

Report of the Director-General of Public Health, New South Wales.

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DEPARTMENT OF PUBLIC HEALTH, NEW SOUTH WALES



REPORT
OF THE
DIRECTOR-GENERAL OF
PUBLIC HEALTH

NEW SOUTH WALES
1941-1946 (inclusive)



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DEPARTMENT OF PUBLIC HEALTH, NEW SOUTH WALES.

OFFICE OF THE DIRECTOR-GENERAL OF PUBLIC HEALTH,
93 Macquarie Street and 52 Bridge Street, Sydney.

Members of the State Board of Health 1941-1946.

At the end of 1946—Dr. E. S. MORRIS (President); Dr. H. G. WALLACE; Dr. CECIL PURSER; Dr. C. J. M. WALTERS; R. J. HAWKES, Esq.; R. J. BARTLEY, Esq.; J. SMITH, Esq.; Miss M. GROVE; Mrs. C. M. MELVILLE; Mrs. E. G. CLANCEY.

During the period 1941-46 the following were members of the Board:—Dr. W. G. ARMSTRONG (1941); Hon. Dr. F. E. WALL (1941); S. S. CRICK, Esq. (1941-42); Mrs. LYNCH (1942-43); Dr. R. DICK (1941-43); Dr. A. J. ASPINALL (1944-45); B. G. LITTLE, Esq. (1941-43); W. N. HARDING, Esq., 1945.

Administrative Staff.

Director-General of Public Health and Commissioner for Venereal Diseases:—E. SYDNEY MORRIS, M.D., Ch.M., D.P.H.

Deputy Director-General of Public Health, Director of Tuberculosis Division and Senior Medical Officer of Health:—HUGH GILMOUR WALLACE, M.B., B.S., D.P.H.

Metropolitan Medical Officer of Health:—JOHN GRAHAME DREW, M.B., B.Ch., M.R.C.S., L.R.C.P., D.P.H., D.T.M., D.T.H., F.R.San.I.

Assistant Medical Officers of Health:—BRUCE ROBSON OVEREND, M.B., Ch.M., D.P.H., D.T.M. D.T.H.; ALFRED JOHN GEOFFROY, M.B., Ch.M., D.P.H., D.T.M., D.T.H.

Secretary:—JAMES VALENTINE BOYLE.

Divisions and Branches.

The following divisions are controlled by the Director-General of Public Health:—Maternal and Baby Welfare; Tuberculosis; Social Hygiene; Industrial Hygiene; Government Medical Officers for Sydney; Medical Officers of Health, Metropolitan, Newcastle and Broken Hill Districts Microbiological Laboratory, Chemical Laboratory; Health Education; Pure Food; Sanitation, etc.

The Hospital Division comprises The David Berry Hospital, three State Hospitals and Homes, Waterfall Sanatorium (Tuberculosis) and Auxiliary at Randwick, Strickland Convalescent Hospital, Vaucluse, and the Leper Lazaret.

Legislative Enactments.

The Minister of Health is charged with the administration of the following Acts, for the promotion of the Public Health, execution of which is left to the Director-General of Public Health and the staff working under his control:—Cattle Slaughtering and Diseased Animal and Meat Acts 1902-1932; Food preservation by Sulphur Dioxide Enabling Act 1920; Noxious Trades Act 1902; Private Hospitals Act 1908; Public Health Acts 1902-1944; Pure Food Act 1908; King George V and Queen Mary Maternal and Infant Welfare Foundation Act 1937; and the Lady Edith Carpenter Land Vesting Act 1937. Burials in closed cemeteries and the exhumation of bodies for the purpose of re-interment, etc., are also dealt with.



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1941-46 Report of the N.S.W. Director-General
of Public Health.

Corrigenda.

1. Contents page and p 5 for "The Hon. M. O'Sullivan" read
"The Hon. C.A. Kelly".
2. Contents Page, list of graphs no. 12 For "Maternal Mortality"
read "Criminal abortions".
3. Pages 18 & 85 For "Annual case rate per 100,000" read "Annual
case rate per 10,000.
4. Page 97 Table 1 Metrop. area, live births for year 1939 should
read 19323.
Remainder of state, still births 1936 should
read 837.
Remainder of state, still births % of total
1940 should read 2.55.
5. Page 98 Table 111 Metrop. accidents of pregnancy 1946 should read
no:3; rate: 0.09.
Puerperal haemorrhage 1946 should read
no.4; rate: 0.13.
Remainder of state accidents of pregnancy
1946 should read no:10; rate: 0.23.
Puerperal haemorrhage 1946 should read
no:12; rate: 0.34.
Albuminuria 1941 should read no: 33
Total 1941 should read no: 110
Grand Total 1944 should read rate: 3.00
N.S.W. accidents of pregnancy 1946 should read
no: 13; rate: 0.19
Puerperal haemorrhage 1946 should read
no: 16; rate: 0.24
6. Page 99 Table IV Live births for the year 1940 State should read
49,382.
Live births for the year 1941 Metrop. should read
22,366.
7. Page 99 Table 5. Total puerperal all ages proportion percent
Metrop. 1943 should read 1.15
Remainder of State
1941 should read 2.57

Deaths from Criminal Abortion All Ages
Remainder of State
Proportion per cent 1946 should read 0.11
Ages 15-44 Metropolitan area
1939 No. should read 30

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1941-46

Report of the Director-General of Public Health to the Honourable the Minister for Health (The Hon. M. O'Sullivan, M.L.A.).

Sir,

I have the honour to present a summarised report on the work of this office for the years 1941-1946 inclusive.

During the war the Annual Reports of this Department were not submitted for printing separately for economy reasons and to conserve manpower. It was later decided, in order to bring the reports up to date in printed form, to ask heads of institutions, divisions and branches of the Department to submit short comprehensive reports covering the period 1941-1946 inclusive and to publish the whole under one cover.

Separate reports for the years referred to have been prepared and filed but are not in published form.

Vital Statistics (see page 7).

A summarised Report of the Government Statistician on the Vital Statistics for the years 1941-1946 inclusive is appended.

Population.—The population of New South Wales at 31st December, 1946, was 2,962,932 of whom 1,481,172 were males and 1,481,760 females, the number of females being greater than the number of males for the first time in the history of the State. Because of the war population gain by immigration was negligible.

Births.—During the six years 1941-1946 there was a pronounced upward trend in the fertility of the N.S.W. population due mainly to war and post-war influences, the average annual birth rate over the six years being 20.31 per 1,000 mean population compared to 17.41 in the preceding six years. In the period under review the proportion of children stillborn declined steadily, the 1946 figure of 22.49 per 1,000 all births being probably the lowest figure recorded since registration was made compulsory in 1935.

Deaths.—Over the years 1941-1946 the average annual death rate was 9.72 per 1,000 compared with 9.42 in the preceding six years 1935-1940.

Infantile Mortality.—This continued to become less throughout the period and reached a new low level in 1946 with a rate of 30.22 per 1,000 live births.

Infectious Diseases (see page 19).

The tables compiled by the Government Statistician which show detailed information about the incidence of notifiable infectious diseases have been included in this report separately for each of the years 1941 to 1946.

Comments on the occurrence of each of these diseases will be found at the beginning of the separate reports for each year, while Table VI on page 79 lists in summary form the number of cases and deaths from these diseases for each year 1898 to 1946.

Tuberculosis Division (see page 109).

Statistics for the years 1941-1946 show a gradual decrease in the number of notifications of and deaths from tuberculosis in New South Wales with the exception of a slight increase in the number of deaths recorded in 1946. There has been a large increase in the number of X-rays taken among the general public by both private radiologists and tuberculosis clinics. In 1941 there was only one private radiologist, operating fortnightly, to X-ray persons referred by the Health Department; in 1946 there were five radiologists, each operating weekly, to give this service.

Division of Social Hygiene (see page 80).

A total of 30,030 notifications of venereal diseases were received in the six-year period 1941-1946—the yearly average for the period being 5,005. The notification of females as alleged sources of infection helped to bring many under treatment who otherwise would have remained unnotified.

An analysis of the age groups of females notified showed the reaction of the 16-20 group to war conditions. A matter of some concern was an increase in the percentage of acute syphilis in the total syphilis notified during the year 1946. Few sources of infection were traced.

During the period, the co-ordination group for the control of venereal disease formed on December 10th 1940, met at least once a month until it was disbanded on December 10th 1945.

The National Security (Venereal Diseases and Contraceptives) Regulations came into force in September, 1942, and ceased to have effect after the 31st December, 1946. They provided authority, lacking in State legislation, to follow-up and bring under medical examination alleged sources of infection. During the period of their operation 2,045 alleged sources of infection were located and examined and of this number 1,258 (61.5%) were found to be infected with venereal disease.

During the war period, venereal disease was brought under public notice by an intensive press publicity campaign and by poster displays.

At the end of 1946 ten clinics were available in the Metropolitan District for the treatment of venereal disease, with prophylactic facilities at the Health Department Clinic.

Bureau of Microbiology (see page 136).

The number of examinations carried out in the Microbiological Laboratories for the years 1941-1946 inclusive are given in the tables attached to the report; the figures are more or less stationary except for minor variations.

In 1946, general laboratory examinations numbered 105,415 in addition to 1,754 examinations of rats for plague.

During 1942 the Prince Henry Hospital undertook its own toxicity tests for diphtheria; in the past these tests were performed at the Microbiological Laboratory.

Less slides were submitted for examination for gonococci due, undoubtedly, to the use of penicillin in the treatment of this disease resulting in quicker cure.

The most striking variation in the number of examinations carried out in the period under review is the increase in the number of slides for examination for malarial parasites. In 1946, 657 slides were submitted and benign tertian parasites were found in 412 cases.

The Director draws attention to the great inconvenience caused by the overcrowded condition of the laboratory.

Division of Industrial Hygiene (see page 111).

During the war the disturbance of normal routine in factories with increased hours, the introduction of new methods and the employment of unskilled workers caused a big increase in the incidence of occupational diseases. The number of employees medically examined by this Division in the period under review totalled 3,899, the peak year being 1944 when 897 workers were examined.

As in previous years special investigations were undertaken at the request of the Industrial Commission of New South Wales, to assist it in the making of industrial awards. A summary of these investigations is found in the body of the report.

Details of investigations into the deaths of thirty-nine coal miners and six workers in other dusty occupations are also given in the report.

Other work carried out by this Division included lectures and demonstrations to groups of medical men, factory inspectors, engineering students and colliery officials.

Government Medical Officer (see page 89).

At the Hospital Admission Depot, which is under the control of the Government Medical Officer, admissions to metropolitan hospitals and State institutions for both metropolitan and country applicants, continued to be arranged.

Medical examinations for State Government Departments, of Police recruits and sick police were carried out, as well as such work as vaccinations against small-pox and throat swabbing of children before admission to children's homes.

Medical officers also carried out examinations in cases of alleged rape and other assault cases, autopsies at the city morgue and visits to the Reception House.

The end of the war brought an increase in the amount of work due mainly to a resumption of police recruiting on a large scale and to an increase in the number of ex-service men examined for travelling concessions.

Maternal and Baby Welfare (see page 95).

The Director of the Division responsible for these services reports an increase in the attendances at prenatal clinics in the period under review. The obstetrical consultant service was not frequently used, however, as more mothers were confined in obstetric hospitals where specialist services are provided.

The major causes of maternal deaths in the period under review were albuminuria and eclampsia, sepsis and haemorrhage. Of these the toxæmias, albuminuria and eclampsia, remained the largest group.

Deaths from sepsis after the birth of a viable child have decreased since the introduction of the sulpha drugs. The Special Committee investigating maternal mortality, however, considered that bacteriological examination was not instituted sufficiently early in the majority of cases to ensure the exhibition of the most effective type of sulpha drug. Puerperal pyrexia is notifiable under the Nurses Registration Act, the Private Hospitals Act and the Public Health Act. Pamphlets with instructions regarding the control of puerperal infection have been distributed to hospitals, medical practitioners, etc.

The blood transfusion service brought about a decrease in maternal deaths from haemorrhage. During 1943 other blood transfusion units, in addition to the original at the Women's Hospital, Crown-street, were established at the Royal Prince Alfred Hospital, the Royal North Shore Hospital and the Royal Hospital for Women, Paddington. The original system of blood donors was superseded by provision of blood by the Red Cross Transfusion Service.

The Departmental free booklet "Healthy Motherhood" continued to be a most valuable publication and was used by all the Metropolitan Obstetric Hospitals, the majority of other obstetric hospitals and by general practitioners.

Infant Welfare (see page 102).

The decision of the Government in 1944 to give generous financial assistance in the establishment of new Baby Health Centre premises gave a tremendous impetus to the development of this most important field of maternal and baby welfare.

The assistance provided consists of a grant of 50 per cent. of the capital cost of building and equipping the centre, and, if required, advances up to a further 25 per cent. of these costs, and provision of staff. Such assistance is subject to approval of site, plans and equipment of the Centre.

At the end of 1946, Baby Health Centres numbered 252, placed as follows:—Sydney and suburbs, 67; Newcastle, 10; Country, 175; with a total staff of 240 nurses.

Total attendances for 1946 were 1,176,854, individual attendances being 110,116.

The Departmental free booklet, "Our Babies," has been substantially improved, particularly in relation to the diet chart for infants and school children.

Preschool Child.—The Baby Health Centres have encouraged mothers to bring their toddlers and preschool children to the centres for supervision at intervals. Parents are given instruction in hygiene and dietetics, and the weight and physical development of the child is checked.

At Kindergartens, Day Nurseries and Nursery Schools, medical supervision of the children was conducted throughout 1946 by an officer of the Division. Details of medical inspections are appended to the report.

Consultative Council on Physically Handicapped Persons.

In August, 1945, the Consultative Council on Infantile Paralysis was renamed the Consultative Council for the Physically Handicapped Persons, the work being extended to include those people physically handicapped not only from infantile paralysis but from other causes as well.

An occupational therapist and a physiotherapist were co-opted as members to the Council and an almoner was appointed in 1946.

An epidemic of poliomyelitis occurred in New South Wales in 1945 and 1946 with 661 cases in 1945 and 647 cases in 1946. There were ninety-eight deaths.

Of the 1,308 cases, 1,197 were followed up after a period of six months to two and a half years from the onset of illness. Of these 43 per cent. showed no residual effects from the disease, 27 per cent. had slight weakness but no disability, 22 per cent. had residual paralysis, the remaining 8 per cent. representing deaths.

After-care of poliomyelitis cases included communication with medical practitioners, visits to patients, transfer to treatment centres, assistance with physiotherapy treatment (expenses and transport), vocational guidance training and placement of physically handicapped persons.

Supervision over Food and Drugs.

During the period 1941-1946 (inclusive) a total of 170,310 samples were examined in the Chemical Laboratory. This number included 155,022 samples submitted in connection with the administration of the Pure Food Act, 13,844 samples for the Public Services of the State and 1,444 for the Defence Authorities.

Of the 155,022 samples examined under the Pure Food Act 6,446 (4.1 per cent.) were found adulterated or falsely described. Milk formed the principal subject of investigation, and of a total of 106,698 samples of milk examined, 3,527 (3.3 per cent.) failed to conform to the prescribed standard.

Supervision of Private Hospitals (see page 88).

During the period 1941-1946 (inclusive) the number of private hospitals licensed in New South Wales declined from 496 to 348 and the number of beds from 5,124 to 4,206. Conditions brought about by the war accounted for these reductions.

Routine inspection of private hospitals was carried out by supervisory nurses as in previous years. Inspections disclosed deterioration in buildings, and a general tendency to overcrowding. Rest and convalescent homes were also visited and some showed undesirable features.

There were 313 cases of puerperal fever notified during the period—of these 114 occurred in private hospitals.

Health Education (see page 90).

Considerably more work was undertaken by the Publicity Branch owing to an increase in the funds made available.

Additions were made to the staff as follows:—An Assistant Publicity Officer, a senior Secretarial Assistant and a qualified projectionist. The services of an advertising agency and a firm of window-display contractors were engaged.

More posters, film screenings, window displays, talks, press articles, health week exhibits and recorded broadcasts put the importance of health work before the public. A good deal of publicity was given to such subjects as venereal disease, tuberculosis, nutrition, diphtheria immunisation, rat control and noise abatement.

Nutrition.

A section on nutrition was established in 1942 following the appointment of the State Nutrition Committee by the Minister for Health "to disseminate, for public information, advice to housewives and others regarding nutrition, the composition of foodstuffs, the preparation of dietaries, the means of purchasing food with due regard to economy and methods of preparing food in the home."

In 1944 a trained dietitian was appointed to the staff and in 1946 two additional trained dietitians.

Among the activities of this section are—talks on nutrition, food values, school lunches and related subjects to interested people in the city and country, and instruction of food services in institutions.

Metropolitan Combined District (see page 121).

Dr. Grahame Drew, in presenting his report on the health conditions of the Metropolitan Area of Sydney for the years 1941-1946, refers first to vital statistics. There has been a steady increase in population and a rise in the birth rate. Ex-nuptial births are ascribed to war-time influence. The still-birth rate shows a steady decline, as does infant mortality. Dr. Drew emphasises the importance of good living conditions in bringing about such decrease.

Close attention has been given during the period under review to the Government's Re-Housing Programme as directed by the Housing Commission. Difficulties have been encountered with household drainage on those estates which are not sewered. Complaints are frequently made to the Health Department from this cause.

Dr. Drew draws attention to the danger of diseases such as typhus being introduced into the Metropolitan Area from countries to the north of Australia and points out that several new cases of malaria have occurred in his area. He urges that greater attention must be paid to the control of vermin.

Nightsoil and garbage services could be operated by Councils through their own employees in order to avoid the difficulties encountered under the contract system. Garbage tips have been unsatisfactory.

Dr. Drew refers to infectious diseases in the Metropolitan Area during the period 1941-1946. The incidence of typhoid fever has remained fairly constant; scarlet fever showed a marked recrudescence though in a mild form only; diphtheria showed a steady decline; poliomyelitis became epidemic in 1945 and 1946 and in the early part of the period under review cerebro-spinal meningitis occurred in outbreaks; typhus fever also showed an increase.

The celebration of Health Week was maintained annually in the Metropolitan Area, and the increase in the Health Education Vote for the Department in 1945 and 1946 enabled a vast amount of informative material on health and disease to be issued to the public.

Hunter River Combined Sanitary District (see page 122).

Dr. J. R. Shannon, Medical Officer of Health, states that during the war years the officers of his branch formed part of the National Emergency Service and Civilian Aid Services so that special and extra duties were required of them. Newcastle at this time became the centre of a vast military establishment with associated health problems.

In February, 1943, dengue fever outbreaks in the district led to an intensive mosquito-eradication campaign with the result that only a few isolated cases of dengue fever occurred in the City of Greater Newcastle, which became almost completely free from mosquitoes.

The incidence of venereal disease infection was reduced to a minimum because of the powers given by Regulations issued under the National Security Act.

Dr. Shannon, in commenting on the occurrence of other infectious diseases, notes that in 1943 for the first time in the history of the Hunter District no cases of typhoid fever were notified. A sudden increase in diphtheria cases occurred in 1941 due largely to the failure to immunise. There were 471 cases and twenty-two deaths. During 1943, 1944 and 1945 scarlet fever became epidemic and an outbreak of a virulent type occurred at a Mental Hospital (thirty-three cases, of

whom eight died of the disease). In 1945 infantile paralysis became epidemic. Cerebro-spinal meningitis occurred in outbreaks coincident with troop concentration in the district.

Constant supervision was kept on general sanitation in the district during the period under review and, despite shortage of material and labour, improvement has been achieved.

Health publicity was continued and the public were found more co-operative than in previous years and prepared to act on advice given.

A summary is given of the anti-tuberculosis work done at the Chest Clinic.

Broken Hill and District (see page 124).

The population of the Broken Hill Municipal District was 25,585 in 1941 and 27,600 in 1946, the deaths during the period 1941 to 1946 averaging yearly 255 and the births 612.

The only notifiable infectious diseases of any frequency were scarlet fever and diphtheria.

The Anti-Tuberculosis Clinic which commenced operations in Broken Hill in June, 1941, is justifying its existence. A great number of contacts of known positive cases of tuberculosis have been investigated. The total number of attendances in 1946 was 692.

In December, 1941, Mantoux tests were performed on 108 inhabitants of the camp at the Aboriginal Station, Menindee. Of these nineteen only gave a positive reaction. The results indicated chiefly a family, and not a general, tuberculous infection among the inhabitants.

The number of examinations carried out at the laboratory averaged 10,340 yearly for the period under review. There was a decrease in the bacteriological examinations and an increase in biochemical and haematological examinations.

Dr. W. E. George, Medical Officer of Health, was absent during part of 1946 on a visit to Canada and the U.S.A. to investigate the use of aluminium in the prevention and treatment of silicosis.

State Hospitals (see page 126).

Liverpool State Hospital and Home for Men.—During the period 1941-1946 inclusive admissions totalled 15,755; discharges, 13,037; deaths, 2,806. The average daily number in hospital was 660. Outpatient attendances numbered 58,595 (15,760 individual attendances). Operations totalled 2,339 including 1,039 major operations.

The new cancer block was completed and occupied in 1941 and various other structures and installations (including a cinema) were effected.

Newington State Hospital and Home for Women.—During the period 1941-1946 inclusive admissions totalled 4,956; discharges, 3,773; deaths, 1,273. The average daily number in hospital was 545.

Lidcombe State Hospital and Home for Men.—The Infectious Diseases Division at the Hospital was closed in 1941.

During the period 1941-1946 inclusive admissions to the Hospital and General divisions totalled 15,640; discharges 12,021; deaths, 4,019. The average daily number of patients and inmates resident was 1,250.

Strickland Convalescent Hospital for Men and Women.—During the period 1941-1946 inclusive admissions totalled 5,131,

discharges 5,126 and deaths five. The average daily number of patients was forty-two women and twenty-five men.

David Berry Hospital.—During the period 1941-1946 ward patients treated totalled 2,345; discharges, 2,138; deaths, 128. Outpatients totalled 1,418.

Waterfall Sanatorium.—During the period 1941-1946 admission of patients totalled 1,692, discharges of patients 1,587, and deaths of patients 266. The average daily number of patients resident was 355.

Randwick Auxiliary Hospital.—During the period 1941-1946 admissions totalled 1,618; discharges, 707; deaths, 945. The average daily number resident was 169. The various operations performed are listed in the report.

Most of the above institutions suffered from staff shortages during the period under review.

Legislation.

In 1942, amendments were made to the Regulations under the Noxious Trades Act and to the Bedding and Upholstery Regulations under the Public Health (Amendment) Act, 1921.

In 1943, an amendment was made to the Rag Dealer and Flock Maker Regulations under the Noxious Trades Act, 1902, respecting the keeping of rags on licensed premises.

In 1944, the Public Health (Amendment) Act, 1944, was assented to. By this Act the Public Health Act, 1902, as amended by subsequent Acts, is amended and may be cited as the Public Health Act, 1902-1944. The Noxious Trades Act, 1902, was amended and is now cited as the Noxious Trades Act, 1902-1944.

In 1945, several proposed amendments to the Local Government Ordinances have been submitted to and approved by the Board of Health under section 26b of the Public Health Act, 1902-1944. Regulations governing Rag Dealers and Flock Makers were amended in order to provide additional control over those businesses or trades.

The Public Health (Further Amendment) Act, 1944, amended the Public Health (Amendment) Act, 1921. By such amendment better control is provided over the business of manufacture and repairing bedding, upholstery and other similar articles.

The amendment of the Public Health Act, 1902, as amended by subsequent Acts and cited as the Public Health Act, 1902-1944, has enabled Regulations to be made to control the use of Dangerous Substances for the purpose of fumigation. To this end Regulations controlling the use of Cyanide for fumigation purposes have been made and are now in operation. Those Regulations require persons who intend to use Cyanide for fumigation purposes to be licensed. Before such a licence can be obtained the applicant must submit himself to a medical, and a theoretical or practical test.

The Local Government Act, 1919, was considerably amended to make better provision for the government of areas, to extend the powers and functions of local government bodies, to establish bodies to take common action on behalf of areas and for other purposes.

In 1946, several proposed amendments to the Local Government Ordinances were submitted to and approved by the Board of Health under section 26b of the Public Health Act. During the year the business of Tanner was declared a Noxious Trade within the meaning of the Noxious Trades Act, 1902-1944.

VITAL STATISTICS OF NEW SOUTH WALES.

(SUMMARY REPORT FOR YEARS 1941 TO 1946 INCLUSIVE.) (Prepared by the Government Statistician, Mr. S. R. Carver.)

Population.

The population of New South Wales at 31st December, 1946, was 2,962,932 of whom 1,481,172 were males and 1,481,760 females. During the six years 1941 to 1946 the total increase in population was 171,577 of which 169,260 was due to natural increase after accounting for deaths of defence personnel. Because of the war, gain by migration was negligible.

Annual population statistics throughout the period are as shown below. The figures include New South Wales personnel

enlisted in the defence forces irrespective of their whereabouts at any time. Refugees and evacuees are also included but Allied defence forces, enemy prisoners of war and internees from overseas are excluded.

It is significant to note that in 1946 the number of females was greater than the number of males for the first time in the history of the State.

POPULATION—NEW SOUTH WALES—1941-1946.

Year.	Population at 31st December.			Mean Population for Year.			Natural Increase.	Net Migration plus intercensal Adjustment.
	Males.	Females.	Total.	Males.	Females.	Total.		
1941	1,410,805	1,402,555	2,813,360	1,405,779	1,395,121	2,800,900	23,049	(—) 1,044
1942	1,428,067	1,420,411	2,848,478	1,419,495	1,411,920	2,831,415	19,436	15,682
1943	1,436,519	1,434,544	2,871,063	1,431,245	1,426,649	2,857,894	25,292	(—) 829
1944	1,449,933	1,451,498	2,901,431	1,443,456	1,443,120	2,886,576	30,865	(—) 497
1945	1,465,114	1,468,322	2,933,436	1,457,580	1,460,243	2,917,823	32,146	(—) 141
1946	1,481,172	1,481,760	2,962,932	1,471,910	1,473,814	2,945,724	38,472	(—) 8,976

Births.

Live Births.—During the six years 1941 to 1946 there was a pronounced upward change in the fertility of the New South Wales population due mainly to war and early post-war influences. From 1943 onwards the annual number of live births considerably exceeded the previous record number of

55,214 in 1922, but whilst this caused a rise in the crude birth rate for the period in comparison with the immediately preceding years, the general level of the crude rate remains low.

Summarised live birth statistics for the State over the period are as follows:—

LIVE BIRTHS—NEW SOUTH WALES, 1941-1946.

Year.	Live Births.					Rate per 1000 Population.			Proportion of Ex-Nuptial to Total Live Births.	Male Live Births to 100 Female Live Births.
	Males.	Females.	Total.	Nuptial.	Ex-Nuptial.	Nuptial.	Ex-Nuptial.	Total.		
1941	26,396	25,333	51,729	49,694	2,035	17.74	.73	18.47	Per cent. 3.03	104
1942	27,159	25,488	52,647	50,602	2,045	17.87	.72	18.59	3.88	107
1943	29,260	28,005	57,265	55,005	2,260	19.25	.79	20.04	3.95	104
1944	30,360	29,252	59,612	57,058	2,554	19.77	.88	20.65	4.28	104
1945	31,812	29,850	61,662	58,936	2,726	20.20	.93	21.13	4.42	107
1946	34,690	32,557	67,247	64,297	2,950	21.83	1.00	22.83	4.39	107

The average annual birth rate over the six years was 20.31 per 1,000 mean population compared with 17.41 in the preced-

ing six years. The proportion of ex-nuptial to total live births in the two periods was 4.16 and 4.26 respectively.

Stillbirths.—In the period under review the proportion of children stillborn declined steadily, the 1946 figure of 22.49 per 1,000 all births being the lowest proportion recorded since registration was made compulsory in 1935. It is probably the lowest figure for all time.

The proportion of children stillborn in the six years 1941-1946 was 24.89 per 1,000 all births compared with 28.71 per 1,000 in the preceding five years 1935-1940.

A summary for the six years is as follows:—

STILLBIRTHS—NEW SOUTH WALES, 1941-1946.

Year or Period.	Nuptial.		Ex-Nuptial.		Total.			Rate per 1,000 of Population.	Per 1,000 Total Births (Live and Still).	Proportion of Ex-Nuptial to Total Stillbirths.	Male Stillbirths to 100 Female Stillbirths.
	Males.	Females.	Males.	Females.	Males.	Females.	Total.				
1941	770	629	32	33	802	662	1,464	.52	27.52	Per cent. 4.44	121
1942	750	581	41	39	791	629	1,411	.50	26.10	5.67	128
1943	752	631	48	34	800	665	1,465	.51	24.94	5.60	120
1944	824	597	51	39	875	636	1,511	.52	24.72	5.96	138
1945	813	654	43	30	856	684	1,540	.53	24.37	4.74	125
1946	819	638		47	862	685	1,547	.53	22.49	5.82	126

Deaths.

The annual number of deaths of civilians throughout the period and the death rates per 1,000 mean population are as follows:—

DEATHS—NEW SOUTH WALES, 1941-1946.

Year.	Deaths.			Rate per 1,000 Population.		
	(Excluding Stillbirths.)			Males.	Females.	Total.
	Males.	Females.	Total.			
1941 ...	15,209	12,091	27,300	10.82	8.67	9.75
1942 ...	16,461*	12,758*	29,219*	11.60	9.04	10.32
1943 ...	15,944*	12,926*	28,870*	11.14	9.06	10.10
1944 ...	14,494*	12,158*	26,652*	10.04	8.42	9.23
1945 ...	14,808*	12,186*	26,994*	10.16	8.35	9.25
1946 ...	16,038*	12,541*	28,579*	10.90	8.51	9.70

* Civilians only.

Over the years 1941-1946 the average annual death rate was 9.72 per 1,000 population compared with 9.42 in the preceding six years 1935-1940, but little significance can be attached to this rise because the rates are crude rates based on total population without any allowance for changing age and sex constitution of the population.

Causes of Death.—The principal causes of death in New South Wales throughout the six years, 1941-1946, are shown in the following abridged classification in comparison with the preceding six years, 1935-1940. The rates shown are crude rates per 10,000 of total population and no allowance has been made for differences in age or sex incidence between the various diseases or for changing age or sex constitution of the population.

CAUSES OF DEATH—NEW SOUTH WALES,

Cause of Death.	Average Annual Number.		Rate per 10,000.		Cause of Death.	Average Annual Number.		Rate per 20,000.	
	1935-40.	1941-46.	1935-40.	1941-46.		1935-40.	1941-46.	1935-40.	1941-46.
Typhoid Fever (including Paratyphoid)	16	5	·05	0·2	Infantile Convulsions	13	16	·05	·06
Cerebro-spinal (meningococcal) Meningitis	7	69	·03	·24	Other Diseases of the Nervous System	345	373	1·27	1·30
Scarlet Fever	17	8	·06	·03	Diseases of the Heart	6,588	8,719	24·31	30·34
Whooping Cough	79	64	·29	·22	Arteriosclerosis and Other Diseases of Arteries	567	535	2·09	1·86
Diphtheria	163	85	·60	·30	Other Diseases of the Circulatory System	43	82	·16	·29
Erysipelas	17	7	·06	·02	Bronchitis	259	251	·96	·87
Tetanus	23	21	·08	·07	Pneumonia	1,676	1,353	6·18	4·71
Tuberculosis of the Respiratory System	941	871	3·47	3·03	Other Diseases of the Respiratory System	266	391	·98	1·06
Nervous System	31	25	·11	·09	Diseases of the Stomach	141	152	·52	·53
Other Tuberculous Diseases	57	46	·21	·16	Diarrhoea and Enteritis—				
Dysentery	18	21	·07	·07	Under 2 years	158	132	·58	·46
Syphilis	127	128	·47	·45	2 years and over	108	109	·40	·38
Influenza with respiratory complications specified	215	76	·79	·26	Appendicitis	235	161	·87	·56
Influenza without respiratory complications specified	83	53	·31	·18	Hernia, Intestinal Obstruction	206	248	·76	·86
Measles	39	33	·14	·11	Cirrhosis of the Liver	115	95	·42	·33
Acute Poliomyelitis and Acute Polioencephalitis (notifiable and non-notifiable forms)	12	21	·04	·07	Peritonitis (without specified cause)	25	24	·10	·08
Acute Infectious Encephalitis (lethargic or epidemic) (notifiable and non-notifiable forms)	9	10	·03	·03	Other Diseases of the Digestive System	361	339	1·33	1·16
Other Infectious and Parasitic Diseases	99	92	·37	·32	Nephritis	1,492	1,277	5·50	4·44
Cancer	2,930	3,273	10·81	11·39	Other Diseases of the Genito-Urinary System	407	378	1·50	1·32
Diabetes Mellitus	463	540	1·71	1·88	Criminal Abortion	44	26	·16	·09
Other General Diseases	458	407	1·69	1·42	Puerperal Septicæmia and Post-Abortive Sepsis	57	27	·21	·09
Vitamin-Deficiency Diseases	2	2	·01	·01	Puerperal Thrombophlebitis, Embolism and Sudden Death (Sepsis)	18	17	·07	·06
Diseases of the Blood	187	220	·69	·77	Other Puerperal Diseases	124	105	·46	·37
Chronic Poisoning and Intoxication	28	40	·10	·14	Congenital Malformations	266	320	·98	1·11
Encephalitis and Meningitis (non-epidemic)	106	115	·39	·49	Congenital Debility	90	79	·33	·27
Cerebral Haemorrhage		1,914		6·66	Premature Birth	623	653	2·30	2·27
Cerebral Embolism, Thrombosis, Softening and Hemiplegia		791		2·75	Other Diseases peculiar to the First Year of Life	370	425	1·37	1·48
Apoplexy and Other Intracranial Effusions		8		·03	Senility	767	1,010	2·83	3·62
					Suicide	315	238	1·16	·86
					Accident	1,449	1,311	5·35	4·56
					Other Violence	44	32	·16	·13
					All Other Causes	193	166	·72	·58
					Total	25,537	27,936	94·29	97·22

Infantile Mortality.—Infantile mortality as measured by deaths of children under one year of age continued to show steady improvement throughout the period and reached a new low level in 1946 with 30.22 per 1,000 live births. The average

rate throughout the six years was 34.85 per 1,000 live births as compared with 40.90 in the preceding six years.

Annual figures are as follows:—

DEATHS UNDER ONE YEAR OF AGE—NEW SOUTH WALES, 1941-1946.

Year.	Number of Deaths under one year of age.			Rate per 1,000 Live Births.					
	Males.	Females.	Total.	Total under 1 week.	Total under 1 month.	Total under 3 months.	Total under one year.		
							Males.	Females.	Total.
1941	1,264	1,000	2,264	23·55	29·52	33·75	47·89	39·47	43·77
1942	1,204	912	2,116	20·97	25·49	29·46	44·33	35·78	40·19
1943	1,161	911	2,072	19·61	23·84	27·40	39·68	32·53	36·18
1944	1,050	779	1,829	18·30	21·96	24·12	34·58	26·63	30·68
1945	1,055	834	1,889	18·28	21·89	24·23	33·16	27·94	30·63
1946	1,195	837	2,032	18·82	21·96	24·15	34·45	25·71	30·22

Of the deaths under one year of age throughout this period 57 per cent. occurred under one week; 69 per cent. under one month, and 77 per cent. under three months.

The principal causes of death of children under one year of age and the average annual number of such deaths throughout the periods were prematurity 652, congenital malformations 269, injury at birth 222, pneumonia 210, "other developmental" diseases 203, diarrhoea and enteritis 96, and infective and

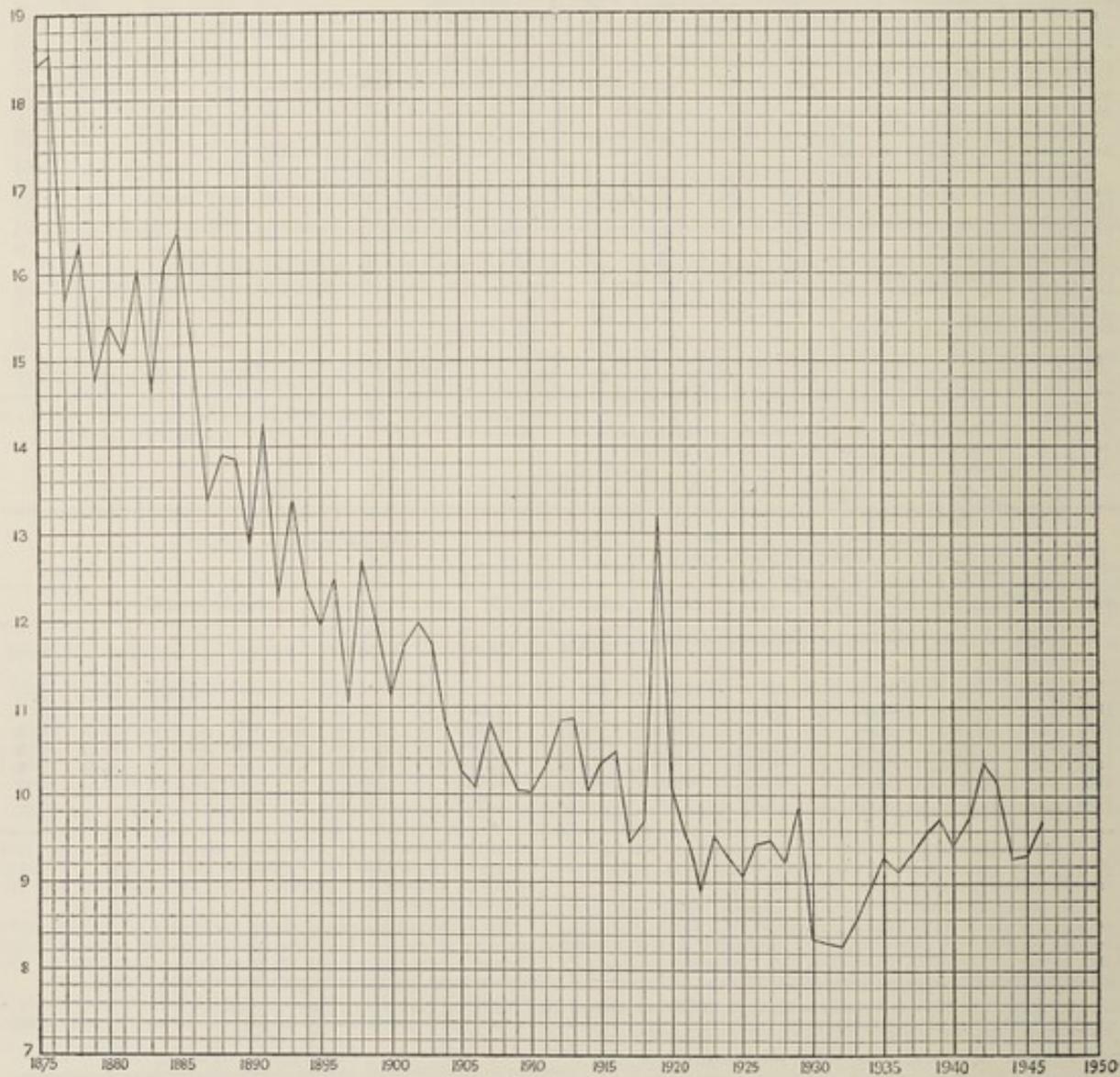
parasitic diseases 106 (including whooping cough 42, cerebro-spinal meningococcal meningitis 16, influenza 13, tuberculosis 8, measles 7, diphtheria 6, purulent infection and septicæmia 6, and syphilis 3).

The following statement shows the deaths of children under one year of age per 1,000 live births classified in the principal disease groups during the six year period 1941-1946 in comparison with the preceding six years, 1935-1940.

PRINCIPAL CAUSES OF DEATH UNDER ONE YEAR OF AGE—NEW SOUTH WALES.

Cause of Death.	Males.		Females.		Total.	
	1935-40.	1941-46.	1935-40.	1941-46.	1935-40.	1941-46.
Tuberculosis	·18	·16	·10	·10	·14	·13
Syphilis	·12	·05	·10	·05	·11	·05
Other Infective or Parasitic Diseases	1·86	1·65	1·94	1·60	1·90	1·62
Meningitis	·52	·56	·35	·40	·44	·49
Convulsions	·24	·20	·11	·11	·17	·16
Bronchitis	·32	·20	·27	·17	·30	·19
Pneumonia	4·82	3·97	3·60	3·22	4·23	3·61
Diarrhoea and Enteritis	2·93	1·89	2·22	1·41	2·59	1·65
Malformations	5·20	4·87	4·10	4·33	4·66	4·69
Congenital Debility	2·12	1·47	1·71	1·25	1·92	1·36
Premature Birth	14·25	12·18	12·13	10·15	13·21	11·19
Injury at Birth	5·14	4·60	3·71	2·97	4·44	3·81
Other diseases peculiar to first year of life	7·88	4·04	2·89	2·88	3·39	3·48
Other Causes	3·69	2·71	3·10	2·29	3·40	2·51
All Causes	45·27	38·56	36·33	30·93	40·90	34·85

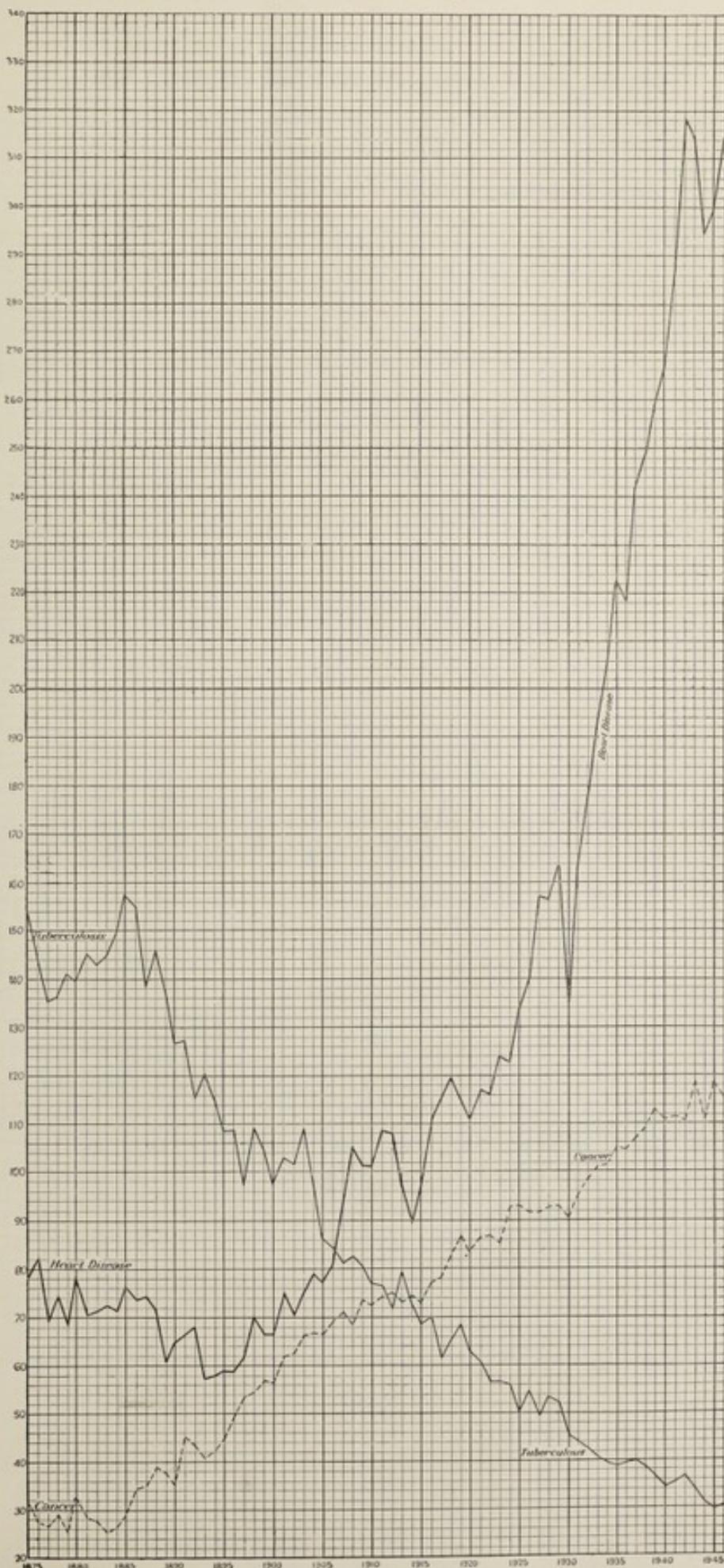
ANNUAL DEATH RATE
Per Thousand of the Population in N.S.W.
1875-1946



Graph I

CANCER, TUBERCULOSIS AND HEART DISEASE

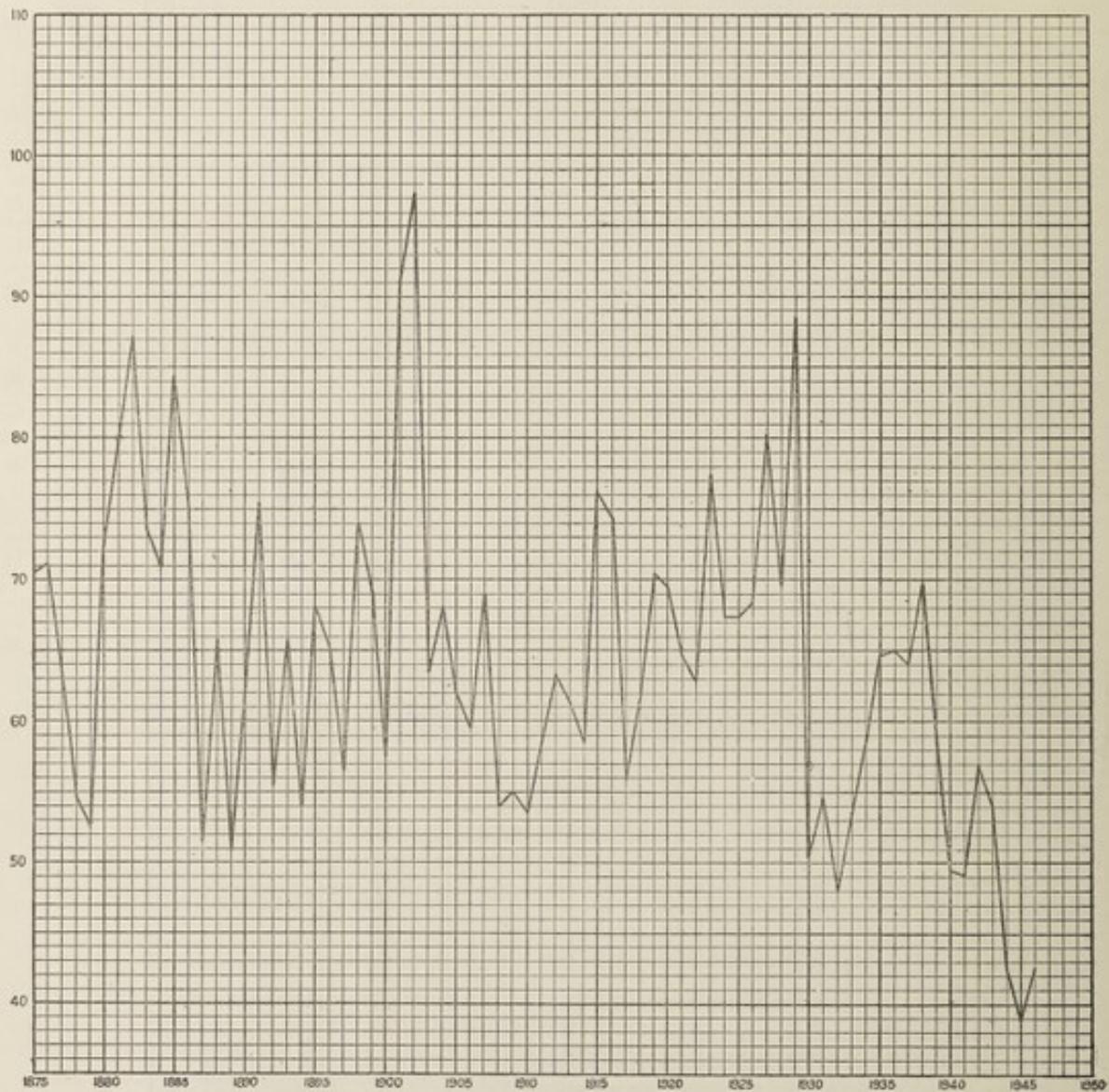
Annual Death Rate per 100,000 of the Population, 1875-1946



Graph 2

PNEUMONIA

Annual Death Rate per 100,000 of Population in N.S.W., 1875-1946



Graph 3

INFLUENZA

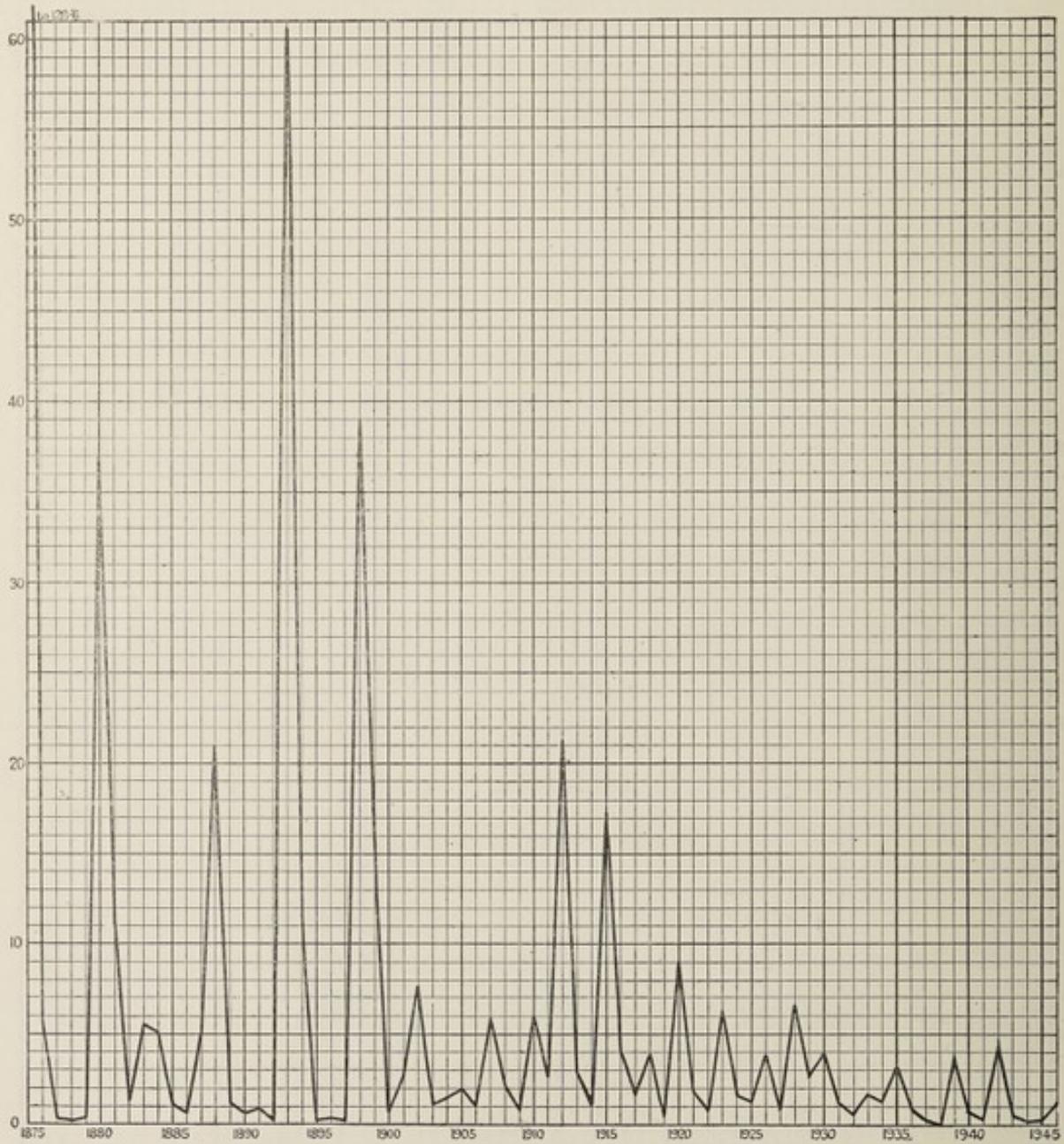
Annual Death Rate per 100,000 of Population in N.S.W., 1875-1946



Graph 4

MEASLES

Annual Death Rate per 100,000 of Population in N.S.W., 1875-1946



Graph 5

WHOOPING COUGH

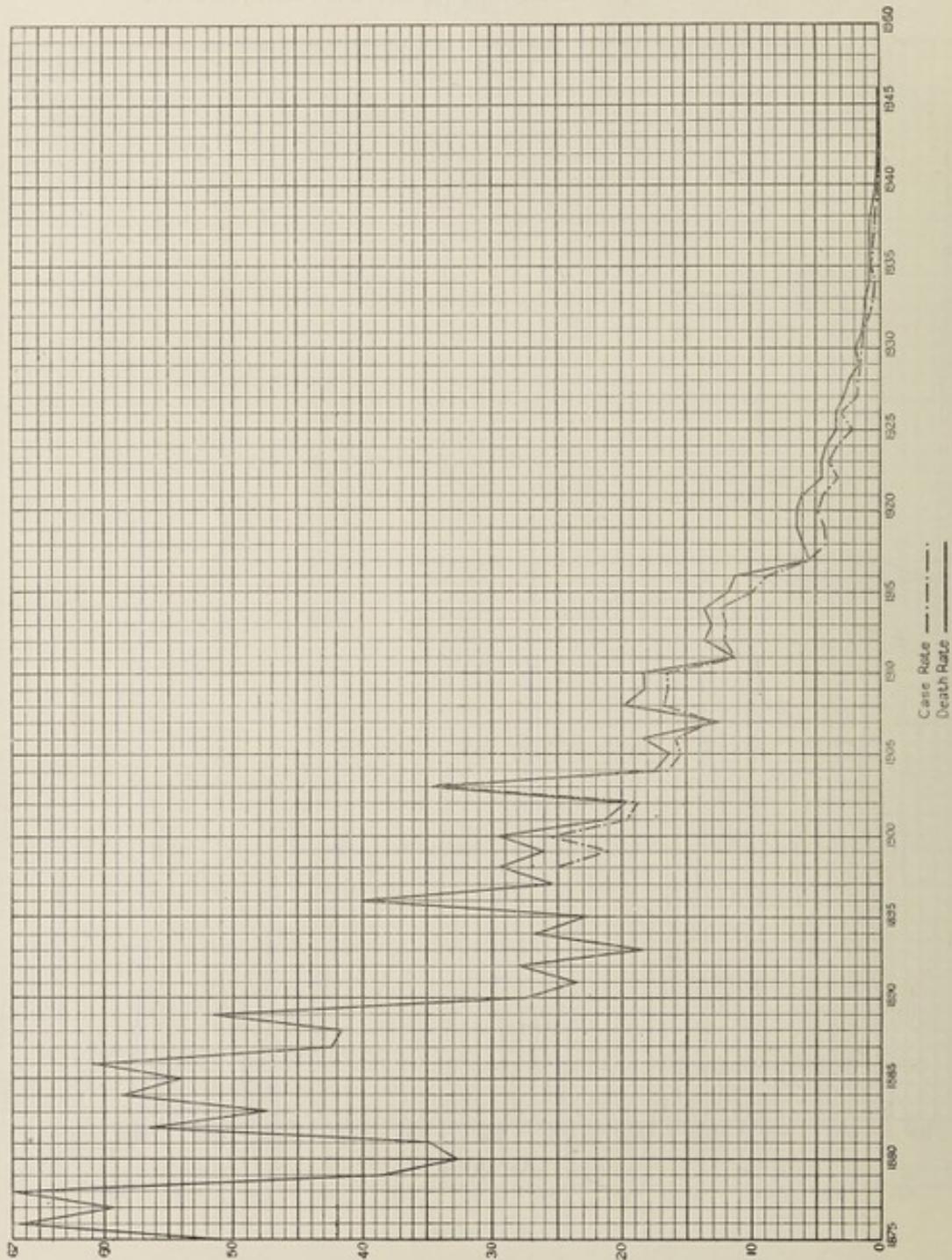
Annual Death Rate per 100,000 of the Population in N.S.W., 1875-1946



Graph 6

TYPHOID FEVER

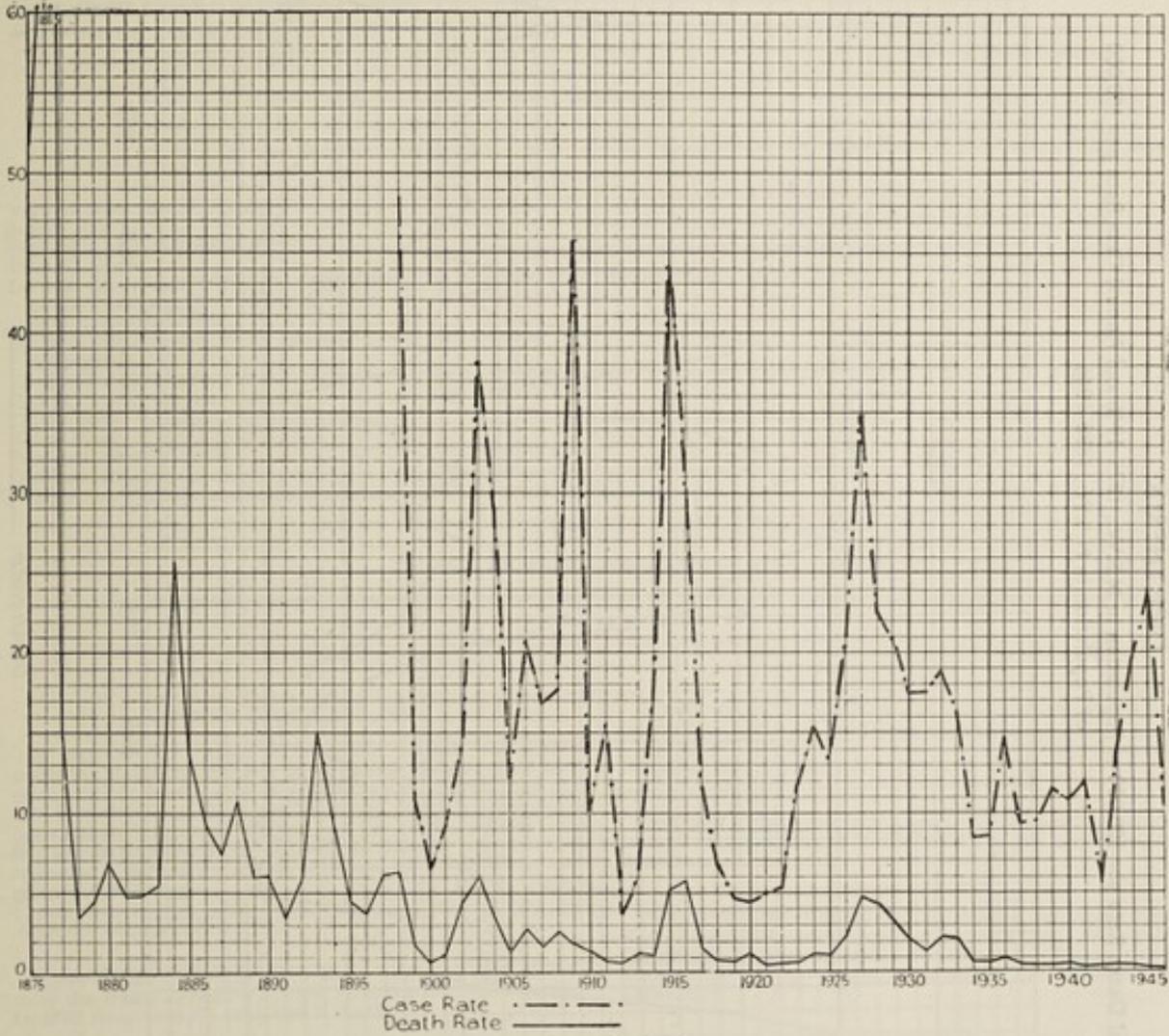
Annual Death Rate per 100,000 of Population in N.S.W., 1875-1946 and Annual Case Rate per 10,000 of Population in N.S.W., 1898-1946



Graph 7

SCARLET FEVER

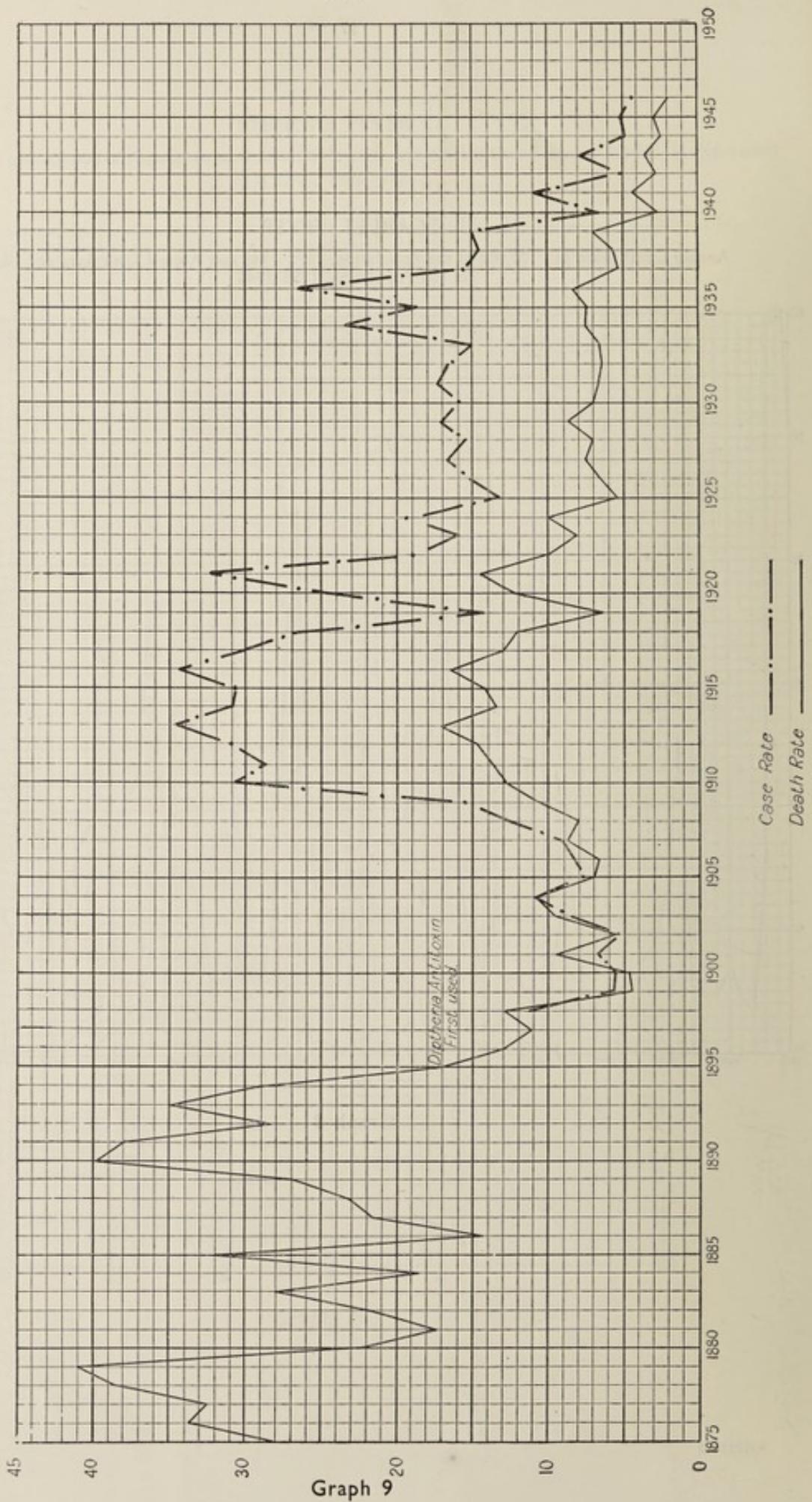
Annual Death Rate per 100,000 of the Population, 1875-1946 and Annual Case Rate per 10,000 of the Population, 1898-1946



Graph 8

DIPHTHERIA

Annual Death Rate per 100,000 of Population in N.S.W., 1875-1946 and Annual Case Rate per 100,000 of Population in N.S.W., 1898-1946



SECTION I.

A.—COMMUNICABLE DISEASES—1941.

Notifiable Infectious Diseases Recorded in New South Wales during the year ended 31st December, 1941.

A.—COMMUNICABLE DISEASES.

The Public Health Act, 1902, provides that the Governor may, by proclamation in the *Government Gazette*, declare that any disease therein named is an infectious disease.

	Notifiable from—	Cases and Deaths Notified.					
		1939.		1940.		1941.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Typhoid fever and paratyphoid	1st January, 1898	63	13	67	9	40	8
Scarlet fever	"	3,190	11	3,026	15	3,385	6
Diphtheria or membranous croup	"	4,103	192	1,834	74	3,063	121
Bubonic plague	23rd January, 1900 .....	...	...	...	...	...	...
Infantile paralysis (including any form of acute anterior poliomyelitis, polioccephalitis or polio-myeloencephalitis).	1st February, 1912. Definition Re-proclaimed 14th August, 1931.	33	2	11	1	90	8
Epidemic cerebro-spinal fever (meningococcal meningitis).	11th October, 1915	22	6	41	13	411	84
Encephalitis Lethargica	1st April, 1926	6	4	7	3	13	4
Cholera	12th August, 1927 .....	...	...	...	...	...	...
Typhus fever .....	" .....	...	...	5	...	10	...
Yellow fever .....	" .....	...	...	...	...	...	...
Puerperal infection	16th August, 1929	244	38	245	50*	270	29*
Undulant fever	13th August, 1937 .....	...	...	...	...	...	...
Leprosy	25th February, 1938 .....	...	2	...	2	1	...
Total .....	.....	7,661	268	5,236	167	7,283	260
Population at 31st December .....	.....	2,764,782		2,789,123		2,812,321	

* See text below.

PUBLIC HEALTH ACT, 1902.

A total of 7,283 cases of infectious disease was notified under the Public Health Act, 1902, during 1941, or 2,047 more cases than in 1940. The number of cases notified from the 158 municipal, 138 shire and 14 police districts; the deaths due to these infections; the age and sex of the patients; and the seasonal incidence of the various diseases are shown in appended Tables I-V (pp. 20-28). As indicated below, pulmonary tuberculosis is notifiable under the Public Health (Amendment) Act, 1915; and venereal diseases under the Venereal Diseases Act, 1918.

Typhoid Fever.—The 40 cases and 8 deaths notified in 1941 show the lowest incidence of this infection hitherto recorded. In 1940 there were 67 cases and 9 deaths.

Scarlet Fever.—There were 3,385 notified cases and 6 deaths, an increase of 359 cases as compared with 1940 when 3,026 cases and 15 deaths were recorded.

Diphtheria.—There were 3,063 notified cases and 121 deaths, in comparison with 1,834 cases and 74 deaths in 1940.

Infantile Paralysis.—90 cases and 8 deaths were notified. In 1940 there were 11 cases with 1 death.

Puerperal Infection.—270 cases were notified, or 25 more than in 1940. The recorded deaths from puerperal septicaemia and post-abortive sepsis in 1941 numbered twenty-nine, which does not include twenty-five deaths from sepsis classed as criminal abortion. Under the revised International List of Causes of Death which came into use in 1940, puerperal thrombophlebitis, embolism, and sudden death are included as subdivisions of the "infection" group, but to maintain comparability with previous years such deaths are omitted here and shown separately in the following pages. There were twenty-four deaths in this additional group.

Cerebro-Spinal Meningitis.—411 cases and 84 deaths were reported in 1941. In 1940 there were 41 cases and 13 deaths.

Encephalitis Lethargica.—13 cases and 4 deaths were notified, compared with 7 cases and 3 deaths in 1940.

Undulant Fever.—On 13th August, 1937, a proclamation was issued making undulant fever notifiable on and from that date.

Bubonic Plague.—No case of this disease has been reported since June, 1923. Rat-catchers are continuously employed in the vicinity of wharves and in the city area. Plague was not detected in the 2,633 rats examined in the Microbiological Laboratory.

Smallpox.—No case was reported during 1941.

Leprosy.—One case of leprosy was notified in 1941, but no patients under detention in the Lazaret died during the year. For the Report on Leprosy in New South Wales see p. 133.

PUBLIC HEALTH (AMENDMENT) ACT, 1915.

Pulmonary Tuberculosis was made a notifiable disease under an amendment of the Public Health Act in 1915. In 1941 registered cases amounted to 1,916, a decrease of 10 on the registrations received in 1940. There were 934 deaths, or an increase of 42 compared with the deaths recorded in 1940. A survey by the Director of the Tuberculosis Division is on p. 109.

VENEREAL DISEASES ACT, 1918.

Cases of venereal disease notified in 1941 numbered 4,798, a decrease of 513 cases on the number (5,311) received in 1940. The Report of the Director of the Division is on p. 80.

TABLE I.—Showing the number of notified cases of, and deaths from, the following diseases:—Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid Fever (including Paratyphoid), and Puerperal Infection in the METROPOLITAN COMBINED DISTRICTS for the year ended 31st December, 1941.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Puerperal Thrombophlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	D.	D.
METROPOLITAN MUNICIPALITIES.																	
Sydney, City of ...	86,630	...	1	70	...	142	3	4	1	23	5	...	...	62	1	...	70
Alexandria	8,460	...	...	9	...	15	1	2	...	2	...	...	...	1	...	...	1
Annandale.....	11,500	...	...	12	...	25	1	...	...	2	...	...	...	2	...	...	4
Ashfield	41,900	...	...	47	...	24	1	1	...	7	1	...	...	6	...	1	17
Auburn	20,710	...	...	25	...	37	2	...	...	4	1	...	...	1	...	...	6
Balmain.....	27,150	...	...	35	...	37	1	1	...	...	...	...	...	4	...	1	14
Bankstown	29,950	1	...	49	...	45	3	4	...	5	1	...	...	3	...	...	17
Bexley	23,520	...	...	39	...	15	...	...	...	2	...	...	...	1	...	...	6
Botany	9,070	...	...	19	...	15	1	...	...	3	...	...	...	1	...	...	3
Burwood	20,310	...	...	20	...	14	2	...	...	6	1	...	...	3	...	...	3
Canterbury	85,570	1	...	134	...	35	2	5	...	10	1	...	...	13	1	1	36
Concord.....	24,430	...	...	35	...	15	1	1	...	5	2	...	...	...	...	...	3
Darlington	2,750	...	...	2	...	4	...	...	...	...	...	...	...	...	...	...	4
Drummoyne	30,900	1	...	63	...	71	5	3	...	5	2	...	...	5	2	1	6
Dundas	6,760	...	...	13	...	2	...	1	...	...	...	...	...	...	...	...	7
Eastwood	3,350	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3
Enfield	15,690	...	...	31	...	17	...	1	...	2	1	...	...	1	...	...	6
Ermington and Rydalmere	2,510	...	...	2	...	1	...	...	...	...	...	...	...	1	...	...	...
Erskineville	6,260	...	...	15	...	18	...	1	...	2	1	...	...	2	...	...	6
Glebe	19,220	...	1	21	...	36	1	5	1	6	...	...	...	5	...	...	7
Granville	20,030	...	...	20	...	27	2	1	...	4	...	...	...	2	...	...	5
Holroyd (Pitt and Merrylands Wards)	9,420	...	...	33	...	10	...	...	...	...	...	...	...	...	...	...	2
Homebush.....	3,290	...	...	3	...	4	...	...	...	1	1	...	...	...	...	...	1
Hunter's Hill	9,790	...	...	8	...	1	...	3	...	...	...	...	...	...	...	...	2
Hurstville	27,230	...	...	59	...	9	...	...	...	6	2	...	...	3	...	1	8
Kogarah	34,670	...	...	44	...	13	...	3	...	7	1	...	...	3	...	...	9
Kuring-gai	33,670	...	...	44	...	4	...	...	...	1	...	...	...	...	1	...	13
Lane Cove	16,730	...	...	35	...	4	...	...	...	1	...	1	...	...	...	...	7
Leichhardt	30,120	...	...	29	...	35	...	...	...	7	...	1	...	3	...	...	11
Lidcombe	18,080	...	...	17	...	16	1	...	...	4	...	...	...	4	1	...	16
Manly	26,640	1	...	40	...	14	1	...	...	8	1	...	...	...	...	...	8
Marrickville	46,410	1	...	79	...	26	1	...	...	2	2	...	...	4	...	...	23
Mascot	16,150	...	...	19	...	20	...	1	...	3	1	...	...	1	...	...	6
Mosman	25,250	...	...	27	...	6	2	...	...	3	...	...	1	1	...	...	10
Newtown	24,780	...	...	27	...	52	1	2	...	9	3	...	...	3	...	...	17
North Sydney	53,170	...	...	81	...	50	2	...	...	5	1	1	...	...	1	...	18
Paddington	23,910	...	...	28	...	71	1	2	1	8	4	...	...	10	...	...	13
Parramatta	19,700	...	...	12	...	7	...	...	...	2	...	...	...	4	...	1	7
Petersham	27,690	...	...	32	...	15	...	1	...	8	2	...	...	7	...	...	15
Randwick	87,330	2	...	137	...	59	2	2	...	20	2	...	...	8	...	...	59
Redfern	17,410	...	...	17	...	51	...	2	1	7	1	...	...	8	...	...	14
Rockdale	43,630	...	...	68	...	12	...	2	1	7	2	...	...	1	...	1	14
Ryde	31,330	...	...	70	...	11	...	2	...	10	5	...	...	6	1	...	7
St. Peters	12,390	...	...	18	1	22	1	...	...	4	1	...	...	3	...	...	5
Strathfield	13,610	...	...	18	...	8	...	...	...	1	...	...	...	2	...	...	6
Vaucluse	8,340	...	...	18	...	...	...	...	...	2	...	...	...	...	...	...	7
Waterloo	11,420	...	...	20	...	16	...	...	...	4	1	...	...	2	...	...	3
Waverley	64,640	...	...	104	...	32	2	2	...	6	1	...	...	12	2	...	27
Willoughby	46,820	1	...	62	...	13	3	...	...	7	...	1	...	5	...	2	9
Woolahra	40,660	1	...	50	...	14	...	4	...	9	2	...	...	2	1	...	9
EXTRA METROPOLITAN MUNICIPALITIES.																	
Cabramatta and Canley Vale	7,780	...	...	9	...	18	...	...	...	3	1	...	...	...	...	...	4
Fairfield.....	10,702	...	...	10	...	30	...	...	...	3	...	...	...	...	...	...	5
Holroyd (Guildford and Wentworth Wards)	9,230	...	...	...	1	...	...	1	...	1	...	...	...	3	...	...	5
Ingleburn	2,200	...	...	5	...	16	...	...	...	2	...	...	...	...	...	...	...
Liverpool	7,470	1	...	13	...	18	1	...	...	5	...	...	...	1	...	...	3
EXTRA METROPOLITAN SHIRES AND PORT JACKSON.																	
Hornsby	26,840	...	...	46	...	12	...	...	...	1	...	...	...	...	...	...	22
Warringah.....	20,190	...	...	21	...	15	...	1	...	3	...	...	...	1	...	...	9
Harbour of Port Jackson .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	1,406,430	10	2	1,964	2	1,299	44	58	5	257	51	3	2	210	11	10	618

TABLE III—continued.

REMAINDER OF STATE—Return showing the number of Cases, etc., from Country Municipalities—continued.

Municipality.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Puerperal Thrombophlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	D.	D.
Dungog	2,150	...	...	5	...	17	...	...	...	...	...	...	...	...	...	...	1
Forbes	5,660	...	...	18	...	12	...	...	...	...	...	...	...	1	...	...	2
Gerringsong	900	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Glen Innes	5,340	...	...	...	...	3	...	...	...	1	...	...	...	...	...	...	1
Gosford	3,980	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...
Goulburn	15,460	1	...	37	1	14	...	...	...	...	...	...	1	1	...	...	1
Grafton	7,590	1	...	8	...	9	1	...	...	...	...	...	...	...	...	...	2
Grafton, South	2,980	...	...	...	...	8	...	1	...	...	...	...	...	...	...	...	1
Grenfell	2,440	...	...	11	...	4	2	...	...	...	...	...	...	...	...	...	...
Gulgong* .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gunnedah	4,150	...	...	5	1	46	4	...	...	...	...	...	...	...	...	...	...
Hay	3,350	1	...	2	...	4	...	1	...	...	...	...	...	...	...	...	...
Hillston	1,110	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Ilawarra North	9,630	...	...	6	...	8	...	...	...	2	...	...	...	...	...	...	1
Inverell	6,120	...	...	3	...	3	...	...	...	...	...	...	2	...	...	...	2
Jamberoo	1,130	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Junee	4,380	...	...	...	...	3	1	...	...	2	...	...	...	...	...	...	1
Katoomba	8,330	...	...	8	...	10	1	...	...	1	...	...	...	...	...	...	5
Kempsey	5,360	...	...	3	...	11	...	...	...	...	...	...	...	...	...	...	2
Kiama	2,440	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Lismore	13,400	...	...	3	...	17	1	1	...	1	...	...	...	...	...	...	5
Lithgow	20,180	...	...	33	...	17	...	...	...	1	...	...	1	2	...	...	1
Maclean	1,720	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...
Manilla	1,990	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Moama	720	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Molong	1,000	...	...	7	...	2	...	...	...	...	...	...	...	...	...	...	...
Moree	4,720	1	...	...	...	4	...	...	...	...	...	...	...	...	...	1	1
Mudgee	4,150	...	...	9	...	9	...	...	...	1	...	...	...	...	...	...	3
Mullumbimby	1,500	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Murrumburrah	2,610	...	...	5	...	13	...	...	...	1	...	...	...	...	...	...	...
Murrumbidgee	1,110	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Murwillumbah	4,620	...	...	2	...	3	...	...	...	2	1	...	1	1	...	...	...
Muswellbrook	3,530	...	...	2	...	8	...	1	...	...	...	...	...	...	...	...	...
Narrabri	3,460	...	...	3	...	5	1	...	...	...	...	...	...	...	...	...	...
Narrandera	4,410	...	...	11	...	18	2	...	...	...	...	...	1	...	...	...	2
Narromine	1,840	...	...	2	...	...	...	...	...	2	...	...	...	...	...	...	1
Norrah	3,250	...	...	4	...	1	...	...	...	...	...	...	...	...	...	...	2
Nyngan	1,670	...	...	1	...	7	...	...	...	...	...	...	...	...	...	...	...
Orange	10,930	1	1	24	...	17	...	...	...	4	...	...	1	...	...	...	1
Parkes	6,590	...	...	15	...	38	2	1	...	1	...	...	...	...	...	...	...
Peak Hill	1,220	...	...	1	...	3	...	...	...	...	...	...	...	...	...	...	3
Penrith	4,420	...	...	6	...	6	...	...	...	3	1	...	...	...	...	...	3
Port Macquarie	2,000	...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	...
Queanbeyan	4,360	...	...	3	...	2	...	...	...	2	1	...	1	...	...	...	1
Quirindi	2,450	...	...	2	...	12	1	...	...	...	...	...	...	...	...	...	2
Richmond	2,900	...	...	13	...	5	1	...	...	3	...	...	1	...	...	...	2
Scone	2,290	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Shellharbour	2,250	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...
Shoalhaven, South	830	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
St. Mary's	3,220	...	...	2	...	11	1	...	...	...	...	...	...	...	...	...	1
Tamworth	11,390	...	...	5	...	22	...	...	...	4	1	1	1	1	...	...	3
Taree	5,210	...	...	6	1	1	...	...	...	...	...	...	1	...	...	...	4
Temora	4,320	...	...	4	...	1	...	...	...	...	...	...	...	...	...	...	...
Tenterfield	2,670	...	...	...	...	1	...	1	...	...	...	...	1	...	...	...	1
Ulladulla	1,590	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...
Umarra	2,000	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Uralla	1,120	...	...	3	...	1	...	...	...	...	...	...	...	...	...	...	...
Wagga Wagga	13,720	...	...	88	...	6	...	1	...	1	...	...	4	...	...	...	5
Walcha	1,550	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Warren	1,720	...	1	9	...	5	...	...	...	...	...	...	...	...	...	...	...
Wellington	4,430	...	...	6	...	36	1	...	...	...	...	...	1	...	...	1	...
Wentworth	1,580	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wilcannia	680	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...
Windsor	3,510	...	...	8	...	6	...	...	...	1	...	...	1	...	...	...	...
Wingham	1,790	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wollongong	18,110	1	...	29	...	17	1	...	...	3	1	...	...	...	...	...	4
Yass	3,020	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Young	4,310	...	...	1	...	7	...	...	...	2	1	...	1	...	...	...	2
Total Municipalities	425,840	10	3	607	3	627	27	7	...	59	12	2	1	31	7	4	116

* United with Wyaldra Shire to form Gulgong Shire, 1st January, 1941.

TABLE III—continued.

REMAINDER OF STATE—Return showing the number of cases, etc., from Country Shires—continued.

Shires.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Puerperal Thrombophlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.		
COUNTRY SHIRES—continued.																	
Namoi	9,060	...	...	5	...	23	1	...	...	...	...	...	...	...	...	...	1
Narraburra	4,310	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	2
Nattai	5,780	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	1
Nepean	3,790	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	1
Nundle	1,870	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Nymboida	2,840	...	...	1	...	3	...	...	...	...	...	...	...	...	...	...	1
Oberon	3,010	...	...	14	...	1	...	...	...	2	...	...	...	...	...	...	...
Orara	1,610	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Patrick Plains	6,050	...	...	...	...	2	...	...	...	1	...	...	...	...	...	...	...
Peel	6,750	...	...	5	...	11	...	...	...	3	...	...	...	...	...	...	2
Rylstone	5,750	...	...	17	...	4	1	...	...	...	...	...	...	...	...	...	1
Seyern	6,350	1	...	3	...	45	...	...	...	4	1	...	1	...	1	...	1
Snowy River	3,560	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Stroud	6,270	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Sutherland	19,100	...	...	25	...	23	1	3	...	3	2	...	2	...	...	...	11
Talbragar	4,110	...	...	1	...	6	...	...	...	...	...	...	...	...	...	...	...
Tallaganda	3,100	...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...
Tamarang	3,040	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Tenterfield	5,410	...	...	2	...	1	...	1	1	...	...	...	...	...	...	...	2
Terania	7,680	...	...	2	...	6	...	1	...	...	...	...	...	...	...	...	...
Timbregongie	4,410	...	...	1	...	1	...	1	...	1	1	...	...	...	...	...	...
Tintenbar	5,370	...	...	4	...	7	1	...	...	1	...	...	...	...	...	...	...
Tomki	4,080	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tumbarumba	3,120	...	...	4	...	1	...	1	...	...	...	...	1	...	...	...	...
Tumut	8,440	...	...	32	...	6	1	...	...	...	...	...	...	...	...	...	3
Turon	4,550	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Tweed	13,760	...	...	5	...	9	...	4	...	2	...	2	...	2	...	...	1
Upper Hunter	5,400	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	1
Urana	3,080	...	...	3	...	1	...	...	...	...	...	...	...	...	...	...	...
Wade	10,150	...	...	11	1	4	...	...	...	...	...	...	2	...	...	...	3
Wakool	4,320	...	...	4	...	...	...	...	...	3	...	...	...	...	...	...	...
Walgett	3,880	...	...	...	...	9	...	1	...	...	...	...	...	...	...	...	...
Wallarobba	4,810	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Waradgery	1,220	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Warrah	1,780	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Waugoola	5,530	...	...	5	...	10	...	...	...	...	...	...	...	...	...	...	1
Weddin	4,010	...	...	11	...	4	...	...	...	1	...	...	...	...	...	...	...
Willimbong	8,700	...	...	6	...	32	...	...	...	...	...	...	1	...	...	...	3
Windouran	860	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Wingadee	3,590	...	...	4	...	...	...	...	...	...	...	...	1	...	...	...	...
Wingecarribee	7,500	...	...	22	...	3	1	...	...	1	...	...	...	...	...	...	...
Wollondilly	7,790	...	...	4	...	3	...	...	...	1	...	...	1	...	1	...	4
Woodburn	4,820	...	...	1	...	7	1	1	...	...	...	...	...	...	...	...	...
Woy Woy	2,880	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	4
Wyaldra† .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Yallaroo	4,520	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Yanko	5,140	...	...	3	...	10	...	1	...	...	...	...	...	...	...	...	2
Yarrowluma	3,140	...	...	...	...	12	...	...	...	...	...	...	...	...	...	...	...
Total, Shires	712,170	8	1	665	1	661	28	24	2	54	12	8	1	19	6	10	140
WESTERN DIVISION (UNINCORPORATED) POLICE DISTRICTS.*																	
Balranald .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bourke .....	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Brewarrina .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Broken Hill .....	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Cobar .....	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Hay .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hillston .....	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Ivanhoe .....	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Menindie .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mitchell .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nyngan .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Walgett .....	...	...	...	...	...	2	...	1	...	...	...	...	...	...	...	...	...
Wentworth .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wilcannia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, Unincorporated	17,800	1	...	3	...	5	...	1	...	...	...	...	...	1	...	...	1
MISCELLANEOUS.																	
Lord Howe Island	160	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Migratory	4,355	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Outside the State—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Australian Capital Territory .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Queensland .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Victoria .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Australia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Miscellaneous	4,515	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, N.S.W.	2,799,155	40	8	3,385	6	3,063	121	90	8	411	84	13	4	270	29	24	934

* Population and Deaths available only for unincorporated area as a whole.
† United with Gulgong Municipality to form Gulgong Shire, 1st January, 1941.

TABLE IV.—Table showing Age and Sex Incidence, and Mortality, in the Metropolitan Combined District, Hunter River Combined District, Broken Hill District, and Remainder of State, from the notified cases of Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Infantile Paralysis (Acute Anterior Poliomyelitis), Encephalitis Lethargica, Scarlet Fever, Typhoid Fever (including Paratyphoid) and Puerperal Infection, for the year ended 31st December, 1941.

Age Period.	Typhoid and Paratyphoid.						Scarlet Fever.						Diphtheria.						Infantile Paralysis.					
	Incidence.			Mortality.			Incidence.			Mortality.			Incidence.			Mortality.			Incidence.			Mortality.		
	Notified Cases.			Notified Deaths.			Notified Cases.			Notified Deaths.			Notified Cases.			Notified Deaths.			Notified Cases.			Notified Deaths.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
METROPOLITAN COMBINED DISTRICT.																								
All ages	5	5	10	1	1	2	749	1,215	1,964	...	2	2	583	716	1,299	20	24	44	41	17	58	3	2	5
Under 1 year ...	...	...	...	...	...	...	1	2	3	...	...	...	11	2	13	2	1	3	1	...	1	...	...	...
1-4 years ...	...	...	...	...	...	...	211	236	447	...	...	...	235	285	520	12	16	28	8	4	12	2	2	4
5-14 " ...	2	1	3	...	...	...	426	665	1,091	...	1	1	295	350	645	6	5	11	31	12	43	1	...	1
15-24 " ...	3	...	5	...	...	...	52	125	177	...	...	...	30	58	88	...	2	2	1	1	2	...	...	...
25-34 " ...	...	2	...	...	1	2	21	89	110	...	1	1	5	37	42	...	...	...	...	...	...	...	...	...
35-44 " ...	...	...	...	...	...	...	26	70	96	...	...	...	3	4	7	...	...	...	...	...	...	...	...	...
45-54 " ...	...	...	...	...	...	...	7	13	20	...	...	...	...	13	13	...	...	...	...	...	...	...	...	...
55-64 " ...	...	...	...	...	...	...	3	7	10	...	...	...	...	7	7	...	...	...	...	...	...	...	...	...
65 and over ...	...	...	...	...	...	...	...	1	1	...	...	...	...	3	3	...	...	...	...	...	...	...	...	...
Not stated .....	...	...	...	...	...	...	2	7	9	...	...	...	4	7	11	...	...	...	...	...	...	...	...	...
HUNTER RIVER COMBINED DISTRICT.																								
All ages	6	5	11	1	1	2	56	90	146	...	...	...	244	327	471	12	10	22	...	...	...	1	...	1
Under 1 year ...	...	...	...	...	...	...	...	...	...	...	...	...	10	5	15	3	...	3	...	...	...	...	...	...
1-4 years ...	...	...	...	...	...	...	24	17	41	...	...	...	100	80	180	7	7	14	...	...	...	...	...	...
5-14 " ...	1	...	1	...	...	...	27	54	81	...	...	...	92	88	180	2	3	5	...	...	...	1	...	1
15-24 " ...	2	3	5	...	...	...	3	6	9	...	...	...	19	27	46	...	...	...	...	...	...	...	...	...
25-34 " ...	1	1	2	...	1	1	1	7	8	...	...	...	11	10	21	...	...	...	...	...	...	...	...	...
35-44 " ...	...	...	...	...	...	...	1	6	7	...	...	...	4	6	10	...	...	...	...	...	...	...	...	...
45-54 " ...	2	1	3	...	1	1	...	...	...	...	...	...	3	5	8	...	...	...	...	...	...	...	...	...
55-64 " ...	1	...	1	...	...	...	...	...	...	...	...	...	3	2	5	...	...	...	...	...	...	...	...	...
65 and over ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
Not stated .....	...	...	...	...	...	...	...	...	...	...	...	...	2	3	5	...	...	...	...	...	...	...	...	...
BROKEN HILL DISTRICT.																								
All ages	1	1	2	...	...	...	19	27	46	...	...	...	19	19	38	...	2	2	...	...	...	...	...	...
Under 1 year ...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...
1-4 years ...	...	...	...	...	...	...	4	6	10	...	...	...	5	7	12	...	1	1	...	...	...	...	...	...
5-14 " ...	1	...	1	...	...	...	15	17	32	...	...	...	12	7	19	...	1	1	...	...	...	...	...	...
15-24 " ...	1	1	2	...	...	...	1	1	2	...	...	...	3	3	6	...	...	...	...	...	...	...	...	...
25-34 " ...	...	...	...	...	...	...	2	2	4	...	...	...	1	2	3	...	...	...	...	...	...	...	...	...
35-44 " ...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45-54 " ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55-64 " ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and over ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Not stated .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
REMAINDER OF STATE.																								
All ages	11	6	17	4	...	4	466	763	1,229	...	4	4	546	709	1,255	28	25	53	17	15	32	2	...	2
Under 1 year ...	...	...	...	...	...	...	6	4	10	...	...	...	12	7	19	...	...	...	1	...	1	1	...	1
1-4 years ...	...	...	...	...	...	...	126	145	271	...	...	...	213	214	427	19	18	37	2	5	7	...	...	...
5-14 " ...	1	...	1	...	...	...	290	429	689	...	2	2	350	391	551	9	7	16	11	5	16	...	...	...
15-24 " ...	...	3	3	...	...	...	35	74	109	...	1	1	80	80	110	...	...	...	3	4	7	1	...	1
25-34 " ...	...	...	...	...	...	...	17	59	76	...	1	1	19	57	76	...	...	...	...	1	1	...	...	...
35-44 " ...	...	1	1	...	2	2	11	33	44	...	...	...	11	23	34	...	...	...	...	...	...	...	...	...
45-54 " ...	3	...	3	...	1	1	1	3	4	...	...	...	7	12	19	...	...	...	...	...	...	...	...	...
55-64 " ...	...	...	...	...	...	...	1	5	6	...	...	...	1	5	6	...	...	...	...	...	...	...	...	...
65 and over ...	...	...	...	...	...	...	...	1	1	...	...	...	...	5	6	...	...	...	...	...	...	...	...	...
Not stated .....	...	...	...	...	...	...	7	9	16	...	...	...	2	5	7	...	...	...	...	...	...	...	...	...

TABLE IV.—Table showing Age and Sex Incidence, and Mortality, in the Metropolitan Combined District, Hunter River Combined District, Broken Hill District, and Remainder of State, from the notified cases of Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Infantile Paralysis (Acute Anterior Poliomyelitis), Encephalitis Lethargica, Scarlet Fever, Typhoid Fever (including Paratyphoid) and Puerperal Infection, for the year ended 31st December, 1941—*continued.*

Age Period.	Encephalitis Lethargica.						Cerebro-spinal Meningitis.						Puerperal Infection.		Puerperal Thrombo-phlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.		
	Incidence.			Mortality.			Incidence.			Mortality.			Incidence.	Mortality.		Deaths.	Deaths.	
	Notified Cases.			Notified Deaths.			Notified Cases.			Notified Deaths.			Notified Cases.	Notified Deaths.	M.		F.	Total.
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	F.	F.		F.		
METROPOLITAN COMBINED DISTRICT.																		
All ages	2	1	3	1	1	2	163	94	257	31	29	51	210	11	10	433	185	618
Under 1 year	12	9	21	3	2	5	...	...	...	...	...	...
1-4 years	1	...	1	...	...	...	25	17	42	10	6	16	...	...	...	...	2	2
5-14 "	1	...	1	31	14	45	6	5	11	...	...	...	...	...	44
15-24 "	42	21	63	4	...	4	74	1	1	17	27	44
25-34 "	1	...	1	...	...	...	29	12	41	3	...	5	102	8	7	49	52	101
35-44 "	14	7	21	...	2	1	26	2	2	77	46	123
45-54 "	5	8	13	2	2	4	...	...	...	134	23	157
55-64 "	1	1	...	1	1	3	4	7	1	1	2	...	...	...	98	19	117
65 and over	2	2	2	1	3	...	...	...	58	16	74
Not stated	2	...	2	...	...	...	8	...	...	...	...	...
HUNTER RIVER COMBINED DISTRICT.																		
All ages	34	7	41	5	4	9	10	4	...	36	23	59
Under 1 year	1	1	...	...	...	...	...	...	...
1-4 years	2	...	2	1	1	...	...	...	...	...	...	...
5-14 "	3	2	5	3	1	4	...	...	...	1	...	1
15-24 "	7	3	10	1	1	2	3	...	...	...	...	4
25-34 "	10	...	10	...	...	...	6	2	...	1	3	4
35-44 "	9	...	9	...	...	...	1	2	...	7	6	13
45-54 "	2	...	2	...	...	...	...	...	...	9	3	12
55-64 "	1	1	...	1	1	...	...	...	12	4	16
65 and over	6	3	9
Not stated	1	1	2	...	...	...	...	...	...	...	...	...
BROKEN HILL DISTRICT.																		
All ages	3	1	4	...	...	...	1	...	...	12	...	12
Under 1 year
1-4 years	1	1	...	...	...	...	...	...	...	...	...
5-14 "
15-24 "
25-34 "	1	...	1	...	...	...	...	...	...	...	...	...
35-44 "	1	...	1	...	...	...	...	...	...	3	...	3
45-54 "	1	...	1	...	...	...	...	...	...	4	...	4
55-64 "	4	...	4
65 and over	1	...	1
Not stated	1	...	...	...	...	...
REMAINDER OF STATE.																		
All ages	7	3	10	2	...	2	71	38	109	18	6	24	49	14	14	149	96	245
Under 1 year	2	...	2	3	...	3	...	...	...	...	...	...
1-4 years	1	...	1	...	...	...	13	5	18	2	...	3	...	...	...	...	...	...
5-14 "	2	1	3	...	...	...	13	13	26	2	1	3	...	...	...	...	1	1
15-24 "	1	3	2	...	2	13	10	23	3	...	3	18	4	1	7	10	17
25-34 "	1	...	1	...	...	...	18	4	22	3	3	6	20	3	8	17	26	43
35-44 "	1	1	...	...	...	5	4	9	1	...	1	8	7	5	26	20	46
45-54 "	1	...	1	...	...	...	5	1	6	...	1	1	...	...	...	30	15	45
55-64 "	1	1	1	1	2	...	...	...	37	12	49
65 and over	1	...	1	...	...	...	...	...	...	32	12	44
Not stated	1	...	1	...	...	...	3	...	...	...	...	...

TABLE V.—Showing the seasonal prevalence of Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Infantile Paralysis (Acute Anterior Poliomyelitis), Encephalitis Lethargica, Scarlet Fever, Typhoid Fever (including Paratyphoid), and Puerperal Infection in New South Wales for the year ended 31st December, 1941.

Month—	Metropolitan Combined Districts.		Hunter River Combined Districts.		Broken Hill District.		Remainder of State.		Total.		Metropolitan Combined Districts.		Hunter River Combined Districts.		Broken Hill District.		Remainder of State.		Total.		
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	
Typhoid and Paratyphoid Fever.																					
January	1	...	6	...	...	...	2	1	9	1	147	1	18	...	...	...	90	1	255	2
February	1	...	1	...	...	...	3	1	5	1	189	...	16	...	...	...	113	...	318	...
March	3	...	2	1	...	...	...	...	5	1	228	...	11	...	...	...	200	...	439	...
April .....	...	...	...	...	1	...	2	...	3	...	226	1	19	...	15	...	162	1	422	2
May .....	...	...	...	...	...	...	...	...	...	...	213	...	10	...	9	...	140	...	372	...
June	2	1	1	...	...	...	2	...	5	1	179	...	10	...	1	...	87	1	277	1
July .....	...	...	...	...	...	...	2	...	2	...	189	...	19	...	6	...	98	...	312	...
August	1	...	...	...	...	...	...	...	1	...	136	...	14	...	7	...	85	1	242	1
September	1	...	...	...	...	...	1	...	2	...	144	...	4	...	3	...	72	...	223	...
October .....	...	...	...	...	...	...	1	...	1	...	131	...	14	...	3	...	63	...	211	...
November .....	...	...	1	1	...	...	2	...	3	1	96	...	7	...	...	...	56	...	159	...
December	1	1	...	...	1	...	2	2	4	3	86	...	4	...	2	...	63	...	155	...
Total ...	10	2	11	2	2	...	17	4	40	8	1,964	2	146	...	46	...	1,229	4	3,385	6	
Diphtheria.																					
January	98	3	58	2	2	...	50	4	206	9	2	1	...	1	...	...	2	...	4	2
February	95	2	57	1	2	...	108	5	262	8	1	...	...	...	...	...	1	...	2	...
March	140	4	54	2	...	...	230	7	424	13	...	...	...	...	...	...	4	...	4	...
April	171	4	70	3	1	...	207	5	449	12	...	...	...	...	...	...	2	...	2	...
May	138	7	39	5	6	1	189	10	372	23	2	...	...	...	...	...	2	...	4	...
June	125	4	25	1	2	...	138	6	290	11	2	...	...	...	...	...	5	...	7	...
July	112	2	60	3	4	...	121	6	297	11	4	1	...	...	...	...	2	1	6	2
August	91	5	31	3	5	...	45	2	172	10	5	1	...	...	...	...	1	...	6	1
September	103	3	16	1	6	...	46	2	171	6	5	...	...	...	...	...	3	1	8	1
October	85	2	29	...	7	...	49	4	170	6	12	1	...	...	...	...	5	...	17	1
November	66	6	13	...	...	1	40	1	119	8	11	1	...	...	...	...	2	...	13	1
December	75	2	19	1	5	...	32	1	131	4	14	...	...	...	...	...	3	...	17	...
Total ...	1,299	44	471	22	38	2	1,255	53	3,063	121	58	5	...	1	...	...	32	2	90	8
Cerebro-spinal Meningitis.																					
January	7	...	...	...	...	...	...	1	7	1	...	...	...	...	...	...	...	...	...	...
February	3	...	...	...	...	...	1	...	4	...	...	...	...	...	...	...	...	...	...	...
March	3	...	2	...	...	...	1	...	6	...	...	...	...	...	...	...	...	...	...	...
April	5	3	1	...	...	...	1	...	7	3	...	...	...	...	...	...	...	...	...	...
May	6	1	...	...	...	...	1	2	7	3	...	...	...	...	...	...	...	...	...	...
June	11	2	...	...	...	...	4	2	15	4	...	...	...	...	...	...	...	...	...	...
July	28	8	5	2	...	...	12	2	45	12	...	...	...	...	...	...	2	...	2	...
August	33	5	5	3	...	...	17	5	55	13	...	1	...	...	...	...	...	1	...	2
September	52	12	9	1	...	...	33	3	94	16	1	1	...	...	...	...	4	...	5	1
October	45	7	5	2	...	...	20	2	70	11	2	...	...	...	...	...	2	...	4	...
November	33	8	6	1	...	...	9	4	48	13	...	...	...	...	...	...	1	...	1	...
December	31	5	8	4	...	...	10	3	53	8	...	...	...	...	...	...	1	1	1	1
Total ...	257	51	41	9	4	...	109	24	411	84	3	2	...	...	...	...	10	2	13	4
Puerperal Embolism, Thrombophlebitis and Sudden Death.																					
January .....	...	1	...	...	...	...	...	1	...	2	6	1	1	...	...	...	2	1	9	2
February .....	...	...	...	...	...	...	...	...	...	...	20	1	...	...	...	...	4	1	24	2
March .....	...	3	...	...	...	...	...	4	...	7	28	2	1	...	...	...	6	1	35	3
April .....	...	...	...	...	...	...	...	1	...	1	26	1	2	...	...	...	6	1	34	2
May .....	...	1	...	...	...	...	...	2	...	3	16	...	...	1	...	...	6	2	22	3
June .....	...	...	...	...	...	...	...	2	...	2	22	1	...	1	...	...	9	3	31	5
July .....	...	1	...	...	...	...	...	...	...	1	15	1	...	...	...	...	2	...	17	1
August .....	...	...	...	...	...	...	...	...	...	...	19	2	4	1	...	...	4	1	27	4
September .....	...	...	...	...	...	...	...	2	...	2	15	...	2	...	1	...	2	1	20	1
October .....	...	1	...	...	...	...	...	...	...	1	20	1	...	1	...	...	3	...	23	2
November .....	...	3	...	...	...	...	...	...	...	3	16	1	...	...	...	...	4	...	20	1
December .....	...	...	...	...	...	...	...	2	...	2	7	...	...	...	...	...	1	3	8	3
Total ...	...	10	...	...	...	...	...	14	...	24	210	11	10	4	1	...	49	14	270	29
Pulmonary Tuberculosis																					
January .....	...	...	42	...	8	...	...	...	...	23	...	...	...	...	...	...	...	...	73	...
February .....	...	...	52	...	2	...	1	...	...	14	...	...	...	...	...	...	...	...	69	...
March .....	...	...	45	...	3	...	1	...	...	23	...	...	...	...	...	...	...	...	72	...
April .....	...	...	52	...	4	...	1	...	...	14	...	...	...	...	...	...	...	...	71	...
May .....	...	...	75	...	6	...	1	...	...	22	...	...	...	...	...	...	...	...	104	...
June .....	...	...	66	...	6	...	3	...	...	21	...	...	...	...	...	...	...	...	96	...
July .....	...	...	65	...	4	...	1	...	...	25	...	...	...	...	...	...	...	...	95	...
August .....	...	...	51	...	6	...	2	...	...	19	...	...	...	...	...	...	...	...	78	...
September .....	...	...	49	...	4	...	1	...	...	20	...	...	...	...	...	...	...	...	74	...
October .....	...	...	42	...	4	...	...	...	...	25	...	...	...	...	...	...	...	...	71	...
November .....	...	...	41	...	10	...	1	...	...	21	...	...	...	...	...	...	...	...	73	...
December .....	...	...	38	...	2	...	...	...	...	18	...	...	...	...	...	...	...	...	58	...
Total ...	...	...	618	...	59	...	12	...	...	245	...	...	...	...	...	...	...	...	934	...

SUMMARY.

District.	Typhoid Fever.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Puerperal Thrombophlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	†† Deaths.	Cases.	Deaths.	Cases.	†† Deaths.	Cases.	Deaths.	Deaths.	Deaths.
Metropolitan Sanitary District Combined	10	2	1,964	2	1,299	44	58	5	257	51	3	2	210	11	10	618
Hunter River District Combined	11	2	146	...	471	22	...	1	41	9	...	...	10	4	...	59
Broken Hill District	2	...	46	...	38	2	...	...	4	...	...	...	1	...	...	12
Remainder of State—																
Municipalities	8	3	561	3	589	25	7	...	55	12	2	1	30	7	4	104
Shires	8	1	665	1	661	28	24	2	54	12	8	1	19	6	10	140
Unincorporated	1	...	3	...	5	...	1	...	...	...	...	...	...	1	...	1
Lord Howe Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A.C.T.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	40	8	3,385	6	3,063	121	90	8	411	84	13	4	270	29	24	934

†† Deaths from notifiable forms only.

SECTION I.

A.—COMMUNICABLE DISEASES, 1942.

Notifiable Infectious Diseases Recorded in New South Wales during the Year ended 31st December, 1942.

Public Health Acts, 1902-1937.

The Public Health Act, 1902, provides that the Governor may, by proclamation in the *Government Gazette*, declare that any disease therein named is an infectious disease.

Disease.	Notifiable from—	Cases and Deaths Notified.					
		1940.		1941.		1942.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Typhoid fever and paratyphoid	1st January, 1898	67	9	40	8	31	6
Smallpox .....	" .....	...	...	...	...	...	...
Scarlet fever	"	3,026	15	3,385	6	1,576	9
Diphtheria or membranous croup	"	1,834	74	3,063	121	1,454	79
Bubonic plague	23rd January, 1900 .....	...	...	...	...	...	...
Infantile paralysis (including any form of acute anterior poliomyelitis, polioencephalitis or polio-myeloencephalitis).	1st February, 1912, Definition; re-proclaimed 14th August, 1931.	11	1	90	8	34	1
Epidemic cerebro-spinal fever (meningococcal meningitis).	11th October, 1915	41	13	411	84	879	125
Encephalitis Lethargica	1st April, 1926	7	3	13	4	12	3
Cholera	12th August, 1927 .....	...	...	...	...	...	...
Typhus fever	"	5	...	10	...	8	1
Yellow fever .....	" .....	...	...	...	...	...	...
Puerperal infection	16th August, 1929	245	50*	270	29*	244	36*
Undulant fever	13th August, 1937 .....	...	...	...	...	...	...
Leprosy	25th February, 1938 .....	...	2	1	...	5	...
Total cases and deaths notified .....	.....	5,236	167	7,283	260	4,243	260
Population as at 31st December .....	.....	2,782,991		2,802,014		2,833,133	

* See text below.

PUBLIC HEALTH ACT, 1902.

A total of 4,243 cases of infectious disease was notified under the Public Health Act, 1902, during 1942, or 3,040 less cases than in 1941. The number of cases notified from the 157 municipal, 138 shire and fourteen police districts, the deaths due to these infections, the age and sex of the patients, and the seasonal incidence of the various diseases are shown in appended Tables I-V (pp. 30-38). As indicated below, pulmonary tuberculosis is notifiable under the Public Health (Amendment) Act, 1915, and venereal diseases under the Venereal Diseases Act, 1918.

Typhoid Fever.—The thirty-one cases and six deaths notified in 1942 show the lowest incidence of this infection hitherto recorded. In 1941 there were forty cases and eight deaths.

Scarlet Fever.—There were 1,576 notified cases and nine deaths, a decrease of 1,809 cases as compared with 1941 when 3,385 cases and six deaths were recorded.

Diphtheria.—There were 1,454 notified cases and seventy-nine deaths, in comparison with 3,063 cases and 121 deaths in 1941.

Infantile Paralysis.—Thirty-four cases and one death were notified. In 1941 there were ninety cases, with eight deaths.

Puerperal Infection.—Two hundred and forty-four cases were notified, or twenty-six less than in 1941. The recorded deaths from puerperal septicaemia and post-abortive sepsis in 1942 numbered 36, which does not include 30 deaths from sepsis classed as criminal abortion. Under the revised International List of Causes of Death which came into use in 1940, puerperal thrombophlebitis, embolism, and sudden death are included as subdivisions of the "infection" group, but to maintain comparability with previous years such deaths are omitted here and shown separately in the following pages. There were 13 deaths in this additional group.

Cerebro-spinal Meningitis.—Eight hundred and seventy-nine cases and 125 deaths were reported in 1942. In 1941 there were 411 cases and eighty-four deaths.

Encephalitis Lethargica.—Twelve cases and three deaths were notified, compared with thirteen cases and four deaths in 1941.

Undulant Fever.—On 13th August, 1937, a proclamation was issued making undulant fever notifiable on and from that date.

Bubonic Plague.—No case of this disease has been reported since June, 1923. Rat-catchers are continuously employed in the vicinity of wharves and in the city area. Plague was not detected in the 3,084 rats examined in the Microbiological Laboratory.

Smallpox.—No case was reported during 1942.

Leprosy.—Five cases of leprosy were notified in 1942, but no patients under detention in the Lazzaret died during the year. For the report on Leprosy in New South Wales, see page 133.

PUBLIC HEALTH (AMENDMENT) ACT, 1915.

Pulmonary Tuberculosis was made a notifiable disease under an amendment of the Public Health Act in 1915. In 1942 registered cases amounted to 1,912, a decrease of four on the registrations received in 1941. There were 958 deaths, or an increase of twenty-four compared with the deaths recorded in 1941. A survey by the Director of the Tuberculosis Division is on page 109.

VENEREAL DISEASES ACT, 1918.

Cases of venereal disease notified in 1942 numbered 5,990, an increase of 1,192 cases on the number (4,798) received in 1941. The Report of the Director of the Division is on pages 80-82.

TABLE I.—Showing the number of notified cases of, and deaths from, the following diseases:—Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid Fever (including Paratyphoid) and Puerperal Infection in the METROPOLITAN COMBINED DISTRICTS for the year ended 31st December, 1942.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Puerperal Thrombophlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.		
METROPOLITAN MUNICIPALITIES.																	
Sydney, City of ...	83,990	2	1	67	...	102	8	...	...	43	4	...	...	51	1	...	78
Alexandria	8,570	...	...	4	...	8	...	1	...	...	...	...	...	1	1	...	6
Annandale.....	11,530	...	...	6	...	2	...	...	...	8	2	...	...	4	...	...	4
Ashfield.....	43,800	...	...	23	...	4	1	...	...	4	1	...	...	5	1	...	15
Auburn	20,820	...	...	18	...	23	1	2	...	5	1	...	...	3	...	...	5
Balmain.....	26,600	...	...	29	...	24	1	...	...	9	4	...	...	2	1	...	19
Bankstown.....	31,330	...	...	24	1	17	1	...	...	22	5	...	...	9	...	...	14
Bexley	24,600	...	...	17	...	8	...	1	...	2	...	...	...	1	...	...	4
Botany	9,260	...	...	16	...	18	2	...	...	4	1	...	...	1	1	...	4
Burwood	20,790	...	...	5	...	5	...	...	...	8	2	...	...	3	1	...	6
Canterbury.....	87,930	...	...	67	...	19	1	1	...	36	7	...	...	3	2	...	29
Concord	24,550	...	...	16	...	8	...	1	...	12	1	...	...	2	...	...	11
Darlington.....	2,760	...	...	...	...	1	...	...	...	...	...	...	...	3	...	...	5
Drummoyne.....	30,960	...	...	17	...	13	...	...	...	8	1	...	...	1	1	...	8
Dundas	6,900	...	...	7	...	9	...	...	...	1	...	...	...	...	...	...	2
Eastwood	3,410	...	...	2	...	2	...	...	...	3	...	...	...	...	...	...	...
Enfield	16,430	...	...	6	...	2	...	...	...	9	1	...	...	3	...	...	11
Ermington and Rydalmere	2,560	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...
Erskineville.....	6,340	...	...	5	...	7	...	1	...	2	...	...	...	...	...	...	4
Glebe	19,570	...	...	5	...	8	1	1	...	6	1	...	...	5	...	...	10
Granville	21,030	...	...	9	...	18	...	...	...	4	1	...	...	4	...	...	8
Holroyd (Pitt and Merrylands Wards)	10,340	...	...	26	1	8	...	...	...	3	...	...	...	...	...	...	4
Homebush	3,320	...	...	7	...	4	...	...	...	1	...	...	...	1	...	...	2
Hunter's Hill	9,970	...	...	8	1	2	...	2	...	2	1	...	...	...	...	1	2
Hurstville	28,750	...	...	24	...	2	1	...	...	8	1	...	...	3	1	...	14
Kogarah	35,930	...	...	13	...	3	1	...	...	13	1	...	...	1	...	...	13
Kuring-gai	34,990	...	...	28	...	4	1	...	...	13	1	...	...	2	2	...	23
Lane Cove	17,730	...	...	6	...	2	...	...	...	5	...	...	...	...	...	...	2
Leichhardt	29,720	1	...	14	1	26	1	...	...	13	...	...	...	2	...	...	15
Lidcombe	18,190	...	1	3	...	7	...	3	...	6	1	1	...	...	...	...	18
Manly	29,000	...	...	15	...	3	...	...	...	13	1	...	...	1	...	...	10
Marrickville.....	46,610	1	...	31	...	10	...	...	...	12	2	...	...	1	...	1	15
Mascot	16,710	...	...	8	...	19	1	2	...	7	...	...	...	8	...	...	6
Mosman	25,610	...	...	10	...	2	...	1	...	4	...	1	1	...	...	...	10
Newtown	25,350	...	...	12	...	21	3	1	...	10	2	...	...	5	1	...	18
North Sydney.....	54,610	...	...	26	...	10	...	...	...	19	1	...	...	1	...	1	18
Paddington.....	24,780	...	1	9	...	30	2	1	...	5	...	...	...	5	...	...	19
Parramatta	20,110	...	...	10	...	10	1	...	...	7	2	...	...	5	...	...	9
Petersham	27,880	...	...	12	...	11	2	...	...	16	2	...	...	4	...	...	12
Randwick	89,860	5	...	46	...	61	2	1	...	32	6	...	...	10	1	...	48
Redfern	17,560	...	...	6	...	33	3	...	...	12	1	...	...	6	...	...	18
Rockdale	45,170	1	...	18	...	7	...	...	...	9	...	...	...	3	...	...	14
Ryde	32,050	...	...	23	...	9	...	1	...	17	6	...	...	7	2	...	12
St. Peters	12,290	...	...	9	...	17	2	...	...	2	1	...	...	5	...	...	4
Strathfield.....	14,210	...	...	4	...	3	...	1	...	2	2	...	...	2	...	...	3
Vaucluse	8,720	...	...	1	...	1	...	...	...	2	...	...	...	...	...	...	1
Waterloo	11,560	...	...	9	...	20	1	1	...	14	2	...	...	...	...	...	7
Waverley	69,230	1	...	41	...	13	...	...	...	19	2	...	...	12	1	...	20
Willoughby.....	47,840	...	...	12	...	14	2	...	...	15	2	...	...	2	2	...	18
Woollahra	43,950	...	...	21	...	8	...	1	...	8	4	...	...	7	...	1	16
EXTRA METROPOLITAN MUNICIPALITIES.																	
Cabramatta and Canley Vale	8,210	...	...	2	...	17	...	...	...	3	...	...	...	2	...	...	3
Fairfield.....	11,710	...	...	2	...	10	...	...	...	3	2	...	...	1	...	...	4
Holroyd	9,280	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Ingleburn	2,230	...	...	7	...	...	...	...	...	4	...	...	...	...	...	...	...
Liverpool	7,900	1	...	5	...	11	1	...	...	4	...	...	...	2	...	...	4
EXTRA METROPOLITAN SHIRES AND PORT JACKSON.																	
Hornsby	28,330	...	...	32	...	4	1	...	...	5	1	...	...	2	...	...	18
Warringah.....	21,000	...	...	4	...	7	1	...	...	7	1	...	...	...	1	...	3
Harbour of Port Jackson .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	1,440,430	12	3	847	4	708	42	23	...	502	77	2	1	200	21	4	649

Typhus Fever—Canterbury (M) 1
 Enfield (M) 1
 Kogarah (M) 1
 Randwick (M) 1

TABLE II.—Showing the number of notified cases of, and deaths from, Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria or Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid Fever (including Paratyphoid), and Puerperal Infection in the HUNTER RIVER COMBINED DISTRICT for the year ended 31st December, 1942.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Puerperal Thrombophlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.		
MUNICIPALITIES.																	
Greater Newcastle	126,810	6	1	52	...	91	5	...	...	22	3	...	...	5	1	2	35
Cessnock	13,860	...	...	6	...	7	...	...	...	1	...	...	...	1	...	...	5
Maitland, East	4,480	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Maitland, West	7,930	...	...	1	...	10	...	...	...	3	2	...	...	4	...	...	2
Morpeth	1,030	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Singleton	4,100	...	...	4	...	3	...	...	...	2	...	...	...	...	...	...	1
SHIRES.																	
Bolwarra	3,990	1	...	1	...	1	...	...	...	...	...	1	...	...	...	...	1
Kearsley	28,260	...	...	6	...	15	1	...	...	10	1	...	...	1	...	...	6
Lake Macquarie	36,380	...	...	22	...	39	...	...	...	4	...	1	...	1	...	1	8
Port Stephens	5,180	...	...	5	...	1	...	...	...	1	...	...	...	1	1	...	...
Tarro	6,300	...	...	...	...	4	...	...	...	2	...	...	...	...	...	...	2
	238,320	7	1	97	...	171	6	...	...	45	6	2	...	12	3	3	60

TABLE III.—Showing the number of notified cases of, and deaths from, Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria or Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid (including Paratyphoid) and Puerperal Infection in the REMAINDER OF STATE for the year ended 31st December, 1942.

Municipality.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Puerperal Thrombophlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.		
MUNICIPALITIES.																	
Albury	12,970	...	...	7	...	2	...	...	...	3	...	...	...	...	...	...	6
Armidale	7,280	...	...	13	...	13	...	1	...	2	...	...	...	...	...	...	1
Ballina	2,740	...	...	11	1	1	...	...	...	1	...	...	...	...	...	...	1
Balranald	1,210	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	1
Barraba	1,360	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	1
Bathurst	12,030	...	...	11	...	5	1	...	...	5	1	...	...	...	...	...	3
Bega	2,340	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...
Berry	2,810	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Bingara	1,220	...	...	4	...	1	...	...	...	1	...	...	...	...	...	...	...
Blackheath	2,620	...	...	1	...	...	...	...	...	1	...	...	...	2	...	...	1
Bombala	940	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Bourke	1,990	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Bowral	3,370	...	...	5	...	...	...	...	...	1	...	...	...	...	1	...	1
Brewarrina	890	...	...	9	...	1	...	...	...	...	...	...	...	...	...	...	...
Broken Hill	26,470	1	...	9	...	27	...	...	...	23	2	...	...	1	2	...	14
Broughton Vale	220	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Burrowa	1,180	...	...	1	...	...	...	...	...	2	1	...	...	...	...	...	...
Camden	2,700	...	...	...	...	3	1	...	...	1	...	...	...	2	...	...	...
Campbelltown	3,270	...	...	1	...	3	...	...	...	1	...	...	...	2	...	...	1
Casino	5,760	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...	...
Castlereagh	1,190	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Cobar	1,820	...	...	...	...	4	...	...	...	...	...	...	...	...	...	1	1
Condobolin	2,530	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cooma	2,100	...	...	3	...	1	...	...	...	...	...	...	...	...	...	...	...
Coonamble	2,820	...	...	6	...	1	...	...	...	2	...	...	...	2	1	...	...
Cootamundra	5,550	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Corowa	2,790	...	...	1	...	9	...	...	...	1	...	...	...	...	...	...	2
Cowra	5,690	...	...	2	...	2	...	...	...	3	1	...	...	...	...	...	...
Deniliquin	3,380	...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	1
Dubbo	9,190	1	...	...	...	5	...	1	...	7	1	...	...	...	...	...	1

TABLE III—continued.

REMAINDER OF STATE—Return showing the number of cases, etc., from Country Municipalities—continued.

Municipality.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Puerperal Thrombophlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.		
MUNICIPALITIES—continued.																	
Dungog	2,090	...	...	1	...	10	...	...	...	1	...	...	...	...	...	...	...
Forbes	5,430	...	...	1	...	...	...	...	...	3	...	...	...	...	...	...	1
Gerringsong	900	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Glen Innes	5,070	...	...	...	...	5	1	...	...	7	...	...	...	...	...	...	...
Gosford	4,080	1	...	8	...	...	...	...	1	...	...	...	...	1	...	...	1
Goulburn	15,490	...	...	20	...	8	2	1	...	4	...	...	2	...	...	...	6
Grafton	7,570	...	...	9	...	15	2	...	...	2	...	...	...	...	...	...	2
Grafton, South	2,990	...	...	1	...	4	...	...	...	...	...	...	...	...	...	1	...
Grenfell	2,390	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gunnedah	4,070	...	...	3	...	7	...	...	...	1	...	...	...	...	...	...	1
Hay	3,330	...	...	8	...	...	...	...	...	1	...	...	...	...	...	...	...
Hillston	1,010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Illawarra North	10,790	...	...	7	...	1	...	...	...	1	3	...	...	...	...	...	7
Inverell	6,150	...	...	5	...	9	2	...	...	...	...	...	1	...	...	...	1
Jamberoo	1,120	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
Junee	4,370	...	...	2	...	...	...	...	...	3	...	...	1	...	...	...	...
Katoomba	9,360	...	...	14	...	1	...	...	...	1	...	...	...	...	...	...	13
Kempsey	5,270	...	...	1	...	4	...	...	...	3	...	...	1	...	...	...	2
Kiama	2,370	...	...	1	...	2	...	...	...	1	...	...	...	...	...	...	1
Lismore	13,320	...	...	32	...	27	...	...	...	1	...	2	...	...	...	...	3
Lithgow	21,690	...	...	15	...	4	1	...	...	2	1	...	...	1	...	...	4
Maclean	1,720	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Manilla	1,950	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	2
Moama	650	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Molong	1,450	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1
Moree	4,320	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	1
Mudgee	4,090	...	...	21	1	3	...	...	...	...	...	...	...	...	...	...	1
Mullumbimby	1,490	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Murrumburrah	2,460	...	...	...	...	...	...	...	...	2	...	...	1	...	...	...	1
Murrurundi	1,090	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Murwillumbah	4,590	...	...	3	...	...	...	...	...	1	...	1	1	1	...	...	...
Muswellbrook	3,560	...	...	...	...	1	...	...	...	1	...	...	...	1	...	...	...
Narrabri	3,430	...	...	6	...	6	...	...	...	...	...	...	...	...	...	...	...
Narrandera	4,320	...	...	2	...	4	...	...	...	3	...	...	...	...	...	...	3
Narromine	1,930	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...
Nowra	3,230	...	...	...	...	1	...	...	...	4	...	...	...	...	...	...	...
Nyngan	1,620	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Orange	11,830	1	...	...	...	15	1	...	...	10	2	...	...	...	...	...	8
Parkes	6,850	...	...	5	...	...	...	...	...	3	...	...	...	...	...	...	2
Peak Hill	1,110	...	...	12	...	2	...	...	...	...	...	...	...	...	...	...	...
Penrith	4,700	...	...	4	...	...	...	...	...	1	...	...	1	...	...	...	...
Port Macquarie	1,940	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	1
Queanbeyan	4,540	...	...	4	...	2	...	1	...	4	...	...	...	...	...	...	...
Quirindi	2,230	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...
Richmond	2,640	...	...	2	...	...	...	...	...	4	2	...	...	...	...	...	1
Scone	2,250	...	...	7	...	...	...	...	...	1	...	...	...	...	...	...	...
Shellharbour	2,370	...	...	2	...	2	...	...	...	2	...	...	...	...	...	...	...
Shoalhaven, South	830	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
St. Mary's	3,390	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Tamworth	11,670	...	...	14	...	23	1	...	...	12	1	1	...	...	...	...	4
Taree	5,240	...	...	...	...	3	...	...	...	2	...	...	...	...	...	...	1
Temora	4,250	...	...	2	...	1	...	...	...	1	...	...	...	...	...	...	...
Tenterfield	2,550	...	...	1	...	1	...	...	...	1	...	...	...	...	...	...	...
Ulladulla	1,600	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Ulmara	1,900	...	...	...	...	9	...	...	...	...	...	...	...	...	...	...	...
Uralla	1,090	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...
Wagga Wagga	14,160	...	...	17	...	4	1	...	...	9	2	...	1	...	...	...	4
Walcha	1,540	...	...	2	...	5	...	...	...	...	...	...	1	...	...	...	...
Warren	1,670	...	...	4	...	2	...	...	...	...	...	...	...	...	...	...	...
Wellington	4,280	...	...	4	...	1	...	...	...	4	1	...	...	...	...	...	...
Wentworth	1,900	...	...	2	...	2	...	...	...	2	...	...	...	...	...	...	...
Wilcannia	680	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Windsor	3,460	1	...	6	...	...	...	...	...	4	...	...	...	...	...	...	1
Wingham	1,810	...	...	...	...	1	...	...	...	4	...	...	...	...	...	...	...
Wollongong	18,400	...	...	9	...	6	...	...	...	9	...	...	...	...	...	...	6
Yass	2,920	...	...	1	12	...	...	...	...	1	...	...	...	...	...	...	1
Young	4,260	...	...	...	...	5	...	1	...	...	...	...	...	...	...	...	...
Total Municipalities	429,160	6	1	370	3	292	14	5	1	177	19	4	1	17	7	2	118

Typhus Fever—
Murwillumbah (M) 1

TABLE III—continued.

REMAINDER OF STATE—Return showing the number of cases, etc., from Country Shires.

Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Puerperal Thrombo-phlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.		
SHIRES.																	
Abercrombie	4,240	...	...	1	...	...	...	...	...	1	1	...	...	...	1	...	1
Amaroo	2,580	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Apsley	2,000	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Ashford	3,510	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Barraba	2,010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Baulkham Hills	8,890	...	...	5	...	6	...	...	...	1	...	...	...	...	...	...	3
Bellingen	5,860	...	...	1	...	3	...	...	...	...	...	...	...	...	...	...	2
Berrigan	5,140	...	...	2	...	5	...	...	...	1	...	...	...	...	...	...	...
Bibbenluke	2,290	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Blacktown	15,980	...	...	6	...	12	...	...	...	16	...	...	...	...	...	...	5
Bland	10,780	...	...	4	...	...	...	...	...	3	...	...	...	...	...	...	5
Blaxland	9,420	1	...	5	...	1	...	...	...	3	1	...	...	...	...	...	2
Blue Mountains	9,130	...	...	8	...	3	...	1	...	1	...	...	...	...	...	...	21
Bogan	1,790	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Booloroo	3,480	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
Boomi	3,190	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Boree	6,490	...	...	7	...	...	...	...	...	2	1	...	...	...	...	...	2
Bulli	16,320	...	...	5	...	2	...	...	...	1	...	...	1	...	...	...	8
Burrangong	5,690	...	...	...	...	2	...	1	...	2	1	...	...	...	...	...	...
Byron	7,290	...	...	7	...	5	1	...	...	5	...	...	...	...	...	...	4
Cambewarra	1,040	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Canobolas	10,110	...	...	1	...	6	...	...	...	5	...	...	...	...	...	...	10
Carrathool	4,690	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Clyde	1,700	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Cobbora	4,880	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Cockburn	4,870	...	...	1	...	1	1	...	...	1	...	...	...	...	...	...	...
Colo	4,670	...	...	...	...	1	...	...	...	2	1	...	...	...	...	...	1
Conargo	1,170	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Coolah	1,660	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Coolamon	6,620	...	...	...	...	3	...	...	...	2	...	...	...	...	...	...	1
Coonabarabran	7,090	1	1	...	1	2	...	...	...	1	...	...	...	...	...	...	2
Copmanhurst	3,170	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Coreen	3,300	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...
Crookwell	6,160	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...
Cudgong	5,070	...	...	3	...	2	...	...	...	...	...	...	...	...	...	...	...
Culcairn	5,450	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...
Demondrille	3,090	...	...	2	...	...	...	...	...	2	...	...	...	...	...	...	...
Dorrigo	11,900	...	...	...	...	13	...	...	...	2	...	1	...	...	...	...	...
Dumaresq	4,090	...	...	4	...	5	...	...	...	1	...	...	...	...	...	...	...
Erina	14,370	...	...	2	...	3	...	1	...	1	1	...	2	...	...	...	2
Eurobodalla	4,590	...	...	...	...	4	1	...	...	2	3	...	...	...	...	1	...
Gilgandra	5,260	...	...	13	...	2	...	...	...	...	...	...	...	...	...	...	...
Gloucester	4,310	1	...	5	...	10	2	...	...	1	...	...	...	...	...	...	...
Goobang	6,160	...	...	3	...	3	...	...	...	...	...	...	2	...	...	...	...
Goodrabigbee	3,400	...	...	...	...	2	...	...	...	1	1	...	...	...	...	...	...
Gostwyck	3,920	...	...	2	...	...	...	...	...	...	...	...	...	...	...	1	1
Gulgong	3,890	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Gundagai	5,040	...	...	...	...	1	...	...	...	1	1	...	...	...	...	...	1
Gundurimba	4,240	...	...	3	...	14	...	...	...	1	...	...	1	...	...	...	...
Gunning	3,420	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Guyra	7,010	...	...	8	...	1	1	...	...	...	...	...	...	...	...	...	...
Gwydir	1,800	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...
Harwood	4,480	...	...	3	...	2	...	...	...	1	1	...	...	...	...	...	1
Hastings	8,950	...	...	1	...	2	...	...	...	2	...	...	...	...	...	...	...
Holbrook	2,320	...	...	2	...	...	...	1	...	2	...	...	...	...	...	...	1
Hume	4,950	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...
Ilabo	2,410	...	...	2	...	2	...	...	...	1	...	...	...	...	...	...	...
Illawarra, Central	14,330	...	...	11	...	5	...	...	...	6	1	1	...	1	...	...	4
Inlay	4,550	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	1
Jemalong	4,500	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Jerilderie	1,510	...	...	2	...	...	...	...	...	1	...	...	...	...	...	...	...
Jindalee	2,380	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...
Kyamba	4,790	...	...	2	...	1	...	...	...	5	...	...	...	...	...	...	...
Kyogle	13,060	...	...	5	...	11	...	...	...	1	...	...	...	1	...	...	1
Lachlan	6,330	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	1
Liverpool Plains	5,290	...	...	1	...	3	...	...	...	2	...	...	...	...	...	...	1
Lockhart	4,890	...	...	3	...	1	...	...	...	3	...	...	...	...	...	...	2
Lyndhurst	6,770	...	...	...	...	1	...	...	...	4	...	...	...	...	...	...	...
Macintyre	4,920	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	2
Macleay	8,550	...	...	1	...	1	...	...	...	...	...	1	2	...	...	...	2
Macquarie	4,590	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	2
Mandoway	1,990	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Manning	12,860	...	...	...	...	1	...	...	...	4	...	...	...	...	...	...	1
Marthaguy	1,990	...	...	2	...	1	1	...	...	...	...	...	...	...	...	...	1
Merriwa	2,840	...	...	...	...	6	1	...	...	...	...	...	...	...	...	...	...
Mitchell	3,980	...	...	...	...	2	...	...	...	2	...	...	...	...	...	...	...
Monaro	2,580	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Mulwara	6,180	...	...	3	...	3	...	...	...	2	...	1	1	...	...	...	1
Mumbulla	4,290	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Murray	2,930	...	...	2	...	6	...	...	...	1	...	...	...	...	...	...	1
Murrumbidgee	640	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Murrumbidgee	2,400	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Muswellbrook	2,940	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Nambucca	7,870	...	...	...	...	1	...	...	...	1	...	...	...	1	...	...	...

TABLE III—continued.

REMAINDER OF STATE—Return showing the number of cases, etc., from Country Shires—continued.

Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Puerperal Thrombophlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	D.	D.
SHIRES—continued.																	
Namoi	9,580	1	...	17	...	22	2	...	...	5	1	...	...	...	...	...	1
Narraburra	4,010	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Nattai	5,550	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepean	3,810	...	...	2	...	4	1	...	...	2	...	...	...	...	...	...	...
Nundle	1,810	...	...	1	...	1	1	...	...	1	...	...	...	...	...	...	1
Nymboida	2,410	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Oberon	2,830	...	...	2	...	...	...	...	...	3	1	...	...	...	...	...	...
Orara	1,400	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Patrick Plains	5,410	...	...	1	...	...	1	...	1	1	...	...	...	...	...	...	...
Peel	6,570	...	...	3	...	2	1	...	...	4	3	...	...	...	...	1	...
Rylstone	5,980	...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	2
Severn	6,190	...	...	...	...	7	...	...	...	1	...	...	...	...	...	...	1
Snowy River	3,370	...	...	2	...	...	...	...	...	3	...	...	...	...	...	...	1
Stroud	6,100	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...
Sutherland	20,980	...	...	14	...	10	1	...	10	...	...	2	...	...	...	...	5
Talbragar	3,760	...	...	1	...	2	...	...	1	...	...	...	...	...	...	...	...
Tallaganda	2,980	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...
Tamarang	3,080	...	...	1	...	...	...	...	2	...	...	...	...	...	...	...	1
Tenterfield	5,290	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Terania	7,250	...	...	12	...	14	...	...	...	...	...	...	...	...	...	...	...
Timbregongie	4,160	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	2
Tintenbar	5,120	...	...	5	...	3	...	...	1	...	...	...	...	...	...	...	...
Tomaki	3,950	...	...	1	...	1	1	...	...	1	...	...	...	...	...	...	...
Tumbarumba	3,220	...	...	14	...	...	...	...	...	...	...	...	...	...	...	...	1
Tumut	8,590	...	...	3	...	1	...	...	1	...	...	...	...	...	...	...	4
Turon	4,470	...	...	...	...	1	...	...	1	1	...	...	...	...	...	...	1
Tweed	12,700	...	...	2	...	7	...	...	2	1	1	...	3	...	1	...	1
Upper Hunter	4,860	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	1
Urana	2,950	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Wade	10,610	...	...	5	...	5	...	...	...	...	...	...	...	...	...	...	4
Wakool	3,970	...	...	1	...	1	...	...	...	1	...	...	...	...	...	...	...
Walgett	3,850	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Wallarobba	4,400	...	...	...	...	4	...	...	1	...	...	...	...	...	...	...	1
Waradgery	1,150	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Warrah	1,800	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Waugoola	4,880	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...
Weddin	3,810	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Willimbong	8,800	...	...	6	...	2	1	...	1	...	...	...	...	...	...	...	...
Windouran	810	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wingaroo	3,430	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	1
Wingecarribee	7,900	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...
Wollondilly	6,990	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Woodburn	5,070	...	...	1	...	4	...	...	2	...	...	...	...	...	...	...	...
Woy Woy	3,370	...	...	1	...	1	...	...	1	...	...	1	...	...	...	...	1
Yallaroi	4,160	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Yanko	4,560	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Yarrowluma	3,120	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...
Total Shires	687,350	4	1	261	2	281	17	6	...	155	22	4	1	15	4	4	131
WESTERN DIVISION (UNINCORPORATED) POLICE DISTRICTS.*																	
Balranald .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bourke .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brewarrina .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Broken Hill .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cobar .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hay .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hillston .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ivanhoe .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Menindie .....	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mitchell .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nyngan .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Walgett .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wentworth .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wilcannia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Unincorporated	16,250	2	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
MISCELLANEOUS.																	
Lord Howe Island	151	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Migratory	2,608	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Outside the State .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A.C.T. .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Queensland .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Victoria .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Australia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Miscellaneous	2,759	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total N.S.W.	2,818,269	31	6	1,576	9	1,454	79	34	1	879	125	12	3	244	36	13	958

* Population and Deaths available only for unincorporated area as a whole.

Typhus Fever—
 Kyogle (S) 2
 Tweed (S) 1

TABLE IV.—Table showing Age and Sex Incidence, and Mortality, in the Metropolitan Combined District, Hunter River Combined District, Broken Hill District and Remainder of State, from the notified cases of Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Infantile Paralysis (Acute Anterior Poliomyelitis), Encephalitis Lethargica, Scarlet Fever, Typhoid Fever (including Paratyphoid) and Puerperal Infection, for the year ended 31st December, 1912.

Age Period.	Typhoid and Paratyphoid.						Scarlet Fever.						Diphtheria.						Infantile Paralysis.					
	Incidence.			Mortality.			Incidence.			Mortality.			Incidence.			Mortality.			Incidence.			Mortality.		
	Notified Cases.			Notified Deaths.			Notified Cases.			Notified Deaths.			Notified Cases.			Notified Deaths.			Notified Cases.			Notified Deaths.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
METROPOLITAN COMBINED DISTRICT.																								
All ages	9	3	12	3	...	3	354	493	847	2	2	4	329	379	708	19	23	42	12	11	23	...	...	...
Under 1 year ...	...	...	...	...	...	...	1	...	1	...	...	...	4	10	14	1	1	2	...	...	...	...	...	...
1-4 years ...	1	...	1	...	...	...	85	77	162	...	1	1	159	134	293	10	13	23	2	3	5	...	...	...
5-14 " ...	1	...	1	...	...	...	142	243	385	1	1	2	128	159	287	8	7	15	5	7	12	...	...	...
15-24 " ...	5	2	7	...	...	...	70	63	133	...	...	...	20	45	65	...	1	1	4	1	5	...	...	...
25-34 " ...	1	1	2	1	...	1	35	60	95	1	...	1	12	16	28	...	...	...	1	...	1	...	...	...
35-44 " ...	1	...	1	...	...	...	12	32	44	...	...	...	4	9	13	...	...	...	...	...	...	...	...	...
45-54 " ...	...	...	...	2	...	2	5	9	14	...	...	...	2	2	4	...	...	...	...	...	...	...	...	...
55-64 " ...	...	...	...	...	...	...	1	6	7	...	...	...	2	2	4	...	1	1	...	...	...	...	...	...
65 and over ...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...
Not stated .....	...	...	...	...	...	...	3	3	6	...	...	...	2	1	3	...	...	...	...	...	...	...	...	...
HUNTER RIVER COMBINED DISTRICT.																								
All ages	5	2	7	1	...	1	44	53	97	...	...	...	88	83	171	2	4	6	...	...	...	...	...	...
Under 1 year ...	...	...	...	...	...	...	1	1	2	...	...	...	4	2	6	...	...	...	...	...	...	...	...	...
1-4 years ...	...	...	...	...	...	...	18	11	29	...	...	...	38	25	63	2	4	6	...	...	...	...	...	...
5-14 " ...	1	...	1	...	...	...	29	29	58	...	...	...	36	39	75	...	...	...	...	...	...	...	...	...
15-24 " ...	1	...	1	...	...	...	3	5	8	...	...	...	7	13	20	...	...	...	...	...	...	...	...	...
25-34 " ...	...	1	1	...	...	...	...	6	6	...	...	...	2	7	9	...	...	...	...	...	...	...	...	...
35-44 " ...	3	...	3	1	...	1	2	...	2	...	...	...	1	2	3	...	...	...	...	...	...	...	...	...
45-54 " ...	1	...	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55-64 " ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and over ...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...
Not stated .....	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
BROKEN HILL DISTRICT.																								
All ages .....	...	1	1	...	...	...	2	7	9	...	...	...	9	18	27	...	...	...	...	...	...	...	...	...
Under 1 year ...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...
1-4 years ...	...	...	...	...	...	...	...	...	...	...	...	...	4	4	8	...	...	...	...	...	...	...	...	...
5-14 " ...	1	...	1	...	...	...	6	6	12	...	...	...	4	12	16	...	...	...	...	...	...	...	...	...
15-24 " ...	...	...	...	...	...	...	1	1	2	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...
25-34 " ...	...	...	...	...	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35-44 " ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45-54 " ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55-64 " ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and over ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Not stated .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
REMAINDER OF STATE.																								
All ages	9	2	11	1	1	2	242	381	623	3	2	5	261	287	548	19	12	31	8	3	11	1	...	1
Under 1 year ...	...	...	...	...	...	...	2	4	6	...	...	...	5	5	10	...	...	...	...	...	...	...	...	...
1-4 years ...	1	...	1	...	...	...	67	72	139	1	...	1	123	89	212	10	8	18	2	...	2	...	...	...
5-14 " ...	4	...	4	...	...	...	125	218	343	1	2	3	98	104	202	9	3	12	4	1	5	...	...	...
15-24 " ...	2	1	3	...	...	...	24	35	59	1	...	1	17	49	66	...	1	1	...	2	2	...	...	...
25-34 " ...	1	...	1	...	...	...	9	28	37	...	...	...	8	32	40	...	...	...	1	...	1	...	...	...
35-44 " ...	...	...	...	...	...	...	8	14	22	...	...	...	6	11	17	...	...	...	...	...	...	...	...	...
45-54 " ...	1	1	2	...	1	1	3	4	7	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...
55-64 " ...	...	...	...	1	...	1	...	3	3	...	...	...	1	...	1	...	...	...	1	...	1	...	1	1
65 and over ...	...	...	...	...	...	...	1	...	1	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...
Not stated .....	...	...	...	...	...	...	3	3	6	...	...	...	3	3	6	...	...	...	...	...	...	...	...	...

TABLE IV.—Table showing Age and Sex Incidence, and Mortality, in the Metropolitan Combined District, Hunter River Combined District, Broken Hill District, and Remainder of State, from the notified cases of Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Infantile Paralysis (Acute Anterior Poliomyelitis), Encephalitis Lethargica, Scarlet Fever, Typhoid Fever (including Paratyphoid) and Puerperal Infection, for the year ended 31st December, 1942—*continued*.

Age Period.	Encephalitis Lethargica.						Cerebro-spinal Meningitis.						Puerperal Infection.		Puerperal Thrombophlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.		
	Incidence.			Mortality.			Incidence.			Mortality.			Incidence.	Mortality.		Deaths.	Deaths.	
	Notified Cases.			Notified Deaths.			Notified Cases.			Notified Deaths.			Cases.	Deaths.	Deaths.		M.	F.	Total.
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	F.	F.	F.	M.	F.	Total.
METROPOLITAN COMBINED DISTRICT.																		
All ages	1	1	2	...	1	1	397	195	592	49	28	77	299	21	4	427	222	649
Under 1 year	28	29	48	10	4	14	...	...	...	...	...	...
1-4 years	44	32	76	9	3	12	...	...	...	...	...	...
5-14 "	51	34	85	5	4	9	...	...	...	...	...	...
15-24 "	75	37	112	5	4	9	77	1	1	29	35	55
25-34 "	35	39	65	4	4	8	98	16	1	38	59	97
35-44 "	1	1	...	1	1	36	17	53	5	...	5	24	4	2	71	41	112
45-54 " ...	1	...	1	...	...	...	18	11	29	1	3	4	...	...	...	115	36	151
55-64 "	15	7	22	6	4	10	...	...	...	114	27	141
65 and over	4	6	10	4	2	6	...	...	...	68	23	91
Not stated	1	1	2	...	...	...	1	...	...	...	...	...
HUNTER RIVER COMBINED DISTRICT.																		
All ages	1	1	2	...	...	...	39	15	45	4	2	6	12	3	3	39	21	60
Under 1 year	1	2	3	1	1	2	...	...	...	...	...	...
1-4 years	1	1	2	...	...	...	...	...	...	...	...	...
5-14 "	5	7	12	...	1	1	...	...	...	...	...	...
15-24 " ...	1	...	1	...	...	...	11	...	11	...	...	...	5	2	1	1	5	6
25-34 "	1	1	...	...	...	5	4	9	1	...	1	5	...	1	2	6	8
35-44 "	4	...	4	1	...	...	2	1	1	12	2	14
45-54 "	1	1	2	...	...	...	...	...	...	11	4	15
55-64 "	1	...	1	...	...	...	...	...	...	8	4	12
65 and over	1	...	1	1	...	1	...	...	...	4	...	4
Not stated
BROKEN HILL DISTRICT.																		
All ages	14	9	23	1	1	2	1	1	...	11	3	14
Under 1 year	5	3	8	...	...	...	...	...	...	...	...	...
1-4 years	6	5	11	1	1	2	...	...	...	...	...	...
5-14 "	1	...	1	...	...	...	...	...	...	...	...	...
15-24 "	1	...	1	...	...	...	...	...	...	1	...	1
25-34 "	1	...	1	...	...	...	1	1	...	...	1	1
35-44 "	2	...	2
45-54 "	1	1	...	...	...	...	...	...	1	...	1
55-64 "	4	2	6
65 and over	3	...	3
Not stated
REMAINDER OF STATE.																		
All ages	7	1	8	2	...	2	214	95	309	30	10	40	31	11	6	152	83	235
Under 1 year	7	4	11	...	3	3	...	...	...	...	...	...
1-4 years ...	1	...	1	...	...	...	29	12	41	8	2	10	...	...	...	...	...	...
5-14 "	38	31	69	6	1	7	...	...	...	...	...	...
15-24 " ...	2	...	2	...	...	...	58	17	75	4	2	6	10	2	2	9	10	19
25-34 "	1	1	...	...	...	23	18	41	5	1	6	16	4	1	18	29	47
35-44 "	20	5	25	2	...	2	2	3	3	22	15	37
45-54 " ...	2	...	2	...	2	2	7	...	7	1	...	1	...	2	...	38	5	43
55-64 "	7	4	11	4	1	5	...	...	...	37	7	44
65 and over	1	1	2	...	...	...	...	...	...	28	14	42
Not stated	4	3	7	...	...	...	2	...	...	...	...	...

TABLE V.—Showing the seasonal prevalence of Cerebro-spinal Fever, (Meningococcal Meningitis), Diphtheria, and Membranous Croup, Infantile Paralysis (Acute Anterior Poliomyelitis), Encephalitis Lethargica, Scarlet Fever, Typhoid Fever (including Paratyphoid) and Puerperal Infection in New South Wales for the year ended 31st December, 1942.

Month—	Metropolitan Combined Districts.		Hunter River Combined Districts.		Broken Hill District.		Remainder of State.		Total.		Metropolitan Combined Districts.		Hunter River Combined Districts.		Broken Hill District.		Remainder of State.		Total.	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Typhoid and Paratyphoid Fever.																				
January	2	...	1	...	...	...	1	...	4	...	50	...	4	...	...	...	46	...	100	...
February	2	1	...	...	...	...	2	...	4	1	45	...	3	...	...	...	38	1	86	1
March	3	...	1	...	1	...	1	1	6	1	36	...	11	...	...	...	39	...	86	...
April	3	...	2	1	...	...	1	1	6	2	60	1	9	...	3	...	63	...	135	1
May .....	...	1	...	...	...	...	3	...	3	1	44	1	5	...	2	...	53	1	104	2
June .....	...	...	...	...	...	...	...	...	...	...	43	...	9	...	...	...	58	...	110	...
July .....	...	...	1	...	...	...	...	...	1	...	70	1	7	...	1	...	60	...	138	1
August .....	...	1	...	...	...	...	...	...	1	1	78	...	10	...	...	...	45	1	133	1
September	1	...	...	...	...	...	...	...	1	...	112	1	8	...	...	...	41	...	161	1
October	1	...	...	...	...	...	...	...	1	...	99	...	6	...	2	...	36	...	143	...
November .....	...	...	1	...	...	...	3	...	4	...	109	...	11	...	...	...	66	2	186	2
December .....	...	...	1	...	...	...	...	...	1	...	101	...	14	...	1	...	78	...	194	...
Total ...	12	3	7	1	1	...	11	2	31	6	847	4	97	...	9	...	623	5	1,576	9
Scarlet Fever.																				
January	61	4	13	1	...	...	50	1	124	6	6	...	...	...	...	...	2	...	8	...
February	38	3	9	...	...	...	17	2	64	5	3	...	...	...	...	...	1	...	4	...
March	37	1	14	...	...	...	33	...	84	1	...	...	...	...	...	...	1	...	1	...
April	67	5	10	...	2	...	40	3	119	8	...	...	...	...	...	...	2	...	2	...
May	91	1	10	2	6	...	54	4	161	7	...	...	...	...	...	...	...	...	...	...
June	83	7	15	...	7	...	43	5	148	12	...	...	...	...	...	...	...	...	...	...
July	56	5	13	1	2	...	32	1	103	7	2	...	...	...	...	...	1	...	3	...
August	56	3	12	...	2	...	41	2	111	5	3	...	...	...	...	...	2	1	6	1
September	54	2	23	...	...	...	45	3	122	5	1	...	...	...	...	...	1	...	2	...
October	57	5	14	...	1	...	44	4	116	9	2	...	...	...	...	...	...	...	2	...
November	45	5	12	2	1	...	61	2	119	9	4	...	...	...	...	...	...	...	4	...
December	63	1	26	...	6	...	88	4	183	5	2	...	...	...	...	...	1	...	2	...
Total ...	708	42	171	6	27	...	548	31	1,454	79	23	...	...	...	...	...	11	1	34	1
Diphtheria.																				
January	38	6	...	...	11	1	10	2	59	9	...	...	...	...	...	...	2	1	2	1
February	26	2	1	...	...	...	5	1	32	3	...	...	...	...	...	...	1	...	1	...
March	19	6	6	...	1	...	8	2	34	8	...	...	1	...	...	...	...	1	1	1
April	25	1	4	...	...	...	10	2	39	3	...	...	...	...	...	...	1	...	1	...
May	15	4	1	...	...	...	15	...	31	4	...	...	...	...	...	...	...	...	...	...
June	45	11	8	3	4	...	27	4	84	18	1	1	...	...	...	...	...	...	1	1
July	78	11	4	...	2	1	29	7	113	19	...	...	...	...	...	...	1	...	1	...
August	87	15	4	1	2	...	59	4	152	20	...	...	...	...	...	...	1	...	1	...
September	70	3	8	2	...	...	65	8	143	13	1	...	...	...	...	...	...	...	1	...
October	49	4	3	...	...	...	37	5	89	9	...	...	...	...	...	...	...	...	...	...
November	31	9	3	...	2	...	29	3	65	12	...	...	1	...	...	...	...	...	1	...
December	19	5	3	...	1	...	15	2	38	7	...	...	...	...	...	...	2	...	2	...
Total ...	502	77	45	6	23	2	309	40	879	125	2	1	2	...	...	...	8	2	12	3
Encephalitis Lethargica.																				
January .....	...	1	...	1	...	...	...	1	...	3	16	3	2	...	...	...	2	...	20	3
February .....	...	...	...	...	...	...	...	...	...	2	11	...	1	...	...	...	3	...	14	1
March .....	...	...	...	1	...	...	...	1	...	2	15	3	1	...	...	...	...	2	16	5
April .....	...	...	...	...	...	...	...	1	...	1	8	1	2	...	1	1	3	...	14	2
May .....	...	...	...	...	...	...	...	1	...	1	8	...	1	1	...	...	1	1	10	2
June .....	...	1	...	...	...	...	...	...	1	9	2	2	1	...	...	...	3	...	13	2
July .....	...	1	...	1	...	...	...	...	2	26	2	2	...	...	...	...	4	1	32	3
August .....	...	...	...	...	...	...	...	...	...	14	3	...	...	...	...	...	2	1	16	4
September .....	...	...	...	...	...	...	...	...	...	12	2	1	...	...	...	...	5	3	18	5
October .....	...	1	...	...	...	...	...	...	1	22	4	2	...	...	...	...	3	...	27	4
November .....	...	...	...	...	...	...	...	1	...	1	23	...	...	...	...	...	4	1	27	1
December .....	...	...	...	...	...	...	...	1	...	1	36	1	...	1	...	...	1	2	37	4
Total ...	...	4	...	3	...	...	...	6	...	13	200	21	12	3	1	1	31	11	244	36
Puerperal Thrombophlebitis, Embolism and Sudden Death.																				
January .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
February .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
March .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
April .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
May .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
July .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
November .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	...	4	...	3	...	...	...	6	...	13	200	21	12	3	1	1	31	11	244	36
Puerperal Infection.																				
January .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
February .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
March .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
April .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
May .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
July .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
November .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	...	4	...	3	...	...	...	6	...	13	200	21	12	3	1	1	31	11	244	36
Pulmonary Tuberculosis.																				
January .....	...	...	...	...	...	...	48	...	6	...	1	...	16	...	...	...	...	...	71	...
February .....	...	...	...	...	...	...	45	...	3	...	...	...	9	...	...	...	...	...	57	...
March .....	...	...	...	...	...	...	53	...	7	...	2									

SUMMARY.

District.	Typhoid Fever.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Puerperal Thrombophlebitis, Embolism and Sudden Death.	Pulmonary Tuberculosis.
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Deaths.	Deaths.		
Metropolitan Combined	12	3	847	4	708	42	23	...	592	77	2	1	200	14	4	649
Sanitary District	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hunter River Combined	7	1	97	...	171	6	...	...	45	6	2	...	12	1	3	60
District	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Broken Hill District	1	...	9	...	27	...	...	...	23	2	...	...	1	1	...	14
Remainder of State—																
Municipalities	5	1	361	3	265	14	5	1	154	17	4	1	16	2	2	104
Shires	4	1	261	2	281	17	6	...	155	22	4	1	15	2	4	131
Unincorporated	2	...	1	...	2	...	...	...	...	1	...	...	...	...	...	...
Lord Howe Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A.C.T.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	31	6	1,576	9	1,454	79	34	1	879	125	12	3	244	20	13	958

SECTION I.

A.—COMMUNICABLE DISEASES, 1943.

Notifiable Infectious Diseases Recorded in New South Wales during the year ended 31st December, 1943.

Public Health Acts, 1902-1937.

The Public Health Act, 1902, provides that the Governor may, by proclamation in the *Government Gazette*, declare that any disease therein named is an infectious disease.

Disease.	Notifiable from—	Cases and Deaths Notified.					
		1941.		1942.		1943.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Typhoid fever (and paratyphoid)	1st January, 1898	40	8	31	6	24	4
Smallpox	"	...	...	...	...	...	...
Scarlet fever	"	3,385	6	1,576	9	3,940	13
Diphtheria and membranous croup	"	3,063	121	1,454	79	2,268	99
Bubonic plague	23rd January, 1900	...	...	...	...	...	...
Infantile paralysis (including any form of acute anterior poliomyelitis, polioencephalitis or polio-myeloencephalitis).	1st February, 1912; Definition re-proclaimed 14th August, 1931.	90	8	34	1	25	2
Epidemic cerebro-spinal fever (meningococcal meningitis).	11th October, 1915	411	84	879	125	400	89
Encephalitis Lethargica	1st April, 1926	13	4	12	3	8	2
Cholera	12th August, 1927	...	...	...	...	...	...
Typhus fever	"	10	...	8	1	16	2
Yellow fever	"	...	...	...	...	...	...
Puerperal infection	16th August, 1929	270	29*	244	36*	224	45*
Undulant fever	13th August, 1937	...	...	...	...	2	1
Leprosy	25th February, 1938	1	...	5	...	16	1
Total		7,283	260	4,243	260	6,923	258
Population at 31st December		2,802,014		2,833,133		2,854,862	

* See text below.

PUBLIC HEALTH ACT, 1902.

A total of 6,923 cases of infectious disease was notified under the Public Health Act, 1902, during 1943, or 2,680 more cases than in 1942. The number of cases notified from the 157 municipal, 138 shire, and 14 police districts; the deaths due to these infections; the age and sex of the patients, and the seasonal incidence of the various diseases are shown in appended Tables I-V (pp. 40-47). As indicated below, pulmonary tuberculosis is notifiable under the Public Health (Amendment) Act, 1915, and venereal diseases under the Venereal Diseases Act, 1918.

Typhoid Fever.—The twenty-four cases and four deaths notified in 1943 show the lowest incidence of this infection hitherto recorded. In 1942 there were thirty-one cases and six deaths, being at the time the lowest number recorded.

Scarlet Fever.—There were 3,940 notified cases, and thirteen deaths, an increase of 2,364 cases as compared with 1942, when 1,576 cases and nine deaths were recorded.

Diphtheria.—There were 2,268 notified cases and ninety-nine deaths, in comparison with 1,454 cases and seventy-nine deaths in 1942.

Infantile Paralysis.—Twenty-five cases and two deaths were notified. In 1942 there were thirty-four cases and one death.

Puerperal Infection.—Two hundred and twenty-four cases notified, or twenty less than in 1942. The recorded deaths from puerperal septicaemia and post-abortive sepsis in 1943 numbered forty-five, which does not include twenty-five deaths from sepsis classed as criminal abortion. Under the revised International List of Causes of Death which came into use in 1940, puerperal thrombophlebitis, embolism and sudden death are included as subdivisions of the "infection" group, but to maintain comparability with previous years such deaths are omitted here and shown separately in the following pages. There were nineteen deaths in this additional group.

Cerebro-spinal Meningitis.—Four hundred cases and eighty-nine deaths were reported in 1943. In 1942 there were 879 cases and 125 deaths.

Encephalitis Lethargica.—Eight cases and two deaths were notified, compared with twelve cases and three deaths in 1942.

Undulant Fever.—On 13th August, 1937, a proclamation was issued making undulant fever notifiable on and from that date. Two cases and one death were notified in 1943.

Bubonic Plague.—No case of this disease has been reported since June, 1923. Rat-catchers are continuously employed in the vicinity of wharves and in the city area. Plague was not detected in the 2,580 rats examined in the Microbiological Laboratory.

Smallpox.—No case was reported during 1943.

Leprosy.—Sixteen cases of leprosy were notified in 1943, and one patient under detention in the Lazaret died during the year. For the Report on Leprosy in New South Wales, see page 133.

PUBLIC HEALTH (AMENDMENT) ACT, 1915.

Pulmonary tuberculosis was made a notifiable disease under an amendment of the Public Health Act in 1915. In 1943 registered cases amounted to 1,722, a decrease of 190 on the registrations received in 1942. There were 890 deaths, or a decrease of sixty-eight compared with the deaths recorded in 1942. A survey by the Director of the Tuberculosis Division is on page 109.

VENEREAL DISEASES ACT, 1918.

Cases of venereal disease notified in 1943 numbered 4,869, a decrease of 1,121 cases on the number (5,990) received in 1941. The Report of the Director of the Division is on pages 80-82.

TABLE I.—Showing the number of notified cases of, and deaths from, the following diseases:—Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid Fever (including Paratyphoid), Pulmonary Tuberculosis, and Puerperal Infection in the METROPOLITAN COMBINED DISTRICTS for the year ended 31st December, 1943.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
METROPOLITAN MUNICIPALITIES.																	
Sydney, City of	125	1	73	2	...	...	17	3	...	...	58	4	...	75	
Alexandria	14	...	15	...	...	...	3	1	...	...	1	...	...	2	
Annandale	36	...	12	...	...	...	3	2	...	...	1	...	...	6	
Ashfield	67	...	30	3	...	...	4	...	1	1	1	1	...	12	
Auburn	45	...	44	1	...	...	2	1	...	...	...	...	...	6	
Balmain	62	...	30	1	...	...	2	...	...	...	1	...	...	18	
Bankstown	53	...	47	3	2	...	2	2	...	...	3	1	...	14	
Bexley	1	55	...	7	...	...	...	2	1	...	...	1	...	...	2	
Botany	16	...	17	1	...	...	2	...	...	...	1	...	...	7	
Burwood	17	...	13	1	...	...	2	...	...	...	...	...	...	9	
Canterbury	1	166	1	49	6	...	...	13	1	1	...	8	1	...	26	
Concord	42	...	12	...	...	...	6	2	...	...	2	1	...	9	
Darlington	8	...	7	...	...	...	1	...	...	...	2	...	...	6	
Drummoyne	37	...	18	1	1	...	3	1	...	...	1	1	...	9	
Dundas	18	...	5	1	...	...	3	1	...	...	...	...	...	2	
Eastwood	5	...	2	...	...	...	...	...	...	...	...	...	...	2	
Enfield	25	...	16	...	...	...	3	...	...	...	3	...	...	7	
Ermington and Rydalmere	2	...	4	...	...	...	...	...	...	...	1	...	...	1	
Erskineville	16	...	40	...	...	...	...	...	...	...	2	...	...	2	
Glebe	56	...	19	...	...	...	7	3	...	...	8	1	...	8	
Granville	1	33	...	24	4	1	...	2	1	...	...	1	...	...	5	
Holroyd (Pitt and Merrylands Wards)	33	...	33	1	1	...	...	...	...	...	...	...	...	2	
Homebush	3	...	1	...	...	...	...	...	...	...	...	...	...	...
Hunter's Hill	Not Available.	4	...	2	...	...	...	1	...	...	...	...	...	...	3	
Hurstville	56	...	18	1	...	...	4	...	1	...	4	1	...	9	
Kogarah	50	...	18	1	1	...	7	4	1	...	1	...	...	7	
Kuring-gai	80	...	10	1	...	...	7	2	...	...	...	...	...	23	
Lane Cove	29	...	6	...	...	...	2	...	...	...	...	...	...	1	
Leichhardt	85	...	29	...	1	...	5	...	1	1	3	...	...	12	
Lidcombe	2	16	...	7	...	...	...	2	2	...	...	...	...	...	12	
Manly	1	62	...	13	...	...	...	6	2	...	...	...	...	...	7	
Marrickville	60	...	53	5	1	...	4	...	...	...	3	1	...	17	
Mascot	38	...	17	...	...	...	3	1	...	...	1	...	...	8	
Mosman	42	...	5	...	...	...	3	1	...	...	...	1	...	1	
Newtown	54	...	75	2	...	...	6	2	...	...	2	...	...	9	
North Sydney	95	...	22	...	...	...	7	1	...	...	2	...	...	18	
Paddington	34	...	35	1	...	...	2	...	...	...	10	1	...	22	
Parramatta	9	...	23	1	1	...	4	...	...	...	2	...	...	11	
Petersham	34	...	16	1	...	...	10	1	...	...	4	...	...	14	
Randwick	3	184	...	60	...	1	...	17	4	...	...	8	...	...	36	
Redfern	24	...	35	2	...	...	3	...	...	...	7	...	...	12	
Rockdale	41	...	14	...	...	...	6	1	...	...	4	...	...	17	
Ryde	81	1	25	1	...	...	1	...	...	...	3	1	...	14	
St. Peters	1	19	...	14	...	...	...	...	...	...	...	2	1	...	2	
Strathfield	10	...	6	...	...	...	1	1	1	...	...	1	...	1	
Vaucluse	11	...	2	...	...	...	...	...	...	...	1	...	...	4	
Waterloo	22	...	26	1	...	...	...	...	...	...	3	...	...	13	
Waverley	1	110	...	13	1	...	...	12	1	...	...	4	...	...	23	
Willoughby	52	...	17	...	...	...	9	2	...	...	2	2	...	10	
Woollahra	1	70	...	11	3	...	...	7	...	...	...	6	...	...	14	
EXTRA METROPOLITAN MUNICIPALITIES.																	
Cabramatta and Canley Vale	7	...	27	1	...	...	...	...	...	...	2	...	...	4	
Fairfield	4	...	31	1	...	...	1	1	...	...	...	...	...	3	
Holroyd (Guildford and Wentworth Wards)	3	
Ingleburn	10	...	1	...	...	...	5	...	...	...	...	...	...	...
Liverpool	7	...	23	1	...	...	2	...	...	...	1	3	...	1	
EXTRA METROPOLITAN SHIRES AND PORT JACKSON.																	
Hornsby	61	...	16	...	...	...	1	1	...	...	3	...	...	13	
Warringah	24	...	16	...	...	...	3	...	...	...	...	...	...	6	
Harbour of Port Jackson	
Total	11	3	2,419	3	1,204	49	10	218	46	6	2	173	22	...	580

Typhus Fever—

Annandale, 1; Canterbury, 1; Drummoyne, 1; Ku-ring-gai, 1; Mascot, 2; Randwick, 2; Redfern, 1; Sydney, 1;

Undulant Fever—

Ku-ring-gai, 1,

TABLE II.—Showing the number of notified cases of, and deaths from, Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria or Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid Fever (including Paratyphoid), Pulmonary Tuberculosis, and Puerperal Infection in the HUNTER RIVER COMBINED DISTRICT for the year ended 31st December, 1943.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.		
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	
MUNICIPALITIES.																		
Greater Newcastle .....		...	...	129	7	93	4	...	...	17	3	1	...	4	2	...	32
Cessnock .....		...	...	5	...	14	...	...	...	1	...	...	...	...	...	...	1
Maitland, East	Not Available.	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	2
Maitland, West .....		...	...	3	...	6	...	...	...	2	...	...	...	3	...	...	2
Morpeth	1
Singleton	16	...	2	1
SHIRES.																		
Bolwarra .....		...	...	4	...	1	...	...	...	...	...	...	...	...	...	...	...
Kearsley	Not Available.	...	...	16	...	14	1	1	...	6	3	...	...	1	1	...	8
Lake Macquarie .....		...	...	16	...	39	1	...	...	4	2	...	...	4	1	...	3
Port Stephens .....		...	...	3	...	5	...	...	...	2	...	...	...	...	...	...	...
Tarro	2	...	6	1
Total .....		...	...	195	7	181	7	1	...	32	8	1	...	12	4	...	50

Undulant Fever : Greater Newcastle, 1.

TABLE III.—Showing the number of notified cases of and deaths from Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria or Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid (including Paratyphoid), Pulmonary Tuberculosis, and Puerperal Infection, in the REMAINDER OF STATE for the year ended 31st December, 1943.

Municipality.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
COUNTRY MUNICIPALITIES.																	
Albury	20	...	6	2	...	...	1	...	...	...	...	...	...	4
Armidale	21	...	13	1	...	...	...	...	...	...	...	...	...	1
Ballina	1	...	...	...	2	...	...	...	1	...	...	1
Balranald		1	...	...	...	8	...	...	...	...	...	...	...	...	...	...	...
Barraba
Bathurst		2	...	9	...	21	1	...	...	1	2	...	...	4	1	...	3
Bega	1	...	11	...	...	...	...	...	...	...	...	...	...	2
Berry	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Bingara	3	...	1	...	...	...	1	...	...	...	...	...	...	...
Blackheath	2	...	1	...	...	...	1	...	...	...	...	...	...	3
Bombala	5	...	...	...	...	...	...	...	...	...	...	...	...	...
Bourke	3	...	...	...	...	...	...	...	...	...	...	1
Bowral	15	...	...	...	...	...	...	...	...	...	...	...	...	3
Brewarrina	3
Broken Hill		Not Available.	2	...	89	...	19	1	...	2	...	...	...	1	...	...	12
Broughton Vale
Burrowa	1
Camden	5	...	...	...	...	...	...	...	...	...	...	1
Campbelltown	1	...	3	1	...	...	1	...	...	...	1	...	...	...
Casino	1	...	...	...	...	...	...	...	...	...	...	1	...	...
Castlereagh
Cobar	4	...	1	...	...	...	...	...	...	...	...	...	...	1
Condobolia	14	...	1	...	...	...	...	...	...	...	...	...	...	...
Cooma	3	...	...	...	...	...	...	...	...	...	...	...	...	1
Coonamble	1	...	4	...	...	...	...	...	...	...	2	...	...	1
Cootamundra	13	...	...	...	...	...	...	...	...	...	...	...	...	...
Corowa	8	...	5	...	...	...	3	2	...	...	...	...	...	2
Cowra	3	...	3	...	...	...	1	1	...	...	...	...	...	3
Deniliquin	6	...	6	...	...	...	1	...	...	...	...	...	...	...
Dubbo	9	...	63	...	1	...	6	1	...	...	2	...	...	2

TABLE III—continued.

REMAINDER OF STATE—Return showing the number of cases, etc., from Country Municipalities.

Municipality.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro- spinal Meningitis.		Esephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
COUNTRY MUNICIPALITIES—continued.																	
Dungog	4	...	15	...	...	...	1	1	...	...	...	...	...	...	...
Forbes	21	...	5	...	...	...	1	1	...	...	...	...	...	...	4
Gerrigong
Glen Innes	1	...	1	...	...	...	3	2	...	...	...	...	...	...	...
Gosford	3	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Goulburn	34	...	17	...	...	...	2	...	...	...	1	...	...	...	5
Grafton	33	1	13	2	...	...	1	1	...	...	1	...	...	...	2
Grafton, South	15	...	4	...	...	...	1	...	...	...	...	1	...	...	...
Grenfell	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gunnedah	8	...	4	...	...	...	3	...	...	...	...	1	...	...	...
Hay	1	...	1	...	1	...	1	...	...	...	...	...	...	1	...	...	...
Hillston	1	...	...	...
Illawarra North	12	...	6	...	...	...	...	...	...	...	...	...	...	...	1
Inverell	1	...	4	...	...	...	...	...	...	...	...	...	...	...	3
Jamberoo
Junee	7	...	2	...	...	...	...	1	...	...	2	...	...	...	2
Katoomba	10	...	...	...	...	...	...	...	...	...	...	...	...	...	10
Kempsey	8	...	4	...	...	...	1	1	...	...	...	...	...	...	...
Kiama	3	...	...	...	2	...	...	...	...	...	...	...	...
Lismore	11	...	13	...	...	...	...	...	...	...	...	...	...	...	...
Lithgow	15	...	6	1	...	...	1	...	...	...	...	...	...	...	2
Maclean	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Manilla	1	...	...	...	...	...	...	...	...	...	...	...	...
Moama
Molong	1	1	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Moree	1	...	1	...	...	...	1	...	...	...	...	...	...	...	2
Mudgee	3	...	30	1	...	...	...	...	...	...	1	...	...	...	3
Mullumbimby	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Murrumburrah	2	...	...	...	...	...	...	...	...
Murrurundi	3	1	...	...	...	...	...	...	...	...	...	...	...
Murwillumbah	Not Available.	...	16	...	2	1	...	...	...	...	...	...	...	...	...	...	...
Muswellbrook	12	...	7	1	...	...	1	...	...	...	...	...	...	...	...
Narrabri	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...
Narrandera	7	...	16	...	...	...	1	...	...	...	1	...	...	...	...
Narromaine	2	...	...	...	...	...	3	...	...	...	1	...	...	...	2
Nowra	1	...	1	...	...	...	4	...	...	...	1	...	...	...	1
Nyngan	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Orange	10	...	15	...	...	...	3	1	...	...	2	1	...	...	1
Parke	36	...	9	...	...	...	...	...	...	...	...	...	...	...	...
Peak Hill	9	...	3	1	...	...	...	...	...	...	...	...	...	...	...
Penrith	15	...	4	...	...	...	...	...	...	...	...	...	...	...	2
Port Macquarie	1	...	1	...	3	1	...	...	...	...	...	...	...	...	...	...	2
Queanbeyan	7	...	2	...	...	...	1	...	...	...	...	...	...	...	1
Quirindi	7	...	...	1	...	...	2	...	...	...	...	...	...	...	2
Richmond	13	...	...	...	...	...	2	...	...	...	...	...	...	...	1
Scone	23	...	3	...	...	...	...	...	...	...	...	...	...	...	...
Shellharbour	2	...	4	...	...	...	1	...	...	...	...	...	...	...	...
Shoalhaven, South
St. Mary's	1	...	1	1	...	...	1	1	...	...	...	...	...	...	2
Tamworth	6	...	23	...	...	...	5	...	...	...	1	...	...	...	4
Taree	1	...	3	...	...	...	...	...	...	...	...	...	...	...	1
Temora	19	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Tenterfield	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Ulladulla
Ullmarra	3	...	4	...	...	...	...	...	...	...	...	...	...	...	...
Uralla	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wagga Wagga	54	...	9	1	...	...	3	1	...	...	1	1	...	...	3
Walcha	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Warren	2	...	2	...	...	...	...	...	...	...	1	...	...	...	...
Wellington	5	...	8	...	...	...	...	...	...	...	...	...	...	...	4
Wentworth	1	...	11	...	...	...	...	...	...	...	...	...	...	...	1
Wilcannia	2	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Windsor	7	...	4	...	...	...	2	...	...	...	...	...	...	...	...
Wingham
Wollongong	20	...	5	1	...	...	6	2	...	...	...	1	...	...	4
Yass	11	...	1	...	...	...	1	...	...	...	...	...	...	...	1
Young	20	...	3	...	...	...	...	...	...	...	2	...	...	...	...
Total Municipalities			9	1	760	1	453	17	4	...	76	18	...	29	7	...	112

Typhus Fever: Lismore Municipality, 1; Murwillumbah Municipality, 1; Port Macquarie Municipality, 2.

TABLE III—continued.
REMAINDER OF STATE—Return showing the number of cases, etc., from Country Shires—continued.

Shires.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.		
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	
COUNTRY SHIRES—continued.																		
Namoi	3	...	5	...	...	...	...	...	...	...	...	...	...	...
Narraburra	7	...	...	...	...	...	...	...	...	...	...	...	...	...
Nattai	2	...	4	...	...	...	...	...	...	...	...	...	...	...
Nepean	6	...	...	...	...	...	...	...	...	...	...	...
Nundle	1	...	2	...	...	...	...	...	...	...	...	...	...	...
Nymboida	3	...	2	...	...	...	...	...	...	...	...	...	...	...
Oberon	1	
Orara	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Patrick's Plains	11	...	2	...	...	...	...	...	...	...	...	...	...	...
Peel	8	...	4	...	1	...	...	...	...	...	...	...	...	...
Rylstone	1	...	3	...	...	...	...	...	...	...	...	...	...	1	
Severn	8	...	7	...	...	...	1	...	1	...	...	...	...	1	
Snowy River	1	
Stroud	3	...	23	2	...	...	2	...	...	...	1	...	...	2	
Sutherland	21	...	16	...	...	...	3	1	...	...	...	...	...	12	
Talbragar	4	1	6	...	...	...	...	...	...	...	...	...	...	1	
Tallaganda	3	...	...	...	1	...	...	...	...	...	...	1	
Tamarang	1	...	1	1	...	...	...	...	...	...	...	...	...	1	
Tenterfield	1	
Terania	5	...	7	...	...	...	...	...	...	...	...	...	...	1	
Timbreebongie	5	...	1	...	...	...	1	1	...	...	...	...	...	...
Tintenbar	12	...	...	...	1	...	...	...	...	...	...	...
Tomki	2	...	1	...	...	...	...	...	...	...	...	1	
Tumbarumba	Not Available.	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...
Tumut	29	...	2	...	...	...	3	3	...	...	...	...	...	...
Turon	1	...	...	3	...	4	...	...	...	...	...	...	...	...	...	...	...
Tweed	11	...	9	...	1	...	1	2	...	1	...	...	...	2	
Upper Hunter	12	...	5	...	...	...	1	...	...	...	...	...	...	1	
Urana	1	...	...	...	1	...	...	...	...	...	...	1	
Wade	14	...	13	1	...	...	...	...	...	...	...	...	...	...
Wakool	7	...	1	...	...	...	1	1	...	...	...	...	...	...
Walgett	3	...	...	...	...	...	...	...	...	...	...	...
Wallerobba	2	...	6	...	...	...	...	...	...	...	1	...	...	2	
Waradgergy	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Warrak	1	...	7	...	...	...	...	...	...	...	1	...	...	...
Wangool	3	...	2	...	...	...	1	1	...	...	...	...	...	1	
Weddin	1	...	...	...	...	...	...	...	...	...	...	...	...	1	
Willimbong	7	...	3	1	...	...	...	...	...	...	...	...	...	1	
Windouran	
Wingadee	2	...	...	...	...	...	...	...	...	...	...	1	
Wingecarribee	1	...	...	21	...	2	...	...	...	...	...	...	...	...	...	...	1
Wollondilly	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	3
Woodburn	14	...	1	...	...	...	1	...	...	...	...	...	...	...
Woy Woy	1	...	...	...	1	...	...	1	...	...	...	2	
Yallaroi	
Yanko	4	...	3	...	...	...	...	...	...	...	...	...	...	...
Yarrowlunla	4	...	1	...	...	...	...	...	...	...	...	...	...	...
Total, Shires	4	...	566	2	429	26	10	2	72	17	1	...	10	12	143
WESTERN DIVISION (UNINCORPORATED) POLICE DISTRICTS.*																		
Balranald	1
Bourke
Brewarrina
Broken Hill
Cobar
Hay
Hillston
Ivanhoe
Menindie	1	...	...	...	...	...	...	...
Mitchell	1	...	...	...	...	...	...	...
Nyngan	
Walgett	
Wentworth	1	...	...	...
Wilcannia	
Total, Unincorporated	1	...	...	...	2	...	...	...	...	...	...	5	
MISCELLANEOUS																		
Lord Howe Island
Migratory
Outside the State—
Australia Capital Territory
Queensland
Victoria
South Australia
Total Miscellaneous
Total, N.S.W.	24	4	3,940	13	2,268	99	25	2	400	80	8	2	224	45	890

* Deaths available only for unincorporated area as a whole.

Typhus Fever: Kyogle Shire, 1; Terania Shire, 1.

TABLE V.—Showing the seasonal prevalence of Cerebro-spinal Fever, (Meningococcal Meningitis), Diphtheria, and Membranous Croup, Infantile Paralysis (Acute Anterior Poliomyelitis), Encephalitis Lethargica, Scarlet Fever, Typhoid Fever (including Paratyphoid), Pulmonary Tuberculosis, and Puerperal Infection in New South Wales for the year ended 31st December, 1943.

Month—	Metropolitan Combined Districts.		Hunter River Combined Districts.		Broken Hill District.		Remainder of State.		Total.		Metropolitan Combined Districts.		Hunter River Combined Districts.		Broken Hill District.		Remainder of State.		Total.	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Typhoid and Paratyphoid Fever.																				
January .....	...	...	...	...	...	...	1	...	1	...	100	...	9	...	1	...	80	...	190	...
February	5	2	...	...	...	...	2	1	7	3	74	...	14	...	...	...	132	1	220	1
March	1	...	...	...	1	...	1	...	3	...	170	...	27	...	3	...	157	...	357	...
April	3	...	...	...	1	...	2	...	6	...	152	1	16	...	...	...	96	1	264	2
May	1	...	...	...	...	...	...	...	1	...	144	...	3	...	3	...	85	...	235	...
June .....	...	...	...	...	...	...	...	...	...	...	121	...	16	...	4	...	80	...	221	...
July .....	...	...	...	...	...	...	...	...	...	...	182	...	9	...	14	...	55	...	260	...
August .....	...	...	...	...	...	...	1	...	1	...	284	...	11	...	15	...	106	...	416	...
September .....	...	...	...	...	...	...	1	...	1	...	354	...	15	...	15	...	85	...	469	...
October	1	...	...	...	...	...	1	...	2	...	263	1	13	...	4	...	87	1	367	2
November .....	...	1	...	...	...	...	1	...	1	1	314	1	12	...	18	...	145	...	489	1
December .....	...	...	...	...	...	...	1	...	1	...	261	...	50	7	12	...	129	...	452	7
Total ...	11	3	...	...	2	...	11	1	24	4	2,419	3	195	7	89	...	1,237	3	3,940	13
Diphtheria.																				
January	88	3	30	1	...	...	82	5	200	9	4	...	...	...	...	...	...	...	4	...
February	141	6	20	1	...	...	117	6	278	13	2	...	...	...	...	...	2	1	4	1
March	237	7	29	...	2	...	168	10	436	17	1	...	...	...	...	...	1	...	2	...
April	177	5	30	...	5	1	127	3	339	9	...	...	...	...	...	...	...	...	...	...
May	138	12	18	2	6	...	76	2	238	16	1	...	...	...	...	...	...	...	1	...
June	89	3	13	1	1	...	44	4	147	8	...	...	1	...	...	...	1	...	2	...
July	72	6	12	...	2	...	31	3	117	9	1	...	...	...	...	...	2	1	3	1
August	50	2	4	...	1	...	46	2	101	4	...	...	...	...	...	...	1	...	1	...
September	54	...	1	...	...	...	46	4	101	4	...	...	...	...	...	...	2	...	2	...
October	47	...	6	...	...	...	43	2	96	2	1	...	...	...	...	...	1	...	2	...
November	51	4	9	2	2	...	46	...	108	6	...	...	...	...	...	...	2	...	2	...
December	60	1	9	...	...	...	38	1	107	2	...	...	...	...	...	...	2	...	2	...
Total ...	1,204	49	181	7	19	1	864	42	2,268	99	10	...	1	...	...	...	14	2	25	2
Cerebro-spinal Meningitis.																				
January	18	3	4	...	...	...	16	1	38	4	...	...	...	...	...	...	...	...	...	...
February	13	3	2	...	...	...	14	3	29	6	...	...	...	...	...	...	...	...	...	...
March	10	2	1	...	...	...	8	1	19	3	...	...	1	...	...	...	1	...	2	...
April	13	5	2	1	...	...	7	1	22	7	...	...	...	...	...	...	...	...	...	...
May	15	4	4	...	...	...	10	4	29	8	1	1	...	...	...	...	...	...	1	1
June	13	4	1	...	...	...	12	6	26	10	1	...	...	...	...	...	...	...	1	...
July	41	7	2	3	1	...	18	1	62	11	1	...	...	...	...	...	...	...	1	...
August	24	4	3	1	...	...	26	5	53	10	...	...	...	...	...	...	...	...	...	...
September	36	7	8	2	...	...	16	6	60	15	1	...	...	...	...	...	...	...	1	...
October	17	4	2	...	...	...	8	3	27	7	2	...	...	...	...	...	...	...	2	...
November	12	2	2	...	1	...	7	4	22	6	...	1	...	...	...	...	...	...	...	1
December	6	1	1	1	...	...	6	...	13	2	...	...	...	...	...	...	...	...	...	...
Total ...	218	46	32	8	2	...	148	35	400	89	6	2	1	...	...	...	1	...	8	2
Pulmonary Tuberculosis.																				
January .....	...	40	...	4	...	1	...	23	...	68	12	2	1	...	1	...	2	3	16	5
February .....	...	36	...	4	...	2	...	20	...	62	16	2	1	...	...	...	1	1	18	3
March .....	...	45	...	2	...	...	...	21	...	68	14	3	1	...	...	...	2	...	17	3
April .....	...	49	...	4	...	2	...	17	...	72	17	3	1	...	...	...	...	...	18	3
May .....	...	31	...	5	...	2	...	18	...	56	17	2	...	...	...	...	2	4	19	6
June .....	...	56	...	4	...	1	...	20	...	81	21	2	3	2	...	...	5	1	29	5
July .....	...	67	...	4	...	1	...	26	...	98	9	1	...	...	...	...	9	1	18	2
August .....	...	57	...	9	...	...	...	20	...	86	20	2	...	...	...	...	2	3	22	5
September .....	...	53	...	5	...	1	...	21	...	80	9	...	...	...	...	...	1	1	10	1
October .....	...	49	...	5	...	1	...	24	...	79	7	4	...	...	...	...	4	2	11	6
November .....	...	49	...	3	...	...	...	18	...	70	14	1	1	...	...	...	4	1	19	2
December .....	...	48	...	1	...	1	...	20	...	70	17	...	4	2	...	...	6	2	27	4
Total ...	...	580	...	50	...	12	...	248	...	890	173	22	12	4	1	...	38	19	224	45
Scarlet Fever.																				
January .....	...	...	...	...	...	...	1	...	1	...	100	...	9	...	1	...	80	...	190	...
February	5	2	...	...	...	...	2	1	7	3	74	...	14	...	...	...	132	1	220	1
March	1	...	...	...	1	...	1	...	3	...	170	...	27	...	3	...	157	...	357	...
April	3	...	...	...	1	...	2	...	6	...	152	1	16	...	...	...	96	1	264	2
May	1	...	...	...	...	...	...	...	1	...	144	...	3	...	3	...	85	...	235	...
June .....	...	...	...	...	...	...	...	...	...	...	121	...	16	...	4	...	80	...	221	...
July .....	...	...	...	...	...	...	...	...	...	...	182	...	9	...	14	...	55	...	260	...
August .....	...	...	...	...	...	...	1	...	1	...	284	...	11	...	15	...	106	...	416	...
September .....	...	...	...	...	...	...	1	...	1	...	354	...	15	...	15	...	85	...	469	...
October	1	...	...	...	...	...	1	...	2	...	263	1	13	...	4	...	87	1	367	2
November .....	...	1	...	...	...	...	1	...	1	1	314	1	12	...	18	...	145	...	489	1
December .....	...	...	...	...	...	...	1	...	1	...	261	...	50	7	12	...	129	...	452	7
Total ...	11	3	...	...	2	...	11	1	24	4	2,419	3	195	7	89	...	1,237	3	3,940	13
Encephalitis Lethargica.																				
January	18	3	4	...	...	...	16	1	38	4	...	...	...	...	...	...	...	...	...	...
February	13	3	2	...	...	...	14	3	29	6	...	...	...	...	...	...	...	...	...	...
March	10	2	1	...	...	...	8	1	19	3	...	...	1	...	...	...	1	...	2	...
April	13	5	2	1	...	...	7	1	22	7	...	...	...	...	...	...	...	...	...	...
May	15	4	4	...	...	...	10	4	29	8	1	1	...	...	...	...	...	...	1	1
June	13	4	1	...	...	...	12	6	26	10	1	...	...	...	...	...	...	...	1	...
July	41	7	2	3	1	...	18	1	62	11	1	...	...	...	...	...	...	...	1	...
August	24	4	3	1	...	...	26	5	53	10	...	...	...	...	...	...	...	...	...	...
September	36	7	8	2	...	...	16	6	60	15	1	...	...	...	...	...	...	...	1	...
October	17	4	2	...	...	...	8	3	27	7	2	...	...	...	...	...	...	...	2	...
November	12	2	2	...	1	...	7	4	22	6	...	1	...	...	...	...	...	...	...	1
December	6	1	1	1	...	...	6	...	13	2	...	...	...	...	...	...	...	...	...	...
Total ...	218	46	32	8	2	...	148	35	400	89	6	2	1	...	...	...	1	...		

SUMMARY.

District.	Typhoid Fever.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths. ††	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Metropolitan Combined Sanitary District	11	3	2,419	3	1,204	49	10	...	218	46	6	2	173	22	...	580
Hunter River Combined District .....	...	...	195	7	181	7	1	...	32	8	1	...	12	4	...	50
Broken Hill District	2	...	89	...	19	1	...	...	2	...	...	...	1	...	...	12
Remainder of State—																
Municipalities	7	1	671	1	434	16	4	...	74	18	...	...	28	7	...	100
Shires	4	...	566	2	430	26	10	2	74	17	1	...	10	12	...	143
Unincorporated .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
Lord Howe Island .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A.C.T. .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	24	4	3,940	13	2,268	99	25	2	400	89	8	2	224	45	...	890

†† Deaths from notifiable forms only.

SECTION I.

A.—COMMUNICABLE DISEASES, 1944.

Notifiable Infectious Diseases Recorded in New South Wales during the year ended 31st December, 1944.

Public Health Acts, 1902-1937.

The Public Health Act, 1902, provides that the Governor may, by proclamation in the *Government Gazette*, declare that any disease therein named is an infectious disease.

Disease.	Notifiable from—	Cases and Deaths Notified.					
		1942.		1943.		1944.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Typhoid fever and paratyphoid	1st January, 1898	31	6	24	4	24	5
Scarlet fever	"	1,576	9	3,940	13	5,618	11
Diphtheria or membranous croup	"	1,454	79	2,268	99	1,402	69
Bubonic plague	23rd January, 1900 .....	...	...	...	...	...	...
Infantile paralysis (including any form of acute anterior poliomyelitis, poliomyelitis or poliomyelencephalitis).	1st February, 1912; Definition re-proclaimed 14th August, 1931.	34	1	25	2	15	2
Epidemic cerebro-spinal fever (meningococcal meningitis).	11th October, 1915	879	125	400	89	172	59
Encephalitis Lethargica	1st April, 1926	12	3	8	2	3	2
Cholera	12th August, 1927 .....	...	...	...	...	...	...
Typhus fever	"	8	1	16	2	33	2
Yellow fever .....	" .....	...	...	...	...	...	...
Puerperal infection	16th August, 1929	244	36*	224	45*	205	26*
Undulant fever	13th August, 1937 .....	...	...	2	1	1	...
Leprosy	25th February, 1938	5	...	8	1	7	...
Total		4,243	260	6,915	258	7,480	176
Population as at 31st December.....		2,833,133		2,854,862		2,884,848	

* See text below.

PUBLIC HEALTH ACT, 1902.

A total of 7,480 cases of infectious diseases was notified under the Public Health Act, 1902, during 1944, or 565 more cases than in 1943. The number of cases notified from the 152 municipalities, 137 shires and the unincorporated portion of the Western Division; the deaths due to these infections; the age and sex of the patients, and the seasonal incidence of the various diseases are shown in appended Tables I-V (pages 49-57). As indicated below, pulmonary tuberculosis is notifiable under the Public Health (Amendment) Act, 1915, and venereal diseases under the Venereal Diseases Act, 1918.

Typhoid Fever.—In 1944 there were twenty-four cases notified and five deaths. The number of cases was the same as in 1943 and the experience over these two years was the lowest incidence of this disease hitherto recorded. In 1943 there were four deaths.

Scarlet Fever.—There were 5,618 notified cases, and eleven deaths, an increase of 1,678 cases as compared with 1943 when 3,940 cases and thirteen deaths were recorded.

Diphtheria.—There were 1,402 notified cases and sixty-nine deaths in comparison with 2,268 cases and ninety-nine deaths in 1943.

Infantile Paralysis.—Fifteen cases and two deaths were notified. In 1943 there were twenty-five cases and two deaths.

Puerperal Infection.—Two hundred and five cases were notified or nineteen less than in 1943. The recorded deaths from puerperal septicaemia and post-abortive sepsis in 1944 numbered twenty-six, which does not include twenty-nine deaths from sepsis classed as criminal abortion. Under the revised International List of Causes of Deaths which came into use in 1940, puerperal thrombophlebitis, embolism and sudden death are included as subdivisions of the "infection" group but to maintain comparability with previous years such deaths are omitted here and shown separately in the following pages. There were twenty-three deaths in this additional group.

Cerebro-spinal Meningitis.—One hundred and seventy-two cases and fifty-nine deaths were reported in 1944. In 1943 there were 400 cases and eighty-nine deaths.

Encephalitis Lethargica.—Three cases and two deaths were notified compared with eight cases and two deaths in 1943.

Undulant Fever.—On 13th August, 1937, a proclamation was issued making undulant fever notifiable on and from that date. One case and no deaths were notified in 1944.

Bubonic Plague.—No case of this disease has been reported since June, 1923. Rat-catchers are continuously employed in the vicinity of wharves and in the city area. Plague was not detected in the 1,926 rats examined in the Microbiological Laboratory.

Smallpox.—No case was reported during 1944.

Leprosy.—Seven cases (no deaths) of leprosy were notified in 1944. For the Report on Leprosy in New South Wales, see page 133.

PUBLIC HEALTH (AMENDMENT) ACT, 1915.

Pulmonary tuberculosis was made a notifiable disease under an amendment of the Public Health Act in 1915. In 1944 registered cases amounted to 1,743, an increase of 21 on the registrations received in 1943. There were 825 deaths, or a decrease of sixty-five compared with the deaths recorded in 1943. A survey of the Director of the Tuberculosis Division is on page 109.

VENEREAL DISEASES ACT, 1918.

Cases of venereal disease notified in 1944 numbered 4,410, a decrease of 459 cases on the number (4,869) received in 1943. The Report of the Director of the Division is on pages 80-82.

TABLE I.—Showing the number of notified cases of, and deaths from, the following diseases:—Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid Fever (including Paratyphoid), Pulmonary Tuberculosis, and Puerperal Infection in the METROPOLITAN COMBINED DISTRICTS for the year ended 31st December, 1944.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
METROPOLITAN MUNICIPALITIES.																	
Sydney, City of	...	...	174	1	66	1	...	...	4	2	...	...	21	1	...	...	67
Alexandria	1	...	23	...	8	...	3	...	1	...	...	...	1	...	...	...	3
Annandale	...	...	14	...	5	...	...	...	2	...	...	...	...	1	...	...	7
Ashfield	...	...	71	...	5	1	...	...	2	...	...	...	7	...	...	...	13
Auburn	...	...	36	1	14	...	...	...	4	1	...	...	4	...	...	...	8
Balmain	...	...	111	1	28	1	...	...	5	1	...	...	2	1	...	...	9
Bankstown	...	...	103	...	33	2	1	...	2	2	...	...	4	...	...	...	11
Bexley	...	...	64	...	3	1	...	...	1	...	...	...	1	1	...	...	6
Botany	1	...	19	...	5	1	...	...	...	...	...	...	...	1	...	...	3
Burwood	...	...	25	...	2	...	...	...	4	...	...	...	1	...	...	...	6
Canterbury	1	1	214	...	39	...	...	...	4	4	...	...	6	...	...	...	29
Concord	1	...	52	...	1	...	...	...	4	...	...	...	...	...	...	...	4
Darlington	...	...	4	...	1	...	...	...	...	...	...	...	...	...	...	...	4
Drummoyne	...	...	39	...	6	...	1	...	3	1	...	...	...	1	...	...	7
Dundas	...	...	23	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Eastwood	...	...	6	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Enfield	...	...	28	...	12	1	...	...	...	...	...	...	...	...	...	...	3
Ermington and Rydalmere	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erskineville	...	...	19	...	19	...	...	...	1	...	...	...	...	...	...	...	4
Glebe	...	...	57	...	13	...	...	...	3	1	...	...	5	1	...	...	9
Granville	...	...	56	...	12	...	...	...	3	1	...	...	2	...	...	...	9
Holroyd (Pitt and Merrylands Wards)	1	...	39	...	13	1	...	...	1	...	...	...	2	...	...	...	4
Homebush	Not Available.	...	4	...	1	1	...	...	...	...	...	...	1	...	...	...	...
Hunter's Hill	...	...	16	...	3	...	...	...	...	...	...	...	...	...	...	...	3
Hurstville	1	...	73	...	20	3	...	...	2	1	...	...	4	...	...	...	10
Kogarah	...	...	100	...	17	1	...	...	1	...	...	...	6	1	...	...	6
Kuring-gai	...	...	94	1	8	...	1	...	1	1	...	...	...	...	...	...	24
Lane Cove	...	...	36	...	3	...	...	...	...	...	...	...	...	...	...	...	1
Leichhardt	...	...	49	...	18	...	...	...	2	...	...	...	3	...	...	...	13
Lidcombe	...	...	23	...	7	...	...	...	...	...	...	...	3	...	...	...	16
Manly	...	...	82	...	10	1	...	...	4	1	...	...	...	...	...	...	4
Marrickville	...	...	120	...	29	3	...	...	1	1	...	...	3	1	...	...	17
Mascot	...	...	32	...	11	1	...	...	1	1	...	...	3	...	...	...	4
Mosman	...	...	25	...	3	...	...	...	1	...	...	...	2	...	...	...	7
Newtown	...	...	62	...	19	...	...	...	1	...	...	...	3	1	...	...	10
North Sydney	...	1	70	...	31	3	...	...	...	1	...	...	6	...	...	...	20
Paddington	2	...	100	...	34	...	1	1	1	...	...	...	12	...	...	...	13
Parramatta	...	...	58	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Petersham	...	...	48	...	13	...	...	...	1	...	...	...	2	...	...	...	15
Randwick	1	...	213	...	36	...	1	...	6	3	...	...	8	1	...	...	47
Redfern	1	...	41	...	26	...	...	...	1	...	...	...	8	1	...	...	11
Rockdale	...	...	84	...	7	1	1	...	2	...	...	...	1	1	...	...	11
Ryde	...	...	105	...	8	...	...	1	1	...	...	...	2	...	...	...	8
St. Peters	3	...	25	...	13	1	...	...	2	2	...	...	1	...	...	...	5
Strathfield	1	...	27	...	3	...	...	...	1	...	...	...	...	...	...	...	4
Vaucluse	...	...	8	...	1	...	...	...	1	...	...	...	2	...	...	...	1
Waterloo	...	...	31	...	18	...	...	...	3	1	...	...	2	...	...	...	2
Waverley	1	...	188	...	23	...	...	...	5	2	...	...	12	...	...	...	17
Willoughby	...	...	104	...	16	1	...	...	1	...	...	...	4	1	...	...	13
Woollahra	...	1	93	...	4	...	...	...	3	...	...	...	9	...	...	...	15

METROPOLITAN COMBINED DISTRICTS.—Return showing the number of cases, etc., from Extra Metropolitan Municipalities.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
EXTRA METROPOLITAN MUNICIPALITIES.																	
Cabramatta and Canley Vale	...	...	16	...	7	...	...	...	1	...	...	...	1	...	...	...	4
Fairfield	Not Available.	...	15	...	9	1	...	...	...	...	...	...	...	...	...	...	5
Holroyd (Guildford and Wentworth Wards)	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Ingleburn	...	...	6	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Liverpool	...	...	27	...	14	...	...	...	1	1	...	...	1	...	...	...	7
EXTRA METROPOLITAN SHIRES AND PORT JACKSON.																	
Hornsby	1	...	101	...	9	...	...	...	3	2	...	...	...	...	...	...	14
Warringah	...	...	41	...	10	...	...	...	2	...	...	...	...	...	...	...	2
Harbour of Port Jackson	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	16	3	3,296	5	717	26	10	2	93	30	...	...	155	15	...	540

Undulant Fever: Waverley, 1.

Typhus Fever: Alexandria, 1; Canterbury, 1; Concord, 1; Drummoyne, 2; Hornsby, 1; Leichhardt, 1; Marrickville, 1; Mascot, 1; Newtown, 1; North Sydney, 5; Randwick, 3; Rockdale, 1; Sydney, 3; Waterloo, 1; Waverley, 1; Woollahra, 1

TABLE II.—Showing the number of notified cases of, and deaths from, Cerebro-spinal Fever, (Meningococcal Meningitis), Diphtheria or Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid Fever (including Paratyphoid), Pulmonary Tuberculosis, and Puerperal Infection in the HUNTER RIVER COMBINED DISTRICT for the year ended 31st December, 1944.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
MUNICIPALITIES.																	
Greater Newcastle	Not Available.	1	...	249	...	49	2	...	...	4	...	...	...	8	3	...	31
Cessnock .....		...	...	33	...	14	...	...	...	...	...	...	...	...	1	...	2
Maitland .....		...	...	45	...	4	...	...	...	...	...	...	...	...	1	...	3
Singleton .....		...	...	15	...	2	...	...	...	...	...	...	...	...	...	...	...
SHIRES.																	
Bolwarra	Not Available.	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	2
Kearsley .....		...	...	50	...	10	...	...	...	1	...	...	...	...	...	...	3
Lake Macquarie .....		...	...	88	1	10	2	1	...	1	1	...	...	...	...	1	8
Lower Hunter .....		...	...	10	...	3	...	...	...	...	...	...	...	...	...	...	...
Port Stephens		3	1	6	...	2	...	...	...	...	...	...	...	...	...	...	...
Harbour of Port Hunter ...		...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Total		4	1	498	1	95	4	1	...	6	1	...	...	9	6	...	49

TABLE III.—Showing the number of notified cases of, and deaths from, Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria or Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid (including Paratyphoid), Pulmonary Tuberculosis, and Puerperal Infection, in the REMAINDER OF STATE for the year ended 31st December, 1944.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.		
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	
COUNTRY MUNICIPALITIES.																		
Albury	Not Available.	...	...	45	...	13	1	...	...	2	1	...	...	...	...	...	5	
Armidale .....		...	...	8	...	8	...	...	...	1	...	...	...	...	...	...	1	
Ballina .....		...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...
Balranald .....		...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Barraba .....		...	...	4	...	11	...	...	...	...	...	...	...	...	...	...	...	...
Bathurst .....		...	...	42	...	7	...	...	...	1	...	...	...	2	...	...	...	2
Bega .....		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...
Berry .....		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Blackheath .....		...	...	5	...	8	1	...	...	...	...	...	...	...	...	...	...	...
Bombala .....		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bourke		1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bowral .....		...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Brewarrina .....		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Broken Hill .....		...	...	64	...	9	...	...	...	...	...	...	...	...	...	...	...	15
Broughton Vale .....		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Camden .....		...	...	7	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Campbelltown .....		...	...	3	...	1	1	...	...	...	...	...	...	...	...	...	...	1
Casino .....		...	...	6	...	3	...	...	...	...	...	...	...	...	...	...	...	...
Castlereagh .....		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2
Cobar .....		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Condobolin .....		...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cooma		33	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Coonamble		3	...	...	...	1	...	...	...	...	...	...	...	1	1	...	...	2
Cootamundra		18	...	...	...	2	...	...	...	1	1	...	...	1	...	...	...	...
Corowa		2	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...
Corra		73	...	...	...	4	...	...	...	1	...	...	...	...	...	...	...	...
Deniliquin .....		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dubbo		14	...	...	...	14	...	...	...	2	...	...	...	...	...	...	...	5
Dungog		6	...	...	...	7	...	...	...	2	2	...	...	...	...	...	...	1
Forbes		20	...	...	...	5	...	...	...	...	1	...	...	...	...	...	...	1
Gerringong .....		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Glen Innes		3	...	...	...	2	...	...	...	...	...	...	...	1	...	...	...	1
Gosford		5	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	3
Goulburn		41	1	17	1	...	...	...	...	2	...	1	1	...	...	...	...	6
Grafton		23	...	...	...	9	...	...	...	...	...	...	...	...	...	...	...	1
Grafton South		2	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	1
Grenfell		5	...	...	...	1	...	...	...	2	...	...	...	...	...	...	...	...
Gunnedah		4	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	3
Hay		1	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	2
Illawarra North		11	...	...	...	11	1	...	...	...	...	...	...	...	...	...	...	3
Inverell		5	...	...	...	7	...	...	...	...	...	...	...	...	1	...	...	1
Jamberoo .....		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Junee	7	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	
Katoomba	11	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	11	
Kempsey	6	...	...	...	1	...	...	...	2	...	...	...	...	...	...	...	2	
Kiama	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lismore	21	...	...	...	13	1	...	...	2	...	...	...	...	1	...	...	1	
Lithgow	35	...	...	...	10	1	1	...	...	...	...	...	...	1	...	...	3	

TABLE III—continued.
REMAINDER OF STATE—Return showing the number of cases, etc., from Country Municipalities—continued.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
COUNTRY MUNICIPALITIES—continued.																	
Maclean	4	...	4	...	...	...	...	...	...	...	...	...	...	1
Manilla	15	...	11	1	...	...	...	...	...	...	...	...	...	2
Moama
Molong	2	...	8	...	...	...	...	...	...	...	...	...	...	...
Moree	15	...	6	1	...	...	...	...	...	...	...	...	...	2
Mudgee	2	...	...	...	1
Mullumbimby
Murrumbarrah	4	...	...	...	...	1	...	...	...	...	...	...	...	1
Murrurundi	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Murwillumbah	4	...	2	...	...	...	...	...	...	...	...	...	...	1
Muswellbrook	12	...	1	...	...	1	...	...	...	...	...	...	...	1
Narrabri	3	...	...	...	...	...	...	...	...	...	...	...
Narrandera	20	...	1	...	...	...	...	...	...	3	...	...	...	...
Narromine	4	...	...	...	...	1	1	...	...	...	...	...	...	...
Nowra	3	...	3	...	...	...	...	...	...	...	...	...	...	1
Nyngan	4	...	...	...	...	...	...	...	...	...	...	...	...	...
Orange	17	...	16	2	...	1	1	...	...	...	...	...	...	4
Parkes	72	...	7	...	...	...	...	...	...	...	...	...	...	5
Peak Hill	4	...	1	1	...	...	...	...	...	...	...	...	...	1
Penrith	34	...	...	...	...	2	...	...	...	...	...	...	...	3
Port Macquarie	1
Queanbeyan	4	...	16	1	...	...	...	...	...	...	...	...	...	...
Quirindi	1	1	...	...	...
Richmond	Not Available.	...	...	11	...	1	...	...	...	...	...	...	...	...	...	...	...
Scone	7	...	...	...	...	...	...	...	...	...	...	...	...	2
Shelharbour	4	...	1	...	...	...	...	...	...	...	...	...	...	...
Shoalhaven South	1	...	...	...	...	...	...	...	...	...	...	...
St. Mary's	3	...	1	...	...	...	...	...	...	1	...	...	...	...
Tamworth	49	...	7	3	...	2	1	...	...	...	...	...	...	6
Taree	2	...	1	...	...	...	...	...	...	...	...	...	...	...
Temora	19	...	1	...	...	...	...	...	...	...	...	...	...	...
Tenterfield	6	...	...	...	...	...	...	...	...	1	...	...	...	1
Ulladulla	2	...	...	...	...	...	...	...	...	...	...	...	...	1
Umarra	3	...	2	...	...	...	...	...	...	...	...	...	...	...
Uralla	1
Wagga Wagga	63	...	1	...	...	...	...	...	...	...	...	...	...	3
Walcha	4	...	1	...	...	...	...	...	...	...	...	...	...	1
Warren	5	...	1	...	...	1	1	...	...	...	...	...	...	...
Wellington	5	...	2	...	...	...	...	...	...	...	...	...	...	...
Wentworth	4	...	7	...	...	...	...	...	...	1	...	...	...	...
Wilcannia	1
Windsor	13	...	...	...	...	...	...	...	...	...	...	...	...	3
Wingham
Wollongong	19	...	15	1	...	2	...	...	...	1	1	...	...	2
Yass	6	...	...	...	...	...	...	...	...	...	...	...	...	...
Young	5	...	2	...	...	...	...	...	...	1	...	...	...	...
Total Municipalities	2	...	996	1	311	17	1	...	30	10	1	1	24	2	...	128

Typhus Fever: Grafton Municipality, 3; Lismore, 1; Murwillumbah, 1.

REMAINDER OF STATE.—Return showing the number of cases, etc., from Country Shires.

Shires.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
COUNTRY SHIRES.																	
Abercrombie	14	...	3	...	...	...	1	2	...	...	...	...	...	...
Amaroo	1	...	...	...	...	...	...	...	...	...	...	...
Apsley	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Ashford	1	...	...	...	...	...	...	...	...	...	...	...
Barraba	1	...	...	...	...	...	...	...	...	...	...	...
Baulkham Hills	9	...	2	...	...	...	...	...	...	...	...	...	...	1
Bellingen	1	...	2	...	...	...	...	...	...	...	...	...	...	...
Berrigan	7	...	5	1	...	1	1	...	...	...	...	...	...	...
Bibbenluke	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Bingara	Not Available.	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...
Blacktown	22	...	3	...	...	...	...	...	...	...	...	...	...	5
Bland	10	...	1	1	...	...	...	...	...	...	...	...	...	2
Blaxland	5	...	5	...	...	...	...	...	...	...	...	...	...	2
Blue Mountains	12	...	3	...	...	...	...	...	1	...	...	...	...	11
Bogan
Booolaroo	1	...	...	...	...	...	...	...	...	...	...	1
Boomi	1	...	4	...	...	...	...	...	...	...	...	...	...	...
Boorowa	1	...	...	...	...	...	...	...
Boree	11	...	3	...	...	...	...	...	...	1	...	...	...	1

REMAINDER OF STATE—Return showing the number of cases, etc., from Country Shires—*continued.*

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
<i>COUNTRY SHIRES—continued.</i>																	
Tamarang
Tenterfield
Terania	4	...	9	1	...	...	2	...	...	1	...	...	...	1	...
Timbreeongie	1	...	...	...	1	...	...	...	1	...	...	...	...	...	...	1	...
Tintenbar	4	...	3	...	...	...	2	1	...	...	...	...	...	...	...
Tomki	1	...	...	...	1	...	...	...	...	...	...	...	...
Tumbarumba	1	...	10	...	...	...	...	...	...	...	...	...	...	...	...
Tumut	13	...	9	1	...	...	2	2	...	...	...	...	...	...	...
Turon	8	...	4	...	...	...	1	1	...	...	...	2	...	...	2
Tweed	2	...	1	...	...	...	...	...	...	...	...	...	...	...	2
Upper Hunter	5	...	3	...	...	...	...	...	...	...	...	...	...	...	2
Urana
Wade	33	1	21	...	...	...	...	...	...	...	...	...	...	...	3
Wakool	1	...	...	...	...	...	...	...	...	...	...	...	...
Walgett	1	1	3	...	...	...	...	...	...	...	...	...	...	...	...
Wallarobba	13	...	2	...	...	...	...	...	...	...	...	...	...	...	...
Waradgery	Not Available.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Warrah	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Waugoola	38	...	1	...	...	...	2	...	...	1	...	...	...	...	1
Weddin
Willimbong	30	...	3	...	...	...	1	...	...	...	...	...	...	...	3
Windouran
Wingadee	3	...	2	1	...	...	...	...	...	...	...	...	...	...	1
Wingecarribee	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wollondilly	5	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Woodburn	1	...	1	...	...	...	2	...	...	...	...	...	...	...	...
Woy Woy	8	...	2	...	...	...	...	1	...	...	...	...	...	...	1
Yallaroi
Yanko	7	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Yarrowlumla	6	...	4	1	...	...	...	...	...	...	...	...	...	...	1
Total, Shires	2	1	827	4	276	22	3	...	43	17	2	1	17	3	...	104

WESTERN DIVISION (UNINCORPORATED) POLICE DISTRICTS.*

Balranald.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bourke .....	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brewarrina .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Broken Hill .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cobar .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hay .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hillston	Not Available.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ivanhoe .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Menindie .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mitchell .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nyngan .....	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...
Walgett .....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Wentworth .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wilcannia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, Unincorporated	...	...	1	...	3	...	...	...	...	1	...	...	...	...	...	...	4

* Deaths available only for unincorporated area as a whole.

MISCELLANEOUS.

Lord Howe Island .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Migratory .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Outside the State—Australian Capital Territory...	Not Available.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Queensland .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Victoria .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Australia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, Miscellaneous ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, N.S.W. ....	...	24	5	5,618	11	1,402	69	15	2	172	59	3	2	205	26	...	825

Typhus Fever : Terania Shire, 1; Tweed, Shire, 2.

TABLE IV—continued.

METROPOLITAN AREA.							REMAINDER OF STATE.						
Typhus Fever.	M.	F.	Total.	Undulant Fever.	M.	F.	Total.	Typhus Fever.	M.	F.	Total.		
All ages	19	6	25	All ages	1	...	1	All ages	6	2	8		
Under 1 year .....	...	...	...	Under 1 year .....	...	...	...	Under 1 year .....	...	...	...
1-4 years .....	...	...	...	1-4 years .....	...	...	...	1-4 years .....	...	...	...
5-14 "	1	...	1	5-14 " .....	...	...	...	5-14 " .....	...	...	...
15-24 "	2	1	3	15-24 " .....	...	...	...	15-24 "	2	...	2
25-34 "	3	...	3	25-34 " .....	...	...	...	25-34 "	1	...	1
35-44 "	6	...	6	35-44 "	1	...	1	35-44 "	1	...	1		
45-54 "	2	2	4	45-54 " .....	...	...	...	45-54 " .....	...	1	1
55-64 "	4	3	7	55-64 " .....	...	...	...	55-64 "	2	1	3
65 and over .....	...	...	...	65 and over .....	...	...	...	65 and over .....	...	...	...
Not stated	1	...	1	Not stated .....	...	...	...	Not stated .....	...	...	...

TABLE V.—Showing the seasonal prevalence of Cerebro-spinal Fever, (Meningococcal Meningitis), Diphtheria, and Membranous Croup, Infantile Paralysis (Acute Anterior Poliomyelitis), Encephalitis Lethargica, Scarlet Fever, Typhoid Fever (including Paratyphoid), Pulmonary Tuberculosis, and Puerperal Infection in New South Wales for the year ended 31st December, 1944.

Month.	Metropolitan Combined Districts.		Hunter River Combined Districts.		Broken Hill District.		Remainder of State.		Total.		
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	
Typhoid and Paratyphoid Fever.											
January	1	...	...	...	...	...	1	...	...	...
February	5	2	...	...	...	...	1	1	...	3
March	2	...	...	...	...	...	...	...	...	...
April	1	...	...	...	...	...	1	...	...	...
May .....	...	...	...	...	...	...	...	...	...	...
June	2	...	...	...	...	...	...	...	...	...
July	1	1	...	...	...	...	...	...	...	1
August .....	...	...	...	...	...	...	...	...	...	...
September	1	...	...	...	...	...	...	...	...	...
October .....	...	...	...	...	...	...	1	...	...	...
November	2	...	...	...	...	...	...	...	...	...
December	1	...	...	1	...	...	...	...	...	1
Total	16	3	4	1	...	...	4	1	...	5
Scarlet Fever.											
January	117	...	...	...	4	...	108	...	...	...
February	141	...	...	...	7	...	139	2	...	2
March	189	...	...	...	1	...	175	...	...	...
April	172	...	...	...	5	...	170	...	...	...
May	324	1	...	...	6	...	192	1	...	2
June	306	...	...	...	4	...	113	...	...	...
July	297	...	...	...	1	...	135	...	...	...
August	391	3	...	...	1	...	117	...	...	3
September	328	...	...	...	2	...	115	1	...	1
October	363	...	...	...	8	...	106	...	...	...
November	361	1	...	...	6	...	158	...	...	1
December	307	...	...	1	19	...	232	1	...	2
Total	3,296	5	498	1	64	...	1,760	5	...	11	
Diphtheria.											
January	44	1	...	...	...	...	43	2	...	3
February	74	4	...	1	...	...	54	6	...	11
March	75	1	...	...	...	...	102	3	...	4
April	88	2	...	...	3	...	54	4	...	6
May	60	3	...	...	2	...	90	7	...	10
June	54	3	...	...	1	...	53	3	...	6
July	41	2	...	1	...	...	41	5	...	8
August	28	3	...	...	...	...	30	1	...	4
September	60	3	...	1	...	...	23	2	...	6
October	54	...	...	...	1	...	22	1	...	1
November	76	3	...	...	1	...	34	3	...	6
December	63	1	...	1	1	...	35	2	...	4	
Total	717	26	95	4	9	...	581	39	...	69	

TABLE V—continued.

Month.	Metropolitan Combined Districts.		Hunter River Combined Districts.		Broken Hill District.		Remainder of State.		Total.		
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	
Infantile Paralysis.											
January .....	...	...	...	...	...	...	...	...	...	...
February .....	...	1	...	...	...	...	...	...	...	1
March	2	1	...	...	...	...	...	...	...	1
April	1	...	Not Available.	...	...	...	...	...	...	...
May .....	...	...		...	...	...	...	...	...	...
June	1	...		...	...	...	...	...	...	...
July	1	...		...	...	...	...	...	...	...
August .....	...	...		...	...	...	...	...	...	...
September	2	...		...	...	...	...	...	...	...
October .....	...	...		...	...	...	...	...	...	...
November	2	...		...	...	...	...	...	...	...
December	1	...		...	...	...	...	...	...	...
Total	10	2		1	2
Cerebro-Spinal Meningitis.											
January	13	4		Not Available.	2	...	6
February	6	5	...		...	...	...	3	...	8
March	5	...	...		...	...	...	1	...	1
April	4	2	...		...	...	...	1	...	3
May	7	1	...		...	...	...	6	...	7
June	8	4	...		...	...	...	2	...	6
July	12	3	1		...	...	...	3	...	7
August	13	3	...		...	...	...	1	...	4
September	5	2	...		...	...	...	5	...	7
October	9	4	...		...	...	...	1	...	5
November	5	...	...		...	...	...	3	...	3
December	6	2	...		...	...	...	...	...	2
Total	93	30	6	1	...	...	...	28	...	59
Encephalitis Lethargica.											
January .....	...	...	Not Available.	...	...	...	...	...	...	...
February .....	...	...		...	...	...	...	...	...	...
March .....	...	...		...	...	...	...	...	...	...
April .....	...	...		...	...	...	...	...	...	...
May .....	...	...		...	...	...	...	...	...	...
June .....	...	...		...	...	...	...	...	...	...
July .....	...	...		...	...	...	...	...	...	...
August .....	...	...		...	...	...	...	...	...	...
September .....	...	...		...	...	...	...	1	...	1
October .....	...	...		...	...	...	...	...	...	...
November .....	...	...		...	...	...	...	1	...	1
December .....	...	...		...	...	...	...	...	...	...
Total .....	...	...	...	...	...	...	...	2	...	2
Pulmonary Tuberculosis.											
January .....	...	41	Not Available.	4	...	2	...	16	...	63
February .....	...	43		1	...	1	...	18	...	63
March .....	...	40		3	...	1	...	17	...	61
April .....	...	40		6	...	...	...	18	...	64
May .....	...	58		5	...	1	...	16	...	80
June .....	...	49		3	...	...	...	32	...	84
July .....	...	53		6	...	...	...	14	...	73
August .....	...	46		4	...	3	...	21	...	74
September .....	...	37		3	...	1	...	14	...	55
October .....	...	44		4	...	1	...	12	...	61
November .....	...	47		6	...	4	...	23	...	80
December .....	...	42		4	...	1	...	20	...	67
Total .....	...	540	...	49	...	15	...	221	...	825
Puerperal Infection.											
January	12	...	Not Available.	...	...	...	...	...	...	...
February	19	4		...	...	...	...	1	...	5
March	17	2		1	...	...	...	...	...	3
April	14	1		...	...	...	...	1	...	2
May	7	1		...	...	...	...	...	...	1
June	6	...		1	...	...	...	...	...	1
July	10	...		...	...	...	...	1	...	1
August	19	2		1	...	...	...	...	...	3
September	12	4		...	...	...	...	1	...	5
October	10	...		...	...	...	...	...	...	...
November	17	1		2	...	...	...	1	...	4
December	12	...		1	...	...	...	...	...	1
Total	155	15	9	6	...	...	...	5	...	26

SUMMARY.

District.	Typhoid Fever.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
	C.	D.	C.	D.	C.	D.	C.	†† D.	C.	D.	C.	D.	C.	D.	C.	D.
Metropolitan Combined Sanitary District	16	3	3,296	5	717	26	10	2	93	30	...	...	155	15	...	540
Hunter River Combined District ...	4	1	498	1	95	4	1	...	6	1	...	...	9	6	...	49
Broken Hill District .....	...	...	64	...	9	...	...	...	...	...	...	...	...	...	...	15
Remainder of State—																
Municipalities	2	...	932	1	302	17	1	...	30	10	1	1	24	2	...	113
Shires	2	1	827	4	276	22	3	...	43	17	2	1	17	3	...	104
Unincorporated .....	...	...	1	...	3	...	...	...	...	1	...	...	...	...	...	4
Lord Howe Island .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A.C.T. ....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	24	5	5,618	11	1,402	69	15	2	172	59	3	2	205	26	...	825

†† Deaths from notifiable forms only.

SECTION 1.

A.—COMMUNICABLE DISEASES, 1945.

Notifiable Infectious Diseases Recorded in New South Wales during the year ended 31st December, 1945.

Public Health Acts, 1902-1944.

The Public Health Act, 1902, provides that the Governor may, by proclamation in the *Government Gazette*, declare that any disease therein named is an infectious disease.

Disease.	Notifiable from.	Cases and Deaths Notified.					
		1943.		1944.		1945.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Typhoid Fever (and Paratyphoid)	1st January, 1898 ...	24	4	24	5	29	2
Scarlet Fever	1st January, 1898 ...	3,940	13	5,618	11	6,977	6
Diphtheria or Membranous Croup	1st January, 1898 ...	2,268	99	1,402	60	1,478	84
Bubonic Plague	23rd January, 1900 ...	...	...	...	...	...	...
Infantile Paralysis (including any form of acute Anterior Poliomyelitis, Poliоencephalitis or Poliomyeloencephalitis).	1st February, 1912 ... Definition re-proclaimed 14th August, 1931.	25	2	15	2	668	47
Epidemic Cerebro-spinal Fever (Meningococcal meningitis).	11th October, 1915 ...	400	89	172	59	117	29
Encephalitis Lethargica	1st April, 1926	8	2	3	2	3	4
Cholera	12th August, 1927 ...	...	...	...	...	...	...
Typhus Fever	12th August, 1927 ...	16	2	33	2	26	3
Yellow Fever	12th August, 1927 ...	...	...	...	...	...	...
Puerperal Infection	16th August, 1929 ...	224	45*	205	26*	151	13*
Undulant Fever	13th August, 1937 ...	2	1	1	...	2	...
Leprosy	25th February, 1938	8	1	7	...	3	1
Total		6,915	258	7,480	176	9,454	189
Population at 31st December		2,854,802		2,884,848		2,912,791	

* See text below.

PUBLIC HEALTH ACT, 1902-1944.

A total of 9,454 cases of infectious diseases was notified under the Public Health Act, 1902-1944, during 1945, or 1,974 more cases than in 1944. The number of cases notified from the 152 municipalities, 138 shires and the unincorporated portion of the Western Division; the deaths due to these infections; the age and sex of the patients, and the seasonal incidence of the various diseases are shown in appended Table I-V (pp. 59-68). As indicated below, pulmonary tuberculosis is notifiable under the Public Health (Amendment) Act, 1915, and venereal diseases under the Venereal Diseases Act, 1918.

Typhoid Fever.—In 1945 there were twenty-nine cases notified and two deaths. The incidence of this disease was slightly higher than in 1944, when there were twenty-four cases and five deaths.

Scarlet Fever.—There were 6,977 notified cases, and six deaths, an increase of 1,359 cases as compared with 1944, when 5,618 cases and eleven deaths were recorded.

Diphtheria.—There were 1,478 notified cases and eighty-four deaths in comparison with 1,402 cases and sixty-nine deaths in 1944.

Infantile Paralysis.—Six hundred and sixty-eight cases and forty-seven deaths were notified. In 1944 there were fifteen cases and two deaths.

Puerperal Infection.—One hundred and fifty-one cases were notified or fifty-four less than in 1944. The recorded deaths from puerperal septicaemia and post-abortive sepsis in 1945 numbered thirteen, which does not include sixteen deaths from sepsis classed as criminal abortion. Under the revised International List of Causes of Deaths which came into use in 1940, puerperal thrombophlebitis, embolism and sudden death are included as subdivisions of the "infection" group but to maintain comparability with previous years such deaths are omitted here and shown separately in the following pages. There were thirteen deaths in this additional group.

Cerebro-spinal Meningitis.—One hundred and seventeen cases and twenty-nine deaths were reported in 1945. In 1944 there were 172 cases and fifty-nine deaths.

Encephalitis Lethargica.—Three cases and four deaths were notified compared with three cases and two deaths in 1944. Deaths exceeded cases in 1945 because one death was recorded for which no case notification was received.

Undulant Fever.—On 13th August, 1937, a proclamation was issued making undulant fever notifiable on and from that date. Two cases and no deaths were notified in 1945.

Bubonic Plague.—No case of this disease has been reported since June, 1923. Rat-catchers are continuously employed in the vicinity of wharves and in the city area. Plague was not detected in the 2,521 rats examined in the Microbiological Laboratory.

Smallpox.—No case was reported during 1945.

Leprosy.—Three cases and one death of leprosy were notified in 1945. For the Report on Leprosy in New South Wales see page 133.

PUBLIC HEALTH (AMENDMENT) ACT, 1915.

Pulmonary tuberculosis was made a notifiable disease under an amendment of the Public Health Act in 1915. In 1945 registered cases amounted to 1,688, a decrease of fifty-five on the registrations received in 1944. There were 803 deaths, or a decrease of twenty-two compared with the deaths recorded in 1944. A survey of the Director of the Tuberculosis Division is on page 109.

VENEREAL DISEASES ACT, 1918.

Cases of venereal disease notified in 1945 numbered 4,562, an increase of 152 cases on the number (4,410) received in 1944. The Report of the Director of the Division is on pages 80-82.

TABLE I.—Showing the number of notified cases of, and deaths from, the following diseases:—Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid Fever (including Paratyphoid), Pulmonary Tuberculosis, and Puerperal Infection in the Metropolitan Combined Districts for the year ended 31st December, 1945.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
METROPOLITAN MUNICIPALITIES.																	
Sydney, City of	99	...	44	2	19	...	7	1	...	...	23	...	...	55	
Alexandria	21	...	6	...	1	...	1	...	...	...	1	...	1	5	
Annandale	24	...	5	1	5	...	...	...	...	...	3	...	...	1	
Ashfield	65	...	5	...	7	...	4	...	...	...	3	1	...	11	
Auburn	42	...	8	...	9	...	1	1	...	...	3	1	...	8	
Balmain	80	...	17	...	10	1	3	1	...	...	1	...	...	18	
Bankstown	127	...	49	1	10	2	1	...	...	...	2	...	...	9	
Bexley	1	1	82	...	9	1	2	...	...	...	...	...	1	...	...	7
Botany	21	...	1	...	4	...	...	...	...	...	...	...	...	2	
Burwood	26	...	7	1	2	...	1	...	...	...	7	...	...	8	
Canterbury	1	...	320	...	25	...	30	1	3	...	...	...	...	1	...	19
Concord	43	...	7	...	22	1	1	...	...	...	3	...	...	5	
Darlington	7	...	5	...	1	...	1	...	...	...	...	...	...	5	
Drummoyne	49	...	4	...	1	...	1	...	...	...	1	...	...	9	
Dundas	26	...	1	1	5	...	...	...	...	...	1	...	...	2	
Eastwood	12	...	...	...	1	...	...	...	...	...	1	...	...	1	
Enfield	29	...	6	2	7	...	1	1	...	...	2	...	...	...
Ermington and Rydalmere	4	...	1	...	...	...	...	...	...	...	...	...	...	...
Erskineville	9	...	7	...	1	...	...	...	...	...	...	...	...	7	
Glebe	40	...	20	...	5	1	...	...	...	...	...	...	...	9	
Granville	59	...	20	...	3	1	1	...	...	...	...	...	...	11	
Holroyd (Pitt and Merrylands Wards)	1	...	...	...	...	...	...	...	...	...	2	
Homebush	Not Available.	...	10	...	3	...	1	...	...	...	...	...	...	...	...	2
Hunter's Hill	23	...	2	...	2	...	...	...	...	...	...	...	...	3	
Hurstville	96	...	2	...	10	...	1	1	...	...	2	...	...	11	
Kogarah	2	1	108	...	8	...	12	...	4	...	...	...	2	...	...	11
Ku-ring-gai	184	...	3	...	11	...	2	...	...	...	1	...	...	29	
Lane Cove	33	...	2	1	7	1	...	...	...	...	...	...	...	4	
Leichhardt	1	...	53	...	15	...	7	1	...	...	...	...	...	...	...	5
Lidcombe	32	...	21	...	9	...	...	...	...	...	1	...	...	16	
Manly	92	...	26	...	5	...	1	...	...	...	2	...	...	4	
Marrickville	1	...	117	...	9	...	7	...	...	...	...	...	1	...	...	18
Mascot	41	...	8	...	8	...	1	...	...	...	3	...	...	3	
Mosman	36	...	5	...	8	...	...	...	...	...	...	...	...	7	
Newtown	1	...	71	...	16	3	4	...	1	...	...	...	3	...	...	18
North Sydney	116	...	31	...	15	1	1	...	1	1	2	...	...	22	
Paddington	49	...	16	...	2	...	1	...	...	...	7	2	...	10	
Parramatta	51	...	5	1	10	2	...	...	...	...	...	...	...	15	
Petersham	50	...	10	1	5	...	1	1	...	...	3	...	...	9	
Randwick	2	...	194	...	24	...	27	...	5	2	...	...	6	1	...	32
Redfern	45	...	10	...	8	...	2	1	...	...	3	...	...	7	
Rockdale	95	...	14	...	4	...	1	...	...	...	3	...	...	15	
Ryde	91	...	2	...	9	1	1	...	...	...	3	...	...	8	
St. Peters	20	...	4	1	2	...	1	2	...	...	1	...	...	2	
Strathfield	48	...	3	1	5	...	...	1	1	1	...	...	...	6	
Vaucluse	6	...	1	...	6	1	1	...	...	...	...	...	...	2	
Waterloo	37	...	8	...	2	...	1	...	...	...	...	...	...	7	
Waverley	1	...	142	...	22	1	11	...	3	1	...	...	12	...	...	16
Willoughby	137	...	18	1	11	1	2	1	...	...	2	...	...	17	
Woollahra	1	...	70	...	9	1	11	...	...	...	...	...	4	...	...	16

Undulant Fever.

Eastwood 1

Ku-ring-gai 1

—

2

—

Typhus Fever.

Ashfield 1

Auburn 1

Botany 2

Canterbury 1

Concord 5

Marrickville 1

Randwick 1

St. Peters 1

Waterloo 1

Hornsby Shire 1

Liverpool Municipality 1

—

16

—

TABLE III—continued.

REMAINDER OF STATE—Return showing the number of cases, etc., from Country Shires—continued.

Shires.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Purpural Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Gostwyck	10	...	2	...	...	...	...	...	...	...	...	...	...	...
Gulgong	10	...	...	...	1	...	...	...	...	...	...	...	...	...
Gundagai	11	...	...	...	...	...	...	...	...	...	...	...	...	...
Gundurimba	11	...	1	...	...	...	...	...	...	...	...	...	...	...
Gunning	6	...	1	...	...	...	...	...	...	...	...	...	...	...
Guyra	22	...	2	...	...	...	...	...	...	...	...	...	...	...
Gwydir
Harwood	1	...	15	...	1	...	...	...	...	...	...	...	...	1
Hastings	8	...	1	...	3	...	1	...	...	...	...	...	...	2
Holbrook	1	...	2	...	...	...	...	...	...	...	...	...	...	...
Hume	4	...	10	...	2	...	...	...	...	...	...	...	...	...
Illabo	7	...	...	...	...	...	...	...	...	...	...	...	...	...
Illawarra, Central	32	...	6	2	1	...	...	...	...	1	1	...	...	3
Imlay	2	...	...	...	1	1	...	...	...	...	...	...	...	...
Jemalong	6	...	...	...	2	...	...	...	...	...	...	...	...	...
Jerilderie
Jindalee	9	...	1	4	1	...	...	...	...	...	...	...	...	1
Kyeamba	17	...	4	...	...	...	...	...	...	...	...	...	...	...
Kyogle	2	...	3	...	8	1	2	1	...	...	...	...	...	1
Lachlan	8	...	...	...	...	...	...	...	...	...	...	...	...	3
Liverpool Plains	4	...	...	...	3	...	...	...	...	...	...	...	...	...
Lockhart	10	...	1	...	1	...	1	...	...	...	...	...	...	1
Lyndhurst	9	...	1	...	...	...	...	...	...	...	...	...	...	...
Macintyre	9	...	...	...	...	...	...	...	...	...	...	...	...	...
Macleay	5	...	1	...	...	2	...	...	...	...	...	...	...	...
Macquarie	5	...	1	1	1	...	...	...	...	...	...	...	...	1
Mandowah	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Manning	6	...	6	...	...	...	...	...	...	...	...	...	...	...
Marthaguy	1	...	1	...	...	...	...	...	...	...	...	...	...	1
Merriwa	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Mitchell	12	...	...	...	...	...	...	...	...	...	...	...	...	...
Monaro	3	...	1	1	...	...	...	...	...	...	...	...	...	1
Mulwaree	16	...	5	...	2	...	...	...	...	...	...	...	...	...
Mumbulla	1	...	...	...	...	1	1	...	...	...	...	...	...	...
Murray
Murrumbidgee
Murrungal
Muswellbrook	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Nambucca	5	2	...	2	1	...	...	...	...	...	...	...
Namoi	9	...	2	...	1	3	1	...	...	...	...	...	...	1
Narraburra	5	...	...	...	1	...	...	...	...	...	1	...	...	...
Nattai	18	...	2	...	2	...	...	...	...	...	...	...	...	...
Nepoan	6	...	3	...	...	...	...	...	...	...	...	...	...	...
Nundle	1	...	13	1	...	...	...	...	...	...	...	...	...	...
Nymboida	1	...	1	...	...	...	...	...	...	...	...	1
Oberon	11	...	...	...	...	...	...	...	...	...	...	...	...	1
Orara	1
Patrick's Plains	16	...	...	...	...	...	...	...	...	...	...	...	...	1
Peel	14	...	...	...	3	1	1	...	...	...	...	...	...	...
Rylstone	6	...	3	...	...	...	...	...	...	...	...	...	...	...
Severn	1	...	...	...	2	...	...	...	...	...	...	...	...	...
Snowy River	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Stroud	1	...	...	23	...	4	...	...	1	...	...	...	...	...	...	...	...
Sutherland	114	...	17	...	7	1	...	...	...	...	1	...	...	11
Talbragar	5	...	4	1	2	...	...	...	...	...	...	...	...	1
Tallaganda	2	...	1	...	...	...	...	...	...	...	...	...	...	...
Tamarang	1	...	...	...	...	1	...	...	...	...	1	...	...	1
Tenterfield	5	...	1	...	...	...	...	...	...	...	1	...	...	1
Terania	9	...	3	...	3	...	...	...	...	...	...	...	...	1
Timbregongie	1	...	...	...	1	1	...	...	...	...	...	...	...	1
Tintenbar	6	...	9	...	1	...	...	...	...	...	...	...	...	...
Tomki	1	...	2	...	3	...	...	...	...	...	...	...	...	...
Tumbarumba	1	...	17	...	...	...	...	...	...	...	...	...	...	...
Tumut	30	...	3	...	...	...	...	...	...	...	...	...	...	2
Turon	8	...	...	...	3	...	...	...	...	...	...	...	...	...
Tweed	6	...	6	2	2	...	...	...	...	...	...	...	...	1
Upper Hunter	16	...	...	...	1	1	...	...	...	...	...	...	...	1
Urana	4	...	3	...	1	...	...	...	...	...	...	...	...	...
Wade	8	...	8	...	1	...	...	...	...	...	...	...	...	...
Wakool	3	...	...	...	...	...	...	...	...	...	...	...	...	1
Walgett	5	...	...	...	1	...	...	...	...	...	...	...	...	2
Wallarobba	2	...	...	22	...	2	...	1	...	...	...	...	...	...	...	...	1
Waradgery
Warrah	3	...	...	...	...	...	...	...	...	...	1	...	...	...
Waugoola	29	...	1	...	...	1	...	...	...	...	...	...	...	...
Weddin	6	...	...	...	3	...	...	...	...	...	...	...	...	4
Willimong	15	...	3	...	...	...	...	...	...	...	...	...	...	4
Windouran
Wingadee	3	...	...	...	...	...	...	...	...	...	2	...	...	...

TABLE III—continued.

REMAINDER OF STATE—Return showing the number of cases, etc., from Country Shires—continued.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.		
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	
COUNTRY SHIRES—continued.																		
Wingecarribee	Not Available.	...	...	6	...	1	...	...	...	...	...	...	...	...	...	...	2	
Wollondilly .....		...	...	10	...	1	...	1	...	...	...	...	...	...	...	...	...	2
Woodburn .....		...	...	5	...	1	...	2	...	...	1	...	...	...	...	...	...	...
Woy Woy .....		...	...	13	...	5	...	...	...	...	...	...	...	...	...	...	...	4
Yallaroi .....		...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Yanko .....		...	...	7	...	2	...	1	...	...	...	...	...	...	...	...	...	...
Yarrowluma .....		...	...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, Shires		3	...	1,333	...	330	24	129	12	26	9	...	...	11	3	...	108	

WESTERN DIVISION (UNINCORPORATED) POLICE DISTRICTS.*

Balranald .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bourke .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brewarrina .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Broken Hill .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cobar .....	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...
Hay .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hillston .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ivanhoe .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Menindie .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mitchell .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nyngan .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Walgett .....	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...
Wentworth .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wilcannia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Western Division Unincorporated .....	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...
Total, Unincorporated .....	...	...	...	...	4	1	2	...	...	...	...	...	...	1	...	...	2

* Deaths available only for unincorporated area as whole.

MISCELLANEOUS.

Lord Howe Island .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Migratory .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Outside the State—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Australian Capital Territory .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Queensland .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Victoria .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Australia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, Miscellaneous .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, N.S.W.	29	2	6,977	6	1,478	84	668	47	117	29	3	4	151	13	...	...	803

Typhus Fever.

Shires—

Byron .....	...	...	1
Kyogle .....	...	...	1
Sutherland .....	...	...	1
Tintenbar .....	...	...	1
Tweed .....	...	...	1
			—
			5
			—

TABLE IV.—Table showing Age and Sex Incidence, and Mortality, in the Metropolitan Combined District, Hunter River Combined District, Broken Hill District, and Remainder of State, from the notified cases of Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Infantile Paralysis (Acute Anterior Poliomyelitis), Encephalitis Lethargica, Scarlet Fever, Typhoid Fever (including Paratyphoid) and Pulmonary Tuberculosis, Puerperal Infection, for the year ended 31st December, 1945.

Age Period.	Typhoid and Paratyphoid.			Scarlet Fever.			Diphtheria.			Infantile Paralysis.			Encephalitis Lethargica.			Cerebro-spinal Meningitis.			Pulmonary Tuberculosis.			Puerperal Infection.															
	Incidence.		Mortality.	Incidence.		Mortality.	Incidence.		Mortality.	Incidence.		Mortality.	Incidence.		Mortality.	Incidence.		Mortality.	Incidence.		Mortality.	Incidence.		Mortality.													
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.													
All ages	4	7	11	2	1,393	2,149	3,542	326	300	626	11	14	25	239	160	399	11	9	20	1	1	2	42	29	62	19	6	16	354	187	541	122	7				
Under 1 year	1	2	3	1	505	572	1,077	121	99	220	7	9	16	6	7	13	1	1	2	1	1	2	16	7	23	6	4	10	...	...	...	...	...
1-4 years	1	2	3	1	753	1,147	1,900	170	134	304	3	4	7	51	36	87	3	3	6	1	1	2	15	4	19	1	1	2	...	...	...	...	...
5-14	1	1	2	1	48	154	202	10	28	38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15-24	1	1	2	1	24	131	155	2	18	20	1	1	2	6	6	12	1	1	2	1	1	2	2	2	4	1	1	2	...	...	...	...	...	...
25-34	1	1	2	1	34	90	124	7	8	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35-44	1	1	2	1	14	26	40	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45-54	1	1	2	1	14	26	40	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55-64	1	1	2	1	14	26	40	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and over	1	1	2	1	14	26	40	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Not stated	1	1	2	1	3	10	13	3	3	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
METROPOLITAN COMBINED DISTRICT.																																					
All ages	4	7	11	2	326	300	626	11	14	25	239	160	399	11	9	20	1	1	2	1	1	2	42	29	62	19	6	16	354	187	541	122	7				
Under 1 year	1	2	3	1	121	99	220	7	9	16	6	7	13	1	1	2	1	1	2	1	1	2	16	7	23	6	4	10	...	...	...	...	...
1-4 years	1	2	3	1	753	1,147	1,900	170	134	304	3	4	7	51	36	87	3	3	6	1	1	2	15	4	19	1	1	2	...	...	...	...	...	...
5-14	1	1	2	1	48	154	202	10	28	38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15-24	1	1	2	1	24	131	155	2	18	20	1	1	2	6	6	12	1	1	2	1	1	2	2	2	4	1	1	2	...	...	...	...	...	...	...
25-34	1	1	2	1	34	90	124	7	8	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35-44	1	1	2	1	14	26	40	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45-54	1	1	2	1	14	26	40	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55-64	1	1	2	1	14	26	40	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and over	1	1	2	1	3	10	13	3	3	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Not stated	1	1	2	1	3	10	13	3	3	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
HUNTER RIVER COMBINED DISTRICT.																																					
All ages	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Under 1 year	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1-4 years	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5-14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15-24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25-34	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35-44	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45-54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55-64	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Not stated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
BROKEN HILL DISTRICT.																																					
All ages	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Under 1 year	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1-4 years	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5-14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15-24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25-34	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35-44	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45-54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55-64	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Not stated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
REMAINDER OF STATE.																																					
All ages	9	5	14	2	1,093	1,633	2,696	2	3	5	311	383	694	24	19	43	133	115	248	13	12	25	23	19	42	6	5	11	122	78	200	23	4				
Under 1 year	1	1	2	1	18	10	28	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	...	...	...	...	...	...
1-4 years	1	1	2	1	405	484	889	130	144	274	11	11	22	27	27	54	27	27	54	11	11	22	9	9	18	5	5	10	...								

TABLE V.—Showing the seasonal prevalence of Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria, and Membranous Croup, Infantile Paralysis (Acute Anterior Poliomyelitis), Encephalitis Lethargica, Scarlet Fever, Typhoid Fever (including Paratyphoid), Pulmonary Tuberculosis, and Puerperal Infection in New South Wales for the year ended 31st December, 1945.

Month.	Metropolitan Combined Districts.		Hunter River Combined Districts.		Broken Hill District.		Remainder of State.		Total.	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Typhoid and Paratyphoid Fever.										
January .....	...	...	...	...	...	...	2	...	...	...
February	3	1	...	...	...	...	...	...	...	1
March	1	...	...	...	...	...	...	...	...	...
April	1	...	...	...	...	...	...	...	...	...
May	2	...	...	...	...	...	...	...	...	...
June	2	...	...	...	...	...	2	...	...	...
July .....	...	...	...	...	...	...	2	...	...	...
August .....	...	...	...	...	...	...	1	...	...	...
September	2	1	...	...	...	...	1	...	...	1
October .....	...	...	...	...	...	...	2	...	...	...
November .....	...	...	...	...	...	...	...	...	...	...
December .....	...	...	...	...	...	...	4	...	...	...
Total	11	2	2	...	...	...	14	...	...	2
Scarlet Fever.										
January	353	...	...	...	10	...	302	...	...	...
February	359	...	...	...	...	...	266	...	...	...
March	536	...	...	...	4	...	384	...	...	...
April	382	...	...	...	6	...	376	...	...	...
May	352	...	...	...	6	...	325	1	...	1
June	305	...	...	...	6	...	223	...	...	...
July	253	...	...	...	...	...	151	...	...	...
August	223	...	...	...	3	...	121	1	...	1
September	156	...	...	...	2	...	84	2	...	2
October	182	...	...	...	2	...	111	...	...	...
November	235	...	...	1	2	...	162	...	...	1
December	206	...	...	...	4	...	191	1	...	1
Total	3,542	...	694	1	45	...	2,696	5	...	6
Diphtheria.										
January	75	2	...	2	1	...	95	4	...	8
February	55	2	...	1	...	...	61	4	...	7
March	92	2	...	2	1	...	56	5	...	9
April	72	3	...	1	...	...	77	2	...	6
May	58	...	...	...	2	1	55	2	...	3
June	33	2	...	...	1	...	60	4	...	6
July	38	4	...	4	4	1	41	2	...	11
August	51	5	...	1	1	...	42	1	...	7
September	25	1	...	...	4	...	27	6	...	7
October	33	1	...	...	2	...	46	3	...	4
November	39	2	...	...	7	...	58	5	...	7
December	55	1	...	2	8	1	76	5	...	9
Total	626	25	127	13	31	3	604	43	...	84
Infantile Paralysis.										
January	3	...	...	...	...	...	1	...	...	...
February	18	...	...	...	...	...	11	1	...	1
March	50	1	...	...	...	...	38	3	...	4
April	34	3	...	...	...	...	32	1	...	4
May	53	2	...	...	...	...	24	4	...	6
June	69	1	...	...	...	...	22	1	...	2
July	46	3	...	...	...	...	37	4	...	7
August	52	4	...	...	...	...	22	3	...	7
September	27	3	...	...	...	...	7	...	...	3
October	14	...	...	...	...	...	13	1	...	1
November	17	2	...	...	...	...	16	4	...	6
December	16	1	...	2	...	...	25	3	...	6
Total	399	20	21	2	...	...	248	25	...	47

TABLE V—continued.

Month.	Metropolitan Combined Districts.		Hunter River Combined Districts.		Broken Hill District.		Remainder of State.		Total.	
	C.	D.	C.	D.	C.	D.	C.	D.	W.	D.
Cerebro-Spinal Meningitis.										
January	1	...	...	...	...	...	2	...	...	...
February	2	...	...	1	...	...	1	...	...	1
March	2	...	...	...	1	...	4	1	...	1
April	5	1	Not Available.	...	...	...	5	1	...	2
May .....	...	1	...	...	...	...	3	1	...	2
June	4	2	...	...	...	...	4	1	...	3
July	5	5	...	...	...	...	3	1	...	6
August	8	2	...	...	...	...	6	2	...	4
September	12	2	...	1	...	...	3	1	...	4
October	13	1	...	...	...	...	3	1	...	2
November	8	2	...	...	...	...	3	2	...	4
December	2	...	...	...	...	...	5	...	...	...
Total	62	16	12	2	1	...	42	11	...	29

Encephalitis Lethargica.										
January .....	...	...	...	...	...	...	...	...	...	...
February .....	...	...	...	...	...	...	...	...	...	...
March .....	...	...	...	...	...	...	...	...	...	...
April .....	...	...	...	...	...	...	...	...	...	...
May .....	...	...	Not Available.	...	...	...	...	...	...	...
June .....	...	...	...	...	...	...	...	...	...	...
July .....	...	...	...	...	...	...	...	...	...	...
August .....	...	...	...	...	...	...	...	...	...	...
September .....	...	...	...	...	...	...	...	...	...	...
October .....	...	...	...	2	...	...	...	...	...	2
November .....	...	1	...	...	...	...	...	...	...	1
December	2	1	...	...	...	...	...	...	...	1
Total	2	2	1	2	...	...	...	...	...	4

Pulmonary Tuberculosis.										
January .....	...	55	...	4	...	...	...	14	...	73
February .....	...	51	...	7	...	2	...	14	...	74
March .....	...	39	...	5	...	1	...	17	...	62
April .....	...	42	...	2	...	2	...	9	...	55
May .....	...	42	...	8	...	...	...	12	...	62
June .....	...	35	...	4	...	...	...	21	...	60
July .....	...	51	...	1	...	2	...	21	...	75
August .....	...	50	...	3	...	3	...	21	...	77
September .....	...	53	...	2	...	...	...	18	...	73
October .....	...	45	...	5	...	...	...	16	...	66
November .....	...	42	...	4	...	1	...	22	...	69
December .....	...	36	...	6	...	...	...	15	...	57
Total .....	...	541	...	51	...	11	...	200	...	803

Puerperal Infection.										
January	15	...	...	...	...	...	...	...	...	...
February	7	...	...	1	...	...	...	...	...	1
March	17	...	...	...	...	...	3	...	...	...
April	8	...	...	...	...	...	4	...	...	...
May	7	1	Not Available.	...	...	...	2	1	...	2
June	4	...	...	...	...	...	6	1	...	1
July	5	1	...	...	...	...	1	...	...	1
August	18	...	...	...	...	...	...	...	...	...
September	8	...	...	1	...	...	2	...	...	1
October	14	4	...	...	...	...	2	...	...	4
November	11	1	...	...	...	...	2	2	...	3
December	8	...	...	...	...	...	1	...	...	...
Total	122	7	6	2	...	...	23	4	...	13

SUMMARY.

District.	Typhoid Fever.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
	C.	D.	C.	D.	C.	D.	C.	†† D.	C.	D.	C.	D.	C.	D.	C.	D.
Metropolitan Combined Sanitary District	11	2	3,542	...	626	25	399	20	62	16	2	2	122	7	...	541
Hunter River Combined District.....	2	...	694	1	127	13	21	2	12	2	1	2	6	2	...	51
Broken Hill District	2	...	45	...	31	3	...	...	1	...	...	...	...	...	...	11
Remainder of State—																
Municipalities	11	...	1,363	5	369	18	117	13	16	2	...	...	11	1	...	90
Shires	3	...	1,333	...	339	24	129	12	26	9	...	...	1	3	...	108
Unincorporated .....	...	...	...	...	4	1	2	...	...	...	...	...	1	...	...	2
Lord Howe Island .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A.C.T. ....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	29	2	6,977	6	1,478	84	668	47	117	29	3	4	151	13	...	863

†† Deaths from notifiable forms only.

Undulant Fever—

Metropolitan Area—

October

1

December

1

2

Typhus Fever—

Metropolitan District.

Remainder of State.

January .....	...	...
February	2	1
March	2	...
April	1	1
May	1	1
June	3	...
July .....	...	...
August	2	2
September .....	...	2
October	2	2
November	1	1
December	2	...
	<hr/>	<hr/>
	16	10
	<hr/>	<hr/>

SECTION I.

A.—COMMUNICABLE DISEASES, 1946.

Notifiable Infectious Diseases Recorded in New South Wales during the year ended 31st December, 1946.

Public Health Acts, 1902-1944.

The Public Health Act, 1902, provides that the Governor may, by proclamation in the *Government Gazette*, declare that any disease therein named is an infectious disease.

Disease.	Notifiable from.	Cases and Deaths Notified.					
		1944.		1945.		1946.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Typhoid Fever (and Paratyphoid)	1st January, 1898	24	5	29	2	25	3
Scarlet Fever	" " "	5,618	11	6,977	6	3,090	4
Diphtheria or Membranous Croup	" " "	1,402	69	1,478	84	1,297	57
Bubonic Plague	23rd January, 1900	...	...	...	...	...	...
Infantile Paralysis (including any form of acute anterior poliomyelitis, poliomyelitis or poliomyelencephalitis)	1st February, 1912, definition reproclaimed 14th August, 1931	15	2(a)	668	47(a)	656	52(a)
Epidemic cerebro-spinal fever (meningococcal meningitis)	11th October, 1915	172	59	117	29	89	29
Encephalitis Lethargica	1st April, 1926	3	2(a)	3	4(a)	3	1(a)
Cholera	12th August, 1927	...	...	...	...	...	...
Typhus Fever	" " "	33	2	26	3	43	2
Yellow Fever	" " "	...	...	...	...	...	...
Puerperal Infection	16th August, 1929	205	26(b)	151	13(b)	185	10(b)
Undulant Fever	13th August, 1937	1	...	2	...	...	...
Leprosy	25th February, 1938	7	...	3	1	1	2
Total		7,480	176	9,454	189	5,371	160
Mean Population		2,886,576		2,917,823		2,945,724	

(a) Notifiable forms only.
(b) See text below.

PUBLIC HEALTH ACT, 1902-1944.

A total of 5,371 cases of infectious diseases was notified under the Public Health Act, 1902-1944, during 1946, or 4,983 less cases than 1945. The number of cases notified from the 152 municipalities, 137 shires and the unincorporated portion of the Western Division; the deaths due to these infections; the age and sex of the patients, and the seasonal incidence of the various diseases are shown in appended Tables I-V (pp. 70-79). As indicated below, pulmonary tuberculosis is notifiable under the Public Health (Amendment) Act, 1915, and venereal diseases, under the Venereal Diseases Act, 1918.

Typhoid Fever.—In 1946 there were twenty-five cases notified and three deaths. The incidence of this disease was slightly lower than in 1945, when there were twenty-nine cases and two deaths.

Scarlet Fever.—There were 3,090 notified cases and four deaths, a decrease of 3,887 cases as compared with 1945, when 6,977 cases and six deaths were recorded.

Diphtheria.—There were 1,297 notified cases and fifty-seven deaths in comparison with 1,478 cases and forty-seven deaths in 1945.

Infantile Paralysis.—Six hundred and fifty-six cases and fifty-two deaths were notified. In 1945 there were 668 cases and forty-seven deaths.

Puerperal Infection.—One hundred and eighty-five cases were notified or thirty-four more than in 1945. The recorded deaths from puerperal septicaemia and post-abortive sepsis in 1946 numbered ten, which does not include nine deaths from sepsis classed as criminal abortion. Under the revised International List of Causes of Death which came into use in 1940, puerperal thrombophlebitis, embolism and sudden death are included as subdivisions of the "infection" group but to maintain comparability with previous years such deaths are omitted here and in the following pages. There were eleven deaths in this additional group.

Cerebro-spinal Meningitis.—Eighty-nine cases and twenty-nine deaths were reported in 1946. In 1945 there were 117 cases and twenty-nine deaths.

Encephalitis Lethargica.—Three cases and one death were notified compared with three cases and four deaths in 1945. Deaths exceeded cases in 1945 because one death was recorded for which no case notification was received.

Undulant Fever.—On 13th August, 1937, a proclamation was issued making undulant fever notifiable on and from that date. No cases or deaths were recorded in 1946.

Bubonic Plague.—No case of this disease has been reported since June, 1923. Rat-catchers are continuously employed in the vicinity of wharves and in the city area. Plague was not detected in the 1,754 rats examined in the Microbiological Laboratory.

Smallpox.—No case was reported during 1946.

Leprosy.—One case and two deaths of leprosy were notified in 1946. For the Report on Leprosy in New South Wales, see page 133.

PUBLIC HEALTH (AMENDMENT) ACT, 1915.

Pulmonary tuberculosis was made a notifiable disease under an amendment of the Public Health Act in 1915. In 1946 registered new cases amounted to 1,671, a decrease of seventeen on the registrations received in 1945. There were 818 deaths, an increase of fifteen compared with the deaths recorded in 1945. A survey by the Director of the Tuberculosis Division is on page 109.

VENEREAL DISEASES ACT, 1918.

Cases of venereal disease notified in 1946 numbered 5,401, an increase of 839 cases on the number (4,562) received in 1945. The Report of the Director of the Division is on pages 80-82.

TABLE I.—Showing the number of notified cases of, and deaths from, the following diseases:—Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid Fever (including Paratyphoid), Pulmonary Tuberculosis, and Puerperal Infection in the METROPOLITAN COMBINED DISTRICTS for the year ended 31st December, 1946.

Municipality or Shire.	Estimated Population at 31st December, 1946.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
METROPOLITAN MUNICIPALITIES.																	
Sydney, City of	95,670	...	...	64	...	28	1	10	1	3	1	...	...	17	...	...	66
Alexandria	8,100	...	...	4	...	7	1	2	...	...	...	...	...	1	...	...	3
Annandale	12,390	...	...	18	...	3	...	4	...	...	...	...	...	3	...	...	12
Ashfield	44,580	...	...	40	1	10	...	8	1	...	...	...	...	...	...	...	9
Auburn	21,850	...	...	29	...	8	...	5	...	1	...	...	...	1	1	...	11
Balmain	28,370	...	1	35	...	6	...	5	...	3	1	...	...	3	...	...	10
Bankstown	41,990	...	...	53	...	13	1	16	...	2	...	...	...	7	...	...	9
Bexley	26,630	...	...	54	...	3	...	14	2	1	1	...	...	1	...	...	4
Botany	9,420	...	...	5	...	3	1	2	...	...	...	...	...	...	...	...	3
Burwood	21,650	...	...	21	...	7	1	3	...	...	...	1	...	1	...	...	13
Canterbury	98,680	...	...	114	...	24	1	17	1	4	...	...	...	11	...	...	18
Concord	29,170	...	...	34	...	7	...	4	3	1	...	...	...	1	...	...	5
Darlington	3,040	...	...	3	...	2	...	1	...	...	...	...	...	...	...	...	1
Drummoyne	32,850	...	...	21	...	5	...	14	...	1	...	...	...	1	...	...	8
Dundas	7,570	...	...	6	...	4	...	...	...	...	...	...	...	...	...	...	2
Eastwood	4,070	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	2
Enfield	17,140	1	...	33	...	3	...	1	...	2	...	...	...	1	...	...	3
Ermington and Rydalmere	3,270	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	2
Erskineville	6,870	...	...	8	...	2	...	2	...	...	...	...	...	1	...	...	4
Glebe	20,470	...	...	17	...	10	...	5	...	3	...	...	...	6	...	...	10
Granville	26,680	...	...	27	...	19	...	6	...	2	2	...	...	1	...	...	12
Homebush	3,490	...	...	2	...	4	...	...	...	...	...	...	...	3	...	...	3
Hunter's Hill	11,400	...	...	18	...	2	...	7	...	...	...	...	...	...	...	...	2
Hurstville	33,530	...	...	75	...	2	1	12	4	1	...	...	...	5	...	...	12
Kogarah	38,960	...	...	66	...	6	...	20	...	1	...	...	...	5	...	...	8
Kuring-gai	39,440	...	...	60	...	3	...	12	...	1	...	...	...	1	...	...	21
Lane Cove	19,640	...	...	22	...	1	...	6	...	...	...	...	...	...	...	...	3
Leichhardt	29,520	...	...	30	...	13	1	5	...	1	...	...	...	3	...	...	11
Lidcombe	20,180	...	...	15	...	3	1	1	1	1	1	...	...	...	...	...	15
Manly	33,090	2	...	62	...	6	1	11	2	1	...	...	...	1	...	...	9
Marrickville	46,840	...	...	57	...	13	...	4	...	2	1	...	...	1	...	...	17
Mascot	17,850	...	...	13	...	9	...	5	...	2	...	...	...	3	...	...	5
Mosman	27,420	...	...	25	...	2	...	9	2	...	...	...	...	...	...	...	9
Newtown	24,950	...	...	15	...	13	...	3	...	...	...	...	...	1	...	...	13
North Sydney	60,030	...	...	42	...	8	...	29	1	2	...	...	...	5	...	...	24
Paddington	24,700	...	...	22	...	5	...	7	...	1	...	...	...	10	...	...	10
Parramatta	20,720	...	...	14	...	3	1	4	...	1	...	...	...	2	...	...	15
Petersham	29,390	...	...	22	...	12	...	1	...	2	...	...	...	3	1	...	13
Randwick	100,150	1	...	155	...	14	1	62	4	5	2	...	...	11	1	...	42
Redfern	18,660	...	...	14	...	13	...	5	...	...	...	...	...	2	...	...	10
Rockdale	46,990	...	...	40	...	5	...	7	1	...	1	...	...	1	...	...	10
Ryde	36,110	...	...	38	...	2	...	12	3	...	...	...	...	...	...	...	9
St. Peters	12,410	...	...	6	...	5	1	4	...	...	...	...	...	...	...	...	9
Strathfield	15,630	...	...	13	...	2	...	2	...	1	...	...	...	...	...	...	7
Vauluse	9,070	...	...	7	...	...	...	1	...	...	...	...	...	...	...	...	2
Waterloo	11,250	...	...	11	...	9	1	3	...	...	...	...	...	5	...	...	10
Waverley	74,120	...	...	81	...	16	3	18	2	2	1	...	...	13	...	...	20
Willoughby	51,610	...	...	51	...	13	1	27	1	2	1	...	...	1	...	...	12
Woollahra	44,740	...	...	36	...	6	...	8	...	2	...	...	...	4	...	...	11

TABLE I—continued.

METROPOLITAN COMBINED DISTRICTS—Return showing the number of cases, etc., from Extra Metropolitan Municipalities.

Municipality or Shire.	Estimated Population at 31st December, 1946.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
EXTRA METROPOLITAN MUNICIPALITIES.																	
Cabramatta and Canley		...	...	5	...	10	...	1	...	1	...	...	...	...	...	...	7
Vale	10,480	...	...	5	...	7	2	5	...	...	...	...	...	2	...	...	5
Fairfield	15,260	...	...	36	...	27	...	4	1	...	...	...	...	1	...	...	2
Holroyd	10,790	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	2
Ingleburn	3,130	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
Liverpool	12,010	...	...	8	...	9	...	4	...	1	...	...	...	3	...	...	3
EXTRA METROPOLITAN SHIRES AND PORT JACKSON.																	
Hornsby	30,890	...	...	65	1	2	...	12	...	1	...	...	...	1	...	...	16
Warringah	31,450	1	...	36	...	5	...	22	1	2	...	...	...	1	...	...	3
Harbour of Port Jackson	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	1,589,160	6	1	1,758	2	414	20	453	31	54	14	2	1	148	3	...	580

TABLE III—continued

REMAINDER OF STATE—Return showing the number of cases, etc., from Country Shires—continued.

Shires.	Estimated Population at 31st December, 1946.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
COUNTRY SHIRES—continued.																	
Harwood	4,650	...	...	2	...	13	1	1	...	...	...	...	...	...	...	...	...
Hastings	9,490	...	...	4	...	2	...	4	...	...	...	...	...	...	...	...	...
Holbrook	2,320	...	...	15	...	3	...	...	...	...	...	...	...	...	...	...	...
Hume	4,630	...	...	6	1	5	1	...	...	...	...	...	...	...	...	...	...
Illabo	2,160	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Illawarra, Central	15,080	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Imlay	4,800	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Jemalong	3,470	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	1
Jerilderie	1,530	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jindalee	2,250	...	...	9	...	5	...	...	...	...	...	...	...	...	...	...	1
Kyeamba	4,400	...	...	7	...	20	...	...	...	...	...	...	...	...	...	...	1
Kyogle	11,420	...	...	1	...	2	1	1	...	...	...	...	...	1	...	...	...
Lachlan	5,360	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Leeton	8,870	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Liverpool Plains	4,300	...	...	3	...	4	...	...	...	...	...	...	...	...	1	...	...
Lockhart	4,620	...	...	18	...	13	...	...	...	...	...	...	...	...	...	...	...
Lynnhurst	6,200	1	...	11	...	2	...	...	...	...	...	...	...	...	...	...	4
Macintyre	4,150	...	...	2	...	3	...	2	...	1	...	...	...	...	...	...	...
Macleay	8,590	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	2
Macquarie	3,380	...	...	2	...	1	...	1	...	...	...	...	...	...	...	...	...
Mandowah	1,420	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Manning	13,960	...	...	...	...	1	2	1	...	...	...	...	...	...	...	...	...
Marthaguy	2,070	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Merriwa	2,490	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Mitchell	2,950	...	...	12	...	2	...	2	...	...	...	...	...	...	...	...	1
Monaro	2,280	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Mulwaree	5,770	...	...	14	...	2	...	...	...	1	1	...	...	...	...	...	1
Mumbulla	4,160	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	1
Murray	2,060	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Murrumbidgee	650	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1
Muswellbrook	3,630	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Nambucca	8,380	...	...	...	...	...	3	1	...	...	...	...	...	...	...	...	1
Namoi	8,050	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	2
Narraburra	3,260	...	...	2	...	2	1	...	...	...	...	...	...	...	...	...	...
Nattai	5,460	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Nepean	4,340	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Nundle	1,420	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...
Nymboida	2,330	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Oberon	3,180	...	...	10	...	1	...	2	...	...	...	...	...	...	...	...	...
Orara	1,570	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Patrick's Plains	5,470	...	...	10	...	...	...	5	...	...	...	...	...	...	...	...	...
Peel	6,080	...	...	5	...	5	...	1	...	...	...	...	...	...	...	...	1
Rylstone	4,460	...	...	3	...	5	...	...	...	...	...	...	...	...	...	...	1
Severn	5,040	...	...	5	...	1	...	...	...	...	...	...	...	...	...	...	...
Snowy River	3,330	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Stroud	6,520	...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...
Sutherland	27,610	...	...	34	...	9	26	...	1	...	...	2	...	...	...	...	4
Talbragar	3,330	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...
Talaganda	2,910	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Tamarang	2,470	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...
Tenterfield	4,570	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Terania	6,990	...	...	1	...	6	2	2	...	1	...	...	...	...	...	...	...
Timbregongie	3,340	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tintenbar	4,800	...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	1
Tomki	3,680	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Tumbarumba	3,190	...	...	24	...	13	...	...	...	...	...	...	...	...	...	...	...
Tumut	8,350	...	...	13	...	5	...	...	...	1	...	...	...	...	...	...	...
Turon	3,540	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...
Tweed	14,250	...	...	5	...	2	...	2	...	...	...	...	1	...	...	...	3
Upper Hunter	4,940	...	...	6	...	1	...	3	...	...	...	...	...	...	...	...	...
Urana	2,480	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...
Wade	10,800	...	...	18	...	5	...	...	...	...	...	...	...	...	...	...	...
Wakool	3,460	...	...	7	...	4	...	...	...	...	...	...	...	...	...	...	...
Walgett	3,420	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Wallerobba	4,320	...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...
Waradgery	640	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Warrah	1,830	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Waugoola	4,610	...	...	4	...	...	...	1	...	1	...	...	...	...	...	...	1
Weddin	3,100	...	...	1	...	...	...	2	1	1	...	...	...	...	...	...	...
Windouran	500	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wingadee	3,020	...	...	...	...	5	1	...	...	1	1	...	...	...	...	...	...
Wingecarribee	7,180	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Wollondilly	7,730	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	4
Woodburn	4,330	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Woy Woy	5,080	...	...	8	...	2	...	...	...	...	...	...	...	...	...	...	1
Yallaroi	3,730	...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	...
Yanko	3,480	...	...	4	...	...	...	...	...	1	...	...	...	...	...	...	...
Yarrowlumla	3,010	...	...	20	...	1	...	...	...	1	...	...	...	1	...	...	...
Total, Shires	673,330	2	1	633	1	289	16	107	12	10	6	1	...	13	2	...	94

TABLE III—continued.

REMAINDER OF STATE.—Return showing the number of cases, etc., from Country Shires—continued.

Shire.	Estimated Population at 31st December, 1946.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
WESTERN DIVISION (UNINCORPORATED) POLICE DISTRICTS.*																	
Bairnald.....
Bourke
Brewarrina
Broken Hill
Cobar
Collarenebri	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Hay
Hillston
Ivanhoe
Menindie
Mitchell
Nyngan
Walgett	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wentworth
Wilcannia
Total, Unincorporated	14,990	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	2

* Deaths available only for unincorporated area as a whole.

MISCELLANEOUS.

Lord Howe Island	185	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Migratory	7,097	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Outside the State—																	
Australian Capital Territory .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Queensland .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Victoria .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Australia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, Miscellaneous ...	7,282	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, N.S.W.	2,962,392	25	3	3,090	4	1,279	57	656	52	89	29	3	1	185	10	...	818

TABLE V. Showing the seasonal prevalence of Cerebro-spinal fever (Meningococcal Meningitis), Diphtheria, and Membranous Croup, Infantile Paralysis (Acute Anterior Poliomyelitis), Encephalitis Lethargica, Scarlet Fever, Typhoid Fever (including Paratyphoid) Pulmonary Tuberculosis, and Puerperal Infection in New South Wales for the year ended 31st December, 1946.

Month.	Metropolitan Combined Districts.		Hunter River Combined Districts.		Broken Hill District.		Remainder of State.		Total.	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Typhoid and Paratyphoid Fever.										
January	4	1	...	...	...	...	5	...	9	1
February .....	...	...	1	...	...	...	4	...	5	...
March	1	...	1	...	...	...	...	...	2	...
April .....	...	...	...	1	...	...	2	...	2	1
May .....	...	...	1	...	...	...	...	...	1	...
June	1	...	...	...	...	...	...	...	1	...
July .....	...	...	...	...	...	...	...	...	...	...
August .....	...	...	...	...	...	...	...	...	...	...
September .....	...	...	...	...	...	...	...	...	...	...
October .....	...	...	...	...	...	...	...	...	...	...
November .....	...	...	...	...	...	...	...	1	...	1
December .....	...	...	...	...	...	...	4	...	4	...
Total	6	1	3	1	...	...	15	1	24	3
Scarlet Fever.										
January	288	...	25	1	...	...	188	1	518	2
February	177	1	16	...	...	...	170	...	373	1
March	203	...	12	...	6	...	138	...	374	...
April	176	...	19	...	1	...	155	...	363	...
May	136	...	15	...	2	...	108	...	268	...
June	99	...	13	...	...	...	83	...	198	...
July	128	...	4	...	4	...	72	...	209	...
August	108	1	7	...	7	...	45	...	169	1
September	126	...	2	...	...	...	43	...	175	...
October	123	...	5	...	...	...	35	...	171	...
November	106	...	7	...	2	...	23	...	143	...
December	88	...	16	...	3	...	18	...	129	...
Total	1,758	2	141	1	25	...	1,078	1	3,090	4
Diphtheria.										
January	117	2	32	1	6	2	83	1	257	6
February	57	3	18	...	1	...	70	4	155	7
March	30	...	11	3	17	...	90	3	157	6
April	42	...	11	2	14	...	65	8	137	10
May	39	6	14	2	19	...	74	4	157	12
June	31	4	7	...	7	...	54	1	100	5
July	19	...	4	...	4	...	24	2	54	2
August	24	2	5	...	3	...	25	1	57	3
September	15	2	6	...	5	...	18	1	45	3
October	8	1	13	...	4	...	20	...	49	1
November	17	...	1	...	1	...	35	2	55	2
December	15	...	7	...	3	...	30	...	56	...
Total	414	20	129	8	84	2	588	27	1,279	57
Infantile Paralysis.										
January	34	4	5	...	1	...	26	2	66	6
February	37	2	3	...	2	...	24	1	66	3
March	53	3	4	...	...	...	19	1	76	4
April	33	2	...	...	...	...	15	...	50	2
May	159	7	2	...	...	...	39	6	205	13
June	84	3	3	...	...	...	18	6	115	9
July	29	5	1	...	...	...	11	3	42	8
August	12	2	...	...	...	...	1	...	15	2
September	4	...	...	...	...	...	4	1	9	1
October	3	...	1	...	...	...	1	...	5	...
November	2	...	...	...	...	...	...	2	2	2
December	3	1	...	...	...	...	2	1	5	2
Total	453	29	19	...	3	...	160	23	356	52

TABLE V—continued.

Month.	Metropolitan Combined Districts.		Hunter River Combined Districts.		Broken Hill District.		Remainder of State.		Total.	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Cerebo-Spinal Meningitis.										
January	3	2	1	...	...	...	2	...	6	2
February	1	1	...	...	...	...	1	1	2	2
March	8	1	...	1	1	...	...	1	9	3
April	2	1	...	...	...	...	3	2	5	3
May	6	2	2	...	...	...	2	4	12	6
June	3	...	1	...	...	...	1	...	5	...
July	9	3	4	...	...	...	2	...	15	3
August	4	1	...	...	...	...	2	1	6	2
September	3	...	...	1	...	...	5	...	8	1
October	12	...	...	1	...	...	...	2	12	3
November	2	2	...	...	...	...	3	1	6	3
December	1	1	1	...	...	...	1	...	3	1
Total	54	14	9	3	1	...	22	12	89	29
Encephalitis Lethargica.										
January .....	...	...	...	...	...	...	...	...	...	...
February .....	...	...	...	...	...	...	1	...	1	...
March .....	...	...	...	...	...	...	...	...	...	...
April	1	...	...	...	...	...	...	...	1	...
May .....	...	...	...	...	...	...	...	...	...	...
June .....	...	...	...	...	...	...	...	...	...	...
July .....	...	...	...	...	...	...	...	...	...	...
August .....	...	...	...	...	...	...	...	...	...	...
September .....	...	...	...	...	...	...	...	...	...	...
October	1	1	...	...	...	...	...	...	1	1
November .....	...	...	...	...	...	...	...	...	...	...
December .....	...	...	...	...	...	...	...	...	...	...
Total	2	1	...	...	...	...	1	...	3	1
Pulmonary Tuberculosis.										
January .....	...	49	...	2	...	1	...	21	...	73
February .....	...	43	...	4	...	...	...	15	...	62
March .....	...	41	...	3	...	...	...	12	...	56
April .....	...	34	...	3	...	...	...	13	...	50
May .....	...	54	...	2	...	2	...	10	...	68
June .....	...	51	...	4	...	1	...	15	...	71
July .....	...	64	...	6	...	1	...	24	...	95
August .....	...	56	...	5	...	2	...	15	...	78
September .....	...	50	...	3	...	2	...	10	...	65
October .....	...	51	...	5	...	1	...	17	...	74
November .....	...	50	...	1	...	1	...	11	...	63
December .....	...	37	...	7	...	...	...	19	...	63
Total .....	...	580	...	45	...	11	...	182	...	818
Puerperal Infection.										
January	14	1	1	2	...	...	3	1	18	4
February	20	...	1	...	...	...	2	1	23	1
March	22	...	2	...	...	...	6	...	30	...
April	8	...	...	...	...	...	4	...	12	...
May	10	...	...	...	...	...	4	...	14	...
June	14	...	...	...	...	...	2	...	16	...
July	14	...	...	...	...	...	2	2	16	2
August	10	...	...	...	...	...	6	...	16	...
September	12	1	...	...	1	...	...	1	13	2
October	6	...	...	...	1	...	...	...	7	...
November	8	...	...	...	...	...	1	...	9	...
December	10	1	...	...	...	...	1	...	11	1
Total	148	3	4	2	2	...	31	5	185	10

SUMMARY.

District.	Typhoid Fever.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.		Pulmonary Tuberculosis.	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Metropolitan Combined Sanitary District	6	1	1,758	2	414	20	453	...	54	14	2	...	148	3	...	580
Hunter River Combined District	3	1	141	1	129	8	19	...	9	3	...	...	4	2	...	45
Broken Hill District	...	...	25	...	84	2	3	...	1	...	...	...	2	...	...	11
South Coast Health District	1	...	88	...	64	...	21	...	3	...	...	...	...	...	...	...
Remainder of State—																
Municipalities	12	1	442	1	299	27	53	...	12	12	...	...	18	5	...	182
Shires	2	...	633	...	289	...	107	...	10	...	1	...	13	...	...	...
Unincorporated	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Lord Howe Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A.C.T.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	25	3	3,090	4	1,279	57	656	...	89	29	3	...	185	10	...	818

TABLE VI.—Showing the number of Cases of Infectious Diseases notified in the State of New South Wales during the years 1898 to 1946 inclusive, and the number of deaths therefrom.

Year.	Mean Population.	Typhoid Fever.*		Scarlet Fever.*		Diphtheria.*		Plague.†		Infantile Paralysis.‡		Cerebro-spinal Meningitis.§		Encephalitis Lethargica.||		Pulmonary Tuberculosis.¶		Puerperal Infection.**	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
1898	1,312,455	3,302	387	6,342	83	1,493	169	...	...	...	...	...	...	...	...	...	...	...	...
1899	1,333,605	2,783	347	1,389	25	741	60	...	...	...	...	...	...	...	...	...	...	...	...
1900	1,354,335	3,442	398	895	9	726	63	303	103	...	...	...	...	...	...	...	...	...	...
1901	1,366,900	2,702	291	1,288	16	922	131	...	...	...	...	...	...	...	...	...	...	...	...
1902	1,388,400	2,624	276	2,010	61	757	74	140	41	...	...	...	...	...	...	...	...	...	...
1903	1,407,400	4,855	475	5,358	87	1,214	134	2	...	...	...	...	...	...	...	...	...	...	...
1904	1,428,700	2,370	249	4,056	50	1,584	156	12	6	...	...	...	...	...	...	146	...	...	...
1905	1,454,800	2,226	239	1,773	21	1,118	102	56	21	...	...	...	...	...	...	128	...	...	...
1906	1,484,600	2,373	271	3,085	42	1,219	100	20	8	...	...	...	...	...	...	118	...	...	...
1907	1,517,900	1,972	189	2,570	26	1,376	133	51	20	...	...	...	...	...	...	161	...	...	...
1908	1,515,700	2,607	307	2,755	40	2,001	123	6	3	...	...	...	...	...	...	112	...	...	...
1909	1,577,200	2,615	287	7,178	30	2,419	166	24	7	...	...	...	...	...	...	196	...	...	...
1910	1,616,200	2,714	294	1,642	23	4,989	207	...	...	...	...	...	...	...	...	184	...	...	...
1911	1,665,265	1,864	184	2,618	11	4,784	226	...	...	...	...	...	...	...	...	222	...	...	...
1912	1,743,958	2,126	236	662	11	5,440	253	...	...	...	...	...	...	...	...	265	...	...	...
1913	1,820,066	2,187	236	1,120	23	6,380	310	...	...	47	10	...	...	...	...	228	...	...	...
1914	1,870,460	2,284	250	3,207	21	5,831	247	...	...	79	14	...	...	...	...	293	...	...	...
1915	1,891,191	1,941	219	5,335	97	5,838	264	...	...	63	11	50	33	...	...	361	86	...	...
1916	1,893,479	1,742	209	5,759	107	6,588	309	...	...	311	21	309	145	...	...	1,499	666	...	...
1917	1,905,194	1,091	103	2,255	27	5,805	247	...	...	16	12	197	98	...	...	1,319	584	...	...
1918	1,943,356	810	112	1,308	15	5,151	221	...	...	50	12	120	80	...	...	1,308	586	...	...
1919	2,000,573	857	106	959	10	2,826	114	...	...	8	3	28	23	...	...	1,102	678	...	...
1920	2,068,585	1,016	132	937	24	5,043	263	...	...	45	10	34	27	...	...	1,509	674	...	...
1921	2,108,485	949	129	1,060	8	6,854	306	2	1	184	22	30	28	...	...	1,240	791	...	...
1922	2,155,522	706	99	1,153	11	4,094	207	33	9	33	5	21	22	...	...	1,045	517	...	...
1923	2,201,531	873	104	2,623	13	3,480	176	1	1	104	8	27	22	...	...	1,218	657	...	...
1924	2,244,403	768	97	3,421	29	4,364	222	...	...	108	6	29	38	...	...	1,096	730	...	...
1925	2,295,516	533	80	3,043	27	3,004	118	...	...	57	14	37	27	...	...	1,195	617	...	...
1926	2,346,903	698	80	4,755	53	3,579	147	...	...	81	21	32	23	...	...	1,265	705	...	...
1927	2,403,881	460	68	8,369	113	4,059	179	...	...	25	4	25	10	3	27	1,158	632	...	...
1928	2,460,410	453	60	5,531	105	3,835	168	...	...	30	2	31	8	18	23	1,212	815	...	...
1929	2,503,026	438	45	5,219	78	4,274	215	...	...	241	29	28	10	26	30	1,215	1,152	44	79
1930	2,532,289	380	48	4,400	54	4,051	176	...	...	30	6	43	12	14	20	1,917	1,022	269	82
1931	2,555,871	340	35	4,477	36	4,432	168	...	...	103	10	30	9	20	16	1,588	1,014	319	83
1932	2,579,741	233	31	4,905	57	4,310	160	...	...	384	44	43	7	12	18	1,485	969	292	59
1933	2,601,782	188	28	4,259	55	3,912	169	...	...	13	4	24	5	11	15	1,441	951	222	100
1934	2,623,560	141	19	2,166	19	6,167	193	...	...	94	13	29	7	6	15	1,509	955	238	63
1935	2,645,575	173	20	2,250	18	4,913	194	...	...	181	20	29	5	7	16	1,571	939	266	72
1936	2,667,839	132	19	3,939	26	7,064	220	...	...	23	6	11	4	7	5	1,372	955	326	82
1937	2,694,679	118	18	2,493	17	4,244	143	...	...	70	††5	17	7	9	††4	1,771	991	241	52
1938	2,721,196	91	20	2,599	12	3,935	156	...	...	658	††18	22	7	11	††10	1,797	946	259	47
1939	2,748,192	63	13	3,190	11	4,103	192	...	...	33	††2	22	6	6	††4	1,687	922	243	38
1940	2,772,185	67	9	3,026	15	1,834	74	...	...	11	††1	41	13	7	††4	1,926	892	245	50
1941	2,791,169	40	8	3,385	6	3,063	121	...	...	90	††8	411	84	13	††4	1,916	934	270	29
1942	2,818,269	31	6	1,576	9	1,454	79	...	...	34	††1	879	125	12	††3	1,912	958	244	36
1943	2,841,227	24	4	3,940	13	2,268	99	...	...	25	††2	400	89	8	††2	1,722	890	224	45
1944	2,870,956	24	5	5,618	11	1,402	69	...	...	15	††2	172	59	3	††2	1,743	825	205	26
1945	2,899,112	29	2	6,977	6	1,478	84	...	...	668	††47	117	29	3	††4	1,688	803	151	13
1946	2,945,724	25	3	3,090	4	1,297	57	...	...	656	††52	89	29	3	††1	1,671	818	185	10

* Notifiable from 1st January, 1898.

† " " 23rd January, 1900.

‡ " " 1st February, 1912. Proclamation re-issued 14th August, 1931.

§ " " 1st April, 1926.

|| " " 11th October, 1915.

¶ " " 1904, City of Sydney only; from 1915, Metropolitan and Hunter River Districts; from 1916, Blue Mountain Districts.

** Notification extended to whole State, March, 1929.

†† Deaths from notifiable forms only.

SECTION I.

A.—COMMUNICABLE DISEASES.
SOCIAL HYGIENE DIVISION.

REPORT OF THE DIRECTOR, DIVISION OF SOCIAL HYGIENE (J. COOPER BOOTH, M.B., Ch.B.) to the Commissioner under the Venereal Diseases Act, 1918, (E. SYDNEY MORRIS, M.D., Ch.M., D.P.H., F.R.A.C.P., Director-General of Public Health), for the years 1941 to 1946.

Staff.

Director: J. COOPER BOOTH, M.B., Ch.B. (Edin.).
Senior Medical Officer: J. H. ABBOTT, M.B., Ch.M. (Syd.).
Medical Officers: S. H. HANKINS, M.B., Ch.M. (Syd.) (Transferred from Division). A. J. GEOFFROY, M.B., Ch.M., D.P.H., D.T.H. (Syd.) (Transferred from Division); E. H. STAPLES, M.B., Ch.M. (Syd.).
Clerical: L. MAHER, four assistants and typiste.
Senior Clinical Assistant: R. C. LEWRY with Clinic Assistant and seven to five Attendants.

The Co-ordination Group for Control of Venereal Disease.

The Co-ordination Group was formed on 10th December, 1940, and met at least once each month until it was disbanded on 10th December, 1945. It was the first of such groups to be formed in Australia, and all Services (Naval, Military, Police and Civil) were represented, including the Navy and Army of the United States of America. The Director, Division of Social Hygiene, was chairman of the group.

The National Security (Venereal Diseases and Contraceptives) Regulations.

The National Security (Venereal Diseases and Contraceptives) Regulations came into force in September, 1942, and ceased to have effect after the 31st December, 1946. They provided authority, lacking in State legislation, to follow up and bring under medical examination alleged sources of infection or any person the Commissioner had reason to believe might be suffering from a venereal disease. During the period of their operation 2,045 alleged sources of infection were located and examined, and of this number 1,258 (61.5 per cent.) were found to be infected with a venereal disease.

These war-time Regulations were of great value and recommendations have been made for amendment to the Venereal Diseases Act, 1918, to provide similar authority to investigate alleged sources of infection.

Publicity.

During the war period venereal disease was brought under public notice by an intensive Press publicity campaign, and posters were displayed at various suitable places.

The Press, by its wholehearted co-operation, contributed very greatly in making the public conscious of the problem of venereal disease, and it is largely because of its initial action in this regard that it is now possible to refer to venereal disease anywhere but over the wireless, without objection being raised.

While it is desirable to keep the danger of these infections before the public, late education of the adolescent and of the adult is not sufficient to protect against irregular sexual behaviour. The sex education of the child from the earliest days of its questing after knowledge is of major importance. The child who is given its knowledge of sex little by little in answer to its questions as it grows through childhood has a greater chance of a balanced sexual life in later years than has one forced to gain its information from many sources, mostly unreliable and unsupervised.

Much of the irregular sexual life of to-day, as in the past, is due to failure of parents to appreciate and perform their obligations in regard to their children. Every child is entitled to a knowledge of self and a pattern of behaviour by which it may live in moral security, and the parent should be the one best fitted to provide this.

The control of venereal disease depends more on the infiltration of informed new generations with high ideals into national life than on spasmodic periods of publicity.

Venereal Diseases Act, 1918.

REPORT ON NOTIFICATIONS RECEIVED TO 31ST DECEMBER FOR YEARS 1941 TO 1946.

The six years under survey (1941 to 1946) cover the years of the war in the Pacific and the first post-war year.

The notifications of venereal disease received during the period were as follows:—

Thirty thousand and thirty notifications of venereal disease were received in the six-year period 1941-1946. Twenty-three thousand five hundred and ninety-two were for males and 6,438 for females. The yearly average for the period was 5,005, the average for males being 3,932 and for females 1,073. Males were above their average for the years 1941, 1942 and 1946, and females were above their average for the years 1943 and 1944. The notification of females as alleged sources of infection helped to bring many under treatment who otherwise would have remained unnoticed, and this was especially noticeable in the years 1943 and 1944.

Increase in Venereal Disease in Females:—The number of females notified as infected increased from 842 in the year 1941 to 1,548 in the year 1944, after which it began to decline. In the peak periods over half the women notified as infected admitted being married though many had separated from their husbands.

The age groups of females notified showed the reaction of the 16-20 years group to war conditions. A survey of age groups of females notified disclosed the following percentages in their totals:—

Age Group.	1941.	1942.	1943.	1944.	1945.	1946.
16-20	18.3	22.9	27.9	23.0	20.4	23.4
21-25	24.1	25.8	27.9	28.9	28.3	30.3
	42.4	48.7	55.8	51.9	48.7	53.7

It will be noticed that there is an appreciable rise in the percentage of the age group 16-20 in the total females notified up to the year 1943, followed by a decline in the following two years and a rise again in 1946.

During the war period young women came into contact with new social conditions and temptations for which they were, in the vast majority of cases, quite unprepared. They met men with new methods of approach and money to spend who romanced to them in new speech and accent and many were flattered and eventually not unwilling to surrender their chastity. Once virtue had fled they too often became the huntress rather than the hunted, and irregular sexual experiences rapidly multiplied. In many instances the disasters of disease or of ex-nuptial pregnancy followed and some seeking a way of escape from natural consequences added the experience of abortion.

Syphilis.

A matter for some concern is an increase in the percentage of acute syphilis in the total syphilis notified during the year 1946. The incidence is still low but few sources of infection have been traced.

The amount of acute syphilis in the total syphilis notified during the period 1941-1946 was as follows:—

Year.	Total Syphilis.	Acute Syphilis in Total.	Percentage Acute Syphilis.
1941	1,094	289	26.4
1942	1,189	382	32.1
1943	1,121	353	31.5
1944	899	203	22.6
1945	852	261	30.6
1946	1,024	532	51.9

Year.	1941.			1942.			1943.			1944.			1945.			1946.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Syphilis	736	358	1,094	854	335	1,189	735	386	1,121	573	326	899	604	248	852	811	213	1,024
Gonorrhoea	2,936	465	3,401	3,857	615	4,472	2,603	819	3,422	2,106	1,205	3,311	2,767	719	3,486	3,557	606	4,163
Chancroid	21	11	32	49	9	58	9	7	16	1	1	5	1	5	3	3	3	3
Gonococcal Ophthalmia	8	6	14	7	1	8	3	3	6	...	...	...	...	...	...	...	...	...
Venereal Warts	114	2	116	136	19	155	161	38	199	73	17	90	65	16	81	86	10	96
Ghæf	149	...	149	117	...	117	103	1	104	109	...	109	126	...	126	114	...	114
Venereal Granuloma	1	...	1	...	...	...	...	1	1	...	...	...	2	1	3	1	...	1
Total	3,956	842	4,798	5,011	979	5,990	3,614	1,255	4,869	2,862	1,548	4,410	3,577	985	4,562	4,572	829	5,401

FAILED TO CONTINUE TREATMENT.

The following table shows the percentage of notified defaulters who remained permanent defaulters:—

Year.	Total defaulters notified.	Resumed treatment, dead or left State.	Remained in default.	Percentage remaining in default.
1941	1,628	928	700	43.0
1942	1,493	991	502	33.6
1943	1,112	836	276	24.8
1944	1,129	810	319	28.2
1945	1,154	689	465	40.3
1946	1,298	769	529	40.7

CLINICS.

Metropolitan District.—Ten clinics are available. The clinic at the Health Department (Albert-street entrance) is continuous during the day, closing at 7.30 p.m. Monday to Friday (except Wednesday when it closes at 5 p.m.).

Prophylactic facilities are continuous at the Health Department Clinic for males, the total yearly attendances being as follows:—

1941	9,104
1942	10,551
1943	10,898
1944	11,230
1945	12,843
1946	16,452

Newcastle District.—The clinic at the Newcastle Hospital provided treatment for the majority of persons notified from that area. Prophylactic facilities are also available.

District General Hospitals.—Treatment is available at country hospitals as required.

Bed Accommodation.—Beds are available in the metropolitan area for 34 females and 12 males.

PATHOLOGICAL EXAMINATIONS.

Examinations were made in the Microbiological Laboratory in the Department, the numbers being as follows:—

Year.	Serologic Tests.	Smears for Gonococci.	Examinations for Treponema Pallidum.
1941	50,201	16,569	472
1942	46,946	14,603	375
1943	52,811	19,123	289
1944	51,475	19,495	182
1945	57,678	13,527	222
1946	70,517	14,783	586

PROSECUTIONS.

Action was taken against numerous persons for breach of section 5 of the Act (failure to continue under treatment). The total actions for the years under survey were as follows:—

1941	17
1942	61
1943	142
1944	219
1945	225
1946	314

The following tables are appended:—

TABLE I.—Notifications received during the period 1941 to 1946 in order of district from which notifications came.

TABLE II.—Summary of total attendances at various public clinics during the period 1941-1946.

TABLE I.—Notifications received during period 1941 to 1946 arranged in order of districts.

Disease.	Metropolitan Area.						Newcastle District.						Remainder of State.					
	1941.	1942.	1943.	1944.	1945.	1946.	1941.	1942.	1943.	1944.	1945.	1946.	1941.	1942.	1943.	1944.	1945.	1946.
Gonorrhoea	3,081	4,141	3,123	2,997	3,148	3,665	211	209	179	210	215	339	109	122	120	104	123	159
Syphilis	989	1,103	1,048	835	776	949	47	47	37	30	35	34	58	39	36	34	41	41
Soft Chancre	30	44	12	1	5	3	2	5	4	...	...	...	...	...	...	...	...	...
Gleet	128	107	99	109	126	114	11	10	5	...	...	...	1	...	...	...	...	...
Venereal Warts	116	154	199	89	81	96	...	1	...	...	...	...	...	...	...	1	...	...
Gonococcal Ophthalmia	12	8	6	...	7	...	1	...	...	...	...	...	1	...	...	...	2	...
Venereal Granuloma	1	...	1	...	3	1	...	...	...	...	...	...	...	...	...	...	...	...
Total	4,357	5,557	4,488	4,031	4,146	4,828	272	272	225	240	250	373	169	161	156	139	166	200

TABLE II.—Table showing Annual Attendance Returns at Public Clinics for Treatment of Venereal Diseases 1941-1946 inclusive.

Year.	Attendances.			New Cases.					
				Gonorrhoea.			Syphilis.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
HEALTH DEPARTMENT CLINIC.									
1941	68,760	...	68,760	1,477	...	1,477	315	...	315
1942	62,343	...	62,343	1,336	...	1,336	345	...	345
1943	49,084	...	49,084	812	...	812	271	...	271
1944	41,229	...	41,229	737	...	737	205	...	205
1945	52,733	...	52,733	1,421	...	1,421	280	...	280
1946	80,734	...	80,734	2,011	...	2,011	282	...	282
ROYAL PRINCE ALFRED HOSPITAL.									
1941	16,690	3,783	20,473	117	29	146	39	9	48
1942	10,480	2,765	13,245	108	19	127	37	19	56
1943	7,966	2,718	10,684	73	23	96	39	44	83
1944	6,148	3,787	9,935	55	142	197	44	50	94
1945	6,708	2,935	9,643	70	69	139	36	39	75
1946	4,523	3,136	7,659	151	36	187	45	20	65
SYDNEY HOSPITAL.									
1941	4,388	4,150	8,538	33	21	54	52	38	90
1942	3,443	2,941	6,384	26	9	35	47	36	83
1943	3,146	2,197	5,343	25	3	28	35	39	74
1944	2,413	1,326	3,739	31	1	32	26	13	39
1945	2,128	1,159	3,287	47	8	55	17	13	30
1946	2,375	817	3,192	50	4	54	34	18	52
ROYAL ALEXANDRA HOSPITAL FOR CHILDREN.									
1941	257	711	968	1	4	5	3	10	13
1942	118	495	613	1	3	4	3	1	4
1943	146	494	640	...	13	13	6	11	17
1944	221	795	1,016	...	33	33	13	16	29
1945	350	982	1,332	...	9	9	3	5	8
1946	284	580	864	...	2	2	1	2	3
ROYAL SOUTH SYDNEY HOSPITAL.									
1941	1,923	205	2,128	19	...	19	1	1	2
1942	908	46	954	14	...	14	2	1	3
1943	256	117	373	6	2	8	...	4	4
1944	232	150	382	4	1	5	4	2	6
1945	190	162	352	6	...	6	1	2	3
1946	152	99	251	3	...	3	2	1	3
ROYAL NORTH SHORE HOSPITAL.									
1941	1,460	1,177	2,637	22	10	32	11	5	16
1942	1,489	1,161	2,650	17	10	27	7	6	13
1943	1,360	1,130	2,490	14	9	23	8	20	28
1944	1,238	1,374	2,612	11	8	19	9	13	22
1945	644	875	1,519	1	5	6	4	5	9
1946	717	774	1,491	6	3	9	6	5	11
BALMAIN DISTRICT HOSPITAL.									
1941	257	286	543	...	...	...	3	2	5
1942	213	438	651	1	1	2	...	...	...
1943	280	399	679	...	...	...	2	...	2
1944	386	492	878	...	...	...	2	...	2
1945	441	497	938	...	...	...	1	...	1
1946	432	476	908	...	...	...	1	1	2
NEWCASTLE DISTRICT HOSPITAL.									
1941	8,141	1,755	9,896	174	17	191	32	25	57
1942	7,492	1,464	8,956	126	23	149	19	19	38
1943	6,104	1,591	7,695	134	29	163	23	13	36
1944	6,787	1,392	8,179	161	43	204	21	9	30
1945	7,071	1,754	8,825	150	54	204	18	11	29
1946	4,865	1,327	6,192	147	21	168	17	10	27
WESTERN SUBURBS DISTRICT HOSPITAL.									
1941	27	7	34	2	...	2	...	...	...
1942	13	...	13	...	...	...	...	...	...
1943	...	...	...	...	...	...	...	...	...
RACHEL FORSTER HOSPITAL FOR WOMEN.									
1941	...	11,004	11,004	...	180	180	...	121	121
1942	...	12,782	12,782	...	329	329	...	115	115
1943	...	18,556	18,556	...	479	479	...	161	161
1944	...	19,715	19,715	...	512	512	...	118	118
1945	...	13,130	13,130	...	369	369	...	102	102
1946	...	9,846	9,846	...	331	331	...	84	84
PARRAMATTA DISTRICT HOSPITAL.									
1943	116	79	195	8	9	17	4	2	6
1944	301	253	554	...	1	1	...	4	4
1945	315	263	578	...	...	...	3	2	5
1946	364	226	590	2	2	4	12	2	14

CONSULTATIVE COUNCIL FOR THE PHYSICALLY HANDICAPPED.

SUMMARISED REPORT COVERING THE YEARS 1941 TO 1946 INCLUSIVE.

In August, 1945, the Consultative Council on Infantile Paralysis was renamed the Consultative Council for the Physically Handicapped. The work of investigating acute anterior poliomyelitis continued, but activities were extended to include other cases coming under the category of physically handicapped.

A meeting was held each month at 52 Bridge-street, and in December, 1946, a small Executive Committee was formed to deal with routine matters of finance and reports prior to the general meetings.

In September, 1946, the Minister for Health approved the appointments of an occupational therapist and a physiotherapist as co-opted members of the Council.

An Almoner was appointed to the Council in September, 1946.

TABLE I.

Notifications of Acute Anterior Poliomyelitis:—

Year.	No. of cases.	Deaths.
1941	90	2
1942	34	1
1943	25	4
1944	14	1
1945	661	55
1946	647	43

Epidemic of Poliomyelitis in New South Wales, 1945-46.—One thousand three hundred and eight cases of poliomyelitis were notified during 1945-46—661 cases in 1945, 647 cases in 1946.

Ninety-nine additional notifications were later cancelled owing to amended diagnoses.

The epidemic reached its peak in April to June, 1946, with the maximum number of cases (212) having onset in any one month occurring in May of that year.

There was a decline during June (eighty-five) and July (twenty-seven) and a sharp decrease in August (seven).

TABLE II.

Sex.—735 (56 per cent.) of the cases were males; 573 (44 per cent.) of the cases were females.

TABLE III.

The age groups (according to age at onset) were as follows (1,308 cases):—

	Under 1 year.	1-4 years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	Over 40 years.
1945 cases...	14	123	213	176	74	31	21	9
1946 cases...	17	158	185	124	77	50	23	13
Total	31	281	398	300	151	81	44	22
Per cent.	2.3	21.5	30.4	23	11.5	6.2	3.4	1.7

Deaths.—Ninety-eight cases died. Fifty-eight were males, forty females.

The death rate was highest (22.7 per cent.) in the cases over 30 years and lowest (3.2 per cent.) in the 5-9 years group.

TABLE IV.

Deaths according to age at onset (ninety-eight cases):—

1945-46.	Under 1 year.	1-4 years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	Over 40 years.
Total cases notified ...	31	281	398	300	151	81	44	22
Died	4	11	13	29	14	12	10	5
Per cent.	12.8	3.9	3.2	9.6	9.2	11.1	22.7	22.7

Amount of Paralysis.—One thousand one hundred and ninety-seven cases were followed up after a period of six months to two and a half years from onset of illness:—

TABLE V.

513 cases (43 per cent.) showed no after-effects;
320 cases (27 per cent.) had slight weakness but no disability;
266 cases (22 per cent.) had residual paralysis;
98 cases (8 per cent.) had died.

After Care.—An attempt was made to contact every case in New South Wales notified as poliomyelitis, and ensure adequate treatment and after care.

Circulars or letters were sent to Medical Practitioners, hospitals and patients, in an endeavour to follow up progress, and visits were paid by the Almoner and Medical Officer to hospitals and institutions treating poliomyelitis cases. Patients were also visited in their own homes, or interviewed at 52 Bridge-street, and necessary after-care arrangements made.

Arrangements included:—

- Transfer of paralysed patients from rural districts to metropolitan hospitals and institutions.
- Payment of fees to consultant orthopaedic surgeons visiting Nepean and Wollongong District Hospitals at the request of the local practitioners.
- Payment of physiotherapy fees for patients too handicapped to travel to an Out-patient Department, but unable to afford private fees.
- Payment for muscle re-education given to patients staying at the Far West Home at Manly.
- Transport to Orthopaedic Out-patient Clinics, and in a necessitous case, payment of fares from Lindfield to Royal North Shore Hospital.

Cases Illustrating After-care Arranged by Council.—Case 1, *at.* 24 years, married, one child *at.* 12 months. Developed acute anterior poliomyelitis in May, 1946.

In November, 1946, she was fit for discharge from a general metropolitan hospital, but had residual paresis of abdominal muscles and both lower limbs, and was still needing bed-rest and physiotherapy.

It was impossible for this patient to receive adequate attention at home, and the family was not in a position to pay private fees. The Almoner's Department of the hospital arranged to pay the major expenses for board in a Nursing Home, and the Council undertook payment for physiotherapy three times weekly.

After six months the patient had improved sufficiently to return home, and travel by bus to an Orthopaedic Clinic for further muscle re-education.

Case 2, at. 5 years. Developed poliomyelitis in May, 1946, and was discharged from hospital in November, 1946, with marked paresis of left leg, and wearing a caliper.

There was one other child, *at.* 2 years, and the family was having difficulty in meeting routine living expenses. Fares for the patient and an escort to and from an Orthopaedic Clinic were costing £1 1s. 3d. per week, and the father applied to the Council for assistance.

For eight months the Council paid travelling expenses between the home and hospital until the child had improved sufficiently to need only one treatment weekly.

Vocational Training.—In 1942 the need was stressed for the organisation of vocational guidance, training and placement of physically handicapped persons.

A detailed scheme, drawn up by a special sub-committee of the Council, was sent to the Minister for Health.

In 1945 a State Government grant amounting to £2,500 was allotted to the Council for expenditure on vocational training of physically handicapped persons, and the scheme was put into operation in November.

Eleven applicants referred by the New South Wales Society for Crippled Children and the Far West Children's Health Scheme have been considered suitable for training.

Four have suffered from paralysis following poliomyelitis, four from osteomyelitis, one from congenital absence of radii and thumbs, one from congenital dislocation of the hips, and one from tubercular disease of the spine.

Four were girls—two have completed secretarial courses and been placed in positions, one is training as a hairdresser, and one is having occupational and speech therapy with a view to later training as a telephonist.

One boy has trained as a wool-classer, one is studying accountancy, and four have had part-time training in general education, accountancy and boot-repairing.

Hospital fees were paid for a badly paralysed boy in the Gosford District while he learnt weaving. He was provided with a loom and wool, the loom to remain the property of the Council.

Cases Illustrating Vocational Training under the State Government Grant.—Case 1, male, *et.* 21 years, had a history of Osteomyelitis of left leg and arm, necessitating continuous hospitalization for fifteen years.

He was recommended to the Council by the New South Wales Society for Crippled Children for training in Wool-classing at the Sydney Technical College, the expenses involved to be for equipment accommodation (30s. per week at home) and fares.

The trainee commenced his course in February, 1946, and received an honours pass at his first examination. He then had a recurrence of Osteomyelitis, but the Council continued to pay his accommodation for the eight weeks he was attending hospital.

He was then well enough to proceed to the Country for practical training, and in July, 1947, completed his course with a very good record.

Case 2, female, *et.* 19 years, with congenital dislocation of the hips—passed her Leaving Certificate examination in 1945, and was referred by the New South Wales Society for Crippled Children as suitable for training in secretarial work.

Under the State Government grant the Council paid fees to a Business College, and accommodation (30s. per week at home) for a period of twelve months.

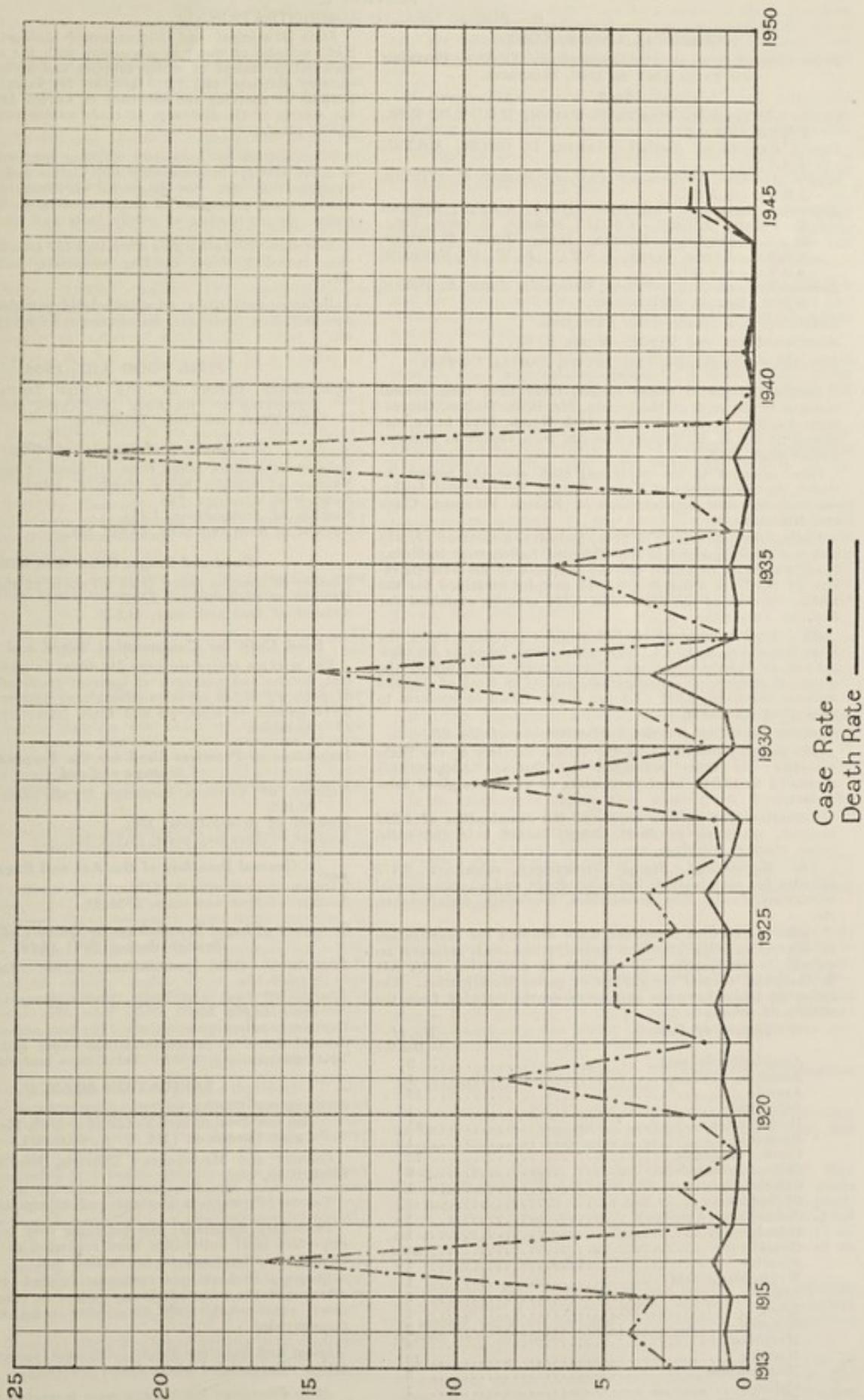
This trainee found parts of her course somewhat difficult, but passed her Diploma Examination with 6 A's and 2 B's and is now employed as Secretary to a Personnel Officer in a Metropolitan firm.

Expenditure on Vocational Training till December, 1946.—This amounted to £387 2s. 5d., comprising £288 6s. for accommodation, £85 6s. 11d. for fees and equipment and £13 9s. 6d. for fares.

The small outlay is due to the fact that, owing to lack of accommodation, use of the grant has necessarily been restricted to applicants living in the metropolitan area.

The need has been urgently felt for a hostel to accommodate trainees from the country, and following inspections of buildings recommendations have been made for the purchase of a property considered suitable for use as such a hostel.

INFANTILE PARALYSIS
 Annual Death Rate per 100,000 of Population. Annual Case Rate per 100,000 of Population
 1913-1946



Graph 10

SECTION I.

B.—PUBLIC HEALTH ADMINISTRATION.

CHEMICAL LABORATORY.

SUMMARISED REPORT OF THE GOVERNMENT ANALYST COVERING THE YEARS 1941 TO 1946, INCLUSIVE.

Staff.

Government Analyst.—HAROLD B. TAYLOR, M.C., V.D., D.Sc., F.R.I.C., F.A.C.I.

Second Government Analyst.—ARTHUR D. DIBLEY, A.S.T.C., A.A.C.I.

Senior Assistant Government Analyst.—ROBERT G. O'BRIEN, A.S.T.C., A.A.C.I.

Analysts.—ERNEST S. OGG, B.Sc. (Hon.), A.A.C.I., WILLIAM F. FISHER, A.S.T.C., A.A.C.I., EDWARD R. COLE, B.Sc., M.P.S., ANTHONY DADOUR, B.Sc., JOHN PLOWMAN, A.S.T.C., LESTER CLARK, A.S.T.C., J. W. G. NEUHAUS, A.S.T.C., A.A.C.I.

Laboratory Assistants.—VICTOR WILLIAMS, JOHN A. HORAN, H.D.D., RONALD McDONOUGH.

Laboratory Attendant.—IVAN RATCLIFFE.

Shorthandwriter and Typist.—MARIE KEMP.

Two Office Assistants.—VERA SPIERS, PAMELA CAFFYN.

During the period under review, there have been several changes in the staff of the branch, Mr. S. G. Walton, Government Analyst, having retired on 10th March, 1946, to be succeeded by Dr. H. B. Taylor, who had been absent on military service since 1940.

Other changes in the analytical staff over the period included the resignations of Messrs. Sparks, Andrews and Anderson and the new appointments of Messrs. Plowman, Clark and Neuhaus.

During the years 1941 to 1946, inclusive, a total of 170,310 samples were examined in the Chemical Laboratory, including 155,022 samples examined for the purposes of the administration of the Pure Food Act, 13,844 samples examined for the Public Services of the State, and 1,444 samples examined for Defence Authorities.

Of a total number of 155,022 samples examined under the Pure Food Act, 6,446 (4.1 per cent.) were found to be adulterated or falsely described. Numerically, milk formed the principal subject of investigation, and of a total of 106,698 samples examined, 3,527 (3.3 per cent.) failed to conform to prescribed standards.

Samples Submitted for the Public Services of the State.

The samples submitted by the Public Services of the State (exclusive of those submitted by Defence Authorities) amounted to 13,844, brief particulars of which are given hereunder:

Subsidised Institutions requested the examination of 1,333 samples, consisting of foods, drugs, human hair and nails, urine, stomach washings, etc.

The Government Stores Department submitted 2,379 samples for examination, including drugs and pharmacopoeial substances, foods, inks, insecticides, lubricants, disinfectants, etc.

Police Authorities forwarded 2,677 exhibits for examination in connection with criminal investigations and coroners required the examination of exhibits in connection with 834 deaths which formed the subject of police investigation. The following table shows the number of deaths recorded from the effects of poisons:

Nature of Poison.	No. of Deaths.
Acetylsalicylic acid	2
Aconitine	1
Arsenic	16
Atropine	1
Barbiturates	31
Bromural	1
Carbon monoxide	22
Chloral hydrate	9
Chloroform	1
Chromium	1
Cinchophen (Atophan)	1
Cresol	1
Cyanide	22
Fluoride	1
Hydrochloric acid	1
Lead	1
Lysol	1
Mercury	3
Morphine	4
Nicotine	13
Nitrobenzene	3
Opium	1
Phosphorus	4
Sedormid (Allylisopropylacetylurea)	1
Strychnine	48
Strychnine and Brucine	3
Thallium acetate	1

TOTAL 194

State Municipal and Departmental Authorities submitted 2,467 samples of water in connection with the supervision and chemical treatment of water supplies and swimming pools in country districts, and 1,210 samples for examination for the purpose of checking the efficiency of sewage installations and the control of the discharge of trade wastes and drainage into public places.

The Division of Industrial Hygiene required the examination of 2,447 samples in connection with claims under the Workers' Compensation Act, the diagnosis of illness due to occupational causes, conditions of employment in workshops and factories, the ventilation of public halls and theatres, etc.

Miscellaneous Authorities submitted 497 samples for examination including food, bedding materials, lubricants, urine, etc.

Defence Authorities submitted 1,444 samples for examination including foodstuffs, disinfectants, fly sprays, soap, petrol, etc.

PURE FOOD ACT, 1908.

SUMMARISED REPORT BY THE CHIEF INSPECTOR OF THE ACTIVITIES OF THE FOOD INSPECTION BRANCH COVERING THE YEARS 1941-1946 INCLUSIVE.

Analyses of Samples of Milk.

Number of samples taken from all parts of the State, 57,160.
Number of samples below standard, 1,435.
Number of warnings, 283.
Number of prosecutions, 1,154.
Amount of fines and costs, £4,346 15s.

Food and Drugs, Other than Milk.

Number of samples taken from all parts of the State, 47,153.
Number of prosecutions, 1,519.
Amount of fines and costs, £4,652.

Food Unfit for Consumption Seized and Destroyed.

The seizures comprised over 212 tons; in addition to 285,435 tins, bottles and packages of assorted foodstuffs; 51,505 head of poultry; 12,089 carcasses of mutton; 12,000 sheep tongues; 2,117 gallons of wine, oil and fruit juice; and also 74 bags of vegetables.

Inspection of Premises Used for the Preparation, Sale and Storage of Food.

Number of premises inspected in all parts of the State, 62,195.
Number of prosecutions, 156.
Amount of fines and costs, £1,174 19s.

General Breaches of the Act and Regulations.

Number of prosecutions, 219.
Amount of fines and costs, £821 2s.

Summary of Legal Proceedings by Officers of the Pure Food Branch during 1941-1946.

Adulterated milk, prosecutions, 1,154; fines and costs, £4,346 15s.
Adulterated food and drugs, prosecutions, 1,519; fines and costs, £4,652 10s.
Unclean premises, prosecutions, 156; fines and costs, £1,174 19s.
General breaches, prosecutions, 219; fines and costs, £821 2s.
Total prosecutions, 3,047. Total fines and costs, £10,995 6s.

SANITATION BRANCH.

SUMMARISED REPORT OF THE ACTIVITIES OF THE SANITATION BRANCH DURING THE YEARS 1941-1946, INCLUSIVE, BY THE CHIEF INSPECTOR (MR. G. A. GARROW).

Country and Metropolitan Districts, Routine and General Inspections, etc.

Towns: Primary inspections and re-inspections were 175.

Insanitary Buildings: 600 buildings were inspected and the respective local authorities were requested to cause necessary repairs or alterations to be carried out.

Shortage of housing accommodation made it inadvisable to recommend the issue of closing orders in other than extreme cases, consequently only 24 closing order certificates were recommended.

Guest and Boarding Houses: 186 were inspected and suitable action recommended where found necessary.

Shop Premises: 1,380 shops were inspected and appropriate action taken.

Hospitals, Institutions, and Schools: 276 separate premises were inspected and necessary action recommended.

Public Halls and Theatres: 232 inspections were made and 55 air tests were carried out in conjunction with an Officer from the Division of Industrial Hygiene.

Hotel Premises: 318 hotels were inspected and reports and recommendations thereon were forwarded to the controlling authority for necessary action.

Swimming Pools: 44 inspections of swimming pools, treatment plant and proposed sites were made, and numerous samples of pool water were procured for chemical and bacteriological examination.

Cattle Slaughtering and Diseased Animals and Meat Act, 1902: 545 inspections were made of slaughtering premises, including abattoirs, and where deemed necessary, suitable action was taken or recommended and the local authority requested to give effect thereto.

Increased Fees: 10 councils made application under section 15 of the Act for increased fees, and upon investigation, with two exceptions, applications were recommended.

Noxious Trades: 2,949 inspections and reinspections of noxious trades premises were made and where necessary repairs, etc., were required to be carried out and in a few cases legal proceedings were instituted against the trader.

The provisions of the Act were extended to a number of areas during this period.

Removal of Dead Stock from Flemington: 153,264 dead animals were removed from the Flemington saleyards and the abattoirs by a private firm, to its knacker premises, and in no case were complaints received by this office respecting these activities. On those premises about 100 dead dogs per week of five days are destroyed without nuisance.

Flock and Bedding Material: 159 samples of flock and bedding material were obtained and several mattresses and pillows purchased for examination, and 240 inspections of premises were made.

Camps, Show Grounds, Cemeteries, etc.: 165 inspections were made, and where found necessary suitable action was recommended.

Sale Yards and Proposed Sites: 165 inspections were made of saleyards, etc., and work required to be carried out recommended.

Scavenging Districts, Sanitary Depots, Proposed Sites for Garbage Incinerators: Seventy-two descriptions and plans of proposed scavenging districts were examined, several of which were amended or recast in this office; 1,092 inspections of sanitary depots and garbage incinerators were made and where found necessary suitable action was taken; 165 proposed depot sites were inspected and those found unsuitable were not recommended.

Sanitary Services: 151 investigations of sanitary services were made and where found warranted suitable action was taken.

Septic Tanks, Sewerage Treatment Works, Public and Private Water Supplies: 2,197 plans of proposed septic tanks were examined and where found necessary were either amended or not recommended for approval. Of the 1,741 sites inspected, a number were found unsuitable, in consequence of which, approval to instal the septic tank could not be recommended; 483 inspections of existing septic tanks, including sewerage treatment works and effluent disposal areas were made and suitable action recommended where found necessary; seventy-three investigations were made respecting the source, and storage of water supplies, and water samples were procured for examination and suitable action where found necessary.

Number of Councils Required to Employ a Certificated Health Inspector: Forty-seven local government councils were required to employ a certificated health inspector following an investigation of their respective areas by this department's officers; the majority of them complied.

It should be noted that health inspectors are now required by law to obtain the local government health inspector's certificate in addition to their other qualifications before they can be employed as health inspectors by a local government council. This certificate is in reality a form of registration.

Unhealthy Building Land: 1,085 inspections and check surveys were made of land considered unfit for building purposes; 30,672 inquiries were made by solicitors and others. These inquiries produced in revenue £3,797 10s.

Infectious Diseases: Fifty-five investigations were made and suitable action was taken; five cases of malaria, and five of typhus were investigated and action considered necessary recommended.

Rat Infestation: 12,184 rats were examined in the Microbiological Laboratory and were found free from plague; 848 investigations were made, respecting alleged rat infestation and where found necessary suitable action was taken.

Sydney Wharves: 848 visits were made to these premises, and where repairs, eradication of rats, etc., was found necessary the controlling authority was duly notified. Reinspections have disclosed that work required has been or is being carried out.

Nuisances: Investigations were made of 1,500 complaints respecting drain, pollution of rivers and other alleged nuisances, following which, action considered necessary was recommended.

Sorting of Dead Wool: Numerous visits were made to premises where this process is carried out, and where considered necessary advice was given.

Dairies Supervision Act: During this period, nine shire councils made application to be proclaimed local authorities under the Act. The necessary investigations were made and resulted in the majority of applications being recommended.

Samples of Water, Sewage, Effluent, Soils, Dust, Sawdust and Air: 576 samples were obtained for chemical analysis and bacteriological examination on results of which suitable action was recommended.

Knackers Premises and Horse Flesh Shops: So far as is possible these premises are visited by a departmental officer and where necessary suitable action is recommended; 288 inspections were made.

Legal Proceedings: In connection with the several prosecutions instituted for breaches of the various Acts, Regulations and Ordinances, fines and costs amounting to £937 7s. 3d. were imposed.

Amendments to Acts, Regulations and Ordinances: Several proposed amendments to the Local Government Ordinances have been submitted to and approved by the Board of Health under section 26B of the Public Health Act, 1902-1944. During the period under review, the Public Health (Amendment) Act, 1944, was assented to. The business of "Tanner" has been declared a noxious trade within the meaning of the Noxious Trades Act, 1902-1944.

Applications for Cyanide Fumigation Inspectors' Licence: During the period sixty-six persons presented themselves for the respective examinations; of this number the majority were recommended. Three cyanide fatalities were investigated.

Building Regulation Advisory Committee: This committee still functions and meets frequently to consider all matters connected with building materials, and construction and to advise on building problems submitted by councils and other bodies.

It is pleasing to report that after much discussion the proposal to reduce the ceiling height of rooms in buildings from 9 ft. to 8 ft. was not recommended.

North Coast Floods: Investigations were made of conditions following the floods in the North Coast district. Reports, recommendations and photos on results of the investigation were submitted.

Mosquitoes and Dengue Fever: 220 investigations were made respecting the eradication of mosquitoes in an effort to control the spread of dengue fever, and where found necessary the local authority was required to take suitable action.

Several of these investigations were a check on previous surveys made and were for the purpose of ascertaining whether the local authority was giving effect to recommendations forwarded to it by this department.

Malaria and Endemic Typhus: Ten cases were investigated and suitable action was recommended.

Swine Fever: Officers of this branch were active in assisting the Stock Branch (Department of Agriculture) to combat this disease. Necessary assistance is still being rendered.

Construction Camps: At the request of the Allied War Council, forty-one inspections and reinspections were made of camps throughout the State and where considered necessary, water samples for chemical analysis and bacteriological examination were obtained. Reports and recommendations on conditions found during the inspections were forwarded to the controlling authorities.

Temporary Rest Shelters: At the request of the Civilian War Emergency Aid Service a survey was made of rest shelters in several parts of the State and reports and suggestions thereon were submitted to the controlling authorities.

Commonwealth Authorities: At the request of several departments of the Commonwealth, inspections and investigations have been made and advice tendered in matters respecting sewage treatment works, disposal of drainage and effluent; camp kitchen wastes, rat infestation and other matters relating to sanitation at military camps and other Commonwealth premises.

United States Authorities: When requested advice was tendered in matters relating to sanitation, collection and disposal of camp kitchen wastes, etc.

War Workers' Houses: Investigations of drainage nuisances were made and reports and recommendations thereon were forwarded to the controlling authorities.

Military School of Instruction for Sewage and Sullage Plant Operators: Several lectures on matters relating to treatment and disposal of grease, sewage and effluent were given by an officer of this branch to members of the Military School of Instruction.

Addressing Councils: At the request of several local government councils, officers of this branch addressed those authorities on matters relating to health conditions in their respective areas.

Timber for Manufacture of Coffins: Owing to the receipt of complaints an investigation was made into the use of plywood in the manufacture of coffins. The efforts of this department, resulted in the matter being satisfactorily settled.

PRIVATE HOSPITALS ACT, 1908.

Report on the operation of the Act for the period 1941-1946, inclusive, by Dr. A. J. Hope.

During this period the number of private hospitals licensed in New South Wales declined from 496 to 348, and the number of beds from 5,124 to 4,206, being a reduction respectively of 148 and 1,098.

The decline in both categories was evident for each year in the period under review.

Most of the hospitals were small, only forty-one being licensed for the reception of more than twenty patients at the end of the period, compared with forty-four at the beginning. With the figures for 1941 in brackets, a comparison may be drawn in this way:—

Of the 348 (496) hospitals licensed in 1946, 120 (206) were for the reception of lying-in cases only, 55 (53) for medical and surgical only and 173 (237) for all classes.

It can be seen that the greatest decline has been in hospitals licensed for the reception of lying-in cases only (41.7%) and this decline has taken place at the expense of the 1 to 5 bed hospitals. In comparing the metropolitan loss with the country loss, it is shown that of the total loss of 148 hospitals and 1,098 beds, the metropolitan loss was 55 hospitals and 475 beds, whilst the country figures were 93 and 623 respectively.

Inspections of Private Hospitals were carried out by the supervisory nurses as regularly as the war conditions allowed.

A fair amount of deterioration to property occurred during this period and a considerable volume of requests for improvements has been despatched to licensees; the latter have endeavoured to carry them out and have shown a proper spirit of co-operation but lack of material and difficulty in procuring the necessary labour has, however, caused a definite lag in this direction.

Most resident managers conduct their hospitals ably and well and are most co-operative, but there is a general tendency to over-crowd, which is understandable owing to the continuing bed loss; a few also are neglectful in keeping their registers up to date.

The Bush Nursing Association and Country Women's Association still have a small number of hospitals under their control.

Puerperal Infections.—Of the 313 cases of Puerperal infection during the five years, 114 occurred in private hospitals.

Rest and convalescent homes have been visited and inspected when permission to do so has been given by the proprietors, and advice tendered.

Whilst most of these places are satisfactorily conducted, many are not, and overcrowding has been a persistent, undesirable feature. In many instances, there is considerable room for improvement all round.

The Thanks of this Department are due to the Commissioner of Police and the Registrar of the Nurses' Registration Board and their staffs for the ready assistance tendered.

TABLE I.—Showing classification of Private Hospitals licensed at December 31st, 1941 and 1946, according to nature of cases received and the total number of beds provided by each class of hospital.

	Medical, Surgical and Lying-in.		Medical and Surgical.		Lying-in.		Total.	
	No. of Hospitals.	No. of Beds.	No. of Hospitals.	No. of Beds.	No. of Hospitals.	No. of Beds.	No. of Hospitals.	No. of Beds.
Sydney Metropolitan Area—								
1941	81	1,644	45	961	73	364	199	2,969
1946	64	1,395	41	878	39	221	144	2,494
Country Districts—								
1941	156	1,440	8	121	133	594	297	2,155
1946	109	996	14	158	81	378	204	1,532
Total—								
1941	237	3,084	53	1,082	206	958	496	5,124
1946	173	2,391	55	1,036	120	599	348	4,026

TABLE II.—Showing classification of Private Hospitals licensed at December 31st, 1941 and December 31st, 1946.

Beds.	1.	2.	3.	4-5.	6-10.	11-20.	Over 20.	Total.
Sydney and District—								
1941	4	9	18	25	55	52	36	199
1946	3	6	7	11	43	40	34	144
Country Districts—								
1941	17	29	34	61	94	54	8	297
1946	15	16	22	38	66	40	7	201
Total—								
1941	21	38	52	86	149	106	44	496
1946	18	22	29	49	109	80	41	348

TABLE III.—Showing general decline in numbers of the different types of Private Hospitals during the period 1941-1946.

	Total Hospital.	Total Beds.	Medical, Surgical and Lying-in.	Medical and Surgical.	Lying-in.	1 Bed.	2 Beds.	3 Beds.	4-5 Beds.	6-10 Beds.	11-20 Beds.	Over 20 Beds.
1941	496	5,124	237	53	206	21	38	52	86	149	106	44
1946	348	4,026	173	55	120	18	22	20	49	109	80	41
Decrease.....	148	1,098	64	+2	86	3	16	23	37	40	26	3
Percentage decrease ...	29.8	21.4	27	+3.8	41.7	14.3	42.1	44.2	43	26.8	24.5	6.8

Comment.—From the above figures, it can be seen that hospitals licensed for the reception of medical, surgical and lying-in cases constitute the greatest proportion of the total number being 49.7% for 1946, those for lying-in cases only, being 34.48%, and those for medical and surgical cases only, 15.8%.

The corresponding percentages for 1941 were 47.7%, 41.5% and 10.8% respectively.

The number of beds available was greatest in those hospitals licensed for the reception of medical, surgical and lying-in cases, being 59.4%. Those available for lying-in cases only were 14.9% and for medical and surgical 25.7%.

The 1941 figures corresponding were 60.2%, 18.7% and 21.1%. The greatest decrease has been in those hospitals which admit lying-in cases only, and at the expense of those hospitals whose bed capacity is 2 to 5 (43%). Those hospitals licensed for 6 and over 20 declined by 20%. The only category showing an increase concerned the number of hospitals admitting medical and surgical cases only—this increase being 2 (3.8%).

HOSPITAL ADMISSION DEPOT; MEDICO-LEGAL SECTION, ETC.

REPORT OF THE GOVERNMENT MEDICAL OFFICER FOR THE YEARS 1941 TO 1946.

Medical Staff.

In 1941, the medical staff consisted of Dr. C. E. PERCY, Government Medical Officer for Sydney, Dr. C. W. ENGLAND, Assistant to the Government Medical Officer, and Dr. F. W. FRASER.

From October, 1941, to December, 1945, Dr. England was absent on Military Service and Dr. Fraser performed his duties. In 1945, owing to an increase in the work of the division, Dr. S. H. Hankins was appointed, and in 1946 the medical staff comprised Drs. Percy, England, Fraser and Hankins.

Hospital Admission Depot.

Assistants: Mr. W. GRIERSON (retired medically unfit, 1946), Mr. R. DUNCAN, Mr. R. CURTIS and Mr. A. HALE.

Night Officer: Mr. A. W. STEVENS.

Medical Work.

Admissions to Hospitals and Homes.—Admissions are arranged to Metropolitan Hospitals, State Hospitals and Homes and Convalescent Homes. These admissions are arranged by medical practitioners telephoning the Hospital Admission Depot or by personal application. The admissions of country applicants to Metropolitan and Base Hospitals are also arranged. Transport by ambulance is arranged by the Depot for admissions to hospitals, inter-hospital transfers, and visits from one hospital to another for treatment.

Medical examinations for State Government Departments.—These examinations are carried out for various departments, the State Superannuation Board, the Maritime Services Board and the Board of Fire Commissioners. Some of these cases are visited in their own homes or in hospitals.

Medical examinations of Police Recruits.—These include applicants for admission to the Police Force as probationary constables and police cadets. Some of these applicants are examined repeatedly before final acceptance. Probationary constables are all re-examined prior to the confirmation of appointment at the end of twelve months' service. Police cadets are examined every six months during their service.

Medical examinations of sick police.—Matters concerning the health of the Police Force are dealt with and a daily sick parade is held at which police on sick report are seen at

intervals during their illness to determine their fitness or otherwise to resume work. All police assaulted or injured while on duty are also examined.

Vaccinations.—Vaccination against Small Pox is carried out for members of the public, and all new appointees in the Police Force are vaccinated during their first year of service.

Miscellaneous.—Other work includes the taking of throat swabbings for the detection of diphtheria bacilli in children being admitted to various institutions. Numerous persons are directed to appropriate places for out-patient treatment or are advised on medical matters or social services.

Medico-Legal Work.

Examinations of alleged rape and other assault cases.—These cases are examined at all hours, exhibits connected with such cases are examined and evidence is given at various courts.

Work for the City Coroner.—The Government Medical Officer performs autopsies at the City Morgue in connection with suicides, homicides, violent and uncertified deaths.

Lunacy work.—The Reception House at Darlinghurst is visited daily by a medical officer of this branch for the purpose of certifying persons for admission to Mental Hospitals.

The end of the war brought an increase in the volume of work. This was mainly due to a resumption of police recruiting on a large scale and to an increase in the number of ex-servicemen examined for the Department of Road Transport and Tramways in connection with applications for travelling concessions. Dr. S. H. Hankins made three extended country tours with the Police Mobile Recruiting Committee during 1946. The increase in police recruiting and the resumption of overseas travelling caused a marked increase in the number of people vaccinated against Small Pox.

Two tables are appended showing figures covering some of the work for the year 1941-1946.

TABLE I: ADMISSIONS TO HOSPITALS.

	1941.	1942.	1943.	1944.	1945.	1946.
Admissions to Metropolitan Hospitals	6,095	3,794	5,533	5,634	5,637	4,432
Admissions to State Hospitals and Homes	7,796	7,476	6,149	6,230	5,555	5,095
Admissions to Convalescent Homes.....	1,270	1,158	985	1,067	998	1,022
Ambulance Removals	12,973	10,937	13,784	14,066	13,889	10,933

TABLE II: MEDICAL WORK.

	1941.	1942.	1943.	1944.	1945.	1946.
Examinations for Government Departments	635	894	970	999	1,154	1,719
Police Recruits—Primary examination	409	210	174	312	1,574	1,883
Probationary Constables—Examinations prior to confirmation of appointment	95	36	15	22	21	321
Police Sick Report and daily average	62	76	87	84	91	108
Certifications at the Reception House	1,172	1,250	1,346	1,231	1,360	1,395
Examinations in cases of rape and other assaults.....	133	115	123	115	119	101
Vaccinations	138	58	71	68	89	554

HEALTH EDUCATION BRANCH.

SUMMARISED REPORT FOR THE YEARS 1941 TO 1946 INCLUSIVE.

BY THE PUBLICITY OFFICER.

Introduction.

The above six years have been the most important in the history of the Department's health education activities. They have seen the growth of activities from small-scale operations to planned State-wide campaigns reaching record proportions in 1946. This has been due to the provision of adequate funds and staff. A Publicity Officer was appointed to the Department in 1926. For years his activities were severely restricted by lack of funds and staff, but despite these handicaps, sound progress was made and a solid foundation laid on which to build, details of which are given in previous reports. In February, 1944, an Assistant Publicity Officer and a senior Secretarial Assistant were appointed. Later a Despatch Officer was added. These three, together with the existing Publicity Officer and an Office Assistant, made up the total complement of five. In April, 1946, a qualified Projectionist was appointed in place of the Despatch Officer, his duties embracing also despatch work. This staff works under the general direction of a Senior Medical Officer. Also in 1944 the services of an Advertising Agency and a firm of Window Display Contractors were obtained. Appointment of these two services meant that a far greater volume of work could be handled in the sphere of paid advertising without increasing the staff of the Branch beyond five.

Increase in the provision of funds is shown by the amounts expended during the relevant financial years:

1940-41	£992
1941-42	£2,000
1942-43	£2,000
1943-44	£2,000
1944-45	£16,000
1945-46	£25,000
1946-47	£32,000

A comparison of the work done in 1941 with that of 1946 shows the growth of activities. In 1941 two new 30in. x 40in. posters were produced and two more were re-issued. A set of cards were issued for free display in trams. Several new editions of pamphlets were published. Other activities were film screenings, talks, window displays, issue of press paragraphs and circulation of screen slides, recorded broadcasts, window display material and printed matter. These activities were necessarily on a small-scale.

In 1946 the following new material was produced:

- 150,000 copies of a new two-colour pamphlet on diphtheria immunization entitled "Here Are the Facts."
- 20,000 copies of a revised two-colour pamphlet on Rat control, entitled, "Get Rid of the Rats."
- 100,000 copies of a three-colour pamphlet on Diphtheria immunization entitled "My Children Are Protected."
- 50,000 copies of a revised and improved edition of the pre-natal booklet, "Healthy Motherhood."
- 25,000 copies of the mothercraft booklet, "Our Babies."
- 100,000 copies of a one-page leaflet on rat control entitled "Rats Carry Disease."
- 20,000 copies of a leaflet to advertise Nutrition lectures entitled "Which Foods are the Best."
- 10,000 copies of a two-colour eight-page pamphlet on "Diabetes."
- 5,000 copies of a two-colour pamphlet on "Hydatid Disease."
- 25,000 copies of a two-colour pamphlet on nutrition entitled "Making the Most of Country Produce."
- 30,000 copies of a pamphlet on maternal and baby welfare entitled "Your Baby and You."
- 100,000 copies of a pamphlet on rat control entitled "Typhus."
- 100,000 copies of a three-colour booklet on venereal disease entitled "V.D. is Curable."
- 50,000 copies of a revised edition of our nutrition pamphlet with a four-colour cover entitled "Food and Nutrition."
- 50,000 copies of a large three-colour card entitled "Sumptuous Sandwiches for School Lunches."
- 50,000 copies of a new two-colour, 6-paged folder on T.B. entitled "Can You Tell."
- 10,000 copies of a two-colour leaflet entitled "Cancer."
- 10,000 copies of a two-colour leaflet entitled "Cancer for Women."
- 30,000 copies of an eight-paged health newspaper entitled "Fitness."

Posters.

The following is a list of posters produced in full colours:—

"Don't be a Litterbug" ..	5,000	Size 20in. x 30in.
"Don't Spit"	5,000	"
"Whooping Cough"	5,000	"
"Calling All Mothers" ..	5,000	"
"Public Enemy No. 1" ..	5,000	"
"Balanced Lunch"	5,000	"
"Meat Thief"	5,000	"
"Things You Should Know"	5,000	size 30in. x 40in.
"Right Way to Cook Greens"	5,000	size 20in. x 15in.
"Balance Your Diet"	5,000	size 20in. x 15in.

24-Sheet Posters (size 20ft. x 10ft.) for display on boardings:—

"Diphtheria Strikes 1 in 9"	200
"Loaded Dice" (V.D.)	200

Show Cards: Mainly for window displays, etc.:—

"Diphtheria Strikes 1 in 9"	1,000
"339,000 Children in Danger"	1,000
"Loaded Dice" (V.D.)	1,000
"Baby Health Centres"	12

Tram Cards:—

"Tuberculosis"	1,000
"Baby Welfare"	1,000
"Whooping Cough"	500
"Right Way to Cook Greens"	1,000
"Balance Your Diet"	1,000
"A Balanced Lunch"	500

Tram and Train Stickers.—3,000 copies of six designs adapted from posters on Immunization, Flies, Spitting, V.D. (2), Whooping Cough and the following new designs:—

"Rats Carry Disease"	3,000
"Pre-Natal Care"	3,000
"Nutrition"	3,000
"Tuberculosis"	3,000
"Accident Prevention"	3,000
"Hygiene"	3,000
103,000 envelope stickers on Diphtheria Immunization.	

Window Displays:

- 14 full-size window displays, two each of seven different subjects (duplicates of 1945 Health Week Windows).
- 14 new window displays (full size) obtained for the 1946 health week.
- 4 sanitation displays for country displays entitled "Help to Fight Disease."

Recordings for Broadcasting:

- 16 one-minute health announcements were recorded and 42 pressings made.
- 16 pressings of a further eight recorded one-minute health announcements were also made.

Slides:

- (a) Rat Control, 30.
- (b) (i) 339,000 in danger, 33 (on diphtheria immunization); (ii) 1 in 9, 44.
- (c) Baby Health Centres, 20.

Miscellaneous.—Other material acquired in 1946 ranged from prints of 35mm. and 16mm. films to a large exhibition display entitled "Fitness," of which the original cost was £2,000.

Prior to 1944 the Department was able to make only token entries into the various fields of advertising, and was dependent upon the co-operation of the press and radio for free space and time over the air. With the provision of funds significant efforts were possible as the above list shows. In addition, it was possible to operate in some of the most important fields previously denied to it, viz., paid press advertising, purchase of time on the air, and production and display of 24-sheet posters on rented boardings.

Press Advertising.

This activity commenced in February, 1945. The main campaign was on venereal disease, and advertisements were taken in nearly all the New South Wales newspapers. One result was a very large increase in attendance at the Department's V.D. Clinic. There was considerable public support for this campaign which undoubtedly did much to dispel widespread ignorance and to remove the social taboo on the subject. Other subjects featured in press advertising were nutrition, tuberculosis, sanitation, diphtheria immunization, rat control and noise abatement. The publicity campaign

to encourage parents to have their children immunized against diphtheria begun in 1936 in conjunction with the local authorities, has proved most successful and over 600,000 children have now been protected.

In 1946 press advertisements on this and the other subjects mentioned appeared in four Sydney dailies, five Sydney weeklies and fifty-eight country papers. The advertisements varied in size from double columns to full pages, and appeared regularly throughout the year. In addition, twenty South Coast newspapers were used for a special advertising campaign on diphtheria immunization in the South Coast Health District. In some of these advertisements free copies of the Department's publications were offered and the response was remarkable. For instance, in a period of six months no less than 21,000 written applications for Food and Nutrition and other pamphlets were received and more than that number of persons called at the Department—a total of approximately 50,000 individual inquiries. Unfortunately, paid press and radio publicity ceased at the end of June, 1947, owing to lack of funds.

Press Publicity.

Articles on health, about 400 words long, have for years been sent to newspapers which use them as editorial matter. The system has been standardised so that each week four articles are issued and one article is sent to all country and suburban newspapers in the State. Four articles are used to ensure that newspapers serving the same areas receive different material. Over the years the papers have co-operated to a valuable degree but shortage of paper has militated against this form of free publicity in recent years. This is being overcome as far as may be by the issue of articles divided into self-contained paragraphs for use as "fill-ups."

The Department now subscribes to a press clipping service which supplies items on health noticed in city and country newspapers. This service shows that recently the average number of country papers using the material is forty, that is ten to each article. In addition they appear in suburban papers and other media of which we have no record. This publicity is secured free. This service could be improved by the circulation among papers of stereos to illustrate our articles and a commencement was made some time ago, but lack of staff hitherto has prevented the general adoption of this plan. Also in the sphere of free publicity the Department's medical officers often give statements and interviews to the city newspapers which are featured as important news items. This material is very valuable from the angle of health education. Of particular value have been the statements given by the Metropolitan Medical Officer of Health who also supervises the work of this branch.

Radio Advertising.

This activity commenced in February, 1945, and took the form of one-minute announcements of about 100 words. These were recorded by medical officers of the Department. By a decision of the Federal Parliamentary Committee on Broadcasting the Department was prevented from giving talks on venereal disease. Further difficulty was encountered when the Federation of Commercial Broadcasting Stations disapproved of some of the Department's sanitation announcements on the grounds that they contained words which they considered unsuitable for broadcasting. However, the stations have assisted us as far as practicable and recorded one-minute announcements were given regularly on both day and evening sessions over the six Sydney commercial stations and over thirteen of the country ones until December, 1946, when they were cancelled.

A paid five minute weekly broadcast on health was given throughout 1946 by the Medical Officer of Health for the South Coast Health District over 2WL.

Radio Publicity.

Two series of recorded three minute radio talks by officers of the Department have also been made and some have been used by the ABC in the State women's session over 2BL and by some country stations. This has been done free. From time to time, particularly during Health Weeks, talks have been given by the Minister for Health and by Departmental officers as featured items on station programmes. The advent of radio newsreels and documentaries have enabled the Department's medical officers to give statements and interviews akin to those of the newspapers. Regular broadcasts have consisted of a weekly ten minute talk by Departmental officers for two years (1943-45) on a 2UW County Council session and recently the Baby Health Centre sisters at Goulburn and Mudgee have commenced a weekly series of mothercraft talks over the local stations. Recently all metropolitan stations began a weekly broadcast of information for housewives on economical spending of money on fruit and vegetables and plans are now on hand for regular health announcements or talks over all stations willing to co-operate.

24-Sheet Poster Advertising.

This activity commenced in February, 1945, when fifty boardings were obtained and posters exhibited continuously thereon. At that time good poster sites were difficult to obtain and since then some of these sites have been cancelled and better ones substituted. Also as they became available new sites were added until at the end of 1946 ninety-three sites were in continuous use.

From February, 1945, to December, 1946, the following 24-sheet posters have been produced and exhibited:—"Shadow Over Australia" (V.D.), "Control of V.D.," "Nutrition," "Diphtheria Strikes One in Nine" and "Loaded Dice" (V.D.).

Months News Sheet.

Free press and radio publicity, and the free screening of health films in theatres, together with the distribution of pamphlets, and staging of window displays and health exhibits at country shows, with the co-operation of the local council, continue to offer the best opportunities for health education of the public on a goodwill basis. Other fields are closed to us unless and until substantial grants can be made annually for the purpose. This work can be greatly extended, however, when more staff can be made available, provided funds are sufficient to maintain supplies of material. It could also be stimulated by the issue of a monthly sheet on Health Education for distribution to local authorities, newspapers, broadcasting stations and organisations and public bodies interested in health as is now done in Queensland. The idea has often been explored here but so far it has not been possible to undertake it.

Window Displays.

With the provision of adequate funds it has been possible to build up a considerable and varied stock of window displays. These are of two types, major and minor. The major displays are full-size complete units originally obtained for important windows in big Sydney stores during Health Weeks. The minor displays are made up of miscellaneous display material and posters and being on a smaller scale and flexible, are suited to indows in suburban and country stores. Wherever it has been possible to obtain the free use of windows, the Department's Window Display Contractors have staged these displays, generally for the period of one month. Some municipal councils have co-operated in obtaining the free use of windows in their districts. Lighting restrictions have considerably handicapped our efforts to make effective window displays.

With the co-operation of the councils, displays have also been staged at country shows with excellent results. It is hoped to build up this activity as opportunity offers by manufacture of portable exhibits which will fit into crates for transportation.

Films.

From time to time additions were made to our library of 35 mm. standard size films and 16 mm. sub-standard films.

At the end of 1946 the 16 mm. library contained seventy-two positive prints of which sixty-six are different titles. The 35 mm. library contained fifty positive prints of which twenty-four are different titles.

At the beginning of April, 1946, a qualified projectionist was appointed to the staff of the Publicity Branch. It was then possible to conduct an enlarged number of screenings of 16 mm. films. Screening health films has been an activity of the Branch since 1927 when a portable 35 mm. projector was purchased for showing silent films, for which purpose a number were purchased overseas and in 1928 we commenced making 35 mm. documentary health films, thus pioneering this activity in Australia. In 1939 the first complete sound 16 mm. equipment was purchased. The branch now possesses three complete equipments, one of which is stationed permanently at the Newcastle office.

During 1946 sixty 16 mm. screenings were given. In addition, a twelve-hour daily programme was screened at the Town Hall for four days during Health Week. The total audience for these screenings was 23,000 people who saw 305 films.

As from the 1st October, 1946, the Department entered into an agreement with the Motion Picture Exhibitors, whereby we would discontinue our practice of arranging publicly advertised screenings of 16 mm. films in public halls in competition with local theatres. These films can, however, still be screened under the sponsorship of any organisation and the theatres are also co-operating by arranging matinees and shows on off nights. In return, the exhibitors agreed each month to release for screening in all theatres in New South Wales, health shorts to be produced by the Department.

There will be no charge to the Department for this service, other than the cost of supplying the prints. The Department is now actively engaged in preparing a schedule of film releases to take advantage of this valuable arrangement.

Until the above agreement was made 35 mm. films were circulated to councils, who arranged screenings with their local exhibitors, but they were principally used at special matinees for school children. For example, between 1st April, 1946, and 31st December, 1946, there were thirty screenings of this nature which were seen by a total audience of 20,000. In view of the agreement our library of 35 mm. films will no longer be circulated to councils except where special films are requested as part of a local campaign, e.g., diphtheria immunization, rat control, etc.

In 1943 the Department produced a ten minute 35 mm. film "Poisoned Dagger," on the control of the aedes aegypti mosquito. Fourteen copies of this film were made available for circulation to picture theatres and were widely screened in the north and west as part of the campaign against dengue fever.

Slides.

In 1943 the Department produced 580 slides on dengue fever and droplet infection. Through the public-spirited co-operation of the firms controlling screen slide advertising these were screened throughout the State at no cost to the Department.

Quantities of slides on whooping cough, diphtheria immunization, rat control and baby welfare have also been produced and loaned to councils who arrange exhibitions at their local theatres.

Pamphlets.

Pamphlet distribution has shown an enormous increase over the period 1941-46. With the provision of funds it has been possible not only to increase the number of pamphlets printed, but also to improve their quality and appeal. Colour and illustrations as well as attractive lay-outs have increased the demand. Extension of health education methods to the field of paid advertising has again increased the demand. In press, radio and poster advertisements we have drawn attention to the fact that various publications have been available. Thus in the case of the pamphlet "Food and Nutrition" over six thousand individual applications were received from the public after it had been offered in press advertisements.

Apart from the general public, the pamphlets find ready distribution to schools, factories, organizations, doctors, hospitals, councils and shires, baby health centres, etc.

The Department continues to issue the mothercraft book, "Our Babies," which was compiled in this branch in 1930-31, and has now passed through fifteen editions, over 600,000 copies having been distributed mainly through baby health centres.

The number of pamphlets issued was steadily increased until by the end of 1946 the Department was distributing thirty-five of its own publications as well as fourteen by the School Medical Service Branch. In addition, the three health week books published yearly by the Health Week Council, two pamphlets by the Australian Dental Association, nine by the Commonwealth Health Department and two by the New South Wales Department of Agriculture were distributed.

In 1946 which was the peak year, over half a million pamphlets were distributed. Appended is a complete list of the Department's pamphlets, available for distribution.

Posters.

Between 1941-46 new posters and reprints of previous successful ones were obtained not only in the standard sizes, but in smaller sizes for particular purposes. At the end of 1946 the Department was holding considerable stocks of twelve new 20-inch x 30-inch posters and one 30-inch x 40-inch poster. Small stocks were held of seventeen 20-inch x 30-inch posters issued prior to 1941 and two 30-inch x 40-inch posters. Five new posters were issued in the 15-inch x 20-inch size. These posters are supplied to councils and interested bodies and are exhibited in special frames in baby health centres and railway stations.

For exhibition in the trains and trams various stickers and cards have been produced. The designs for these have either been adapted from the larger posters or new designs created.

The posters are distributed mainly to schools, factories, organisations and baby health centres. In 1944 a special large distribution was made to schools through the co-operation of the Education Department as a link-up with the health week activities and to all important factories in the state in co-operation with the Factory Welfare Board. A noteworthy feature is that large quantities of posters have been sold at cost to governmental and other bodies in the other States and New Zealand. During 1946 over 22,000 posters were distributed.

Appended is a list of the posters at present distributed by the Department.

Health Weeks.

During 1941-46 the Department as before played a prominent part in the annual health week campaigns conducted by the Health Week Councils. The principal campaigns are those of Sydney and Newcastle. In addition, some local campaigns were held by country and suburban municipalities. The Department participated by providing a cash subsidy, by compiling the health week booklets, assisting to organise the campaigns, supplying departmental officers for lectures and broadcasts, providing large quantities of pamphlets, posters and window display material, and by arranging screenings of 16 mm. and 35 mm. films.

Special Events.

"World of Plenty" Screening.

In November, 1945, the Department arranged the first public screening in Australia of the brilliant nutrition film: "World of Plenty." It was screened for four days and nights at the Sydney Town Hall and for two weeks in the open-air at night at Phillip Park. The programmes lasted 1½ hours and the main feature was supported by excellent health films produced by official British and American bodies and by Metro Goldwyn Mayer. An admission charge of 1s. 6d. was made and the total attendance exceeded 20,000. This proved to be the most successful showing of documentary films yet undertaken in Australia and proved a most valuable health educational activity.

Health Week Exhibition.

A Health Week Exhibition was held in the Lower Sydney Town Hall in 1945 at which this Department exhibited a special display entitled: "Help Yourself to Health," which was subsequently exhibited at Cessnock, Newcastle, Maitland, Gunnedah, and Tamworth shows. The following year a more ambitious Health Week Exhibition was held in both the Upper and Lower Halls. The exhibition was a big success, with the public attendance being in the vicinity of 100,000.

The Department was one of the main exhibitors with its display entitled: "Fitness" (which cost over £2,000 to prepare), and also ran a 300-seat theatre in which documentary films on health were screened.

The "Fitness" exhibit consisted of ten bays on different features of the Department's work, as well as an Information Bureau and a gallery on venereal disease. The venereal disease gallery was the outstandingly successful feature of the exhibition. It was visited by over 14,000 people and was generally considered to be the most telling education exhibit on V.D. ever made in this State.

The fitness display and the V.D. gallery were subsequently exhibited at Wollongong, at the Royal Agricultural Show and at Newcastle. At the four locations it has been seen by a total of 393,000 people.

In the theatre, the programme screened was taken from over 39,000 feet of film. This was the largest and most comprehensive collection of documentary films ever made in this State. The theatre proved most popular. Over 15,000 people attended screenings and hundred were turned away.

Large quantities of the Department's pamphlets were distributed at the exhibition. In particular 10,000 of the V.D. booklets were given out to people passing through the V.D. gallery. Also 30,000 copies of a special health newspaper entitled, "Fitness" were obtained for the exhibition and 20,000 were distributed there.

Conclusion.

As has been described in the sections above it was possible to build up the health education work of the Department between 1941-46 to the point where a large, varied and balanced campaign was being carried out. This campaign was designed to educate the people of this State in promoting and safeguarding their own and their families' health. Such education is just as important if not more so, than any other form of popular education, on which large sums are expended annually. "A Healthy Mind in a Healthy Body," represents the ideal.

If the health information spread by the campaign resulted in the saving of only twenty lives that would be worth at least £40,000 to the State. That is estimating the value of one life conservatively at £2,000.

Australia needs increased population. If lives are saved and sickness prevented among the present population this is surely the soundest of ways to increase and improve our labour force.

In this State we spend millions endeavouring to make sick people well, but hitherto comparatively little in keeping them well. In modern health administration the emphasis is now on the preventive rather than the curative side of medicine. It is necessary now more than ever that the national health

should be maintained at a high standard. To maintain a high standard each individual must be aware of his own responsibility to safeguard his health. That is why it is necessary to educate the individual in the science of how to live.

Health education along popular lines is the only means by which people can be taught how best to promote good health and well being, both of body and mind. People too, must learn to use the knowledge and means of preventing disease that scientific research has made available, and the services and facilities which the Health Department has provided for them. The aim of the campaign of health education was to secure the interest and co-operation of every person in raising the standard of both personal and community health and thus ensuring the physical and mental well-being of the people of this land of ours.

List of Pamphlets Published by the Department of Public Health and Available for Distribution.

Our Babies, to educate mothers in pre-natal and post-natal care of themselves, and how to care for their babies.
Healthy Motherhood, to educate mothers in pre-natal care.
Anthrax.
Botulism. "Danger From Home Preserved Foods."
Cancer.
Cancer for Women.
Cerebro-spinal Meningitis.
Common Pests (Flies, Mosquitoes, Fleas, Bed Bugs, Scabies, Lice).
Dengue Fever.
Diabetes.
Diphtheria.
Diphtheria Immunization. "My Children are Protected" and "Here are the Facts."
Encephalitis Lethargica (Sleeping Sickness).
Food and Nutrition.
Food Poisoning.
Goitre.
German Measles.
Hookworm Disease.
Hydatid Disease.
Infantile Paralysis.
Influenza.
Making the Most of Country Produce (Recipes).
Measles.
Mumps.
Noise. "For Your Health and Happiness."
Rat Control. "Rats Carry Disease" and "Get Rid of the Rats."
Sumptuous Sandwiches for School Lunches.
Things you Should Know (First Aid, etc.).
Tuberculosis. "Can You Tell Which of These Persons Have T.B.?"
Typhus.
Venereal Disease.

Posters.

Size	Subject.
Size 30 in. x 40 in.—	
Things You Should Know.	First Aid, etc.
Size 20 in. x 30 in.—	
Don't be a Litterbug.	Sanitation.
They Lived Happily.	V.D., Produced by the Health Week Council.
Venereal Disease is a Killer.	V.D., Produced by the Health Week Council.
Enemy No. 1.	Fly control.
Don't Spit.	Hygiene.
Safe Milk for Your Child.	Hygiene.
Cleanliness Repels Disease.	Hygiene.
Whooping Cough.	
A Balanced Lunch.	Nutrition.
Prevent T.B.	
Do You Want Your Child to Suffer.	Diphtheria Immunization.
Size 19 in. x 24 in.—	
Make Sure, Mummy.	Hygiene.
Size 15 in. x 20 in.—	
Flies Have Dirty Feet.	Fly Control.
Dengue Fever.	
Cover Up Each Cough and Sneeze.	Droplet infection.
It's The First Year That Counts.	Baby Welfare.
Right Way to Cook Greens.	Nutrition.
Balance Your Diet.	Nutrition.
Keep Your Homes Clean.	Rat Control.
Stop the Rat Invasion.	Rat Control.
For Your Protection.	V.D.

DEPARTMENT OF PUBLIC HEALTH—NUTRITION

SECTION—1942-46.

By E. O'BRIEN.

The Nutrition Section within the Department of Public Health came into being as a result of the appointment of a State Nutrition Committee for New South Wales in October, 1942.

Recognising the importance of nutrition in the field of preventive medicine the Minister for Health in October, 1942, appointed the following to constitute the State Nutrition Committee:—

Professor H. PRIESTLEY—Professor of Bio-Chemistry, University of Sydney (Chairman).

Dr. H. G. WALLACE—Deputy Director-General of Public Health.

Dr. G. CUTHBERT—Director of Maternal and Baby Welfare.

Miss J. WOODHILL—Chief Dietitian, Royal Prince Alfred Hospital—Representative of the National Council of Women.

Dr. A. E. MACHIN—Principal Medical Officer, Department of Education—As representative of that Department.

Professor E. S. WALLACE—Dean of the Faculty of Dentistry, Sydney University.

Mr. A. H. McDONALD—Chief of the Division of Plant Industry, Department of Agriculture—As representative of that Department.

The Committee was appointed for a period of three years. At the completion of this period the Minister and the Government asked that this important national work be continued and the Committee agreed to act for a further three years.

The functions of the Committee as set out under the terms of appointment are:—

- (1) To act as a means of liaison between the Minister for Health and the Australian Food Council, the Nutrition Committee of the National Health and Medical Research Council, the Nutrition Committees of other Australian States, and similar bodies within Australia or elsewhere.
- (2) To keep itself informed of the state of nutrition of the people of New South Wales, and, in particular, of the children of school and pre-school age, and to institute such inquiries and obtain such information in regard thereto as it may deem necessary and desirable.
- (3) To advise the Minister without delay in the case of any existing or anticipated lack or inadequacy of any essential foodstuff coming to its knowledge.
- (4) To keep itself informed regarding the wholesale and retail price of essential foods.
- (5) To disseminate for public information advice to housewives and others regarding nutrition, the composition of foodstuffs and preparation of dietaries, the means of purchasing food with due regard to economy and methods of preparing foods in the home.
- (6) To report to the Minister, at such times as it may think fit regarding any matter pertaining to the production, distribution, sale or consumption of any foodstuff.
- (7) To elect annually from amongst its members (a) a chairman, (b) a deputy chairman, (c) an executive composed of not less than three members including the chairman, and to elect from time to time from among its members such sub-committees as it may deem necessary.
- (8) The Committee may co-opt to the Committee, or to any of its sub-committees, for such period as it deems advisable, any person whom it considers suitably qualified to assist the Committee or sub-committee.
- (9) To present to the Minister, as soon as practicable after the thirtieth day of June in each year, a report of its activities during the twelve months immediately preceding, together with any observations or recommendations in relation thereto which it may think fit to make.
- (10) Generally, to conduct such inquiries into human nutrition as are considered necessary by the Committee or by the Minister and to formulate such plans and recommendations for the Minister's consideration, as it may consider desirable.

The Committee meets regularly; during the first term of office once a month and subsequently at regular two monthly intervals.

The work of the nutrition services within the Department is to an extent directed by the State Nutrition Committee, each member of which is an expert in his or her particular sphere, and the actual work is carried out by the departmental staff, the publicity being handled by the Publicity Branch of the Department. The work covers a wide field and includes publicity through broadcast talks, posters, pamphlets, leaflets, booklets and lectures (singly or in series).

From the beginning the Nutrition Committee's main consideration has been "to disseminate for public information advice to housewives and others regarding nutrition, the composition of foodstuffs, the preparation of dietaries, the means of purchasing food with due regard to economy and methods of preparing foods in the home." As a first step towards the dissemination of information and propaganda the Committee considered it essential that a Nutrition Section should be established within the Department of Public Health from which Section the public generally could seek advice and information on the subject of nutrition. Funds were made available and this section was set up within the Department. A trained dietitian was appointed to the staff early in 1944 and the personnel of the section consisted of the Secretary, State Nutrition Committee, a senior shorthand-typist and a trained dietitian. In April, 1946, two additional trained dietitians were appointed to the staff.

During the first year relations were established by the Committee with the Nutrition Committee of the National Health and Medical Research Council and the Committee assisted the Commonwealth Nutrition Committee in its publicity campaign by the distribution of pamphlets on nutrition.

Arrangements were made with responsible residents in a number of country towns to furnish monthly reports of shortages of essential foods. A copy of the information supplied was passed on to the Controller-General of Food at his request. The towns from which the reports were received were so selected as to fairly represent the country districts of the State and the reports indicated reasonably accurately the food position in the country districts generally. This arrangement continued until the end of the war years and the food position gradually returned to normal.

The Committee found the demand for trained dietitians was far greater than the supply and there appeared to be a reluctance on the part of science graduates to take up dietetics as a profession, the main reason being the financial outlay involved for an extra year. As a result of discussions initiated by the committee, financial assistance was arranged through the Hospitals Commission for the additional year of training, and is still being given.

During the second year 1943-44 contact was established with the Departments of Health in New Zealand and Canada, and is still being maintained. Through the New South Wales Official Secretary in London the Committee continues to receive particulars of the United Kingdom food supply, production and distribution plans.

The committee arranged a series of lectures on nutrition to groups from such organisations as the N.E.S., with its auxiliary services, C.U.S.A., St. John Ambulance and classes sponsored by other bodies. The lectures were given by the dietitian, members of the Dietetic Association of New South Wales and members of the Medical Women's Society who worked in co-operation with the committee.

Later, with the appointment of two additional dietitians early in 1946, the lectures were extended to country districts.

The committee strongly recommended that the Government should seriously consider the question of extending the free milk in schools scheme and strongly supported the Commonwealth Nutrition Committee's recommendation that the Commonwealth Government arrange for the free distribution of milk to expectant and nursing mothers and children up to two years. The committee is still pressing for the introduction of a scheme whereby milk will be supplied free or at a reduced cost to this group.

During 1944-45 particular interest was taken in the development of schemes for the supply of nutritious lunches for school children, and the nutrition section played an important part in this developmental work. Leaflets were prepared giving advice regarding the Oslo health lunch and the operation and equipping of a school lunch scheme. Talks were given to groups on the advantages to be gained from the establishment of a school canteen, and assistance has been given and is still being given to groups who are operating such schemes.

In July, 1945, a conference was arranged by the Parents & Citizens and Teachers Federations to stimulate interest in the establishment of school lunch schemes with gratifying results.

The committee took an active interest in this development and is represented on the School (Oslo) Lunch Advisory Committee which was appointed at the above conference to advise schools, groups of parents and others interested in the establishing and operating of school lunch schemes and to promote the growth of these schemes.

Activities of the Nutrition Section.—The dietitians' duties include the handling of all inquiries by telephone, personal visits or letters, relating to diet and food problems, the giving of lectures, on request to interested groups, and the preparation of facts and data for publicity.

Lectures.—Talks on nutrition, food values, school lunches and related subjects are given to interested groups such as Mothers' Clubs at schools, Kindergartens, Day Nurseries and Parents & Citizens' organisations. These may be in the form of a single lecture, or a series of lectures or as demonstrations.

On request, general advice is furnished and reports prepared on the food services in Child Welfare Homes, Church Homes and similar institutions.

Publicity.—Publicity material is prepared and distributed through newspaper articles and country broadcasting stations. Leaflets and pamphlets on food are prepared for publication by the Department.

The dietitians have co-operated with the Publicity Branch in the preparation of and the staffing of the nutrition section of the Department's exhibit for the Health and Recreation Exhibition during Health Week.

Country Visits.—During 1946 dietitians visited country districts throughout New South Wales to disseminate knowledge on nutrition. The general procedure was to spend several days in each town and give lectures to the general public and talks to local organisations such as Red Cross Society, Country Women's Association, mothers attending Baby Health Centres and Rotary Clubs. Talks were also given to school children both in primary and super primary groups.

The dietitians have attended conferences of Agricultural Bureaux and Junior Farmer Clubs in many districts and given talks and demonstrations on some aspect of food to the Women's Sessions.

SECTION I.

C. DIVISION OF MATERNAL AND BABY WELFARE.

Report for the Years 1941-1946, Inclusive.

DIRECTOR: DR. GRACE J. CUTHBERT, M.B., Ch.M., M.R.C.O.G.

PART I.—MATERNAL WELFARE.

Pre-Natal Clinics.

The departmental pre-natal clinics were first opened in 1929 to supplement those in operation in the Metropolitan Obstetric Hospitals. The marked increase in attendances in the last five years indicates a growing appreciation of the importance of regular pre-natal supervision.

Patients attending the departmental pre-natal clinics are those booked at the Metropolitan Obstetric Hospitals and those referred by midwives or by letter from private practitioners. Cases from the departmental clinics requiring special treatment are referred to the hospitals concerned. Midwives are obliged under the Nurses Registration Act to arrange for medical advice in cases of abnormality; this service is therefore a great benefit to the midwives in the districts concerned.

Every mother is given a card on which is recorded at every visit an abbreviated history of her pregnancy. She takes this card with her to the hospital at the time of her confinement. In addition to the medical record for the use of the hospital, the card helps to assure regularity of attendance by the mother as the dates of each visit are noted for her in advance. If she fails to attend on this date which is entered in the attendance book at the centre, one of the Baby Health Centre Nurses calls at her home.

Two of the most useful sources of education in emphasising the need for regular pre-natal supervision have proved to be the film "Modern Motherhood" and the Department's free booklet, "Healthy Motherhood." The latter is used by most obstetric specialists, and the majority of general medical practitioners and all public obstetric hospitals in New South Wales.

During 1941 and 1942 weekly clinics were conducted at Parramatta, Manly and Campsie by practising obstetricians paid by the Department. The other six clinics, the weekly evening clinic at Newtown, the fortnightly clinics at Hornsby, Hurstville, Mascot and Balmain, and the monthly clinic at Rockdale were supervised by the Director of Maternal and Baby Welfare.

The increasing attendances at the pre-natal clinics during 1941-42 and the early part of 1943 made a further appointment to the medical staff of the Division of Maternal and Baby Welfare necessary.

In May, 1943, an Assistant Medical Officer was appointed to conduct the medical services of the nine departmental pre-natal clinics. Dr. N. P. Banks began her duties in June, 1943.

The appointment of an Assistant Medical Officer made possible the introduction of weekly supervision at all departmental clinics. The Balmain clinic was closed in 1943 because of the few attendances at that centre. The establishment of the King George V Hospital made the continuation of the Newtown Clinic unnecessary and it was closed in 1946.

A bi-weekly clinic became necessary at Manly in November, 1943, and at Hurstville in February, 1944.

The attendances at the clinics from 1941-46 were:

1941, 4,282; 1942, 3,434; 1943, 4,843; 1944, 7,542; 1945, 8,316; 1946, 10,352.

The decrease in 1942 is explained by the emergency war condition when Australia was threatened with invasion and many mothers and expectant mothers moved out from the metropolitan areas.

Scheme for the Reduction of Maternal Mortality.

The Special Medical Committee investigating Maternal Mortality in the metropolitan area includes the Director-General of Public Health, the Emeritus Professor and the Professor of Obstetrics at the University of Sydney, the senior Honorary Medical Officers of each of the two student teaching hospitals, a General Practitioner appointed by the N.S.W. Branch of the British Medical Association and the Director of Maternal and Baby Welfare; the latter is the medical secretary of the Committee.

The co-operation of the Medical Superintendents of the Metropolitan Obstetric Hospitals and medical practitioners in private practice has been greatly appreciated by the Committee. Questionnaires, which set out to furnish a detailed and accurate case history are sent to the public obstetric hospitals shortly after the occurrence of each maternal death. These questionnaires are also sent to the private practitioners and consultants concerned and thus a complete history of the case is obtained. In this way the Committee endeavours to assess accurately the avoidable factors, if any, and the responsibility for same in each maternal death and thus achieve the object of reducing maternal mortality.

Consultant Service.

Since the scheme came into operation in 1939 the services of Obstetric Consultants who have agreed to receive a reduced fee from the Department have been available for all patients who are unable to meet a specialist's fee. This service has relieved the relatives of the patient of unnecessary anxiety and the Medical Practitioner no longer hesitates to call a consultant when necessary. The reluctance of the medical practitioner to call a consultant because it may be feared that there is an implied criticism of lack of skill is also disappearing since the inauguration of this service. It is recognised by all concerned that successful obstetrics is based on the team work between the patient, her relatives, the nurse, the doctor, and the consultant, and that there is no reflection on the capacity or efficiency of the doctor in charge of the case when a consultant is called.

The consultant service is, however, not frequently used because fewer mothers are confined in their own home, and those in the obstetric hospitals are provided with a specialist service when necessary.

Metropolitan Blood Transfusion Service.

The decrease in maternal deaths from haemorrhage is chiefly due to the mobile blood transfusion service as it is considered that each transfusion given at the bedside of a patient is potentially a life saved.

This service is available to any medical practitioner at any hour of the day or night. The original unit was stationed at the Women's Hospital, Crown-street. During 1945 other units were established at Royal Prince Alfred Hospital, North Shore Hospital and the Royal Hospital for Women, Paddington.

A resident medical officer, and a trained nurse with specially devised equipment are available at each of the above hospitals and proceed to the patient's home or to the private hospital when called. The Department provides the equipment, cost of transport, and a small honorarium, but it is fully appreciative of the services rendered by the doctor and nurse, and by the hospitals in making their services available, a service which is a great contribution to the saving of mothers' lives and to the improvement of obstetric practice.

Originally blood donors were paid by the Department and were on call at all times, but this system has now been superseded by the provision of blood by the Red Cross Transfusion Service and the transporting of the blood with the medical officer and nurse to the mother.

In 1942 the Special Medical Committee, through a circular issued by the Department pointed out to medical practitioners the importance of early blood transfusion and that from the case histories of maternal deaths, it appeared that the administration of a blood transfusion in many cases would have prevented death.

Five Year Survey.

As 1944 marked the sixth year of operation of the Scheme for the Reduction of Maternal Mortality, the Committee decided to make a five year survey of its investigations. The survey, when complete, was presented at a meeting of the Section of Obstetrics and Gynaecology of the B.M.A., and was subsequently published in the Australian Medical Journal on 30th December, 1944. The interest in its findings was so widespread that a large number of reprints of the report in the A.M.J. were obtained by the Department for distribution.

Year.	Meetings of Committee.	Number of Consultants Called.	Number of Blood Transfusions.
1941	7	12	20
1942	7	10	13
1943	10	11	28
1944	12	12	30
1945	9	10	38
1946	7	6	26

Physiotherapy in Pregnancy and the Puerperium.

Under the supervision of qualified physiotherapists pre-natal and post-natal exercises are a routine at the Royal Hospital for Women; and post-natal exercises are routine procedure at the Women's Hospital, Royal North Shore and King George V and Ryde District Hospital. Medical officers at the Departmental clinics have observed that mothers who have attended these hospitals have received considerable benefit from these exer-

cises. The post-natal examination reveals that the mothers who have had post-natal exercises less frequently develop gynaecological abnormalities such as retroversion, cystocele, rectocele, and the like. Moreover, their abdominal muscles usually regain normal tone and correct posture is resumed.

At the Metropolitan Obstetric Hospitals where this procedure has been instituted, medical and nursing staff report that the mothers express their appreciation of the sense of well being which the exercises produce and of the regaining of their normal figure.

The New South Wales Branch of the Australian Physiotherapy Association has introduced a sound routine of training in this subject at the Royal Hospital for Women under Miss Nancy Love with special lectures by Emeritus Professor Windeyer.

The Departmental film, "Physiotherapy in Pregnancy and the Puerperium" continues to be used for the teaching of medical and physiotherapy students and for the training of nurses. Copies are used for training physiotherapy students in other States.

Control of Puerperal Infection.

To protect the mother from infection which might prove fatal, every effort is made by this Department to prevent the spread of puerperal sepsis. Control is effected by the administration of the Nurses Registration Act, 1924-1932. This Act requires nurses to notify any cases of puerperal pyrexia occurring in their practice. It prohibits their attendance on any other case while attending a patient with puerperal infection and it makes provision for the examination of their methods in the management of their cases. The Public Health Act 1902-1944, under which puerperal infection is a notifiable disease and the Private Hospitals Act, 1902, provide further legislation for the prevention and control of puerperal infection.

Puerperal infection is "any inflammatory condition of the genital tract and its adnexa" occurring in the puerperium. It includes septicaemia, supraemia, parametritis, cervicitis, pelvic peritonitis and thrombophlebitis. These conditions may be caused by haemolytic streptococci and other virulent organisms. While the latter infections may be serious, even fatal, and are treated as infectious diseases, their infectivity is not as great as those cases due to the Group A haemolytic streptococci which may be conveyed from the nose and throat of anyone suffering from recent infection or even by healthy carriers.

A pamphlet has been prepared setting out the method of implementation of the legislation for the control of puerperal infection.

This has been widely distributed to hospitals and medical practitioners and copies are available at this Department, and are issued upon request.

The Regulations of the various Acts are designed to prevent the occurrence of puerperal sepsis, particularly those for nurses relating to the wearing of masks, the management of the case, etc. Each case of infection occurring is investigated by bacteriological examination. Further action is determined by those results, the dual object being to protect midwifery patients from further possibility of infection and to avoid any delay or difficulty in nursing and medical supervision.

When a case of pyrexia of puerperal origin is notified, arrangements are made immediately for bacteriological examination. A medical certificate is required to exclude obvious sources of infection such as paronychia, etc., and in addition swabbings are taken from the nose and throat of the nurse in charge of the case and lochial swabbings (not cervical) of the mother are also examined.

It is gratifying to observe that in all metropolitan obstetric hospitals and in most private hospitals routine lochial swabbings are examined bacteriologically when the patient develops a pyrexia of 100.4 on the first occasion, thus simplifying all procedures if the patient develops a second rise of temperature, which is notifiable under the Nurses Registration Act, 1924-1932. Quick co-operation is achieved in the matter of swabbings and their results from the majority of country practitioners.

Under the Regulations of the Private Hospitals' Act the licensee of a private hospital is prevented from admitting any other obstetric case until the requirements concerning transfer of patient and fumigation are fulfilled.

Cases notified from 1941 to 1946:—

1941—131 cases of puerperal pyrexia were notified under the Nurses Registration Act of which sixty were due to puerperal infection and seventy-one to other causes.

1942—242 cases were notified to local authorities of which twenty-eight were from the country; of the 214 metropolitan cases, 133 were due to abortal sepsis and eighty-one to sepsis following a viable child.

106 cases of pyrexia were notified under the Nurses' Registration Act; of these thirty-eight were of puerperal origin and eighteen were from private hospitals.

1943—224 cases were notified to local authorities of which ninety-five followed confinements of mothers where the period of gestation was later than twenty-eight weeks; the remainder were infectious following abortal sepsis.

Under the Nurses Registration Act midwifery nurses notified eighty-one cases of puerperal pyrexia; thirty-three from private hospitals, forty-three from public hospitals and five from home confinement. Of the eighty-one cases thirty-five were considered to be due to infection of puerperal origin.

1944—203 cases notified to local authorities of which 171 were in the city and thirty-two in the country. Of the 171 in the metropolitan area, 113 were abortal and fifty-eight followed labour; in the country two were abortal and thirty followed labour.

Sixty-six cases were notified under the Nurses Registration Act of these forty-six were of puerperal origin and eighteen occurred in private hospitals and two in home confinements.

1945—151 cases were notified to the local authorities. Of these, 102 were due to abortal sepsis (100 in the metropolitan area and two in the country) and forty-nine followed confinement (twenty-five in the city and twenty-four in the country).

The distribution of these cases was:—

	Abortal Sepsis.	Following confinement.
Private hospitals	7	15
Public hospitals	95	34

Under the Nurses Registration Act, forty-three cases of pyrexia were notified (twenty-eight in the city and fifteen in the country).

The distribution of these cases was:—

	Puerperal origin	Non-puerperal notifiable.
non-notifiable.		
Private hospitals	11	3
Public hospitals	18	11

1946—185 cases were notified to the local authorities. Of these, 133 were due to abortal sepsis (131 in the metropolitan area and two in the country) and fifty-two following confinement (twenty-four in the city and 28 in the country).

The distribution of these cases was:—

	Abortal Sepsis.	Following confinement.
Private hospitals	3	17
Public hospitals	130	35

Under the Nurses Registration Act, thirty-four cases of pyrexia were notified (thirteen in the city and twenty-one in the country).

The distribution of these cases was:—

	Puerperal origin	Non-puerperal non-notifiable.
non-notifiable.		
Private hospitals	8	4
Public hospitals	15	7

Stillbirths.

Stillbirths have been registered compulsorily under the provisions of the Registration of Births, Deaths, and Marriages Act since 1934, and under the Nurses Registration Act, 1924-1932, midwifery nurses must notify stillbirth occurring in their practice, together with certain information concerning the labour and the period of gestation and the condition of the infant.

In 1942 a survey was begun of the current notification. Seven hundred and forty-eight notifications were received through the Nurses' Registration Board and it was found that 29 per cent. of the stillbirths were full time pregnancies with normal labours and vertex presentation; 64 per cent. were full time pregnancies with complicated labour and malpresentations.

Vital Statistics.

The live birth rate for Australia for 1946 was 23.62 per 1,000 of mean population: the New South Wales rate was 22.83. The number of births in Australia for 1946 was 176,379 and in New South Wales 67,247 and the still births in this State in 1946 numbered 1,547 which is 22.49 per 1,000 total births (live and still).

TABLE I.
LIVE BIRTHS AND STILL BIRTHS.

Year.	Total Births.	Live Births.	Live Births Rate per 1,000 of population.	Still births.	Still births per cent. of Total.
METROPOLITAN AREA (Statistical Metropolis).					
1935	17,495	16,907	13.60	588	full 3.35
1936	18,341	17,759	14.23	582	year. 3.17
1937	18,748	18,158	14.48	590	3.15
1938	19,150	18,559	14.73	591	3.09
1939	19,885	19,223	15.24	562	2.83
1940	20,515	19,942	15.53	573	2.79
1941	23,019	22,366	17.06	653	2.83
1942	23,848	23,220	17.26	628	2.63
1943	27,700	26,989	19.52	711	2.57
1944	29,014	28,318	19.96	696	2.4
1945	30,230	29,501	20.42	729	2.41
1946	32,467	31,769	21.68	698	2.15
REMAINDER OF STATE.					
1935	28,582	27,769	19.80	813	full 2.84
1936	29,271	28,434	20.02	737	year. 2.86
1937	30,201	29,339	20.35	862	2.85
1938	29,642	28,760	19.66	882	2.98
1939	29,478	28,680	19.34	798	2.71
1940	30,209	29,440	19.70	769	2.18
1941	30,174	29,363	19.71	811	2.69
1942	30,210	29,427	19.81	783	2.59
1943	31,030	30,276	20.53	754	2.43
1944	32,109	31,294	21.32	815	2.54
1945	32,972	32,161	21.83	811	2.46
1946	36,327	35,478	23.97	849	2.34
NEW SOUTH WALES.					
1935	46,077	44,676	16.88	1,401	3.04
1936	47,612	46,193	17.31	1,419	2.98
1937	48,949	47,497	17.62	1,452	2.97
1938	48,792	47,319	17.38	1,473	3.02
1939	49,363	48,003	17.45	1,360	2.75
1940	50,724	49,382	17.77	1,342	2.65
1941	53,193	51,729	18.47	1,464	2.75
1942	54,058	52,647	18.59	1,411	2.61
1943	58,730	57,265	20.04	1,465	2.49
1944	61,123	59,612	20.65	1,511	2.47
1945	63,202	61,662	21.13	1,540	2.44
1946	68,794	67,247	22.83	1,547	2.25

The loss of the mothers' lives per 1,000 live births is expressed as the maternal mortality rate. The rate for Australia in 1946 was 1.85, for New South Wales 1.65, this figure includes deaths from criminal abortion; exclusive of criminal abortion, the figure for Australia was 1.67 and for New South

Wales 1.49 in 1946. Table II (below) indicates figures including acute yellow atrophy. For New South Wales this is again the lowest maternal mortality rate recorded (exclusive of criminal abortion) and shows a decline since 1935 when it was 5.15.

TABLE II.
TOTAL MATERNAL MORTALITY RATES.

	1941.	1942.	1943.	1944.	1945.	1946.
New South Wales—						
Including criminal abortion	4.04	3.97	3.42	3.12	2.25	1.65
Excluding criminal abortion	3.42	3.27	2.95	2.60	1.97	1.49
Australia—						
Including criminal abortion .....	...	3.59	3.33	2.85	2.15	1.85
Excluding criminal abortion .....	...	2.96	2.81	2.45	1.89	1.67

To obtain any idea of the reasons for this reduction it is necessary to study the figures for the various causes of maternal deaths. These are indicated in the Table III and graph.

TABLE III.
MATERNAL MORTALITY.

Causes of Death.	1941.		1942.		1943.		1944.		1945.		1946.	
	No.	Rate per 1,000 Live Births.										
METROPOLITAN AREA (Statistical Metropolis).												
Accidents of Pregnancy	5	·22	10	·43	6	·22	4	·14	7	·24	4	·13
Puerperal Haemorrhage	9	·40	7	·30	7	·26	12	·42	6	·20	3	·09
Puerperal Septicaemia	9	·40	14	·60	11	·41	7	·25	4	·14	1	·03
Post Abortive Septicaemia	2	·09	6	·26	8	·30	7	·25	3	·10	2	·06
Thrombophlebitis, Embolism, sudden death	10	·45	4	·17	6	·22	9	·32	4	·14	3	·09
Albuminuria and Eclampsia	17	·76	10	·43	16	·60	25	·88	14	·47	13	·41
Other Casualties of Childbirth	15	·67	10	·43	12	·44	10	·35	8	·27	7	·22
Total	67	2·99	61	2·62	66	2·45	74	2·61	46	1·56	33	1·03
Criminal Abortion	21	·94	25	1·08	17	·63	18	·64	14	·47	5	·16
Grand Total	88	3·93	86	3·70	83	3·08	92	3·25	60	2·03	38	1·19
REMAINDER OF STATE.												
Accidents of Pregnancy	16	·54	17	·58	11	·36	11	·35	14	·44	12	·34
Puerperal Haemorrhage	14	·48	17	·58	23	·76	11	·35	11	·34	10	·28
Puerperal Septicaemia	11	·37	6	·20	13	·43	6	·19	3	·09	7	·20
Post Abortive Septicaemia	7	·24	10	·34	13	·43	6	·19	3	·09	...	...
Thrombophlebitis, Embolism, sudden death	14	·48	9	·30	13	·43	14	·45	9	·28	8	·23
Albuminuria and Eclampsia	32	1·12	35	1·19	18	·60	29	·93	25	·78	25	·70
Other Casualties of Childbirth	15	·51	17	·58	12	·39	4	·13	11	·34	5	·14
Total	100	3·74	111	3·77	103	3·40	81	2·59	76	2·36	67	1·89
Criminal Abortion	11	·38	12	·41	10	·33	13	·41	3	·10	6	·17
Grand Total	121	4·12	123	4·18	113	3·73	94	2·94	79	2·46	73	2·06
NEW SOUTH WALES.												
Accidents of Pregnancy	21	·41	27	·51	17	·30	15	·25	21	·34	16	·24
Puerperal Haemorrhage	23	·44	24	·46	30	·52	23	·39	17	·27	13	·19
Puerperal Septicaemia	20	·39	20	·38	24	·42	13	·22	7	·11	8	·12
Post Abortive Septicaemia	9	·17	16	·30	21	·37	13	·22	6	·10	2	·03
Thrombophlebitis, Embolism, sudden death	24	·46	13	·25	19	·33	23	·39	13	·21	11	·16
Albuminuria and Eclampsia	50	·97	45	·86	34	·59	54	·90	39	·63	38	·57
Other Casualties of Childbirth	30	·58	27	·51	24	·42	14	·23	19	·31	12	·18
Total	177	3·42	172	3·27	169	2·95	155	2·60	122	1·97	100	1·49
Criminal Abortion	32	·62	37	·70	27	·47	31	·52	17	·28	11	·16
Grand Total	209	4·04	209	3·97	196	3·42	186	3·12	139	2·25	111	1·65

The major causes of maternal deaths are albuminuria and eclampsia, sepsis and haemorrhage. Deaths from sepsis after the birth of a viable child have shown a decrease since the introduction of the sulpha drugs and penicillin and this has been maintained. The Special Medical Committee investigating maternal mortality consider, as the result of their investigations, that bacteriological examination is not instituted sufficiently early in the majority of cases to ensure the exhibition of the most effective type of sulpha drug. The decrease in the mortality rate from this cause is certainly disappointing giving due consideration to the remarkable results which can be achieved by these new methods of chemotherapy.

The toxæmias, albuminuria and eclampsia, remain the largest group of causes of maternal deaths. Fulminating cases do occur but the major proportion of cases in this group could be prevented by careful pre-natal supervision and treatment. This means not only a high standard of medical care but the utmost co-operation from the mother and her relatives. Too frequently the mother fails to seek any pre-natal care and too frequently the relatives discourage her from rigidly following the advice given by the doctor. The loss of life from

this cause is a serious problem for those attempting to bring safety to maternity. Health education in the form of the booklet "Healthy Motherhood" and instruction to the increasing numbers attending the departmental clinics is assisting in some degree to make known to mothers their duty to themselves, their families and the nation in seeking pre-natal care. The metropolitan area figures support this claim that the departmental clinics are playing a part with their increasing attendances and propaganda value. In the remainder of the State the figure remains high.

Thrombophlebitis, embolism and sudden death are included in the deaths from puerperal infection in the International List of Causes of Death which came into use in Australia on 1st January, 1940. The incidence varies considerably and indicates no particular trend. Sepsis after abortion or miscarriage with no illegal qualification also is a variable figure.

Deaths from criminal abortion and their relation to maternal mortality and to deaths of all women in the child-bearing years are indicated in the graph and Table V.

TABLE IV.
MATERNAL MORTALITY.
Metropolitan Area, Remainder of State and Whole State.

Year.	Live Births.			Death from Puerperal Causes (excluding Criminal Abortion).			Maternal Mortality Rate per 1,000 Live Births (excluding Criminal Abortion).		
	Metropolitan Area.	Remainder of State.	State.	Metropolitan Area.	Remainder of State.	State.	Metropolitan Area.	Remainder of State.	State.
1935	16,907	27,769	44,676	74	156	230	4.38	5.62	5.15
1936	17,759	28,434	46,193	103	133	236	5.80	4.68	5.11
1937	18,158	29,339	47,497	83	115	198	4.57	3.92	4.17
1938	18,559	28,760	47,319	72	109	181	3.88	3.79	3.82
1939	19,323	28,680	48,003	59	103	162	3.05	3.59	3.38
1940	19,942	29,440	49,382	59	116	175	2.96	3.94	3.54
1941	22,336	29,363	51,729	67	110	177	2.99	3.74	3.42
1942	23,220	29,427	52,647	61	111	172	2.62	3.77	3.27
1943	26,989	30,276	57,265	66	103	169	2.45	3.40	2.95
1944	28,318	31,294	59,612	74	81	155	2.61	2.59	2.60
1945	29,501	32,161	61,662	46	76	122	1.56	2.36	1.97
1946	31,769	35,478	67,247	33	67	100	1.03	1.89	1.49

Note.—Total Puerperal Deaths on this page include Acute Yellow Atrophy of the liver from 1940 onwards.

TABLE V.
CRIMINAL ABORTION.
Metropolitan Area, Remainder of State and Whole State.

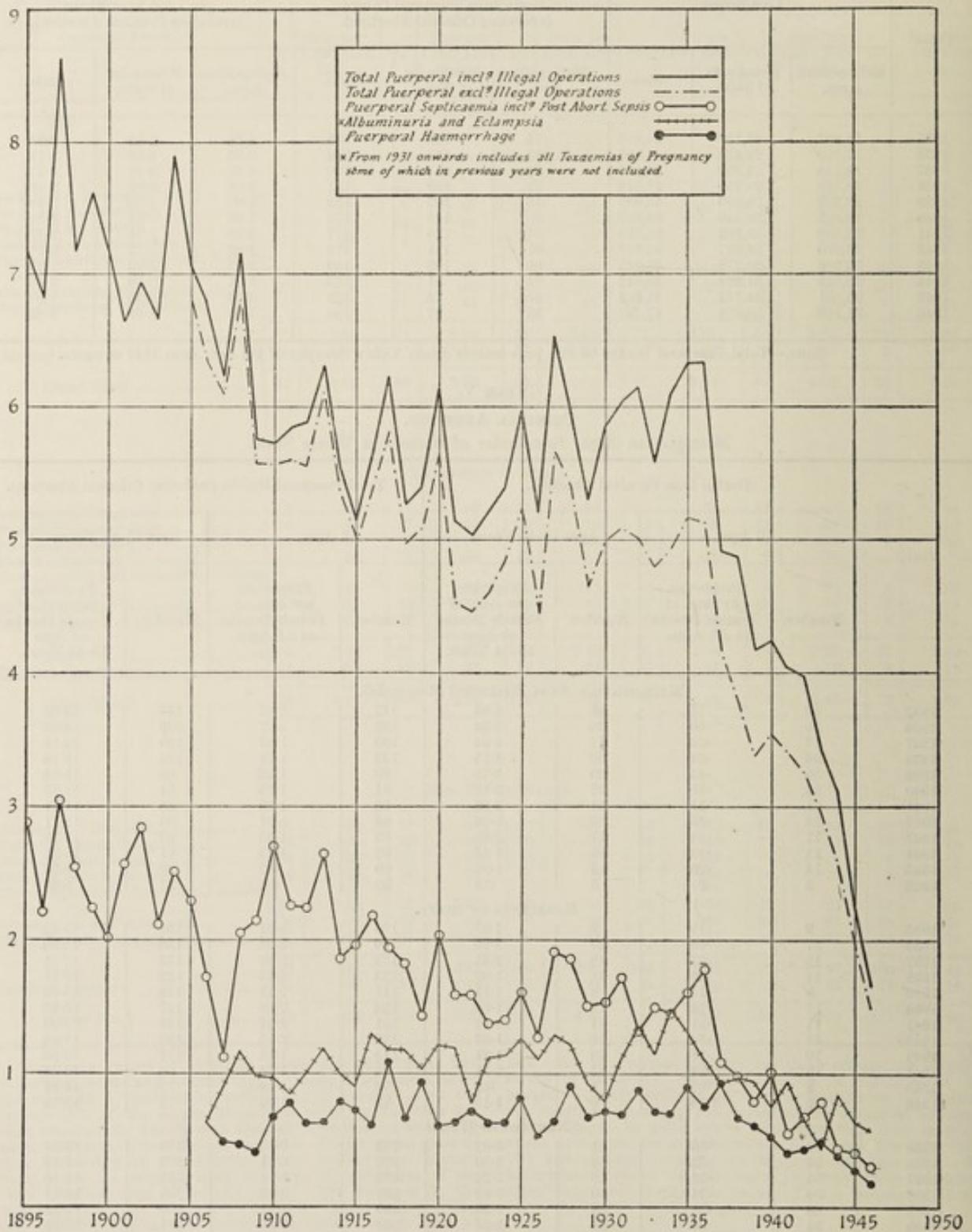
Year.	Deaths from Criminal Abortion.				Total Puerperal Deaths (including Criminal Abortion).			
	All Ages.		Ages 15-44 Years.		All Ages.		Ages 15-44 Years.	
	Number.	Proportion per cent. of Female Deaths at All Ages.	Number.	Proportion per cent. of Female Deaths at Ages 15-44 Years.	Number.	Proportion per cent. of Female Deaths at All Ages.	Number.	Proportion per cent. of Female Deaths at Ages 15-44 Years.
METROPOLITAN AREA (Statistical Metropolis).								
1935	43	.74	42	4.93	117	2.01	116	13.62
1936	29	.50	29	3.34	132	2.27	130	14.96
1937	17	.28	17	2.04	100	1.67	100	12.12
1938	36	.57	36	4.13	108	1.71	106	12.16
1939	30	.47	20	3.75	89	1.38	89	11.14
1940	22	.35	22	3.17	81	1.28	81	11.59
1941	21	.31	21	2.83	88	1.30	88	11.84
1942	25	.35	25	3.56	86	1.21	85	12.11
1943	17	.24	17	2.45	83	1.35	83	11.98
1944	18	.26	18	2.45	92	1.35	91	12.38
1945	14	.20	13	1.97	60	.87	59	8.95
1946	5	.07	5	.78	38	.53	37	5.80
REMAINDER OF STATE.								
1935	9	.19	9	1.07	165	3.41	164	19.55
1936	27	.55	27	3.26	160	3.24	158	19.08
1937	18	.37	18	2.41	133	2.72	133	17.78
1938	14	.28	14	1.87	123	2.44	122	16.31
1939	8	.15	8	1.14	111	2.11	110	15.62
1940	12	.24	12	1.85	128	2.58	127	19.63
1941	11	.21	11	1.57	121	2.27	119	17.00
1942	12	.21	12	1.67	123	2.18	122	17.06
1943	10	.18	10	1.41	113	1.98	112	15.82
1944	13	.24	13	2.11	94	1.76	94	15.28
1945	3	.06	3	.49	79	1.49	78	12.81
1946	6	1.10	6	1.10	73	1.34	73	13.39
NEW SOUTH WALES								
1935	52	.49	51	3.02	282	2.65	280	16.56
1936	56	.52	56	3.30	292	2.71	288	16.97
1937	35	.32	35	2.22	233	2.14	233	14.75
1938	50	.44	50	3.09	231	2.03	228	14.07
1939	38	.32	38	2.53	200	1.71	199	13.24
1940	34	.30	34	2.54	209	1.86	208	15.52
1941	32	.26	32	2.22	209	1.78	207	14.35
1942	37	.29	37	2.60	209	1.64	208	14.63
1943	27	.21	27	1.93	196	1.52	195	13.92
1944	31	.25	31	2.30	186	1.53	185	13.70
1945	17	.14	16	1.26	139	1.14	137	10.80
1946	11	.09	11	.93	111	.89	110	9.30

Note.—Total Puerperal Deaths on this page include Acute Yellow Atrophy of the liver from 1940 onwards.

The number and rate of deaths from criminal abortion per 1,000 live births have been greatly reduced since the introduction of the sulpha drugs and penicillin drugs in 1937 from 1.06 in 1938, to .16 in 1946. The problem of the reduction of these deaths is a complicated one implying medical, social economic and moral issues.

DEATHS DUE TO PUERPERAL CONDITION, NEW SOUTH WALES

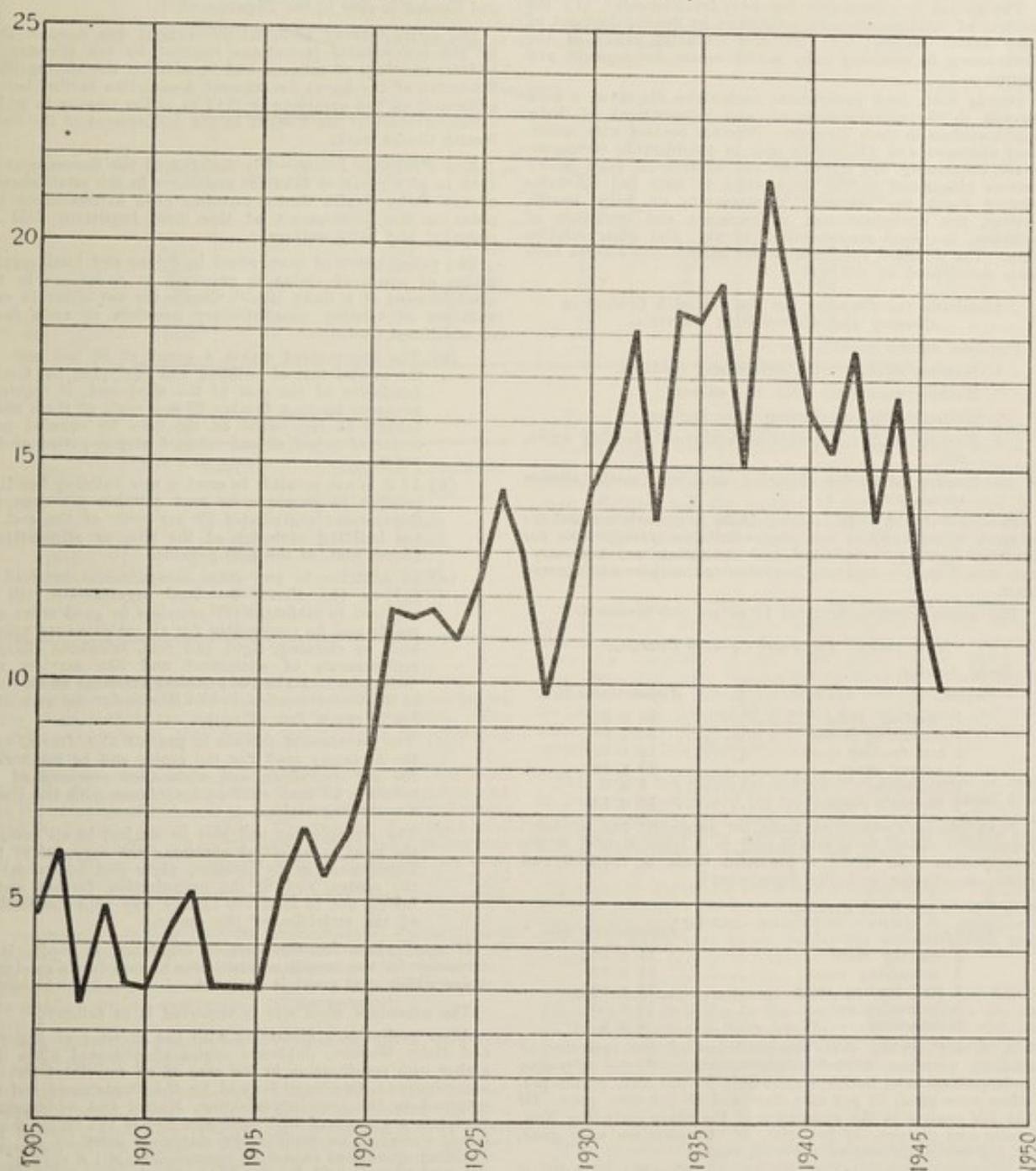
Death Rates from Certain Causes per 1,000 Live Births for the Years 1895-1946



Graph II

CRIMINAL ABORTIONS

Proportion per cent. of Total Maternal Mortality, 1905-1946



Graph 12

PART II.
INFANT WELFARE.

Baby Health Centres.

The period covered in the report 1941 to 1946 inclusive, being mainly war years, were extremely difficult ones for handling the volume of work in the baby health centres.

In spite of war-time restrictions and difficulties there was an increase in the number of centres opened, and particularly in the number of attendances at all centres.

The period is remarkable for two developments: (1) the interest of local government authorities in the development of baby health centres; (2) the new financial policy of the Government in assisting baby health centre development and extension.

During 1942, local government authorities displayed a keen interest in the establishment of, and improvement of, baby health centres in their districts. Personal contact with individual aldermen and officials as well as considerable correspondence concerning the standards and control of baby health centres culminated in the preparation of lists and schedules setting forth the standard requirements of baby health centres, the equipment and maintenance and condition of premises, the local responsibility, if any, and other relative data. The standard requirements for baby health centres have been determined as follows:—

*Standards for Premises for Baby Health Centres in
Country and Metropolitan Districts.*

Premises should provide for:—

1. Waiting mothers with babies and toddlers.
2. Mothers consulting with the nurses.
3. Mothers who are having test feeding.
4. Nursing staff for sterilizing equipment, heating water, etc.
5. Nursing staff for changing uniforms, meals, shower rooms, etc.

Provision should be made for parking perambulators and for a space where toddlers can play. Suitable arrangements for heating, lighting, ventilation and sanitation are necessary; this should include separate lavatories for mothers and nursing staff.

The accommodation required is as set out hereunder.

Metropolitan Areas and Country Districts.

A Daily Service.

<i>Rooms.</i>	<i>Approximate Size.</i>
1 waiting room	14 x 16
2 consulting rooms	14 x 12
1 test feeding room	12 x 12
1 nurses' room	10 x 10
Kitchenette	6 x 8
*1 Doctor's room	12 x 12

* (The doctor's consulting room for paediatric and pre-natal supervision should be provided only in a large district in the metropolitan area where a pre-natal clinic is required and after consultation with the department).

3 to 4 Days per Week Service.

<i>Rooms.</i>	<i>Approximate Size.</i>
1 waiting room	14 x 16
1 consulting room	14 x 12
1 test feeding room	12 x 12
1 nurses' room	10 x 10
Kitchenette	6 x 8

A survey showed that the condition of the majority of existing premises needed improvement. Of the fifty-nine metropolitan baby health centres only 30 per cent. of the premises were good, 22 per cent. fair and 48 per cent. poor. Of the 150 centres in the remainder of the State excluding Newcastle and district, 14 per cent. of the premises were good, 42 per cent. fair and 44 per cent. poor.

Standard requirements for premises and equipment, indicating the size and number of rooms according to whether the service provided by the centre was full- or part-time were adopted early in 1943 by the Department of Public Health following persistent inquiries from local government authorities in 1942 as to the requirements for baby health centres.

The Concord Municipal Council in 1943 built the first Baby Health Centre to these requirements, entirely at its own expense, and handed it over to the Department of Public Health, thus making history in the Infant Welfare Movement of this State.

In the same year Strathfield Municipal Council received from the Department of War Organization of Industry, permission to build, but Marriekville Council was refused because

of the existence of a centre in the district. In addition, 28 local councils in the metropolitan area negotiated with the Department during 1943 concerning the erection of new premises or the improvement of existing ones.

Strathfield's centre was opened in 1944, a modern Baby Health Centre built to a special design to fulfil all the requirements. The Strathfield Council provided the site, the building, furniture and equipment without any Government assistance and handed it over to the Department.

The active interest of Local Government was demonstrated by the innumerable invitations received by the Director to address meetings of councils and in addition the Metropolitan Executive of the Local Government Association invited her to address it on two occasions in 1942 as to the manner in which Local Government could assist in the development of the Baby Health Centre work.

New Financial Policy.—The decision of the Government in 1944 to give generous financial assistance in the establishment of new Baby Health Centre premises gave a tremendous impetus to the development of this most important field of maternal and baby welfare.

The policy provided that, where in future any local organisation of approved status is prepared to co-operate in the establishment of a Baby Health Centre for use either in substitution of existing unsatisfactory premises or as a fresh or additional Centre—

- (a) The Government makes a grant of 50 per cent. of the capital cost of building and equipping the Centre (exclusive of the cost of the site) and, if required, advances up to a further 25 per cent. of these costs, subject to repayment of the loan by equated payments of principal and interest over a period of ten years.
- (b) If it is not possible to erect a new building but it is possible to purchase or rent suitable premises, the Government contributes 50 per cent. of the cost of the building exclusive of the site, or alternatively, 25 per cent. of the rent payable.
- (c) In addition to any other commitments involved in (a) or (b) above, the local organisation will be required to maintain the premises in good order and repair and be responsible for all maintenance upkeep such as cleaning, light and fuel, telephone charges, replacements of equipment and like services and undertake to make the premises available at all times to the Department of Public Health for use as a baby health centre free of rent.
- (d) The Government intends to provide also, free of cost, the necessary staff for the centre and be responsible for any travelling and sustenance expenses of the members of such staff in accordance with the Public Service Regulations.
- (e) The arrangement will also be subject in all cases to the local organisation obtaining the approval of this Department as to location, plans and equipment of the centre, and to the organisation further undertaking not to interfere in any way with the conduct of the activities of the centre.

If application for Government assistance is made, it is necessary for the council or committee to complete a resolution under which such grant is accepted.

The procedure when site is approved is as follows:—

After preliminary discussion with the Director of Maternal and Baby Welfare, duplicate copies of proposed plans (together with specification in the case of an associated service) are required. One copy is held by the Department and one returned to the local organisation. Names and addresses of tenderers are required with estimates and if the lowest tender is not accepted, an explanatory statement must be attached. Building operations cannot be commenced until a copy of the endorsed plan is held by the local organisation and approval has been received for the tender accepted. The procedure in the purchase of equipment is as follows:—

Official standard lists of equipment are used as a basis of discussion and planning and all purchases of equipment are made through ordinary commercial channels.

Payment of 50 per cent. of the costs are made on production of all receipts for all articles on an approved list of proposed purchases which has been previously submitted.

While observing the standard requirements for adequate and proper relationships of rooms for the most efficient working conditions, external appearance of general design have varied widely. The combination of domestic and institutional architecture has been the objective.

BABY HEALTH CENTRES.

Year.	Number of Centres.	City.	Newcastle.	Country.	New Buildings.	Closed.	Re-opened.
1941	224	...	...	...	...	2	2
1942	230	59	21	150	...	2	...
1943	239	62	22	155	...	...	...
1944	247	65	23	159	...	1	...
1945	249	66	10*	173	4	3	...
1946	252	67	10*	175	11	...	...

* Includes City of Greater Newcastle only.

STAFF.

Year.	Nurse Inspectors.	Number of Nurses.	Seniors.	Juniors.	On Active Service.	Number of Relieving Nurses included in General Total.
1941	2	186	108	78	24	17
1942	2	195	111	84	26	18
1943	3	197	113	84	22	18
1944	3	208	126	82	21	18
1945	3	208	126	82	21	18
1946	3	240	132	108	1	21

ATTENDANCES.

Year.	Total.	Individual Attendance.
1941	967,015	82,246
1942	982,558	90,946
1943	1,051,593	93,977
1944	1,201,815	103,589
1945	1,246,135	123,364
1946	1,176,854	110,116

Survey re Attendances.—In 1941 a survey was made to discover how many mothers attend a baby health centre before they were visited by the baby health centre sisters. The survey was made on 1939 figures and provided the following results:—

Total birth registrations in N.S.W. were 51,729. The number of registrations obtained by the baby health centres was 39,616 of which 25,373 infants or 63.4 per cent. received attention at the baby health centre. The number of mothers who attended the centre before the nurse visited their homes was 15,494 or 61 per cent. compared with 9,878 or 38.9 per cent. who only attended after the nurse's visit. Of the total registrations obtained 15.2 per cent. or 6,058 were not visited.

Sustenance.—During 1943 the Department of Public Health assumed responsibility for the payment of sustenance to all nurses while away from their headquarters in the country. Previously this has been a cost against the local committee responsible for the maintenance of the premises.

Staff Lectures.—Routine staff lectures are given each year at least once a quarter.

Departmental Booklets.—The Departmental free booklet, "Healthy Motherhood," of which 50,000 are printed annually, continues to be a most valuable publication and is used by all the metropolitan obstetric hospitals, the majority of obstetric specialists and general practitioners.

Its chief aim is to raise the standard of pre-natal care by encouraging the mother to co-operate with her doctor, hospital or clinic by following implicitly the instructions given, by attending regularly, and by paying particular attention to diet during pregnancy.

The pamphlet "Your Baby and You," was prepared in collaboration with the Rationing Commission and is issued in all cases with pre-natal coupons.

In addition to this valuable instruction in pre-natal care, "Our Babies," another free booklet from the Department of which 25,000 are printed annually, has been substantially improved, particularly in relation to the diet chart for infants and pre-school children.

When emergency conditions occur, special pamphlets are produced by the Department for the information of mothers. When oranges were withdrawn from the civilian market in 1944 and a serious outbreak of scurvy threatened, 50,000 pamphlets on the subjects were distributed. The propaganda was most effective and the number of cases were reduced to a minimum in a very short period. During the milk strike in 1944, 14,000 pamphlets were issued in the metropolitan area to assist mothers in the rapid change over from cow's milk to dried milk in the feeding of babies.

Country Women's Association.—The Director expresses her appreciation of the valuable support given by the Country Women's Association to the baby health centres, especially since the inception of the 1944 policy under which the local authority (very frequently the Country Women's Association in country areas) provides the site for the centre and 50 per cent. of the cost of erection and equipment, and maintains the centre when established. Nursing service is provided completely by this Department.

This policy has called for considerable expenditure of funds by country branches, and the willingness with which such financial responsibility has been undertaken by the association, has done a tremendous amount towards furthering the baby health centre service throughout the State.

Tribute to Nurse Inspectors and Nursing Staff.—The Director pays tribute to the loyal and co-operative manner in which the nurse inspectors have assisted in meeting the complicated situations which have arisen during the difficult period under review.

Their work has entailed considerable laborious and detailed recording and it is due to the co-ordination between the staff at Headquarters and baby health centre sisters in the field that the service has been maintained throughout the State despite the shortage of nursing personnel.

Pre-School Child.

The general interest of the community in recent years has been awakened to the needs of the pre-school child and there has been a marked demand from all sections of the community for increased facilities for this age group.

The baby health centres have always encouraged mothers to bring their toddlers and pre-school children to the centres for interval supervision since the years from 0 to 5 are those in which the foundation is laid for the child's future health. These are the "vulnerable" years, the most formative period and the one of most rapid growth.

The baby health centres give the parent of pre-school children instruction in simple dietetics and elementary hygiene as well as checking the weight and physical development of the child.

The steady increase in the attendance of the pre-school group indicates that mothers are aware of the need for and advantage to their young children in receiving this supervision.

ATTENDANCES.

Year.	Over 1 and under 3 years.	Over 3 years.	Total.
1941	46,579	44,069	90,648
1942	192,768	41,089	233,857
1943	204,390	43,863	248,253
1944	(not available)	(not available)	266,602
1945	233,711	57,724	291,435
1946	203,485	54,134	257,619

The Director continued as Chairman, of the Pre-school Child Committee of the Child Welfare Advisory Council, a statutory body under the Child Welfare Act 1939. The council published a report in 1944 on the pre-school child problems in this State. This publication has proved of great usefulness in all official and technical matters concerned with the pre-school child.

TABLE VIII—Causes of Death of Children under one year—Rate per 1,000 Live Births in New South Wales.

Year.	Class 1.	Classes 2, 3, 4 and 5.	Class 6.	Class 7.	Class 8.	Class 9.	Class 10.	Classes 12 and 13.	Classes 14 and 15.	Class 17.	Class 18.	Total all diseases.
	Parasitic and infectious diseases.	General disease, diseases of the blood and chronic poisonings.	Diseases of the nervous system.	Diseases of the circulatory system.	Diseases of the respiratory system.	Diseases of the digestive system—diarrhoea and enteritis.	Diseases of the genito-urinary system.	Diseases of the skin, cellular tissue and bones.	Malformation and disease peculiar to early infancy.	Violent or accidental deaths.	Causes of death not determined.	
1931	4.48	.84	.54	.02	4.95	5.07	.21	.34	26.51	.48	.04	43.48
1932	2.65	.27	.89	...	4.52	3.57	.13	.31	27.55	1.07	.02	40.98
1933	1.88	.50	.77	.02	4.91	2.85	.16	.30	26.97	.97	.02	39.35
1934	5.17	.60	1.06	.07	5.95	3.30	.14	.26	29.03	.69	.09	46.36
1935	2.60	.36	.80	.11	4.39	2.48	.27	.25	27.40	.69	.09	39.44
1936	3.10	.58	1.00	.02	5.52	3.01	.43	.15	28.88	.71	.07	43.47
1937	2.51	.51	.67	.02	4.27	2.97	.15	.25	28.38	.94	...	40.68
1938	2.58	.66	.99	.06	4.92	3.19	.21	.19	27.92	1.12	...	41.84
1939	1.98	.35	.96	.08	4.25	3.81	.13	.21	27.27	1.96	.02	41.02
1940	2.03	.51	1.05	.08	4.74	3.40	.16	.18	26.02	.83	.02	39.02
1941	2.69	.64	.87	.13	4.45	3.50	.25	.13	30.37	.68	.06	43.77
1942	2.18	.59	1.06	.13	5.68	3.29	.17	.04	26.27	.76	.02	40.19
1943	2.22	.49	1.10	.12	4.08	2.39	.24	.10	24.42	.84	.18	36.18
1944	1.19	.40	.64	.07	3.24	1.58	.07	.12	22.49	.74	.14	30.68
1945	1.45	.47	.81	...	3.21	1.59	.05	.11	22.20	.69	.05	30.63
1946	1.40	.30	.57	.07	3.35	1.23	.06	.07	22.25	.79	.13	30.22

In the comparative Table VIII the figures since 1931 show the rates in groups of causes of deaths of children under one year per 1,000 live births.

The group indicating class 14 and 15 malformation and diseases peculiar to early infancy for the ten-year period 1931-1940, show the highest rate. The rate is 27.58. In 1941, 30.37 was the highest rate in the group for the period shown, the lowest being 22.20 in 1945. The lowest recorded rate of 22 for the State being reached and sustained in 1944. A

During 1942, baby health centre nurses attended a special course of lectures on the care of pre-school children arranged by the Kindergarten Union and the Day Nursery and Nursery Schools' Association as a supplementary training if the war situation, then extremely grave, made it necessary for children with nurses to be evacuated to remote areas.

VITAL STATISTICS.

The infant mortality rates for the years 1941 to 1946 have been as follows:—

	per 1,000 live births.
1941	43.77
1942	40.77
1943	36.68
1944	30.68
1945	30.63
1946	30.22

The rates decreased to thirty-nine per 1,000 live births for the first time in 1933 and again in 1935, then rose to forty-three in 1936 and again in 1941; since when the decrease has been sustained and for the last three years the record low infantile mortality rate has been reached in this State. Two comparative tables and graphs are set out indicating the factors which influence these rates.

sustained decrease has been shown for the first time in the last four years. Prior to that the lowest rate of 26 had been reached on a number of occasions.

Respiratory disease is the group which next draws attention being the second greatest cause of deaths of infants under one year. Here again the last three years are noteworthy for the sustained decrease and the lowest rate at 3.2 on record; the rate for 1941 to 1946 being highest in 1942 at 5.68 and lowest in 1945 at 3.21.

TABLE IX—New South Wales—Infantile Mortality According to Age.

(* Indicates "not recorded".)

Rate of Mortality per 1,000 live births among Children.

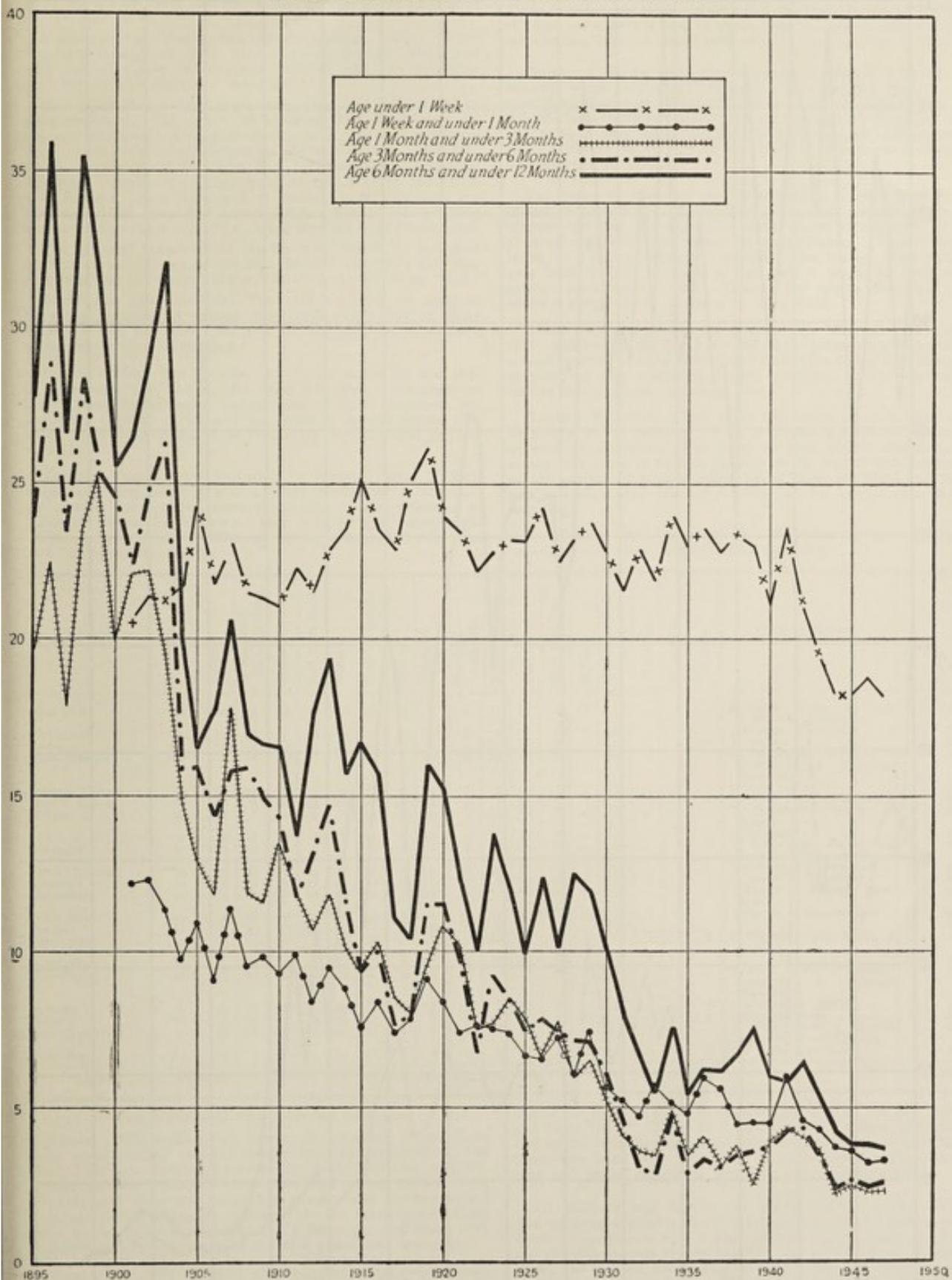
Year.	Under 1 week.	1 week and under 1 month.	Total under 1 month.	1 month and under 3 months.	Total under 3 months.	3 months and under 6 months.	6 months and under 12 months.	Total under 1 year.
1931 ...	21.58	5.22	26.80	4.11	30.91	4.61	8.00	43.52
1932 ...	22.94	4.72	27.66	3.58	31.24	3.07	6.75	41.06
1933 ...	21.90	5.70	27.60	3.42	31.02	2.88	5.45	39.35
1934 ...	24.02	5.12	29.14	4.94	34.08	4.76	7.52	46.36
1935 ...	22.99	4.77	27.76	3.44	31.20	2.87	5.37	39.44
1936 ...	23.64	5.93	29.57	4.07	33.64	3.66	6.17	43.47
1937 ...	22.80	5.58	28.38	3.10	31.48	3.05	6.15	40.68
1938 ...	23.42	4.48	27.90	3.80	31.70	3.46	6.68	41.84
1939 ...	22.06	4.48	27.44	2.48	29.92	3.56	7.54	41.02
1940 ...	21.12	4.46	25.58	3.85	29.43	3.62	5.97	39.02
1941 ...	23.55	5.97	29.52	4.23	33.75	4.18	5.84	43.77
1942 ...	20.97	4.52	25.49	3.97	29.46	4.27	6.46	40.19
1943 ...	19.61	4.23	23.84	3.56	27.40	3.42	5.36	36.18
1944 ...	18.30	3.66	21.95	2.16	24.12	2.38	4.18	30.68
1945 ...	18.28	3.52	21.80	2.43	24.23	2.61	3.79	30.63
1946 ...	18.82	3.14	21.96	2.19	24.15	2.37	3.70	30.22

In the comparative Table IX the loss of infant life at different age groups is shown. The greatest loss is seen to be in the first week when the rate is very high being 18.82

compared with 3.14 in the next three weeks of life and 8.26 in the remainder of the twelve months. The total being 30.22 in 1946.

Infantile Mortality, New South Wales., Rates in Age Groups under 1 Year, 1895-1946

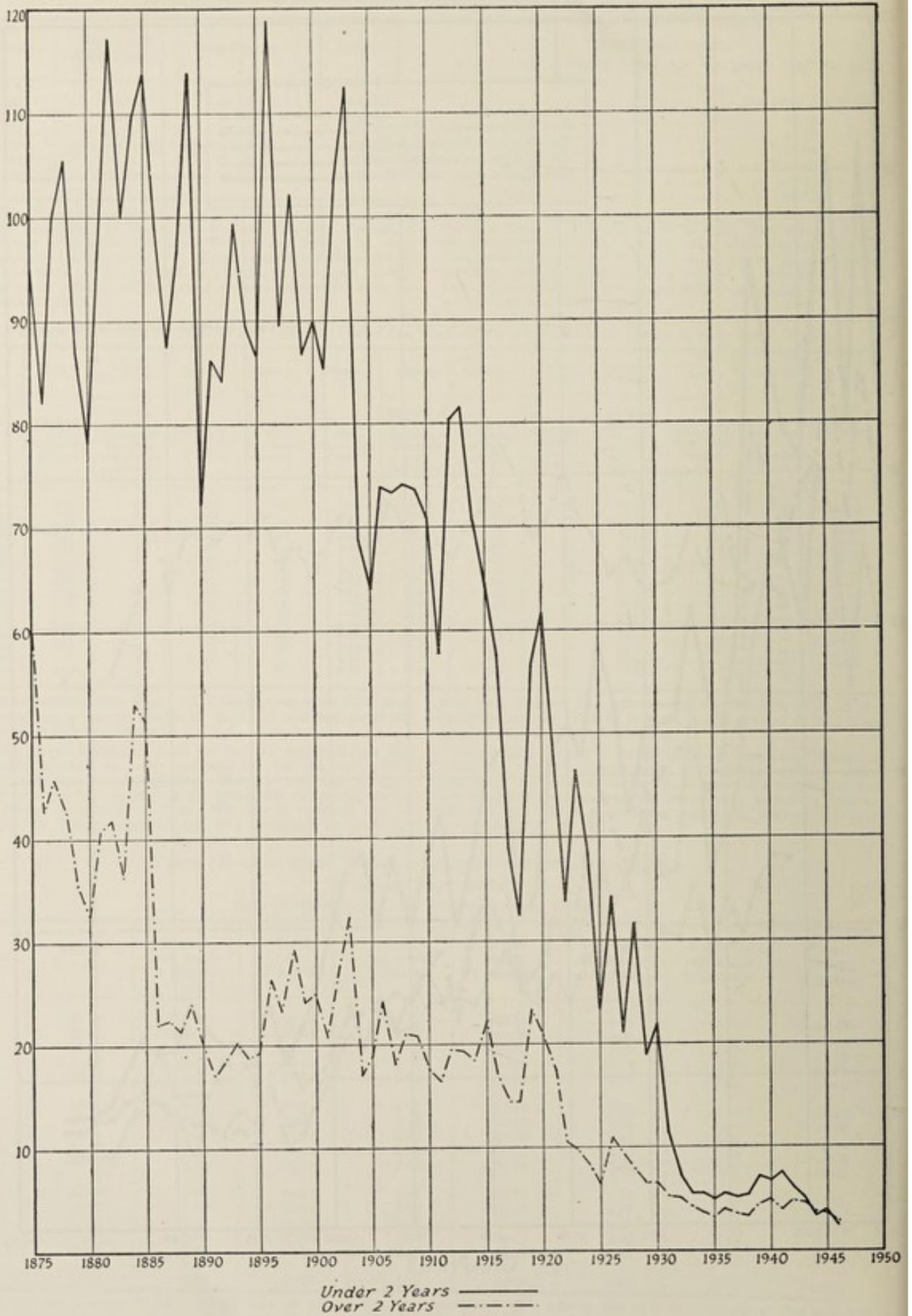
Vertical scale represents the number of deaths for 1,000 live births



GRAPH 13

DIARRHOEA AND ENTERITIS

Annual Death Rate per 100,000 of the Population in N.S.W., 1875-1946



Graph 14

Report on the Medical Supervision of Kindergartens and Day Nurseries and Nursery Schools.

Medical supervision of these institutions was not commenced until the end of 1945, and the following reports are in respect of the year 1946.

Kindergartens: Twenty-two kindergartens were visited regularly throughout 1946. One of these, Samuel Cohen, was only for physically handicapped children and has not been included in the disability schedule.

Two hundred and fifty visits were paid and 1,247 children were examined. The aim is to examine each child every six months, this was not possible during this year as there were many more first examinations to be made than there will be in future years as there had been no regular medical supervision previously. Four hundred and fifty of the children, however, were examined a second time. Parents are interviewed at the first examination. Some are working mothers who cannot attend but 1,192 mothers were interviewed.

The general standard of health was found to be good throughout as is shown by the fact that 677 children's nutrition was classified as "Good," 494 as "Fair" and only 78 as "Bad."

Diphtheria Immunization: The vast majority of children have been immunized against diphtheria. Only 140 of those examined had not been done and the majority of those have subsequently been immunized.

Dental Caries: The problem of dental caries is one that is crying out to be solved. No child attending a kindergarten should have dental caries present, but of those examined 362 had very obvious caries and no doubt a dentist would find many more with small holes that were not included in this total.

Tonsils: Tonsils were classified as diseased, only if their appearance suggested it plus another confirming factor such as chronic bronchitis, recurrent colds or the presence of enlarged glands in the neck. One hundred and ninety-eight children were thus classified as having diseased tonsils and 203 had cervical adenitis.

Knock Knees and Flat Feet: Knock knees and flat feet were very prevalent. Only those children having over 1 inch of separation between the ankles when their knees were knocking were counted as being knock-kneed; there were 213 of these. Three hundred and sixty children had flat feet but the majority of these were in the two to three year old group and on re-examination most of them were seen to be improved.

Posture: Posture on the other hand almost invariably becomes worse as the children grow. Only the bad degrees of poor posture were counted and there were seventy-nine of these. All of these require remedial exercises to correct them and it would be a very good thing if a part-time physiotherapist could visit the kindergartens regularly to give these children the exercises they need.

Nutrition: Eighteen of the kindergartens provide a cooked dinner in the middle of the day. The meal consists of two courses, the first comprises of a meat, cheese or egg dish, plus a green vegetable, root vegetable and potatoes. This is followed by a milk pudding and stewed or raw fruits. Each child gets half a pint of milk a day and a piece of fruit or orange juice with a rusk. During the winter Potantol (a vitamin preparation) is given to each child.

Education Programme: As most of the kindergartens only take children up till five years old their programme is purely a kindergarten one and they spend their time doing such things as painting, clay modelling, dough modelling, potato printing, line-printing, finger painting, etc.

Hygiene Training: There is an inspection of each child as he arrives in the morning. This is carried out by the director at each kindergarten. She looks at each child's throat and makes sure there is no rash present on the body. She inquires of the mother as to how many hours' sleep the child had the previous night and whether he has had his bowels open that morning.

A schedule showing physical deficiencies in the children examined and other particulars is appended.

Kindergarten.	1st Examination	Parents.	Subsequent Examination.	Dental Caries.	Not immunized.	Nutrition.			Diseased Tonsils.	Cervical Adenitis.	Knock Knees.	Flat Feet.	Bad Posture.	Squint.	Undescended Testes.	Phimosis.	Bronchitis.	Herniae.	Other Conditions.	Sessions.	Total Enrolment.
						Good	Fair	Bad													
Blue Bird ...	63	58	14	15	14	34	26	3	8	9	14	31	4	2	...	...	4	...	2 Otitis Media, 1 Deaf, 1 Muscular Dystrophy.	13	65
Cheltenham ...	37	36	10	4	4	26	9	2	2	3	8	7	1	1	2	...	2	...	1 Eczema, 1 Antritis ...	8	37
Globe ...	68	61	15	5	1	37	25	2	2	6	17	22	3	...	...	...	1	...	1 Eczema ...	12	68
Ellen Desally	110	112	35	55	20	58	48	4	20	24	23	42	6	...	5	2	...	...	1 Rheumatic Carditis, 1 Hydrocele, 1 Pituitary Deficiency.	20	89
Frances Newton	52	52	21	17	9	24	22	6	4	3	3	4	...	1	...	...	...	...	1 Hare Lip ...	11	50
Harold Wheen	66	68	28	26	13	28	27	11	10	7	7	24	4	1	...	3	...	...	1 Blepharitis, 1 Dermatitis...	12	56
Killara ...	50	48	7	6	1	35	12	3	5	5	11	14	1	...	1	...	...	...	1 Congenital Heart, 1 Rickets.	9	57
Lance ...	50	49	18	14	4	26	23	1	11	9	16	14	1	...	...	...	...	...	1 Ichthyosis ...	10	50
Leichhardt ...	47	33	18	19	4	17	25	5	7	8	12	12	5	...	...	...	2	2	1 Congenital Nystagmus, 1 Stye, 1 Poliomylitis.	9	40
Little Citizens	66	60	30	17	10	30	33	3	11	12	12	22	2	1	...	...	1	1	1 Anaemia, 1 Hammer toes ...	13	55
Newtown ...	74	74	33	27	14	40	32	2	19	22	4	28	4	1	...	2	...	...	1 Glandular Deficiency ...	14	60
Parramatta ...	77	74	24	20	10	50	24	3	19	20	10	19	10	...	1	...	1	4	1 Talipes, 1 Mentally backward.	12	60
Peter Pan ...	65	64	44	18	23	36	24	5	9	10	9	11	7	...	2	3	2	...	1 Taenia, 1 Hammer toes ...	15	60
Phoenix ...	57	55	25	25	10	27	27	3	10	10	3	2	...	1	...	...	...	...	...	12	35
Surry Hills ...	51	56	17	11	6	26	23	2	11	7	17	26	4	...	3	2	...	1	1 Chronic Otitis Media, 1 Eczema	12	45
Sunbeam ...	54	48	20	19	8	24	27	3	17	13	10	18	4	1	1	3	4	...	...	13	50
Waverley ...	54	42	26	9	3	40	10	4	5	8	3	3	4	2	2	...	...	...	3 Deaf Mutes, 1 Mentally retarded, 1 Thyroid Deficiency.	14	45
Crusader ...	50	49	15	14	4	28	19	3	12	12	7	17	4	...	1	...	1	1	1 Rheumatic Carditis ...	11	50
Croydon ...	70	72	31	15	3	39	27	4	3	3	17	27	9	1	...	...	...	...	1 Conjunctivitis ...	15	58
East Chatswood ...	47	42	15	10	1	31	15	1	3	3	3	9	2	...	...	1	...	...	1 Deaf Mute, 1 Carditis following Scarlet Fever.	7	50
Petersham ...	39	39	4	16	...	21	14	4	4	5	5	8	4	3	1	...	2	1	...	8	35
Totals	1,247	1,192	450	362	162	677	492	78	198	203	213	360	79	16	21	18	24	13	...	250	1,998

DAY NURSERIES AND NURSERY SCHOOLS.

Eleven of the Sydney day nursery and nursery schools have been supervised by medical officers from the department. The work has been divided between Dr. Mary Bertram and Dr. Puleston-Jones. The first visits were paid during the last week in July and since then each day nursery and nursery school has been visited at regular intervals, the aim being to visit those with babies under two years once a fortnight and those with children between the ages of 2 and 5 years once a month.

From July until the end of December, seventy-one visits were paid by the medical officers and 537 children were examined. Most of the mothers of the children who attend the day nurseries are working and so it is difficult for them to come up to be interviewed, but 165 were seen.

Nutrition: The general standard of nutrition amongst their children is not good as will be seen from the fact that only

254 of the children could be classified as "Good," 209 as "Fair," and 74 as "Bad." Many of them show obvious signs of neglect and under nourishment. It is however, gratifying to note that those who have been attending the day nurseries for a long time are better nourished than the more recent arrivals.

All children and babies are given clinic emulsion daily. The toddlers and older children get one teaspoonful once a day. Each child receives half a pint of milk daily. Some children are given breakfast on arrival, but this is only given in cases where the matron knows that the child has not been given a proper breakfast at home. All children get a midday meal at the nursery. This consists of a meat, cheese or egg dish and two vegetables, followed by a milk pudding and stewed or raw fruit. They have milk for their afternoon tea.

A general comment on the physical deficiencies noted in the children examined, and other particulars is appended.

DAY NURSERY OR NURSERY SCHOOLS.

Day Nursery or Nursery School.	No. of Babies under 2 years.	No. of Children 2-6 years.	1st Examination.	Parents.	Subsequent Examination.	Dental Caries.	Not Immunized.	Nutrition.			Dissected Tonsils.	Cervical Adenitis.	Knock Knees.	Flat Feet.	Bad Posture.	Squint.	Undescended Testes.	Phimosis.	Hernia.	Bronchitis.	Cases.	Sessions.	
								Good.	Fair.	Bad.													
Surry Hills	18	65	52	36	...	4	6	23	24	5	9	11	9	21	...	...	1	10	2	3	1 Feeding Case	8
Paddington	21	60	59	35	1	8	...	23	24	6	11	11	...	16	...	...	...	...	1	5	1 Hammer toes, 1 Rickets	8
Waverley .....	...	79	10	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	1 Malnutrition	1
Marrickville .....	...	50	49	11	...	3	...	...	16	3	10	...	...	...	...	...	...	...	...	...	...	6
Forest Lodge	25	55	53	47	...	...	...	...	18	4	14	9	14	19	2	...	5	4	...	...	1 Congenital Heart.	8
Woolloomooloo	25	90	72	1	...	5	7	...	18	3	14	4	8	6	13	4	...	...	1	3	1 Congenital Heart.	8
									19	16	14	4	8	6	13	4	10	1 Congenital Heart, 2 Talipes, 2 Rickets, 1 Urticaria.	7
North Sydney	14	45	43	15	...	2	1	20	13	10	12	13	12	11	6	1	3	1 Andivis, 1 Urticaria, 1 Endocarditis, 1 Mental Deficient, 2 Otorrhoea, 1 Mumps, 1 Mitral mimum.	8
Redfern	14	65	59	6	...	4	8	20	27	12	11	6	4	7	...	3	...	8	...	...	...	5
									21	18	7	9	2	5	5	1	...	2	1 Anaemia, 1 Biepharitis, Asthma, 1 Talpe, 1 Rickets, 1 Hypothyroidism.	5
Mosman .....	...	40	42	3	...	1	...	...	21	11	7	6	4	3	6	...	...	1	1	2	1 Rickets, 1 Asthma, 1 Webbtocs	5
Randwick .....	...	50	34	11	...	4	...	21	11	2	7	6	4	3	6	...	...	4	...	...	1 Deaf, 1 Webbertoes, 1 Rickets,	7
Newtown .....	...	65	64	...	...	8	1	28	26	10	14	7	...	8	...	...	...	...	...	...	1 Endocarditis, 1 Mental Defective, 1 Hyperpmtetrisim.	7
Totals	117	664	537	165	1	51	23	254	209	74	109	84	69	105	41	14	7	34	6	23	.....	71

SECTION I.

D.—TUBERCULOSIS DIVISION.

REPORT OF THE DIRECTOR FOR THE YEARS 1941-1946, INCLUSIVE.

*Staff.**Director:* Dr. H. G. WALLACE.*Deputy Director:* Dr. J. HUGHES.

One Clerk. Nine Visiting Nurses.

Close co-operation between the Division, hospitals and voluntary bodies engaged in the diagnosis and treatment of tuberculosis was maintained during the period under review. The assistance of the Commonwealth Government, through the

appointment of a Commonwealth Director of Tuberculosis and the passage of the Commonwealth "Tuberculosis Acts" in 1945 and 1946, is looked forward to as a further means of co-ordinating a nation-wide campaign against tuberculosis.

Notifications and Deaths.—Statistics for the years 1941-1946 show a gradual decrease in the number of notifications of and deaths from tuberculosis in N.S.W., as shown in the tables following.

NOTIFICATIONS FOR YEARS 1941-46.

Year.	Metropolitan.			Hunter River.			Broken Hill.			Remainder of State.			Whole of State.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1941	881	518	1,399	38	20	58	6	...	6	275	178	453	1,200	716	1,916
1942	1,011	477	1,488	47	34	81	18	5	23	213	107	320	1,289	623	1,912
1943	824	504	1,328	44	30	74	12	8	20	176	124	300	1,056	666	1,722
1944	811	491	1,302	64	46	110	18	6	24	160	147	307	1,033	690	1,743
1945	826	454	1,280	64	33	97	14	4	18	184	109	293	1,088	600	1,688
1946	800	480	1,280	51	29	80	14	3	17	178	116	294	1,043	628	1,671

DEATHS FOR YEARS 1941-46.

Year.	Male.	Female.	Total.
1941	663	338	1,001
1942	670	369	1,039
1943	609	360	969
1944	583	312	895
1945	556	310	866
1946	579	309	888

X-rays.—The Division continued the arrangement with private radiologists to conduct radiological examinations of members of the public under the group scheme, at reduced fees.

The following table of X-ray examinations gives an indication of the increase in the number of X-rays of the general public:—

Year.	1941.	1942.	1943.	1944.	1945.	1946.
Private	1,465	2,185	4,005	5,632	6,959	9,615
Clinics	10,894	12,402	11,379	12,822	15,415	16,368
Combined Totals	12,359	14,587	15,384	18,454	22,374	25,983

Regarding private radiologists, although there was only one operating fortnightly group sessions in 1941, in 1946 there were five radiologists operating weekly sessions on different days in the week, in addition to the clinics operating at the Royal Prince Alfred Hospital; Royal North Shore Hospital; the Anti-Tuberculosis Association's Clinic, Surry Hills; the Newcastle Hospital; Canterbury District Hospital; Manly District Hospital; Sydney Hospital, and Broken Hill.

Hospitals.—Further accommodation for indoor patients was provided by the opening in the metropolitan area of the Lourdes Private Hospital at Killara.

New Developments.—The provisions of the Public Health Act, 1902-1944 made all forms of tuberculosis notifiable by medical practitioners, and this has added slightly to the number of notifications received during later years.

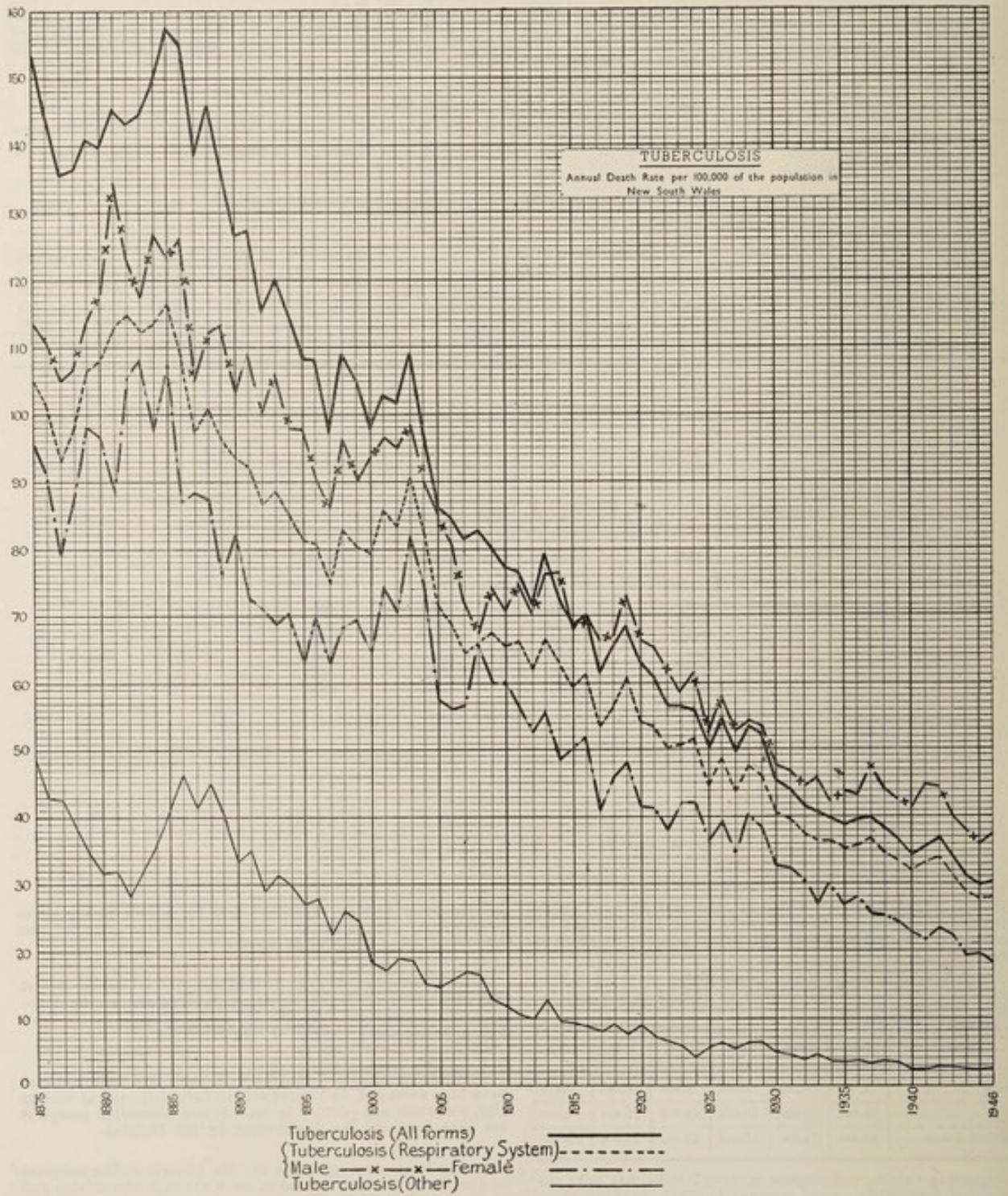
Regular broadcasts fortnightly through the 2GZ network have been arranged, and lectures have been delivered at various city, suburban and country towns. A new illustrated pamphlet has been prepared for distribution by the Division.

It has been encouraging to see the general public response to the X-ray services available, both through the clinics and the private radiologists.

Radiological survey units have been established in various country centres, and the visiting mobile unit of the Anti-Tuberculosis Association, N.S.W., has rendered services both in the rural and urban areas.

TUBERCULOSIS

Annual Death Rate per 100,000 of the Population, 1875-1946



Graph 15

SECTION I.

E.—DIVISION OF INDUSTRIAL HYGIENE.

REPORT OF THE DIRECTOR FOR THE YEARS 1941-1946 INCLUSIVE.

Introduction.

The Division of Industrial Hygiene undertakes the investigation of diseases arising from work, especially in factories and mines. Any person claiming to be affected by exposure to dangerous dusts, gases, fumes, or to bad ventilation or other unsatisfactory conditions of work is entitled to an examination, which is usually carried out by the staff. At times, an additional examination such as an X-ray of the chest or a report on a skin condition by a dermatologist is thought advisable, and this extra service is available without cost to the worker.

Pathological and chemical examinations are made of the lungs of coal miners and workers in other dusty trades. Reports on these examinations are used in the determination of compensation payments to dependents.

Lectures and demonstrations are given at fairly frequent intervals to groups of medical men doing post-graduate studies, to factory inspectors, university undergraduates in engineering and to colliery officials studying for higher certificates.

Investigations are carried out into the ventilation of theatres and public halls, including the examination of proposed plans for mechanical ventilation of such places.

It is not intended that this report will cover in detail the laboratory and field investigations carried out, but a summary has been made of the more important inquiries undertaken. It should be understood that the number of individuals reported as suffering from industrial diseases such as lead poisoning, dermatitis and pneumokoniosis is not the total number occurring in New South Wales for the given period, but the number examined by the staff of the Division, often after they have been examined elsewhere and been declined compensation.

Many individuals with skin or pulmonary disease are examined by insurance companies or compensation boards, and do not report to this Division at all, but in regard to lead poisoning, practically all persons claiming to be affected by that disease would be examined by this Division.

Staff.

At the beginning of 1941 the late Dr. Charles Badham was in charge of the Division, and had a staff consisting of Dr. Gordon C. Smith, Medical Officer; H. E. G. Rayner, B.Sc., First Scientific Assistant; A. M. Willison, M.Sc.; H. M. Whaithe, B.E., Scientific Assistants; and A. J. Gavriloff, Laboratory Assistant.

In 1942 Mr. Gavriloff enlisted in the R.A.A.F. In August, 1943, the death occurred of Dr. Badham after a short illness, and Dr. G. C. Smith was appointed as his successor. At about the same time, Mr. Willison resigned and was replaced by Mr. J. L. Sullivan, A.S.T.C., and a year later the staff was increased by the appointment of Mr. C. L. Cullen, B.Sc., as Scientific Assistant. The position of Medical Officer remained unfilled until 1945, when Dr. J. T. Cullen, who had served in the R.A.A.F., joined the staff. In 1944 a full-time shorthand-writer and typist was appointed. This position is at present held by Miss B. P. Byrnes. At the end of 1946 Mr. Gavriloff was still on leave of absence with the R.A.A.F.

Death of Dr. Charles Badham.

By the death of Dr. Badham on August 6th, 1943, at the age of 59, the Department of Health lost one of its most valuable officers, and the Australian medical profession a scientist of distinction and rare ability.

The late Charles Badham was born in Australia in 1884, into a family whose name was already famous. At the completion of his school days he spent some years in commercial life and then proceeded to the University of Sydney, where, after a distinguished record in the study of Pharmacy and in

the Faculty of Science, in which he graduated with first-class honours, he studied medicine and secured honours at graduation in 1917.

He volunteered for active service in 1916, and after graduation served in hospitals, and then as captain in the Australian Army Medical Corps, proceeded to France and served in the 5th Field Ambulance in the Somme sector.

After the declaration of the armistice in 1918 he made a further study of biology and zoology in Britain working for a time at the University College, London, under Professor J. P. Hill, F.R.S. He was the author of a number of papers on original researches into zoological subjects.

He returned to Australia in 1919 and for a time practised medicine on the North Coast of New South Wales, and then joined the staff of the Microbiological Laboratory of the New South Wales Department of Public Health.

In 1923 the Arbitration Court of New South Wales asked for the appointment of a government medical officer to conduct scientific and medical investigations into the health, comfort and well-being of employees in a number of industries. Dr. Badham was selected for this work and assumed the title of Medical Officer of Industrial Hygiene. Thus, the Division of Industrial Hygiene of the Department of Public Health originated, and the status which the Division enjoys to-day is due to Dr. Badham's achievements and enthusiasm.

Quite early he selected the problems of ventilation, industrial poisonings and dust diseases of the lungs for special study, and he published a considerable amount of work on his researches into these subjects.

The problem of lead poisoning was studied over a long period in various industries, and within a few years Dr. Badham produced standards of diagnosis which were then and still are widely accepted. In 1926 he urged upon the Department of Labour and Industry the necessity for the gazetting and enforcement of regulations to control the lead trades, and in 1928 these regulations were gazetted.

Probably his best work and most notable contribution to the field of industrial medicine was in connection with dust diseases of the lungs. This work, which won for him a world-wide reputation, involved the investigation of dust hazards of workers in coal mines, sandstone tunnels and in other industries. He established and practised a refined method of dust sampling, made many pathological examinations of lungs from dead miners, and conducted a large number of animal experiments to determine the reaction to injection and prolonged inhalation of various dusts.

As an Australian expert on silicosis, he was twice honoured with an invitation from the International Labour Office of the League of Nations to attend conferences on silicosis in South Africa in 1930 and in 1938 to Geneva.

In collaboration with Dr. H. B. Taylor, a method of chemical analysis of lung tissue which ensured the accurate determination of the amount of free silica, combined silica and free carbon was produced.

He showed that the reaction of the lung to the inhalation of insoluble dusts like coal was a form of pneumokoniosis showing characteristic irregular fibrous nodules associated with emphysema, the lesions differing pathologically from the typical discrete nodule of silicosis, which follows inhalation of quartz or sandstone dust.

It was largely due to Dr. Badham's efforts that a scheme for the compensation of workers whose lungs have been dusted was introduced into New South Wales.

For many years he had been a member of the Special Pneumonokoniosis Medical Board of the Workers' Compensation Commission of New South Wales; he was for some time Chairman of the Medical Authority of the Workers' Compensation (Silicosis) Act and was also a member of the Commonwealth Committee of Industrial Hygiene in Munitions Establishments of the National Health and Medical Research Council. He was an associate editor of the "Journal of Industrial Hygiene and Toxicology."

Charles Badham was a true man of science, a constant seeker after the truth. In the words of Thomas Didymus, his motto might well have been: "Except I shall see . . . I will not believe." He possessed a high critical faculty and sound judgment, and demanded from others the same high standard of efficiency which he set for himself. His great enthusiasm for his work and extraordinary energy and vitality acted as a stimulus to all who came in contact with him, and none who came within the scope of his influence could fail to benefit.

In a high official position which demanded tact and impartiality, Dr. Badham succeeded in holding the confidence of both worker and employer, and his advice was always much appreciated by both sides. His contributions to the advancement of industrial hygiene in Australia will long be remembered.

Increase in Work Caused by the War.

To provide staff for munitions plants, annexes and new industries that were developed as the result of the war, a large number of men and women was called up for factory work with which they were unfamiliar, and in some cases unfitted. The expansion of industry not only increased the number of factory workers, but also introduced new hazards. In a number of processes toxic materials that were readily available were used in place of less harmful substances which were in short supply, or required for the more essential industries. In addition, employees were often required to work overtime, and on night shifts under conditions of restricted ventilation owing to the need to maintain blackout conditions.

The disturbance of normal routine in factories, the large increase in man-hours worked, the introduction of new methods and employment of unskilled workers caused a big increase in the incidence of occupational diseases. The number of employees medically examined each year, and many of these on more than one occasion, at the Division's laboratory increased to a peak in 1944, as shown in the following table. To these must be added the numerous examinations conducted at the place of work.

Year.	Total Number Examined.	Number of Male Employees Examined.	Number of Female Employees Examined.
1941	392	360	32
1942	583	534	49
1943	798	723	75
1944	897	809	88
1945	647	596	51
1946	582	547	35

Co-operation With Commonwealth Departments.

In addition to work for State Departments, which is one of the normal functions of this Division, various investigations were made for the Commonwealth authorities in munitions plants and munitions annexes, chiefly in this State, but also in Victoria.

In 1942 the Commonwealth Department of Labour and National Service asked the Division to undertake the training in industrial hygiene technique of six graduates in science seconded from the Council of Scientific and Industrial Research; at a later date four more officers with similar qualifications were instructed. At the request of the above Department the work of these officers in the investigation of problems in certain industries was supervised by this Division.

The Director of the Division attended a number of meetings of the Advisory Committee which was set up by Commonwealth Government to advise it on matters affecting the health and welfare of munitions workers, and concerning the hygiene of munitions establishments. Following the cessation of war the committee continued to function as the Committee on Industrial Hygiene of the National Health and Medical Research Council.

An officer of the Division was a member of two war-time Committees—one to advise on the Ventilation and Construction of Air Raid Shelters, and the other to advise on the Protection of Vital Plant and Factories.

Co-operation With State Departments.

The Division co-operates in an advisory capacity with the Department of Labour and Industry in the prevention of industrial disease, and with the Mines Department in problems dealing with dust and ventilation in coal mines; also with other State authorities as the occasion demands.

The Director is a member of the Special Pneumonokoniosis Medical Board of the Workers' Compensation Commission, and he and a scientific officer of the Division are members of the Coal Dust Standard Committee of the Mines Department.

Special Investigation Made at Request of Industrial Commission of New South Wales.

The Industrial Commission is a judicial authority responsible for the making or varying of industrial awards covering rates of pay, hours of work and other conditions of employment. When the question of a health hazard is raised, the advice of this Division is sought by the Commission.

In this connection, inquiries were made into several industries where it was claimed that health hazards existed. A summary of the findings in regard to the manufacture of ferro-alloys, chiefly ferro silicon, and the manufacture of bricks, tiles and earthenware pipes, is given in the body of the report. In addition, reports were made on the following subjects:—

1. Working conditions of employees in a glass works, especially in reference to exposure to high temperatures, dust, fumes, and to the risk of contracting infectious diseases.
2. The electrolytic refining and smelting of metals, chiefly in reference to poisoning by selenium.
3. The hazard of lead poisoning and exposure to pneumokoniosis-producing dusts in paint factories.
4. The incidence of dermatitis and other effects on health from the manufacture of vegetable oils.
5. An alleged outbreak of dermatitis in a factory engaged in the manufacture of parachutes.
6. Exposure to asbestos and other dusts and also to benzol in the manufacture of engine packing and similar materials.
7. The dust exposure of machine men, pneumatic pick men and jumper men working in sandstone.
8. The application of granulated cork to the underside of a roof of a power house.
9. Exposure to manganese during the manufacture of ferro manganese.

Post-Mortem Examination of Lungs of Coal Miners and Workers in Other Dusty Trades.

Lung specimens from seventy (70) individuals were received for examination for pneumokoniosis. In some cases the heart and other organs were also sent.

The lung specimens were examined pathologically and were chemically analysed for the amount of free and combined silica and free carbon. The details of the methods used in these post-mortem studies have been described in earlier reports of this Division.

In some cases the amount of pulmonary tissue submitted for examination was too small to enable an accurate diagnosis to be made, so that neither a pathological nor chemical examination was undertaken.

A summary of the pathological and chemical findings of forty-five (45) specimens is given in Table 1.

TABLE I.—Showing the pathological and chemical findings of the lung specimens of thirty-nine (39) coal mine workers and six (6) miscellaneous workers in dusty occupations examined in the years 1941 to 1946 inclusive. Where a coal miner worked on more than one coalfield, the last mine at which he worked has been used for the purpose of classification.

Case No.	Age.	Dusty Occupations, Mining, etc.		Pathology.	Mg. per Gram of Dried Lung.					Content of Lungs (Grams.).				Remarks.
		Year of work in.	Years since work in.		Ash.	Free and combined silica.	Combined silica.	Free silica.	Carbon.	Free and combined silica.	Combined silica.	Free silica.	Carbon.	
COAL MINE WORKERS, NEW SOUTH WALES SOUTHERN COALFIELD.														
141	67	55	3	Pneumoconiosis, coal dust type, early.	43.9	11.2	0.3	4.9	54.0	2.97	1.67	1.3	14.3	Worked in Australian coal mines for 55 years; at Newcastle, Gippsland (Victoria) and South Coast, where he was at Scarborough for 22 years.
143	57	40	2	Chronic and acute bronchitis; pneumoconiosis, coal dust type, early.	29.2	4.4	2.4	2.0	31.0	0.77	0.42	0.35	5.4	Worked in coal mines for 20 years at Coalcliff and South Clifton.
144	45	31	...	Pneumoconiosis, coal dust type, early.	28.0	3.3	1.3	2.0	42.0	0.69	0.27	0.42	8.8	Started work at 14 years of age in South Wales Collieries; also coal miner in America and New Zealand. Last 16 years, South Bulli. Coal miner in Scotland for 15 years, followed by 18 years underground work at Coalcliff Colliery.
147	53	33	...	Pneumoconiosis, coal dust type, early.	29.6	3.6	1.4	2.2	30.0	0.49	0.19	0.30	4.0	Coal miner in England for 2 years, followed by 36 years on Southern Field of N.S.W., including 19 years at Balgownie, Corrimal.
149	49	?	...	Pneumoconiosis, coal dust type, early. Lobar pneumonia.	36.7	4.8	1.4	3.4	69.0	1.2	0.35	0.85	17.25	Early history unknown. Last 18 years miner at Coalcliff Colliery.
150	69	38	13	Pneumoconiosis, coal dust type, early.	48.5	9.5	5.9	3.6	57.0	1.95	1.2	0.75	11.8	Coal miner in England for 2 years, followed by 36 years on Southern Field of N.S.W., including 19 years at Balgownie, Corrimal.
153	62	?	12	Pneumoconiosis, coal dust type, early.	19.5	1.6	1.4	0.2	41.0	0.51	0.45	0.06	13.3	Ambulance attendant, Wongawilli Mine, 12 years. Previously coal miner.
155	56	43	...	Pneumoconiosis, coal dust type, early; chronic bronchitis.	20.7	3.0	1.4	1.6	19.0	0.69	0.32	0.37	4.4	Coal miner in England 22 years and 21 years at Corrimal Colliery on South Coast.
164	59	40	...	Pneumoconiosis, coal dust type, early.	25.9	3.42	0.91	2.61	19.0	0.63	0.17	0.46	3.5	Worked in mines for 40 years. Last 22 years in South Clifton Tunnel Colliery on South Coast.
165	65	30	1	Pneumoconiosis, coal dust type, moderate.	31.85	6.95	7.26	1.69	93.0	2.11	1.71	0.40	22.0	Over 20 years at Corrimal Colliery.
166	71	40	?	Pneumoconiosis, coal dust type, very early.	21.25	2.41	0.92	1.49	27.0	0.61	0.23	0.38	6.8	Worked for 20 years in coal mines in Northern field, followed by 20 years on South Coast.
168	60	46	...	Pneumoconiosis, coal dust type, early.	24.7	5.69	3.69	2.0	11.0	1.48	0.96	0.52	2.86	Coal miner in England for 29 years. Then for 17 years in South Coast Collieries.
186	60	35	?	Congestion and oedema of lungs. No pneumoconiosis.	20.7	1.82	0.60	1.22	7.0	0.57	0.19	0.38	2.2	Worked at coke washing plant, Wongawilli Colliery, for 35 years.
188	53	28	5	Pneumoconiosis, coal dust type, early.	26.2	3.72	1.65	2.07	38.0	0.65	0.29	0.36	6.7	South Coast Collieries, mostly at South Bulli.
190	44	30	...	Pneumoconiosis, coal dust type, moderate.	42.0	7.43	4.53	2.90	102.5	1.44	0.88	0.56	20.0	Only worked in coal mines on South Coast.
192	53	40	...	Pneumoconiosis, coal dust type, early.	31.5	4.6	2.27	2.33	52.0	1.03	0.52	0.54	12.0	Worked in northern field collieries for 15 years; last 25 years in southern field collieries.
199	55	36	?	Pneumoconiosis, coal dust type, very early.	20.8	1.1	0.6	0.5	17.0	0.24	0.13	0.11	3.8	Worked only in coal mines on southern field; 25 years at Excelsior Colliery.
200	63	35	?	Pneumoconiosis, coal dust type, very early.	20.6	2.7	2.6	0.1	43.0	0.67	0.65	0.02	10.8	Worked for 35 years at South Bulli Colliery.
202	56	41	2	Pneumoconiosis, coal dust type, marked.	44.4	13.57	10.6	2.97	150.0	4.1	3.2	0.9	46.0	10 years in mines at Durham, England. 10 years at Corrimal and Mt. Pleasant, and 21 years at South Bulli.
206	45	31	...	Pneumoconiosis, coal dust type, very early.	18.9	2.36	0.7	1.66	16.0	0.44	0.13	0.31	3.0	Six years in Northern fields. 26 years at Mt. Kembla on southern coalfields.
210	58	?	...	Bronchitis and pleurisy (chronic). No pneumoconiosis.	37.7	0.72	0.02	0.7	6.0	0.123	0.003	0.12	1.0	Employed for some years on surface and later as lamp man at South Bulli.
COAL MINE WORKERS, NEW SOUTH WALES WESTERN COALFIELD.														
142	63	24	13	Pneumoconiosis, coal dust type, early. Pulmonary tuberculosis.	29.1	3.4	0.6	2.8	19.0	0.75	0.13	0.62	4.2	Worked for six months only in western coal mines. Previously 19 years in northern field mines and four years on southern field.
151	54	22	3	Pneumoconiosis, coal dust type, early.	21.4	0.73	0.09	0.64	22.0	0.17	0.02	0.15	5.3	17 years at State Coal Mine. Also worked as lorry driver and was on active service for 4½ years.
154	56	35	...	Pneumoconiosis, coal dust type, early.	20.4	2.35	0.32	2.03	27.0	0.46	0.06	0.40	5.3	Twelve years South Coast Collieries and 23 years on western field.
156	55	20	...	Pneumoconiosis, coal dust type, early.	28.6	4.16	0.48	3.68	27.0	0.53	0.06	0.47	3.5	Miner at Wallerawang Colliery only.
158	66	24	14	Pneumoconiosis, coal dust type, moderate.	27.7	3.79	0.66	3.13	55.0	0.87	0.15	0.72	12.6	Worked 22 years at South Coast coal mines, and last 2 years on western field.
160	67	?	?	Pneumoconiosis, coal dust type, early.	40.5	4.12	3.02	1.1	84.0	1.36	1.0	0.35	27.0	Known to have worked for about 20 years at State Coal Mine, Lithgow.
161	58	42	?	Pneumoconiosis, coal dust type, moderate.	32.7	2.7	1.6	1.1	62.0	0.61	0.36	0.25	14.0	Lithgow Valley Colliery for 41 years.
162	63	26	2	Silicosis, early	52.7	3.7	1.8	1.9	29.0	1.05	0.51	0.54	8.2	Shale miner for 2 years, 24 years coal mining, all done on western field.
194	55	22	3	Pneumoconiosis, siliceous and coal dust type, marked.	43.71	9.73	5.28	4.45	54.0	3.46	1.88	1.58	19.2	Worked at State Coal Mine, Lithgow for 22 years, mostly as miner, but also did some shaft sinking.
201	57	35	4	Pneumoconiosis, coal dust type, marked.	31.8	3.94	2.54	1.4	104.0	1.4	0.9	0.5	36.0	Only worked in western field coal mines.

TABLE I.—continued.

Case No.	Age.	Dusty Occupations, Mining, etc.		Pathology.	Mg. per Gram of Dried Lung.					Content of Lungs (Grams.).				Remarks.
		Years of work in.	Years since work in.		Ash.	Free and combined silica.	Combined silica.	Free silica.	Car-bon.	Free and combined silica.	Combined silica.	Free silica.	Car-bon.	
COAL MINE WORKERS, NEW SOUTH WALES NORTHERN FIELD.														
145	63	48	2	Pneumoconiosis, coal dust type, early.	37.2	5.4	3.2	2.2	40.0	1.42	0.84	0.58	10.48	Worked in English coal mines for 35 years; Hebburn Colliery (N.S.W.) for 13 years. Only worked on northern fields; last 28 years at Abermain.
148	55	40	2	Pneumoconiosis, coal dust type, very early. Pulmonary tuberculosis.	17.7	1.6	1.1	0.5	17.0	0.42	0.29	0.13	4.5	Only worked on northern fields; last 28 years at Abermain.
174	59	45	?	Pneumoconiosis, coal dust type, early.	21.1	2.23	0.55	1.68	29.0	0.62	0.15	0.47	8.1	Only worked in northern field coal mines.
177	58	40	3	Pneumoconiosis, coal dust type, very early.	21.4	1.56	0.43	1.13	46.0	0.37	0.10	0.27	10.8	Only worked on northern field coal mines.
195	7	23	...	Pulmonary tuberculosis, miliary type.	28.0	0.35	0.35	0.05	3.0	0.13	0.13	0.002	1.1	Only worked at mines on northern field.
203	46	22	...	No pneumoconiosis	22.8	1.0	0.6	0.4	10.0	0.2	0.12	0.08	2.0	Overseas mining experience not known. Shaft sinker for 6 years and then coal miner for 16 years at Elrington Colliery.
204	56	40	...	Pneumoconiosis, coal dust type, early.	22.3	2.3	1.0	1.3	51.0	0.36	0.16	0.2	8.3	Last colliery Aberdare 37 years.
209	56	40	2	Pneumoconiosis, coal dust type, moderate.	23.2	2.89	1.5	1.39	79.0	0.69	0.36	0.33	18.8	Twenty-five years Pacific Colliery, Teralba (5 years shaft work). Last colliery Stockton Borehole 13 years (11 years shift work).
MISCELLANEOUS WORKERS IN DUSTY OCCUPATIONS.														
152	63	39	?	Silicosis, marked; and tuberculosis.	208.6	7.3	5.4	1.9	2.0	3.2	2.4	0.8	0.9	Gold miner for two years in Western Australia, and 37 years in South Africa.
184	64	30	?	Pneumoconiosis, very early	56.3	6.39	4.13	2.26	13.0	1.37	0.89	0.48	2.8	Foundry worker. Dresser of castings with emery wheels and rammer.
185	54	38	...	Tuberculosis of right lung	30.07	4.5	0.62	3.88	5.0	1.74	0.24	1.5	2.0	Foundry moulder on stove parts.
187	54	25	...	Bronchogenic carcinoma. Pneumoconiosis, very early.	46.84	11.5	2.0	9.51	14.0	3.0	0.5	2.5	3.7	Worked at iron foundry for 25 years, dressing castings.
196	58	34	...	Pneumoconiosis, very early	33.2	3.3	1.6	1.7	8.5	0.32	0.25	0.27	1.3	Moulder in iron and steel foundries all industrial life.
205	58	?	4	Pneumonia and lung abscess. No silicosis.	31.96	2.2	1.5	0.7	5.0	0.46	0.31	0.15	1.0	Stone mason most of industrial life.

Coal Mine Investigations.

Dust and ventilation tests were made in fifty-two (52) New South Wales collieries as well as in the National Shale Mine, Glen Davis. These collieries constitute about 40 per cent. of the total number of coal mines in the State and include all the major collieries. In most cases a large number of tests was taken at each mine.

Most of the work was connected with—

- complaints from the workmen about dusty or badly ventilated working places;
- surveys of collieries or of working processes in collieries, for the Minister for Mines or for the dust committee appointed under General Rule 12s of the Coal Mines Regulation Act to investigate and report on a standard of concentration of dust in mine air;
- special research tests such as determining the reduction, if any, in dust concentration by the use of water applied by hose or by infusion.

From 1941 to 1943 most of the work was directed towards obtaining representative data on dust concentrations in the various fields with the object of proclaiming a standard of concentration of dust not to be exceeded in New South Wales coal and shale mines. The tests taken confirmed the belief that the Southern Coalfield was the dustiest and the Western the least dusty, with the Northern intermediate between the two. Omitting for the time being the dust concentration after shotfiring—these being concentrations to which the men are usually not exposed for a great length of time—the getting and filling of coal during the extraction of pillars on the South Coast was the most dusty operation and the one most likely to exceed any reasonable dust standard.

Finally, in December, 1943, a dust standard of 700 particles per cubic centimetre by Owens' dust counter was proclaimed. At least twelve (12) samples were to be taken at regular intervals over a period of one hour. This standard has now been in operation for some years and except at some points on the South Coast, the dust concentrations in the collieries can be kept below the limit it imposes.

The following are the more important surveys carried out during the six-year period:—

- A dust survey of the screening plants of the major southern collieries was made in 1941. The information obtained was used by the Dust Committee determining the dust standard.

- A dust survey of representative pillar districts in three southern collieries was also made in 1941. The working places tested were considered among the dustiest in the State. The information obtained was also used by the Dust Committee.

- A ventilation survey of one of the southern collieries (Wongawilli) was carried out in 1941 with further work in 1943.

- Following on the above investigation, a medical survey was carried out in 1945 and 1946 to determine the incidence of bronchitis in Wongawilli Colliery compared with that in Osborne-Wallsend (Mount Keira) Colliery. No significant difference between the incidence of bronchitis in the two collieries was found.

- At the request of the chairman of a board of inquiry into the coal mining industry, a survey was made early in 1946 of the atmospheric conditions of Bellbird and Elrington Collieries on the northern field, Metropolitan Colliery on the southern field, and the State Coal Mine on the western field. It was established that optimum comfort conditions for the miners underground ranged from 66° F. to 72° F. effective temperature, or from 5 to 8 dry katathermometer cooling power.

- An analysis made of the findings of the Special Pneumoconiosis Medical Board, which examines coal miners claiming compensation for dust disease of the lungs, showed that from 1934 to 1944 inclusive, Abermain Colliery on the South Maitland field, John Darling Colliery on the Newcastle field, Metropolitan Colliery on the southern field, and the State Coal Mine on the western field, had produced the greatest number of cases of pneumoconiosis in their respective districts. On the basis of the number of cases per 100 employees, Abermain, John Darling and Metropolitan Collieries had the highest incidence in their respective districts, but Ivanhoe No. 1 Colliery replaced the State Coal Mine in the west. At the request of the Minister for mines, a dust survey of these five mines was commenced early in 1946.

Special research work on the use of water sprays for dust reduction was carried out in four southern collieries (Bull, Osborne-Wallsend, Metropolitan and Coalcliff), and two northern collieries (Burwood and Stanford Main No. 2). Briefly the results showed that little dust reduction was achieved by using water sprays unless—

- (a) a liberal amount of water was used;
- (b) the dust was wetted before it became airborne, that is, whilst still in a heap or part of the solid coal;
- (c) as long a time as possible (up to several hours) was allowed to pass after wetting the coal before disturbing it.

Research work was carried out in pillar places of Coalcliff Colliery and solid places of Metropolitan Colliery, both on the South Coast, to determine the reduction in dust concentration brought about by water infusion, that is, by pumping water under pressure (30-90 lb. per square inch at Coalcliff, and 300-400 lb. per square inch at Metropolitan) into the coal seam through boreholes more than 100 feet long. The quantities of water absorbed ranged from one to several thousand gallons, and extraction of the coal generally commenced a few days after the treatment began and continued for some months. In both collieries this method of treatment reduced the dustiness considerably, but whilst the effect was apparent within a few days at Coalcliff Colliery, three months elapsed before the full reduction in dust concentration became obvious at Metropolitan Colliery. The results of the tests were that—

- (a) water infusion reduces the dust concentrations during most mining operations. Cutting is the most notable exception;
- (b) in some cases the water infusion may not become fully effective as a dust reducer until several months have elapsed.

All tests, research and otherwise, have pointed to good ventilation as a prime requisite for reducing dust concentrations, and this fact has always been stressed in the reports made by the Division. It was found that the dust concentration in a place tends to vary inversely as the air flow; for example, to halve the dustiness of a place one would need approximately to double the volume of air entering that place each minute.

During the six-year period, little work was done on suction plants since few collieries have them installed. The few tests taken indicated their suitability for dust reduction at surface screening plants.

A small but important aspect of our work was the determination of the size frequencies of the particles of dust in airborne suspension. This is a matter of some importance, since the harmfulness of dust particles depends largely on their size. Our tests showed that the median size of coal dust particles ranged from 1.3 to 1.9 microns (1 micron = 0.0001 centimetre) and that at least 97 per cent. of them are under ten microns in size.

Data on "soot" or "smoke" particles arising from the use of naked lights (i.e., lamps burning acetylene or kerosene and tallow) were compiled, since the late Dr. Badham considered these particles may have been a contributing factor in the production of pneumoconiosis. With the replacement of naked lights by safety lamps in all mines, the concentrations of these particles have become negligible. The information obtained, however, is useful when assessing the dustiness of certain collieries in former years.

Tests after shotfiring were made in a large number of collieries throughout the State, but particularly in the southern and western fields. Not only were dust concentrations determined, but samples of air were analysed for gases such as carbon monoxide and nitrous fumes. Conclusions from these tests were that—

- (a) good ventilation is essential to dilute and sweep away the dust and fumes from shotfiring;
- (b) with the explosives in use in New South Wales collieries the concentration of noxious gases and fumes is usually low;
- (c) the dust from shotfiring tends to be carried by the air throughout the ventilating district and to boost the dust concentration in other working places. On this account it has been consistently recommended that all shotfiring in the northern and western fields be done on afternoon shifts. This is already the practice in the southern field.

During the period 1941 to 1946 the incidence of dermatitis amongst miners in Aberdare Extended and Aberdare Central Collieries on the northern field, and Corrimall Colliery on the southern field, was investigated. Since the miners attributed their skin condition to bites by insect pests, the help of the Government Entomologist and the Forestry Commission's Division of Wood Technology was obtained. Few cases of dermatitis attributable to bites were seen; some of these cases were probably due to bites from the mite *Pediculoides ventricosus*, which feeds on the larvae of powder post beetles.

Toward the end of 1946 the Federal Government appointed a Coal Dust Advisory Committee consisting of representatives of the Council for Scientific and Industrial Research, the Insti-

tute of Mining and Metallurgy, the mine owners, the Miners' Federation, the Department of Mines, and this Department. The Director and Mr. H. M. Whaithe were appointed to this committee.

Radiographs of the Lungs of Workers in Dusty Trades.

Radiographs were made of the chests of 615 workers who attended the Division for medical examination. Most of these had been employed in industries where a potential dust hazard existed, but in a few instances the radiographs were taken to ascertain whether any lung changes had been caused by exposure to fumes, as in welding.

Of the 615 radiographs, 248 were normal, and in 234 there was some increase in linear markings; nodulation, apparently due to dust, was present in 109 and the changes in the remaining twenty-nine rays were considered to be due to, or probably due to, tuberculosis.

Table II below summarises the number of cases of nodulation according to the occupation of the worker. The majority of the twenty-five foundry moulders given in this list were under 40 years of age and had worked for the whole of their industrial life as machine moulders of stove parts and similar articles, and in their work had used a parting powder made from ground sandstone. Following the finding of such a high incidence of silicosis amongst machine moulders and other foundry workers, the Department of Labour and Industry had special regulations gazetted which were designed to reduce the exposure to silica dust of employees in factories in which foundry operations are carried on.

TABLE II.—Showing the number of cases of nodulation in various occupations.

Occupation.	Number Affected.
Foundry Moulders	25
Foundry Dressers	9
Foundry Labourers	2
Refractory Moulders, Glass Works	9
Metal Miners	9
Bricklayers	5
Shot and Sandblasters	3
Sandstone workers	9
Ore Millers	2
Coal and Ex-coal Miners	7
Ceramic Workers	2
Biograph Operators	2
Abrasive Soap Makers	3
Pipe and Brickyard Workers	3
Bricklayers	5
Miscellaneous Occupations, in which there was only one case of nodulation in each occupation.	14

The two biograph operators were brothers who had worked in the same cinema biograph box, one for ten and the other for twenty-three (23) years. Both had X-ray changes in the lungs, the appearances of which were described by radiologists as those of pneumoconiosis. Tests showed that due to faulty ventilation of the lamp houses there was a leakage of fine dust particles into the breathing zone, and when the projection lamp was alight the air contained several thousand particles of such dust per cubic centimetre of air. The dust was composed mostly of oxides of rare earths, iron and aluminium. The total silica present was small and the free silica too small to be determined.

Although one of these biograph operators has been compensated for silicosis by the Silicosis Committee, it is considered that further investigation is necessary. The possibilities that the lung changes were due to deposits of dust without fibrosis, such as occurs in welders exposed to iron oxide fume, or that they were due to some familial condition, and thus were not occupational, were considered. Chest radiographs were taken of twenty (20) other individuals who had worked as operators for periods ranging up to thirty-seven years, but none showed any evidence of a dust disease of the lungs.

Under the heading of sandstone workers are included excavators in sandstone and rock choppers. The bricklayers affected had been engaged on furnace repair work.

Lead Poisoning.

One thousand, six hundred and fifty-six (1,656) individuals were examined for suspected lead poisoning. The examination consisted of an inquiry for relevant symptoms and blood examination for haemoglobin percentage, red cell count and an estimation of the number of stippled cells; in many cases an analysis of the urine for lead was carried out also.

The cases have been classified in one or other of two groups, according to the standards adopted by the Division:

1. Lead poisoning with disability.
2. Lead poisoning without disability.

From a practical point of view, lead poisoning with disability occurs when it is considered necessary for the man to cease work and lead poisoning without disability when it is considered he could work on a non-lead process, or could continue at lead work under medical supervision.

In addition to the medical examinations carried out, 20,708 blood slides submitted by the medical officers of sixteen (16) factories, where there was a lead hazard, were examined for

stippled red cells, and the results sent to the medical officer concerned. This examination of blood slides may be regarded as a practical means of checking the lead exposure of the employees and preventing more serious forms of lead poisoning.

The number of individuals examined each year, the occupation and the diagnosis, are shown in Table III. Of the three hundred and ninety-four (394) individuals who were considered to be suffering from lead poisoning with disability, two hundred and forty-three (243) or 62 per cent. were employed in factories manufacturing electric accumulators, and in each year the number of cases of lead poisoning with disability in this industry was over 50 per cent. of the total number of cases from all industries.

TABLE III.—Showing the occupations of 1,656 individuals investigated for lead poisoning by the New South Wales Division of Industrial Hygiene during the years 1941–46 inclusive. The table shows the number examined (1,656) and the number considered to be lead poisoned with disability (394); the remainder (1,262) were not lead poisoned, or lead poisoned without disability.

Industry.	Occupation.	1941.		1942.		1943.		1944.		1945.		1946.		1941–46.	
		No. examined.	No. lead poisoned with disability.	No. examined.	No. lead poisoned with disability.	No. examined.	No. lead poisoned with disability.	No. examined.	No. lead poisoned with disability.	No. examined.	No. lead poisoned with disability.	No. examined.	No. lead poisoned with disability.	No. examined.	No. lead poisoned with disability.
Manufacture of Accumulator Batteries	Moulding	4	2	10	3	8	1	4	...	...	4	1	39	7	
	Lead oxide plants	3	2	4	2	3	2	3	1	2	1	2	17	8	
	Mixing .....	...	...	4	2	...	...	1	1	...	...	1	8	3	
	Pasting	19	15	20	13	19	14	17	7	10	2	14	10	99	61
	Formation	9	2	4	3	14	8	16	4	16	1	11	4	70	22
	Handling dried plates	37	30	28	21	28	16	16	3	12	4	3	3	124	77
	Assembling	11	7	23	15	11	5	12	3	18	3	7	2	82	35
	Burning	10	6	9	2	15	6	13	1	6	...	5	2	58	17
	Repair work	1	...	...	...	3	3	2	6	1	3	...	1	14	3
	Cleaning .....	...	...	1	1	...	...	2	2	1	3	...	...	8	4
	Other processes	5	1	9	3	4	2	8	...	5	...	5	...	36	6
	Painting	House painting	11	4	25	10	24	8	19	...	19	...	20	3	118	25
Coach painting		2	2	6	...	1	...	6	...	2	...	3	...	20	2
Bridge painting		1	1	1	...	...	...	2	...	...	...	...	...	4	1
Ship painting		12	5	17	4	11	2	16	1	10	...	13	1	79	13
Commercial painting		3	...	11	1	1	...	...	...	1	...	1	...	17	1
Spray painting		5	...	10	...	3	...	15	...	10	...	9	1	52	1
Paint factory		6	3	1	1	14	3	2	1	7	2	5	...	35	10
Lead corroding .....		...	...	1	...	2	1	1	...	...	...	1	...	5	1
Vitreous Enamelling	Mixing .....	...	...	1	...	...	...	1	...	...	...	...	...	2	...
	Fusing	1	...	1	...	...	...	1	...	...	...	...	...	3	...
	Spraying	4	2	...	...	2	2	...	2	...	...	...	...	10	4
	Dusting	4	1	1	...	...	...	1	...	...	...	1	...	7	1
	Shot-blasting old baths	2	...	...	...	...	...	...	...	...	...	...	...	2	...
Smelting of metals ...	Lead	17	3	8	4	27	7	29	2	15	1	5	2	92	19
	Alloy mixing .....	...	...	5	...	5	2	3	...	2	...	17	...	32	2
Printing	Hand composing	3	1	3	...	6	...	4	...	1	...	6	...	23	1
	Machine composing	3	...	1	...	10	2	4	1	13	...	4	...	35	3
	Ink manufacturing .....	...	...	2	1	...	...	2	1	...	...	...	...	4	2
	Other processes	11	1	6	2	...	...	7	...	...	...	10	...	34	3
Glass Manufacture ...	Batch mixing .....	...	...	3	3	...	...	1	...	...	...	...	...	4	3
	Spraying	2	1	...	...	...	...	...	...	...	...	...	...	2	1
	Other processes .....	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Potteries	Kiln hand .....	...	...	...	...	1	1	...	...	...	...	...	...	1	1
Plumbing	Plumbing soldering	5	...	9	...	8	2	11	...	4	...	10	...	47	2
	Tinning	1	...	...	...	2	...	3	...	...	...	1	...	7	...
Sheet Metal	Other processes .....	...	...	5	...	3	...	...	...	7	...	...	...	15	...
	Galvanising .....	...	...	...	...	1	...	1	...	...	...	...	...	2	...
Wire	Other processes .....	...	...	1	...	1	...	...	...	...	...	...	...	2	...
	Furnace	2	...	1	1	1	...	...	...	...	1	...	...	5	1
Brass	Moulding .....	...	...	...	...	2	...	1	...	...	5	...	...	8	1
	Lead mining	1	...	4	...	8	...	6	...	3	...	2	...	24	...
Foundry	Oxy-acetylene cutting	10	8	9	4	...	...	...	...	...	...	...	...	19	12
	Manufacture .....	...	...	2	2	1	1	1	1	1	...	4	3	9	7
Arsenate of Lead	Packing and mixing .....	...	...	...	...	...	...	5	2	...	...	...	...	5	2
	Spraying .....	...	...	...	...	...	...	...	...	1	...	...	...	1	...
Pipe laying	Lead caulking .....	...	...	2	...	1	...	...	...	...	...	...	...	3	...
	Lead burning	1	...	3	1	...	...	4	...	...	...	...	...	8	1
Petrol Distribution ...	Pump maintenance .....	...	...	...	...	1	1	1	...	...	...	...	...	2	1
	Lead buffing	2	1	3	2	1	1	1	...	...	...	...	...	7	4
Motor body	Lead filling .....	...	...	4	1	...	...	...	...	...	...	...	...	4	1
	Turning metal bearings .....	...	...	...	...	4	...	3	...	...	...	...	...	7	...
Engineering	Boilermaking, welding and cutting	22	3	24	4	58	6	37	1	24	...	28	1	193	15
	Riveting .....	...	...	...	...	1	...	...	...	...	8	2	...	9	2
Engineering	Other processes .....	...	...	4	1	3	...	...	4	...	...	...	...	11	1
	Hose joining .....	...	...	1	1	...	...	...	...	...	...	...	...	1	1
Rubber	Trucking lisharge	2	2	1	1	...	...	...	...	...	...	...	...	3	3
Transport	Adventitious exposure and no lead workers	7	...	14	...	20	...	48	2	11	...	36	1	136	3
	Totals	240	103	302	109	332	97	327	33	212	16	243	36	1,656	394

There was a serious increase of lead poisoning in the years 1941 to 1943. This was mainly due to the working of overtime in accumulator factories where the hygiene generally was not good enough to allow more than the usual hours of work.

In 1941 and 1942 there were seen twelve (12) cases of lead poisoning in men engaged in electric or oxy-acetylene welding or burning on painted surfaces, in ship building or alterations to old ships. Most of these came from one ship yard, and the hazard was overcome by intelligent use of portable exhaust fans.

Special investigations were made of a number of processes where a lead hazard was suspected. These included the following:

1. Manufacture of electric-light globes.
2. Manufacture of white lead.
3. Spraying of vitreous enamel.
4. Spray-painting of boxes with a paint containing a lead chromate base.
5. Lead buffing at a motor car repair shop.
6. Rolling a zinc-lead alloy.

7. Riveting railway waggon underframes.
8. Weighing and mixing lead acetates and lead oxide in a chemical works manufacturing caffeine.
9. Mixing of arsenate of lead with kaolin in manufacture of insecticides.

Fluorine Poisoning.

An inquiry was made into the possibility of fluorine poisoning occurring among the employees of a factory manufacturing the fertiliser superphosphate from crude rock phosphate, which is composed mainly of tricalcium phosphate, but also contains small amounts of fluorine compounds. After crushing, the rock phosphate is disintegrated by treatment with sulphuric acid producing superphosphate (calcium hydrogenc phosphate) and liberating fluorine.

Employees in this industry might be exposed to the risk of fluorine poisoning either from exposure to the rock phosphate dust or to the gas formed by the process of disintegration. It is interesting to note that in the district where the factory is situated the windows of many of the factory buildings have become etched, probably due to the action of hydrofluoric acid.

In workers industrially exposed to fluorine the chronic effects of fluorine poisoning would most likely be shown by changes in the bones. Physical and radiographic examinations were made of six (6) men who had been employed at the factory for periods varying from thirteen to twenty-one years. There were some symptoms indicating minor disturbance of the alimentary canal, and some due to irritation of the respiratory passages, and a few complaints of muscle or joint stiffness.

Two men showed a slight reduction in the haemoglobin content of the blood, and stippled cells up to 1,250 were counted in blood films. The blood findings were otherwise within normal limits.

No pus cells, casts, albumen or sugar were found in any of the urine specimens. The centrifugal deposit from one man contained several red blood cells.

The amount of fluorine found in the urine specimens varied from 0.5 to 7.0 milligrammes per litre. Normal figures for Australia are not known, but judging by American and European standards, the amounts found in four of the specimens were high. However, increased urinary excretion of fluorine is not necessarily diagnostic of fluorine intoxication, and probably indicates no more than exposure to fluorine.

On physical examination of the six men, no abnormal changes were found in the lungs or heart, nor in the muscles or bones. One man had a full set of dentures; no mottling of the enamel was seen in the other men.

Radiographs of the chest showed slight to marked increase in linear markings, but there was no evidence of nodulation due to dust disease.

The X-rays of the pelvic bones of four men appeared normal, and in one of the others there was some early osteo-arthritis. With regard to the remaining man, the changes were sufficient to suggest the possibility of fluorine poisoning and further examinations were carried out and a re-examination made at a later date. The details of this man's industrial history and the results of radiographic and medical examinations are shown below.

He had been employed for twenty years as a charge-hand in the sulphuric acid plant of the superphosphate factory, and stated that fumes and smoke from a chimney stack in the factory were blown in through a window to the top floor of the sulphuric acid plant. (This smoke would probably have contained small amounts of fluorine.)

He had suffered from "rheumatism" of the feet and shoulders for two years, some pain in muscles and joints; periodical attacks of "bronchitis," shortness of breath on exertion, slight pain in upper part of the chest; no loss of weight; occasional nausea and vomiting; sometimes diarrhoea, at others constipation; tiredness, loss of energy and insomnia; no headaches.

The physical examination showed that he weighed 12 st. 11 lb. (partly clothed); his teeth were all artificial; no abnormality was detected in the heart and lungs; there was no pain or tenderness on palpation of bones or muscles.

His blood count was as follows:—

Red cell count	.....4,870,000 per cubic mm.
Haemoglobin	.....14.7 gms. (95 per cent.).
White cell count	.....7,700 per cubic mm.
Differential white cell count	Within normal limits.
Fluorine content of urine	...0.6 mg. per litre.

The rectal examination showed that the prostate was uniformly enlarged and firm; no nodules were felt and there was no pain on palpation.

Radiographic examinations were made in 1941 and 1945, and the findings were as follows:

27th August, 1941:

Thorax. X-ray film showed slight increase in linear fibrosis with calcification of the right hilar glands and calcified nodules towards the right base, suggesting some infection at an early stage of life, but no evidence of active tuberculosis was detected nor was there any evidence of pneumokoniosis.

27th August, 1941:

Pelvis. The bones of the pelvis showed very unusual appearances. The ala of each ilium showed an increase in the bony trabecula with some osteo-sclerosis towards the edge.

Each wing of the sacrum showed increase in calcium deposits also.

Apart from the possibility of fluorine poisoning, the diagnosis lay between Paget's disease or secondary carcinoma from the prostate.

5th September, 1941:

The bony cranium showed no evidence of abnormality, beyond some slight increase in the posterior clinoid processes of the sella turcica.

He was not seen again until 26th November, 1945, when there was no significant change in his general physical condition. However, when the pelvis and skull were X-rayed again, the following findings were made:—

X-ray Examination of Pelvis and Bony Cranium, 27.11.45.

The condition of osteo-sclerosis seen on the film of 1941 and involving all the pelvic bones had quite considerably advanced. As well as the condition of osteo-sclerosis there was a diffuse cyst-like osteo-porosis also present. There was a little more osteo-arthritis of each hip joint than previously. No evidence of any malignant degeneration was detected.

The skull showed no apparent change since the previous film.

Although in this case the diagnosis of fluorosis has not been established beyond all doubt, the fact that there were no skull changes and that he was still alive and well some four years after the initial examination would seem to eliminate the other possibilities which were considered.

Silicosis Hazard From Manufacture of Ferro Alloys.

At the request of the New South Wales Industrial Commission an investigation was made into the possible silicosis hazard in a newly-established industry, namely, the manufacture of ferro-alloys, chiefly ferro-silicon (also ferro-chrome) at a large foundry in New South Wales. Ferro-silicon, which is an alloy of iron and silicon, is prepared by heating a mixture of iron oxide or iron filings, silica (quartzite) and carbon (charcoal or coke) in an electric furnace.

Carbon monoxide, which is evolved during the process, carries with it vapours of silicon and silicon dioxide (silica). Silicon vapour readily combines with the oxygen of the air to form silica which can be observed escaping from the furnace as a white smoke ("silica smoke") almost continuously, although it is most noticeable in the early part of heating the charge, when tapping the furnace, and when pouring.

A silicosis hazard arises from the vitiating of the atmosphere by this silica smoke, and in the *Journal of Industrial Hygiene and Toxicology* (Vol. 19, p. 155, 1937), Torsten Bruce reported cases of silicosis amongst employees engaged in the manufacture of ferro-silicon in two foundries in Sweden.

From a preliminary inspection of the New South Wales plant it appeared, on naked eye observation, that there was a gross exposure to dust and to confirm this impression, dust sampling was carried out with an Owens' Dust Counter, a Greenburg-Smith Impinger and a Thermal Precipitator. Owing to the small size of many of the particles, the first two instruments were found to be very inefficient as dust collectors. On the thermal precipitator slides only the particles greater than $\frac{1}{2}$ micron in size could be counted with the oil immersion objective used. A study of the settling rates of the particles in the impinger samples showed that the size of many of the particles was well below $\frac{1}{2}$ micron. When pouring the charge after tapping the furnace, a large sample of dust was collected by impinger for chemical analysis, which showed that of the total dust, 73 per cent. was free silica and 11 per cent. combined silica.

The dust exposure of the various workmen at the ferro-silicon furnace was very high; the Owens' dust slides were mostly too dense to make even an approximate count. When charging the furnace the exposure of the furnacemen was shown to be, by impinger sample, 10.5, 11.4 and 24 milligrammes per cubic metre of air, but due to the inefficiency of the impinger for collecting fine dust particles, the actual exposure was greater. The thermal precipitator slide showed that the dust concentration on the platforms where the furnacemen work was many thousands of particles per cubic centimetre of air. When pouring it reached 105,000 particles per cubic centimetre; when tapping 53,000 particles per cubic centimetre; when pouring was not taking place the dust count near the usual working position was 42,000 particles per cubic centimetre.

About two months after the first investigation, dust tests were repeated and it was found that there was a big reduction in the amount of dust in the air of the furnace shed. The improvement was due to the closing in of the shed to prevent wind currents from dispersing the upwardly directed escaping gases and also to better technique in tapping the furnace. However, despite the improvements made, from the tests it was considered that all employees in the furnace shed were exposed to a silicosis hazard of the same order as stone-masons and men employed in excavating in sandstone tunnels.

By continuing alterations to the plant designed to encourage the natural tendency of the silica smoke to ascend rapidly, it was found by tests taken at intervals during the next few years that the dust exposure of workers at this plant was progressively reduced, until a little more than three years after the first examination it was concluded that there was no silicosis hazard, provided that the conditions then existing were maintained.

In addition to the examination for dust in the air, all employees in the major alloy sections were X-rayed and clinically examined within a few months of starting work, and at about yearly intervals thereafter for three years. No evidence was found from these examinations that any employee had been adversely affected as a result of his work in the ferro-alloy plant. This result was not unexpected, as the time was too short to show X-ray changes in the lungs, especially as the exposure to high concentrations of silica smoke had only lasted for a few months.

Manufacture of Brick and Roofing Tiles, and Earthenware Pipes.

At the request of the Industrial Commission an inquiry was made with respect to any health hazards, including minor conditions of ill-health, associated with the work of making bricks, roofing tiles and earthenware pipes.

Ten (10) places selected by the employees' union and six (6) nominated by the Employers' Federation were inspected. Two (2) visits were made to most of the establishments and three or four to the others. All operations from the time that the raw materials reached the factory until the particular product was completed were inspected in practically all places.

Pit work was not inspected at close range, but in places where the pit adjoined the factory the work was observed from a distance.

Where the nature and conditions of the work indicated the necessity for taking special tests, dust sampling was carried out and temperatures were recorded, but where it appeared that there was no serious exposure to dust or high temperatures, these observations were not always made. Also, in some of the yards, particularly in the smaller ones, all processes were not in operation at the time of the inspection, so that the full range of tests could not be carried out in those places.

A sample of raw material from each yard was collected and submitted to the Government Analyst for estimation of the free silica content, which was found to vary between 20 and 30 per cent.

A number of individuals in different sections of the industry were questioned regarding their health, the amount of time lost due to sickness and minor injuries and the cause thereof, but no medical examinations were conducted.

It should be pointed out that this investigation was made at a time when abnormal conditions existed in the industry. A number of the yards had been closed during the war years and had only recently reopened. There were many new workers, although quite a number of old employees had returned to the industry. Most of the yards inspected were not working at full capacity.

Apparently many new employees stayed only a few days or weeks at the job, for example, at one yard which had a normal working staff of forty, over sixty men had come and gone in a period of about four (4) months.

Further, the investigation was made in the summer months, and it was impossible to say definitely what the conditions would be like in winter, when temperature variations would no doubt be different, probably greater in certain places than those measured during these inspections. Also, draughts and other defective ventilation factors might become manifest and create uncomfortable conditions which would not be experienced in the summer.

General Conclusions.—It was not considered that, as a group, the workers in this industry would be more subject to health risks than those in other industries doing comparable work, or exposed to similar environments.

With regard to industrial diseases, the investigation showed that draggers of bricks in patent kilns are exposed to a serious dust hazard, that is, the risk of pneumonokoniosis, but it was not considered that there was sufficient evidence of a dust hazard elsewhere, and there was no reason to suspect the occurrence of other diseases (not accidents) of direct occupational origin.

The work of dragging from patent kilns was considered to be the most objectionable job observed in this industry for, in addition to being associated with a proved dust hazard, the work was hot, constant and hard.

Owing to the fact that in the majority of establishments complete sickness and absence records were not kept, and to the practical and other difficulties involved in conducting a large-scale medical survey, it was not possible to show whether, in the employees of this industry, there was an undue incidence of sickness and diseases of the types which are to be found in the general population.

There were, however, certain factors in the work which may have an indirect influence on health.

Generally, for employees who work near pan mills, lofts, screens, mixers, pug mills, machines, and for those carrying out moulding and other similar manual operations, the work was not hard or heavy, and was not associated with any obvious risk to health.

In the case of pitmen, the work was heavy and they were exposed to the elements in the same way as other outdoor workers.

Where the lifting or moving of heavy weights, for example, pipes and similar earthenware articles, was involved, and in wheeling operations generally, but particularly when wheeling bricks to patent kilns, for inexperienced and untrained persons the work was considered to be strenuous and perhaps harmful, but by those who were properly trained it appeared to be performed without appreciable effort.

Certain operators were exposed to high temperatures, for example, burners attending rectangular and circular kilns (these burners also experience considerable temperature changes), draggers, and to a somewhat lesser extent, setters. Other employees were at times exposed to unfavourable weather conditions such as rain, wind or radiant heat from the sun, for example, some wheelers, some machine men and pan mill attendants, and some of the burners mentioned above.

Those exposed to heat, temperature changes, or abnormal weather conditions, encountered greater risk of ill-health than the other workers; such conditions as colds and other respiratory infections or rheumatism could reasonably be expected to occur, but it was difficult to prove an undue incidence of them. For these employees, the wearing of suitable protective clothing and the avoidance of undue cooling and chilling of the body are of importance in preventing ill-health. Also, workers in hot environments would no doubt become acclimatised to the high temperatures.

It is difficult to determine the incidence of minor injuries. These, however, would be expected to occur from time to time, more particularly in new and untrained employees.

Benzol Poisoning.

In previous years serious ill-health amongst industrial workers in this State due to benzol has not come under notice. Only one case of poisoning can be called to mind—where a station hand lost his life from painting the inside of a tank with a paint containing about 30 per cent. of benzol. However, when benzol came into more common use to replace less toxic materials that were in short supply, a number of cases of poisoning was detected, chiefly in the following occupations:—

- (a) *Rotogravure Printing.*—An important investigation was made in the rotogravure printing industry, where a particular solvent used in printing inks was replaced by benzol. Over fifty employees from two firms (the majority, however, being from one firm) were examined, and as a result of the blood examinations, it was considered that most of the workers had in some

degree been affected by benzol, although from the two firms only seven men were affected to such an extent that it was necessary for them to cease work. In both factories air tests were carried out, and it was found that in several places the concentration of benzol in the air was greater than the maximum approved concentration of 50 parts per million for the full working period. The highest concentration found was 700 parts per million.

Following the investigation and examinations of the workers, the use of benzol by these printing firms was terminated and a return made to the original solvent for which the benzol had been substituted.

- (b) *Rubber Solution Manufacture.*—At a factory manufacturing rubber solution from scrap rubber, benzol and resin, it was found that the concentration of benzol in the air was 1,400 parts per million. The blood count of operators was indicative of benzol poisoning, and it was recommended that they be removed from exposure to benzol. It was further recommended that a less toxic solvent be used and that the whole operation be carried out in an efficiently exhausted booth with an air velocity at the face of 200 feet per minute.
- (c) *Shoe Manufacture.*—Following the report that a woman aged 51 was admitted to hospital with suspected benzol poisoning, an inspection was made at her former place of work, a shoe manufacturing factory. She had been engaged in the application of a benzol rubber solution to linings of leather shoes, and the work was carried out on an open bench. The highest concentration of benzol in the breathing zone of the girl carrying out this work at the time of inspection was 200 parts per million. The blood of one of the girls who had been intermittently exposed to the benzol rubber solution showed blood changes sufficient to suggest re-examination at intervals. Representations were made to the Department of Munitions to make available a non-toxic solvent to the suppliers of the rubber solution.
- (d) *Rubber Glove Manufacture.*—In the manufacture of rubber gloves, employees who were engaged in dipping the moulded gloves into benzol and racking them for drying were working in an atmosphere containing 150 parts per million of benzol. The factory had only been in production for a few weeks and there was no proof that any of the employees' health had been affected, but in view of the amount of vapour present in the air an exhausted booth was installed.
- (e) *Removal of Paint.*—Men engaged for about four hours per day removing paint from buses with a paint remover containing 15 per cent. of benzol were exposed to a concentration of 100-120 parts per million of benzol in the air.

In addition to the air tests for benzol, blood examinations were made on fifteen (15) of the men:—

Five (5) had a red cell count of 5,000,000 or more per c.m.m.

Six (6) had a red cell count of less than 4.5 millions per c.m.m.

Four (4) had haemoglobin values of less than 85 per cent. (13.2 gms.).

One (1) showed leucopenia.

It was considered that the mild anaemia found in some of those examined was due to benzol, and that those persons showing pathological blood changes should be removed from further exposure to benzol. It was recommended also that the use of benzol in the paint remover under the conditions observed should be discontinued.

Arsenic Poisoning.

Seventeen (17) waterside workers who had for three days or less been engaged in loading bales of sheepskins into holds of ships showed signs of nose bleeding and irritation of the eyes, and several had rashes on the forearms. The skins had been stored for five (5) years and had been sprayed with arsenic about twice each year. Pieces of skin taken from the outside of the bales contained from 0.2 to 0.9 per cent. of arsenic and dust swept from the floor of the storage shed on the wharf was found to have 0.7 per cent. of arsenic.

Although it was clear that the symptoms of irritation complained of were due to the work of handling the arsenic treated skins, none of the men was sufficiently affected to require him to cease work. As a matter of interest, the amount of arsenic in the urine of each man was determined. The arsenic excretions varied between 0.4 and 2.2 milligrammes per litre, and were thus higher than is usually found in cases of arsenic poisoning with disability. The effects of the arsenic could

have been much reduced if the men had worn gamgee tissue masks and suitable overalls, and if proper washing and bathing facilities had been available. These precautions were recommended for future work of this type.

Dermatitis.

In addition to examinations made of men and women at work, nine hundred and thirty-two (932) persons were examined at the Division's laboratories to determine whether the skin rashes from which they were suffering were due to their occupation. Two hundred and sixty-three (263) or 28 per cent. of those examined were considered to have a dermatitis associated with their work. In the remaining cases the diagnosis was dermatitis, either not due to, or not proved due to, the occupation.

In some years about 10 per cent. of those examined were suffering from scabies and between 5 and 10 per cent. from tinea. One person who was referred to hospital for investigation was found to be suffering from leprosy. A number of the patients was referred to dermatologists for a further opinion. The cost of this service was borne by the Department.

Oil dermatitis occurred chiefly amongst machinists working on lathes in annexes. Those affected by alkalies were mostly cleaners, and in the solvent group eleven (11) were french polishers and four (4) painters. In many cases heat and humidity aggravated existing conditions rather than caused new ones, and cases of this type occurred in occupations such as textile workers, furnacemen, bakers, bakelite moulder, laundry workers. Dermatitis caused by wet conditions (water) was seen amongst hotel bar-hands, dyers, wool scourers and others. Eight (8) hairdressers had a dermatitis of the hands caused by permanent waving solutions. A number of persons suffering from bites by mites was seen, but only those examined at the Division's laboratory are shown in the table. These comprised waterside workers handling a cargo of copra, packers at a glass works and at a foundry handling straw infested with mites. The mites found in the copra included members of the Tyroglyphus genus; the straw was infested with the harvest mite (*Pediculoides ventricosus*).

Table IV gives the numbers of persons examined in each year, the number considered to have a dermatitis caused by or probably caused by work, and the causative agent.

TABLE IV.

	1941.	1942.	1943.	1944.	1945.	1946
Causative Agent.						
Oil	8	10	6	7	3	2
Alkalies	4	6	4	2	3	3
Solvents	10	2	3	4	5	1
Heat and Humidity	5	15	4	...	1	5
Water	2	3	2	...	4	4
Permanent waving solutions .....	...	...	3	3	...	...
Chlorinated Naphthalenes .....	...	...	...	1	1	...
Chrome salts	1	...	...	...	1	...
Pyrethrum .....	...	...	...	2	...	...
Carbolic and Creosote .....	...	1	1	2	...	...
Wood Dust and Allergy .....	...	1	2	...	2	...
Arsenic .....	...	...	2	...	...	3
Flour .....	...	1	3	...	1	2
Leather .....	...	...	...	...	...	4
Formalin .....	...	...	...	...	...	1
Nickel .....	...	...	...	...	...	1
Phenol-Formaldehyde resins .....	...	1	1	...	1	...
Para-Phenylene Diamine .....	...	...	1	...	1	...
Sodium Sulphide .....	...	...	...	...	...	1
Insul Wool .....	...	...	...	...	1	...
Acid .....	...	1	1	2	...	...
Sugar .....	...	1	...	...	...	...
Dyes .....	...	1	...	...	...	...
Cauliflower .....	...	1	...	...	...	...
Textiles .....	...	...	5	...	...	...
Mites .....	...	3	7	...	...	...
Cement .....	...	...	3	...	...	...
Miscellaneous	3	6	17	15	7	10
Total number affected	33	53	65	43	30	39
Total number examined	71	134	197	232	160	138

Only two cases of dermatitis are shown for chlorinated naphthalenes but, in addition, four cases were seen during an investigation of the hazard from using chlorinated naphthalene waxes in plating shops. A brief report on this investigation follows:—

Dermatitis and Jaundice from Chlorinated Naphthalene Wax.—Early in 1944 three employees in the chromium plating section of an electro-plating works were found to have a dermatitis of the face, neck, forearms and axillae, which, from the industrial history of the men, appeared to have been caused by the fumes from a wax which was used as a "stopping off" agent in preventing the deposition of chromic acid on parts of articles being plated. A fourth employee was said to have a similar type of rash, but he was absent from work when the inspection was made.

Inquiries revealed that the wax which was sold under the name of "See Kay" Wax, was a chlorinated naphthalene, one of a group of compounds well known to cause more or less severe chronic dermatitis which may be slow to clear up, as well as acute yellow atrophy of the liver.

When it was found that this wax had been widely distributed to plating shops, inspections were made of twenty-seven factories which had received supplies. Of these, twelve (12) had either not used it, or had discontinued its use. At the other factories, it was being used intermittently and for relatively brief periods of time. In practice, the wax was melted in an open container and none had efficient mechanical exhaust ventilation for removing the fumes from the molten wax.

Two additional cases of acneiform dermatitis were seen during this investigation, both from the one factory. At another factory the foreman in the chromium-plating section was affected by jaundice and was admitted to hospital for treatment.

Although no fatalities occurred in this State, the industrial literature contains many reports of deaths amongst workers who have been exposed to the chlorinated naphthalene waxes, often only for a few weeks, and in 1944 information was received that a man who had been handling "See Kay" wax in an army workshop in Victoria had died from acute yellow atrophy of the liver.

The following action was taken:—

1. The Commonwealth Government was asked to permit the importation of non-toxic substitutes.
2. Until such time as suitable substitutes were available, it was recommended to the Department of Labour and Industry that chlorinated naphthalene waxes should only be used where special preventive measures, as recommended by this Division, were provided.

Dermatitis from Fulminate of Mercury.—An investigation was carried out to aid in determining the cause of an outbreak of dermatitis of the face, neck, back and forearms, associated with conjunctivitis, in a Victorian munitions plant engaged in manufacturing percussion caps, using a mixture consisting of mercury fulminate, antimony sulphide, potassium chloride, sulphur and gunpowder.

As mercury fulminate was the most likely cause of the trouble, special consideration was given to the estimation of the amount of this compound in the positions tested. It was found that the amount of fulminate in the air was not large in any position; the highest concentration of 0.2 milligrammes per cubic metre of air was found near a cupboard where loose material was blown with an air blast from trays containing the caps. It was amongst workers at this cupboard that the majority of cases of dermatitis had occurred.

Other factors in producing the dermatitis and eye irritation were that the overalls on which an appreciable deposit of dust settled were not regularly cleaned, and the habit of rubbing the face with dusty hands.

Dermatitis from Hexamethylene Tetramine.—An outbreak of dermatitis in a factory where synthetic resins of the phenol formaldehyde type were being manufactured was considered to be due to hexamethylene tetramine, which was used as an accelerator.

Other Investigations.

A large number of additional inquiries were made into complaints of unsatisfactory working conditions, such as bad ventilation, dangers of poisoning by toxic materials, and although many of these reports are of interest, it has not been practicable to summarise them for inclusion in this report.

SECTION II.

MEDICAL OFFICERS OF HEALTH.

METROPOLITAN COMBINED SANITARY DISTRICT OF SYDNEY.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEARS 1941-1946.

J. GRAHAM DREW, M.A., M.B., B.Ch. (Camb.), M.R.C.S. (Eng.),
L.R.C.P. (Lond.), D.P.H., D.T.M., D.T.H. (Syd), F.R.San.I.

To the Director-General of Public Health,
Sir,

I have the honour to present my report on the health conditions of the Metropolitan Area of Sydney for the years 1941-1946.

	1941.	1942.	
Population.....	1,423,810	1,469,930	
	1941.	1945.	
Live Births	23,931	31,629	Progressive yearly rise.
Ex-Nuptial	960	1,493	
Birth rate	16.33	...	Progressive rise since 1936 (13.63)
Still births	693	782	
Ex-Nuptial	35	46	
Deaths	15,278	15,398	Slight increase in interven- ing years.
Deaths under 1 year	1,007	869	Reduction
		1944.	
Still births per cent of all births	2.81	2.43	Progressive decline since 1936 (3.21)

Comparative Death Statistics.

Causes of Death.		1945
Diseases of the Heart	4,821 (rate per million 3,427.85)	5,164
Cancer	1,889 " " " 1,343.12)	2,050
Intracranial lesions of Vas- cular Origin	1,459 (" " " 1,037.38)	1,783
Pneumonia	755 (" " " 536.82)	759
Tuberculosis	655 (" " " 465.72)	577

Puerperal Causes.	1941.		1945.	
	No. of Deaths	Rate per 1,000 Live Births.	No. of Deaths.	Rate per 1,000 Live Births.
Puerperal Causes including Criminal Abortion	91	3.80	63	1.99
Criminal Abortion	21	.88	15	.47
Puerperal causes excluding Criminal abortion	70	2.92	48	1.52
Puerperal Septicæmia (including Post abortive sepsis)	11	.46	7	.22
*Puerperal Thrombophlebitis, Embol- ism and Sudden Death	10	.42	4	.13
Total Puerperal Infection	21	.88	11	.35

* Under revised classification introduced in 1940 these conditions are included in "Puerperal Infections".

Full statistics are not available for the years following 1941.

It is apparent that there has been a steady increase in population with a consequent rise in the birth rate.

The increase in ex-nuptial births no doubt reflects the influence of war-time. The still birth rate presents a steady decline and must reflect the greater attention being paid to prenatal care.

Similarly the decline in infant mortality should encourage the State towards redoubling the Specialist and Baby Health Centre activities associated with the post-natal period. I have no doubt that the toll of infant mortality would still be decreased if greater attention could be paid to the living conditions of our people by regular house to house inspections by municipal health inspectors. In this connection I hope that the time is not far distant when homes will be visited by Lady Health Visitors. They have proved their worth in England where in twenty-five years the sacrifice of infant life has been reduced about 50 per cent.

"The Health Visitor is primarily a health teacher and mother's advisor. She is also a social investigator, research worker and interpreter. Through her contacts with the family, the Health Visitor is the medium whereby the results of scientific investigation and legal enactments affecting the health and welfare of the family are conveyed to the general public."
—J. McKinlay Calder.

In September, 1944, the Minister of Health, the Hon. C. A. Kelly, M.L.A., addressed a conference of Metropolitan Mayors, Town Clerks and Health Inspectors convened for the purpose of emphasising the need for considerable augmentation of the

staffs of Municipal Health Departments. The parlous state into which housing of the people had fallen before and during the war years necessitates the enforcement of the first principle of a health inspector's duty, viz., house to house inspection.

The disordered state of countries to the north of Australia further requires that rat control campaigns should be prosecuted with the utmost vigour if diseases of which the rat is the reservoir are to be kept out of the country. The increase in the number of endemic tropical typhus (urban) cases presented an important pointer to this need. Many of our servicemen had suffered acutely from endemic tropical typhus fever (scrub) in New Guinea and elsewhere to the north, and during the years under review many instances of infestation of premises with rat mites were brought to the notice of this division. It was deemed, therefore, to be not improbable that the scrub variety might yet be introduced into the Metropolitan Area. Support for this thesis is presented by the occurrence of five or eight cases of Malaria de novo in several municipalities for which there is strong evidence that *Anopheles annulipes* was the vector. Hitherto it had been held that this mosquito was of no public health significance.

Greater attention must also be paid to the breeding of flies. In 1945 an epidemic of gastro-enteritis swept through the component municipalities. Every endeavour was made to isolate the infecting organism with incomplete success. It would appear, however, that it was closely allied to a coliform organism of the Morgan type.

In the campaign against flies very close attention has been paid to municipal methods of garbage and nightsoil disposal.

I am not satisfied in many instances with the condition of garbage tips, as the principle of controlled tipping is not adequately enforced in the complete covering of all deposited garbage with at least six inches of clean covering material at the end of each day's operations, thus producing completely enclosed cells of garbage where the heat caused by fermentation is effective in destroying larval life. Rats, too, will not burrow deeply, their burrows can be easily seen and easily fumigated with cyanogas, etc.

It is regrettable to state that a successful prosecution was lodged against the Municipality of St. Peters for contravention of Ordinance 51, Local Government Act, in this regard. The fact that the matter was treated lightly is possibly a sign of the times, but it represents a complete disregard for the welfare of the community and the state of the Public Health.

Housing.—Close attention has been given to the Government's Re-housing Programme as directed by the Housing Commission. From long experience of the unsewered areas of the Metropolitan Area, it was realized that one of the greatest problems to be solved would be the sanitary disposal of household drainage. The area is mainly composed of clay with little or no qualities for the absorption of drainage. Such a device as an absorption trench in the small curtilage of suburban homes is conspicuous by its failure to absorb. Such devices really become holding tanks and in time overflow. The custom then is to run an overflow pipe into the street gutters which in the majority of instances are of earth and unformed. Here the drainage water stagnates with the production of noxious insanitary conditions, together with excellent sources for the breeding of mosquitoes. Kerbing and guttering may remove the drainage from the proximity of homes but only to run to some other place where it again stagnates.

Early during the period under review efforts were made to advise the Housing Commission on the choice of suitable sites for Housing Estates with little success. Problems were also frequently discussed with the President of the Metropolitan Water, Sewerage and Drainage Board, who gave the greatest co-operation possible. As a result, sewerage facilities were extended to several new estates at the cost of depriving several other localities of such services, although they had been on the waiting list for several years. To try to obviate many of these troubles the President had a map prepared in which was illustrated suitable building lots which already enjoyed sewerage facilities, in the hope that these sites would be chosen to advance the schemes of the Housing Commission but with little result, and to-day a public health problem of the first magnitude now exists which is daily brought to the notice of the Health Department by residents of these new homes demanding that something should be done to eliminate the insanitary conditions prevailing in the housing estates. The only solution lies in the provision of sewers which the Metropolitan Water, Sewerage and Drainage Board would be glad to construct if men and materials were available.

Swimming Pools.—Regular inspections of swimming pools have been made, together with analyses of the waters. Where there is provision for chlorination and filtration, analyses have

been good, but various harbour pools have shown signs of pollution, especially after rainy weather. The Woolloomooloo baths have often shown signs of being polluted with organisms of faecal origin.

There is no doubt that as the times become more settled, close attention will be required towards the construction of modern pools fitted with filtration and chlorination purification apparatus.

Nightsoil and Garbage Services.—I am of the opinion, greatly strengthened by post-war conditions, that the time is long overdue for councils to operate these services through the medium

of their own employees under the direction of the Chief Health Inspectors. By so doing many of the difficulties encountered in the contract system should disappear.

This opinion is borne out by the successes achieved by those councils which operate these essential services as a municipal undertaking in contra-distinction to the many breakdowns reported to this department by irate ratepayers serviced by the contract system. It might be noted that the men so employed by councils would come under the superannuation system which would help in maintaining staffs contented and so produce a measure of permanency among them.

Infectious Diseases.

Year.	Typhoid Fever.		Scarlet Fever.		Diphtheria		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Undulant Fever.		Typhus Fever.	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
1941	10	2	1,964	2	1,299	44	58	5	257	51	3	2	...	...	6	...
1942	12	*	847	*	708	*	23	*	502	*	2	*	...	*	4	*
1943	11	3	2,419	3	1,204	49	10	...	218	46	6	2	1	...	10	...
1944	16	*	3,296	*	717	*	10	*	93	*	...	*	1	*	25	*
1945	11	*	3,542	*	626	*	399	*	62	*	2	*	2	*	16	*
1946	6	*	1,758	*	414	*	453	*	54	*	2	*	...	*	34	*

* Figures from Government Statistician not available.

Typhoid Fever.—The incidence of this disease has remained fairly constant. All cases have been of a sporadic nature. It is significant that the sources of infection in three instances were in three grandmothers who had suffered from the disease in their early married life. I would advise that people, especially women, who have suffered an attack of typhoid fever, should apply to the department for a routine test from time to time so that their freedom from carrying the germs could be established.

Scarlet Fever.—The period under review has been marked by a re-occurrence of scarlet fever in epidemic form. Fortunately the disease has been mild, only five deaths having been recorded. Parents of children suffering from an attack, no matter how mild, are asked to co-operate fully with health officers in their isolation requirements.

Diphtheria.—This disease is marked by a steady decline in incidence. There is no doubt that immunization is the influence which has brought about this happy result. Parents should note, however, that if there is any falling away in attendances of children as they reach their first birthday, a serious epidemic will result. This was the case early in 1943 when, as a result of the reduction in the number of cases recorded in 1942, apathy set in, the clinics were deserted and the disease immediately flared up again with forty-nine deaths. Immediate measures were taken to widely broadcast the dangerous situation into which we were again drifting—the clinics were rushed and the disease died down. Since then the decline has been steady and no deaths have been recorded.

Anterior Poliomyelitis or Infantile Paralysis.—The disease again became apparent in 1945-46. Too much emphasis cannot be placed on the fact that the disease can be highly generalized throughout the community and that all infected persons do not suffer from the third phase—paralysis. In fact the converse holds good in that only a small proportion so suffer and even then with expert medical attention the chances of complete recovery are good. The disease is spread in the fine spray which emanates from the mouth in sneezing, coughing and kissing, and in the bowel discharges. It is a disease of crowds, and badly ventilated places. Fresh air, sunshine, avoidance of fatigue and clean personal habits are its enemies. It has been noted in many instances that those who suffer from a paralytic attack have indulged in strenuous exercise in the early stages of the infection. People, especially parents in regard to their children, when the disease is epidemic, are urged to refrain from passing on their saliva to others, to attend to personal hygiene, ventilation and sanitation, to avoid crowds, to ensure adequate rest periods, to go to bed if an attack of fever become apparent, and lastly to seek medical advice.

Cerebro-spinal Meningitis.—The early war years were marked as was to be expected by outbreaks of the disease. The rules for infantile paralysis in the main apply to this disease and its control.

Typhus Fever.—There has been a tendency for an increased number of cases to occur. In every instance rats have been found to be prevalent at some location where the patient lived or worked. In one or two instances, cases have recurred and the potential source of infection traced to a common

location. A most vigorous campaign for the eradication of rats has been maintained and every effort has been made to influence municipal councils to do their duty in this regard.

Health Education.—During the period under review, the celebration of Health Week has been maintained annually in the metropolitan area. Special themes were chosen for each year such as 1940: "Now more than ever Fitness," 1941: "Your Health is the Nation's Strength," 1942: "For Health and Humanity," 1943: "Hope. The Ideal—Home, Health, Happiness," 1944: "Health in Industry Hastens Victory," 1945: "Health and Rehabilitation," 1946: "Health Will Conquer Disease."

In 1945-46 the Health Education Vote for the Department was increased to £25,000 and in 1946-47 to £32,000. This enabled the Department to issue a vast amount of informative material on health and disease. Press, radio, cinema, posters and public meetings were all utilized, culminating in a graphic presentation in modern fashion of the activities of the Health Department which was shown at the Town Hall, Sydney, towards the end of 1946. In addition, a pavilion for the pictorial demonstration of venereal disease was also erected. They were eminently successful as large crowds of people viewed them with great interest and attention.

From the immense amount of correspondence received by the Division of Publicity and by the increase in attendance at the Divisions of Tuberculosis and Social Hygiene, it can be categorically stated that the vigorous propaganda health campaign was a great success.

In conclusion I desire to thank the health officers of the municipalities which go to make up the metropolitan area for their loyal co-operation during a very difficult period. In many instances, shorthanded and faced with innumerable "controls," they put up a good fight. I trust in the years ahead elected members of councils will realise the value of their respective Health Departments and will do all that is possible to raise these Departments to the standard which they fully merit by increasing staffs in conformity with the size of the respective populations and housing them in offices worthy of the name of Health Department.

J. GRAHAME DREW,
Metropolitan Medical Officer of Health.

HUNTER RIVER COMBINED SANITARY DISTRICT.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEARS 1941-1946, INCLUSIVE.

Staff.

The staff of the office comprised Medical Officer of Health (Dr. J. R. SHANNON), Senior Health Inspector (Mr. A. J. GUY), Supervisory Nurse (Miss T. BAIN), and Office Assistant (Miss E. PATERSON).

Dr. VAN SOMEREN was appointed Acting Medical Officer of Health for the period December, 1941, to December, 1942, vice Dr. J. R. SHANNON who was on active service.

Epidemiological.

Typhoid Fever:

1941—11 cases	1942—7 cases	1943—nil.
1944—2 cases	1945—2 cases	1946—3 cases.

In 1944 the cases notified were sporadic, occurring in six different local government areas. In 1942 six of the seven cases were in the Greater Newcastle area and three of them in Merewether. During the previous five years two or three cases were reported in the Adamstown-Merewether area, yet no evidence was found to point to a carrier that could be identified. In 1943 for the first time in the history of the Hunter district no case of typhoid was notified. The 1944 cases occurred at Hinton—three; and Newcastle—one. At Hinton one notified case led officers of this Department to locate two other cases which were in Maitland Hospital suffering from "influenza."

Diphtheria.—The worst year in the series 1941-46 from an epidemic viewpoint was 1941 when 471 cases with 22 deaths occurred. This sudden increase, from 166 in the previous year, was due largely to the failure to immunise. The lowest figures for immunisation were 1940 (2,023) and 1941 (1,970).

After 1941 the notification remained at about 100 per annum, but in 1945 there was a considerable increase in case mortality. This rose to one in twelve, compared with one in seventy-eight in 1936, for example. Case histories at Newcastle Hospital confirmed this increase of virulence, several of the patients being of the fulminant laryngeal types.

In 1946 the virulence of the disease was still very high, the case mortality being one in twenty-one.

Scarlet Fever.—During the years 1943, 1944, 1945, scarlet fever became epidemic. The peak of the epidemic was in 1945 with 694 notifications. Mortality was nil. In 1946 the notifications had fallen to 141 and there was one death. An outbreak of a virulent type of scarlet fever occurred at a mental hospital in 1943. Thirty-three of the inmates contracted the disease and of these eight died. Factors contributing to the high mortality rate were, in addition to the virulence of the organism, overcrowding, poor methods of ward cleaning, and the difficulties incidental to the handling of debilitated mental cases.

Infantile Paralysis.—No case occurred in the period under review, till 1943, when there was one notification. In 1944 there was one case. In 1945 the disease became epidemic with twenty-eight cases, and in 1946, nineteen cases. The previous wave of this disease was in 1938, when sixty-two cases were notified.

Cerebro-spinal Meningitis.—Figures remained high for 1941—forty-one cases and eight deaths; 1942—forty-five cases and fifteen deaths; 1943—thirty-two cases and ten deaths. In 1944 the notifications dropped to six, in 1945 to thirteen cases, and in 1946 to nine cases. This rise and fall in incidence conformed with the concentration of troops in the area. The death rate with the new sulphanamide treatment approximated that experienced during the same period in England.

An outbreak of cerebro-spinal meningitis at Dungog is worthy of comment. During the periods July, 1942, to September, 1944, five young children died from cerebro-spinal meningitis. The outbreak of the disease coincided with the general increase of the incidence in the Hunter Valley and was in turn correlated with the rise of troop concentrations in the district.

Dengue Fever.—In February, 1943, dengue fever became epidemic at Dudley, Belmont and Singleton, and in outlying districts infection was very widespread. Some cases occurred in the Greater Newcastle area. A controversy was started in the press as to whether *Aedes aegypti* occurred in the Greater Newcastle area. This question was settled by officers of this department, who took specimens of *Aedes aegypti* at various points, including council property at Stockton. The specimens were classified at the School of Public Health, University of Sydney.

General.

Midwifery and Infant Welfare.—In 1944 various public bodies, stimulated by the inadequacy of the midwifery services in the district, met at the City Hall to urge the building of a public midwifery section at the Newcastle Hospital. By the end of 1946 considerable progress had been made in the building of the new midwifery wing at the hospital.

A movement to found a Tresillian Mothercraft Training Home in the Hunter district was also given much support, though no tangible results had been attained in this project by December, 1946.

Housing Projects.—In 1944 a new housing project was inaugurated at Wallsend by the Housing Commission. The design of houses to be erected was much superior to the war-time housing designs at Homeville, Maitland.

*97811—11

Special Activities During War Years.—The officers of this branch formed part of the National Emergency Services and Civilian Aid Services and in that capacity undertook organisation of medical and hospital co-ordination and training of emergency staff for this purpose.

Concerning civilian aid services, departmental officers occupied executive positions, the Senior Health Inspector being responsible for housing and billeting of displaced persons. A survey was made of halls in the district for the purpose of estimating their value as temporary shelters, aid posts, etc. The services of the Medical Officer of Health, Senior Health Inspector and Supervisory Nurse were in constant demand concerning the training of civilian groups associated with the emergency services.

Under the guidance of the Senior Health Inspector, municipal and shire public health services were co-ordinated and a plan prepared whereby the whole of public health personnel and plant and equipment used in such services could, if called upon, be directed to any particular area. Realizing that in the event of invasion mass evacuation by the public may occur, a close survey was made of routes which would be open to the public, water bearing points were noted, the quality of the water and treatment of such determined. Temporary rest sites and those affording protection were plotted. Health officers and assistants equipped with tools and emergency equipment were allotted areas of patrol, and, had the need arisen, would have provided for the comfort of evacuees.

The value of this organisation was proved when, due to various difficulties, the council was advised by its nightsoil removal contractor that he could not carry on. Another contractor was found to be available provided plant could be obtained. Within twenty-four hours all necessary plant was made available on loan and the service continued without interruption.

During war years, Newcastle was the centre of a vast military establishment; a considerable number of troops stationed in, and adjacent to, the source of the city water supply.

In conjunction with Lieutenant Beasley, the Senior Health Inspector arranged for removal of refuse by a number of farmers who utilized the waste for the purpose of pig feeding, thus combining camp sanitation with production of a food commodity in short supply. By zoning the area into waste removal districts it became possible to assure camp cleansing and in the event of any one trader deciding to discontinue, the trader was available to render the service from an adjoining district.

The fact that the Hunter River district is within the dengue fever area was brought under notice of the respective councils, and a warning issued that an epidemic of that disease was imminent. The Council of the City of Greater Newcastle organised an intensive mosquito eradication campaign, and in this regard was greatly assisted by a staff of observers loaned for that purpose by the military authorities. A house-to-house survey was completed, resulting in a thorough cleansing of the city and suburbs, removal of numerous defective rainwater tanks and mosquito proofing of those that remained. One of the council's officers was detailed to concentrate on mosquito eradication measures, and as a result of liberation of fish, oil spraying, and other general measures, the major part of the city of Greater Newcastle enjoyed, for probably the first time in its history, almost complete freedom from mosquitoes. A few isolated cases of dengue fever did occur, however, the work which had been done no doubt prevented a major outbreak.

Absence of Medical Officer of Health on Military Duties.—During the latter part of 1940, and for the major part of 1941, the Medical Officer of Health, Dr. J. R. Shannon, was serving with the 1st Cavalry Division of the A.I.F.

For approximately eleven months of his absence this office was without the services of a medical officer of health.

During this period, Dr. Van Someren, who was then attached to Head Office Staff, made periodical visits for the purpose of making medical examinations, and in March of 1941, commenced duties at Newcastle, as Acting Medical Officer of Health.

December, 1940, the Deputy Director-General of Public Health, Dr. H. G. Wallace, visited Newcastle for the purpose of appraising the situation in regard to this Department's activities concerning emergency services, and in the capacity of Director of Emergency Medical and Hospital Services remained in this district for about three months.

For a short period Dr. Wallace was assisted by Dr. B. R. Overend and an officer loaned by the Hospitals Commission.

Veneral Disease Control.—Police Inspector (now Superintendent) Blakely was directed to inquire into and report on measures considered desirable towards checking the spread of veneral disease.

Subsequent to a conference with Senior Inspector Guy, a regulation was issued under the National Security Act which enabled the Commissioner, under the Venereal Diseases Act, to require any person suspected of having been exposed to infection to undergo medical examination.

As a result of this power and the co-operation of the military authorities, it is felt that the incidence of venereal disease infection in this district was reduced to a minimum. During this period defaulters from treatment were prosecuted.

General Sanitation.—Constant supervision of the district was maintained and despite shortages of materials and labour during these years improvement has been achieved and local government health inspectional services increased. Extensions to nightsoil removal services and introduction of a new service was obtained and, in addition, two new garbage scavenging districts declared.

Increased building activity following cessation of war, has resulted in greater need for attention to areas of unhealthy building land, and the erection of buildings beyond the boundaries of sewered areas has resulted in an increase in proposals to install septic tanks.

Rationing of meat resulted in the establishment of new undertakings for the supply of meat for dog food. To offset loss of trade it appeared that some butchers were obtaining supplies of meat for dog food from irregular sources. Following investigations, one butcher was prosecuted for selling meat, which was not intended for human consumption. From all appearances the meat was obtained from knacker premises, and was the flesh of cracker cattle. As a result of this prosecution, the practice appears to have ceased.

Health Publicity.—During these years, health publicity related to problems peculiar to the times and regardless of difficulties and pressure of work, the annual health week campaigns continued.

It is felt that during war years the public were prepared to accept and act on advice, and were more co-operative than in previous years.

Prior to the outbreak of war, the subject, venereal disease, could hardly be discussed in the open; however, to-day the public are more fully informed, and constant requests have been made for delivery of addresses and screenings of films on venereal disease. The Health Week Committee extended its activities in the direction of visual education, making use of 35 mm. and 16 mm. films. This form of publicity is proving popular and enables a more vivid description to be given than is possible by an oral address. Organised groups are constantly seeking the services of this Department, and members of the Health Week Committee and in particular request that a screening of films be arranged. To comply with these requests the officers concerned are obliged to forego their evening leisure.

Tuberculosis Division.

NEWCASTLE CHEST AND THROAT CLINIC AND DISPENSARY.

	1945.	1946.
1. Total number of Attendances, Including Contacts	8,627	9,410
2. Number of New Patients (excluding contacts) examined during the year as above—	983	1,004
(a) Definitely Tuberculous	91	882
(b) Non-Tuberculous	892	122
(c) Diagnosis not complete .....	...	...
3. Number of Contacts examined during the year	243	300
(a) Definitely Tuberculous	6	3
(b) Non-Tuberculous	237	297
(c) Diagnosis not complete .....	...	...
4. Total number of Nurses Visits during the year	644	740
5. Number of homes visited during the year.....	410	450
6. Number of Sputum examinations	408	424
7. Number of X-ray examinations	1,872	2,296
(a) New Cases	983	1,280
(b) Cases previously X-rayed at Clinic ...	306	390
(c) Contacts	583	626
8. Number of Cases on Clinic Register, 30th June, 1946	1,920	2,231

TABLE COMPARING THE WORK OF THE CHEST CLINIC IN THE YEARS 1941 AND 1946.

	1941.		1946.
Attendances	4,390	Attendances.....	9,410
New Cases	533	New Cases	1,226
Positive Tubercular	70	Positive Tubercular	135

BROKEN HILL AND DISTRICT.

SUMMARISED REPORT OF THE MEDICAL OFFICER OF HEALTH, FOR THE YEARS 1941-1946.

The population of the Broken Hill Municipal District during the period under review is revealed in the following table:—

TABLE A.

1941.	1942.	1943.	1944.	1945.	1946.
25,585	25,233	25,075	25,805	27,437	27,600

The deaths for the period under review are shown in the following table:—

TABLE B.

Year.	Males.	Females.	Total.
1941	159	89	248
1942	151	114	265
1943	148	105	253
1944	150	123	273
1945	161	99	260
1946	137	95	235

The following table (C) reveals the number of births during the period under review.

TABLE C.

Year.	Males.	Females.	Total.
1941	319	285	604
1942	329	274	603
1943	297	304	601
1944	262	268	530
1945	296	295	591
1946	371	372	743

Infectious Diseases.—The incidence of notifiable infectious diseases in the Broken Hill Municipal District was as follows:—

TABLE D.

Disease.	1941.	1942.	1943.	1944.	1945.	1946.
Typhoid and Paratyphoid	2	3 (2 N.I.)	2	...	2	...
Scarlet Fever	45 (1 N.I.)	10	90	63 (1 N.I.)	44	27 (1 N.I.)
Diphtheria	42	27	18	9	34	91 (1 N.I.)
Meningococcal Meningitis	7 (2 N.I.)	21 (2 N.I.)	3	...	1	1
Infantile Paralysis .....	...	...	...	...	...	3

The only notifiable infectious diseases of any frequency were scarlet fever and diphtheria. The twenty-one cases of meningococcal meningitis during 1942 occurred at irregular intervals throughout that year, and the three cases of infantile paralysis during 1946 were notified in the month of January.

General.—The aboriginal station at Menindee was visited at intervals during the period under review. The general health of the inhabitants was satisfactory. When necessary cases of illness from the station were admitted to the Broken Hill and District Hospital for observation and treatment.

In December, 1941, Mantoux tests were performed on 108 inhabitants of the camp at the aboriginal station, Menindee, and of these nineteen only gave a positive reaction. The results indicated chiefly a family and not a general tuberculous infection among the inhabitants, and confirmed the absence of any immune response to tuberculosis infection which has frequently been noted when cases of tuberculosis have occurred among the aboriginals.

An anti-tuberculosis clinic was commenced in Broken Hill in June, 1941, and is justifying its existence. A great number of contacts of known positive cases of tuberculosis have been investigated, and regular re-examinations of child contacts are being carried out. All doctors practising in the town submit cases for investigation.

The following table reveals the number of cases investigated during the period under review:—

TABLE E.

Year.	New Cases.	Total Number of Attendances.
1941	369	846
1942	118	601
1943	134	676
1944	128	812
1945	78	819
1946	79	692

The number of examinations conducted at the State Laboratory during the years under review was as follows:—

TABLE F.

Year.	Bio-chemical Tests.	Bacteriological Examinations.	Haemotological Examinations.	Histopathological Examinations.	Serological Specimens Sent to Sydney.	Total.
1941	2,033	4,816	2,501	150	259	9,739
*1942	2,096	3,743	2,841	120	227	9,927
1943	3,024	3,283	3,939	124	172	10,542
1944	2,768	2,702	4,301	117	154	10,942
1945	2,754	3,291	4,737	101	144	10,937
1946	2,769	3,856	4,695	150	302	11,752

* Comparatively few throat swabbings were examined during this period, and this accounts for the decrease in the figures of bacteriological examinations. The increase, however, of 400 in biochemical and haemotological examinations was a considerable one, and, from the point of view of the work required, far outweighed that required in performing throat swabbing examinations.

In February, 1947, this laboratory was handed over, together with its equipment, to the control of the Broken Hill and District Hospital.

Dr. W. E. George, Medical Officer of Health, was absent from Broken Hill from April to July, 1946, on a visit to Canada and the United States of America to investigate, at the request of the Commonwealth and State Governments, the use of aluminium in the prevention and treatment of silicosis.

A report of his investigations and conclusions was published in the New South Wales *Industrial Gazette* of September, 1946.

SECTION III.

HOSPITALS AND INSTITUTIONS.

REPORT UPON THE STATE HOSPITALS UNDER THE CONTROL OF THE DIRECTOR-GENERAL OF PUBLIC HEALTH FOR THE YEARS 1941-1946, INCLUSIVE.

WATERFALL SANATORIUM.

ANNUAL REPORT, 1941.

1. (a) Number of beds available on 31st December, 1941:—

	Male.	Female.	Total.
Patients	292	176	468
Working inmates ...	129	19	148

	Patients.	Workers.	Total.
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(b) Remaining in on 31st December, 1940 ..	391	138	529
Admitted during 1941 ..	478	637	1,115
Total treated during 1941 ..	869	775	1,644
Number discharged ..	374	643	1,017
Number died ..	58	2	60
Remaining in on 31st December, 1940 ..	391	138	529
Average daily number resident ..	421	133	554
Average residence of discharged patients in days—475.			
Total cost of maintenance and treatment of indoor patients, £39,197.			
Average cost of patients per annum (cost per occupied bed), £91 1s. 10d.			

(c) Outpatients.

Number of individuals who received treatment—90.
Total number of attendances—93.

2. Staff at 31st December, 1941.

Honorary medical officers	2
<i>Salaries and Wages Staff.</i>	
Management and clerical	3
Medical officers	4
Nursing staff	41
Domestic staff	5
Maintenance staff	5
Special departments	2
Other	27

ANNUAL REPORT, 1942.

1. (a) Number of beds available on 31st December, 1942:—

	Male.	Female.	Total.
Patients	270	159	429
Working inmates ..	129	19	148

	Patients.	Workers.	Total.
--	-----------	----------	--------

(b) Remaining in on 31st December, 1941 ..	437	130	567
Admitted during 1942 ..	404	629	1,033
Total treated during 1942 ..	841	759	1,600
Number discharged ..	370	657	1,027
Number died ..	52	2	54
Remaining in on 31st December, 1942 ..	419	100	519
Average daily number resident ..	424.6	111.4	536
Average residence of discharged patients in days—362.			
Total cost of maintenance and treatment of indoor patients—£39,287 19s. 3d.			
Average cost of patients per annum (cost per occupied bed)—£92 12s. 7d.			

(c) Outpatients.

Number of individuals who received treatment—47.
Total number of attendances—50.

2. Staff at 31st December, 1942.

Honorary medical officers	3
<i>Salaries and Wages Staff.</i>	
Management and clerical	3
Medical officers	5
Nursing staff	29
Domestic staff	4
Maintenance	5
Special departments	3
Other	27
Total	79

ANNUAL REPORT, 1943.

1. (a) Number of beds available on 31st December, 1943:—

	Male.	Female.	Total.
Patients	292	176	468
Working inmates ...	129	17	146

	Patients.	Workers.	Total.
--	-----------	----------	--------

(b) Remaining in on 31st December, 1942 ..	419	100	519
Admitted during 1943 ..	271	535	806
Total treated during 1943 ..	690	635	1,325
Number discharged ..	276	532	808
Number died ..	43	1	44
Remaining in on 31st December, 1943 ..	371	102	473
Average daily number resident ..	370	102	472
Average residence of discharged patients in days, 435.			
Total cost of maintenance and treatment of indoor patients, £54,841 10s. 9d.			
Average cost of patients per annum (cost per occupied bed), £148 14s. 5d.			

(c) Outpatients.—Number of individuals who received treatment, 45; total number of attendances, 50.

2. Staff at 31st December, 1943:—

Honorary medical officers, 3.

Salaries and Wages Staff—Management and clerical, 3; medical officers, 5; nursing staff, 43; domestic staff, 11; maintenance staff, 5; special departments, 3; other, 21.

ANNUAL REPORT, 1944.

1. (a) Number of beds available on 31st December, 1944:—

	Male.	Female.	Total.
Patients	292	176	468
Working inmates ..	129	19	148

	Patients.	Workers.	Total.
--	-----------	----------	--------

(b) Remaining in on 31st December, 1943 ..	371	102	473
Admitted during 1944 ..	263	546	809
Total treated during 1944 ..	634	648	1,282
Number discharged ..	248	531	779
Number died ..	53	...	53
Remaining in on 31st December, 1944 ..	333	117	450
Average daily number resident ..	356.5	107	463.5
Average residence of discharged patients in days 515.5.			
Total cost of maintenance and treatment of indoor patients, £55,516 7s. 4d.			
Average cost of patients per annum (cost per occupied bed), £155 15s. 6d.			

(c) Outpatients.—Number of individuals who received treatment, 70; total number of attendances, 75.

2. Staff at 31st December, 1944:—

Honorary medical officers, 3.

Salaries and Wages Staff—Management and clerical, 3; medical officers, 5; nursing staff, 28; domestic staff, 5; maintenance staff, 5; special departments, 3; other, 34.

ANNUAL REPORT, 1945.

1. (a) Number of beds available on 31st December, 1945:—

	Male.	Female.	Total.
Patients	292	176	468
Working inmates ..	129	19	148

	Patients.	Workers.	Total.
--	-----------	----------	--------

(b) Remaining in on 31st December, 1944 ..	333	117	450
Admitted during 1945 ..	150	468	618
Total treated during 1945 ..	483	585	1,068
Number died ..	32	2	34
Number discharged ..	180	474	654
Remaining in on 31st December, 1945 ..	271	109	380
Average daily number resident ..	319.5	106.5	426
Average residence of discharged patients in days, 540.			

Total cost of maintenance and treatment of indoor patients, £57,695 4s. 4d.
Average cost of patients per annum (cost per occupied bed), £180 11s. 7d.

(c) Outpatients.—Number of individuals who received treatment, 113; total number of attendances, 129.

2. Staff at 31st December, 1945:—

	Posts.	Filled.
Honorary medical officers	2	2
Salaries and Wages Staff—		
Management and clerical	3	3
Medical officers	5	4
Nursing staff	43	26
Domestic staff	13	5
Maintenance staff	5	5
Other staff	38	30
Special departments	3	3

ANNUAL REPORT, 1946.

1. (a) Number of beds available on 31st December, 1946:—

	Male.	Female.	Total.
Patients	292	176	468
Working inmates ..	129	19	148

	Patients.	Workers.	Total.
(b) Remaining in on 31st December, 1945 ..	271	109	380
Admitted during 1946 ..	125	696	821
Total treated during 1946	396	805	1,201
Number discharged ..	139	667	806
Number died	28	4	32
Remaining in on 31st December, 1946 ..	229	134	363
Average daily number resident	239	119	358
Average residence of discharged patients in days, 185.			
Total cost of maintenance and treatment of indoor patients, £58,431 18s. 11d.			
Average cost of patients per annum (cost per occupied bed), £244 9s. 6d.			
(c) Outpatients.—Number of individuals who received treatment, 74; total number of attendances, 80.			

2. Staff at 31st December, 1946:—

	Posts.	Filled.
Honorary medical officers	2	2
Salaries and Wages Staff:—		
Management and clerical	3	3
Medical officers	5	5
Nursing staff	43	18
Domestic staff	13	7
Maintenance staff	5	5
Other staff	39	34
Special departments	3	3

2. DAVID BERRY HOSPITAL.

Berry, New South Wales.

SECRETARY'S REPORT FOR YEARS 1941-1946, INCLUSIVE.

Administration Staff.—Visiting Medical Officer, Dr. R. C. APPS; Matron, D. CAWOOD, June, 1941-2-3; Acting Matron, D. CADDY, July, 1943 to July, 1944; Acting Matron RUSSELL HALL, July, 1944, to November, 8th, 1946; Acting Matron, A. WILSON, from that date.

Clerical Staff.—A. HALE resigned as Secretary December, 1943; Clerk, R. E. GREEN, from January, 1944.

Resident Staff.—Acting Matron, head nurse, three staff nurses, three assistants in nursing, four domestics, two inmate workers.

Non-resident.—Two attendants.

Staff Problems.—The staff position has been most acute throughout the period, with both nursing staff and domestic.

Number of—Wards 9, beds 32, cots 4.

	Male.	Female.	Total.
<i>Ward Patients Treated, 1941-1946</i>	1,349	996	2,345
Discharged	1,232	916	2,138
Births	16	16	32
Deaths	85	43	128
Operations			1,215
X-rays			850
Infectious cases			62
Outpatients			1,418
Collections, 1941-1946		£5,299	9 4

Increase in Collections.—The increase in collections was due to patients from military camps in the Shoalhaven area.

Ground and Buildings.—An emergency hospital was completed in 1944, but has not been occupied. Use has been made of a portion for clerks office, recreation room for nursing staff, and store rooms. The main hospital building is in need of painting. The grounds generally are in fairly good order.

3. STRICKLAND CONVALESCENT HOSPITAL FOR MEN AND WOMEN, "CARRARA," VAUCLUSE.

REPORT OF THE MATRON FOR THE YEARS 1941-1946, INCLUSIVE.

Beds available, 120—80 Female, 40 Male.

Admissions, Discharges and Daily Average.			Admissions, Discharges and Daily Average.		
	Male.	Daily Average.		Female.	Daily Average.
1941—			1941—		
Admissions	392	} 27	Admissions	694	} 43
Discharges	385		Discharges	694	
1942—			1942—		
Admissions	295	} 24	Admissions	298	} 25
Discharges	298		Discharges	290	
Deaths	1		Deaths	1	
1943—			1943—		
Admissions	247	} 24	Admissions	633	} 44
Discharges	258		Discharges	633	
Deaths	1				
1944—			1944—		
Admissions	285	} 28	Admissions	658	} 47
Discharges	275		Discharges	654	
1945—			1945—		
Admissions	229	} 25	Admissions	594	} 47
Discharges	239		Discharges	595	
			Deaths	1	
1946—			1946—		
Admissions	216	} 22	Admissions	590	} 46
Discharges	215		Discharges	590	
			Deaths	1	

Total during years 1941-1946 inclusive—

Male—	
Admissions	1,664
Discharges	1,670
Deaths	2
Female—	
Admissions	3,467
Discharges	3,456
Deaths	3
Daily Average—	
Male	25
Female	42
Staff has remained static during these years—	
Nursing	7
Domestic	6
Attendants	3
Clerical	1
Maintenance collected from Patients—	
1941	£ 987
1942	1,008
1943	1,456
1944	1,600
1945	1,772
1946	1,480
Yearly Average	1,384

Activities.—Patients are admitted to the hospital through the Metropolitan Hospitals, Health Department and country doctors, and the majority are most appreciative of the care and attention extended to them and also of the beauty, peace and quiet of their surroundings. On discharge most patients show marked improvement in condition generally and an increase in weight as the result of their convalescence following their medical and surgical illnesses. A large number of plaster and crutch cases have been admitted and also others who have had to report to their hospitals at regular intervals for deep-ray treatment, etc.

In 1941 the entire premises were painted externally and several wards and rooms renovated with high-class wall finishes. Numbers of trees and shrubs were planted outside men's quarters. In 1942 the roadway to back gate was reconstructed and pathway to nurses' quarters repaved. Through these years, 1941-1946, general maintenance and renovations were performed by the Public Works Department to sewerage and water pipes, downpipes guttering, etc.

4. LIDCOMBE STATE HOSPITAL AND HOME.

REPORT OF THE MEDICAL SUPERINTENDENT FOR THE YEARS 1941-1946, INCLUSIVE.

	1941.		1942.		1943.		1944.		1945.		1946.	
	No.	Total.	No.	Total.	No.	Total.	No.	Total.	No.	Total.	No.	Total.
Beds available beginning of year—												
Hospital	1,024		1,010		1,010		1,010		964		894	
Dormitories	835		835		835		835		900		651	
Infectious Division*	48		...		...		...		...		...
		1,907		1,845		1,845		1,845		1,864		1,545
Daily Average No. of Patients and Inmates resident												
	1,520	...	1,317	...	1,187	...	1,130	...	1,126	...	1,201	...
Admission—Discharges												
In Institution beginning of year—												
Hospital	940		918		805		796		726		795	
General Division	564		484		391		342		324		391	
Infectious Division*	16		2		...		...		...		...
		1,520		1,404		1,196		1,138		1,050		1,186
Admissions—												
Hospital	1,793		1,694		1,363		1,226		1,144		1,147	
General Division	1,684		1,281		970		891		1,051		1,220	
Infectious Division*	176		...		...		...		...		...
		3,653		2,975		2,333		2,117		2,195		2,367
Transferred from yard to other Sections—												
Hospital	349		311		280		228		248		263	
General Division	309		291		168		129		129		206	
Infectious Division* .....	...		...		...		...		...		...
		658		602		448		357		377		469
		5,831		4,981		3,977		3,612		3,622		4,022
Discharges—												
Hospital	1,160		966		783		775		640		710	
General Division	1,721		1,350		903		805		864		1,152	
Infectious Division*	190		2		...		...		...		...
		3,071		2,318		1,686		1,580		1,504		1,862
Deaths—												
Hospital	695		861		701		620		554		567	
General Division	3		3		4		5		1		5	
Infectious Division* .....	...		...		...		...		...		...
		698		864		705		625		555		572
Transferred to other Sections—												
Hospital	309		291		168		129		129		206	
General Division	349		311		280		228		248		263	
Infectious Division* .....	...		...		...		...		...		...
		658		602		448		357		377		469
		4,427		3,784		2,839		2,562		2,436		2,903
In Institution end of year—												
Hospital	918		805		796		726		795		722	
General Division	484		392		342		324		391		397	
Infectious Division*	2		...		...		...		...		...
		1,404		1,197		1,138		1,050		1,186		1,119

* Infectious Division closed 1941.

	1941.		1942.		1943.		1944.		1945.		1946.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Cost of Maintenance and Treatment	102,466	13 6	100,833	15 8	106,251	2 9	86,046	12 7	98,281	4 6	123,159	7 8
Average Annual Cost of Patients and Inmates	67	8 3	76	11 3	89	10 3	76	2 11	87	5 7	102	10 11
Annual Contribution toward Maintenance of Pensioners	5,537	1 4	2,978	0 8	6,499	15 10	29,567	15 6	30,336	15 7	37,208	16 1
Revenue Collected	1,314	6 0	1,562	5 11	447	5 0	6,257	17 4	5,790	1 9	6,601	8 3
Medical:												
Major Operations during year	188		166		175		193		192		121	
X-Ray Examinations	1,650		1,540		2,024		2,385		2,151		2,540	
Pathological Department Examinations	2,358		1,821		1,932		2,037		2,130		2,176	
Miscellaneous—												
Bakehouse—												
Bread and cake produced	1,073,990	lb.	917,592	lb.	872,784	lb.	855,430	lb.	861,285	lb.	864,000	lb.
Cost per lb.	1-24d.		1-333d.		1-353d.		1-359d.		1-395d.		1-401d.	
Laundry—Articles laundered	1,141,812		1,098,338		1,050,200		1,005,904		1,087,300		1,052,082	
Dairy Farm—Milk produced	86,790	gals.	79,470	gals.	78,314	gals.	56,211	gals.	30,029	gals.	49,961	gals.
Vegetable Gardens—												
Vegetables grown	91,168	lb.	34,814	lb.	44,550	lb.	32,355	lb.	39,089	lb.	30,146	lb.
Green feed	32½	tons	16 t. 18½	cwt.	51 t. 15	cwt.	16 t. 2	qrs.	19 t. 2	qrs.	9	tons
Piggery, etc.—Sales	£259	5s. 3d.	£1,065	0s. 4d.	£410	0s. 0d.	£569	13s. 4d.	£304	6s. 1d.	£221	1s. 3d.

During the period 1941-1945 the activities of the institution were curtailed through war activities and only essential work was carried out owing to shortage of Staff. The Department of Public Works, however, carried out certain maintenance and replacement works during the years mentioned, all of which have been of much assistance in the general efficient maintenance of the institution.

Throughout the years under review, regular entertainments were given by various organisations for the enjoyment of the inmates and gifts of food and kind were received from other organisations for which the thanks of the Administration is given.

5. LIVERPOOL STATE HOSPITAL AND HOME FOR MEN.

REPORT OF THE MEDICAL SUPERINTENDENT FOR THE YEARS 1941-1946, INCLUSIVE.

Honorary Visiting Staff.—Consulting Surgeon, B. T. EDVE, F.R.C.S.; Surgeon, L. D. MILLER, M.B., F.R.C.S.; Assistant Surgeons, A. L. WEBB, M.B., F.R.C.S., J. A. LAWSON, M.B., F.R.C.S., J. A. MANTON, M.B., Ch.M.; Anaesthetist, A. ROSE INNES, L.R.C.P. (London), M.R.C.S. (Eng.); Ear, Nose and Throat Surgeon, H. EISENBERG, M.B., B.S.; Dermatologist, W. A. McDONALD, B.A., M.B., Ch.M.; Urologist, R. T. CAMPBELL, M.B., Ch.M.

Staff.—During the years 1941 to 1946 several changes occurred in the personnel of the executive staff of the institution in consequence of retirements or promotions.

In 1941 Dr. C. R. O'Brien was appointed to the position of Medical Superintendent as successor to Dr. D. Wallace, retired, whilst later in the same year Mr. S. J. Warner was appointed Manager vice Mr. S. T. Creagh transferred to the corresponding position at Lidcombe State Hospital. Following the retirement in 1946 of the officer last named, Mr. Warner was transferred to the post so vacated and was succeeded at this institution by the present Manager, Mr. E. C. Barrett.

In common with hospitals generally throughout the State shortage of female nursing staff has created considerable difficulty and involved, early in 1946, the closure of one of the two district wards.

It is pleasing to report, however, that notwithstanding further progressive diminution in the number of female nursing personnel the closure of other wards or reduction in the number of hospital beds has been avoided as a result of duty re-allocations and the engagement of additional male staff for ward duties.

Details of staff actually employed as at 31st December, 1946, are as follow, viz.:—Medical Superintendent, C. R. O'Brien, M.B., Ch.M.; Medical Officer, J. J. L. McDonald, L.R.C.P.; Manager, E. C. Barrett; Matron, L. W. McIntosh; Acting Sub-Matron, Dispenser, 2 Clerks, 4 Office Assistants, 2 Storekeepers, 15 Nurses, Chief Attendant, Deputy Chief Attendant, 29 Attendants, 24 other Male Staff, 10 other Female Staff. In addition, a part-time Medical Practitioner visits the Outpatients' Department three days per week, whilst a Dental Surgeon attends the institution at fortnightly intervals.

Number of Beds and Wards.—Hospital bed accommodation has remained constant, throughout the six-yearly period under review, at 302 beds, though 28 of these were temporarily closed in 1946 arising out of staffing difficulties. Dormitory accommodation for inmates of the Home section fell from 541 in 1941 to 444 in 1946 in consequence of the demolition of an unsatisfactory, outmoded and unsightly structure with a capacity of approximately 100 beds.

Admissions and Discharges for the Period.—In residence at 1st January, 1941, 744; admitted (1st January, 1941 to 31st December, 1946), 15,775; discharged, 13,037; deaths, 2,806; remaining at 31st December, 1946, 676; average daily number resident, 660.

Average cost per occupied bed was, respectively: 1941, £64 2s. 10d.; 1942, £74 14s. 10d.; 1943, £76 18s. 7d.; 1944, £83 8s. 7d.; 1945, £93 0s. 9d.; 1946, £112 10s. 5d.

SUMMARY ON PATIENTS TREATED IN THE VARIOUS WARDS DURING PERIOD 1.1.1941 TO 31.12.1946.

Hospital Section.	In Hospital on 1st Jan., 1941.	Admitted during period.	Discharged during period.	Died.	In Hospital 31st Dec., 1946.
Cancer ward	59	1,012	316	701	54
General wards	178	3,338	1,658	1,693	165
Total	237	4,350	1,974	2,394	219
District wards	55	4,712	4,301	443	23
Grand Total	292	9,062	6,275	2,837	242

Outpatient Department.—58,595 attendances were recorded during the period under review, including 15,760 individual attendances.

Operations.—A total of 2,339 operations were performed, 1,450 of which were under general anaesthesia. Of such latter number 1,039 could be classified as major operations.

Review of Work.

Buildings.—As a result of conditions imposed by war which embraced more than four and a half years of the six-year period under review, it will be appreciated that much leeway remained to be overtaken at the end of 1946 in such matters as repairs, renovations, etc., to buildings, new constructions and renewals and replacements of services at this institution.

Notwithstanding the severe handicap so occasioned, however, it is indeed pleasing to report that several works of a major character were proceeded with and completed during the period, of which the more important were the new Cancer Block, which was completed and occupied in 1941, the installation of a passenger elevator for the transport of patients to upstairs wards, the provision in 1942 of a new bathroom and sterilizing room at "M" and "N" Wards, and the remodelling and renovation of the Medical Superintendent's consultation, examination and treatment rooms in 1946.

During that year also a commencement was made with the erection of a new recreation hall for the inmates, whilst, in addition, the foundations were laid for two other structures—a new yard lavatory and a new barber's shop for inmates of the home section.

Services.—Improvements effected in services relate chiefly to the installation of electrical equipment in the nature of a dish washing machine, potato peeler and mincing machine in 1945, whilst the provision in the following year of a gas cooking range in the kitchen at the Nurses' Home, installation of refrigeration units in the day rooms of five wards, and the renewal of both gas and water service pipes to one of the residences afforded much satisfaction generally.

It was during 1946 also that the hospital's sewerage system was linked up with the Metropolitan Water, Sewerage and Drainage Board's new sewage treatment plant, and towards the end of that year considerably improved telephone services were secured arising out of the provision of eight additional extensions and the complete change-over from a manually-operated system to automatic control.

Entertainments.—A new feature, introduced in 1942, which has afforded considerable pleasure for the inmates during the past four years relates to the installation, in that year, of talkie equipment, and with the provision of a second projector head in 1944, a very satisfactory and well-patronised cinema entertainment has been provided fortnightly.

As in past years regular concerts and variety entertainments have been provided throughout the period under review by various organisations, whilst donations of pipes, tobacco, fruit, eggs, cakes and sweets have been received and distributed among our inmate population.

The grateful thanks of this administration is expressed to all members of such organisations and individual persons who have so contributed towards promoting the well-being and contentment of those within our care.

Dairy and Piggery.—In 1942, to meet war-time exigencies, a considerable portion of this institution's farm and grazing land, including buildings thereon, was temporarily acquired by the military authorities and remained under army occupation for a period in excess of three years.

As an involvement dairying operations and pig-raising activities were discontinued, the live-stock in each section being disposed of to other departmental instrumentalities.

Lacking normal maintenance during this period, considerable repair work, renovations and renewals both in respect of buildings and services within the area referred to is still to be undertaken before the property is restored to its pre-army occupation condition.

Gardens and Grounds.—Reviewing outdoor activities generally throughout the six years covered by this report, it can be said that two major factors—unfavourable weather conditions and pronounced shortage of suitable labour—imposed a severe handicap in the conduct of vegetable garden operations and flower gardening and ground maintenance activities.

Notwithstanding these difficulties, however, a reasonably regular supply of fresh vegetables was achieved, the provision of a rotary hoe having been of much assistance in vegetable production work. With adequate assistance, however, production in this section could be considerably augmented.

Much remains to be achieved in connection with the beautification of the grounds with well-ordered flower gardens and neat lawns, but until labour difficulties are resolved, partial attainment only of our objective in this matter is within accomplishment.

6. NEWINGTON STATE HOSPITAL.

SUMMARISED ANNUAL REPORT COVERING THE YEARS 1941-1946.

Admissions and Discharges.	1941.	1942.	1943.	1944.	1945.	1946.
In Institution 1st January	570	570	543	534	540	522
Admitted during year	1,138	959	860	804	638	557
Discharged	858	758	605	565	493	494
Died	280	228	264	233	163	105
In Institution on 31st December	570	543	534	540	522	480
Average daily number	616	556.3	533	533	535	500
	£	£	£	£	£	£
Expenditure during year	39,012	38,893	41,690	44,264	49,366	53,687
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Annual cost per occupied bed	63 6 7	69 19 0	78 4 4	83 0 11	92 2 0	107 7 6

The staff establishment in 1941 was as follows:—Honorary Medical Staff 2 (neither of which has been occupied), Medical Superintendent, Medical Officer, Manager, Matron, Sub-Matron, Nurses 63, Dispenser, Senior Clerk, Junior Clerk, Female Office Assistant, Storekeeper, other Female Staff 23, Male Staff 15, and a visiting Dentist.

During the period 1941-1946 the establishment has been augmented by the creation of additional posts as follows:—Nurses 7, other Female Staff 4 (Laundresses), Female Office Assistants 2, Male Staff 8 (7 Cleaners, 1 Kitchenman).

Generally, posts have been filled throughout the period with the exception of those of the nursing staff. Up till June, 1943, the institution had its full complement of nurses. The following year the figure had dropped to 58; in 1945 to 51, and in June, 1946, the nurses employed numbered 37.

This deterioration in the position of the nursing staff has been the reason for the progressive drop in the number of admissions and in the average daily number of inmates as shown in the figures above quoted.

7. RANDWICK AUXILIARY HOSPITAL.

REPORT FOR THE YEARS 1941-1946, INCLUSIVE.

Appended are statistics summarising the activities of the Hospital during the six-year period 1st January, 1941, to 31st December, 1946.

	Males.	Females.	Total.	Males.	Females.	Total.
Indoor Patients—						
Patients under treatment on 31st December, 1940.....	...	...	...	90	61	151
Admitted—						
1941	215	138	353			
1942	246	136	382			
1943	226	117	343			
1944	130	118	248			
1945	78	79	157			
1946	79	56	135			
	974	644	1,618	974	644	1,618
Total treated during period .....	...	...	...	1,064	705	1,769
Died during—						
1941	127	55	182			
1942	132	81	213			
1943	143	76	219			
1944	84	57	141			
1945	48	50	98			
1946	62	30	92			
Total deaths during period	596	349	945			
Discharged during—						
1941	74	54	128			
1942	105	57	162			
1943	94	41	135			
1944	76	61	137			
1945	43	29	72			
1946	27	46	73			
Total discharges during period.....	419	288	707			
Total deaths and discharges during period ...	...	...	...	1,015	637	1,652
Remaining in hospital 31st December, 1946 .....	...	...	...	49	68	117
Daily average number of resident patients during each year—						
1941	91	66	157			
1942	111	89	200			
1943	105	89	194			
1944	95	90	185			
1945	63	89	152			
1946	49	74	123			
Daily average over full period .....	...	...	...	86	83	169

Statistics summarising activities of the Hospital—*continued.*

	1941.	1942.	1943.	1944.	1945.	1946.
Operations—						
Abdominal and Pelvis .....	...	...	...	...	3	3
Amputations .....	...	...	1	...	...	...
Appendicectomy .....	...	...	1	...	...	...
Bronchoscopy .....	...	...	5	19	146	90
Cholecystectomy .....	...	...	1	2	...	...
Cystoscopy and retrograde Pyelogram .....	...	...	2	...	...	1
Implantation of Radon seeds .....	...	...	...	...	1	...
Excision of Breast Abscess .....	...	...	...	1	...	...
Orchidectomy .....	...	...	...	1	...	...
Phrenic Crush .....	...	...	8	37	85	95
Sequestrectomy .....	...	...	...	1	...	...
Sigmoidoscopy .....	...	...	1	...	3	...
Thoracoscopy and Pneumonolysis .....	...	...	8	8	7	9
Thoracoplasty .....	...	...	19	47	28	20
Minor operations .....	...	...	14	38	10	19
X-Ray Department—						
Number of indoor patients X-rayed	122	1,172	1,363	1,525	1,254	1,050
Number of outdoor patients X-rayed					140	198
Number of staff X-rayed					361	522
Total number of films used	1,424	1,264	1,566	1,676	1,759	1,982
Screenings .....	...	...	...	65	253	811
Barium Meal .....	...	...	...	4	6	20
Use of portable X-ray .....	...	...	88	127	99	107
Potter Bucky examinations .....	...	...	...	...	6*	21*
Dental examinations	8	8	6	...	26	33
Gall Bladder .....	...	...	6	...	2	6
Pyelogram and Renal Tract	5	5	4	...	25	28
Bronchogram .....	...	...	...	...	9	9
Staff—						
Honorary Staff—						
Ear, Nose and Throat Surgeon .....	...	...	...	1	2	2
Urologist .....	...	...	...	1	1	1
Thoracic Surgeon .....	...	...	...	1	1	1
Dermatologist	4	5	5	1	1	1
Orthopaedic Surgeon .....	...	...	...	1	1	1
General Surgeon .....	...	...	...	1	1	1
Consulting Physician .....	...	...	...	1	1	1
Anaesthetist .....	...	...	...	3	3	3
Total Honorary Staff	4	5	5	10	11	11
Medical and Clerical—						
Medical Superintendent	1	1	1	1	1	1
Medical Officer	1	1	1	1	1	1
Junior Medical Officer .....	...	...	1	1	1	2
Manager	1	1	1	1	1	1
Clerks (male)	1	1	1	1	2	2
Office Assistant	1	1	2	2	1	1
Total Medical and Clerical Staff	5	5	7	7	7	8
Nursing Staff—						
Male	11	11	11	11	11	17
Female	63	63	61	61	61	61
Domestic Staff	39	40	42	42	43	43
Miscellaneous	12	9	7	9	10	15
Visiting Staff—						
Radiologist	1	1	1	1	1	1
X-ray Technician	1	1	1	1	1	1
Dentist	1	1	1	1	1	1
Chaplains	2	2	2	2	2	2
Part-time Staff—						
Nursing .....	...	...	...	...	1	5
Domestic .....	...	...	...	...	5	3
Total Authorised Staff	139	138	138	145	154	168

* Chests only.

Staff Shortages.—Staff shortages of 27—occurring during the year 1944, resulted in closing of Ward 28 during September, 1944, and the reduction of 19 beds in Ward 24 during November and December, 1944. The staff position further deteriorated during 1945—the shortage at 31st December, 1945, being 36. As a result Ward 24 was closed on 20th April, 1945. In 1946 the position became even worse, the shortage at 31st December, 1946 was 44, and during the year it was necessary to gradually reduce the number of beds in use in Ward 25 to 9.

The decline in the number of patients under treatment as a consequence of staff shortages is illustrated by the following table:—

Daily average number resident:

1942 (maximum number under treatment at this Hospital)	200
1943	194
1944	185
1945	152
1946	123

8. LEPER LAZARET.

REPORT ON LEPROSY IN NEW SOUTH WALES FOR THE PERIOD 1941-1946, INCLUSIVE.

On 1st January, 1941, nine (9) persons remained under detention at the lazaret.

Four deaths occurred during the period 1941-1946, inclusive, i.e., H.L.S., J.L., J.T. and T.C.V.M.

The total number of persons admitted since 1883, when patients were first received (though the notification of leprosy was first made compulsory and the detention of lepers provided for by law only towards the end of 1900), is 223. Distributed under nationalities, the account stands as follows at 31st December, 1946:—

	Ad- mitted.	Re- admitted.	Dis- charged.	Repat- riated.	Died.	Remain- ing in at 31 Dec., 1946.
Whites, of European descent—						
New South Wales...	56	4	19	...	33	4
Victoria	3	...	1	...	2	...
Tasmania	1	...	1	...	...	...
Queensland	7	...	4	...	2	1
Northern Territory...	2	1	2	...	...	...
Western Australia...	1	...	...	...	...	1
New Zealand	1	...	...	...	1	...
Fiji	2	1	1	...	1	1
New Hebrides	1	...	1	...	...	...
England	15	1	5	...	12	...
Ireland	8	...	2	...	6	...
Scotland	1	...	2	1	...	...
Germany	5	...	2	1	2	...
			1 ab- sconded.			
Belgium	1	...	...	...	1	...
U.S. America	1	...	...	...	1	...
Greece	2	...	...	1	1	...
Malta	3	...	1	...	1	1
			ab- sconded.			
Sweden	1	...	...	...	1	...
France	1	...	...	...	1	...
Mauritius	1	...	1	...	...	...
Italy	1	...	...	1	...	...
Coloured patients—						
Australian	11	2	6	...	2	5
West Indies	1	...	1	...	...	...
			(In 1885)			
East Indies	1	...	...	1	...	...
India	5	...	1	2	2	...
			Ab- sconded.			
China	62	...	4	35	23	...
Straits Settlements..	1	...	...	...	...	1
Java	3	...	...	2	1	...
New Caledonia	1	...	...	...	1	...
Pacific Islands	18	...	...	6	12	...
Egypt	1	...	...	1	...	...
Zanzibar	1	...	1	...	...	...
			(Hong Kong at own request).			
Syria	2	...	1	1	...	...
Malta	3	...	...	...	...	3
Total	224	9	55	51	106	17

Thus the number remaining in the lazaret on 31st December, 1946, was seventeen persons—eleven males and six females.

Appendix A shows particulars of each case under detention since the year 1912.

Every opportunity has been offered to members of the medical profession to visit the lazaret for the purpose of

seeing such patients as were formerly under their care, or for study of the disease.

The following statement shows the expenditure for the years 1941-1946 and the average cost per inmate per annum:—

	1941.	1942.	1943.	1944.	1945.	1946.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Working expenses of Lazaret	4,204 11 9	4,566 13 3	6,019 3 0	6,530 3 7	7,317 16 11	7,357 1 4
Average cost per inmate per annum	459 9 0	456 0 0	382 8 0	306 11 7	359 17 11	432 15 4

APPENDIX A.

RETURN showing Admission, Discharges, etc., of Patients suffering from Leprosy for the Years 1929-1946.

	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.	
In Lazaret on 1st January	20	20	20	20	19	19	17	18	16	13	11	9	9	8	13	18	24	17	
Admitted during the year	1	4	3	1	2	1	2	1	3	3	...	2	1	...	1	...	1	2	
Died during the year	1	4	2	...	1	2	1	1	4	2	2	1	...	...	1	...	1	2
Discharged	...	...	...	2	1	1	...	1	2	...	...	2	...	...	2	1	6	3
Repatriated	...	...	1	...	...	...	...	3	...	...	...	1	...	...	...	...	3	1
Total	20	20	20	19	19	17	18	16	13	11	9	9	8	13	18	24	17	17	
Remaining in Lazaret on 31st December—																			
Males	15	17	16	16	16	15	15	13	9	8	6	6	7	11	13	16	10	11	
Females	5	3	4	3	3	2	3	3	4	3	3	3	1	2	5	8	7	6	

Birthplaces of Lepers: The inmates of the Lazaret at the close of the year 1946 were of the following nationalities:— New South Wales, 4; West Australia, 1; Queensland, 1; Malay, 1; Fiji, 1; Malta, 4; Australian Aborigines, 5; Total 17.

RETURN showing particulars of Lepers admitted to Little Bay, New South Wales, since the year 1912.

Name.	Sex.	Native of—	Occupation.	Admission.		Where from.	No. of Case in Clinical Notes.	Died or Discharged.
				Age on	Date of.			
G.S.	Female	New South Wales	Domestic	18	9 Feb., 1904	Lismore, N.S.W.	88	Died, 28 July, 1936.
T.A.	Male	South Sea Is.	Farmer	34	8 July, 1905	Clarence River, N.S.W.	101	Died, 16 Oct., 1939.
S.C.	"	China	Cabinet-maker	40	21 May, 1912	Boolaroo, N.S.W.	128	Died, 15 September, 1935.
L.J.T.	"	N.S.W.	School	12	14 Aug., "	Lismore	129	Discharged, 21 July, 1916.
S.M.	"	Mallicolo	Labourer	50	27 "	Maclean	130	Died, 23 April, 1919.
J.F.	"	N.S.W.	Van-driver	28	19 Sept., "	Glebe	131	Discharged, 1 Jan., 1920; re-admitted, 7 Nov., 1927; died 18 March, 1930.
W.D.	"	"	Fisherman	22	24 June, 1913	Ulladulla, South Coast	132	Discharged, 10 February, 1921.
J.M.	"	New Hebrides	Labourer	60	28 Nov., "	Tweed River	133	Died, 17 March, 1917.
J.C.M.	"	N.S.W.	Miner	26	28 Jan., 1914	Homeville, W. Maitland	134	Died, 17 June, 1915.
W.B.	"	England	Dealer	33	4 Mar., "	Sydney	135	Died, 14 August, 1915.
A.C.P.	"	N.S.W.	School	15	23 June, "	Lismore	136	Discharged, 12 Oct., 1922; re-admitted, 16 Jan., 1925; died, 27 August, 1937.
E.W.	"	South Sea Is.	Labourer	50	17 Nov., "	Cudgen	137	Discharged, 19 Oct., 1932.
H.H.	"	England	"	36	19 May, 1915	Hornsby	138	Died, 7 Jan., 1924.
A.D.	Female	New Hebrides	Domestic	19	1 Sept., "	St. Kilda, Victoria	139	Died, 18 July, 1923.
C.F.	Male	China	Cabinet-maker	50	18 Dec., "	Waterloo, N.S.W.	140	Discharged, 10 March, 1917.
L.F.	"	England	Showman	45	9 Mar., 1916	Campbelltown	141	Discharged, 2 June, 1917.
F.H.	"	China	Gardener	45	25 May, "	Sydney	142	Died, 15 June, 1916.
D.M.	"	N.S.W.	Publican	46	25 "	Armidale	143	Discharged, 19 May, 1917.
W.J.P.	"	"	School	12	25 Nov., "	Lismore	144	Discharged, 5 Nov., 1924, re-admitted, 1 July, 1927; died, 11 August, 1937.
E.L.P.	"	"	"	11	25 "	"	145	Died, 27 December, 1922.
E.M.	"	Germany	"	56	3 April, 1917	Liverpool, N.S.W.	146	Repatriated as Prisoner of War, 27 May, 1919.
C.W.	"	England	"	80	14 "	Sydney	147	Died, 18 Feb., 1923.
C.D.	Female	N.S.W.	Domestic	54	30 Oct., "	Casino, N.S.W.	148	Discharged, 12 June, 1920.
P.P.	Male	Greece	Cafe-proprietor	33	21 Feb., 1918	Melbourne, Victoria	149	Died, 24 Feb., 1931.
J.C.	"	Ireland	Miner	54	5 Feb., 1919	"	150	Died, 19 Nov., 1920.
M.T.	Female	Victoria	Housewife	63	25 "	Sydney	150a	Died, 1 May, 1910.
J.P.	Male	Malta	Labourer	29	18 June, "	"	151	Absconded, 14 September, 1919.
J.S.	"	"	"	30	22 Dec., "	Kempsey	152	Died, 29 July, 1921.
A.S.	"	China	Gardener	64	3 Aug., 1920	Kandos, N.S.W.	153	Died, 2 Aug., 1923.
C.T.P.	"	"	Labourer	30	19 Oct., "	Nauru Is., S. Pacific	154	Discharged 25 April, 1921.
E.T.D.	"	N.S.W.	Teamster	32	10 Nov., "	Bellingen, N.S.W.	155	Discharged, 1 Dec., 1925, re-admitted, 28 Sept., 1931.
T.F.	"	Ireland	Civil servant	57	29 Dec., "	Hobart, Tasmania	156	Discharged, 18 June, 1921.
A.W.	Female	Sweden	Seamstress	62	18 Feb., 1921	Newcastle	157	Died, 24 Feb., 1939.
D.A.	Male	N.S.W.	Teamster	71	26 May, "	"	90	Died, 16 July, 1921.
J.G.	"	"	Fisherman	22	18 Aug., "	Tilba Tilba	158	Died 6 Aug., 1924.
A.S.	Female	Queensland	Domestic	20	29 Jan., 1922	Redfern	159	Returned to Peel Island, Queensland, 29 March, 1922.
Y.M.B.	Male	France	Labourer	67	7 June, 1922	Hunter's Hill	160	Died, 12 Aug., 1922.
E.	"	Ceylon	Sailor	24	13 Dec., "	Not fixed	161	Repatriated, 26 June, 1923.
E.B.	"	N.S.W.	Coach-painter	42	18 June, 1923	Taree, N.S.W.	95	Died, 5 Aug., 1923.
C.E.B.	"	Northern Territory	Garage proprietor	35	11 Aug., 1924	Darwin, N.T.	162	Discharged, 16 Sept., 1925. Re-admitted, 7 July, 1933. Discharged, 12 Dec., 1933.
H.L.S.	"	N.S.W.	Invalid pensioner	37	26 Oct., "	Liverpool Asylum	163	Died, 5 June, 1943.
J.B.	"	Ireland	Bush worker	61	28 Jan., 1925	Liverpool	164	Died, 24 June, 1931.
A.C.	"	Germany	Importer	45	6 Mar., "	Sydney	165	Absconded, 21 August, 1925.
K.	"	Hawaii	Musician	...	7 "	"	166	Repatriated, 11 March, 1925.
A.M.	"	China	School	12	12 "	"	167	Repatriated, 16 Dec., 1925.
A.D.	"	N.S.W.	"	7	21 April, "	"	168	Discharged, 1 Dec., 1925.
Wong Toe	"	China	Gardener	46	22 Nov., "	Clarence River	169	Died, 29 November, 1937.
H.P.	"	N.S.W.	Farmer	29	14 Dec., "	Queensland	170	Discharged, 9 Sept., 1926.
G.T.	"	Scotland	Chemist	56	8 May, 1926	Sydney	171	Discharged, 21 July, 1926.
E.S.G.	Female	Queensland	Domestic	23	27 April, 1927	Hunter's Hill	171	Died, 29 January, 1930.
A.E.B.	Male	N.S.W.	Farm labourer	41	6 July, "	Croydon	172	Died, 26 November, 1928.
W.C.	"	"	Sugar-worker	47	7 Feb., 1928	Queensland	173	Discharged, 4 July, 1928.
D.E.D.	Female	Queensland	Domestic	31	29 March, "	Northern Territory	174	Discharged, 15 Feb., 1932.
A.H. Coy	Male	China	Gardener	49	28 May, "	Liverpool	175	Died, 27 November, 1939.
P.T.I.	"	N.S.W.	Labourer	17	9 Dec., "	Tweed River	176	Died, 15 December, 1933.
J.L.	"	"	"	47	22 "	Macksville	177	Died, 2 August, 1945.
L.M.	Female	"	Domestic	59	14 Sept., 1929	Lismore	178	Discharged, 30 Nov., 1934.
E.W.	"	"	"	33	4 Feb., 1930	Sydney	179	Died, 6 February, 1930.
T.G.J.D.	Male	"	School	13	4 July, "	Lismore	180	Discharged, 16 April, 1937
E.C.	"	W. Australia	"	12	6 Aug., "	Sydney	181	"
L.B.	"	Italy	Labourer	39	13 Sept., "	Queensland	182	Repatriated to Queensland, 15 January, 1931.
A.M.	Female	N.S.W.	Home-duties	19	1 April, 1931	Adamstown, N.S.W.	183	Died, 17 October, 1938.
W.L.	Male	China	Gardener	60	12 Sept., 1931	Kogarah, N.S.W.	184	Repatriated to China, 14 March, 1936.
J.T.	"	England	Bootmaker	60	29 Jan., 1932	Queensland	185	Died, 13 October, 1946.
A.D.	"	N.S.W.	Engine-driver	53	30 Sept., 1933	Lakemba, N.S.W.	186	Died, 24 November, 1938.
E.C.H.L.	"	Victoria	Student	42	15 April, 1934	Manly	187	Discharged, 21 May, 1936.
A.N.	"	Germany	Labourer	55	30 Aug., "	Rockhampton, Q'land	188	Repatriated to Queensland, 5 November, 1936.

APPENDIX A—continued.

Name.	Sex.	Native of—	Occupation.	Admission.		Where from.	No. of Case in Clinical Notes.	Died or Discharged.
				Age on.	Date of.			
<i>M.E.M.G.</i> ...	Female	N.S.W.	Domestic	25	11 Oct., 1934	Lawrence, Clarence R.	189	
<i>I.D.</i> ...	"	"	Domestic	38	29 Mar., 1936	Bankstown	190	Discharged, 1941; readmitted 26 December, 1942.
<i>J.D.C.</i> ...	Male	Queensland	Student	20	5 Aug., "	Goulburn	191	Repatriated to Queensland, 5 November, 1936.
<i>H.P.H.</i> ...	Male	Straits Settlements	"	46	22 Oct., "	Woolahra	192	
<i>A.P.</i> ...	Female	N.S.W.	Home-duties	71	24 June, 1937	Malabar	193	Discharged, 8 December, 1941.
<i>K.O.</i> ...	"	"	"	30	14 Sept., "	Kyogle	194	Died, 22 September, 1937.
<i>M.A.</i> ...	Male	Malta	Labourer	45	12 Oct., "	Auburn	195	
<i>W.S.</i> ...	Male	China	Ship steward	35	2 April, 1940	Hong Kong	166	Repatriated to Hong Kong per S.S. "Nanking," on 7 May, 1940.
<i>D.B.W.</i> ...	"	"	Shop-assistant	62	20 Aug., 1940	7 Kirk Lane, Ultimo	167	Died, 5 September, 1940.
<i>J.S.K.</i> ...	"	N.S.W.	Plumber and drainer	33	4 Mar., 1941	"	168	Discharged, 9 July, 1943, re-admitted 18 November, 1946
<i>J.C.V.M.</i> ...	"	England	Clergyman	79	5 May, 1942	11 Anzac Pde., Newcastle	169	Died, 18 November, 1946.
<i>P.H.</i> ...	Female	Australian N.T.	Domestic duties	33	14 July, "	Sydney	170	Discharged, 19 October, 1943.
<i>C.L.</i> ...	Male	China	Market gardener	75	11 Aug., "	"	171	Discharged, 1 May, 1945.
<i>M.C.</i> ...	"	Tasmania	Brickworker	55	6 Oct., "	St. Mary's	172	Discharged, 18 June, 1945, to Northern Territory.
<i>F.C.</i> ...	"	China	Trainee electro plater	18	5 Jan., 1943	Petersham	173	Discharged, 21 Nov., 1946.
<i>M.G.</i> ...	Female	Australia	Ex patient Channel I.	22	5 Jan., "	"	174	
<i>F.C.</i> ...	"	N.S.W.	Scholar	12	1 June, "	Malabar	175	Discharged, 10 Feb., 1945, re-admitted, 18 October, 1946.
<i>S.I.</i> ...	Male	India	Sailor	38	7 Sept., "	Not fixed	177	Repatriated to Dutch New Guinea, 17 February, 1945.
<i>M.C.</i> ...	Female	Australia	Shop-assistant	15	7 Sept., "	Malabar	176	Discharged, 25 April, 1944.
<i>W.S.</i> ...	Male	Java	Internee	42	16 Nov., "	Cowra	178	Discharged for repatriation, 20 April, 1945.
<i>G.T.O.</i> ...	Female	"	"	35	16 Nov., "	Victoria	179	Discharged for repatriation, 31 January, 1946.
<i>T.E.C.</i> ...	Male	England	Private in A.I.F.	34	14 Dec., "	Not fixed	180	Discharged, 18 June, 1945.
<i>S.</i> ...	"	Macassar	Sailor	31	7 Mar., 1944	"	181	Repatriated to Dutch New Guinea, 1945.
<i>P.M.</i> ...	"	Australian N.T.	Scholar	9	13 April, "	Oxford	182	
<i>M.F.</i> ...	Female	"	"	14	2 May, "	"	183	Discharged, 16 Nov., 1945, re-admitted, 30 March, 1946.
<i>D.C.L.C.</i> ...	"	N.S.W.	Domestic duties	32	6 June, "	Clarence River	184	Discharged, 16 Nov., 1945, re-admitted, 30 March, 1946.
<i>M.E.J.</i> ...	"	Queensland	Textile worker	45	20 Oct., "	Milson's Point	185	Discharged, 26 November, 1946.
<i>C.H.</i> ...	Male	Australian	School	8	28 Sept., "	Mulgoa	186	
<i>M.R.H.</i> ...	Female	"	Domestic duties	30	5 Dec., "	"	187	Discharged, 30 July, 1945.
<i>O.M.W.</i> ...	"	Queensland	"	25	6 Feb., 1945	Sydney	188	
<i>J.F.</i> ...	"	New Hebrides	Scholar	9	16 Feb., "	Longueville	189	
<i>F.R.G.C.</i> ...	Male	England	Invalid Pensioner	60	30 Aug., "	Narrabeen	190	Discharged, 15 April, 1946.
<i>J.M.</i> ...	"	Malta	Labourer	41	17 May, 1946	Victoria	191	
<i>M.S.</i> ...	"	"	"	40	19 Sept., "	Sydney	192	
<i>G.Z.</i> ...	"	"	"	31	25 Nov., "	Victoria	194	

Notes.—(a) The cases of a few other persons who, for one reason or another, were never admitted to the lazaret, have been mentioned in the course of the series of Reports and are additional to those shown in this Table. (b) On comparison with the reports for early years, differences in ages or dates of admission of some coloured patients will be observed. Those now given are the correct ages and dates. Patients remaining under treatment have their initials shown in italics.

SECTION IV.

MICROBIOLOGICAL LABORATORY.

REPORT OF THE PRINCIPAL MICROBIOLOGIST FOR THE YEARS 1941-1946, INCLUSIVE.

Staff.

Staff of the Microbiological Laboratory for the year 1946.

Director.—ERNEST LESLIE MORGAN, M.B., Ch.M. (Syd.).

Assistant Director.—ELSIE J. DALYELL, O.B.E., M.B., Ch.M. (Sydney), retired 21st May, 1946; KEITH HARVEY GRIEVE, M.C., M.B. (Sydney), appointed 22nd May, 1946.

Medical Officers.—STANLEY W. M. KING, L.R.C.P. (London), M.R.C.S. (England); ALFRED E. GATENBY, M.B., B.S. (Sydney); SERGE G. ROSS, M.D. (Khar'kov) (Temporary), resigned on 11th January, 1946; KAREN T. HELMS, M.B., Ch.M. (Sydney) (part-time), on military service—subsequently resigned; ELIZABETH L. F. LAURIE, B.A., B.Sc., M.B., B.S. (Sydney) (on military service), resigned 19th March, 1946; WALTER H. CORBETT, M.B., B.S. (Sydney), commenced duty on 24th June, 1946; INA M. WILLIAMS (temporary), commenced duty 28th October, 1946, resigned 17th December, 1946.

Senior Microbiologist.—H. V. JUSTELIUS.

First Microbiologist.—L. H. SNELL, A.S.T.C., A.A.C.I.

Microbiologists.—W. C. THOMPSON; Miss A. PLAYOUST, B.Sc. (Sydney); A. P. WESTWOOD, A.S.T.C.; R. TRUMAN, A.S.T.C.

Laboratory Assistants.—A. J. WILLIAMSON, J. FLYNN, D. CROFT (absent on extended leave); B. REIMER; E. JACOB (absent on extended study leave); L. HORTON; K. FRASER (commenced duty on 30th December, 1946); Miss B. N. BRIDGE; Miss H. E. PARRY; Miss M. CRIDLAND.

Cadet Laboratory Assistant.—B. O'CONNOR.

Clerical.—Miss V. D. BRADLEY (resigned 19th April, 1946); Miss N. E. SCAHILL (commenced duty 15th April, 1946); Mrs. W. THOMAS (resigned 20th December, 1946); Miss E. STARR (commenced duty on 16th December, 1946); one messenger (temporary).

Attendants.—H. J. MOSELEY; A. V. LYNCH; J. W. FOSTER; J. FLETCHER.

Annual Reports for the Years 1941 to 1946 Inclusive.

Sir,

I have the honour to submit the following report dealing with the work carried out in the Microbiological Laboratory during the years 1941-1946 inclusive, together with a table giving detailed figures for each individual year.

It was decided that during the war years the Microbiological Laboratory should carry on with routine work to meet the needs of the civil population. To replace officers who proceeded on military service, the services of Dr. Serge G. Ross of Khar'kov and several female temporary laboratory assistants were made available to the laboratory. I wish to place on record the splendid manner in which these officers, together with the permanent staff, met all the demands that frequently required an officer to undertake the duties that ordinarily would be allotted to two separate officers.

The following officers proceeded on active service:—

Dr. E. L. F. Laurie, Dr. K. T. Helms, Mr. T. O'Brien, Mr. E. Morgan, Mr. D. Croft, Mr. B. Reimer and Mr. E. Jacob.

Temporary military duties were also undertaken by:—

Dr. K. H. Grieve, M.C., and by Dr. A. E. Gatenby.

It is with deep regret that I have to record the death, whilst a prisoner of war, of Mr. T. R. W. O'Brien. He joined the staff of the Microbiological Laboratory at the beginning of 1937 and enlisted in July, 1940. He was a most popular member of the staff and his colleagues wish to extend to his family the deepest sympathy.

During the period under review the following changes took place in the permanent staff:—

Mr. J. O. Sergeant retired in November, 1943, and Mr. H. V. Justelius was appointed to the position of Senior Laboratory Assistant in his stead.

Mr. T. W. Murphy, First Laboratory Assistant, was transferred to the Department of Agriculture in August, 1944. Mr. L. H. Snell was promoted to the vacant position and Miss A. Playoust was appointed to fill the vacancy on the staff.

In 1945 Mr. L. F. Horton returned from active service and in December was appointed to the staff of the Microbiological Laboratory.

Dr. E. J. Dalyell, the Assistant Director of the Laboratory, retired on 21st May, 1946, and Dr. K. H. Grieve was appointed Assistant Director.

Dr. K. T. Helms and Dr. E. L. F. Laurie, who had been absent on military service, resigned during the same year and Dr. W. H. Corbett was appointed to the staff on 24th June, 1946.

Mr. A. P. Westwood and Mr. R. Truman were appointed Microbiologists on 1st January, 1946.

The number of examinations carried out in the Microbiological Laboratory for the years 1941-1946 inclusive, are given in the attached tables. Except for minor variations in the number of individual examinations, the figures are more or less stationary and it will not be possible to undertake additional work without increased accommodation. The minor variations are discussed below:—

Diphtheria.—No great variation has occurred in the number of swabbings submitted for examination for diphtheria bacilli but it will be noted that in 1942 the number of toxicity tests was greatly reduced. In that year the Prince Henry Hospital undertook their own toxicity tests whereas, in the past, they had been performed in the Microbiological Laboratory.

Syphilis and Gonorrhoea.—The number of complement deviation tests carried out in connection with these diseases varied from year to year with a general tendency to rise during 1945 and 1946. This rise was largely brought about by pre-discharge examinations for the armed forces. The figures do not show a corresponding increase in the number of examinations of slides for gonococci, although figures of the Departmental Clinic show that the number of cases of gonorrhoea had practically doubled in 1945. Undoubtedly the use of penicillin in the treatment of gonorrhoea, resulting in quicker cure of the disease, caused a reduction in the number of slides examined from each individual case.

Malaria.—The most striking variation in the number of examinations carried out over the period under review is the increase in the number of slides for examination for malarial parasites. In 1946, 657 slides were submitted and benign tertian parasites were found in 412 cases. During the six years, apart from one infection by subtertian parasites and two by quartan parasites, all infections have been due to benign tertian parasites.

Anthrax.—The only occasion on which anthrax bacilli have been recovered was in 1942. This case was associated with an outbreak amongst stock in the Penrith district.

Tissues for Histological Examination.—Year by year the number of specimens for histological examination is increasing and the number now being examined is placing a very great strain on a section of the Laboratory that is working to a point near the maximum capacity that the available accommodation permits.

Several additional headings have been included in the reports, the majority occurring under the sections dealing with cerebral fluids, haematology and chemical examinations. These headings have been brought into use following adoption of new tests such as the Serum Acid Phosphatase tests commenced in 1944 and Takata Ara commenced in 1946, following the temporary closure of Broughton Hall Laboratory owing to shortage of staff. Other headings have been brought into use in order to reduce the number of examinations classified as "Miscellaneous."

Accommodation.—No additional accommodation has been made available, although year by year, attention has been called to the overcrowded condition of the Laboratory. Great inconvenience is caused by the shortage of space and under existing conditions no further expansion of the Laboratory's activities is practicable.

Purposes for which the various examinations were made —

	1941.	1942.	1943.	1944.	1945.	1946.
Haematology—						
Full and Differential Blood Counts	1,010	870	966	1,020	1,114	1,136
Blood Sedimentation Rate	35	21	...	...	3	42
Blood Coagulation Time .....	...	...	35	56	...	...
Blood Typing	4	105	16	...	...	2
Malaria	12	19	40	177	170	657
Miscellaneous Blood Examinations .....	...	...	24	27	46	...
Chemical Examinations—						
Blood for Sugar	119	64	122	50	37	54
Blood for Sugar Tolerance	253	823	178	186	101	175
Blood for Urea	339	758	250	196	72	151
Blood for Creatinine .....	...	4	...	29	16	37
Blood for Cholesterol .....	...	...	...	...	...	...
Blood for Fibrin, Globulin, Albumen .....	...	...	...	...	...	...
Serum Acid Phosphatase .....	...	...	...	75	40	73
Urines for Sugar	3	7	26	127	67	108
Urines for Urea	106	37	17	152	81	153
Test Meal Specimens	758	813	864	673	1,193	1,207
Calculus	20	16	19	26	5	20
Miscellaneous Chemical Examinations	603	596	1,080	1,158	1,512	1,415
Faeces	58	33	87	76	46	98
Urines for General Examinations	731	656	529	381	285	190
Pathological Examinations	2,064	2,053	2,092	2,291	2,564	2,749
Mammals	3	1	9	7	1	...
Fish .....	...	...	...	...	...	...
Ecto Parasites (Fleas, Mites, Mosquitoes)	3	...	...	...	...	...
Endo Parasites (Round and Flat Worms)	12	13	26	14	10	3
Protozoa	32	27	20	30	25	10
Trichomonas .....	...	...	...	...	...	10
Fungi (Tinea, Monilia, etc.)	20	13	5	7	6	6
Medico-Legal Examination	150	177	176	145	127	111
Examinations for Anthrax—						
Human Beings	3	3	5	2	6	...
Shaving Brushes, etc. .....	...	...	...	1	7	...
Wool .....	...	...	...	...	6	...
Examinations of Materials—						
Chemical Closet Contents	5	...	...	...	...	...
Disinfectants (Rideal Walker)	25	5	4	6	3	7
Feathers .....	...	...	...	...	...	...
Soil	2	...	...	...	...	25
Water	330	592	279	283	363	205
Water from Swimming Pools	149	79	58	81	21	80
Lotions and Mixtures .....	...	...	...	...	...	2
Food (Bread, Ice Cream, etc.) .....	...	9	15	2	...	...
Milk samples from Milk Board for Tubercle bacilli and B. abortus	730	651	518	521	467	477
Milk from Milk Board for bacteriological count	766	791	1,179	1,414	1,361	1,326
Miscellaneous Milks for bacterial counts .....	...	...	...	...	...	...
	90,822	79,982	91,811	89,204	91,496	105,415

