	14
Confectionery	16	0	18	0
Cordial crystals	0	0	22	0
Cordial extracts	0	0	7	8
Custard powders	0	0	12	14
Dried fruits	0	1	3	5
Fish	0	3	5	0
Gravy makers	0	0	8	12
Ham	0	0	9	0
Jams and preserves	8	1	1	13
Mustard, mixed	0	0	6	0
Patent medicine	0	0	3	0
Preserved ginger (in syrup) ..	0	2	4	0
Processed cheese	0	0	6	0
Salt	0	0	2	8
Sauce	0	0	4	2
Spaghetti	0	2	4	0
Soups, canned and powdered ..	0	2	15	8
Meat extract	0	0	22	0
Milk Powder	0	0	25	8

Special Investigation.—At the request of the chairman of the Rockhampton Waterside Workers' Employment Committee, Port Alma was visited in company with the chairman, the medical officer in charge of the Commonwealth Health Laboratory, Harbour Board and Union officials in connection with a number of cases of a form of dysentery alleged to have occurred amongst waterside workers during the visit of a ship then in port. On the spot it was further stated that it was usual for several cases to occur when ships were being worked here.

In so far as this section of the report is concerned the men had complained regarding the preparation and serving of meals in the refreshment room, and also thought that the water supply might be at fault.

The kitchen was found to be clean although the nature of its construction was not in itself conducive to good hygiene. Flies were almost totally absent so that these were unlikely to have been the cause.

For water supply rainwater storage tanks totalling 47,000 gallons are depended on. If and when this supply becomes exhausted tanks are replenished with water from the Rockhampton town supply, carried by rail. All of the tanks were properly covered and protected.

The waterside workers are drawn from Rockhampton when ships are in port. As some people are rather susceptible to gastric disturbances when changing from one type of water supply to another it is probable that some of the workers would be temporarily so affected.

Matters mentioned to the chairman for attention included the lining and ceiling of the kitchen with fibro-cement sheeting; fitting-up of a hot-water urn on the kitchen range of suitable capacity to reticulate hot water to all sinks; replacement of defective teapots with new ones; covering the dining tables with a smooth impervious material in place of the frayed linoleum coverings.

Paints.—New stocks of paint which came on to the market during the year were found to be labelled as prescribed by the Health Acts. It was again impossible to find time for any routine checking on the nature of paints being used in the painting of veranda railings, gate fences, &c.

One case of lead poisoning in a child came under notice. The medical practitioner treating the patient suspected old powdery paint on the front fence to be responsible, after learning that the child was in the habit of hanging on the fence, and was a nail-biter. When the matter came to the attention of the sub-office it was found upon inspection that the fence had been removed to make way for a new one, and the house had been repainted with approved paint in the meantime.

Poisons and Drugs.—Since the exclusion of records relating to other than dangerous drugs from the drugs book the chemists' duties have been less onerous, as the keeping of special records for dangerous drugs only requires little time in the average dispensary.

Breaches of the Regulations detected in this regard were mostly of a minor nature and due to misinterpretation of the Regulations.

One chemist conducting a dispensary in Rockhampton who failed to heed warnings was proceeded against in the court in respect to three breaches of "The Poisons Regulations of 1947" relating to dangerous drugs. A conviction was secured on each charge and fines and costs totalling £9 18s. were imposed.

Several licensed poisons dealers were warned regarding minor breaches of the Regulations. Unlicensed dealers found to be handling certain specified poisons were required to take out licenses or discontinue dealing in such poisons. One dealer who consistently failed to renew his license when due was proceeded against and a conviction secured. Fine and costs imposed amounted to £4 7s.

PROSECUTIONS UNDER "THE HEALTH ACTS, 1937 TO 1946."

Date.	Place.	Nature of Offence.	Fine.	Costs.
1947—			£ s. d.	£ s. d.
13th August	Blackall ..	Milk, adulterated	13 0 0	1 7 0
27th August	Yeppoon ..	Rum, adulterated	7 0 0	1 7 0
15th December ..	Rockhampton	Dangerous drug, prescription not endorsed	3 0 0	0 6 0
15th December ..	Rockhampton	Dangerous drug, purchase of, not recorded	3 0 0	0 6 0
15th December ..	Rockhampton	Dangerous drug, sale of, not recorded ..	3 0 0	0 6 0
16th December ..	Emerald ..	Rum, adulterated	7 0 0	1 7 0
18th December ..	Blair Athol ..	Poisons, sold without license	3 0 0	1 7 0
23rd December ..	Rockhampton	Milk, adulterated	15 0 0	1 7 0
23rd December ..	Rockhampton	Milk, adulterated	5 0 0	1 7 0
1948—				
2nd June	Yeppoon ..	Milk, rag used under lid	3 0 0	0 6 0
2nd June	Yeppoon ..	Milk, vehicle without enclosed compartment	3 0 0	0 6 0
		Totals	65 0 0	9 12 0
		Grand Total	£74 12 0	

MACKAY SUB-OFFICE.

During this period inspections were carried out at bakehouses, cafes, hotels, cordial works, grocer shops, mixed stores, wholesale warehouses, &c., in the city of Mackay, North Mackay, Mirani, Proserpine, Bowen, and Sarina.

The general sanitary conditions of the premises were found to be satisfactory, but in some instances structural alterations would considerably improve conditions; these cannot be carried out because of shortage of materials. The standard of cleanliness and protection of foodstuffs was maintained.

Milk.—Twenty-eight milk samples were submitted for analysis. Two samples contained 2.5 per cent. added water and a third 8.3 per cent. added water. In the latter instance the source of adulteration was traced to the vendor's supplier (a dairy farmer), whose milk was subsequently sampled and found to contain 9.1 per cent. added water. Legal proceedings were instituted against the supplier, who was convicted and fined £20, together with £1 7s. costs, a previous conviction being proved.

Instructions were issued to several new vendors to bring their vehicles into compliance with the Regulations.

At the request of the city Medical Officer (Dr. Chenoweth) unofficial milk samples were obtained for the cleanliness test from two dairies in the district and submitted to the district hospital laboratory for examination. These were found to be up to standard.

Bakehouses.—Routine inspections of bakehouses and bread delivery vehicles were made from time to time and they were found to be in a clean and sanitary condition. Bakers are experiencing difficulty in obtaining paper for the wrapping of bread, but have endeavoured to comply with this regulation as small supplies become available from time to time.

Cordial Works.—Visits were made to these factories and conditions found to be satisfactory. An order issued to provide a syrup room at one factory has since been complied with after overtures had been made to the Bureau of Industry for a permit for the supply of material.

Ice Cream Substitute.—A complaint that a commodity being used as a substitute for ice cream was being sold in shops and cafes was investigated, but could not be substantiated.

Liquor Testing.—Liquor testing and inspection of bars at hotels in Mackay and district were carried out during the period under review. General sanitary conditions were found satisfactory. Samples of brandy obtained from a hotel at Proserpine were submitted for analysis and found to be slightly below standard. In this instance the licensee was cautioned.

Glass-washing Apparatus.—Notices were served on fifteen hotels in Mackay city to install mechanical glass-washing apparatus in their bars, to conform with Regulation 92 (19) of "The Food and Drug Regulations, 1939." To date several hotels have installed approved machines in accordance with the notice issued.

Unsound Foods.—Inspections at wholesale warehouses and other premises resulted in the withdrawal from sale of a considerable quantity of foodstuffs on account of their being unfit for human consumption. A proportion of these foodstuffs was obtained from southern States. All unsound stocks were destroyed under supervision and the usual certificates issued. The total stock destroyed amounted to 19 tons 9 cwt. 2 qr. 17 lb. 7 oz., for which an itemised list is shown below.

Poisons.—Inspections were carried out at wholesale and retail stores of poisons and any minor faults adjusted. Toys were examined for prohibited metals and paints.

During May, 1948, an official truck was allotted to this district, which will facilitate inspections within the suburban area as well as at small outlying centres.

UNSOUD FOODSTUFFS DESTROYED.

	T.	C.	Q.	L.	O.
Biscuits	0	6	1	22	0
Canned vegetables	1	9	2	13	11
Coffee and chicory	0	0	2	7	0
Condiments	0	7	0	24	10
Cordials	0	0	0	19	8
Confectionery	0	7	1	12	4
Cream of tartar	0	8	0	0	0
Gelatine	0	1	2	0	0
Golden Syrup	0	0	1	13	4
Hams	0	0	2	8	0
Jams	1	11	0	11	0
Lemon peel	0	8	0	0	0
Macaroni	0	0	1	16	0
Pastry mixture	0	0	0	9	0
Porridge	0	0	0	26	0
Soup	0	3	1	18	0
Self raising flour	0	3	1	6	0
Spaghetti	0	0	1	16	0
Tinned fish	0	1	0	7	0
Tinned fruit	2	11	0	20	10
Tinned meat	0	0	2	16	0
Tinned milk (condensed)	0	2	1	6	0
Tinned food (unlabelled)	0	0	3	6	0
Tea	3	7	2	27	0
Fresh fruit	0	0	1	20	8
Potatoes	6	11	3	0	0
Pumpkins	0	2	2	0	0
Turnips	1	2	2	0	0
Total	19	9	2	17	7

Confectionery—1,560 packets (no weight available)

TOWNSVILLE SUB-OFFICE.

Hotels.—Under this heading 54 inspections were made within the city area, such inspections being on account of a general check and in some instances as a result of complaints.

Spirits exposed for sale in licensed premises were tested periodically through the year, the number visited for such purpose being 33. Results of tests failed to reveal any instance of adulteration.

The recent amendment of Regulation 92 (19) of "The Food and Drugs Regulations of 1939" which provides for the installation of mechanical glass-washing apparatus with hot-water unit attached has been acted upon to the extent of notices having been served on 18 licensees. Four hotels had installed approved types of these machines prior to the serving of notices, six others have placed definite orders for the supply, whilst the remainder have not yet decided upon which particular type to purchase.

In all instances licensees favour the modern types of glass-washers and have signified their intention to co-operate.

Milks.—Sixteen official samples of milk were purchased and submitted to the Government Analyst for analysis. With the exception of one, which was found upon analysis to be deficient in total solids and fat, all were found to comply with the required standard. These samples were drawn from wholesalers, street vendors, and cafes. Processed milk from the Tablelands continues to predominate in Townsville, where it is bottled and distributed throughout the city. Latest figures disclose that the approximate weekly quantity received from the Tablelands is 12,250 gallons; of this amount about 1,000 gallons is bottled daily and the remainder is sold in bulk to vendors.

It is the intention of a milk company in the near future to bring untreated milk from Malanda to Townsville, where it will be pasteur-

ised and bottled. Work in connection with the new factory is well advanced and provision is being made to install an approved pasteurisation plant as soon as possible.

Prosecutions.—Legal proceedings which had been instituted in the preceding financial year against a milk vendor, for having carried water on a milk vehicle, were completed, the defendant being convicted and fined £1 with 6s. costs of court.

Aerated Water and Cordial Factories.—Periodical inspections of this class of business revealed the fact that there is a general tendency to replace old plant with modern equipment in all factories, whilst one entirely new factory has been constructed on a new site in lieu of one which had reached a stage of being no longer suitable for such purpose.

One hundred and one unofficial samples of aerated waters and cordials were submitted for analysis. These were as follows:—Townsville manufacturers, 38 samples; Charters Towers manufacturers, 24 samples; Ingham manufacturers, 22 samples; Halifax manufacturers, 11 samples; Winton manufacturers, 6 samples.

Results of analyses revealed numerous breaches of the labelling requirements and in one instance gross adulteration of cordials; five official samples of these cordials have been purchased and the report of the analyst is awaited. Action has been taken to have other labelling breaches rectified.

Factories have been inspected in all towns visited and the standard found to be generally satisfactory.

Bakeries.—A new variety of bread appeared on the local market during the year under varying descriptions—e.g. "Starch Reduced" and "Starchless Bread." Seven unofficial samples were forwarded for analysis as to general standard and aptness of description. The majority of the samples justified the description "Starch Reduced" but in two instances action was taken to prohibit the usage of the term "Starchless."

Conditions under which bread is being manufactured have been found satisfactory; one sub-standard bakery has been vacated and a new properly constructed building has been opened.

Cafes.—Strict supervision has been exercised over all local cafes and no major breaches of the regulations were observed. Verbal instructions have sufficed in all but two instances to remedy minor defects and the notices served subsequently in each of these cases quickly brought the desired result.

Food Delivery Vehicles.—Supervision has also been exercised over all classes of food delivery vehicles. The standard of vehicles at present in use is greatly improved over that tolerated during the war years and no complaints have been received in this respect.

General.—In addition to the above, general supervision has been exercised over all classes of food manufacturing, handling and storage throughout the year, and where defects were noted necessary action was taken to have them rectified.

Unsound Foods.—Over 10 tons of foodstuffs were deemed to be unfit for human consumption and were destroyed during the past year. Varieties and quantities of such food destroyed are as follows:—

	T.	C.	Q.	L.	OZ.
Boracic Acid	0	0	1	14	0
Canned fish	0	0	2	15	10
Canned fruit	1	6	0	16	0
Canned meat	0	9	3	12	0
Canned vegetables	0	2	1	1	4
Cheese	0	0	0	18	0
Coarse salt	0	10	0	2	0
Cream of tartar	0	1	0	0	0
Cured fish	0	2	2	0	0
Curry powder	0	0	1	14	0
Custard powder	0	0	0	3	0
Dates	0	13	3	0	0
Desiccated cocoanut	0	0	2	10	0
Desserts	0	1	0	10	15
Dried fruits	0	3	2	0	0
Fish paste	0	0	2	4	0
Flour	1	10	3	10	0
Icing sugar mixture	1	3	1	24	0
Jam	0	3	3	12	0
Jelly crystals	0	0	1	8	0
Macaroni	2	3	0	2	0
Margarine	0	0	0	8	0
Pastry mixture	0	0	3	24	0
Rice	0	0	2	0	0
Sago	0	3	0	0	0
Spices	0	0	0	19	12
Tapioca	0	1	1	0	0
Tea	1	8	0	14	0
Total	10	8	1	18	9

COUNTRY.

Inspections carried out in towns visited included all classes of premises wherein food was being handled for sale.

A total of twenty notices was served on persons conducting these various businesses in which breaches of the regulations were observed.

SUMMARY OF INSPECTIONS MADE.

Area.	First Inspections.	Re-inspections.	Official Calls.	Towns Visited.
Local	743	88	380	21
Country	361	29	28	..
	1,104	117	408	..

Grand Total .. 1,629

Miles travelled—5,562.

SUMMARY OF INSPECTIONS MADE BY AN ASSISTANT INSPECTOR.

Area.	First Inspections.	Re-inspections.	Official Calls.	Towns Visited.
Local	214	44	158	5
Country	94	..	15	..
	308	44	173	5

Grand Total .. 525

Miles travelled by car and rail—902.

Towns visited included:—Charters Towers, Pentland Prairie, Torrens Creek, and Winton.

The following towns were visited during the year:—Ayr, Bemerside, Charters Towers (5), Cloncurry (2), Forest Beach, Halifax, Hawkins Creek (2), Home Hill, Ingham (6), Julia Creek, Kurukan, Long Pocket, Lucinda Point, Macknade, Magnetic Island, Mt. Isa (2), Pentland, Prairie, Ravenswood, Roseneath, Stone River, Torrens Creek, Trebonne, and Winton.

The increased number of country inspections was made possible by the departmental scheme of transferring assistant inspectors to district offices for a period of six months. Under the scheme this sub-office received the services of an assistant inspector from January to June. Apart from the experience gained of sub-office routine by these young officers the scheme enables more time to be devoted to outside areas without interruption of duties within the city area.

CAIRNS SUB-OFFICE.

During the year under review a steady improvement has been apparent in the production, serving, and handling of foodstuffs in the area. The biggest obstacle to a rapid rate of improvement is the difficulty, natural in these times when the stress is on home-building, of structural repairs and alterations to premises.

A close watch has been kept on all avenues of food production and distribution and this work has necessitated many visits of inspection, and it is a very apparent desire by the average trader to do the right thing, and this has proved very helpful in the matter of control.

Food factories, including bakeries, stores, cafes, milk premises—in fact every place connected with the handling of food for sale for human consumption—has had some measure of attention during the year, whilst coverage was also afforded all food premises at the annual show.

One big feature of the year's work was the introduction of legislation requiring the installation of mechanical hot-water glass-washing machines on licensed premises where water and power supplies were available. There has been a reasonably ready compliance by licensees in this direction and the installation of them has been governed mostly by the rate of flow of the machines.

Another matter dealt with during the year was the control of bottling of beers, wines, &c. Visits of inspection have been paid, as a result of which many improvements in methods of bottling, bottle-washing, and premises have been requested. Here, again, there was apparent a desire on the part of the genuine licensee to comply.

Milk supplies generally have been very good and there have been only minor defects, which were speedily rectified. Altogether, the milk supply in North Queensland is decidedly better than in years gone by and, with milk-processing going along on good lines, with effective check on supplies arriving at factories, there is very little chance of inferior milk going into consumption. A great deal of time has been spent by me on this important section of the community's food and I consider the time extremely well spent.

During the year check sampling, both official and unofficial, has been pursued. Thirty-five official samples of milk were submitted for analysis, whilst there were also thirty-seven unofficial samples, including ice creams, aerated waters, bread, flour, disinfectants, &c., submitted for tentative analysis.

The close check kept on the quality of food-stuffs on the market is reflected in the quantities

of foodstuffs destroyed as being unfit for consumption—viz., 2 tons 1 cwt. and 20 lb. These foodstuffs comprised bacon, jams, tea, coffee, biscuits, tinned meats, honeys, &c.

No prosecutions were found necessary during the year for breaches of the Act and Regulations.

Visits of inspection were paid to the following places:—Almaden, Aloomba, Atherton (2), Babinda (5), Barron Crossing (2), Barron Waters, Bingil Bay, Cardwell (2), Chillagoe, Cooktown, Currajah (2), Dimbulah, Edmonston (5), Einasleigh, El Arish (2), Ellis Beach (2), ETTY Bay (3), Euramo (2), Feluga (2), Fishery Falls, Flying Fish Point, Forsayth, Freshwater (3), Garradunga (4), Georgetown, Gordonvale (3), Hartley Creek (2), Herberton (2), Innisfail (9), Innot Hot Springs (1), Julatten, Kairi, Kamerunga, Kulara, Kurramine (2), Lake Barrine, Lake Eacham, Lower Tully (2), Machan's Beach (6), Malanda (2), Mareeba (2), Mena Creek (2), Millaa Millaa (2), Miriwinni (1), Mission Beach (2), Mossman (4), Mt. Garnet, Mt. Molloy, Mt. Mulligan, Mt. Surprise, Mourilyan (2), Palm Beach (3), Port Douglas (4), Ravenshoe (3), Red Lynch (3), Russell Heads, San Remo (5), Silkwood (2), Silky Oak, Smithfield, South Johnstone (3), Stratford (6), Thursday Island (2), Tolga (2), Trinity Beach (2), Tully (3), Wangan (3), Woree, Yorkies Knob (4), and Yungaburra.

These inspections have necessitated the travelling of 9,679 miles by truck, rail, boat, and aeroplane.

Lead in Toys.—This section of the departmental work was again strictly policed, especially over the Christmas period, and action was responsible for the removal from sale of all dangerous lines. It is a matter for some appreciation that the percentage of such toys coming on the market appears to be dropping each year.

Poisons.—The control of sales and distribution of poisons in this area has again occupied a good deal of time. This is a very important aspect of health work and could occupy an officer full time on this work every year. However, there is a good spirit of co-operation extant in this area, which lightens the burden somewhat.

Inspections have included hospitals, chemists, doctors, dentists, veterinary surgeons, and licensed poisons dealers, whilst a close check has been kept on all unlicensed storekeepers to prevent the illegal handling of poisons.

Drug addicts present a serious problem in control and provision of supplies, and some small difficulties have been encountered during the year in this regard. However, these difficulties have been ironed out and controlled with the co-operation of the professional men.

THURSDAY ISLAND SUB-OFFICE.

Since the opening of this sub-office in February last, it has been found necessary to devote most of my time towards improving the sanitary conditions on the island, and I was not able to fully police the provisions of the Health Acts relating to food and drugs.

The following sections were given attention:—

Cafes.—There were two cafes on the island at the time of opening this sub-office. One of these was in a most unsatisfactory condition, and due to the extensive alterations and repairs necessary to bring it into conformity with the regulations the proprietor has since ceased business. The second cafe proprietor has complied with all directions issued, and his premises and business conduct are now satisfactory. A third cafe has been constructed in conformity with the regulations laid down.

Mixed Businesses.—There are seven of these premises on the island and each had been inspected and instructions issued where necessary to bring them up to the desired standard. These instructions have been complied with in all but two instances, where the necessary action will be taken in the near future to enforce compliance with the law.

Aerated Water Factories.—Both factories operating on Thursday Island leave much to be desired in the general condition of the premises. The essential functions of water filtration and satisfactory bottle washing, however, are strictly adhered to in each case, and both proprietors are making every effort to obtain the materials for reconditioning their premises.

Bakery.—This business is conducted in a clean, satisfactory manner. Troughs, patties, mixer, and all other equipment are in good condition and the bread produced is of good quality. The baker is awaiting delivery of materials from a southern firm to carry out minor alterations and repairs which are necessary. These include repainting, internally and externally, and provision of a new table top.

The bread is sold from the bakehouse, and the acute shortage of suitable wrapping material prohibits satisfactory wrapping of the bread and creates a problem which cannot be overcome until suitable wrapping materials become available. The dusty condition of the roads further accentuates the danger of unwrapped foodstuffs.

Unsound Tobacco Destroyed.—The following quantity of tobacco was found unfit for human consumption and was destroyed:—

Ready rubbed, 3 cwt. 3 qr. 2 lb. 4 oz.;

Plug, 1 qr. 19 lb.

LABORATORY OF MICROBIOLOGY AND PATHOLOGY.

Director: J. I. TONGE, M.B., B.S. (Sydney);

Senior Bacteriologist: H. E. BROWN.

1. STAFF.

Dr. J. I. Tonge was appointed Acting Director on 30th August, 1947, and Director on 29th May, 1948.

STATISTICAL SUMMARY.

1. BACTERIOLOGY.

A. Specimens of Human Origin.

Specimens.	Mode of Examination.	Number.
Swabs—		
Throat	Culture	3,635
Nose	Direct smear ..	16
Urethra	Culture	2,844
Cervix	Direct smear ..	9,724
Bartholin's Gland ..	Culture	6
Anus	Direct smear ..	1
Intestine (P.M.) ..	Culture	5
Septic Sores and Wounds	Direct smear ..	3
Pus	Animal inoculation ..	1
	Culture	6
Pleural Fluid ..	Microscopical ..	13
	Animal inoculation ..	7
	Culture	30
Cerebrospinal Fluid ..	Microscopical ..	58
	Animal inoculation ..	1
Seminal Fluid ..	Microscopical ..	1
Ascitic Fluid ..	Microscopical ..	1
Serous Exudate ..	Direct smear ..	2,340
	Dark ground Examination ..	58
Sputum	Direct smear ..	373
	Animal inoculation ..	3
	Culture	9
Blood	Animal inoculation ..	43
	Culture	298
Urine	Microscopical ..	564
	Dark ground examination ..	1
	Animal inoculation ..	8
Faeces	Culture	71
Gastric contents ..	Microscopical ..	7
	Animal inoculation ..	4
Tissue	Culture	1
		20,132

B. Foods and Waters.

Specimens.	Mode of Examination.	Number.
Water	Plate count	246
	Culture	253
	Microscopical ..	10
Milk	Reductase test ..	5
	Plate count	82
	Culture	117
Ice cream	Plate count	24
	Culture	24
Bread	Culture	13
Flour	Culture	1
Corned beef	Culture	1
Fish saveloys	Culture	5
Saveloy skins	Culture	2
Herrings	Culture	1
Lobster	Culture	1
Oysters	Culture	9
Brine	Culture	1
Cere vitamin	Culture	1
Bernac	Culture	1
Butter	Culture	1
Cake	Culture	1
Sugar	Culture	1
Salt	Culture	1
Pickled onions	Culture	1
Beer	Culture	2
Ginger ale	Culture	2
Aerated waters	Culture	1
		807

C. Various Materials.

Specimens.	Object of Examination.	Number.
Disinfectants ..	Germicidal value ..	2
	Rideal-Walker Co-efficient ..	18
Antiseptic	Germicidal value ..	1
Soap	Germicidal value ..	2
Penicillin lozenges ..	Estimation of Penicillin content ..	1
Bottles	Sterility	7
Glasses	Sterility	22
Novocain solution ..	Sterility	1
Cellophane	Sterility	1
Culture (salmonella) ..	Typing	1
Napkin	Blood	1
Effluent	Presence of M. tuberculosis ..	2
Earth	Presence of Crenothrix spp. ..	1
Flock	Presence of Microorganisms ..	2
Goat hair	Presence of B. anthracis ..	3
Horse hair	Presence of Microorganisms ..	1
Glass-washing machine	Efficiency	21
Commercial filter ..	Efficiency	1
		88

2. SEROLOGY.

	Number.
Serum Agglutination Tests—	
Eberthella typhosa (H) ..	294
Salmonella paratyphi (H) ..	244
Salmonella schottmüller (H) ..	274
Proteus OX19	288
Proteus OX2	7
Proteus OXK	286
Brucella abortus	276
Leptospira pomona	263
Leptospira australis A	68
Leptospira australis B	68
Leptospira mitis	263
Leptospira icterohaemorrhagiae ..	263
Rickettsia burneti	311
Paul Bunnell Test	4
Complement Fixation Tests—	
B.M.R.C. Wassermann (Serum) Routine ..	213
B.M.R.C. Wassermann (C.S.F.) ..	6
Eagle Wassermann (Serum) Routine ..	4,359
Quantitative	62
Eagle Wassermann (C.S.F.) ..	115
Gonococcal C. F.	2,197
Flocculation Tests—	
Kline	5,029
Lange Colloidal Gold Reaction (C.S.F.) ..	122
	15,012

3. BIOCHEMISTRY.

Specimen.	Examined for.	Number.
Whole Blood ..	Urea	199
	Uric Acid	2
	Cholesterol	6
	Sugar	56
Plasma	Pigments (Spectroscopic)	2
	Total Protein	120
Serum	Fibrinogen	1
	Bile pigments (Van den Bergh and Fouchet) ..	3
Cerebrospinal Fluid ..	Specific Gravity	1
	Protein	12
	Globulin (Pandy and Nonne-Apelt)	57
	Chloride (as NaCl)	41
Urine	Sugar	57
	Specific Gravity	75
	Albumin	619
	Sugar	546
	Acetone	2
	Diacetic acid	2
	Ascorbic acid	1
	Blood	1
	Bile pigments	4
	Urobilinogen and urobilin	1
	Bile salts	5
	Chemical analysis of calculi	2
	Hydrogen ion concentration	376
	Porphyrins	4
Faeces	Pigments (Spectroscopic)	1
	Oculta blood	13
Gastric Contents	Hydrochloric acid	1
Functional Tests	Glucose tolerance tests ..	6
	Urea clearance tests	7
	Urea concentration tests	40
		2,263

4. HAEMATOLOGY.

	Number.
Cell Counts—	
Red Cells (Total)	1,129
Red Cells (Stippled)	689
Reticulocytes	2
White Cells (Total)	1,076
White Cells (Differential)	1,956
Platelet Count	2
Haemoglobin Estimations	1,259
Haematocrit	1
Sedimentation Rate	7
Coagulation Time	4
Bleeding Time	4
Prothrombin Time	2
Clotting Time	1
*Blood Grouping (A. B. O.)	263
*Blood Typing (Rh)	238
	6,633

* The majority of these tests was performed by Officers of the Red Cross Blood Transfusion Service on specimens submitted to them from the Laboratory of Micro-Biology and Pathology.

5. PARASITOLOGY.

Specimen.	Object of Examination.	Number.
Faeces	Amoebae (Cysts and vegetative)	21
	Helminth ova	509
Pus	Trichomonas vaginalis ..	77
Blood	Microfilariae	4
	Plasmodium sps.	378
Arthropods ..	Identification	1
Helminths ..	Identification	4
		994

6. VARIOUS TESTS.

—	Number.
Mantoux Test	1
Aschheim Zondek Test	3
Virulence Test (C. diphtheria)	144
	148

7. HISTOLOGY.

Tissues Sectioned.	Number.
Human—	
Biopsy	664
Post-mortem	741
Animal—	
Horse	3
	1,408

8. MEDICO-LEGAL.

Post-mortem Examinations	..	..	..	398
Clothing—				
Blood ..	..	..	..	3
Spermatozoa ..	..	..	..	5
Various Articles—				
Blood ..	..	..	..	3
Spermatozoa ..	..	..	..	3
Smears—				
Gonorrhoea ..	..	..	..	1
Spermatozoa ..	..	..	..	5
Swabs—Gonorrhoea	..	..	..	2
Hair—				
Spermatozoa ..	..	..	..	1
Identification ..	..	..	..	1
Scrapings—Identification	..	..	..	1
Dry Blood Clot—Human Blood	..	..	..	1
Dry Bloodstained Waste—Human Blood	..	..	..	1
Skull—Identification	..	..	..	1
				426

Attendances at Courts—

Supreme Court	8
Police Court	10
Coroner's Court	4
Other Courts	1

9. EXAMINATION OF RODENTS.

Rodents received for examination from Brisbane City Council:—

Classification—					
<i>Rattus norvegicus</i>	..	..	..	..	11,039
<i>Rattus rattus</i>	..	..	..	..	276
Unclassifiable	..	..	..	..	5,395
<i>Mus musculus</i>	..	..	..	..	266
					16,976

Special Examinations for Plague—

Rats fully dissected	4,890
Spleen smears examined	4,890

Rat smears received from other centres—

Mackay	1,434
Bundaberg	668
Maryborough	443
Gympie	100
Ipswich	552
Sandgate	756
Wynnum	719
Meatworks (Brisbane Area)	290
	4,962

No rat was found infected with *Pasteurella pestis*.

10. VACCINES PREPARED.

- A. Typhoid-Paratyphoid Vaccine—2,408 ccs.
T.A.B. Vaccine were prepared.
B. Autogenous Vaccines were prepared as follows:—

From—		
Sputum	1	
Pus	3	
	4	

11. MATERIAL SUPPLIED.

Two hundred requisitions were supplied during the year to hospitals, private practitioners, and local authorities consisting of 10,040 swabs, 10,025 cultures, 286 Wright's capsules, 48 urine bottles, 122 faeces tins, 132 blood bottles, and 74 glass slides.

CULTURE MEDIA PREPARED.

	Number of Tubes
Serum Cultures—	
Inspissated Serum Slopes	12,000
Nutrient Broth Cultures—	
Small Tubes	100
5 cc. tubes	385
Large tubes	50
Nutrient Agar Cultures—	
Large slopes	300
Small slopes	576
Sugars—	
Lactose (20%)	100
Lactose	1,250
Glucose	250
Maltose	50
Sucrose	150
Inositol	150
Inulin	50
Mannite	150
Dulcitol	50
Arabinose	50
Adonite	50
Levulose	50
Xylose	50
Salicine	50
Miscellaneous Tubes and Plates—	
Schüffner's medium for <i>Leptospira</i> ..	1,150
Fletcher's medium	150
Treble Lactose	400
Methyl red	300
Vosges-Proskauer	50
Cooked meat (large)	25
Cooked meat (small)	250
Starch medium	125
	18,311
Material in Bulk—	
	Litres.
Normal saline	45
Buffered saline	100
Sterile distilled water	10
Gonococcus sugars	5
Nutrient agar	35
Count agar	21
Endo's medium	7
Milk medium	5
Nutrient broth	12
Maltose agar	1
Glucose agar	1
Wright's agar	1
Hitchin's media	1
Wort agar	1
Gonococcus media	21
Miscellaneous stains	30
Miscellaneous reagents	80

3. DEVELOPMENT OF THE LABORATORY.

(a) Structural Alterations.

The structural alterations, plans for which were drawn up in the last financial year, are now almost complete. The main laboratory has been divided into four sections and much additional bench space and storage facilities are now available. The equipment has been redistributed

into the various sections and this arrangement provides each worker with additional space and privacy and greatly increases the efficiency and convenience of the laboratory. The four divisions are for bacteriology, serology, histology, and biochemistry respectively, and each can now be regarded, as far as possible, as an essentially separate unit. This sectionalisation is an essential for any modern laboratory.

In the preparation rooms the new structural alterations provide a laboratory which is set aside for media making. Additional bench space and storage cupboards have been provided in both the media room and glass-washing section and all the heat-producing units such as autoclaves, hot-air oven, still, and inspissator are now housed in a separate sterilising room, which is fitted with draught ventilation. This arrangement makes the media and glass-washing sections much cooler, more spacious, and easier to keep clean.

A special area has been provided for glass blowing and it is hoped in the near future that a compressed-air unit will be installed for this purpose.

(b) Office and Records.

The office has been rearranged and large storage cupboards for records have been provided.

The thanks of this Department are due to Mr. Henxman, the architect from the Public Works Department, for his great assistance and co-operation in carrying out the alterations to the laboratory.

(c) Equipment.

During the year a considerable amount of new equipment has been purchased. In the sterilising section a new inspissator, autoclave, and electric still have been installed. For the serology section a Kahn viewer, Kline shaker, and additional small centrifuge have been added and further equipment has been ordered and is expected from the United States of America. For the milk bacteriology section a new electric colony counter and large centrifuge are now in use. Two new embedding baths, a binocular microscope, and a vacuum embedding oven have been provided for the histology section. A recent purchase from Melbourne was a freeze drying apparatus with which it is hoped to be able to preserve stock cultures and complement. Additional biochemical equipment has also been purchased and this has provided a long-felt want.

(d) Staff.

It is hoped that a deputy director will be appointed in the near future. There is still a considerable shortage of technical staff and repeated advertisements in the press have failed to produce the required reinforcements. One hopes that this position will improve in the future so that the work of this laboratory may be extended and that various investigations at present pending may be undertaken.

4. SEROLOGY.

During the year there has been a considerable increase in the number of blood specimens submitted for agglutination tests. Three hundred and fifty-nine blood specimens were examined

during the year, an increase of 110 tests on last year. Specimens were received from all States in Australia as well as from New Zealand and Macassar.

(a) *Leptospirosis.*

In the specimen of blood received from Western Australia a diagnostic titre for *Leptospira pomona* was found. This is the first occasion on which infection due to *Leptospira pomona* has been recognised in that State. The only other case of Leptospirosis due to infection with *Leptospira pomona* occurring during the year was from North Queensland. The patient was a butcher from the Ingham district.

(b) *Q Fever.*

A diagnostic titre for *Rickettsia burneti* was found in ten specimens of serum submitted from Adelaide. This is the first occasion on which the diagnosis of Q fever in South Australia has been confirmed.

(c) *Diagnosis of Venereal Disease.*

The Eagle Wassermann technique is now used entirely in this laboratory and approved American reagents are being employed throughout. The Kahn precipitation test has been introduced and will be in general use in the near future. As a routine the Kline, Kahn, and the Eagle Wassermann tests will be carried out on all specimens of blood submitted for diagnosis in future.

5. INDUSTRIAL HYGIENE.

Technical assistance is still being provided to the Industrial Hygiene Medical Officer, but owing to staff shortages these investigations are not receiving the attention they deserve. It is hoped, however, that soon a laboratory assistant will be able to devote his full time to this work.

6. INVESTIGATIONS INTO THE SIGNIFICANCE OF THE POST-MORTEM BLOOD SUGAR.

The total reducing substances, true glucose and "other reducing substances" have been estimated in 145 cases from samples of blood taken from the right atrium and left ventricle of the heart at autopsy. An evaluation of their possible diagnostic importance has been made. It was found that the post-mortem blood sugar, provided due regard is paid to correct sampling and estimation, as well as to caution in interpretation, can be of considerable value in the diagnosis of hyperglycaemia. A paper has been prepared on the results of this investigation and has been submitted for publication.

7. SURVEY FOR CARRIERS OF CLOSTRIDIUM TETANI.

The survey, commenced last year, to determine what percentage of women are carrying *Clostridium tetani* in their gastro-intestinal tract is being continued. Owing to staff shortages this investigation has been somewhat intermittent, but all cases of tetanus are being investigated as far as possible. It is hoped that sufficient data will be compiled during the coming year to be worthy of publication.

8. PUBLICATIONS.

Streeten, G. E. (Palmwoods), Cohen, R. S. (Brisbane), Gutteridge, N. M. (Brisbane), Wilmer, N. B. (Gympie), and Brown, H. E.; Smith, D. J. W., and Derriek, E. H.: "Tick Typhus in South Queensland: Report of Three Cases." *Medical Journal of Australia*, 20th March, 1948, page 372.

Derriek, E. H.: "The Difficult Autopsy." *Medical Journal of Australia*, 19th June, 1948, page 757.

Tonge, J. L.: "Aneurysms of the Splenic Artery, with a Report of Two Cases and Review of the Literature." (In the press.)

GOVERNMENT CHEMICAL LABORATORY.

S. B. WATKINS, M.Sc., F.A.C.I., Government Analyst and Chief Inspector of Explosives;
A. S. HURWOOD, B.Sc., A.A.C.I., A.R.I.C., Deputy Government Analyst and Inspector of Explosives.

In addition to the above officers, the laboratory staff comprises three senior analysts Division I., 2 senior analysts Division II., 6 analysts, 3 assistants to analysts, 2 cadets, 2 clerks, 1 clerk-typist, 1 mechanic, 1 furnace-room attendant, and 3 male attendants. D. Mathers, M.Sc., A.A.C.I., and M. J. Guyder, B.Sc., were each elevated to the position of senior analyst Division II.

W. N. Carvosso, A.A.C.I., and G. Lahey, M.Sc., A.A.C.I., were newly appointed to the staff as analysts, whilst T. R. Lowth, B.Sc., A.A.C.I. (assistant to analysts), was advanced to the same position. J. E. O'Hagan, M.Sc., A.A.C.I., who had been appointed as analyst, resigned to accept a position as biochemist with the Queensland Red Cross Blood Bank.

K. A. Glover (assistant to analysts) remains on leave to attend the University of Queensland under the Commonwealth Rehabilitation Department.

J. C. Yule (Diploma Industrial Chemistry) was elevated from the position of cadet to that of assistant to analysts.

J. Foreman, clerk, was appointed to the professional staff as a cadet, and his place taken by W. Lovejoy, whilst D. Leckey was appointed junior clerk.

K. H. Deasy and J. C. Yule (assistants to analysts) and J. Foreman and F. V. Esdale (cadets) were successful in passing their respective University Examinations, whilst C. Couper (furnace-room attendant) passed all subjects being studied at the Central Technical College.

The resignation of H. B. Cribb (analyst) from the professional staff as from 7th April, 1948, was received with deep regret. This officer was appointed to the Government Chemical Laboratory in December, 1914, and after serving with the A.I.F. in World War I. returned to duty in August, 1918.

An official farewell was accorded Miss L. P. Vietersen (clerk-typist), who resigned to be married, and Miss E. M. Barry was appointed in her stead.

It is gratifying to record an increase in the analytical staff, particularly in the analysts' group. The appointment of an experienced clerk, assisted by a junior for record work, is also cause for satisfaction. The library and records are receiving belated attention after the pressure of the war years, when office staff was reduced to a minimum.

Service.—The Government Chemical Laboratory has been called upon to analyse, examine, or investigate many and varied submissions from Queensland Government Departments and the Commonwealth Services within the State, The Brisbane and South Coast Hospitals and country Hospitals Boards, the medical profession, and the public.

The following table indicates the number of samples examined for the respective departments or authorities:—

A. State.—

Department of Health and Home Affairs	5,606
Police	226
Geological Survey Office	519
Department of Mines	98
Machinery and Scaffolding	10
Irrigation and Water Supply	638
Forestry	18
Portmaster (Explosives)	1,293
Harbours and Marine	10
Government Printer	13
Department of Local Government	73
Main Roads Commission	508
State Stores Board	174
Queensland Government Railways	44
Department of Public Works	26
Others (9)	35

B. Commonwealth.

Department of Trade and Customs	2,301
Department of Commerce and Agriculture	926
Royal Australian Navy	174
Others (9)	46

C. Brisbane and South Coast and other

Hospitals Boards	134
Medical Profession	105
Public	652
Total	13,629

This represents an increase of 795 over last year's total, and 1,754 over that of the previous year.

SECTION 1.

FOODS AND DRUGS.

Staff.—A. S. Hurwood, B.Sc., A.R.I.C., A.A.C.I., Deputy Government Analyst, Officer in Charge; R. S. Potter, A.A.C.I., Analyst; H. G. Dunstan, B.Sc., A.A.C.I., Analyst; G. Lahey, M.Sc., A.A.C.I., Analyst; K. H. Deasy, Assistant to Analysts; K. A. Glover, Assistant to Analysts (on leave).

The samples examined by the Section showed a decrease of 379 samples on last year's figures, and the number and source of the samples were as follows:—

Department.	Number of Samples.
Health and Home Affairs	4,474
Other State Departments	22
Commerce and Agriculture (Commonwealth)	926
Other Commonwealth Departments	174
Public	36
Total	5,632

TABLE I.
SUMMARY OF SAMPLES EXAMINED FOR THE DEPARTMENT OF HEALTH AND HOME AFFAIRS.

Nature of Sample.	Number of Samples.	Passed.	Failed.
Beverage or cordial	463	169	294
Bread	102	66	36
Cereal	85	62	23
Condiment	59	22	37
Cosmetic	25	7	18
Disinfectant	74	36	38
Drug or Medicine	129	82	47
Essence	17	9	8
Fruit or fruit juice	74	27	47
Jam or jelly	53	33	20
Meat	38	16	22
Vegetable	24	13	11
Milk	2,530	2,191	339
Milk product	45	35	10
Paint	162	43	119
Tobacco	108	84	24
Toy	65	48	17
Miscellaneous	421	250	171
	4,474	3,193	1,281

Those samples classed as failed include samples not conforming with prescribed

standards, and samples falsely described and incorrectly labelled.

The miscellaneous samples include hair, paper, flock, dye, blood, sugar, nuts, nallyware, gelatine, thermometer, ginger, methylated spirits, Sykes hydrometer, fish, confectionery, and soap.

TABLE II.
DETAILS OF LEGAL SAMPLES TAKEN BY INSPECTORS, IN ACCORDANCE WITH THE PROVISIONS OF THE HEALTH ACTS, 1937-1946.

Nature of Sample.	Number Examined.	Passed.	Failed.
Milk	2,283	2,017	266
Meat	25	7	18
Paint	19	2	17
Spirituous liquor	16	3	13
Bread	13	9	4
Disinfectant	4	1	3
Cream	3	3	..
Ice cream	2	2	..
Lemon essence	2	..	2
Apricot	2	1	1
Miscellaneous	6	4	2
	2,375	2,049	326

TABLE III.
DETAILS OF LEGAL SAMPLES OF MILK.

Place.	Number of Samples.	Passed the Standard.	Below the Standard in Fat.	Below the Standard in Total Solids and/or Solids not Fat.	Number of Watered Samples.	Proportion of Watered Samples, Per Cent.	Average Proportion of Added Water, Per Cent.
Greater Brisbane	1,261	1,149	16	76	20	2	6.9
Beaudesert	26	23	..	3	..	..	..
Bundaberg	32	25	1	4	2	6	4.4
Cairns	15	10	2	3	..	..	..
Childers	6	5	..	..	1	17	10.6
Dalby	10	9	..	1	..	..	..
Gayndah	6	6	..	..	..	..	..
Gladstone	8	7	..	1	..	..	..
Gympie	21	21	..	..	..	..	..
Howard	2	..	..	..	2	100	29.5
Innisfail	8	8	..	..	..	..	..
Ipswich	158	116	4	30	8	5	8.8
Kingaroy	6	6	..	..	..	..	..
Mackay	28	21	..	3	4	14	5.6
Maryborough	27	23	..	1	3	11	21.2
Monto	3	2	..	..	1	33	9.6
North Coast	227	196	5	15	11	5	10.0
Redcliffe	104	91	3	9	1	1	15.4
Rockhampton	78	61	3	12	2	3	13.9
South Coast	112	106	2	4	..	..	..
Toowoomba	85	78	1	5	1	1	3.0
Townsville	16	15	..	1	..	..	..
Tully	2	2	..	..	..	..	..
Warwick	23	20	2	..	1	4	8.1
Western Districts	19	17	1	1	..	..	..
	2,283	2,017	40	169	57	2.5	9.6

TABLE IV.
SUMMARY OF TABLE III.

	Percentage of Total Samples.
Adulterated with water	2.50
Deficient in fat only	1.75
Below the standard in total solids and/or solids not fat	7.40
Passed the standard	88.35
	100.00

TABLE V.
SAMPLES TAKEN IN GREATER BRISBANE.

Year.	Number of Samples.	Proportion of Total Milk Samples.	Proportion Adulterated with Water.
		Per cent.	Per cent.
1943-44	1,575	78.5	2.1
1944-45	1,666	79.4	2.9
1945-46	1,411	66.7	1.1
1946-47	1,358	62.7	2.2
1947-48	1,261	55.2	1.6

TABLE VI.

SHOWING THE AVERAGE FAT CONTENT OF THE LEGAL SAMPLES OF MILK IN WINTER AND SUMMER IN TOWN AND COUNTRY.

Number of Samples.	Greater Brisbane or Country.	Season.	Months.	Average Fat Content.
				Per cent.
2283	Both	Overall	January-December	3.98
691	Brisbane	Summer	October-March	3.86
410	Country	ditto	ditto	3.82
1101	Both	ditto	ditto	3.85
342	Brisbane	Winter	July-September	3.90
313	Country	ditto	ditto	3.94
655	Both	ditto	ditto	3.92
228	Brisbane	ditto	April-June	4.37
299	Country	ditto	ditto	4.32
527	Both	ditto	ditto	4.34

NOTE.—"Country" in this table means outside the Greater Brisbane Area.

TABLE VII.
MILK POSITION COMPARED WITH PREVIOUS YEARS.

Year.	Number of Legal Samples.	Deficiency in fat.	Below the standard in total solids and/or solids not fat.	Watered Samples.	Added Water. (average.)
		Per cent.	Per cent.	Per cent.	Per cent.
1941-1942	2,738	2.0	23.2	3.6	11.0
1942-1943	1,950	1.9	10.5	3.5	11.0
1943-1944	2,005	2.7	14.0	4.4	11.0
1944-1945	2,099	3.7	12.4	4.5	12.0
1945-1946	2,116	3.2	11.7	4.0	8.0
1946-1947	2,166	2.4	17.7	4.4	10.0
1947-1948	2,283	1.8	7.4	2.5	10.0

Milk.

The milk position as a whole, judged by the composition and purity of the samples examined, was a distinct improvement on last year, but some complaints regarding dirty milk bottles were received.

Milk samples for examination from distant country centres were transported for the first time by air—a definite improvement on the slower train transport, and from the analyst's viewpoint well worth the difference in cost.

The following observations are made from a survey of Tables III., IV., V., VI., and VII.:—

Of the official milk samples, 55.2 per cent. came from the Greater Brisbane area and 44.8 per cent. from the rest of Queensland.

The proportion of milks adulterated with water was 1.6 per cent. in the Greater Brisbane area and 3.6 per cent. outside this area.

As with last year, no watered milks were obtained from Cairns or Townsville, and few samples were submitted from these centres.

The proportion of watered milks in the Greater Brisbane area (1.6 per cent.) was somewhat lower than last year (2.2 per cent.).

Owing to the favourable conditions which existed throughout the year, the proportion of naturally poor milks (7.4 per cent.) was about the lowest on record, as also was the overall proportion (2.5 per cent.) of watered samples.

The average fat content of the milks examined was 3.98 per cent., as against 3.83 per cent. last year.

There was practically no difference in fat content between town and country milks.

The lowest average fat content (3.85 per cent.) was recorded over the summer months, and the highest (4.34 per cent.) over the early winter months.

Bread.

An investigation was carried out into the quality and water content of underbaked, properly baked, and slightly overbaked bread.

Experimental loaves were made in a local bakehouse under the supervision of an officer of the Section with results as outlined in Table VIII.

TABLE VIII.

Type of loaf	French roll
Variety of flour	Queensland
Dough weight	2 lb. 4 oz.
Water content of dough prior to baking	44.0 per cent

Time of Baking	Weight of Loaf.	Moisture of Crumb.	Moisture of slice.	Observations.
Minutes.	Lb. oz.	Per cent.	Per cent.	
20	2 2½	43.7	40.7	pale crust, uncooked doughy centre, unpalatable
27	2 1½	42.6	39.0	pale crust, doughy patches in crumb, unpalatable
31	2 1	42.3	38.2	good crust, slightly underbaked but palatable
37	2 0½	42.1	37.5	properly baked, good quality bread
43	2 0	41.8	36.0	slightly overbaked but of good quality
50	1 15½	41.5	34.1	overbaked—somewhat dry

The following observations are made from a study of the results shown in Table VIII:—

The optimum baking time in a normal oven for a 2-lb. roll loaf is from 35 to 40 minutes.

With a baking time under 30 minutes, the loaf is underbaked and unpalatable.

With a baking time from 30 to 35 minutes, the loaf is slightly underbaked but palatable.

With a baking time from 40 to 50 minutes, the loaf is overbaked and somewhat dry, but palatable.

As regards excess water in bread, and the frequent claim that the baker is selling water for bread, the following comment is made:—

The water content of dough varies only within small limits, depending on the strength of the flour, and excess water in the dough stage must upset the whole breadmaking process and yield an unpalatable, poor volume loaf. The only chance the baker has to "sell water for bread" is to cut down on the dough weight to say 2 lb. 3 oz. and consistently underbake by about 5 minutes. In this way, he can produce a loaf which pulls its weight of 2lb. and although slightly underbaked and below average quality, is palatable. He is in fact selling excess water to the extent of about ½ oz. in every 2 lb. loaf. He uses 1 oz. less dough in every 36 oz. representing a saving on normal practice of about 3 per cent. Few bakers would intentionally and consistently sell poor quality bread for this small extra return.

The water content of the centre crumb or wettest part of the loaf of good quality, properly baked, fresh white bread varies from 41 to 45 per cent., and it would not appear advisable to alter the present standard, which prescribes a maximum of 45 per cent. water in any part of the loaf. If anything, this prescribed maximum for water content should be slightly increased, as wholemeal bread invariably contains a higher water content than white bread, and 46 to 47 per cent. water in the crumb of properly baked wholemeal bread is quite common. The overall water content of a properly baked loaf is about

5 per cent. below that of its centre crumb, and fixing 45 per cent. as the maximum in the crumb automatically fixes about 40 per cent. as the water content of the whole loaf.

It is not possible to determine the quality of a loaf of bread or its degree of baking by a knowledge of its water content alone. The difference in water content between the slightly overbaked and the slightly underbaked loaf is not great and seldom exceeds 2 per cent. It cannot be too firmly stressed that the physical characteristics of bread, including colour, odour, flavour, texture, pile, and grain, are the all-important factors governing quality.

Starch Reduced Bread.—A number of starch-reduced breads were examined and their average composition compared with white bread is shown in Table IX.

TABLE IX.
COMPOSITION ON WATER-FREE BASIS.

	Starch-Reduced Bread.	White Bread.
	Per cent.	Per cent.
Protein (N.X. 5.7)	16.0	12.5
Fat	3.7	2.0
Carbohydrate (chiefly starch)	77.2	83.0
Ash	3.1	2.5
	100.0	100.0
Common salt (included in ash)	2.0	1.5
Ratio $\frac{\text{Carbohydrate}}{\text{Protein}}$	4.8	6.6

The slight increase in protein content compared with white bread and the decrease in the starch content is due to additions of gluten, extra fat, sugar, and malt extract to the dough. The protein increase and consequent decrease in starch is of little nutritional significance and is too small to be of any value to the diabetic.

The value of this starch-reduced bread lies chiefly in its lightness, palatability and improved keeping quality.

Flour.

A number of bread and cake flours were examined. Early in the year the flour was mostly weak Southern flour with an average wet gluten content of 23 per cent., but over the last six months it has been stronger Queensland flour with a wet gluten content of about 35 per cent. None of the samples examined was chlorine-bleached. The sale of chlorine-bleached flour is prohibited in Queensland. Such flour has been proved toxic to dogs, and in the present state of knowledge it would be unwise to assume that it has no deleterious action on man.

Meat.

Preservative in Minced Meat.—Of 25 legal samples of minced meat examined, 18 contained sulphite preservative, in contravention of the Regulations.

Struvite in Canned Crayfish.—A sample of canned crayfish suspected of containing glass was found free of glass, but contained innumerable small glass-like crystals of magnesium ammonium phosphate (struvite), and was condemned as a deteriorated foodstuff.

The occurrence of struvite in canned shrimps was recorded by Purcell and Hickey in 1920 (Analyst 1922-47-16) and its occurrence in canned salmon by James at a later date (Analyst 1933-58-222).

Luminescent or "Phosphorescent" Lobster.—Following the food poisoning of a number of people, a specimen of lobster was examined. It was luminous in the dark owing to the presence of luminous micro-organisms. Also, it was partly decomposed. The trouble was associated with the putrefactive bacteria present, and not with the luminous micro-organisms. Luminous cooked lobster is fairly common, and although a deteriorated foodstuff is not considered dangerous to health.

"Dynamited" Fish.—A sample of mullet was submitted for an opinion whether explosive shock was the cause of death. It showed no abnormal features. Fish killed by explosive shock exhibit certain characteristics—physical rather than chemical—such as air bladder disruption, but it is usually difficult to get sufficiently conclusive evidence for prosecution purposes. Solid control work is essential and it is intended in the coming year to carry out some such work, in association with an ichthyologist and possibly a pathologist.

Stabilisers in Ice Cream.

Most of the ice cream samples examined conformed with the standard in milk fat content. Some, however, contained a trace of a chemical stabiliser, the presence of which is not officially permitted.

It is common practice in the trade, both in Australia and overseas, to add to ice cream, in addition to gelatine, small proportions, usually 0.1 to 0.2 per cent., of chemical stabilisers,

commonest of which are glyceryl mono stearate or laurate, sodium alginate and methyl cellulose. These substances prevent the crystallisation of ice particles and give that fine smooth texture to the ice cream so popular with the consuming public.

To cover modern practice, some addition to the present standard would appear necessary, and it is suggested that, in addition to gelatine, the use of sodium alginate be permitted in proportion not exceeding 0.15 parts per centum.

Coal-tar Dyes in Lollies.

A number of highly coloured confections, mostly of the boiled lolly type, were examined for dye content. Several of the colours were present in excess of the 2 grains per pound permitted. The excessive use of coal-tar dyes in foods, more especially in sweets and soft drinks, consumed largely by children, should not be tolerated, and consideration must soon be given to further restricting the use of such dyes as food colours.

Soft Drinks from Country Centres.

Of the 366 samples of soft drinks examined, 333 samples were from country centres, including Cairns, Townsville, Rockhampton, Charters Towers, Gayndah, Roma, Mundubbera, Charleville, Ipswich, Mackay, Southport, Clifton, Clermont, Coolangatta, Bundaberg, Dalby, Monto and Tara.

The drinks showed little difference in composition, quality, or variety from those obtainable in Brisbane. It is strange, but unfortunately true of this rich fruit-growing State of ours, that the shops in both town and country have their shelves laden with imitation fruit drinks, with the genuine fruit drinks more often than not conspicuous by their absence.

Cider.

The several brands of cider on the market were examined, and with the exception of one sample, which contained 2 per cent. proof spirit, the samples were alcoholic liquids having an average proof spirit content of 10 per cent., being somewhat stronger than beer, which averages 8 per cent. proof spirit.

Cider for centuries has been regarded as a spirituous drink, but of recent years there has been a growing tendency overseas to define the unfermented apple juice as sweet cider and the fermented juice as hard or dry cider.

There would appear to be no necessity to follow this practice, and it is suggested that the name "Cider" should be applied only to the fermented apple juice containing more than 2 per cent. proof spirit.

Vitamin C in Queensland Oranges.

A number of oranges grown in this State were examined relative to composition of juice and the results obtained are outlined in Table X.

TABLE X.

District.	Montville	Gayndah.	Charters Towers.	Koah.	Montville.	Montville.	Montville.
Variety of Orange.	Late. Valencia.	Late. Valencia.	Late. Valencia.	Late. Valencia.	Late. Valencia.	Joppa.	Navel.
Month.	August.	September.	September.	October.	October.	May.	May.
Extract (per cent)	9.4	9.8	8.8	9.0	11.8	8.5	9.1
Acidity (per cent)	1.4	1.3	0.8	1.3	1.4	2.0	1.2
Phosphate P ₂ O ₅ (per cent)	0.026	0.032	0.041	0.032	0.029	0.024	0.027
Lime (CaO) (per cent)	0.008	0.013	0.016	0.016	0.010	0.014	0.013
Ascorbic Acid (Vitamin C) mgm. per 100 mls.	61.000	49.000	45.000	48.000	56.000	60.000	62.000

Glycerine in Jam.

A sample of "jam" labelled "Specially prepared for diabetics," contained glycerine to the extent of 50 per cent. Glycerine cannot be regarded as harmless to the diabetic. It is changed into glucose by the liver and has much the same effect weight for weight in diabetic metabolism as sugar itself.

Sorghum.

A number of samples of sorghum—flakes, meal and grain—were submitted for an opinion as to suitability for use. They were all good quality products, fit for human consumption.

Sorghum has been cultivated for more than 4,000 years, and is still about the commonest food grain of Africa.

Although unpopular in Australia even as poultry food, it is consumed in enormous amounts in many parts of the world, especially among the coloured races.

Fruit and Vegetables.

The position as regards fruit and vegetables was satisfactory, judged by the few samples submitted for examination.

It is interesting to note that lead arsenate has now been almost entirely replaced by D.D.T. as an insecticide on cabbages, cauliflowers, and tomatoes.

Paint and Paint Scrapings.

There was a big decrease in the number of paint samples examined, 162 samples against 245 samples last year, and few samples from freshly painted houses were submitted.

Considering the menace to a child's health of old powdery lead paint about a house, the total elimination of all lead compounds from house paint should be the ultimate aim.

Lead in Toys.

The position as regards lead in toys shows a distinct improvement on last year, and most of the toys now for sale in this State are free of lead both on the painted surface and in the toy itself. The old lead toy soldier has now almost entirely disappeared and has been replaced by a hardened zinc counterpart, sharper cut, of better appearance and non-poisonous. An agent submitting a line of these toy zinc soldiers for examination remarked that they had been made especially for the Queensland market and this State is proud to pioneer a move aiming at the total elimination of lead from the reach of the child.

Phenol in Plastic Cups.

Eleven plastic cups and two plastic bowls were examined following a complaint that some brands of plastic ware imparted a phenolic taint to hot liquids. Tainting was evident from these containers composed of phenol resins, and was due to leaching of phenol from the plastic material. Boiling water poured into the cups and held for 10 minutes acquired about one part per million of phenol. Subsequent tests gave progressively lower concentrations, although after a lapse of ten days the next test showed a concentration almost as high as the original maximum figure.

The taint was objectionable, but too faint to constitute a health hazard.

Food Taint from Wrapping Paper.

Complaint samples of wrapping papers from the widely different areas of Babinda, Brooweena, and Pinalba were examined. With each sample the complaint was the same, that meat wrapped in the paper for any length of time developed objectionable odours, variously described as resembling iodine, iodoform, and bad meat. The paper was shown to be of Canadian newsprint origin—supplied in remnant form to the shops from the several newspaper companies in the State.

Newsprint paper is made from unpurified mechanical wood pulp and the odour from the damp paper in the cases examined was apparently associated with some aromatic component of the original wood, and, although objectionable, was in no way harmful.

For the wrapping of moist foodstuffs such as meat, fish, cheese, and butter a better quality paper than that intended for newsprint is desirable.

Cosmetics.

Ten different brands of so-called Oil of Roses were examined—apparently a popular hair oil judged by the number of brands on the market. The preparations were all red-coloured, perfumed paraffin oils and misdescribed as Oil of Roses.

A proprietary line of Southern origin, selling at an exorbitant price and claiming depilatory value, was found to be a dilute solution of hydrogen peroxide practically useless for the purposes claimed.

Drugs and Medicines.

Of 129 samples of drugs and medicines 47 failed to conform with prescribed standards or had claims that were incorrect or misleading. A number of the samples were associated with complaints from the public.

A proprietary line of eyedrops manufactured in the South, and said to have caused temporary blindness after use, contained adrenaline in small proportion. The use of this drug is restricted in Queensland, but permitted without a doctor's prescription in some of the other States.

Another proprietary line extravagantly claimed to be "the most powerful invigorator of the human stomach and nerves known to science," essentially was a dilute aqueous solution of phosphoric acid.

A so-called "pure herbal nerve remedy" claimed that it gave "natural sleep without drugs" and consisted principally of a mixture of sugar and cocoa powder.

An ointment which caused serious skin trouble to a child was shown to contain mercuric chloride (corrosive sublimate) in place of ammoniated mercury as prescribed.

Medicines were checked for accuracy of dispensing and a number of lines, including hydrogen peroxide, tincture of iodine, and liquid paraffin, were examined relative to official standards.

Other drugs or medicines examined included cunjevoi extract, cascara extracts, A.P.C. powders, teething powders, and medicated wines.

Variation in Weights of Tablets of the same Drug Potency.

The difference in size of tablets of two brands of Hyoscine Hydrobromide gr. $\frac{1}{100}$ supplied to the same script was the cause of considerable concern to a patient. The tablets weighed $\frac{1}{2}$ grain and $\frac{1}{4}$ grain respectively. Both contained $\frac{1}{100}$ grain of the alkaloid, the rest being milk sugar. Variation in size of tablet of the same drug potency, between different brands, is all too common, and without a knowledge of the brand it is not possible to tell the potency of a tablet by its size. This applies to morphine, heroin, phenobarbitone and other potent drugs in tablet form.

The variations in the weights of the tablets of several common brands of Phenobarb gr. $\frac{1}{2}$ and Phenobarb gr. 1 are given in Table XI. Only three of the brands had distinctive markings. Some of the brands of Phenobarb gr. $\frac{1}{2}$ tablets are similar in size to other brands of Phenobarb gr. 1 tablets.

TABLE XI.
SHOWING VARIATION IN SIZE OF PHENOBARBITONE TABLETS.

Manufacturer.	Phenobarb. gr. $\frac{1}{2}$.		Phenobarb. gr. 1.	
	Weight of Tablet.	Relative Weight.	Weight of Tablet.	Relative Weight.
	Grain.	Per cent.	Grain.	Per cent.
1 ..	0.77	42	1.59	66
2 ..	0.77	42	1.84	77
3 ..	1.00	54	1.62	68
4 ..	1.23	67	1.80	75
5 ..	1.49	81	1.82	76
6 ..	1.84	100	2.39	100
7 ..	1.84	100	2.34	98

A Suggested Substitute for Saccharin.

An inquiry was made as to whether the synthetic substance known commercially as AROS-550X, and chemically as 1-PROPOXY-2 AMINO-4 NITRO BENZENE would be officially accepted as a substitute for saccharin. This compound is probably the sweetest substance known, being twice as sweet as saccharin and about one thousand times as sweet as cane sugar. Too little is at present known of its pharmacology to consider its use as a substitute for saccharin.

New Drugs.

A number of comparatively new drugs came under review during the year, including—Amethone, Dicoumarol, Synhexyl, Antistine, Thiouracid, Tridione, Amidone and Metapon.

Recommendation was made that the first six be included in the restricted drug class and the last two, namely Amidone and Metapon, in the dangerous drug class.

Teething Powders.

Of the five brands examined, three contained little more than commercially pure lactose or milk sugar and were of doubtful value for the purposes claimed, but were at least harmless.

One brand, which has been on the English market for nearly 100 years, contained $\frac{7}{10}$ th grain of calomel to the powder. Considering that the official dose of calomel for an adult is $\frac{1}{2}$ to 3 grains, the powders would appear rather potent for a baby under 6 months.

The remaining brand contained a small proportion of bromide as well as calomel.

The number of these calomel powders used is left, as stated on the label of one of the packets, "to the discretion of the nurse or mother"—advice that could easily prove harmful to the child.

The use of 2 per cent. D.D.T. Emulsions on Pediculosis Capitis (Head Lice).

A proprietary line claiming value in the eradication and prevention of head lice was a 2 per cent. D.D.T. emulsion in water and oil. D.D.T. is effective against the body louse and the head louse, as well proved in the recent war.

In 2 per cent. emulsion form, it is reasonably safe to use on the skin and not so objectionable as Oil of Sassafras, and the organic thiocyanates, substances which have found considerable use in the past for the destruction of pediculi.

Medicated Wine.

A survey of the medicated wines showed the medication to be due to one or more of the following:—

Meat Extract
Malt Extract
Sodium Glycerophosphate
Manganese Glycerophosphate
Iron Compounds
Cinchona Extract
Aneurine hydrochloride (Vitamin B.1)
Kola nut Extractives.

A number of the samples failed to conform with the standard which prescribes that, except for malt and meat wines, the product shall contain in each fluid ounce not less than the official minimum dose of the medicating drug.

Two of the meat wines contained appreciable sediment due to precipitation of some of the meat extractives, a common complaint with such wines.

The addition to wine of meat extract and malt extract adds little to the therapeutic value of the wine and succeeds all too frequently in spoiling a good wine and a good meat or malt extract.

Lysol.

The several brands of lysol examined showed slight deficiencies in cresylic acid content, but otherwise conformed reasonably with the standard of the British Pharmacopoeia.

There would appear to be no necessity for the specific standard for lysol of the Food and Drug Regulations. This standard is too exacting, especially as regards the solubility of the product. The standard of the British Pharmacopoeia with the alternative oleic acid-caustic soda solvent of the Australian and New Zealand Pharmaceutical Formulary is all that is necessary.

New Bedding and Upholstery Regulations.

New Bedding and Upholstery Regulations were gazetted in February, 1948.

These Regulations prescribe a "chlorine" limit of 150 parts and an "ammonia" limit of 6 parts per 100,000 parts of filling material and include also a turbidity limit for the aqueous extract.

Of the 20 samples of flock, fibre, and kapok examined, only 13 samples conformed with the new standard.

Commerce and Agriculture.

Nine hundred and twenty-six samples were examined for the Federal Department of Commerce and Agriculture, mostly in connection with export standards.

Considerable experimental work was carried out in an endeavour to differentiate between the washed and the unwashed egg. The keeping quality of an egg is markedly affected by washing, and eggs for export must not be washed.

Other Departments and Public.

A further 232 samples were examined for the Australian Navy, the public, and for other State Departments, outside Health and Home Affairs. This work covered a wide field, from the comparative rating of ice creams for the State Store-keeper to an examination of human milk for a Maternal and Child Welfare Centre.

SECTION 2.

TOXICOLOGY, BIOCHEMISTRY AND INDUSTRIAL HYGIENE.

I. L. B. HENDERSON, B.Sc., A.A.C.I., Officer in Charge;

M. J. GUYDER, B.Sc., Senior Analyst, Division II.

Industrial Hygiene has been transferred from Section 3 to Section 2, with M. J. Guyder as the officer responsible for the analytical work.

The total number of specimens submitted for examination was 1,354.

Police Department.

Submissions from this Department numbered 229, of which 182 were connected with post-mortem examinations. Poisons found included strychnine (2), arsenic (2), cyanide (2), chloral hydrate (1), aconitine (1), and barbituric acid or derivatives (5). Negative results accounted for the balance.

The incidence of self-administered barbituric acid or derivatives of this acid was higher than usual due no doubt to the widespread clinical use of this drug, and possible ignorance in certain cases of its effect in overdosage. Attention has been focussed on this poison by recent publicity in the press, and the knowledge that death is painless may also contribute to its increased use in suicide. Under the Poisons Regulations, barbituric acid and its derivatives are restricted drugs, only available on medical prescriptions. Further restrictions on such useful drugs would appear to be unjustified, but limitations of the number of tablets available at any one time might reduce their dangerous misuse.

A number of animal poisonings were also investigated, one case involving the loss of cattle worth several hundred pounds, due to an unlabelled tin containing an arsenical liquid being thrown into a drinking trough by truant children. The careless keeping, handling, and use of poisons, all too prevalent in country districts, often leads to loss of life, both human and animal. Poisons which must be labelled in accordance with the Poisons Regulations should be kept in their original containers in a safe and secure place, exclusively appropriated for such use. Only in emergencies should poisons be placed in other adequately labelled receptacles, and care should be exercised to return unused residues to the original bulk, followed by deep burial or other effective disposal of the contaminated containers.

A case involved a person who, in mistake for medicine, drank a liniment containing aconitine, one of the most toxic of the alkaloids, and succumbed shortly afterwards. The liniment had been correctly dispensed in a "poisons" bottle but the accident raises the question as to whether the public is sufficiently aware of the significance of the "poisons" bottle with its dark-blue, dark-green, or dark-brown glass and prominent points or ribs of sufficient number to render it so distinguishable even on handling in the dark.

In another case, a mixture of sulphur and golden syrup taken by a mother and child caused severe vomiting. The sulphur was found to be contaminated with a small proportion of copper sulphate. It was contained in an unlabelled screw-capped jar, a familiar type of container in use for foodstuffs, and doubtless the mixture had been prepared as a horticultural dust. This emphasises the risk attached to the careless use of foodstuff containers as receptacles for harmful substances, a practice which cannot be too strongly condemned.

Other samples submitted included drugs (8), dog baits (2), abortion exhibits (5), alcoholic liquids (9), waters (2), opium (11), foodstuffs (2), and miscellaneous (8).

Specimens forwarded from the Senior Medical Officer, Rabaul, included several pieces of a vine, provisionally identified either as *Anodendron paniculatus* or *Parsonia buruensis*, the ingestion of the juice having caused the death of two natives. Aqueous extracts of the bark and softwood were extremely toxic to guinea pigs, and further experimental work carried out by officers of the School of Physiology, University of Queensland, disclosed the presence of a cardiac glucoside. The vine belongs to the botanical family Apocynaceae, which includes the poisonous plants Oleander and Strophanthus. Other plants associated with poisoning cases were the thorn apple (*Datura stramonium*) and the finger cherry (*Rhodomyrtus macrocarpa*), the latter frequently but inexplicably causing paralysis of the optic nerve, often followed by permanent blindness.

Biochemistry.

The following table indicates the nature, significance, and number of specimens submitted by the Department of Health, hospitals, and medical practitioners:—

Nature of Specimen and Significance.	Number of Specimens.
Blood and/or urine for alcohol, ether and/or other drugs	76
Urine for lead, mercury, manganese, &c.	172
Urine, hair and/or nails for arsenic	46
Miscellaneous	103
Total	397

The miscellaneous specimens included drugs, ointments, faeces, lungs, stomach washouts, and blood for chloride, cholesterol, and uric acid.

On two occasions in the past attention has been directed to the baneful results of eating the mushroom *Panaeolus ovatus*. A further case of poisoning by this fungus came to the knowledge of the laboratory in June. The victims gathered the mushrooms at Cash's Crossing, 12 miles from Brisbane. This is the first laboratory record of the occurrence of the mushroom within the Greater Brisbane area, and in the

interest of the public it is thought advisable to record that the unusual symptoms accompanying ingestion pass off within 24 hours after the onset without leaving any harmful effects. However, the effects—pupils widely dilated, mental confusion, light hallucinations (coloured designs), following on the initial feeling of hilarity—may engender shock to those ignorant of these unexpected reactions.

Mercury in Urine.—A suggestion has been made that mercury may be associated with the abnormality in children known as "Pink Disease," and the assistance of the laboratory was sought by interested members of the medical profession in the determination of the mercury content of urine. Specimens from normal children and sufferers of the disease have been submitted for examination. In this connection it is worthy of note that certain popular teething powders contain calomel, a compound of mercury.

Industrial Hygiene.

Examination of 697 specimens of dust and 31 miscellaneous items were carried out.

The officer associated with industrial hygiene visited coalmines, sugar-mills, foundries, quarries, and wool stores at Brisbane, Rockhampton, Maryborough, Innisfail, Howard, Ogmoo, and Collinsville. Dust, ventilation, and possible industrial hazards from gases, fumes, and vapours were the principal subjects for examination.

SECTION 3.

MINING, MINERALOGY, METALLURGY, EXPLOSIVES.

Staff.—V. R. CUNDITH, B.Sc., A.A.C.I., Officer in Charge; D. MATHERS, M.Sc., A.A.C.I., Senior Analyst, Division II.; T. R. LOWTH, B.Sc., A.A.C.I., Analyst; F. ESDALE, Cadet.

Samples Examined: 2,467.

The table shows the sources of work done by this section, and the number of samples from each:—

DEPARTMENT.	Number of Samples.
Geological Survey and Mines Department ..	603
Portmaster (Explosives)	1,293
Other Departments	128
Industrial Hygiene	55
Public (Chiefly Tanker Examinations) ..	388

Laboratory facilities have been provided for the Investigation Officer of the Forestry Department for about two and a-half years. During the year, the Forestry Department completed its own laboratory and in April this officer was able to move in and continue his investigations of timber problems in the new quarters.

Pending the completion of their own laboratory at Gregory terrace, laboratory facilities were also made available to the Powell Duffryn Services Ltd., for analytical work associated with their survey of Queensland coalfields.

Mines Department and Geological Survey Department.

For the Mines Department, including the Geological Survey Office, there has been a falling off in the total number of samples assayed.

This to some extent has been offset by the increased amount of work required on such samples as coal, clay, beach sands, and tin concentrates.

The greater proportion of the work, however, was in assaying ores of gold, silver, lead, copper, manganese, tin, and other minerals.

The large number of clays examined (87 samples) indicates renewed activity in the search for alternative raw materials for building supplies. Most of the clays were found to be suitable for brick and tile manufacture. Some contained pyrites, gypsum, or soluble salts, which adversely affect the brick or tile during drying or firing operations.

In some cases, clays were subjected to fire tests to determine their suitability for fire bricks.

In connection with coal, tests carried out included—calorific value; proximate analysis; sulphur nitrogen determination; fusion point of ash; analysis of ash; washability tests.

Other Departments.

The work involved consultation as well as examination of a diversity of samples such as concrete, building sand, aboriginal weapon, flue dust, steels, bearing metals, alloys, bore deposits, refractories and insulating materials, mine water, paint, brake fluid and brake caps, and ambergris.

Some material taken from a bore was found to consist principally of black iron sulphide with rust. The action of water carrying traces of sulphuretted hydrogen upon pulverised rust probably affords an explanation for the accumulation of 5 lb. of sulphide material above the pump plunger in twelve months.

An examination of corroded radio equipment showed the presence of metal nitrates.

Areng had occurred between the aluminium alloy condenser plates with generation of nitric oxide and ozone from the air. The extent and hard nature of the fused and partially fused alumina blebs on the surface of one condenser plate indicated that sparking had been severe and practically instantaneous over a large surface.

The nitro ester paints examined were found to be free from lead and benzene. These paints were suggested for outside use with application by brush.

The low pigment content and nature of the high volatile vehicle (ethyl and butylacetates with petrol) favour spray-gun work rather than brush work, in which lifting and streaking will occur as a result of rapid drying unless ample plasticiser be present.

Explosives.

During February the first Australian and New Zealand conference of Chief Inspectors of Explosives was held in Melbourne. The conference occupied ten days, and in addition to formal meetings visits were paid to the fuse factory of Nobel (Australasia) Pty. Ltd., and the explosives reserve conducted by the Victorian Explosives Department, at Altona. A practical demonstration covering the use of a free-running explosive was conducted at Reid Brothers' quarry, where 600 lb. of this explosive was used to dislodge a large quantity of

basalt. Free-running explosive is not as yet authorised for importation into Queensland; however, the demonstration disclosed that its use in large mining ventures has distinct possibilities. The conference was of particular value in presenting to the delegates the various aspects of explosive control in the States and New Zealand, and a move towards general uniformity of control is anticipated, although each State has its own peculiar set of conditions preventing complete agreement on uniformity. One definite outcome of the conference was the proposal that the uniform control of fireworks be adopted as far as possible as a general principle by the States and New Zealand. In furtherance of this, it was indicated that by Statutory Rule No. 169 of 1946 amending the Customs (Prohibited Imports) Regulation, "The Importation of Fireworks into a particular State shall be subject to the law in force in that State." This throws on each State the onus of passing fireworks for importation. Any such importations which do not conform to State Regulations will be prohibited by the Customs authorities in that State. Under such circumstances, uniformity of control by the States is a desideratum. In accordance with the present position, 50 cases of imported fireworks were examined in the laboratory.

Samples examined: 1,293.

INDUSTRIAL EXPLOSIVES IMPORTED INTO QUEENSLAND
DURING THE YEAR ENDED 30TH JUNE, 1948.

	Australian.	Overseas.
	Cases.	Cases.
Blasting gelatine	265	..
60% gelignite S.N.	2,496	..
A.N. gelignite " 60"	7,558	..
50% gelignite S.N.	1,052	100
A.N. gelignite " 50"	9,481	..
Ajax	7,999	..
Quarry Monobel	4,217	..
40% ligdyn S.N.	2,161	..
A.N. ligdyn " 40"	500	..
Blasting powder	549	..
	36,278	100

	Australian.	Overseas.
	Feet.	Feet.
No. 6 detonators	1,200,000	..
Electric detonators No. 6 x 72"	280,000	35,000
Electric detonators No. 6 x 120"	15,000	..
Electric detonators No. 6 x 144"	14,000	..
Blue fuse	5,788,800	..
Plastic cordtex	..	118,500

Condemned Explosives—Nil.

Licences in Force.

	1946-47	1947-48
Bulk magazine	6	6
Retail magazine	463	499
Rackarock	1	1

Truck Inspection.

Inspections were made of motor trucks taking delivery of explosives at Roma Street Station goods yards.

With the advent of the railway strike (February-March), emergency transport of explosive from the Dakabin magazine was effected by motor truck.

Subject to clearance from this Department, a road permit was issued by the Transport Commission, and in the event of loadings exceeding 1 ton explosive a police escort was provided by the Police Department (Traffic Branch) in the busier roads.

The co-operation was much appreciated.

Surplus Army Explosives.

During the year T.N.T., ammonal, wet gun cotton, anti-tank mines, Bangalore torpedoes, black powder, primers, and primacord were transferred from the Dinmore army magazine to the Main Roads Commission magazine near Serviceton, via Darra.

In January, responsibility for safety precautions was undertaken during the road movement of anti-tank mines containing the equivalent of about 74 tons (short) T.N.T. from the army magazine at Wallangarra to a site on the Western Creek Forestry Reserve, in the Millmerran area.

These explosives are to be used by the Department of Irrigation and Water Supply in the preparation of earth water dams along stock routes. A successful experimental shot prepared by the Main Roads Commission using about 12 tons of explosives was fired at a site near Inglewood on the 1st August, 1947.

On the 23rd April, 1948, two inspectors from the Department were associated with officers from the Main Roads Commission in combating a bush fire in the Serviceton area. The burning of a break some distance to the west eliminated any danger to the magazines there.

Magazines for Explosives.

Sites and magazines were examined or selected at Waterford, Bulimba, Chermside, and Ipswich road.

Four magazines for fireworks were examined at Brisbane, and all conformed with the Regulations.

Conferences were arranged with officers from the Co-ordinator-General, Railway, and Lands Departments to discuss and inspect sites at Wacol, Gailes, and Narangba for a new Government magazine to replace the one at Dakabin.

Inflammable Liquids.

The greater proportion of the work for the public is represented by examination of tankers, fuel oil tanks, and bulk petrol tank wagons, to determine the presence of toxic or dangerous proportions of inflammable gas prior to entry for cleaning or repairs.

Evidence was given at an inquiry held in connection with a fire and explosion that occurred at an oil company terminal.

During the year a section of a produce store was damaged and loss of life occurred as the result of an explosion following the ignition of carbon bisulphide vapour which was being used as a fumigant for weavils in wheat. An examination was made of the premises and wrecked property nearby. Carbon bisulphide is an efficient fumigant, but the use of the large gallonage required for the bulk fumigation of grain involves a strict adherence to safety precautions.

SECTION 4.

CUSTOMS, STORES, AND ROADWAY MATERIALS.

Staff.—J. R. W. ADAMSON, A.A.C.I., Senior Analyst, Officer in Charge; J. C. YULE, Diploma Industrial Chemistry, Assistant to Analyst; J. V. FOREMAN, Cadet.

The total number of samples examined was 3,117.

The number submitted by the Commonwealth Customs was 2,300. The work for this Department consists principally of analyses to determine the classification for import and excise duties.

The remaining samples were examined for the following departments:—

Main Roads Commission	495
State Stores Board	145
Queensland Railways	44
Public	109
Other Commonwealth Departments ..	17
Miscellaneous Departments	7
	817

The Main Roads samples consisted chiefly of bitumens, tars, emulsions, and lubricating and fuel oils, whilst those from the State Stores Board included textiles, carbon papers, inks, disinfectants, and oils.

The remainder of the samples submitted to this section consisted chiefly of oils and paints.

The control of the importation of fireworks has been handed over to the States by the Commonwealth Government, and during the year some fifty cases were examined in this connection. The bulk of the fireworks imported into this State come from the United Kingdom, only a small proportion coming from China. None of the fireworks examined contained the highly dangerous potassium chlorate, sulphur, and aluminium powder mixture, but a small proportion were loosely packed and were condemned on this account.

The total number of specimens submitted to this section showed a considerable increase in comparison with the previous year, and the small staff was fully occupied in coping with this increased work.

SECTION 5.

WATER.

J. A. FORBES, A.A.C.I., Analyst in Charge;
W. N. CARVOSSO, A.A.C.I., Analyst.

The work of this section showed no falling off, and the following table details the number of samples examined:—

Department.	Number of Samples.
Health and Home Affairs	177
Irrigation and Water Supply	632
Local Government	70
Machinery	10
Other Departments (14)	65
Public	105
Total	1,059

Fluorine in Water.—Practically all samples of water now submitted to the laboratory are examined for their fluorine content, and those in excess of one part per million are assessed as unsuitable for human consumption and culinary purposes. The United States Public Health Service drinking water standard approved in 1946 allows up to 1.5 parts per million of fluorine; previously this standard permitted up to one part per million. The majority of waters examined for their fluorine content came from the drier western areas of the State, where consumption of water is at a high level, and it is considered advisable to adhere to the present standard of one part per million. Further investigations on the reduction of fluorine in water for drinking and culinary use have been undertaken. A material prepared from high-purity phosphoric acid and milk of lime, and consisting essentially of a mixture of hydroxyapatite and tri-calcium phosphate and marketed under the name of "Fluorex" by the Inflico Inc., of Chicago, U.S.A., yielded very satisfactory results in a laboratory set up. A water containing 15 parts per million of fluorine, together with salts typical of the western bore waters, was reduced by treatment to .5 parts per million, well below the maximum accepted standard. It was estimated that 1 cubic foot of fluorex would treat 660 gallons of water containing ten parts per million of fluorine before further regeneration with caustic soda was necessary. The average fluorine content of the treated water was .6 parts per million. At present the laboratory is investigating the possibilities of a phenol-formaldehyde resin for a similar purpose.

The addition of fluorine to town drinking water up to a maximum of one part per million to combat the incidence of dental caries is being practised in several towns in the U.S.A., and has been suggested in Queensland. However, many factors—physiological, climatic, and dietary—connected with the administration of fluorine are in need of exploration before any definite decision is made. It would appear in general that fluorine may be classed as a trace element of definite benefit under certain conditions to human health. A parallelism appears in the new definitely established fact that certain trace elements (boron, copper, zinc, &c.) are essential to the well-being of many economic horticultural products. In quantities above certain limits these trace elements adversely affect plant health, just as fluorine affects human health, leading to a condition called fluorosis.

Ablutionary Waters.—Numerous samples from coal mines have been submitted for suitability for ablutionary purposes. In general, these waters contain too much mineral matter in solution and are too hard for detergent action. There is no known economical method of treating such waters to render them suitable for the desired use.

Mine waters are always open to suspicion of pollution, and it is considered that those which are otherwise suitable for ablutionary use should be sufficiently chlorinated to effect sterilisation.

As a general chemical standard, a water should be clear, colourless, and inoffensive in odour, and contain not more than 150 grains per gallon of dissolved solids and a hardness not above 10 degrees.

A sample of water stored in a galvanised-iron tank from a fibrolite roof after being boiled in a kitchen stove cistern was found to yield a pink colour with soap indicative of the presence of phenolphthalein. Questioning revealed that

a member of the household was in the habit of taking a well-known brand of aperient tablet containing phenolphthalein as an active ingredient. The presence of a male toddler in the household might explain the addition of some of the aperient tablets to the cistern.

Numerous instances have occurred where samples of water for analysis have been forwarded in containers previously contaminated with material foreign to waters. Earthenware jars, because of their somewhat porous nature, are always questionable in this regard. Another frequent source of contamination arises from dirty or previously used corks. Samples of water should be placed in thoroughly cleansed bottles after the bottles have been rinsed several times with the water submitted. Only new corks should be used, but if unavailable clean, odour-free corks are essential. A beer bottle of water is sufficient for most purposes.

I desire to record my appreciation of the ready co-operation and assistance of all members of the staff in the work of the laboratory.

SECTION OF INDUSTRIAL HYGIENE.

DOUGLAS GORDON, M.B., B.S. (Qld.), Medical Officer in Industrial Hygiene.

During the period under review, the following matters have had the attention of this section:—

Reports submitted on industrial premises, industrial health hazards, or to a less extent on administrative matters	94
Clinical reports to medical practitioners, the Insurance Commissioner, &c.	80
Clinical examinations performed	364

To enable most of the reports to be compiled, it has usually been found necessary to do a deal of field work involving estimations of hazardous gases or air-borne dusts or conditions of ventilation and temperature. This side of the work has been done by members of the staff of the Government Chemical Laboratory. Similarly, often before a clinical opinion can be given, it is necessary to have various laboratory investigations carried out, and these procedures have been done by the Director and staff of the Government Laboratory of Pathology and Microbiology. The exact extent to which these services have been rendered will doubtless be covered in the respective reports of those two laboratories of this Department.

An idea of the diversity of trades investigated by this section can perhaps be best shown by the following table, giving some details of cases seen in consultation or for some other special reason. In this type of medical work, investigation of a patient allegedly suffering from an occupational disease generally means that his place of work must be visited and then perhaps carefully investigated; and conversely, routine examination of an industrial process often discovers a clinical case or two. In other words, clinical aspects and field investigations are but two facets of the one medical problem. It is, in fact, very unwise to diagnose industrial disease without having some concept of the extent of the hazard to which the patient has been exposed, for an occupational disease obviously requires necessary occupational contact with the appropriate hazard.

CASES SEEN FOR SOME SPECIAL REASON OTHER THAN FOR ROUTINE EXAMINATION.

—	Positive.	Negative.
Pneumonokoniosis—		
Foundry workers	3	..
Peanut worker	..	1
Furnace bricklayers	2	1
Tannery worker	..	1
Sand blaster	1	..
Wood turner	..	1
Coal miner	1	..
Gasworks furnaceman	..	1
—	Lead Poisoning with Disability.	Lead Workers showing no Disability.
Lead Poisoning—		
Engine painting	5	..
Panel beater	..	3
Battery manufacture	..	13
House painters	2	11
Former lead miner	..	1
Lead reclaimers	4	8
Scrap merchant on old locos.	1	2
Shipyards electricians	..	2
Ships' painters	..	3
Cable joiner	..	1
Printing—		
Stereocasting	2	9
Flat casting	..	2
Linotype operators	1	3
Lead pot attendant in printing office	..	2

—	Positive.	Negative.
Arsenic—		
Housewife in contact with weedkiller	..	1
Packer of arsenic pentoxide	1	..
Arsenic sprays against white ants and borers	1	..
Skin conditions due to occupation		
Ship's painter and docker	..	1
Coal miners	1	1
Copper linesmen	5	..
Chrome dermatitis	3	..
Miscellaneous—		
Carbon monoxide poisoning	..	2
Oil fumes in sand blaster (naphtha jag)	1	..
Solvent used for DDT	1	..
Q Fever	1	..
Murine typhus	2	..
Scrub typhus	3	2

LEAD POISONING.

The incidence of plumbism during this period illustrates the difficulties of prevention unless an industry itself is interested in the preservation of health and thinks occasionally along those lines. One firm had a small department for painting its engineering products. No consideration had been given to the health aspects of the process, which, among other things, entailed the rubbing off with abrasive paper of a very thick priming coat. This gave rise to a lot of dry dust, which lay everywhere. Though there was no necessity to use lead in the priming coat, a highly leaded primer was actually used. All men engaged in the process were seriously affected with lead. The slightest forethought in choice of paint would have prevented this disaster. In another case, a lead-reclaiming firm had been visited and were found to be handling metallic lead only; with some minor recommendations, the premises, were approved for this purpose. However, the firm later extended their activities to include dusty old battery plate without advertent to the greatly increased hazard which they were thereby creating. The management eventually became alarmed, but too tardily, for by then several of the staff were suffering from plumbism. Similarly, in a printing establishment, at least two men showed signs of lead poisoning as the result of work in a stereo-casting department—not because this process is particularly dangerous, but because the pot had been placed in a corner of a basement where the ventilation was extremely poor, and this converted a moderate hazard into a serious one. A little health vision when originally laying out the plant would have placed this large pot anywhere but in the most poorly ventilated corner of the works. Secondary industries, when planning and buying, should devote a little consideration to possible health hazards which may result from their actions in these matters.

PNEUMONOKONIOSIS.

Though a good deal of publicity is accorded pulmonary dust disease, its incidence in this State is now pleasingly low. In secondary industry, this is due mainly to lack of size in industrial processes which create hazardous dusts. In one instance, where a really dangerously

dusty job was carried out by a sufficient number of men to set up a dust in large amounts the result was disastrous. Certainly in very few cases have employing bodies done much to mitigate potential dust hazards. If some of our secondary industries, which in some process or another create a dangerous dust, develop in a large way without at the same time undergoing a change of attitude towards the prevention of dust disease in industry, then the stage would be set for trouble in this regard. Fortunately those firms, with some exceptions, which have reasonably large plant are progressive in this regard, for usually they are able to employ good engineering brains that keep them abreast of overseas developments in workshop cleanliness and dust mitigation, but the small workshop, which is the most common in Queensland, is usually owned by a "practical man" whose engineering vision does not extend beyond rule of thumb methods which he learnt as a youth. Such men, though highly estimable citizens, are poor subjects to persuade to adopt new technical and health concepts. Luckily the small workshop usually has its potentially dangerous dusty processes in such a small way that only minor hazards are present.

In mining, dust in the metalliferous side is now well controlled; in our coal pits the nature of the seams is such that dust hazards are minimal. As mentioned in a previous report, one field had allegedly produced a large number of cases of pneumokoniosis, but since then this matter has been thoroughly investigated, and in practically all these cases the original diagnoses were faulty. By and large, however, our freedom from a serious incidence of pulmonary dust disease is more a matter of good luck than good management, and should certainly not be a matter for complacency.

CHEMICAL HAZARDS.

Though from time to time patients are seen, alleged to be suffering from the effects of some chemical hazard or another, in actual fact lead is the only chemical toxin of any importance encountered. There have been one or two cases of arsenicism during the period in question, but very little else. There again, this state of affairs is due to the almost complete absence of chemical tertiary industry in Queensland and is not due to preventive measures. Indeed, a tragic happening with carbon bisulphide used as a fumigant, resulting in four deaths, showed that there was very little control, if any, exercised over such dangerous substances.

INDUSTRIAL DERMATITIS.

Skin diseases due to occupational causes of varying kinds continue to be the most common of the compensatable diseases; a great part of this could be prevented, but the preventative measures are of such a nature that to be successful they must be routinely and carefully practised every day of their working lives by each employee exposed. In most cases such a constant regimen is bound to failure unless enforced twice daily by the shop foreman. In these days of plentiful employment, foremen seem loath to try enforcing anything very much. The practice in some few factories of presenting each employee with a jar of barrier cream and telling him to use it, without attempting to force him to do so, is so much waste of time and good barrier cream.

ACCIDENTS.

Accidents, of course, remain the greatest source of occupational absenteeism and tragedy. Much the same remarks as were written on industrial skin disease can be written on the subject of accident prevention, which in the main boils down to constant care and enthusiasm by employer and employee alike. Until such time as employers are charged insurance premiums in accordance with their individual accident rates and not in accordance with a mean struck in each industry there will be no improvement in the State's industrial accident incidence. The greatest single factor leading to greatly improved disease and accident prevention in American industry has been their method of workers' compensation insurance whereby the premium is based on results. And until such time as employees rid themselves of the delightfully naive idea that accident prevention is something meant for the boss alone, any anti-accident campaign would be doomed to failure.

WEIL'S DISEASE AND "SCRUB" TYPHUS.

During the year a visit was made to the coastal area between Ingham and Cairns, and among other things the workings of the Anti-Weil's Disease Campaign was seen at first hand and the incidence of scrub typhus and allied fevers among scrub cutters and timber workers was also investigated. Rat infestation, following a bountiful season, is heavy, and it may well be that if rain falls in any great amount during the present crushing season cases of Weil's Disease will be more numerous than they have been for some time. Many cases of typhus fever are occupational in origin, and during the last summer have reached a higher incidence than usual. I consider that a trial of preventative measures could lessen this disease to some extent at any rate, and a report has been submitted setting out recommendations towards that end.

CONSULTANTS.

During the year approval was granted for the appointment of two part-time consultants. The services of the consultant in dermatology—Dr. G. Pasquarelli—were used on several occasions, both for field work and for patient consultation, and such services have proved very helpful. It is expected that the consultant in ophthalmology—Dr. J. G. Gibson—will render a like service in this coming financial year. Dr. K. Uhd, radiologist to the Brisbane General Hospital, has continued to give invaluable help in the reading of X-rays and in other matters radiological.

REGULATIONS, &C.

As the result of initiating action by this section, preliminary discussions are being held with the appropriate Government officers on the desirability of recommending legislation covering the following:—

- (1) Certain lead trades: Regulations and periodical compulsory medical examinations.
- (2) Diving and caisson work: Adoption of the S.A.A. code on these subjects as compulsory regulations.
- (3) The control of carbon bisulphide and other dangerous fumigants.

Thanks to co-operation during the year from officers of the Factory Inspectorate, quite a number of minor health hazards have been remedied,

and it is particularly gratifying to find that the small group of workers employed in battery manufacture are now giving practically no trouble at all in regards plumbism. This latter is the result of efforts made by the officers of the Factory Inspectorate, helped by regular medical check-ups, mainly of a haematological nature, performed by the staff of the Laboratory of Pathology and Microbiology.

CONCLUSION.

While it can in brief be said that there is not a great deal of industrial disease occurring each year in Queensland, it could also be said with justice that considering the smallness of our hazardous secondary industries we do our best not to interfere with their propensities—even though of a minor kind—for causing industrial disease. And getting away from conditions which are actually dangerous to contemplate conditions of work in general, it can in truth be recorded that there are some unlovely work places in this State, where the lighting is poor, the slightest efforts at cleanliness unknown, and the general effect revolting. The most amazing thing about such factories, however, is not so much their appearance as the complacency with which their managements and many of their older employees view the present condition of things, and fight with tooth and claw to resist all change.

In times such as these of material shortage, the Factory Inspectorate can do little to enforce major changes for where there is no will there is sure to be obstacle after obstacle found to prevent the necessary improvement. But in going around industry one quickly sees that major structural alterations are not really

required in many cases, and that where there has been goodwill some members of the same industry with equally old buildings and equally poor layout have achieved quite an attractive work environment by the judicious use of interior paint or whitewash, a few well-placed lights, a daily clean-up of the premises, and adherence to the old idea that there should be a place for everything and everything kept there. In some trades the slovenly and the careless will be eliminated when next severe competition occurs, for where the eye perceives the outward signs of muddling it is often an indication of much hidden loss and spoiling of materials and tools and lack of any definite trade methods and business planning. Measures designed to create healthy, attractive surroundings tend automatically to create conditions under which business efficiency is easier to attain.

It must always be remembered, however, that many of the faults found in industrial working environments are not due to conservative managements alone, but portion of the blame must be sheeted home to unco-operative and recalcitrant foremen and to employees who sabotage every amenity supplied, and whose carelessness and plain dirtiness render futile most measures designed to foster health. In fact, there would seem to be but little hope of worthwhile reduction in industrial disease and accidents until such time as we are prepared to give some training in health matters in our various technical colleges. By the time our working population is adult most of it is quite impervious to new ideas on hygiene and working habits, but the story might be quite different if the tree was taken when quite young and trained.

SCHOOL HEALTH SERVICES.

P. R. PATRICK, M.B., B.S. (Qld.), Chief Medical Officer; L. M. ARCHIBALD, M.B., B.S. (Qld.), Medical Officer; E. W. HAENKE, L.D.Q., Chief Inspector, School Dental Services.

The year 1947-48 is the first year, since the end of the war, that the staff, both administrative and medical, has remained reasonably constant. This has resulted in a much more efficient service than in the previous few years. Dr. P. R. Patrick was appointed Chief Medical Officer in July, 1947, and Dr. L. M. Archibald joined the staff in November of that year. For a few months the Longreach, Cloncurry, and Southport areas were without the services of a school nurse, but these vacancies are now filled. In all other areas there has been no break in the service.

Although three British dentists joined the School Health Services in July, 1947, there is still a shortage of staff in this section. This shortage is unfortunately preventing the School Health Services from extending its dental service—an extension greatly needed. Approval has been given for the construction of another rail dental clinic, but this has not been commenced due to the pressure of other important work by the Railway Department.

At the end of the year 1947-48, the technical staff consisted of—Chief Medical Officer, 1 medical officer, 1 part-time medical officer, 1 part-time ophthalmic officer, 1 senior sister and 22 school sisters, Chief Dental Inspector of Schools, 17 school dental inspectors, and 1 part-time dental inspector.

WILSON OPHTHALMIC SCHOOL HOSTEL.

During the year the number of children under treatment at the hostel has decreased and the actual cases continue to be less severe than in earlier years. The part-time ophthalmic officers in the Western areas continue to render valuable service in the inspection and treatment at the schools in their towns. The general health of the children has been good, there being no epidemics at the hostel during the year.

The report of the Ophthalmologist is appended.

ROUTINE MEDICAL EXAMINATION.

During the year 74,206 children were examined by the medical staff. The majority of these examinations were conducted by the nursing staff. In the metropolitan area medical inspections were performed by the Chief Medical Officer and one school medical officer. Similar work was carried out in the Ipswich area by the part-time school medical officer there. Although the school nurses do admirable work both in the schools and their visits to homes, their examinations are naturally incomplete and it is hoped that in the future more medical officers will be appointed to carry out complete examinations of school children.

SCHOOL BUILDINGS.

The shortage of labour and materials is still preventing many urgent repairs to school buildings being carried out as quickly as is necessary. Some new schools in which medical inspection rooms are incorporated are under construction.

The design of these new schools has greatly improved and the light and ventilation will be much superior to that in some of the older schools. The new Infants School at Bardon, completed during the year, is an excellent example of this.

EXAMINATION OF TEACHER TRAINEES.

During the year 182 teacher trainees were examined on their entrance to the Teachers' Training College and a further 20 were re-examined after examination in country centres or after being deferred from previous examinations. The number included several ex-servicemen. The physical standard was good and only one candidate was classed permanently unfit.

QUEENSLAND AGRICULTURAL HIGH SCHOOL AND COLLEGE.

The Chief Medical Officer and the Chief Dental Inspector visited the Agricultural College and examined 126 new students. In addition immunisation against typhoid fever and tetanus was performed. Dental inspection of all students at the College was performed by school dental inspectors. During June, 1948, an influenza epidemic commenced at the College and two school nurses were sent to help nurse there. Nearly all the students were afflicted, approximately half being patients at the one time.

INFECTIOUS DISEASES IN SCHOOLS.

Immunisation Against Diphtheria.—During the year the Chief Medical Officer, in the absence of a City Medical Officer, and school nurses assisted the Brisbane City Council in immunising 1,438 children at schools in the metropolitan area.

At the beginning of the school year 1948, school sisters were requested to check the number of children immunised against diphtheria, this check to be carried out during the routine medical examination. The following table has been compiled from the figures supplied by both metropolitan and country school sisters.

METROPOLITAN.

Number of children immunised, 7,169
Number of children not immunised, 983
Percentage immunised, 89.05 per cent.

COUNTRY.

Number of children immunised, 19,958
Number of children not immunised, 4,751
Percentage immunised, 80.87 per cent.

EXAMINATION OF INFECTIOUS DISEASE CONTACTS.

The year 1947-48 has been one in which there was a low incidence of infectious diseases among school children. The Morbilli (measles) epidemic which raged in 1947 continued during July, August, and September of that year, but in the first six months of 1948 there was no major epidemic of any infectious diseases. Where practicable, school sisters continued to examine class contacts of cases suffering from

notifiable diseases. The following table presents the numbers of notifiable diseases occurring in

children of school age whose class contacts were examined during the year 1947-48.

Diseases.	Number of Cases where Class Contacts were Examined.		Number of Class Contacts Examined.	
	Metropolitan.	Country.	Metropolitan.	Country.
Scarlet Fever	41	17	2,018	725
Diphtheria and Suspect Diphtheria	13	7	670	216
Infantile Paralysis	2	9	43	..

PROPOSED ALTERATIONS TO EXCLUSION TABLES.

During the year suggested alterations to the existing regulations regarding exclusion of patients suffering infectious diseases and their contacts were forwarded to the Director-General of Education for his consideration. These alterations would bring the existing regulations into line with the present-day accepted teachings of the infectivity of these diseases.

HEALTH EDUCATION IN SCHOOLS.

In July, 1947, an invitation was received by the Director-General of Health and Medical Services from the Director-General of Education to attend a meeting of the Curriculum Revision Committee to discuss health education in schools. It was decided that each grade should be given a fifteen-minute talk on health by the teachers each week. A sub-committee, consisting of the Publicity Officer, Queensland Health Education Council, the Chief Medical Officer, School Health Services, the Organiser, Physical Education in State Schools, the Assistant Superintendent of Primary Education, and an experienced teacher from the Teachers' Training College was formed to prepare the subject-matter of these talks. The Queensland Health Education Council is producing these talks in the form of a handbook. The Department of Public Instruction has seconded an experienced teacher to write the talks. It is hoped that this valuable contribution to health education will be completed in time to include the talks in the 1949 school year.

RUBELLA INVESTIGATION.

A survey of children born in 1941 with reference to congenital abnormalities arising from maternal rubella was carried out by the School Health Services and completed in September, 1947. Information concerning 7,822 children was collected by all school nurses throughout Queensland. A full report of this survey has already been published. The conclusion reached was that infection with rubella during the first four months of pregnancy is accompanied by a 50 per cent. risk of a congenital abnormality in the resultant offspring—the abnormality being deafness, cardiac disease, mental deficiency, cataract, or dental defects, or any combination of these abnormalities.

HOOKWORM CAMPAIGN.

The Hookworm Campaign in North Queensland was again assisted by School Health Services nurses, who combine these duties with their routine school work in the Cairns and Innisfail districts.

PHYSICAL EDUCATION.

In April, 1948, school nurses assisted members of the physical education staff of the Department of Public Instruction to conduct a posture survey of children in Brisbane, Toowoomba, Townsville, Charters Towers, and Cairns. This was part of a Commonwealth-wide survey conducted by the Commonwealth Department of Health. The final report of this survey has not been received, but many defects were found and these are already receiving treatment.

During June, 1948, the Physical Education Department held a camp for sixty school children at the National Fitness Council Camp at Burleigh Heads. A school nurse attended throughout and the camp was visited by the Chief Medical Officer. Camps of this nature are beneficial not only from a health point of view but also in citizenship training.

THE SPECIAL SCHOOLS.

The School for the Blind and Deaf.—The enrolment of deaf children continues to be high. Of 171 deaf children examined 49 belonged to the "rubella" class. In other cases deafness followed infection, viz.—meningitis (3), ear discharge (3), whooping cough (2), morbilli (2), mumps and pneumonia (1). In all other cases, when information was sought from the parents the cause was stated to be congenital. Amongst the "rubella" group 16 children had congenital cardiac disease and two had congenital cataracts. Further multitone sets have been installed at the school and the latest teaching methods are now available to all children attending.

In contrast to the large number of deaf children, only eleven blind children were enrolled. Some of these are not completely blind.

During the illness of the matron a school nurse acted in her stead for two weeks.

The Opportunity School and Grades.—During the year the Chief Medical Officer examined all children at the Opportunity School and grades in the metropolitan area. An inspection was also made of Opportunity grades at Ipswich and Toowoomba. Despite shortage of teachers at the Dutton Park school, where 103 children are enrolled, good progress is being made. Here children are given manual and domestic training in addition to the academic instruction. In the other Opportunity grades there is no provision for manual training, a condition which should be remedied as many of these children cannot absorb more than a small portion of the normal academic teaching but could be trained in some manual tasks. In addition, there should

be a division into at least two groups, one consisting of children who are educationally retarded but not incapable of being trained to become useful members of the community and another group in which may be placed those children who always will need supervision. There are many retarded children in country districts, and a hostel is greatly needed.

THE DENTAL SERVICES.

A report on the activities of the Dental Section can be summarised as follows:—Good work by the present staff, but no service to many schools due to the shortage of this staff and the restriction of transport. During the year two cars were allotted to replace the old road clinics. These are helping dentists to visit country schools, but there is need for more transport. This need is evidenced by the stream of applications from country schools for the services of the school dentist. It is these country children who need dental and medical services more than do city children. The report of the Chief Dental Inspector is appended.

FLUORINE IN WATER SURVEY.

All school dental inspectors have been asked to observe the effect of fluorine in water on the teeth of school children and make special reports on this matter. It is hoped that valuable data will be collected in the next twelve months from dentists working in the areas where the water is so affected. Closer co-operation on this subject with other departments has been achieved by the appointment of the Chief Medical Officer and the Chief Dental Inspector to the Fluorine in Water Survey Committee.

THE CLERICAL STAFF.

The office staff has remained unchanged throughout the year and is now working most efficiently.

During the year the School Health Services has received the co-operation and assistance of many departments, and gratitude is here expressed for that received from other branches of the Department of Health and Home Affairs, the Department of Public Instruction, the State Children Department, and the Health Department of the Brisbane City Council.

PUBLICATIONS.

"Report on a Survey of Children born in 1941, with reference to Congenital Abnormalities arising from Maternal Rubella," Medical Journal of Australia, 3rd April, 1948, page 421.

TABLE OF FINDINGS.

Number of visits paid to schools on medical inspections by school sisters—

Metropolitan	..	..	..	126
Country	..	..	..	592

Number of children on roll at schools visited by school sisters—

Metropolitan	..	..	..	33,011
Country	..	..	..	53,230

Number of children examined by school sisters—

Metropolitan	..	..	..	29,065
Country	..	..	..	45,141

Number of children referred to private medical practitioners by school sisters—

Metropolitan	..	..	..	622
Country	..	..	..	4,311

Number of children treated by medical practitioners—

Metropolitan	..	..	..	390
Country	..	..	..	1,851

Number of homes visited by school sisters—

Metropolitan	..	..	..	98
Country	..	..	..	429

Apparent physical defects discovered by metropolitan and country school sisters—

Defect.	Metro-politan.	Country.	Total.
Defective vision	322	1,020	1,342
Strabismus	2	136	138
Other eye defects	4	351	355
Deafness	13	148	161
Ear discharge	7	66	73
Tonsils	241	2,659	2,900
Nasal defects	9	542	551
Scabies	69	230	299
Impetigo contagiosa	86	430	516
Tinea	5	27	32
Pediculosis	907	1,222	2,129
Swelling in groin	24	95	119
Swelling in scrotum	11	36	47
Spinal defects	3	77	80
Other defects	34	705	739

Number of special cleanliness visits made by school sisters to schools—

Metropolitan	..	..	..	38
Country	..	..	..	61

Number of children examined—cleanliness visits by school sisters—

Metropolitan	..	..	..	6,138
Country	..	..	..	7,164

Defects found on special cleanliness visits by metropolitan and country school sisters—

Defect.	Metro-politan.	Country.	Total.
Pediculosis	316	180	496
Scabies	18	56	74
Impetigo contagiosa	1	15	16
Tinea	..	4	4

Number of cases of diphtheria in school children—

Metropolitan	..	..	..	3
Country	..	..	..	71

Number of cases of scarlet fever in school children—

Metropolitan	..	..	..	68
Country	..	..	..	123

Number of cases of infantile paralysis in school children—

Metropolitan	..	..	..	2
Country	..	..	..	9

Number of cases of lead poisoning in school children—

Metropolitan	..	..	..	1
Country	..	..	..	Nil

Number of cases of meningitis in school children—

Metropolitan	1
Country	4

Number of cases of tetanus in school children—

Metropolitan	6
Country	2

Number of cases of malaria in school children—

Metropolitan	1
Country	Nil

Number of class contacts examined by school sisters and number of visits made to schools for infectious diseases—

Disease.	Number of Visits.		Metropolitan Number of Class Contacts.	Country Number of Class Contacts.	Total Class Contacts.
	Metropolitan.	Country.			
Scarlet fever	41	17	2,018	725	2,743
Diphtheria and suspect diphtheria ..	13	7	670	216	886
Infantile paralysis	2	9	43	..	43

Notification by head teachers of number of children who suffered from the following diseases:—

Measles	438
Chicken pox	212
Whooping cough	42
Scabies	3
Mumps	17
Pediculosis	1

Inspection and treatment performed by school dental inspectors—

Number of children dentally examined	29,520
Number treated	18,204
Number of extractions	20,601
Number of fillings	67,875
Number of other treatments	24,747

SCHOOL DENTAL SERVICE.

Inspection.

The sub-joined table details the total findings revealed at the different inspections of the full staff of school dental officers during the year.

Number of Children Examined	29,520
Number Notified for Professional Attention	9,982
Number of Children under Regular Dental Care—	
Clinic	1,189
School Dental Officer	5,757
Private Dentist	5,747
Number with Sound Mouths—	
Natural	2,155
Operatively Restored	4,005
Carious Teeth Saveable (Permanent)	28,904
Carious Teeth Unsaveable (Permanent)	4,899
Temporary Carious Teeth	47,804
Permanent Teeth Lost or Extracted	11,096
Six-year Molars Extracted	9,379
Permanent Teeth Filled	35,289
Temporary Teeth Filled	6,429
State of Mouth—	
A	8,617
B	17,433
C	3,470
Use of Tooth Brush—	
A	7,086
B	17,558
C	4,876
Percentage of Children with Dirty Mouths	11
Total Number of Defective Permanent Teeth	33,803
Average Number of Defective Permanent Teeth per Child	1.4

Clinical Phase of Service.

Tabulated hereunder are particulars of the total treatment which was performed through the application of the clinical activities associated with the service for the period under review.

Number of Children Treated.	Number of Extractions Performed.	Number of Fillings Inserted.	Number of Other Treatments Executed.
18,204	20,601	67,875	24,747

Dental clinics under the control of Hospital Boards have been responsible for a considerable expansion in dental treatment in country areas throughout the State.

WILSON OPHTHALMIC SCHOOL HOSTEL.

Report of Dr. E. O. Marks, Ophthalmic Officer (Part-time).

	Boys.	Girls.	Total.
Number of children on the roll on 1st July, 1947	12	25	37
Number admitted during the year	13	9	22
Number discharged during the year	14	19	33
Number on the roll 30th June, 1948	11	15	26

The admissions came from the following localities:—

Bollon	2
Boulia	2
Charleville	2
Cunnamulla	1
Hughenden	1
Kajabbi	1
Longreach	1
Mackinlay	2
Mount Isa	2
St. George	2
Winton	1
Wyandra	5

With one exception the children were all mild cases without corneal complications. The one exception had corneal ulceration but has done exceedingly well and has been discharged with little if any impairment to his vision.

The small numbers coming for admission during the year and the continued mildness of the cases indicate the continued abatement in both the incidence and severity of trachoma in the West. In comparing the actual figures of admissions with those of the previous year it must, however, be remembered that very many of the 42 admissions in 1946-47 were children whom I had selected and arranged for when on my tour of the Western schools in September-October, 1946. Several of the children now in the hostel are almost ready to go home.

SECTION OF MATERNAL AND CHILD WELFARE.

Director: H. C. MURPHY, M.B., B.S. (Sydney).

Part-time Medical Officer: T. HENRY R. MATHEWSON, M.B., Ch.B.

Superintendent: D. BARDSLEY, A.T.N.A.

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INTRODUCTION.

The Maternal and Child Welfare Service was established with one end in view—namely, the reduction and prevention of maternal and infant mortality. While it is not contended that the results so far achieved are due entirely to the work of this Service, it can confidently be claimed that the Maternal and Child Welfare Service has played no small part in bringing about those results.

There still remains a great deal of work to be done, and in order to do this complete co-operation between the different parties interested in the welfare of children—namely, this Service, hospitals, pediatricians, and, last but by no means least, the general practitioner is necessary.

The co-operation between the various bodies at the present time is good but not complete, as there are a number of doctors still who are antagonistic.

Child health should be the concern of every family practitioner, and it is the desire of the Maternal and Child Welfare Service to co-operate with all who are interested in the health of the infants and toddlers of this State.

Many practitioners send their infant patients to the centres for supervision of their feeding and reports of the infants' progress are available to them. Under no circumstances is a sister of this Service allowed to alter the feeding of an infant who is under the care of a doctor, and in many cases the Social Welfare sister supervises the feeding of such an infant, but always with the consent of the doctor concerned.

Both by training and experience the Child Welfare nurse is a specialist in the technique of breast feeding and the many problems associated with its establishment and maintenance,

and she is ever ready to pool her knowledge with that of any practitioner for the benefit of the infants which come under their notice.

The results of co-operation between the doctor and the Child Welfare nurse are seen daily at our centres, where the mothers, sensing the smooth working together of all agencies, develop a serenity and confidence in the care and management of their children, which in its turn reacts favourably on the children themselves.

With the inclusion in the present curriculum of medical students of visits to our homes and centres the spirit of co-operation between all parties concerned in infant welfare will be fostered, and this desirable state of affairs can and must be developed to the full if progress is to be achieved and the mortality and morbidity rate of infants reduced.

PREMATURE BIRTHS.

Following on the preliminary work begun last year on prematurity, more intensive study has revealed the following facts for the year 1947:—

1. Prematurity was responsible for 31.8 per cent. of deaths occurring under 1 year, the number of deaths being 278.
2. Prematurity was responsible for 45.56 per cent. of the deaths occurring under 1 month, the number of deaths being 277.
3. Two hundred and twenty-four premature deaths occurred in public hospitals—93 in the metropolis and 131 extra-metropolitan.
4. Fifty-four premature deaths occurred in private hospitals—19 in the metropolis and 35 extra-metropolitan.
5. Sixty-seven point three per cent. of the deaths due to prematurity occurred in the first 24 hours, 16.9 per cent. from 2 to 3 days, 10.5 per cent. from 4 to 7 days, and 5.3 per cent. from 7 to 35 days.
6. In the public section of the Brisbane Women's Hospital 124 premature infants were born, representing 6 per cent. of live births, and of these 27 died, representing a percentage mortality of 21.8 per cent.
7. Completed questionnaires received from 70 public hospitals outside the metropolis reveal the following figures:—Births, 9,619; premature births, 223; percentage of live births, 2.3 per cent.; deaths of premature babies, 92; percentage mortality of premature babies, 41 per cent.

SUMMARY.

	Live Births.	Premature Babies.	Per Cent. of Live Births.	Deaths of Premature Babies.	Per Cent. Mortality of Premature Babies.
Queensland Public Hospitals	16,618	573	3.5	184	32
Extra-Metropolitan Public Hospitals	9,619	223	2.3	92	41
Brisbane Women's Hospital	6,999	350	5.0	92	26
(a) Public	1,985	124	6.0	27	21.8
(b) Intermediate	5,014	226	4.5	65	29

The outstanding facts revealed are—

1. At the Brisbane Women's Public Hospital, where the percentage of premature live births is highest, the percentage mortality is lowest.
2. In the extra-metropolitan public hospitals the percentage of premature live births is lowest and the percentage mortality is highest.

These results cannot be attributed to mere "good luck," as the Brisbane Women's Public Hospital obtained the same results in the previous year. Obviously, they must have been obtained by skilled nursing and medical care and the provision of proper facilities for the nursing of premature babies.

Statistics from private hospitals are not available, and the only possible comparison that can be made with public hospitals is that of the ratio of live births to that of premature deaths. The ratio of live births in private hospitals to that in public hospitals is 7,501 to 20,857, or 1 to 2.78, and that of deaths due to prematurity 54 to 224, or 1 to 4. Not knowing the number of premature infants born in private hospitals, it is doubtful if any significance can be attached to these figures.

Forty-four infants died from the fourth to the thirty-fifth day, and it is not unreasonable to assume that most of these lives could have been saved given adequate care and facilities.

It cannot be stressed too emphatically that premature infants should be subject to the minimum amount of handling and exposure to cold.

INJURY AT BIRTH.

Prematurity and birth injury are the two major causes of infant mortality.

One hundred and eleven infants died of birth injuries in 1947 compared with 93 in 1946, the mortality rate being 3.82 in 1947 and 3.44 in 1946.

Of the 111 deaths, 46 occurred in the metropolitan area, 15 of these occurring in private hospitals, at home, or in institutions, and 31 in public hospitals. Of the remaining 65 extra-metropolitan deaths, 40 occurred in public hospitals and 25 in private hospitals, at home, or in institutions.

The following table shows the main birth injuries:—

1. Cerebral trauma	76
2. Placenta praevia	6
3. Shock	6
4. Uterine inertia	4
5. Cord lesions	3
6. Other injuries	16

The main contributory factors to the Cerebral Trauma were:—

1. Difficult and prolonged labour, including instrumentation .. 12
2. Precipitate labour 10
3. Abnormal presentations 9
4. Prematurity 6
5. Contracted pelvis 2

Gastro-Enteritis.

During the year an epidemic of gastro-enteritis occurred; 517 children were admitted to the Children's Hospital and of these 89 died. Other cases occurred, but the Children's Hospital handled the great majority.

The cause of the epidemic was due to *S. bovis-morbificans*, which normally enters by the mouth, lives in the intestines, and is excreted in the faeces.

The infection was concentrated in infants under two years old. Of 151 individuals from which the organism was isolated, 108 were infants under 1 year, 30 between 1 and 2 years, 9 over 2 years, and 4 adults.

These children remain infected for a longer period than their clinical condition would indicate. In addition to these convalescent carriers there were healthy carriers who gave no history of having suffered from gastro-enteritis, the age distribution being one in the under 1 year old group, four in the 1-2 years group, three in older children, and three in adults. This epidemic was predominantly institutional, 56 per cent. of proven cases occurring in hospitals or institutions which care for young children; 11 per cent. occurred in housing camps. The incidence of infection was highest at the weaning age; lowest in fully breast-fed infants.

Of the etiological factors concerned, mention is made of carriers and animals, the *Salmonella* being found in cockroaches, mice, rats and cats, but the greatest etiological factor in the spread of the infection is the handling of the soiled napkins by the attendant. The *Salmonella* was isolated from brushes and sinks used in the cleansing of napkins and from nail brushes used by attendants.

As most *Salmonella* infections are derived in the first place from animals, attention should be directed to meat inspection, adequate cooking, prevention of contamination of food (especially by rodents), and vermin control.

From the point of view of the infant, the most important preventive measure is a rigid system of handling soiled napkins in institutions for babies, and that is by immediate boiling for twenty minutes, after which they are laundered.

The procedure adopted at St. Paul's terrace Home and Clayfield Home now is to regard every admission as suspect, and to isolate them

until a culture of their faeces has been made, and they remain in isolation until the report is to hand.

The Salmonella epidemic will be the subject of a published paper by the Director of Queensland Institute of Medical Research, who carried out the above work.

EARLY WEANING.

Reports from sisters in charge of the Social Welfare Section, who visit the homes of mothers unable to attend centres, and also the matrons of the Maternal and Child Welfare Homes would indicate that in many cases mothers are discharged from hospital with their lactation inadequately established.

The baby "fusses" at the breast, the mother, not strong enough to cope with the worry of the baby and her household duties, becomes distressed and upset and in a very short time the baby is weaned.

If, as has been suggested in previous reports, a "mothercraft section" could be established in every maternity hospital to which the mother could be transferred once she is able to be about and where she could be taught to care for her baby herself in "home" surroundings by a qualified experienced Child Welfare sister, much of this trouble would not arise.

Medical students are now taught the importance of breast feeding, the principles of its establishment, and the education of the mother, preferably prenatally, in the technique of handling a baby for breast feeding. This should assist greatly in reducing the serious proportion of babies weaned in hospital.

A recent survey of Queensland clinics showed for one quarter that 128 were weaned in hospital, 48 on medical advice, and 108 by the mothers themselves.

VITAL STATISTICS.

Outstanding features of vital statistics for 1947 are:—

1. The lowest maternal mortality rate ever recorded.
2. 28,358 births were recorded, an increase of 1,334 on 1946, and the greatest number ever recorded.
3. The birth rate, 25.63, is the highest recorded for 25 years.

BIRTHS.

For the year 1947 the number of births registered was 28,358, an increase of 1,334 on the previous year, and the highest on record. The birth rate was 25.63, which was the highest since 1921.

There were 14,598 males and 13,760 females, equivalent to 106 to 100, this being the usual proportion.

The natural increase of births over deaths was 17,359 or an increase of 1.6 per cent. of the population.

MARRIAGES.

During the year 1947 there were 10,999 marriages compared with 11,666 in 1946, the marriage rate being 9.94 as compared with 10.7 in 1946.

The total number of minors married was 3,713, 570 being males and 3,143 females.

DEATHS.

Maternal.

The number of deaths of women due to diseases of pregnancy and childbirth was 46 in 1947, with a corresponding mortality rate of 1.62 per thousand. Both these figures are new records.

The following table shows the progressive decline in maternal mortality since 1940:—

Year.	Deaths.	Mortality Rate.
1940	96	4.7
1941	92	4.28
1942	84	3.97
1943	89	3.83
1944	74	3.02
1945	66	2.47
1946	61	2.26
1947	46	1.62

Of the 46 deaths occurring in 1947, 23 followed childbirth and 16 were due to diseases and accidents of pregnancy (excluding abortion).

The causes of the 23 deaths due to diseases and accidents of childbirth were as follows:—

Hæmorrhage of childbirth and puerperium	7
Infection during childbirth and puerperium	5
Puerperal toxæmias	5
Other accidents of childbirth, including caesarian section	4
Other diseases of childbirth	2

The causes of the 16 deaths due to diseases and accidents of pregnancy were as follows:—

Ectopic gestation	3
Hæmorrhage of pregnancy	5
Toxæmia of pregnancy	5
Other diseases and accidents of pregnancy	2

DEATHS.

INFANTILE.

In 1947 the total number of children who died under the age of one year was 874. The infant mortality rate was 30.82, compared with 29.27 for 1946.

Six hundred and eight children died under 1 month and 266 from 1 month to 1 year, the corresponding mortality rates being 21.44 and 9.38.

The following table shows the major causes of death under 1 year, under 1 month, and from 1 month to 1 year in the tropical, sub-tropical, and metropolitan areas.

Disease.	Under 1 year.			Total.
	Tropical.	Subtropical.	Metropolitan.	
Bronchopneumonia	15	22	30	67
Diarrhoea	5	21	68	94
Congenital malformation of the heart	15	26	20	61
Prematurity	70	107	101	278
Injury at birth	27	42	42	111
Asphyxia	8	18	20	46
Congenital debility	6	8	5	19
Whooping cough	13	3	1	17
Hæmorrhagic disease of the newborn	4	7	3	14
Malformations	1	5	15	21

DEATHS—continued.
Infantile—continued.

Disease.	Under 1 month.			
	Tropical.	Subtropical.	Metropolitan.	Total.
1. Bronchopneumonia	5	4	10	19
2. Diarrhoea	..	3	8	11
3. Congenital malformation of heart ..	10	20	14	44
4. Prematurity	69	107	101	277
5. Injury at birth	27	39	40	106
6. Asphyxia	8	17	20	45
7. Malformations	1	5	12	18
8. Haemorrhagic disease of newborn ..	4	7	3	14

Disease.	1 month to 1 year.			
	Tropical.	Subtropical.	Metropolitan.	Total.
1. Bronchopneumonia	9	19	20	48
2. Diarrhoea	6	17	60	83
3. Congenital malformation of heart ..	5	5	7	17
4. Whooping cough	11	5	1	17

The effect of the gastro-enteritis epidemic on infant mortality is shown in the following table:—

—	Brisbane.		Queensland..	
	Deaths.	Rate.	Deaths.	Rate.
Total	354	34.67	874	30.82
Without gastro-enteritis	286	28.00	780	27.50

Compared with 1946, the effect of diarrhoea and enteritis on infant mortality is shown as under—

1946.

—	Brisbane.		Queensland.	
	Deaths.	Rate.	Deaths.	Rate.
Total	251	25.67	791	29.27
Without diarrhoea and enteritis	234	23.92	754	27.90

Deaths of children aged one year and under five years.

The population of children between 1 and 2 years was 24,247 and of these 108 died, representing a death rate per thousand of 4.5.

The chief causes of deaths were—

Diarrhoea and enteritis	18
Pneumonia unspecified	10
Lobar pneumonia	7

The population of children between 2 and 5 years was 67,989 and of these 98 died, the corresponding mortality rate being 1.4.

The chief causes of death were—

Accidents	27
Bronchopneumonia	8
Congenital heart malformations ..	6
Diphtheria	6

Stillbirths.

Figures available from the public hospitals of Queensland from 1st July, 1946 to 30th June, 1947 show that 23,314 women were admitted to the maternity wards and there were 20,854 living children born with 473 children stillborn, giving a stillbirth rate of 22.2 per 1,000 live births.

The total births for the State for the 12 months ending 31st December, 1947 were 28,358 living children, 667 stillbirths, and the stillbirth rate 22.9.

THE YEAR'S WORK.

Owing to the rail strike, 20 centres had to be closed in February and 23 in March, but notwithstanding this the total attendances at the 187 centres numbered 396,380 compared with 370,946 the previous year.

The value of having cars attached to country centres was demonstrated during the strike as the four centres using cars functioned normally.

In the metropolitan area 155,838 attended compared with 149,223 in the previous year.

EXTENSIONS.

During the year the following subcentres were opened:—Jamboin on 26th July, 1947, and Theodore on 7th August, 1947, both of which are now included in the regular itinerary of the Callide-Dawson Valley Service.

Gin Gin, which is visited from Bundaberg, was opened on 4th August, 1947; Landsborough, visited from Nambour, on 7th October, 1947; Hivesville, visited from Murgon, on 5th January, 1948; and Cleveland, visited from Wynnum, on 29th June, 1948.

In March, 1948, the Valley Church Kindergarten Toddlers' Centre was opened.

In January, 1948, a second Social Welfare sister was appointed to attend to the wants of the south side of the city.

Numerous requests are still being received from country centres for the establishment of clinics in their areas. Approval has been given for the establishment of 12 new subcentres and 2 new resident centres, and as soon as equipment is available (particularly scales) these centres will be functioning. The two resident centres will be established at Mount Isa and Ingham, and the 12 subcentres will be established at the following places:—Geebung, Mulgeldie, Tarzali, Balclava, Calen, West Mackay, Dulacca, Jackson, Camooweal, Cardwell, Halifax and Moura.

RAIL CAR.

During the year the rail car covered its regular three-weekly itinerary in the great north-west area of the State, and the mileage covered was 16,260 miles. The regular itinerary includes Winton, Cloncurry, Dajarra, Julia Creek, Hughenden, Kajibbi, Mount Isa and Richmond. Many mothers outside these main centres avail themselves of this service by attending at the following sidings:—Dobbyn, Quamby, Neila, Nonda, Marathon, Stamford, Corfield, Chinbi, Olio, Wariana, Duchess, Malbon Maxwellton, Trevanna, Whitewood, Undina, Boree, Dunluce and Oorindi. This service is of great benefit to mothers in isolated districts and many travel considerable distances to be at the station when the car arrives.

METROPOLITAN AND COUNTRY CENTRES.

Metropolitan.

The railway strike and the gastro-enteritis epidemic affected attendances at all clinics. It is noticed that the number of artificially fed infants is increasing. The centres established at temporary housing establishments are not attended as well as they might be, considering the number of young families living there. This may possibly be due to the mothers' reaction to their environment. The suggestion of a play centre being established at the main clinics is an excellent one, and in any future planning will be kept in mind.

Many mothers who would normally attend the clinics are unable to do so as they cannot leave their other children. A play centre attached to the larger centres would overcome this difficulty.

Toddlers' clinics are well attended, and appointments in some cases were made eight months ahead. It is anticipated that further staff appointments may reduce this lag and it is hoped to provide weekly clinics where at present clinics are held fortnightly.

In October, 1947, the Fortitude Valley Centre had the highest attendance ever recorded at the main centre as well as a record total for total attendances for the centre and subcentres.

Country.

Reports from many country centres indicate that many minor orthopaedic deformities in infants and toddlers are being neglected mainly due to indifference or ignorance on the part of the parents. The same applies to cases of mental deficiency, and even though mothers are advised of the facilities available for transporting the children to Brisbane for treatment, in a great many cases the mothers do not avail themselves of this service.

Western centres report the failing of babies and toddlers to gain weight during very hot weather.

Many reports are also to hand concerning the service given by the clinic sisters during the railway strike. All manner of transport, including milk waggons and trucks, were used to get to the clinics, and country newspapers were not slow to appreciate the great efforts made by the sisters to carry on their work in the face of great difficulties.

A special word of thanks is due to the many railway officers throughout the State for the great courtesy and many little acts of kindness shown to sisters who have to travel by train. Reports to this effect are continually being received.

ST. PAUL'S TERRACE HOME, BRISBANE.

An increase in the number of mothers and babies admitted into residence was shown for 1947-48 as against the previous year, but the work was again limited by shortage of staff in the between-terms periods, it being necessary to reduce the number of babies admitted during four months of the year. Nevertheless a great deal of work has been done and both staff and trainees show a great interest in the welfare and progress of the mothers and babies.

Infants admitted into residence included cases of prematurity, severe malnutrition, pyloric spasm, hare lip and cleft palate, cerebral irritation, and a spastic infant, all of whom required special attention with regard to feeding and management. Mothers in residence received treatment for restoration of breast milk and instruction in regard to the feeding and handling of their babies. All mothers bath or oil their babies several times under supervision before leaving the Home, and where the baby is on complementary feeding the care of milk and milk mixtures, how to make milk mixtures, and the cleansing and sterilisation of bottles and teats form part of the instruction received. The fact that with very few exceptions treatment for the restoration of breast milk is effective, and in many cases mothers who have had very little milk on admission are discharged with their babies completely breast fed, is an indication of what can be done by experienced Child Welfare nurses in reducing the number of artificially fed babies. Mothers of resident artificially fed infants attend for part of the day in order to receive feeding instructions before taking their babies home.

When the outbreak of gastro-enteritis occurred the doctor in charge of investigations into the cause was requested to check the technique employed in the Homes with regard to feeding, changing of napkins, &c., and this was passed as completely effective. The suggestion was made, however, that all motions passed should be examined for salmonella and napkins should be boiled before being laundered. This involved extra work which is not very pleasant but has been accepted cheerfully by the nursing staff in the interests of the babies in residence.

Total admissions:—Mothers 65, babies 101. This involved the giving of 5,735 test feedings, 2,717 complementary feedings, and 9,707 artificial feedings.

The installation of a hot-water system in the Home and a water softener in the laundry has considerably increased the efficiency of the work.

Four special lecture demonstrations were arranged during the year for fifth-year medical students. Methods of caring for and feeding premature babies in home and hospital, massage and stimulation for the restoration of breast feeding, examination of infants' stools and foods, and special preparations used in infant and toddler feeding are among the subjects dealt with. The students show great interest in the demonstrations, which are prepared and carried out by the matron and senior staff.

ST. PAUL'S TERRACE TRAINING SCHOOL, BRISBANE.

For the training of trained registered nurses only.

Sixty-four nurses completed their training during the year and of these, 56 passed the examination of the Queensland Nurses and Masseurs' Registration Board. This entitled them to State registration as Child Welfare nurses. Of the nurses who received their training, seven were discharged members of the Australian Army Nursing Service and one of the Royal Australian Air Force Nursing Service. In addition two past trainees were accepted for a two months' refresher course under the Rehabilitation Scheme, and with the establishment of reciprocity with New Zealand in respect of this branch of nursing, a New Zealand trained Child Welfare nurse was accepted for the month's refresher course necessary to make her eligible for registration in Queensland.

A number of the graduates were subsequently appointed to the staff of the Maternal and Child Welfare Service in either a permanent or temporary capacity; the majority of the remainder accepted positions on hospital staffs or returned to their hospitals from which they had obtained leave to obtain their Child Welfare certificate. One graduate, an English trained nurse, had taken the training as a necessary prerequisite to work in the field of foreign missions.

Many of the trainees find the work involved in the four months' Child Welfare training far more strenuous than they had expected, and many of them, especially those older nurses who have held positions as matrons or sisters on hospital staffs for a number of years, take several weeks to adjust themselves to the work and find the intensive study difficult. It would appear a good plan for nurses to be encouraged to take their Child Welfare training within two or three years at the most of completing their general and obstetric trainings.

Letters of appreciation have been received from past trainees which testify to the value of their training, especially in the cases of matrons and sisters employed in maternity or children's sections of hospitals.

Graduation ceremonies were held at the A.T.N.A. Nurses' Club at the completion of each training term. On 26th November, 1947, the certificates were presented by the Under Secretary for Health and Home Affairs, Mr. R. H. Robinson, and on 26th May, 1948, by the Minister for Health and Home Affairs, the Hon. A. Jones, M.L.A. The medical and nursing staff of the Training School appreciate very greatly the continued interest shown by the Minister and his officers in the work of the school.

The purchase of an up-to-date epidiascope and the preparation of a large number of slides has assisted considerably in improving the teaching, especially with regard to antenatal work and the recognition of diseases and abnormalities peculiar to infants and children.

The grounds of the Home have been greatly improved, and make the surroundings much more attractive for mothers in residence and staff.

CLAYFIELD HOME, BRISBANE.

This Home has now been established five years and each year has outgrown its accommodation in spite of several additions which have been made to the original structure. The number of admissions was in excess of those of last year and it has been necessary to use one of the nurseries as a test feed room, causing further congestion and making the need for further expansion an urgent necessity.

In spite of this the demand for accommodation in both Clayfield and St. Paul's Homes is still much greater than the accommodation available. The number of frail and underweight babies appears to be greater than ever before and the need for admission if a baby is to have the care necessary for its survival is often one of urgency.

Cases admitted into residence included numerous sets of twins, a large number for restoration of natural feeding and feeding adjustment, persistent vomiting, cross and difficult babies and a number of toddlers for regulation of feeding and management.

There were 207 admissions of babies and 100 mothers. This involved 11,253 test feedings, 6,564 complementary feedings, and 16,902 artificial feedings for babies, and for mothers 3,200 treatments for restoration of breast feeding and special instructions to each mother. Two hundred and seventy-six doctor's visits were paid to the home by the Director and Dr. Mathewson.

CLAYFIELD TRAINING SCHOOL, BRISBANE.

For the training of previously untrained girls from the age of 16 years upwards.

During the year 18 young women completed their training and gained the certificate of competency issued by the State Department of Health, and a further two groups are now in training.

Increased interest is being shown by young girls in this training and many girls make application before they leave school.

The satisfactory training of young girls requires much time and patience, and vigilance and constant supervision is required of the teachers if nursing procedures are to be well carried out. The appointment of a sister tutor and senior sister has greatly improved the quality of the work done by the trainees and this is shown by their efficiency in the practical examinations and by the all-round knowledge they display in answering orally questions on their work.

These girls become very attached to the babies in their care and this type of work does much to develop their maternal instinct. The majority of the girls ultimately commence training as general or obstetric nurses and their capability and the speed with which they adapt themselves to hospital work and routine has

been favourably commented upon by matrons and sisters of the hospitals to which they have gone as pupils. There is no doubt of the value of this work as a pre-nursing training.

Graduation ceremonies for successful students were held at the Home in December, 1947, and June, 1948, at both of which the certificates were presented by the Minister for Health and Home Affairs, the Hon. A. Jones, M.L.A., and attended by the Director-General of Health and Medical Services and the Under Secretary for Health and Home Affairs.

MATERNAL AND CHILD WELFARE HOME, TOOWOOMBA.

This Home, which, owing to extreme staff shortage at the time of its opening, had not functioned properly until May, 1947, was carried on during the year for its appointed purpose—the specialised care and attention of babies, with or without their mothers who through some problem of feeding or management require to be admitted into residence for whole-time supervision or treatment. Cases admitted included several sets of twins, prematurity, hare lip and cleft palate, post-operative pyloric stenosis, infantile eczema due to wrong feeding, persistent vomiting, and restoration of breast feeding.

A very satisfactory liaison was established with the Toowoomba Hospital and babies presenting difficulties at a time when they were due for discharge from hospital are transferred to the Home, if the mother is willing, for admission.

The Director wrote to all medical practitioners in Toowoomba explaining the purpose of the Home and suggesting that they might be glad to avail themselves of its facilities. Very little response has been received in this connection.

The sisters in south-west Queensland, Warwick, Dalby, &c., have been advised that it would be possible for difficult feeding cases from those areas to be sent to Toowoomba for admission to the Home if practicable.

The small number of applications for training received from young girls in the district has limited the number of cases which could be taken but some very successful work has been done.

There were 49 admissions of babies and 24 mothers. This involved 1,822 test feedings, 2,494 complementary feedings and 3,278 artificial feedings for babies, and for mothers 293 treatments for restoration of breast feeding and special instructions to each mother. One hundred and six doctor's visits were paid to the Home by Dr. G. V. Hickey, snr., and Dr. G. V. Hickey, jnr.

TOOWOOMBA HOME TRAINING SCHOOL.

For the training of previously untrained girls from the age of 16 years upwards.

In July, 1947, as soon as the necessary trained staff had taken up duty an advertisement for trainees was inserted in the Toowoomba and Brisbane daily newspapers. The response was poor as only two applications were received, one from a girl who had been employed at the Home previously as an assistant in nursing and one from an ex-service-woman. The latter was unable to complete her course owing to ill-health.

In December the matron visited a number of girls' secondary schools and with the co-operation of the school authorities was allowed to address the girls on the advantages offered by this type of training either as a career in itself or as a preliminary to nursing. Since February, four more trainees have commenced and enquiries received from three others. The senior student completed her training in June, 1948, and was successful in her examinations. The Department allowed her a pass to Brisbane in order that she might graduate with the Clayfield girls. The newspaper publicity which followed the graduation resulted in several inquiries from girls who had become interested.

It is hoped by publicising the training where possible that the situation regarding trainees will gradually improve.

Lectures to trainees were given by Dr. G. V. Hickey, snr., and Dr. G. V. Hickey, jnr., and the matron.

The practical and oral examinations were conducted by Matron Fountain of the Toowoomba Hospital, to whom thanks are due.

MATERNAL AND CHILD WELFARE HOME, SANDGATE.

This Home, which takes into residence for up to one month, or over in necessitous cases, the children of mothers who have been admitted to hospital through illness, operation, or for confinement, has on several occasions been crowded beyond its capacity.

During the year 484 children were admitted, an increase of 43 on 1946-47 and 206 on the year 1945-46.

The children admitted represented 194 families, of whom 8 families were admitted more than once during the year.

The ages of the children were:—

Under 5 years	267
Between 5 and 10 years	186
Over 10 years	31

A minor outbreak of measles occurred in July, 1947, when 15 children were sent to hospital. The majority of children when admitted have colds, various types of rashes, and some have heads infested with pediculi. This adds considerably to the work of the staff. Children showing definite signs of infective illness are transferred at once to the Hospital for Sick Children.

A number of children under the age of two years and a few over that age are admitted still drinking milk from a bottle or having dummies, and these frequently refuse solid food. With care and patient training the majority are discharged eating their solid meals and with their bad habits overcome.

As a general rule parents do not wish their school-age children to attend the local schools and they have to be kept occupied all day at the Home, thus creating a further problem.

As parents found the question of bringing an adequate supply of clothes for their children a difficult one, it has now been arranged to clothe the children at the Home during the period of residence. This has resulted in smoother working for both staff and parents.

A large playing area has been fenced in and a sandpit constructed. The provision of an additional quantity of outdoor play material is projected.

The staff quarters are being altered and enlarged, but the work is not quite completed.

Changes in staff have taken place which are advantageous to the Home, and the present staff is showing a fine example of team work which tides over the many difficult situations which arise in a Home of this type.

CENTRES FOR EXPECTANT MOTHERS OR ANTENATAL CLINICS.

Metropolitan antenatal clinics remain much the same in attendance. Detailed accounts of visits and results of laboratory reports are given to expectant mothers to present on admission to hospital. Individual talks to expectant mothers are given at the centres, the patient usually being sent by her own doctor for a "talk to the sister," and advice is given especially about baby's clothes and patterns for same. Other small problems are also talked over and helped with.

There is a marked increase in the attendance at Caboolture. These country mothers make every effort to attend regularly.

During the year total blood counts were carried out on 218 patients, the average red cell count being 3,750,000 with a haemoglobin value of 11.7 gms. per cent.

Of the 218 patients examined, 7 showed a pathological anaemia, this representing the very low figure of 3.5 per cent.

One hundred and sixty-eight patients were examined for the Rh factor and of these 133 or 74 per cent. were Rh positive and 35 or 26 per cent were Rh negative.

Attendances for the year ending 30th June, 1948, were as follows:—

Fortitude Valley	618
Woolloongabba	664
Caboolture	162
Redcliffe	19
Herschell Street	60
Nundah	7
West End	21
Wynnum	1
Talks to mothers	80
Total attendances	1,632

Owing to the poor response at Redcliffe it was found necessary to close this centre in December, 1947.

CORRESPONDENCE SERVICE FOR EXPECTANT MOTHERS.

The Correspondence Service to country expectant mothers is greatly appreciated and many letters telling of the safe arrival of baby and thanks for the advice given are received.

Many requests are received from doctors in country towns, students, and hospitals for copies of "The Expectant Mother"—1982 being supplied to them for distribution to their patients.

Seven serial letters are sent to expectant mothers from the second to the ninth month, advising them on matters concerning antenatal care and hygiene.

These serial letters are sent on receipt of notifications of birth bookings, from the public hospitals of the State. These notifications are received in response to circulars sent from this Department and most hospitals co-operate, but a noticeable lag is noticed in the north and

north-western areas. It is proposed to seek the co-operation of these hospitals in the immediate future.

Circular letters forwarded to expectant mothers	3,102
Response to circular letters	1,030
Circular letters forwarded to expectant mothers (other than above) re "The Expectant Mother" book	1,971
Serial letters to expectant mothers	6,069
Special letters of advice sent on request	133
Copies of "The Expectant Mother" sent on request	1,674
Copies of baby patterns sent on request	85
Copies of other patterns sent on request	35
Copies of special exercises sent on request	93

DIRECTOR'S CONSULTANT CENTRE.

During the year a number of infants and toddlers whose feeding or management had proved difficult were referred to the Director by sisters in charge of metropolitan and country centres or by private medical practitioners.

Children for admission to Sandgate Maternal and Child Welfare Home and Red Cross Home, Margate, were examined and throat swabs taken.

Attendances for the year ending 30th June, 1948, were as follows:—

Number of children examined for admission to Sandgate Home	475
Number of children examined for admission to Margate Red Cross Home	311
Attendances at Director's Consultant centre for advice	2,114
Total number of children examined or advised at centre	2,900

TODDLERS' CENTRES FOR THE PERIODIC EXAMINATION OF CHILDREN BETWEEN THE AGES OF 1 AND 5 YEARS (PRE-SCHOOL AGE).

At the 17 centres children from the age of 1 to 5 years were examined by the Director or Assistant Director.

The total number of examinations made during the year numbered 3,420, of which 1,261 were first examinations and 2,159 were subsequent examinations; the total examinations during the previous year numbered 3,229.

Owing to the increased number of applications for appointments to attend the toddlers' clinics, half-yearly examinations were decided on. This should benefit a greater number of children than the quarterly examination.

Toddlers from country centres or requiring only one examination are to attend the Director's consultant centre instead of a toddlers' clinic.

Clinics were closed during the Christmas vacation.

A large number of children over 3 years of age had chalky or decayed teeth, a fair number over 4 years of age had teeth extracted and a few had teeth filled. Many children had enlarged tonsils.

A number of children under 2 years of age were found to have bow legs; various degrees of knock knees were found and a number referred for treatment. Flat feet were found in a large number of children under 2 years of age, the wearing of specially built up shoes was necessary in the majority of cases.

Poor posture was frequently found, good posture being relatively rare; retracted chests and protuberant abdomens were frequently seen.

Blood counts were necessary in many cases,

Lectures and demonstration clinics for medical students were given by Dr. Mathewson.

At the invitation of the Combined Churches Kindergarten, a talk on the benefit of regular medical and dental examination of pre-school children was given to the mothers at their monthly meeting.

CORRESPONDENCE SERVICE.

Compared with the previous year there has been a decrease of 312 birth notices received. It is assumed that more visiting of hospitals has been done by the sisters in charge of country centres.

Owing to the nine weeks' railway strike, fewer responses to No. 2 circular letter and letters requesting advice re feeding and management were received. Even though letters were delivered promptly by other transport so many mothers delayed writing until the strike was over.

Letters from New Guinea and the Northern Territory requesting advice re feeding and management have increased and air mail responses have been sent to them. Numerous requests for "Care of Mother and Child" have also been received from these mothers and they have mostly desired them sent air mail at their own expense instead of posted free as usual.

There has been an increase in the number of photographs of babies sent to us, as films are a little less difficult to procure. Letters of appreciation of birthday cards, sent when babe reaches one year, still arrive and these mothers usually continue to correspond after baby is 12 months if in need of advice.

Posters have been printed and sent to every centre and subcentre in the State to be placed in a conspicuous place, requesting mothers to correspond if the centres are closed due to any cause.

The greater proportion of our correspondence mothers are breast feeding their babies. We receive numbers of letters of response to newspaper articles, especially those published in the *Agricultural Journal*, and all requests are granted if at all possible.

Number of birth notifications received	3,583
Number of circular letters posted—	
(1) within reach of centre	1,650
(2) not within reach of centre	1,933
Number of follow-up circular letters posted ..	2,452
Visits to centres in response to Circular letter	
Number 1	707
Letters to Correspondence Section in response to	
circular letter Number 2	624
Letters of advice re feeding and management sent	
on request	1,706
Number of "Care of Mother and Child" sent on	
request	953

SOCIAL WELFARE OR HOME VISITING SERVICE.

This very valuable work has grown to such an extent that it has been found necessary to appoint a second sister for social work on the south side of Brisbane.

The additional car made available for Social Service work on the south side is a distinct advantage as it enables the mothers to be visited twice and sometimes three times weekly instead of once weekly, which is all one sister could possibly achieve. This was commenced on 5th January, 1948.

The many difficulties which beset the young mothers of to-day are mostly due to the appalling housing conditions under which so many of

them must live. Overcrowded and draughty houses favour the spread of colds and other infections, and an attempt to educate the mother in matters of hygiene under such conditions is rather futile.

Breast feeding.—A large number of small and frail babies are entirely weaned if not before leaving hospital then just afterwards due in many cases to breast feeding not being properly established before leaving hospital. The mother arrives home not yet having regained her strength. Domestic help is unobtainable, and even if this were not so one could not expect girls to live under the terrible conditions which mothers are forced to do. If there are other children to be cared for the mother finds it an impossibility to wash, iron, clean, cook, and sew and try to establish her breast milk for the new infant, and so she takes what she thinks is the easiest way out and artificially feeds her babe.

Our Homes are quite inadequate to cope with the large number of frail babes and their mothers who need expert attention to establish breast feeding and give the mother a chance to go home happy in the thought that the very best has been done for her new babe.

There is also a great need for educating the fathers, as there have been instances where they have refused to allow the mother and her infant to enter the Home when a vacancy has been obtained for them. Quite a number of these young fathers and mothers are the children of our depression years who lacked many essentials in their home lives and training, and it is very hard to make them realise the importance of Child Welfare work, particularly in regard to cleanliness.

Many sets of twins have been born, and where there are other toddlers the Social Service work is a special boon to these mothers, as it is to mothers with any physical disability. In fact there are few mothers who do not appreciate what is being done for them.

Number of newborns visited in public hospitals	7,137
Number of newborns visited in private hospitals	523
Number of newborns visited at home	453
Number of cases visited for test feeds and advice	991
Number of test feeds—cases	119
Number of test feeds—feeds	215

LECTURE DEMONSTRATIONS TO SCHOOL GIRLS.

Courses of ten lectures on the care of baby and young child, diet, &c., were carried on in the primary and secondary schools as in previous years. Classes were held in Primary Domestic Science Schools in the metropolitan area at which pupils from outside schools attended. In addition classes were held at the State Commercial High School, Domestic Science High School, Brisbane High School for Girls, Wynnum Intermediate School, and Moreton Bay High School.

The principals and headmasters of the various schools, by their co-operation in allotting a suitable time for the mothercraft lessons, have made the work possible and their interest has greatly added to its success.

The girls on the whole showed great interest, which is evident not only by their attention to the lessons and the intelligent discussion which follows, but also by the work which is done in compiling their mothercraft scrap books.

Most schools arrange a short function towards the end of the school year, when senior members of the Maternal and Child Welfare staff visit the schools and present the certificates and prizes to the successful pupils.

Courses of instruction have been given in thirteen metropolitan schools and one in Ipswich.

Seven hundred and forty-nine children out of a total attendance of 895 sat for the examination, and of these 681 gained certificates.

KINDERGARTEN STUDENTS.

At the request of the Principal of the Kindergarten Training College, lectures on "The development of the Child from Birth to Two Years," "Infections," and "Rashes" were given to the students by Dr. T. H. R. Mathewson, and lectures on "Nutrition" by the Superintendent and sisters.

MEDICAL STUDENTS.

Fourth year medical students attended lectures given by Dr. T. H. R. Mathewson on pre-school child health and on the development and the work of the Maternal and Child Welfare Service in instructing mothers in the care of their own health as well as the care of the health of their babies and children up to school age when they come under the care of the School Health Services. Fifth year medical students in three groups of about twelve each attended lectures by Dr. Mathewson on "Mothercraft." These lectures dealt with the development and care of the infant and child of pre-school age and included attendances at two demonstrations at the Maternal and Child Welfare Centre, Fortitude Valley, as well as a demonstration of normal, healthy babies at the Women's Hospital and a demonstration at St. Paul's Terrace Home on the methods of infant feeding by the matron. The students were also given a demonstration on the babes in residence.

NEWSPAPER ARTICLES.

During the year a copy of an article on some aspect of Maternal and Child Welfare has been sent each month for publication to sixty-four newspapers in the State, including the "Queensland Agricultural Journal" and the "Queensland Dairy Farmer." The titles of the articles were as follows:—"Diarrhoea in Babies and Children," "Between Two Years and Six," "What is a Healthy Child?" "Health as Based on Habit," "The Right Health Habits," "Building Up Health Habits," "The Toddler—Building Up Good Habits—Training a Child to Eat," "The Growing Child and his Food," "Teach your Child to be Independent," "Parents must be the Family's Health Officer—How to Protect Children from Infectious Illness," "What can be done for the Handicapped Baby," and "Your Child's Eyes are a precious Possession."

The value of these newspaper articles is reflected in the increased correspondence following their publication.

PUBLICATIONS OF THE SERVICE.

Numerous requests were received during the year for copies of the two books published by this Service, "The Expectant Mother" and

"Care of Mother and Child." These have been distributed to mothers who have attended the centres and to those who have been advised by correspondence, also to hospitals and doctors when required.

Owing to the large demand, the number of books published in 1947-48 was 16,000 copies of "Care of Mother and Child" and 3,230 copies of "The Expectant Mother."

The plain infant weight card previously used has been replaced by an attractive booklet with advice re breast feeding and space for advice given to the mothers at centres.

PUBLICITY.

Many inquiries were made at our exhibit at the last Royal National Show.

For the forthcoming Show new permanent premises are nearing completion. With the added facilities of a theatre, exhibit room, and public address system, the mothers at the Show will be well catered for in the matter of publicity.

STAFF.

The nursing staff now numbers 99, an increase of 7 on 1946-47. Additional sisters were appointed to fill positions as follows:—Senior Sister for Social Welfare Section attached to South Brisbane Centres; Senior Sister, Clayfield Maternal and Child Welfare Home; Assistant Sister, Pre-school Child Health Centres; Assistant Sister, Callide Valley Service; Assistant Sister, Fortitude Valley Centre; and Assistant Sister, Wynnum Centre. One sister resigned during the year and several temporary sisters also resigned.

Four other appointments to enlarge the scope of the Service have been approved but could not be made owing to the continued shortage of nurses. One sister commenced extended (long service) leave in February, 1948, after 21 years' service.

THE LATE DR. A. JEFFERIS TURNER.

This great but gentle man died in Brisbane on 29th December, 1947. Graduating in London as Doctor of Medicine in 1886 after a brilliant course, he came to Queensland and was appointed Medical Officer in the Hospital for Sick Children in Brisbane in 1889. From that time onwards his life was devoted to children and his energies were directed to the reduction of the incidence of diphtheria, the introduction of intubation, the control of hookworm, and in collaboration with the late Dr. John Lockhart Gibson, he instituted a search into the etiology of lead poisoning.

He was appointed Director of Maternal and Child Welfare in 1925, which position he held until 1937, and it is due largely to his effort that this organisation is what it is to-day.

Apart from his medical interests, he was an entomologist of no mean order, and over 100 of his papers on butterflies and moths have appeared in a wide range of scientific publications.

Queensland, and particularly Queensland mothers, should remember with gratitude the name of Jefferis Turner.

RETIREMENT OF DIRECTOR (DR. T. H. R. MATHEWSON).

On 31st December, 1947, Dr. T. H. R. Mathewson retired from the position of Director of the Maternal and Child Welfare Service after holding the office for ten years and has resumed private practice.

Dr. Mathewson, who had been associated with this Service since its very early days, was appointed Acting Director on 25th December, 1937, in the room of Dr. A. J. Turner, retired, and his appointment to the position of Director was later confirmed.

Like his predecessor, Dr. Mathewson had made the health of children practically his life work.

After returning from post-graduate studies in England and Scotland, where he worked at the Children's Hospital, Leith, and also at hospitals in Edinburgh and London, he was appointed Honorary Physician to the Hospital for Sick Children, Brisbane, in which capacity he served for 15 years. On the opening of the Mater Misericordiae Children's Hospital in July, 1931, Dr. Mathewson accepted a similar appointment there and continued until he took up duties as a full-time officer in the Maternal and Child Welfare Service. Prior to the establishment of the first Baby Clinics in 1918, Dr. Mathewson was a member of a Child Welfare organisation which carried out a great deal of useful work and since that time he has always been willing to give his services to voluntary organisations engaged in work for children such as the Creche and Kindergarten Association, Lady Gowrie Child Centre, and others.

In 1947 he was appointed Special Lecturer in Mothercraft and Normal Infancy at the University of Queensland.

During the years Dr. Mathewson held office as Director, very great expansion and development of the Service took place. The number of centres grew from 104 to 185 and three Homes in Brisbane and one in Toowoomba were established as well as all the special services with the exception of the antenatal service. Doctor was particularly keen on the establishment of the health centres for toddlers and it is through his enthusiasm that the successful work in this direction has developed. In spite of the heavy load of work he carried prior to the appointment of a Deputy Director in 1946, Dr. Mathewson always found time to assist any mother or nurse with her problems. His unfailing kindness and consideration is his most outstanding characteristic, and mothers, trainees, and members of the trained staff alike felt they had in Dr. Mathewson a friend on whom they could always rely.

At the staff Christmas party the Deputy Director and staff, past and present, took the opportunity of paying tribute to Dr. Mathewson's service and presenting him with several gifts as a token of appreciation.

It has been a source of pleasure to all that Dr. Mathewson has acceded to the Department's request to remain with the Service as part-time medical officer in the Pre-school Child Health Section.

APPOINTMENT OF DR. H. C. MURPHY AS DIRECTOR.

On 22nd January, 1948, Dr. H. C. Murphy, who had held the position of Deputy Director of Maternal and Child Welfare since June, 1946, was appointed Director in the place of Dr. Mathewson.

STAFF POSITION.

Another difficult year has been experienced as far as the staff position is concerned, and in order to avoid the closing of country centres it has been necessary in a number of cases to appoint temporary sisters whose experience is insufficient. This is unsatisfactory from all points of view. The particular demands of this Service—that appointees shall be prepared to serve in any part of the State; that they shall be adequate both professionally and temperamentally to deal with mothers in the domestic situation where there is no real control over what the mother does with the advice she receives; that they shall be understanding and tolerant and able to reconcile the best interests of babies and children with the domestic problems of the mothers; and that they shall not only have a very thorough basic knowledge of the principles of maternal and child welfare but shall be interested enough to keep themselves up to date with the latest developments in this ever-changing field—create certain obvious difficulties in the staffing of the homes and centres. For one thing, this combination of qualities is not easy to obtain and it is found that out of every grade of 30 to 35 nurses only a small number can be found who will measure up.

On the other hand Child Welfare work by no means attracts every nurse. In metropolitan centres and homes sisters are required to instruct trainees and to handle efficiently and with patience large crowds of mothers. Unless sisters have homes in the metropolitan area they are often lonely and pay excessive rates for board and lodging. There is no social life attached to the centres as there may be in hospitals or other institutions as the staff are not resident.

In country centres the great distances covered by the Service make travelling arduous and many country sisters who have to cover their district by rail spend twelve to fifteen hours a day travelling by slow mixed trains, waiting on stations, and opening their subcentres for two or three hours. This is in normal times; where delays occur due to floods, accidents, &c., sisters may arrive back at their centres very late at night or even in the small hours of the morning. In one-nurse districts there is considerable isolation and the sisters have no one with whom to discuss their problems and difficulties. As they travel about so much it is not easy to fit into any community even if the people are friendly and hospitable, which is not always the case. Hotel accommodation is very expensive and often unsatisfactory and private board practically unobtainable.

Owing to the great demand for nurses at the present time, coupled with an apparent shortage, nurses have a considerable choice of attractive positions all over Australia. This factor, in addition to the disadvantages referred to in connection with work in this Service, probably accounts for the poor response to advertisements for permanent staff, and out of a staff of 99 sisters, 47 of these still remain in temporary

positions. Some admittedly have domestic responsibilities such as aged or invalid parents and for this reason are unable to serve outside their home towns. However, for the suitable nurse who is attracted to this Service and has sufficient "missionary spirit" to make light of these difficulties, the work gives great satisfaction and an opportunity of contributing to the health and well-being of the family which is found in no other field of nursing. A great deal of fine and effective work has been carried out by both permanent and temporary staff, and appreciation of the great help received has been expressed by very many individual parents.

BABY CLINIC SOCIAL CLUB.

This club was originally established in 1939 with the object of bringing together in a social atmosphere the members of the Maternal and Child Welfare staff, developing educational and other interests, and entertaining country staff members on leave in Brisbane, &c. During the war its activities were suspended, as most members had taken up various forms of war work. However, it was decided to recommence activities, and with the able and enthusiastic work of Sister Joan Foley, as hon. secretary, and a committee, the club records a successful year. The meetings have been held regularly monthly, and past staff have been included in the membership. Once a quarter the meeting is held at St. Paul's Terrace Home, and with the co-operation of the Home staff a high tea is provided for members prior to the meeting, which always includes a talk by a visiting lecturer on a subject of interest to Child Welfare workers.

Lectures given included "Some Aspects of Infant Feeding," by Dr. P. A. Earnshaw, "Minor Deformities of Childhood," by Dr. J. R. S. Lahz, "Infantile Diarrhoea and Gastro-Enteritis," by Dr. Ian Mackerras, and "Diseases of the Skin," by Dr. A. J. Foote. All lectures were much appreciated, and copies were sent to country centres.

During the year club members decided to raise funds to "adopt" a war orphan under the "Save the Children" scheme, and this has been done and the specified amount of money paid into the fund. The identity of the adopted child is now awaited.

A highly successful Christmas party was held on 23rd December, to which members were permitted to invite guests. This innovation was much appreciated.

EDUCATION CO-ORDINATION COMMITTEE.

During the year Dr. T. H. R. Mathewson attended meetings of this committee, consisting of five Government representatives, four of whom are officers of the Department of Public Instruction and an equal number of representatives of the Education Committee of the Creche and Kindergarten Association.

MINISTRY OF POST-WAR RECONSTRUCTION.

The Superintendent is a member of the Professional Advisory Committee for Nursing under the Universities Commission, Ministry of Post-war Reconstruction, and attends meetings of that committee as required.

ACKNOWLEDGEMENTS.

Acknowledgement is gratefully made to Dr. Barbara Meredith, Director of Maternal and Child Hygiene, Victoria, and to Dr. Grace Cuthbert, Director of Maternal and Baby Welfare, New South Wales, together with their staffs, for the courtesy and kindness extended to the Deputy Director during his visit to Melbourne and Sydney in October and November, 1947. Owing to their efforts his visit was made both pleasant and instructive. The continued assistance rendered by the Queensland Country Women's Association in placing their rooms at the disposal of this Service together with their wholehearted co-operation is very greatly appreciated.

It is also desired to express appreciation of the co-operation of other Departments, of medical officers, matrons, and secretaries of hospitals throughout the State, Professor Shedden Adam and Dr. R. Salter of the Brisbane Women's Hospital, Dr. I. Mackerras, Director of the Queensland Institute of Medical Research, Dr. Fison, of the Children's Hospital, Miss Frost, of the Red Cross Aid to Mothers Section, Dr. Shaw, Director of the Red Cross Blood Transfusion Service, Dr. Tonge, Director of Microbiology and Pathology at the Health Laboratory, together with his staff, Mr. Solomon, Acting Government Registrar, Mr. P. Scott, Registrar-General, the Principal of the Kindergarten Training College, the proprietors and editors of 64 newspapers who publish our monthly articles, and to the many others who have in any way contributed to the progress of the Maternal and Child Welfare Service of Queensland.

To every member of the staff sincere thanks are due for their loyal co-operation, their enthusiasm, and zeal, which is always evident under all conditions and in all circumstances.

VISITS TO NEWBORNS, SUBSEQUENT AND TOTAL VISITS

Year.	Visits to Newborns.	Subsequent and other Visits.	Total Visits.
1945-1946	20,246	2,373	22,619
1946-1947	23,611	3,032	26,643
1947-1948	22,875	2,916	25,791

ATTENDANCES AT CENTRES.

Number of New Cases seen at the Centre.

—	1945-46.	1946-47.	1947-48.
Infants—			
Under one year ..	15,389	17,906	17,091
One to two years ..	4,018	4,020	4,568
Over two years ..	2,659	2,613	2,113
Total ..	22,066	24,539	23,772
Expectant mothers ..	1,036	1,120	1,122
Total new cases	23,102	25,659	24,894

ATTENDANCES OF INFANTS AND CHILDREN AT MATERNAL
AND CHILD WELFARE CENTRES AND SURROUNDINGS.

Country—continued.

Metropolitan.							
—	1945-46.	1946-47.	1947-48.	—	1945-46.	1946-47.	1947-48.
Fortitude Valley ..	24,359	25,494	28,412	Biloela (opened	10-3-47)	428	2,332
Branches—				Branches—			
Caboolture ..	1,562	1,047	792	Baralaba (opened	24-6-47	10	533
Clayfield ..	2,524	2,914	2,775	Goovigen (opened	17-5-47)	25	210
Dayboro' ..	400	465	320	Jambin (opened	26-7-47)	..	106
Enoggera ..	1,095	1,424	1,338	Thangool (opened	3-5-47)	69	431
Hamilton ..	2,345	2,088	1,922	Theodore (opened	7-8-47)	..	237
Hendra ..	1,022	1,753	1,591	Wowan (opened	3-6-47)	42	415
Newmarket-Grange	1,387	1,395	1,523				
Windsor ..	3,059	2,813	2,515				
	37,753	39,393	41,188			574	4,264
Herschell Street ..	18,549	17,767	19,650	Bowen ..	1,891	2,307	2,775
Branches—				Branches—			
Ashgrove ..	4,683	4,366	4,005	Collinsville ..	1,049	1,181	1,096
Auchenflower ..	910	964	887	Proserpine ..	1,295	1,407	1,414
Bardon ..	1,328	1,624	1,864			4,235	5,285
Corinda ..	2,710	2,428	2,437				
Graceville ..	2,001	2,323	2,376	Bundaberg ..	8,614	8,846	8,198
Indooroopilly ..	2,142	1,710	1,549	Branches—			
Kelvin Grove ..	1,422	1,434	1,991	Gin Gin (opened	4-8-47)	..	238
Paddington ..	2,781	2,350	1,760			8,614	8,846
Rosalie ..	2,491	1,878	2,183				8,436
St. Lucia ..	946	617	619	Cairns ..	8,341	8,160	8,708
Toowong ..	2,353	2,528	1,927	Branches—			
	42,316	39,989	41,248	Edge Hill ..	619	926	1,039
Nundah ..	3,653	4,096	5,574	Edmonton ..	401	521	453
Branches—				Gordonvale ..	1,236	1,353	1,060
Cribb Island ..	216	294	283	Kuranda ..	148	153	93
Kedron ..	3,663	3,916	3,382	Mossman ..	941	1,136	1,008
Redcliffe ..	2,313	2,277	2,565			11,686	12,249
Sandgate ..	4,075	4,525	4,522				12,361
Zillmere ..	269	225	339	Charleville ..	2,209	2,117	3,426
	14,189	15,333	16,665	Branches—			
West End ..	8,906	9,079	8,760	Cunnamulla ..	594	617	755
				Quilpie ..	416	387	618
Woolloongabba ..	20,583	23,833	24,180			3,219	3,121
Branches—				Charters Towers ..	2,631	3,205	3,561
Beenleigh ..	..	..	517				
Bulimba ..	2,025	1,833	1,686	Dalby ..	4,313	3,757	4,447
Camp Hill ..	2,518	2,124	1,701	Branches—			
Ekibin ..	867	712	876	Chinchilla ..	1,632	1,329	1,984
Holland Park ..	1,876	1,857	1,631	Miles ..	738	532	671
Holland Park T. H.	..	..	..			6,683	5,618
Establishment ..	..	339	1,045				7,102
Ipswich Road ..	2,312	1,856	2,130	Emerald ..	1,267	1,232	1,234
Morningside ..	1,696	1,480	1,566	Branches—			
Rocklea T. H. Es-	..	175	1,042	Alpha ..	193	154	122
tablishment ..	..	823	1,019	Blackall ..	1,297	1,171	1,030
Salisbury ..	448	980	992	Blair Athol ..	283	186	169
Stones Corner ..	1,014	980	992	Capella (opened	7-5-47)	41	142
Yeronga ..	1,285	1,110	1,358	Clermont ..	1,733	1,436	1,002
	34,624	37,122	39,743	Jericho ..	124	72	14
Wynnum ..	6,700	7,647	7,715	Springsure ..	873	932	722
						5,770	5,224
Country.							4,435
Atherton ..	2,150	1,907	2,022	Gayndah ..	1,199	1,033	903
Branches—				Branches—			
Atherton ..	..	..	..	Eidsvold ..	611	474	242
Herberton ..	601	425	440	Monto ..	1,488	1,327	1,383
Malanda ..	445	446	527	Mundubbera ..	868	749	659
Millaa Millaa ..	857	873	741			4,166	3,583
Ravenshoe ..	725	597	810				3,187
Yungaburra (since	Oct., 1947)	..	183	Gladstone ..	3,410	3,181	4,016
	4,778	4,248	4,723	Branches—			
Barcaldine ..	2,006	1,926	1,468	Calliope ..	328	247	239
Branches—				Miriam Vale ..	325	276	344
Aramac ..	1,044	870	614	Mt. Larcom ..	889	731	661
Longreach ..	1,585	1,678	1,645			4,952	4,435
	4,635	4,474	3,727	Goondiwindi ..	1,402	1,548	1,856
				Branches—			
				Dirranbandi ..	244	224	294
				Inglewood ..	509	349	618
				Texas ..	526	609	557
				Yelarbon ..	422	377	363
						3,103	3,107
							3,688

Country—continued.

	1945-46.	1946-47.	1947-48.
Gympie	6,016	5,877	6,349
Branches—			
Cooran	50	191	281
Imbil (opened 13-9-46)	221	403	403
Kandanga	165	165	79
Pomona	686	406	416
	6,917	6,860	7,528
Innisfail	3,935	4,237	4,509
Branches—			
Babinda	1,636	1,683	1,203
El Arish	142	167	87
Mourilyan	112	200	219
Silkwood	156	211	261
South Johnstone	399	526	339
Tully	1,680	1,906	1,661
	8,060	8,930	8,279
Ipswich	10,554	11,795	12,146
Branches—			
Boonah	765	1,036	1,168
Esk	583	754	763
Kalbar	117	(closed)	..
Laidley	823	784	751
Lowood	382	252	158
Rosewood	490	720	800
Somerset Dam ..	185	130	107
Toogoolawah ..	724	990	849
	14,623	16,461	16,742
Kingaroy	2,602	3,664	3,414
Branches—			
Kumbia	478	336	191
Nanango	871	1,438	1,077
Yarraman	347	367	224
	4,298	5,805	4,906
Mackay	7,739	8,606	10,537
Branches—			
Finch Hatton ..	174	283	372
Kournala	206	308	256
North Mackay ..	882	824	1,255
Sarina	715	916	974
	9,716	10,937	13,394
Mareeba	2,395	2,642	3,843
Branches—			
Dimbulah	719	650	734
Mount Mulligan ..	338	435	488
Yungaburra	331	327	104
	3,783	4,054	5,169
Maryborough ..	7,716	9,424	8,910
Branches—			
Biggenden	810	1,186	1,167
Childers	1,015	903	855
Howard	687	1,168	726
Pialba	1,002	1,226	870
	11,230	13,907	12,528
Murgon	1,126	1,205	1,450
Branches—			
Goomeri	558	881	737
Hivesville (opened 5-1-48)	..	..	61
Kilkivan	364	305	308
Proston	185	215	200
Wondai	667	960	1,209
	2,900	3,566	3,965

Country—continued.

	1945-46.	1946-47.	1947-48.
Nambour	4,224	4,648	4,922
Branches—			
Buderim (opened 18-12-46)	54	159	159
Caloundra	15	459	628
Cooroy	913	981	1,124
Eumundi	189	184	133
Maroochydore ..	529	533	567
Palmwoods	483	406	390
Yandina	176	191	205
Landsborough (opened 7-10-47)	..	..	125
	6,529	7,456	8,253
Railway Car.			
Winton	645	614	685
Cloncurry	390	263	483
Dajarra	91	92	116
Hughenden	933	914	1,039
Julia Creek	228	228	215
Kajabbi	48	54	36
Mt. Isa	761	1,079	1,296
Richmond	189	336	374
	3,285	3,580	4,244
Rockhampton ..	14,643	14,710	14,836
Branches—			
Mount Morgan ..	1,223	1,209	1,710
Ogmore	840	581	366
St. Lawrence	357	170	195
Yeppoon	999	921	993
	18,062	17,591	18,100
Roma	2,015	2,329	2,939
Branches—			
Mitchell	1,285	1,249	1,202
Wallumbilla	38	92	209
Yuleba	159	123	198
	3,497	3,793	4,548
Southport	4,970	4,402	4,757
Branches—			
Beaudesert	1,829	1,528	1,423
Burleigh Heads ..	463	546	467
Coolangatta	2,318	3,026	3,208
Beenleigh	725	546	..
	10,305	10,048	9,855
Toowoomba	7,030	9,687	10,272
Branches—			
Clifton	307	378	379
Crow's Nest	255	367	450
Forest Hill	193	149	146
Gatton	718	883	1,337
Oakley	549	591	781
Pittsworth	559	738	802
	9,611	12,793	14,167
Townsville	12,503	13,541	14,485
Branches—			
Ayr	2,660	2,760	3,307
Giru	204	305	429
Home Hill	1,930	2,031	2,235
Ingham	1,215	1,338	1,928
	18,512	19,975	22,384
Warwick	3,881	3,154	3,974
Branches—			
Allora	269	382	645
Killarney	432	371	507
Stanthorpe	1,948	1,603	2,410
	6,530	5,510	7,536

TOTAL ATTENDANCE OF INFANTS AND CHILDREN AND EXPECTANT MOTHERS.

1945-1946.	1946-1947.	1947-48.
352,726	370,946	396,380

ANTENATAL CLINICS

	1945-46.		1946-47.		1947-48.	
	New Cases.	Attend- ances.	New Cases.	Attend- ances.	New Cases.	Attend- ances.
Fortitude Valley	116	624	109	636	111	618
Woolloongabba	129	593	131	700	111	664
Caboolture	16	78	20	139	27	162
Corinda	2	6	(closed)		..	..
Herschell Street	38	89	27	42	21	60
Morningside	..	5	(closed)		..	..
Nundah	7	29	4	11	2	7
Rosalie	..	..	(closed)		..	..
West End	14	35	13	31	12	21
Redcliffe—						
Opened March, 1947	..	..	5	10	2	19
Closed Dec., 1947	..	..	..	..	..	..
Wynnum (closed March, 1948)	..	..	..	..	..	1
	322	1,459	309	1,569	286	1,552

SECTION OF MENTAL HYGIENE.

B. F. R. STAFFORD, M.B., B.S. (Melb.), Director of Mental Hygiene and Medical Superintendent, Brisbane Mental Hospital.

The departmental activities in pursuit of the State's mental health have covered a very wide field during the past year. The high standards of treatment in the existing mental hospitals were maintained, the new Repatriation Pavilion at Wacol for the treatment of ex-servicemen patients was put into use, the progress of the Psychiatric Clinic was maintained, preparatory work was undertaken in connection with the establishment of the new mental hospital in North Queensland, a suburban site was acquired for the intermediate hospital for nervous diseases in Brisbane, the Townsville Mental Hospital, where there was mainly custodial treatment, was closed and a psychiatric section established at the Townsville General Hospital, and, finally, arrangements were made for the State to be represented at the International Congress on Mental Health.

The standards in the State Mental Hospitals are comparable to the accepted modern standards as scheduled by the American Psychiatric Association in that the chief executive officers are highly qualified physicians and experienced psychiatrists, dispensaries with modern equipment and appointments are staffed by registered pharmaceutical chemists, a wide degree of autonomy exists at each hospital, subject to departmental policy, clinical histories are kept of all cases, patients are classified in various wards according to their mental and physical health, with separate wards for acute physical illnesses, surgical conditions, for the tuberculous, the aged and infirm, and a surgical operating theatre is provided at each hospital. There is a clinical and pathological laboratory at the Brisbane Mental Hospital, and laboratories in their centres are available to the other mental hospitals; an X-ray plant has been established at the Brisbane Mental Hospital. A dentist is attached to each hospital, occupational therapy is followed at all three, there is provision for the recreation and social entertainment of patients, there is a working medical library at each hospital, and, where the number of medical officers warrants it, regular staff conferences are held. In effect, out-patient clinics are conducted by the liaison that is maintained with the psychiatric clinics and the mental hospitals at Brisbane and Toowoomba, an adequate nursing staff has been maintained and the systematic instruction and training of the nursing staffs undertaken, mechanical restraint is under strict regulation and control by the medical officers, and the business administration of each mental hospital is delegated to the control of the managing secretary.

Notwithstanding the progress that has been made during the last decade there is still much to be achieved in the mental health programme, and it is hoped that this progress will continue to ensure these deficiencies being remedied. Some progress has already been made with the proposed hospital in North Queensland, and the

development of this will provide a psychiatric service of modern standard to that regional area. It is hoped, too, that use will be made of the site already selected for the intermediate hospital in the outer metropolitan area since the construction of this hospital would provide a very definite benefit to persons suffering from nervous disorders. The necessity for such will be quite apparent if reference be made to the numbers of people already being treated in the limited accommodation at the Psychiatric Clinic. In addition to the question of increased accommodation we are also seriously handicapped by the lack of professional personnel. More medical officers are required on our staffs and facilities for post-graduate training and research available to these officers must be widened in order to maintain the standard of modern requirements. The loss of the services of the laboratory technician at the Brisbane Mental Hospital has been keenly felt, and it is hoped this vacancy will soon be filled. The importance of pathology and research in this service should be appreciated and provision made to induce a neuro-pathologist who is a medical specialist to accept appointment to this laboratory. A technician is also required to service the X-ray plant recently installed at the Brisbane Mental Hospital. A dietician is required to supervise the food services and to ensure that meals are nutritious and palatable. The acute shortage of female nursing staff still endures; one repercussion from this lack of numbers is that we have been prevented from instituting the trainee system for junior nurses throughout the Mental Hygiene Service. The existing nurses' quarters have been modernised to some extent, but the proper solution of this difficulty could be none other than the construction of new and modern quarters when the building position enables this to be effected.

The outstanding event during the past year was the opening of the new Repatriation Pavilion at Wacol. The appointments of this block provide for a very high degree of comfort for the patients. It is considered that this section is typical of modern requirements in a psychiatric hospital.

The Psychiatric Clinics at Brisbane and Toowoomba have widened their activities and in their development, added to their liaison with the mental hospitals, have in effect to some extent become out-patient sections of the mental hospitals. The Brisbane clinic has moved into new accommodation which still does not provide sufficient room for its increased activities. A qualified speech therapist, Miss E. C. Molphy, has been appointed to the clinic, and we have been inundated with demands for her service. The numbers seeking to avail themselves of the facilities at this clinic indicate the necessity of providing additional accommodation, and lays further emphasis on the need for proceeding

with the construction of the intermediate hospital proposed for the suburbs. Dr. Hynes continued on the staff of the Psychiatric Clinic following his resignation from the Brisbane Mental Hospital.

The Townsville Mental Hospital was closed in March, 1948, and the buildings thereafter became part of the Townsville General Hospital. Formerly patients admitted to the Townsville Mental Hospital were given little or no active psychiatric active treatment, but were cared for mainly with custodial treatment only until their transfer to the Brisbane Mental Hospital could be arranged. It is hoped that in future patients suffering from early mental sickness will be given active psychiatric treatment at the Townsville General Hospital, and with this in view the Government has approved the appointment of a part-time psychiatrist to the Townsville General Hospital. The extension of the State's mental health programme to the North Queensland area should be a very definite benefit to the populace there.

The Diploma of Psychological Medicine has been established at the Queensland University, and the inauguration of this syllabus would be a natural sequel to the University Fellowships granted by the Department of Health and Home Affairs to undergraduates in medicine. This development is of considerable importance to the medical officers in the Mental Hygiene Service since it will provide them with an opportunity to undertake further specialist training. In most modern communities throughout the world, including New South Wales and Victoria, post-graduate diplomas in psychiatry are a prerequisite for clinical practice and for promotion to the senior posts in the service.

The Australasian Association of Psychiatrists visited this State and held meetings at the Brisbane Mental Hospital on the 13th December, 1947, and the 9th June, 1948. The value of contact and discussion with specialists of high standing from other parts of Australia is very great and most stimulating.

The International Congress of Mental Health will be held in London from the 12th to 21st August, 1948. The State has been fortunate in that it will be represented there by that distinguished psychiatrist, Dr. Louis Minski, who will hold a watching brief in the State's interests.

The 40-hour working week was introduced throughout the Mental Hygiene Service in common with other parts of the State as from the 1st January, 1948, and all staffs now work five eight-hour days per week. The shortage of female nursing staff still exists and the employment of a number of male nursing orderlies in the female section of the hospital enabled the 40-hour working week for the female nurses to be introduced without detracting from the satisfactory nursing of the patients. The performance of the less intimate nursing in the female sections of the hospitals by male nursing assistants has enabled the trained female nurses to devote more of their time to the actual psychiatric nursing of the patients.

The modernisation of the hospitals, which to some extent is synonymous with the mechanisation, lessened the impact that would otherwise have been felt, particularly by the artisan staff, consequent upon the introduction of the 40-hour working week.

The grounds of the various hospitals and the Epileptic Home are being considerably improved, and with the advice of the Acting Superintendent of Institutional Gardens, are now presenting a much better-groomed appearance more in keeping with the standards of treatment in these hospitals. The beautification of the various hospital reserves and the greater provision of more suitable park lands enabled much greater use to be made of these areas for the comfort of patients. At the Brisbane Mental Hospital a suitable building has already been erected on a site where a recreation reserve will be constructed for the female patients, and this to some extent will reduce the overcrowding in the present ward grounds.

The general health of the patients has been good during the past year, and although the total number under treatment in the several mental hospitals increased from 4,549 to 4,607 as compared with the previous year, the number of deaths during the same periods decreased from 293 to 257. Of the total admissions during the past twelve months (781 patients) male patients numbered 384 as against 426 the previous year, whilst female patients during these years numbered 397 and 342, respectively.

Modern standards of treatment were maintained during the year, and shock, convulsive, and occupational therapies fully maintained. Plans have been prepared for new occupation therapy blocks for both male and female patients at the Toowoomba and Ipswich Mental Hospitals, and the construction of these buildings will enable that form of therapy to be more widely used.

Standards of food and clothing are continually being improved, and every effort is made to keep away from institutional type of dress. The uniform provided to the staff is also under review with the object of making these garments more in keeping with the medical aspect of their duties than otherwise.

I regret to record the death during the year of Mr. J. J. Leahy, Official Visitor. Mr. G. A. Cameron was appointed in his stead, and, with Dr. F. C. Turnbull, has made regular visits to the Brisbane and Ipswich Mental Hospitals. Dr. J. D. Hulme and Mr. F. C. Noyes similarly visited the Toowoomba Mental Hospital, while Dr. Chapman visited the Townsville Mental Hospital.

During the past year various public-minded bodies visited the hospitals for the entertainment of the patients therein, and the deepest appreciation is expressed of their actions.

During the past year the Honourable the Minister for Health and Home Affairs, the Under Secretary, and the Director-General of Health and Medical Services have visited the hospitals.

My duties have frequently brought me into consultation with the Under Secretary and the Director-General, who have always evinced keen interest in any plans tending for the better administration of this Sub-department. I have interviewed various officers from the Public Works Department and other departments regarding building plans, whilst on staff matters I have frequently conferred with officers from the Public Service Commissioner's Department. The Public Curator's staff have frequently

interviewed me on behalf of various patients regarding business affairs for their well-being. The State Stores Board have exhibited close co-operation in meeting our needs throughout the year.

The Minister for Repatriation and the Deputy Commissioner have evinced a keen personal interest in the well-being of ex-servicemen patients, and the administrative officers of the Repatriation Commission have frequently con-

ferred with me to co-operate in matters affecting the well-being of these patients. I would like to express my appreciation of the courtesy and consideration that has been extended to me by these and the officers of other Government Departments with whom my duties have brought me in contact.

A statistical table showing the movement of patients in the four mental hospitals is shown hereunder:—

QUEENSLAND PSYCHIATRIC HOSPITALS.

ADMISSIONS, READMISSIONS, DISCHARGES, AND DEATHS DURING THE YEAR ENDED 30TH JUNE, 1948.

				Males.	Females.	Total.
On the books of the Hospitals on 1st July, 1947				2,055	1,781	3,836
	M.	F.	T.			
Admitted for the first time	320	323	643			
Readmitted	64	74	138	384	397	781
Total under care during the year				2,439	2,178	4,617
Discharged—						
Recovered	146	154	300			
Section 49	28	45	73			
Relieved	32	22	54			
Not improved	4	4	8			
Voluntarily left	14	7	21			
Died	145	112	257			
Total discharged and died				369	344	713
Remaining on Books of Hospitals on 30th June, 1948				2,070	1,834	3,904
Average number daily resident				1,989	1,725	3,714
Number on leave of absence on 30th June, 1948				65	91	156
Proportion of mentally sick to each 1,000 of population as at 31st December, 1947				3.65	3.40	3.53
Proportion of admissions per 10,000 of population for year ended 31st December, 1947				6.77	7.38	7.06

BRISBANE MENTAL HOSPITAL.

The work of the hospital proceeded smoothly during the past twelve months and the various forms of specialised treatment have been continued by our own resident medical staff and also by the visiting consultant specialists. The facilities in our well-equipped operating theatre have been fully utilised during the year, and the services of the visiting specialists, Drs. Brandis, Jobbins, and Charlton, have been freely availed of in the many cases referred to them for consultation and treatment, whilst all emergency operations both major and minor were performed by the resident medical staff. There is an efficient nursing staff for theatre purposes, notwithstanding the serious shortage of female nurses.

The laboratory has been without the services of a bacteriologist since 1st March, 1948. Since that time the laboratory work has been undertaken by the several medical officers, thus throwing an additional burden on these officers.

The X-ray plant was put into commission in February, 1948, and here, too, we are still without the services of a technician, and the added burden of this work has also fallen on the respective medical officers.

The dispensary section in the new block has

now been completed, and the furnishing of these premises should considerably facilitate the ever-increasing work of the pharmacist.

The dental treatment of patients has been continued and this service will be expanded when the two chairs in the dental section of the new block are in operation.

The visiting optometrist, Mr. H. G. McPhail, visited the hospital regularly and more adequate provision is being made by the provision of modern equipment for this officer.

The visiting chiropodist was appointed to the hospital in May, 1948, and both male and female sections of the hospital are now being regularly visited.

Two qualified hairdressers have been appointed to the staff, and the benefit of their services is very evident.

There was a total of 2,716 patients under treatment during the twelve months ending 30th June, 1948. The male and female sections of the hospital remained approximately equal, there being 1,387 male patients and 1,329 female patients under treatment, while the average numbers daily resident were 1,002 males and 952 females, total 1,954.

The patients admitted were drawn from all over the State, although over 75 per cent. had been resident in the southern region. Sixty-two per cent. of the patients admitted were born in Queensland, over 10 per cent. in the other Commonwealth States, with a further 10 per cent. who had been born in the United Kingdom. In approximately 9 per cent. of the admissions the birthplaces were not stated.

The previous occupations of the patients admitted represented a fairly broad general cross-section of the community, including 91, or 15 per cent. of the admissions, whose previous occupation was given as that of a pensioner.

Schizophrenia was the most common type of mental sickness suffered by the patients admitted, which affected 144 male and 131 female patients. Senile cases comprised 55 males and 66 females, whilst mental deficiency was present in 60 males and 33 females.

The number discharged recovered during the year amounted to more than half of the number of admissions, the number being 352 patients, giving a recovery rate of 53.42 per cent. on the rate of admissions; or 66 per cent. on admissions if the senile and the mentally deficient cases were excluded from the number of admissions.

The general bodily health of the patients was good, and there were no serious outbreaks of illness or epidemics during the year.

There was a total of 179 deaths during the year, of whom 42 patients were aged 80 years and upwards.

The cases of five sudden female deaths and one sudden male death were referred to the Coroner, but in no case was there found to be any suspicious circumstances. The death of one female patient was caused by drowning whilst on leave from this hospital in the care of her relatives.

Two children, one male and one female, were born in the hospital during the period under review, resulting from pregnancies conceived prior to admission.

There were 43 patients transferred to the Toowoomba Mental Hospital and 18 to the Ipswich Mental Hospital during the past year to fill vacancies which occurred at those hospitals, and the number remaining on the books at the Brisbane Mental Hospital—1,027 males and 1,077 females, total 2,104—still caused a degree of overcrowding in the female section of the hospital.

A special enclosed area with the necessary appurtenances was provided during the year as a playground for the boy patients, and was put into use in December, 1947, as a place where these youths could have segregated accommodation. A building has also been erected on an area of parkland adjoining the river bank, and here will be constructed a recreation park for the female patients.

The standards of food and clothing are continually being improved. Milk continues to be provided from the tested dairy herd here, and there were 157 tons of green vegetables produced in our market gardens.

At the close of the year departmental policy was varied to the extent that the pig herd was

transferred to the Department of Native Affairs and the waste-food offal sold to outside contractors.

A satisfactory standard of hygiene is being maintained, and with this end in view a new and modern incinerator was constructed and brought into use at the end of November.

An automatic telephone exchange has been constructed within the hospital grounds, and was put into commission in May, 1948.

The electricity supply to the hospital is being changed from direct to alternating current, and the first concrete step in this direction was taken by the installation of the alternating current to the hospital block and the adjoining medical building in April last.

The new canteen building is practically completed, and action is now being taken to improve and extend the parklands adjacent to the building for the greater comfort and convenience of the patients, staff, and visitors.

The Official Visitors, Dr. F. C. Turnbull and Mr. G. A. Cameron, have made regular visits of inspection during the past year, and as a result have expressed their assurance that the well-being of the patients was safeguarded and that modern methods of treatment were being actively pursued.

Entertainments were held regularly and frequently in the recreation hall, comprising picture shows and concert parties weekly throughout the year, with dances in addition during the cooler months. A number of bus trips to the seaside were also provided for the female patients, whilst, in addition, regular bus trips for ex-servicemen patients were arranged.

The religious interests of all patients were guarded, and services of the various denominations were held regularly, whilst some patients attended divine services in the nearby church. In addition, individual visits were undertaken by representatives of the various religious denominations.

The Red Cross Society continues to supply fruit, cake, sweets, and tobacco regularly to returned soldier patients from both wars, whilst the local sub-branch of the R.S.S.A.I.L.A. also provides for the comfort and entertainment of these patients both in the way of outdoor trips, concerts, and dinners.

The Repatriation Commission endow the entertainments in respect of the patients who are their responsibility, whilst the bus trips to the seaside for the female patients above referred to were made possible by the co-operation of the manager of the Eventide Home, Sandgate.

The local branch of the Country Women's Association visits the hospital regularly to provide entertainment for the female patients, whilst officers from the Silver Hut continue to pay regular visits to a number of ex-servicemen patients.

Daily newspapers and periodicals are provided to the various wards throughout the hospital, and each ward is also provided with a wireless receiving set. Nearly all of the wards in the female section have their own pianos, whilst in the male section indoor recreation is provided by billiard and bagatelle tables.

The canteen continues to function as satisfactorily as can be expected in its restricted temporary accommodation, but will be moving into the new building in the very near future. The management of this section has been entrusted to Mr. E. Rusling following his appointment on 8th March, 1948.

Staff changes during the past year were caused by the resignation of Drs. B. McMenamin and J. V. Hynes and the appointment in their stead of Dr. R. Evans and Dr. V. Matchett, Mr. E. J. Skippington was transferred to the

Ipswich Mental Hospital and promoted to store-keeper in the room of Mr. Burns, who was transferred to the Repatriation Pavilion at Wacol. Charge Male Nurse Whitehouse was accidentally killed during the past year, and Deputy Charge Male Nurse S. Geary also died during the past year. Male Nurses Bradley, Collins, O'Hara, McKerrell, and Vieth were retired following long and meritorious service.

The statistical tables relating to this hospital are furnished herewith.

TABLE I.—BRISBANE MENTAL HOSPITAL.

ADMISSIONS, READMISSIONS, DISCHARGES, AND DEATHS DURING THE YEAR ENDING 30TH JUNE, 1948.

				Males.	Females.	Total.
On the books of the hospital on 30th June, 1947				1,053	986	2,039
	M.	F.	T.			
Admitted for the first time	241	262	503			
Readmitted	50	59	109			
Transferred from Toowoomba	10	3	13			
Transferred from Ipswich	3	4	7			
Transferred from Townsville	30	15	45			
				334	343	677
Total under care during year				1,387	1,329	2,716
Discharged, died, transferred—						
Discharged, recovered	127	141	268			
Discharged, section 49	23	40	63			
Discharged, relieved	12	8	20			
Discharged, not improved	..	..	..			
Voluntarily left	14	7	21			
Transferred to Toowoomba	27	16	43			
Transferred to Ipswich	14	4	18			
Transferred to Townsville	..	..	..			
Died	93	86	179			
Total discharged, died, &c., during year				310	302	612
Remaining on the books of the hospital on 30th June, 1948				1,077	1,027	2,104
Average number daily resident				1,002	952	1,954
Number on leave of absence on 30th June, 1948				61	71	132

TABLE II.—BRISBANE MENTAL HOSPITAL.

ADMISSIONS, DISCHARGES, AND DEATHS WITH THE PROPORTIONS OF RECOVERIES AND DEATHS PER CENT. DURING YEAR ENDED 30TH JUNE, 1948.

	Admitted (including transfers from Townsville).	Re-admitted.	Discharged.			Died.	Re-remaining on 30th June, 1948.	Average Number Daily Resident.	Percentage of Recoveries on Admissions.	Percentage of Patients Relieved.	Percentage of Deaths on Average Number Resident.
			Re-covered.	Relieved.	Not Improved.						
Males ..	271	50	164	12	..	93	1,077	1,002	51.09	3.74	9.28
Females ..	277	59	188	8	..	86	1,027	952	55.95	2.38	9.03
Total ..	548	109	352	20	..	179	2,104	1,954	53.42	3.04	9.16

TABLE III.—BRISBANE MENTAL HOSPITAL.
FORMS OF MENTAL DISORDERS IN PATIENTS ADMITTED DURING THE PERIOD.

	Male.	Female.	Total.		Male.	Female.	Total.
1. AFFECTIVE REACTION TYPES—				4. EPILEPTIC REACTION TYPES—			
(a) Manic Depressive Psychosis	7	19	26	Epileptic Psychosis	8	2	10
Manic Depressive Psychosis	1	..	1	Epileptic Dementia	1	2	3
and Arteriosclerosis	1	..	1				
(b) Mania	8	17	25	5. PSYCHONEUROTIC REACTION			
Recurrent Mania	1	2	3	TYPES—			
Acute Mania	3	5	8	Psychoneurosis	5	12	17
(c) Depression	14	13	27				
Acute Depression	..	2	2				
Agitated Depression	2	3	5				
Recurrent Depression	..	1	1				
(d) Dementia (Manic Depressive)	..	1	1	6. MENTAL DEFICIENCY—			
(e) Involutional Psychosis	4	8	12	(a) Mental Deficiency	36	18	54
Involutional Depression	2	5	7	Mental Deficiency with Epi-			
				lepsy	6	6	12
2. SCHIZOPHRENIC REACTION TYPES				Mental Deficiency with Epi-			
(a) Schizophrenia	74	88	162	lepsy (Diplegia)	1	..	1
Schizophrenia (simplex)	1	..	1	Mental Deficiency with Epi-			
Schizophrenia (paranoides)	1	1	2	lepsy (Pituitary Dystrophy)	1	..	1
Schizophrenia Dementia	1	3	4	Mental Deficiency with			
Katatonic Schizophrenia	1	1	2	Schizophrenia)	6	2	8
Schizoid Personality	3	..	3	Mental Deficiency (Arterio-			
Schizophrenia (Hebephrenia)	..	1	1	sclerotic dementia)	..	1	1
(b) Paraphrenia	33	37	70	Mental Deficiency (C2H60) ..	1	..	1
				Mental Deficiency (Mongol)	..	1	1
3. ORGANIC REACTION TYPES—				Mental Deficiency (Moron)	..	1	1
(a) Organic Psychosis	1	1	2	Mental Deficiency (Achondro-			
Organic Psychosis with Epi-				plasia)	..	1	1
lepsy	..	1	1	Mental Deficiency (Spastic			
Organic Psychosis (Dementia)				Pariesis)	..	1	1
(Cerebral Tumour)	1	..	1	Mental Deficiency (Spastic			
Organic Psychosis (Hunting-				Paraplegia)	1	..	1
ton's Chorea)	1	..	1	Mental Deficiency (Hypo-			
Organic Dementia	..	2	2	thyroidism)	..	1	1
Organic Dementia (Hunting-							
ton's Chorea)	1	..	1	(b) Idiocy	..	..	..
Organic Dementia (Paget's)							
Disseminated Sclerosis	..	1	1	(c) Imbecility—			
Post Encephalitic Psychosis	1	..	1	Spastic Paraplegia	1	..	1
(b) <i>Toxins</i> —				Without Epilepsy	1	1	2
Alcoholic Psychosis	15	2	17	Mongolism and Epilepsy ..	1	..	1
Alcoholic Psychosis (Korsa-							
kov's)	1	1	2	(d) Moral Deficiency	6	..	6
Alcoholic Hallucinosi	3	..	3				
Confusional Psychosis	..	5	5	7. TRAUMATIC PSYCHOSIS			
Dementia Paralytica	7	..	7		1	..	1
(c) <i>Degenerative Brain Changes</i> —							
Senile Dementia	27	39	66	8. MON-PSYCHOTIC			
Senile Dementia (C.M.D.)	1	..	1		1	..	1
Senile Psychosis	5	9	14	9. DRUG ADDICTION			
Pre-senile Psychosis	3	6	9		1	..	1
Pre-senile Dementia	..	1	1	10. NOT DIAGNOSED			
Arterio Sclerosis Dementia ..	8	5	13		..	1	1
Arterio Sclerosis Psychosis ..	11	6	17				
					321	336	657

TABLE IV.—BRISBANE MENTAL HOSPITAL.
CAUSES OF DEATHS WHICH OCCURRED DURING PERIOD
ENDING 30TH JUNE, 1948.

	Male.	Female.	Total.
GENERAL DISEASES—			
Diabetes	1	1	2
Diabetic Coma	1	1	2
Carcinoma of Cervix	1	1	2
Carcinoma of Stomach	1	1	2
Carcinoma of Face	1	1	2
Carcinoma of Jaw	1	1	2
Epithelioma of Lower Lip	1	1	2
Bed Sore	1	1	2
Exophthalmia	1	1	2

DISEASES OF NERVOUS SYSTEM—

Succession of Seizures	1	1	2
G.P.I.	1	1	2
Mania	5	2	7
Status Epilepticus	1	3	4
Exhaustion	5	1	6
Katatonie State	1	1	2
Congenital Imbecility	1	1	2
Congenital Mental Deficiency	1	1	2
Acute Confusional Psychosis	1	1	2
Senility	11	3	14
Cerebral Haemorrhage	6	1	7
Amyotrophic Lateral Sclerosis	1	1	2

DISEASES OF CIRCULATORY SYSTEM—

Chronic Cardiac Disease	1	1	2
Congestive Cardiac Failure	4	2	6
Myocardial Degeneration	20	11	31
Cardiovascular Degeneration	5	12	17
Cardiovascular Disease	3	11	14
Rupture Left Ventricle	1	1	2
Coronary Occlusion	1	1	2
Anæmia	1	1	2
Pernicious Anæmia	1	1	2
Disseminated Sclerosis	1	1	2
Auricular Fibrillation	1	3	4
Haemorrhage	1	1	2
Subdural Haemorrhage	1	1	2
Toxæmia	1	1	2

DISEASES OF RESPIRATORY SYSTEM—

Hypostatic Pneumonia	1	1	2
Bronchopneumonia	10	3	13
Pulmonary Oedema	2	2	4
Pulmonary Tuberculosis	3	2	5
Carcinoma of Larynx	1	1	2
Choking due to Inhalation of Vomitus	1	1	2
Mediastinitis	1	1	2

DISEASES OF ALIMENTARY SYSTEM—

Colitis	3	3	6
Carcinoma of Cæcum	1	1	2
Cholecystitis	1	1	2
Peritonitis	1	1	2
Intestinal Obstruction	2	2	4
Hæmatemesis	1	1	2
Abdominal Haemorrhage	1	1	2

DISEASES OF GENITO-URINARY SYSTEM—

Uremia	1	1	2
Nephritis	2	1	3
Coronal Inquiry	1	4	5
	93	86	179

TABLE V.—BRISBANE MENTAL HOSPITAL.
BODILY HEALTH AND CONDITION OF PATIENTS ADMITTED
DURING PERIOD.

	Males.	Female.	Total.
In apparently good health and condition	205	223	428
In indifferent health and reduced condition	98	91	189
In bad health and exhausted condition	18	22	40
	321	336	657

TABLE VI.—BRISBANE MENTAL HOSPITAL.
BIRTHPLACES OF PATIENTS ADMITTED DURING TWELVE MONTHS.

	Males.	Female.	Total.
Queensland	198	222	420
New South Wales	27	27	54
Victoria	9	6	15
South Australia	3	1	4
Tasmania	2	1	3
England	15	22	37
Scotland	11	9	20
Ireland	7	8	15
Wales	2	2	4
United States of America	1	1	2
West Indies	1	1	2
Italy	3	4	7
Germany	3	3	6
Sicily	2	2	4
New Zealand	3	3	6
Egypt	1	1	2
Denmark	2	2	4
Poland	1	1	2
Greece	1	1	2
Shetland Islands	1	1	2
Burma	1	1	2
Holland	1	1	2
Switzerland	1	1	2
Russia	1	1	2
Canada	1	1	2
Malta	1	1	2
Sweden	1	1	2
Unknown	28	28	56
	321	336	657

TABLE VII.—BRISBANE MENTAL HOSPITAL.
DISTRICTS WHENCE PATIENTS WERE RECEIVED DURING
TWELVE MONTHS.

	Males.	Female.	Total.
Northern and North-western Districts	57	39	96
Central Districts	20	25	45
Southern and South-western Districts	244	272	516
	321	336	657

TABLE VIII.—BRISBANE MENTAL HOSPITAL.
AGES OF PATIENTS WHOSE ADMISSIONS, DISCHARGES OR DEATHS OCCURRED DURING THE YEAR, AND OF THOSE WHO
REMAINED IN THE HOSPITAL ON 30TH JUNE, 1948.

Ages.	Admissions.			Discharges.						Deaths.			Remaining.			
				Recovered.			Relieved and not Improved.									
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
der 5 years	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
years and under 10 years	..	..	..	..	..	..	..	..	..	..	..	..	..	10	2	12
years and under 15 years	4	3	7	..	..	..	..	..	..	1	..	1	33	15	48	
years and under 20 years	17	10	27	4	7	11	..	..	..	5	1	6	139	105	244	
years and under 30 years	62	53	115	41	36	77	4	..	4	6	12	18	204	194	398	
years and under 40 years	60	65	125	38	47	85	3	..	3	6	12	18	229	240	469	
years and under 50 years	51	72	123	39	39	78	3	4	7	9	8	17	212	215	427	
years and under 60 years	52	54	106	25	35	60	2	2	4	13	9	22	150	139	289	
years and under 70 years	32	37	69	11	16	27	..	2	2	15	20	35	73	85	158	
years and under 80 years	23	28	51	4	7	11	..	..	..	20	18	38	23	29	52	
years and under 90 years	16	14	30	2	1	3	..	..	..	21	16	37	1	3	4	
years and over	2	..	2	..	..	..	..	..	..	3	2	5	2	..	2	
known	2	..	2	..	..	..	..	..	..	..	..	..	2	..	2	
Totals	321	336	657	164	188	352	12	8	20	93	86	179	1,077	1,027	2,104	

TABLE IX.—BRISBANE MENTAL HOSPITAL.
OCCUPATIONS OF PATIENTS ADMITTED DURING THE TWELVE MONTHS.

	Male.	Female.	Total.		Male.	Female.	Total.
Auctioneer	1	..	1	Mission brother	1	..	1
Bank manager	2	..	2	Music teacher	..	1	1
Barmaid	..	2	2	Machinist	..	1	1
Bookbinder	..	1	1	Manager	1	..	1
Book-keeper	1	..	1	Meatworker	1	..	1
Boundary rider	1	..	1	Motor body builder	1	..	1
Butcher	3	..	3	Moulder	1	..	1
Builder	1	..	1	Nil	21	23	44
Bullock driver	1	..	1	Nurse	..	4	4
Bridge engineer	1	..	1	Office cleaner	..	1	1
Boot repairer	1	..	1	Packer	1	..	1
Cabinet maker	2	..	2	Paint miller	1	..	1
Cane cutter	3	..	3	Pensioner	52	39	91
Cane farmer	3	..	3	Plumber	1	..	1
Carpenter	2	..	2	Prisoner	3	1	4
Carrier	1	..	1	Presser	1	..	1
Casual worker	..	1	1	Plasterer	1	..	1
Child	4	2	6	Police constable	1	..	1
Cleaner	1	1	2	Photographic tinter	..	1	1
Clerk	3	3	6	Radio engineer	1	..	1
Commission agent	..	1	1	Railway ganger	1	..	1
Cook	2	1	3	Railway fitter	1	..	1
Council employee	1	..	1	Railway guard	4	..	4
Domestic duties	..	209	209	Railway employee	2	..	2
Dressmaker	..	1	1	Ring-barker	1	..	1
Dairy farmer	4	..	4	Shop assistant	3	2	5
Draper	1	..	1	School teacher	..	4	4
Engine driver	2	..	2	Shearer	1	..	1
Electric welder	1	..	1	Stenographer	..	1	1
Farmer	24	1	25	Salesman	2	..	2
Farm hand	5	..	5	Soldier	1	..	1
Fireman	2	..	2	Station hand	3	1	4
Fisherman	2	..	2	Stockman	1	..	1
Gardener	3	..	3	Storeman	2	..	2
Grazier	1	..	1	Sawmill worker	1	..	1
Housekeeper	..	1	1	Seaman	3	..	3
Harbour board	1	..	1	Shed hand	1	..	1
Housemaid	..	2	2	Salvation Army	..	1	1
Hairdresser	1	..	1	Tailor	1	2	3
Hawker	1	..	1	Travelling salesman	1	..	1
Kitchenmaid	..	1	1	Typiste	..	5	5
Laboratory assistant	1	..	1	Timber cutter	2	..	2
Labourer	64	..	64	Unknown	42	16	58
Laundress	..	1	1	Waitress	..	5	5
Loom turner	1	..	1	Waterside worker	5	..	5
Mechanic	1	..	1	Waiter	1	..	1
Miner	3	..	3				
Mining prospector	1	..	1				
Minister of religion	1	..	1				
					321	336	657

TABLE X.—BRISBANE MENTAL HOSPITAL.

CONDITION AS TO MARRIAGE OF PATIENTS WHOSE ADMISSIONS, DISCHARGES AND DEATHS OCCURRED DURING THE YEAR, AND THOSE WHO REMAINED IN THE HOSPITAL ON 30TH JUNE, 1948.

Condition as Regards Marriage.	Admissions.			Discharges.						Deaths.			Remaining.		
				Recovered.			Relieved and Not Improved.								
	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.
Single	191	121	312	99	63	162	5	2	7	40	31	71	838	499	1,337
Married	90	151	241	53	99	152	7	3	10	33	28	61	183	379	562
Widowed	20	59	79	5	22	27	..	3	3	18	26	44	25	136	161
Divorced	3	4	7	3	4	7	..	..	..	..	1	1	11	8	19
Unknown	17	1	18	4	..	4	..	..	..	2	..	2	20	5	25
	321	336	657	164	188	352	12	8	20	93	86	179	1,077	1,027	2,104

TABLE XI.—BRISBANE MENTAL HOSPITAL.

LENGTH OF RESIDENCE IN THE HOSPITAL OF THE PATIENTS WHO WERE DISCHARGED OR WHO DIED DURING THE YEAR AND OF THOSE WHO REMAINED ON THE BOOKS OF THE HOSPITAL ON 30TH JUNE, 1948.

Length of Residence.	Discharges.						Deaths.			Remaining.		
	Recovered.			Relieved and not Improved.								
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Under 1 month	9	7	16	..	..	..	21	19	40	26	23	49
1 month and under 3 months	23	31	54	3	..	3	14	9	23	46	52	98
3 months and under 6 months	57	46	103	2	..	2	9	7	16	57	60	117
6 months and under 9 months	25	37	62	2	3	5	7	5	12	42	46	88
9 months and under 12 months	13	17	30	2	2	4	9	4	13	36	36	72
1 year and under 2 years	20	23	43	2	2	4	5	8	13	93	96	189
2 years and under 3 years	9	8	17	1	1	2	1	7	8	62	81	143
3 years and under 5 years	4	11	15	..	..	..	6	6	12	119	118	237
5 years and under 7 years	1	2	3	..	..	..	2	4	6	82	95	177
7 years and under 10 years	1	3	4	..	..	..	3	5	8	110	138	248
10 years and under 12 years	..	1	1	..	..	..	2	1	3	73	59	132
12 years and under 15 years	..	2	2	..	..	..	5	..	5	91	65	156
15 years and under 20 years	1	..	1	..	..	..	2	5	7	66	67	133
20 years and over	1	..	1	..	..	..	7	6	13	174	91	265
	164	188	352	12	8	20	93	86	179	1,077	1,027	2,104

TABLE XII.—BRISBANE MENTAL HOSPITAL.

QUANTITIES OF VEGETABLES AND FARM PRODUCE, 1948.

	Tons.
Garden Vegetables	157
Potatoes	38
Pumpkins and Turnips	27
Chaff	50
Ensilage	240
Lucerne hay	105
Green feed	442

TABLE XIII.

EXPENDITURE TABLE—BRISBANE MENTAL HOSPITAL.

Average number of daily residents during the twelve months 1,954

	£	s.	d.
Total expenditure	260,523	16	2
Maintenance collected by Public Curator	34,463	16	9
Sales	2,320	3	2
Net Expenditure	223,739	16	3
Gross cost per patient per annum	133	6	7
Net cost per patient per annum	114	10	8
Gross cost per patient per week	2	11	3
Net cost per patient per week	2	4	1

REPATRIATION PAVILION, WACOL.

This modern block for the segregate treatment of ex-servicemen patients is situated in separate grounds adjacent to the Brisbane Mental Hospital. The opening ceremony was performed by His Excellency the Governor, Sir John Lavarack, on the 26th January, 1948, in the presence of the Honourable the Minister for Health and Home Affairs and a large and representative gathering of Commonwealth and State officials and other representative members of the public.

During the construction of these buildings close liaison was maintained between the Commonwealth and State officers both on the medical and architectural and constructional services, and a paternal interest in the patients has been shown by the Repatriation authorities since the building has been occupied.

The Minister for Repatriation has visited this pavilion, whilst the Deputy Commissioner for Repatriation, senior medical officer, and other members of their staff have regularly visited here. The educational officers and occupational therapists from the Repatriation have also co-operated with our administrative and nursing staffs for the benefit of the patients in this block.

A higher standard of food and clothing has been provided; billiard tables for indoor recreation have been provided by the Red Cross Society and through the agency of Mrs. Edgar

Robinson, while the outdoor panorama has been considerably improved by the provision of large areas of turfed lawns and garden plots.

In this pavilion there is one central block containing the kitchen and dining-room, &c. The meals are prepared in the kitchen and served direct therefrom. The appointments in the kitchen are of a very high standard, as are the ancillary services such as cold storage and preparation rooms. The dining-room appointments are quite modern, and the service is on the cafeteria style. The consensus of opinion is that the quality of the meals and service is in keeping with the high standard of the appointments of the kitchen and dining-room.

In the clothing of these patients every effort is being made to make their dress as much individual and as little institutional as possible.

The staff of this block consists wholly of ex-servicemen, Mr. G. S. L. Burns being transferred from the Ipswich Mental Hospital as administrative officer, while Mr. S. J. Stormonth, Head Male Nurse, was also transferred from Ipswich to Wacol.

In June of this year the Australasian Association of Psychiatrists spent a day of their annual conference at this pavilion. A coloured film showing the high lights of this block and also of the Brisbane Mental Hospital was exhibited during this conference to illustrate some of their modern features.

TOOWOOMBA MENTAL HOSPITAL.

C. R. BOYCE, M.B. (Syd.), Medical Superintendent.

The period of twelve months from 1st July, 1947, to 30th June, 1948, has been one of continued improvement in the living conditions of the patients and in the working conditions of the staff. Despite the prevailing shortage of essential materials and an acute shortage of staff, the results we have obtained are truly astounding.

Many works are in active operation, many are in process of construction, and more are projected for the future. The response to them is pleasing, and is evidenced by the good health, the happy state, and the excellent behaviour of the patients.

A number of ex-staff members have visited us and all have remarked on the changes in the environments of the patients and on the appearance and quiet contentment of the patients.

It is not possible to remark individually on the various works, so each must speak for itself in the following tabulation:—

1. *Patients' Entertainment*:—

Diversions provided include—

- (a) Weekly talkies (new double-header equipment);
- (b) Weekly orchestral dances;
- (c) Visits from C.W.A., R.S.S.A.I.L.A., and concert parties;
- (d) Visits to town by patients to Toowoomba Show, on Christmas Eve, and such visits encouraged all the year for shopping, &c.;
- (e) Pianos and cards and billiards and cards for female and male patients, respectively, in the wards;
- (f) Visits by relatives are encouraged and they may come any day and at any time.

2. *Dietary*.—Excellent meals, well cooked and prepared, mixed, palatable, and nourishing, are provided.

Kitchen facilities have been improved by the provision of—

- (a) Electric cake mixer (new);
- (b) Electric potato peeler (new);
- (c) Electric fish friers (new);
- (d) Several new steam cookers;
- (e) New scullery floor, projected new kitchen floor, repainting of the kitchen interior, new bins provided for flour, porridge, and sugar;
- (f) A bread room has been built and furnished with cupboards and a new electric bread cutter.

3. *Vegetable Garden and Farm*.—The former has been increased from 9 to 30 acres, and vegetable production has jumped from 55 to 161 tons.

A motor rotary hoe and irrigation have been provided and an air-raid shelter has been converted into a comfortable shed with shower and septic sewerage for the vegetable gardener's staff and for the housing of their tools and machinery.

Further mechanisation and staff are desirable, and some day it is hoped that our vegetable garden will supply the other mental hospitals and Government institutions.

On the farm we have been handicapped by not receiving the expected motor tractor, but progress has been good.

The milking herd has been increased from 66 to 85 cows, giving each patient a minimum of $\frac{1}{2}$ pint of milk per day.

An additional area of 38 acres has been cultivated in the Police Paddock, and extensive fencing work done; more is in progress and more projected.

Mechanical help is urgently required, and the provision of milking machines, tractor, sundereut, &c., will result in further benefit to the patients.

4. *Grounds*.—Considerable improvements have been made in the environments of the patients on the advice of Mr. Rose, Acting Superintendent of Institutional Gardens, by lopping of trees, removal of dead and dangerous trees, and by the planting of new trees, shrubs, and flowering plants.

A number of citrus fruit trees (orange, lemon, and mandarin) have been planted and an experimental plot for stone fruit (peach, plum, apricot, nectarine) has been laid out by Mr. Richardson, of the Department of Agriculture and Stock.

It is hoped that under his supervision, and pruning and spraying suggestions, we may again produce the fruit for which Toowoomba was once famed.

Beautification of the grounds and ward yards is vigorously in progress, and new rose bushes, gladioli, ranunculus, anemone, and other bulb flowers have been planted.

5. *Wards*.—Amenities for the patients and staff have been provided as follows:—

- (a) Electric floor polishers.
- (b) Electric clocks.
- (c) Electric refrigerators.
- (d) Electric coffee urns.
- (e) Electric sterilisers.
- (f) Electric hair clippers.
- (g) Two modern barbers' chairs.

6. *Administrative Block*.—The Public Works Department are well advanced in the construction of the new automatic telephone exchange and the new lecture room.

An electric hot-water system and a water softener have been installed, and these cater for the matron's quarters, the locum tenen's flat, and the dispensary.

7. *Engineer's Department*.—A coal-burning boiler has been installed, a lathe and other machinery installed, many improvements made to the laundry, the plumbers given a much better shop, and more modern devices installed for the blacksmith, who soon hopes to have an electric welding plant.

The carpenters have electrically driven band and bench saws, and the painter now has his own shop.

Considerable improvements are planned for the comfort and convenience of these artisans, and the bootmaker and mattress-maker are awaiting the arrival of their modern equipment.

8. *Works*.—Considerable building operations are envisaged in the near future—

- (a) Extension of nurses' quarters;
- (b) Occupational and industrial therapy block for female patients;

- (c) Extension to the store to carry a kitchen annex;
 (d) Establishment of canteen for patients, visitors, and staff;
 (e) Hairdressing saloon for all patients and for the staff;
 (f) Two new roads have been built and bitumening of all roads is under negotiation.

9. *Admissions*.—For the first time in the history of this hospital the admissions for one year have reached 100. This is a large increase when it is considered that eight years ago the total was only 65.

10. *Psychiatric Clinic*.—This functions actively, and is much appreciated by the medical practitioners of Toowoomba and district.

It partly accounts for the increased admissions, for we are getting more and more voluntary patients through it. These come for special treatment, and viewed from the prophylactic point must result in an economy to the State.

11. *Extra Medical Officer*.—With the increased numbers under treatment it has been considered necessary to budget for a third doctor on the staff.

12. *Bedding and Clothing*.—All patients now receive five blankets in winter (previously three) and bedding comforts are increased by the efforts of the mattress-maker (new appointment) and by the new fibre-teasing machine which is now in operation.

In conclusion, no surprise should be occasioned to state that during the year a changeover from 110 D.C. to 240 A.C. was made, and this has made possible the provision of so many electrically-driven machines.

TABLE I.

TOOWOOMBA MENTAL HOSPITAL.

ADMISSIONS, RE-ADMISSIONS, DISCHARGES, DEATHS, DURING THE YEAR ENDING 30TH JUNE, 1948.

	Males.	Fe-males.	Total.
On books of hospital on 30th June, 1947	628	627	1,255
Admitted for the first time ..	34	38	72
Readmitted	13	15	28
Transferred from Brisbane ..	27	16	43
Transferred from Ipswich ..	1	..	1
	75	69	144
Total under care ..	703	696	1,399
Discharged, died, transferred—			
Discharged—Recovered ..	11	10	21
Discharged—Relieved ..	20	14	34
Discharged—Not improved ..	4	4	8
Discharged—Section 49 ..	5	5	10
Transferred to Brisbane ..	1	3	4
Transferred to Ipswich ..	1	..	1
Transferred to Wacol ..	9	..	9
Died	30	20	50
Total discharged, died, &c. ..	81	56	137
Remaining on books on 30th June, 1948	622	640	1,262
Average number daily resident ..	610	606	1,216
Number on leave of absence on 30th June, 1948	4	20	24

TABLE II.

ADMISSIONS, DISCHARGES, AND DEATHS WITH THE PROPORTIONS OF RECOVERIES AND DEATHS PER CENT. DURING YEAR ENDED 30TH JUNE, 1948.

—	Admitted (including Transfers from Townsville.	Admitted.	Discharged.			Died.	Re-maining on 30th June, 1948.	Average Number Daily Resident.	Percentage of Recoveries on Admissions.	Percentage of Patients Relieved.	Percentage of Deaths on Average Number Resident.
			Recovered.	Relieved.	Not Improved.						
Males ..	34	13	16	20	4	30	622	610	34.04	42.55	4.9
Females ..	38	15	15	14	4	20	640	606	28.3	26.41	3.3
Total ..	72	28	31	34	8	50	1,262	1,216	31.00	34.00	4.11

TABLE III.

FORMS OF MENTAL DISORDERS IN PATIENTS ADMITTED DURING THE TWELVE MONTHS.

	Males.	Fe-males.	Total.
1. AFFECTIVE REACTION TYPES—			
Acute Melancholia	3	11	14
Simple Melancholia	..	2	2
M. D. with Alcoholism ..	1	..	1
Acute Mania	7	7	14
2. SCHIZOPHRENIC REACTION TYPES—			
Schizophrenia	2	6	8
Paraphrenia	..	3	3
3. EPILEPTIC REACTION TYPES—			
Epileptic Psychosis	3	..	3
Epilepsy without Psychosis ..	1	..	1
4. ORGANIC REACTION TYPES—			
Disseminated Sclerosis with Psychosis	..	1	1
Parkinsonism with Psychosis ..	1	..	1
Acute Encephalitis with Psychosis	1	..	1
Arteriosclerosis	3	2	5
Chronic Alcoholism	3	3	6

TABLE III.—continued.

	Males.	Fe-males.	Total.
Alcoholic Acute Hallucinosi ..	4	..	4
Chronic Alcoholism with Korsakoff's Psychosis ..	..	1	1
Drug Addiction	..	1	1
Cerebral Trauma	2	..	2
Senile Psychosis	7	4	11
5. PSYCHONEUROTIC REACTION TYPES—			
Anxiety Neurosis	2	6	8
Hysteria	1	..	1
6. MENTAL DEFICIENCY—			
Idiot	1	..	1
Imbecile	1	..	1
Mongolism	..	1	1
Feeble Minded	3	2	5
SCHIZOID PERSONALITY	..	1	1
PERSONALITY DEFECT	..	1	1
REACTIVE PSYCHOSIS	1	..	1
NO PSYCHOSIS	..	1	1
Total	47	53	100

TABLE IV.—TOOWOOMBA MENTAL HOSPITAL.
CAUSES OF DEATHS DURING THE TWELVE MONTHS
ENDING 30TH JUNE, 1948.

	Males.	Fe- males.	Total.
GENERAL DISEASES—			
Senility	..	1	1
DISEASES OF NERVOUS SYSTEM—			
Cerebral Haemorrhage	1	..	1
Cerebral Thrombosis	2	1	3
Hemiplegia	..	3	3
Cerebral Degeneration	2	2	4
Cerebral Compression and Intra- cranial Haemorrhage	1	..	1
Acute Epilepsy	1	..	1
DISEASES OF CIRCULATORY SYSTEM—			
Acute Myocarditis	3	3	6
Chronic Myocarditis	1	..	1
Coronary Occlusion	1	..	1
Myocarditis	10	3	13
Aortic Regurgitation (Endo- carditis)	1	..	1
DISEASES OF RESPIRATORY SYSTEM—			
Broncho Pneumonia	2	3	5
Hypostatic Pneumonia	1	2	3
Lobar Pneumonia	4	..	4
Pulmonary Tuberculosis	..	1	1
DISEASES OF ALIMENTARY SYSTEM—			
Carcinoma of the Stomach	..	1	1
	30	20	50

TABLE V.—TOOWOOMBA MENTAL HOSPITAL.
BODILY HEALTH AND CONDITION OF PATIENTS ADMITTED
DURING TWELVE MONTHS.

	Males.	Fe- males.	Total.
In apparently good health and condition	31	31	62
In indifferent health and reduced condition	10	21	31
In bad health and exhausted condition	6	1	7
	47	53	100

TABLE VI.—TOOWOOMBA MENTAL HOSPITAL.
BIRTHPLACES OF PATIENTS ADMITTED
DURING THE YEAR.

	Males.	Fe- males.	Total.
Queensland	26	44	70
New South Wales	6	4	10
Victoria	3	1	4
South Australia	1	..	1
England	4	1	5
Scotland	1	1	2
Ireland	1	1	2
South Africa	1	..	1
Italy	..	1	1
Unknown	4	..	4
	47	53	100

TABLE VI.—TOOWOOMBA MENTAL HOSPITAL.

DISTRICTS WHENCE PATIENTS WERE ADMITTED DURING THE TWELVE MONTHS ENDING 30TH JUNE, 1948.

	Males.	Fe- males.	Total.
Northern and north-western Districts	..	..	..
Central Districts	..	..	..
Southern and south-western Districts	35	34	69
Toowoomba District	12	19	31
	47	53	100

TABLE VII.—TOOWOOMBA MENTAL HOSPITAL.

AGES OF PATIENTS WHOSE ADMISSIONS, DISCHARGES OR DEATHS OCCURRED DURING THE YEAR, AND OF THOSE WHO
REMAINED IN THE HOSPITAL ON 30TH JUNE, 1948.

Ages.	Admissions.			Discharges.						Deaths.			Remaining.			
				Recovered.			Relieved and not Improved.									
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
Under 5 years	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5 years and under 10 years	1	..	1	..	..	..	1	..	1	..	..	..	1	2	..	..
10 years and under 15 years	..	..	..	..	..	..	..	..	..	..	..	..	4	4	..	..
15 years and under 20 years	..	2	2	..	1	1	..	..	..	1	..	1	6	..	..	..
20 years and under 30 years	5	7	12	1	..	1	3	5	8	1	..	1	31	23	5	..
30 years and under 40 years	10	11	21	2	2	4	7	10	17	1	2	3	80	67	14	..
40 years and under 50 years	9	11	20	3	2	5	6	1	7	2	1	3	130	120	250	..
50 years and under 60 years	11	8	19	4	4	8	8	5	13	4	2	6	149	173	322	..
60 years and under 70 years	7	7	14	1	1	2	3	2	5	6	4	10	115	141	256	..
70 years and under 80 years	3	7	10	..	..	..	1	..	1	8	8	16	86	85	171	..
80 years and under 90 years	1	..	1	..	..	..	..	..	..	6	2	8	17	21	38	..
90 years and over	..	..	..	..	..	..	..	..	..	1	1	2	..	1	..	..
Unknown	..	..	..	..	..	..	..	..	..	..	..	..	3	3	..	..
	47	53	100	11	10	21	29	23	52	30	20	50	622	640	1,262	

TABLE IX.—TOOWOOMBA MENTAL HOSPITAL.
PREVIOUS OCCUPATIONS OF PATIENTS ADMITTED DURING THE TWELVE MONTHS.

	Males.	Fe- males.	Total.		Males.	Fe- males.	Total.
Accountant	1	..	1	Motor driver	1	..	1
A.I.F.	1	..	1	Newsagent	1	..	1
Builder and carpenter	1	..	1	Nil	5	5	10
Clerk	..	1	1	Nurse	..	2	2
Cook	..	2	2	Orchardist	1	..	1
Dairy farmer	1	..	1	Painter	1	..	1
Domestic	..	6	6	Pensioner	2	1	3
Domestic duties	..	4	4	Plumber	1	..	1
Driver	1	..	1	Post mistress	..	1	1
Electrical engineer	1	..	1	Poultry farmer	1	..	1
Farmer	7	..	7	Quarryman	1	..	1
Fettler	1	..	1	Retired	2	..	2
Foundry worker	1	..	1	Saleswoman	..	1	1
Gardener	1	..	1	Salughterman	1	..	1
Grazier	2	..	2	Station hand	1	..	1
Home duty	..	4	4	Station labourer	1	..	1
Housekeeper	..	1	1	Truck driver	1	..	1
Housewife	..	20	20	Unknown	1	..	1
Household duties	..	2	2	Waitress	..	1	1
Household keeper	..	1	1				
Invalid pensioner	1	1	2				
Labourer	7	..	7		47	53	100

TABLE X.—TOOWOOMBA MENTAL HOSPITAL.
CONDITION AS TO MARRIAGE OF PATIENTS WHOSE ADMISSIONS, DISCHARGES AND DEATHS OCCURRED DURING THE YEAR, AND THOSE WHO REMAINED IN THE HOSPITAL ON 30TH JUNE, 1948.

Condition as Regards Marriage.	Admissions.			Discharges.						Deaths.			Remaining.		
				Recovered.			Relieved and Not Improved.								
	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.
Single	21	16	37	3	1	4	16	6	22	18	4	22	504	337	841
Married	19	28	47	6	6	12	8	14	22	10	10	20	79	244	323
Widowed	5	8	13	2	3	5	4	3	7	1	5	6	15	41	56
Divorced	1	1	2	..	..	..	..	..	..	..	1	1	4	13	17
Unknown	1	..	1	..	..	..	..	..	..	1	..	1	20	5	25
	47	53	100	11	10	21	28	23	51	30	20	50	622	640	1,262

TABLE XI.—TOOWOOMBA MENTAL HOSPITAL.
LENGTH OF RESIDENCE IN THE HOSPITAL OF THE PATIENTS WHO WERE DISCHARGED OR WHO DIED DURING THE YEAR AND OF THOSE WHO REMAINED ON THE BOOKS OF THE HOSPITAL ON 30TH JUNE, 1948.

Length of Residence.	Discharges.									Deaths.			Remaining.		
	Recovered.			Section 49.			Relieved and Not Improved.								
	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.
Under 1 month ..	5	1	6	..	..	..	9	10	19	2	..	2	17	5	22
1 month and under 3 months ..	2	2	4	..	..	..	5	3	8	2	1	3	4	6	10
3 months and under 6 months ..	2	4	6	..	1	1	4	2	6	1	1	2	6	10	16
6 months and under 9 months ..	..	..	..	..	..	..	3	1	4	1	1	2	17	8	25
9 months and under 12 months ..	..	1	1	..	..	..	..	1	1	1	2	3	3	4	7
1 year and under 2 years ..	1	2	3	3	1	4	1	..	1	4	2	6	38	44	82
2 years and under 3 years ..	1	..	1	1	1	2	..	..	..	1	1	2	43	20	63
3 years and under 5 years ..	..	..	..	..	1	1	..	1	1	2	..	2	29	37	66
5 years and under 7 years ..	..	..	..	1	..	1	1	..	1	2	..	2	76	24	100
7 years and under 10 years ..	..	..	..	..	..	..	1	..	1	2	3	5	61	55	116
10 years and under 12 years ..	..	..	..	..	..	..	..	..	..	1	1	2	19	36	55
12 years and under 15 years ..	..	..	..	..	..	..	..	..	..	..	2	2	44	82	126
15 years and under 20 years ..	..	..	..	..	..	..	..	..	..	1	2	3	64	84	148
20 years and over ..	..	..	..	..	1	1	..	..	..	10	4	14	201	225	426
	11	10	21	5	5	10	24	18	42	30	20	50	622	640	1,262

TABLE XII.—TOOWOOMBA MENTAL HOSPITAL.

QUANTITIES OF VEGETABLES AND FARM PRODUCE.

Pumpkins	4 tons
Wheat Hay	90 tons
Oaten Hay	30 tons
Lucerne Hay	5 tons
Silage	400 tons
Sorghum	15 tons
Garden Vegetables	161½ tons
Milk	44,254 gallons

TABLE XIII.—TOOWOOMBA MENTAL HOSPITAL.
EXPENDITURE TABLE.

	Males.	Fe- males.	Total.
Average number daily resident during the twelve months ..	610	606	1,216
Total expenditure	£ 134,004	s. 2	d. 2
Maintenance collected by Public Curator ..	11,741	6	2
Sales	790	7	5
Net expenditure	121,472	8	7
Gross cost per patient per annum ..	110	4	0
Net cost per patient per annum ..	99	17	11
Gross cost per patient per week ..	2	2	4
Net cost per patient per week ..	1	18	5

IPSWICH MENTAL HOSPITAL.

W. P. H. PARKER, L.R.C.P. & S. (Irel.), Medical Superintendent.

The general health of the patients has been satisfactory and there were no serious epidemics.

Patients have been entertained with dances, talking pictures, band and concert parties.

The local sub-branch of the R.S.S.A.I.L.A. have continued their hospitality to the returned soldier patients.

The Red Cross Society continues to donate gifts to the returned soldier patients weekly.

The staff orchestra supplied the music for the patients' fortnightly dances.

The clergy of the various denominations visited our sick patients and religious services were held regularly.

The visiting dentist (Mr. McKenna) attends to the patients each fortnight.

The Official Visitors and the Director of Mental Hygiene have visited the hospital regularly.

No magisterial inquiries were held during the year.

Three male patients absconded during the year. All were recaptured within a few hours.

A shortage of female nurses still exists, but the employment of male assistants in the female wards is relieving the situation.

During the year the visiting magistrate, Mr. J. J. Leahy, died and was succeeded by Mr. G. A. Cameron, and Dr. F. C. Turnbull was appointed to fill the vacancy caused by the death of Dr. Connolly.

I regret to record the death of Male Nurse A. Pringle on 1st July, 1948.

TABLE I.—MENTAL HOSPITAL, IPSWICH.
ADMISSIONS, RE-ADMISSIONS, DISCHARGES AND DEATHS
DURING THE YEAR ENDING 30TH JUNE, 1948.

	Males.	Fe- males.	Total.
On books of Hospital on 30th June, 1947	370	167	537
Admitted for the first time ..	12	8	20
Readmitted	1	..	1
Transferred from Toowoomba ..	1	..	1
Transferred from Brisbane ..	14	4	18
Transferred from Townsville ..	..	..	..
	28	12	40
Total under care	398	179	577
Discharged, died, transferred—			
Discharged, recovered	3	2	5
Discharged, relieved	..	..	..
Discharged, not improved ..	..	..	..
Discharged, Section 49	..	..	..
Transferred to Toowoomba ..	1	..	1
Transferred to Brisbane ..	3	4	7
Transferred to Townsville ..	..	..	..
Died	20	6	26
Total Discharged, Died, etc. ..	27	12	39
Remaining on the books on 30th June, 1948	371	167	538
Average number daily resident ..	373	166	539
Number on leave of absence on 30th June, 1948	..	..	..

TABLE II.—MENTAL HOSPITAL, IPSWICH
FORMS OF MENTAL DISORDERS IN PATIENTS ADMITTED
DURING THE YEAR.

	Males.	Fe- males.	Total.
Congenital Mental Deficiency ..	4	3	7
Congenital Mental Deficiency with Epilepsy	1	..	1
Congenital Mental Deficiency—Idiocy	2	..	2
Congenital Mental Deficiency—Imbecility	6	5	11
	13	8	21

TABLE III.—MENTAL HOSPITAL, IPSWICH.
CAUSES OF DEATHS DURING THE YEAR ENDING
30TH JUNE, 1948.

	Males.	Fe- males.	Total.
Acute Colitis	..	1	1
Acute Lobar Pneumonia	..	1	1
Anaemia	1	..	1
Broncho Pneumonia	2	2	4
Cerebral Haemorrhage	1	..	1
Chronic Colitis	1	..	1
Congenital Cardiac Failure	..	1	1
Epilepsy	1	..	1
Gastro-enteritis	1	..	1
General Paralysis of the Insane	1	..	1
Myocardial Degeneration	2	..	2
Myocarditis	6	1	7
Senile Myocardial Degeneration	1	..	1
Spastic Paralysis	1	..	1
Status Epilepticus	2	..	2
	20	6	26

TABLE IV.—MENTAL HOSPITAL, IPSWICH.
BODILY HEALTH AND CONDITION OF PATIENTS ADMITTED
DURING THE YEAR.

	Males.	Fe- males.	Total.
In apparently good health and con- dition	9	5	14
In indifferent health and reduced condition	3	3	6
In bad health and exhausted con- dition	1	..	1
	13	8	21

TABLE V.—MENTAL HOSPITAL, IPSWICH.
BIRTHPLACES OF PATIENTS ADMITTED DURING THE YEAR.

	Males.	Fe- males.	Total.
Brisbane	2	3	5
Cairns	1	..	1
Eidsvold	..	1	1
Gympie	1	..	1
Kingaroy	1	..	1
Lowood	1	..	1
Mackay	1	..	1
New South Wales	1	..	1
Queensland	2	1	3
Taroom	..	1	1
Toowoomba	1	..	1
Wynnum	..	1	1
Unknown	2	1	3
	13	8	21

TABLE VI.—MENTAL HOSPITAL, IPSWICH.
DISTRICTS WHENCE PATIENTS WERE RECEIVED DURING
THE YEAR ENDING 30TH JUNE, 1948.

	Males.	Fe- males.	Total.
Northern and north-western Dis- tricts	1	1	2
Central Districts	..	..	..
Southern and south-western Dis- tricts	12	7	19
	13	8	21

TABLE VII.—MENTAL HOSPITAL, IPSWICH.
PREVIOUS OCCUPATIONS OF PATIENTS ADMITTED DURING
THE YEAR.

	Males.	Fe- males.	Total.
Nil (children)	13	8	21
	13	8	21

TABLE VIII.—MENTAL HOSPITAL, IPSWICH.

AGES OF PATIENTS WHOSE ADMISSIONS, DISCHARGES OR DEATHS OCCURRED DURING THE YEAR, AND OF THOSE WHO
REMAINED IN THE HOSPITAL ON THE 30TH JUNE, 1947.

Ages.	Admissions.			Discharges.						Deaths.			Remaining.		
				Recovered.			Relieved and not Improved.								
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
or 5 years	4	3	7	..	..	..	..	..	..	1	2	3	8	6	14
ears and under 10 years	7	2	9	..	..	..	..	..	..	4	..	4	27	10	37
ears and under 15 years	1	3	4	1	..	1	..	..	..	1	..	1	11	16	27
ears and under 20 years	1	..	1	..	1	1	..	..	..	2	..	2	8	10	18
ears and under 30 years	..	..	..	..	..	..	..	..	..	..	..	..	14	13	27
ears and under 40 years	..	..	..	1	..	1	..	..	..	1	..	1	34	17	51
ears and under 50 years	..	..	..	..	..	..	..	..	..	..	2	2	60	27	87
ears and under 60 years	..	..	..	1	..	1	..	..	..	1	..	1	96	24	120
ears and under 70 years	..	..	..	..	..	..	..	..	..	2	1	3	59	29	88
ears and under 80 years	..	..	..	..	1	1	..	..	..	5	..	5	37	13	50
ears and under 90 years	..	..	..	..	..	..	..	..	..	3	..	3	16	2	18
ears and over	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
nown	..	..	..	..	..	..	..	..	..	..	1	1	1	..	1
	13	8	21	3	2	5	..	..	..	20	6	26	371	167	538

TABLE IX.—MENTAL HOSPITAL, IPSWICH.

CONDITIONS AS TO MARRIAGE OF PATIENTS WHOSE ADMISSIONS, DISCHARGES AND DEATHS OCCURRED DURING THE YEAR,
AND THOSE WHO REMAINED IN THE HOSPITAL ON 30TH JUNE, 1948.

Condition as Regards Marriage.	Admissions.			Discharges.						Deaths.			Remaining.		
				Recovered.			Relieved and Not Improved.								
	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.
Single	13	8	21	2	2	4	..	..	..	17	6	23	292	99	391
Married	..	..	..	1	..	1	..	..	..	2	..	2	60	52	112
Widowed	..	..	..	..	..	..	..	..	..	1	..	1	6	9	15
Divorced	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3
Unknown	..	..	..	..	..	..	..	..	..	..	..	..	13	4	17
	13	8	21	3	2	5	..	..	..	20	6	26	371	167	538

TABLE X.—MENTAL HOSPITAL, IPSWICH.

LENGTH OF RESIDENCE IN THE HOSPITAL OF THE PATIENTS WHO WERE DISCHARGED OR WHO DIED DURING
THE YEAR AND OF THOSE WHO REMAINED ON THE BOOKS OF THE HOSPITAL ON 30TH JUNE, 1948.

—	Discharges.									Deaths.			Remaining.		
	Recovered.			Section 49.			Relieved and Not Improved.			Males.	Fe- males.	Total.	Males.	Fe- males.	Total.
	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.						
Under 1 month ..	..	..	..	..	..	..	..	..	..	2	1	3	3	1	4
1 month and under 3 months ..	..	..	..	..	..	..	..	..	..	1	..	1	2	..	2
3 months and under 6 months ..	..	..	..	..	..	..	..	..	..	2	..	2	..	2	2
6 months and under 9 months ..	1	..	1	..	..	..	..	..	..	1	1	2	6	2	8
9 months and under 12 months ..	..	..	..	..	..	..	..	..	..	..	..	..	10	3	13
1 year and under 2 years ..	1	..	1	..	..	..	..	..	..	2	..	2	26	9	35
2 years and under 3 years ..	..	1	1	..	..	..	..	..	..	..	..	..	21	12	33
3 years and under 5 years ..	1	..	1	..	..	..	..	..	..	2	2	4	50	29	79
5 years and under 7 years ..	..	..	..	..	..	..	..	..	..	1	..	1	32	17	49
7 years and under 10 years ..	..	..	..	..	..	..	..	..	..	2	1	3	39	12	51
10 years and under 12 years ..	..	..	..	..	..	..	..	..	..	..	..	..	24	14	38
12 years and under 15 years ..	..	..	..	..	..	..	..	..	..	..	..	..	41	17	58
15 years and under 20 years ..	..	..	..	..	..	..	..	..	..	1	..	1	25	9	34
20 years and over ..	..	1	1	..	..	..	..	..	..	6	1	7	92	40	132
Totals ..	3	2	5	..	..	..	..	..	..	20	6	26	371	167	538

TABLE XI.—MENTAL HOSPITAL, IPSWICH.

QUANTITIES OF VEGETABLES AND FARM PRODUCE, 1948.

	T.	C.	Q.	Lbs.
Bush Hay	75	0	0	0
Ensilage	65	0	0	0
Garden vegetables ..	37	5	3	6
Green feed	109	10	0	0
Pumpkins and Turnips ..	7	1	1	12

TABLE XII.—MENTAL HOSPITAL, IPSWICH.

EXPENDITURE TABLE.

Average Number daily resident during the year .. 539

	£	s.	d.
Total expenditure	91,102	3	11
Maintenance collected by Public Curator ..	4,579	13	6
Sales	466	10	2
Net expenditure	86,056	0	3
Gross cost per patient per annum	169	0	5
Net cost per patient per annum	159	13	2
Gross cost per patient per week	3	5	0
Net cost per patient per week	3	1	5

TOWNSVILLE MENTAL HOSPITAL.

The Townsville Mental Hospital as such was closed at the beginning of April, 1948, and thereafter the premises became part of the Townsville General Hospital. It is intended that in future early and incipient cases of mental sickness will be treated in the Psychiatric Section of the Townsville General Hospital.

There were 4 male and 1 female, total 5 patients, in residence at this hospital on the 1st July, 1947, and during the nine months ended 31st March, 1948, there were 33 male and 15 female, total 48 patients, admitted to the hospital, making the number cared for during this period 37 male and 16 female, total 53 patients. Five male and 1 female patients were discharged, 2 male patients died from natural causes, and the remaining 30 male and 15 female, total 45

patients were transferred to the Brisbane Mental Hospital.

The general bodily health of the patients was good. There were no serious illnesses and there were no untoward incidents during the nine months under review.

The average length of residence in the Hospital for each patient admitted during the period was 26 days.

The visiting medical officer, Dr. L. Halberstater, was regularly in attendance and the official visitor, Dr. W. B. Chapman, visited the hospital monthly.

The table showing the movement of patients is set out hereunder:—

TOWNSVILLE MENTAL HOSPITAL.

				Males.	Females.	Total.
On the books of the hospital on 30th June, 1947				4	1	5
				M.	F.	T.
Admitted for the first time				27	11	38
Re-admitted				6	4	10
Total under care during year				33	15	48
Discharged, died, transferred—						
Discharged from hospital				5	1	6
Died				2	..	2
Transferred to Brisbane Mental Hospital				30	15	45
Total discharged, died, &c., during year				37	16	53
Remaining on the books on 30th June, 1948				..	..	..
Average number daily resident				4	1	5

EPILEPTIC HOME, WILLOWBURN.

PATIENTS AT 30TH JUNE, 1947: MALES, 39; FEMALES, 58; TOTAL, 97.
FOR YEAR ENDED 30TH JUNE, 1948.

Age.	Admitted.		Discharged.		To Mental Hospital.		Deaths.		Remaining 30th June, 1948.		
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Total.
Under 5 years	..	..	..	..	..	..	..	..	..	..	..
5 years and under 10 years	3	..	1	..	..	..	..	..	2	1	3
10 years and under 15 years	2	..	1	..	..	..	..	..	6	6	12
15 years and under 20 years	..	..	..	..	..	..	..	..	5	2	7
20 years and under 25 years	3	..	..	..	..	..	..	..	8	6	14
25 years and under 30 years	1	..	..	..	..	..	..	..	7	4	11
30 years and under 35 years	..	2	..	..	1	..	..	..	2	9	11
35 years and under 40 years	1	..	..	..	..	..	..	..	4	6	10
40 years and under 45 years	..	..	..	..	..	..	..	..	5	8	13
45 years and under 50 years	..	..	..	1	..	..	..	..	1	8	9
50 years and under 55 years	..	..	..	..	..	..	..	..	1	1	2
55 years and under 60 years	..	..	..	..	..	..	..	..	3	3	6
60 years and under 65 years	..	..	..	..	..	..	..	..	..	4	4
65 years and under 70 years	..	..	..	..	..	..	1	..	..	..	..
70 years and under 75 years	..	..	..	..	..	..	..	1	..	..	1
75 years and under 80 years	..	..	..	..	..	..	..	1	..	..	1
80 years and under 85 years	..	..	..	..	..	..	..	..	..	..	..
85 years and under 90 years	..	..	..	..	..	..	..	..	..	..	..
90 years and under 95 years	..	..	..	..	..	..	..	..	..	..	..
95 years upwards	..	..	..	..	..	..	..	..	..	..	..
	10	2	2	1	1	..	..	1	46	58	104

PATIENTS RESIDENT—

Under 5 years	35
5 years and under 10 years	26
10 years and under 15 years	22
15 years and under 20 years	9
Over 20 years	12

CAUSES OF DEATH—

Female aged 67. Cardiac Failure, Acute Epilepsy, Chronic Epilepsy.

Patients.—Last year's report gave a résumé of methods employed in the maintenance, care, and control of patients. Further progress has been made with good effect on the patients as a whole.

Admissions have been mostly children and young people, all of good type; there has been noticeable improvement in each case. Only one death has occurred and that to an aged person. One man was transferred to the Toowoomba Mental Hospital following the wounding of another patient.

Routine visits by the Visiting Medical Officer have been observed and proper attention to his requirements maintained. All emergencies have been promptly attended to and our administrative co-operation has been complete. Useful medical records have been established.

Reference for applications for admission to the institution has been made to the Psychiatric Clinics on occasions, and the Clinics have advised admission of suitable types. From our aspect this process of diagnosis, recommendation, and ability to refer is most valuable. Medical officers of hospitals and private psychiatrists and doctors have given precise information and conditions are much improved in this respect.

The Director of Mental Hygiene arranged for a visit by himself with Professor Bostock and Drs. Youngman and Murphy. Professor Kyle also attended with the Director on several occasions and it was subsequently arranged for advanced students in psychology to visit the institution to gain practical experience. Such visits are stimulating to patients and staff. The institution is unique in Australia and opportunity can be afforded for research and study.

Experience in the care and control of the sufferer from epilepsy in its varying degree emphasises that in addition to medical care, the main factors are a good and varied diet, education, occupation, recreation, environment, a close attention to the slightest divergence from the normal, and to various personal needs. Each and all require endless patience. Detail follows:—

Dietary.—This remains good and is varied to get as far away from institutional routine as possible.

Education.—We have had improved types to work on and obtained some fair results. The school inspector continues to emphasise to his department the necessity for assistance to the one school teacher. The school has been housed under difficult circumstances for many years; these are being improved until our new school is built. The new school is being designed to meet all our technical requirements; it will be sited away from the main institution and on the new recreational area. Children will attend all day, have their mid-morning snack and mid-day meal on the premises and be under the care of a nurse, with special arrangement for the temporary care of "fitting."

Occupation.—Except for necessary domestic work, a large amount of male occupation is out of doors and extension of gardens and agricultural area has made so much more possible. A rotary hoe was supplied late in the year and this has permitted great development in addition to cleaning up an overgrown area of good land. Over 100 fruit trees have been planted and are doing well. We grew a seven months' supply of potatoes and expect to do better this year. Vegetables were grown in

abundance and it is hoped to grow our own poultry feed. Fences have been improved and extensive fowl runs erected—mostly from old material. The widening of the patients' horizon in these respects has, in many cases, enabled a pride of achievement very much worth while. Much inmate assistance is used in repairs and maintenance generally.

The women are mostly employed in a domestic sense and standards are much improved—there is plenty of scope here. A spacious sewing room is a necessity, but there is no immediate prospect of obtaining this. I intend getting several semi-crippled types interested in poultry keeping.

Handicrafts hover between occupation and recreation, and have been a source of development and improvement throughout the year. Handicraft instructors of the Q.C.W.A. have attended regularly, and it has been possible to send a few of the women to classes at the C.W.A. rooms in Toowoomba. We wisely progressed from small beginnings to our present stage, which is embracing some fine work by both men and women. We owe much to the ladies of C.W.A. Our own staff have co-operated well too. No pressure was applied to a few patients who were reluctant to take advantage of the opportunity, some of whom were of that queerly obstinate type typical of certain epileptics, but most of them are now as competitive as the rest. This has been the great achievement; it has taken up a great deal of administrative time, but has been well worth while.

Recreation.—We have now got our talkie equipment and regular programmes will commence shortly. The reception to a trial run was colossal. Dances, card and games evenings are regular. Concert parties have attended, and Christmas and other special occasions are heartily observed. A few outings have been arranged, but these are necessarily handicapped by the lack of a vehicle. I do definitely wish to get children, cripples, and older people out more. The billiard table has been included in the vote, and it is expected to have room available shortly. The recreation ground has yet to be completed, but this will be coming.

Environment.—This has been improved both in and out of doors. Behaviour is better all round, which is a contributory factor. There is, of course, much we have to be forgiving about and it is seldom that the mood to the contrary cannot be quietly dealt with—if one has the art. Clothing is mostly purchased by the adult patient from pension funds, and the provision of facility and advice sees that action

in this respect is sensible and sufficiently fashionable. The children are cared for similarly from endowment funds. The women turn out very well for an occasion, as do all. I have not yet been able to deal with hairdressing equipment for the women, but shall do something about this before long. The lack of separate accommodation for children causes anxiety.

Clergy.—Services have been regularly conducted by all denominations, including the Salvation Army, who attend with their band.

Works generally.—A disturbing feature is the lack of progress in building and engineering works, and the further deterioration in the main institutional structure.

During the early part of the year the additions to nurses' quarters and the building of Superintendent's quarters were completed and, except that painting of old portion of nurses' quarters has not been carried out, the resident staff are comfortable and appreciate the improvement.

There is an indication of early commencement of enclosure of ward and administrative block verandas and corridors. This is an extensive work which will provide comparative comfort and some additional temporary accommodation for patients. The installation of hot-water showers has been approved and the job measured up. Inspection of sewerage service has taken place following reference to and recommendation by the Director-General of Health and Medical Services.

With the addition of the mixing machine supplied, the kitchen is well equipped. The kitchen was painted by institution staff. Numerous minor repairs have been carried out.

Staff.—Staff routine has proceeded smoothly. We remain short of female nurses, but a fair standard has been maintained. Some sickness has occurred to older female nurses, and this was hardly to be wondered at considering the strain of the war years. The implementation of the 40-hour week was without incident.

Conclusion.—If disappointed in some respects, we have not stood still, and I am grateful for help and encouragement from the Director of Mental Hygiene and his officers, also from the Under Secretary and staff of head office. The local Public Works officers have helped where possible, and State Stores continue to do a splendid job.

Many relatives and friends of patients have expressed themselves very kindly.

PSYCHIATRIC CLINIC BRISBANE.

J. C. WINSHIP, B.A., Psychologist.

In May of this year the Psychiatric Clinic moved to somewhat more suitable premises. One not altogether unexpected fact became apparent that even this larger accommodation is now inadequate. For this there are two reasons; firstly, as will be seen from the appended tables, the number of new patients was 255 as compared with 106 for the previous year; secondly, an extension of the Clinic's activities by the appointment of a speech therapist. Immediate requirements are at the very least another consulting room and a kindergarten or play therapy room. Perhaps it is not out of place to record here our appreciation of the co-operation and interest of those officers of the Public Works Department and State Stores concerned with the remodelling and the furnishing of the rooms.

It is felt that from the psychiatric point of view the main purpose, early detection and treatment of incipient mental sickness with consequent better prognosis, is being achieved. Therapeutic work and case work generally is carried out by visiting medical officers from the Brisbane Mental Hospital and by one other doctor appointed on a part-time basis. As was previously pointed out there are inherent weaknesses in any system of part-time work and it is hoped that the desirability of a full-time director will not be lost sight of.

As was forecast in last year's report, the psychological work is being orientated towards that form of testing which is essentially clinical. Although some 31 patients are shown as being given vocational guidance, this was mainly in the latter half of last year. It is considered, however, that this form of psychological work is more effectively carried out within the framework of an employment service. As the required

tests became available and as the load of diagnostic testing increased, guidance testing was discontinued. It should be pointed out perhaps that the number of patients shown as being "diagnostically tested" is in addition to the number of clinic patients proper who were tested. The number shown are referrals from a psychiatrist to whom a report was furnished and to whom the patient returned for treatment.

The need for speech therapy became apparent immediately upon the appointment of a fully trained officer in May of this year. In addition to the number shown as being under treatment there are some 30 or more waiting for the commencement of their treatment. As may well be appreciated, such a heavy influx of patients over a short period of time has strained somewhat the medical and psychological facilities of the Clinic, since it is considered necessary that all or nearly all patients should be fully examined. This latter fact must be considered in the staffing requirements of the Clinic.

It is becoming increasingly apparent that clinical work to be fully effective needs facilities which are not in themselves an integral part of a clinical set up. For example, educational backwardness is almost invariably a concomitant feature of social delinquency and quite often a contributing factor in behaviour problems. As yet there is little or no provision for the remedial work required. At the same time, other sections of the community and other departments are looking to this department to provide those facilities for which it is responsible; in particular, the adequate care and treatment of the "backward" child.

SUMMARY—1947-1948.

	0-4		5-9		10-14		15-19		20-29		30-39		40-49		50-59		60—		Totals.		Totals.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Depression	..	..	..	..	..	..	..	..	1	1	1	..	..	1	..	..	1	2	3	5	
Dep. Involut. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	1	1	3	4
Schizophrenia .. .	..	..	..	..	..	..	3	..	2	1	3	1	1	3	..	..	..	9	5	14	
Paraphrenia .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	2	2	
Anxiety and Depression ..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	..	..	1	2	3	
Anxiety	..	..	..	..	..	..	3	6	5	4	5	2	1	..	1	..	1	12	16	28	
Hysteria	..	..	..	..	..	..	..	1	..	1	1	..	1	..	..	..	..	2	2	4	
Obsession Complex .. .	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	1	2	3	
Schizoid Personality .. .	..	..	..	..	..	2	1	7	..	2	..	1	..	..	..	..	..	12	1	13	
Chronic Alcoholism .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	
Epilepsy	..	1	..	..	1	..	1	..	3	..	..	1	1	..	..	..	..	3	5	8	
Senility	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	2	
Various Organic .. .	1	..	..	..	1	2	..	..	..	..	1	..	..	..	..	..	..	2	3	5	
																		47	45	92	92
PSYCHOLOGICAL.																					
Idiot	1	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	1	2	3	
Imbecile	..	..	2	..	1	1	..	3	..	..	1	..	..	..	..	..	..	4	4	8	
Moron	..	..	..	..	3	1	..	..	1	..	..	..	..	..	..	..	..	3	2	5	
																		8	8	16	16
Social Delinquency .. .	..	..	..	..	1	..	2	..	..	..	..	..	..	..	..	..	..	3	..	3	
Sexual Delinquency .. .	..	..	..	..	..	3	..	1	..	1	..	..	..	..	..	..	..	5	..	5	
																		8	..	8	8
Diag. Testing	..	..	..	1	8	3	9	4	4	2	8	1	..	..	..	..	..	29	11	40	
Vocational Guidance .. .	..	..	..	..	3	1	1	2	13	3	8	..	..	..	..	..	..	25	6	31	..
Educ. Backward .. .	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	
																		55	17	72	72
SPEECH THERAPY.																					
Stammering	3	..	3	..	..	..	7	2	7	..	..	3	..	..	1	1	..	24	3	27	
Dyslalia	..	1	5	3	..	1	..	..	..	..	..	..	..	1	..	..	..	6	5	11	
Cleft Palate	2	2	2	3	..	..	..	..	..	..	..	..	..	..	..	..	..	4	5	9	
Aphasia	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	2	..	2	
Dysphasia	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	2	..	2	
Dysarthria	..	..	..	..	..	..	..	1	..	..	1	..	..	..	1	..	..	2	1	3	
Idioglossia	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	
Hyperphonia	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1	
Dyslexia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Dysgraphia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Other	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
																		41	15	56	56
Grand Total .. .																		159	85	..	244

FROM—

Ex B.M.H.	7
Ex B.G.H.	17
Juvenile Employment ..	6
Justice Department .. .	4
Commonwealth Departments ..	27
Red Cross	3
Medical Practitioners .. .	60
Self	57
Other Sources	63

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TO—

B.M.H.	2
B.G.H.	10
Epileptic Home	1
Deaf and Blind	1
Opportunity School .. .	5
Juvenile Employment .. .	3
	22

SECTION OF SOCIAL SERVICES.

- Welfare Officer: Mrs. V. WILLS.

During the gastro-enteritis epidemic the Welfare Officer visited and examined 300 flats at the temporary housing camps and advised the occupants as to the necessity for adhering strictly to hygienic practices, especially in a communal area. The occupants were most co-operative and were always ready to supply particulars of other flats where hygiene was not carried out. These areas are still visited when complaints are made direct to the Welfare Officer.

Reported cases of neglected children have been investigated and the matter brought under the notice of the State Children Department. Assistance has also been given in arranging for the adoption of children.

Accommodation was arranged for families through the State Housing Commission and privately, and arrangements were also made for children of expectant mothers to be admitted to the Maternal and Child Welfare Home at Sandgate during the period of the mother's confinement. In cases where an extension of time was desirable, sympathetic consideration has been given in each instance to the granting of the request, and the Director's co-operation in this regard has been greatly appreciated.

The sick in hospitals and in their homes have been visited, and arrangements have been made for many persons—both adults and children—to receive medical attention, and where necessary hospital treatment. Patients discharged

from the Brisbane Mental Hospital were assisted in securing accommodation and extra blankets and clothing. Mothers seeking advice regarding their daughters have been assisted.

The service to tuberculosis sufferers has been continued. Contacts have been interviewed in their homes and advised as to the desirability of X-ray examination. Instruction in hygiene has been given and inquiries made to ascertain whether financial assistance for the family was necessary.

Claimants for invalid, old-age, and widows' pensions have been assisted in filling in the necessary forms.

One bad case of alcoholism has been rehabilitated through the efforts of the Welfare Officer. The patient was a young woman from a good family, and was a hairdresser by trade. Arrangements were made for her admission to Eventide, Sandgate, where she was placed on a bond. The latest reports concerning this patient are highly satisfactory.

Complaints regarding private hospitals were investigated and inspection made of these premises. An inspection was also made regularly of public conveniences in picture theatres, business houses, and public parks. During Show Week (August) regular daily inspection was made of conveniences, and arrangements were made for extra accommodation in this regard, and also for additional containers for soiled linen, garbage, &c.

LEGISLATION.

During the year "Food and Drug Regulations, 1939" were amended in three particulars. On 23rd October, 1947 (*Government Gazette*, 25th October), an amendment provided for mechanical glass-washers in hotel bars, and on 30th October (*Government Gazette*, 1st November) an amendment provided for the control of wine-making premises. An amendment to the definition of "Inspector" was made on 13th May, 1948, and published in the *Government Gazette* of 15th May, its purpose being to give power to the inspector of the Local Authority to control sanitation under the Food and Drug Regulations. Prior to this, this power was not held. This is in keeping with the Government's policy of decentralisation of control.

An amendment of "The Poisons Regulations of 1947" dated 13th May, 1948, also appeared in the *Government Gazette* of 15th May, a number of new drugs being included in the dangerous and restricted drug schedules.

"The Camp Regulations, 1947," appeared in the *Government Gazette* of 1st November, 1947.

"The Bedding and Upholstery Regulations, 1948," were gazetted on 21st February, 1948.

An Order issued in pursuance of subsection 2 of section 22 of "The Health Acts, 1937 to 1946," and addressed to all Local Authorities throughout the State was gazetted on 26th June, 1948. It set out the duties of inspectors appointed under the Health Acts, and which are specified as in addition to such other duties as a Local Authority may from time to time direct under the provisions of the said Acts.

The work done during the year has been up to the high standard of previous years, and I desire to express my gratitude to all members of the staff for their unfailing and conscientious attention to duty. Thanks are also given to Government Departments, Local Authorities, and other outside bodies who have assisted by their ready co-operation. I would also mention the "Brisbane Telegraph" for the publicity they have given in relation to prosecutions for breaches of the Food and Drug Regulations. It is this publicity, not the fine, that acts as a deterrent.

ABRAHAM FRYBERG,

M.B., B.S. (Melb.), D.P.H., D.T.M. (Syd.),

Director-General of Health and Medical Services.