Annual report of the Central Board of Health / South Australia.

SOUTH AUSTRALIA

ANNUAL REPORT

OF

The Central Board of Health

FOR THE

YEAR ENDED 31st DECEMBER, 1937.

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By Authority: Frank Trigg, Government Printer, North Terrace.

1938.

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THE PUBLIC HEALTH.

Annual Report of the Central Board of Health to the Minister of Health (Hon. Sir George Ritchie, K.C.M.G., M.L.C.)

SIR—We have the honour to submit the annual report for the year ended 31st December, 1937, on the work of the Central Board of Health of South Australia.

PART I.

GENERAL VIEW OF ACTIVITIES.

Personnel of the Board.—The personnel of the Board during the year was :—

Chairman—
Albert Ray Southwood, M.D.

Members appointed by the Governor—
Edward Angas Johnson, M.D.
John Burton Cleland, M.D.

Member elected by Metropolitan Local Boards—
Harry Sumner Hatwell, J.P.

Member elected by Country Local Boards—
Frank Charles Lloyd, V.D., J.P.

In March the seats of the elective members of the Board became vacant by effluxion of time. Mr. H. S. Hatwell was re-elected by Local Boards of the Metropolitan Area, and Mr. F. C. Lloyd by all other Local Boards.

Dr. Southwood visited New Zealand in January, 1937, to attend the meeting of The Australian and New Zealand Association for the Advancement of Science. The meeting was held at Auckland. Dr. Southwood was President of the Section of Medical Science and National Health, and delivered an address on "Heart Disease and National Welfare."

Professor Cleland left on a trip abroad in November, 1937, and was granted leave for a period of seven months. He is taking the opportunity to inquire into public health work in England and other countries. The pathological laboratory services of public health authorities will be especially studied. The Board expects to derive valuable aid from Professor Cleland's observations.

Board Meetings.—Twenty-seven meetings of the Board were held during the year. The increase in the range and volume of the department's work continues. The main matters engaging the Board's attention during the year are reviewed in appropriate portions of this report.

Death of Dr. W. Ramsay Smith.—Dr. W. Ramsay Smith, for 30 years head of the Department of Public Health of South Australia, and Chairman of the Central Board, died at his home at Belair on 28th September, 1937. Dr. Ramsay Smith was a man of outstanding ability, boundless energy, and wide knowledge. He was soundly versed in medical jurisprudence, and held the office of City Coroner in conjunction with his public health appointments.

Staff of the Department.—During the year Sister M. Morris, Trained Nurse Inspector, and Mr. F. C. Siekmann, clerk, retired from the Public Service on reaching the retiring age. These officers gave valuable assistance during their long terms of service. In December, Mr. R. C. McCarthy, A.U.A., was appointed an inspector under The Health Acts and Food and Drugs Acts to assist in the administration of the Regulations relating to Dangerous Drugs and Poisons.

Scope of Work.—In the administration of the Acts which it is empowered to enforce, the Board continued its supervision of the activities of Local Boards of Health throughout the State, and assisted them by inspection and advice.

The following list indicates some of the routine inspections made by the inspectors on the staff of the Central Board during the year :—Slaughterhouses, 160 ; butchers' shops, 119 ; bakehouses, 106 ; hotels, 152 ; business premises, 1,734 ; private premises, 2,196 ; septic tanks, 507 ; plans of septic tanks examined, 467 ; milk vendors' premises, 284 ; dealers in poisons, 560 ; schools, halls, institutes, &c., 379 ; food premises, 1,491 ; exhumations and reburials attended, 11 ; workmen's camps, 20 ; piggeries, 37.

"*Public Health Notes*".—The small bulletin issued quarterly for the guidance of officers and members of Local Boards of Health has completed its sixth year of publication. Reports received from time to time show that the bulletin continues to fill a useful place in facilitating health administration. By its means, Local Boards are kept informed of developments, and are enabled to maintain a clear outlook on their problems.

The success of the bulletin is due to the excellent support it receives. During the year under review the following ladies and gentlemen generously responded to requests for contributed articles:—Sir Henry Newland, Lady Bonython, Professors J. B. Cleland and A. Killen Macbeth, Drs. F. H. Beare, Malcolm Cockburn, W. Christie, (Education Department), L. L. Davey, J. M. Dwyer (Officer of Health, Town of Hindmarsh), H. K. Fry (Vice-President, Mental Hygiene Council of South Australia), Helen Mayo, O.B.E. (Chief Honorary Medical Officer, Mothers' and Babies' Health Association), L. G. Muirhead, A. E. Platt (Lecturer in Bacteriology, University of Adelaide), and F. W. A. Ponsford; and Messrs. G. Carne, M.R.San.I. (Honorary Secretary, South Australian Branch of the Royal Sanitary Institute of London), L. W. Lawlor (Rats Officer to several Local Boards), and G. J. Rodger, B.Sc. (Conservator of Forests).

Legislation.—Dangerous Drugs.—On 1st October, 1937, the Dangerous Drugs Act, 1934, came into force. With the view to carrying out the purposes of the Act, regulations were made on the 22nd September, 1937, and these operated as from the same date as the Act. Subsequently certain amendments to the regulations were found necessary, and these were enacted on 8th December, 1937. Particulars of the legislation is contained in Part IV. of this report.

Infantile Paralysis.—Regulations were enacted on 2nd September, 1937, requiring stringent control of sufferers from infantile paralysis and of contacts. Further regulations were introduced on 2nd December, 1937. These relate to the restriction on travel of children under 16 years of age from Victoria to South Australia.

National Health and Medical Research Council.—The Federal Health Council, reference to whose annual meetings has been made in previous reports, is now merged into the newly-constituted National Health and Medical Research Council. The activities of the council are conducted and financed by the Commonwealth Government. The main functions of the Federal Health Council were the fostering of advancement of public health work throughout Australia, and the encouragement of uniform action in and co-operation between the several States. The new council continues to serve these purposes, and has the additional responsibility of making grants for medical and dental research in Australia, and of supervising research work conducted under its aegis. The Commonwealth Government has made available a sum of £30,000 per annum for the work of the council.

Three meetings of the council were held during 1937. The first session was held at Hobart in February, the second at Canberra in June, and the third at Sydney in November. The Chairman of the Central Board of Health represented this State at the meetings. The council has been occupied in formulating detailed plans for its work and in making the first series of grants. Several applications were made by organizations and persons in this State. A grant of £500 to the Central Board of Health is the first to be made in this State. It is to be devoted to research into the epidemiology of rheumatic infections, and further reference is made to the subject in Part VII. of this report.

Hygiene of Childhood.—The National Health and Medical Research Council has devoted some attention to this matter, and will advise the Commonwealth Government on suitable methods to promote developments with the aid of money being made available by that Government.

In this State the Kindergarten Union has done yeoman service. A splendid article by Lady Bonython was published in *Public Health Notes* of July, 1937. The following paragraphs are extracted:—

> Under the aegis of the Kindergarten Union there are now nine kindergartens in the poorest parts of the city and suburbs—one being at Port Adelaide—and we deal with about 500 children in these welfare centres. We have lately opened a nursery school in Selby Street, Adelaide, where tiny children from 18 months to three years are taken. This is not the first nursery school in Adelaide, for Miss Symon was the pioneer with a beautifully equipped school at Mitcham.
>
> Many people are very vague about kindergartens, so it might be interesting to answer just briefly the questions and criticisms that are usually put to us. One question often asked is, "Isn't it the work of the Education Department to deal with these kindergartens"? The Government does not take children under the age of six at the State schools—it realises the importance of our work and gives us an annual subsidy of £1,500, which helps to pay our directors' salaries, and to conduct our training school for students.
>
> A brief mention of what it costs to run our kindergartens is opportune. Salaries cost the Executive £2,400 a year and Branch expenditure comes to somewhere about £1,500. The Adelaide City Council has, of late years, recognised the benefit of our work in the poor parts of the city, and now gives us £200 a year. So, even with the Government and Council grants, we still have to shoulder the responsibility of raising about £2,200 a year.
>
> To go back to our questions and answers: "What is the good of kindergartens?" In our kindergartens we are vitally concerned with the formative years of the child's life—the children are helped to develop in the right direction, mentally, morally, and physically. We realise the importance of character building, the wisdom of right guidance, the formation of good habits, and the importance of play with others, of physical development, and of learning to fit in with society. Our most vital concern at the present time is the physical development of the child and the importance of right nutrition and rest and sleep if he is to grow into a healthy, useful citizen.

Healthy, happy children grow into healthy citizens who will be a priceless asset to the community. All over the world this fact is being realised and efforts are being made to improve the health of the nations by every possible means. Here in South Australia we have a wonderful organization in the Mothers' and Babies' Health Association, with over 100 baby health centres in various parts of the State. The babies are well cared for. What about the pre-school child ? Except for those who attend the free kindergartens nothing is being done, unless they are ill and must go to hospital. We want to be able to extend our kindergarten work and to deal with more children. We want to be able to do more for those already in our charge. Especially we want more nursery schools.

PART II.

VITAL STATISTICS.

The figures here reproduced have been made available through the courtesy of the Government Statist (Mr. A. W. Bowden, A.I.A.). They show the trends in the State from the public health standpoint.

Population of the State.—In 1937 the natural increase (the excess of births over deaths) was 3,738. Table I. shows the population of the State in the years indicated.

TABLE I.

Population of South Australia in various years since 1900.

Year.	Males.	Females.	Total.
1900	180,349	176,901	357,250
1905	181,467	181,154	362,621
1910	206,557	200,311	406,868
1915	220,967	225,018	445,985
1920	245,300	245,706	491,006
1925	276,266	270,792	547,058
1930	288,618	285,849	574,467
1935	293,650	292,793	586,443
1936	294,807	294,505	589,312
1937	295,611	295,590	591,201

Births and Deaths.—Table II. shows the number of births and deaths, and the rate per 1,000 of mean population, and the number of infantile deaths (under the age of one year) and the rate per 1,000 births.

TABLE II.

Births and Deaths in South Australia.

Period.	Births.		Deaths.			
			Total.		Infants.	
	No.	Rate.	No.	Rate.	No.	Rate.
Mean—						
1920-24	11,857	23·43	4,901	9·68	693	58·45
1925-29	11,301	20·16	5,034	8·98	526	46·54
1930-34	8,989	15·54	5,001	8·65	342	38·05
Year—						
1935	8,270	14·14	5,163	8·83	289	34·95
1936	8,911	15·17	5,464	9·30	277	31·09
1937	8,985	15·25	5,247	8·91	297	33·05

Infantile Deaths.—The Government Statist, in Bulletin No. 2, of 1938, has noted that there was, in 1937, an increase of 20 in the number of deaths of infants under one year of age, the numbers being 297 (277). The figures in parentheses are for 1936. The death rate for 1936 of 31·09 had been just a little higher than the world record of 30·96 for New Zealand. The 1937 rate increased to 33·05, which is the lowest South Australian rate except for 1936 and 1933. The infantile death rate in this State is less than half the rate 20 years ago, and only about one-third of the rate around 1900.

Under one week the deaths were 171 (153), one week and under one month 42 (32), one-five months 42 (50), six-eleven months 42 (42).

The chief causes of infantile deaths were :—Premature birth, 111 (89) ; congenital malformations, 35 (41) ; injury at birth, 28 (26) ; congenital debility, 16 (22) ; other diseases of infancy, 22 (22) ; diarrhoea and enteritis, 15 (11) ; pneumonia, 25 (27) ; whooping cough, 4 (3).

Causes of Death.—The principal causes of deaths and the rates per 10,000 of mean population are shown in Table III.

TABLE III.

Illustrating the Main Causes of Death in South Australia in recent years.

Disease.	Persons.			Rates.		
	1935.	1936.	1937.	1935.	1936.	1937.
Diseases of the heart	1,029	1,101	1,041	17·59	18·74	17·67
Cancer and other malignant tumours	610	740	725	10·43	12·60	12·31
Tuberculosis (all forms)	260	235	256	4·44	4·00	4·35
Cerebral Haemorrhage, softening, &c.	488	527	492	8·34	8·97	8·35
Pneumonia, Lobar-, Broncho-, &c.	390	343	275	6·67	5·84	4·67
Bronchitis (all forms)	59	74	57	1·01	1·26	0·97
Other diseases of respiratory system	113	125	122	1·93	2·12	2·07
Nephritis—Acute and Chronic	274	252	276	4·68	4·29	4·69
Diabetes mellitus	88	110	116	1·50	1·87	1·97
Puerperal causes	49	53	46	0·84	0·89	0·78
Congenital debility, malformations, &c.	199	216	223	3·40	3·67	3·79
Senility	322	318	285	5·50	5·41	4·84
Suicides	59	69	56	1·01	1·17	0·95
Violent deaths (ex suicides)	242	270	318	4·14	4·59	5·40
Diarrhoea and enteritis	27	40	48	0·46	0·68	0·81
Whooping cough	23	9	5	0·39	0·15	0·08
Diphtheria and croup	20	30	27	0·34	0·51	0·46
Influenza	26	17	9	0·45	0·29	0·15
Typhoid fever	5	4	4	0·09	0·07	0·07
Appendicitis	40	35	52	0·68	0·60	0·88
Hernia, intestinal obstruction	53	52	61	0·91	0·89	1·03
Cirrhosis of liver	23	15	22	0·39	0·25	0·37
Tetanus	14	11	7	0·24	0·19	0·12
All other	750	818	724	12·82	13·95	12·29
Totals	5,163	5,464	5,247	88·25	93·00	89·07

Deaths by Violence.—Deaths from automobile accidents show a big increase this year. The death rate from these causes is subject to irregular fluctuations. In 1937 the number of persons meeting death by violence was 374, compared with 334 in the previous year. The Government Statist's figures are shown in Table IV.

TABLE IV.

Deaths by Violence in South Australia.

	1934.	1935.	1936.	1937.
Suicide	78	59	69	56
Homicide	10	4	8	8
Accidental burns	13	9	14	18
Accidental mechanical suffocation	5	3	1	4
Accidental drowning	29	32	35	40
Accidental fall	54	47	50	62
Automobile accidents	74	69	76	105
Other causes	109	78	81	81
Total deaths by violence	372	301	334	374

PART III.

SANITATION.

Historical Review.—At the Australasian Medical Congress in August, the Chairman of the Central Board gave a historical review of public health legislation in South Australia. The development of health legislation largely followed the precedents of English law. "The colony was just established when the cholera epidemic in England aroused general interest in public health." It was not until 1873, however, that the first comprehensive Health Act was passed in South Australia. It was described as "an Act to make provision for the preservation and improvement of public health."

"A very useful Act was eventually passed. It provided for the cleaning of streets, the disposal of rubbish, the seizure of unwholesome food, the abatement of nuisances, and powers of inspection. It provided for the establishment of a central controlling authority to superintend the execution of the Act: the council of each town was made a Local Board of Health, and local boards could also be set up in district council areas. It provided that sanitary works were to be performed by local boards, that the Central Board was empowered to direct local boards to carry out specified works, and that the Central Board itself might do certain works at the cost of a local board if the local board defaulted. The Central Board was also enabled to 'issue such regulations as it shall think fit to mitigate, as far as possible, the effect and to prevent and check the spread of epidemic, endemic, or contagious disease.'"

Further amending Acts were passed in 1876 and 1884. These early Acts dealt mainly with sanitation. The main features of the more comprehensive Act of 1898 are still retained in existing legislation.

Continued Emphasis on Sanitation.—In its beginnings, the scope of public health activities was wholly restricted to sanitation—to the hygiene of environment. It must be emphasised that sanitation is still the basis of health work, and every local board should strive to maintain the area under its control in the highest state of sanitary excellence and sweet wholesomeness. Tidiness and order are the marks of good local government—clean streets and parks, and attention to the many details of community hygiene provide the essential groundwork for a good public health service.

Camping Grounds.—The remarks on this subject in our last annual report need further emphasis. In many local board areas the proper sanitation of camping grounds needs greater attention. Out-of-doors holidays, camping at beaches, and in the hills, and motor caravaning are becoming increasingly popular. They are healthful recreations if proper sanitary requirements are followed—but carelessness may lead to danger. The Central Board urges local boards in whose areas much camping is done to have proper sanitary arrangements available, and to see that camp sites are kept clean. The return to the simple life has many advantages, but there must be protection of food from contamination, and there must be safe disposal of all refuse. Public conveniences at camping grounds and at holiday resorts should be supervised by a trained attendant, who should be on whole-time duty at busy periods.

Holiday Shacks.—The building of unsightly and insanitary camping sheds at seaside and hills resorts should be strongly opposed by local boards of health. Apart from the possible dangers to health, the presence of such unattractive structures is an eyesore, and a decided drawback to property values. Local boards would be wise to deal promptly and vigorously with any such attempts to lower the hygienic standards of their districts.

PART IV.

FOOD AND DRUGS.

The Advisory Committee under the Food and Drugs Act, 1908.—At the beginning of the year the members of the committee were :—Dr. A. R. Southwood, Chairman (Chairman of the Cnetral Board of Health), Professor A. Killen Macbeth (Professor of Chemistry of the University of Adelaide), Mr. C. E. Chapman (Government Analyst), Dr. E. Angas Johnson (Officer of Health for Adelaide), and Messrs. W. M. Fowler, E. F. Lipsham, and F. M. Standish (persons conversant with trade requirements).

The committee met on four occasions. The subjects dealt with were as follows :—Return of bread after delivery ; wholewheat and brown bread ; wrapping of bread, meat, and fish ; milk bars ; cream ; wine ; advertising drugs ; vinegar ; storage of shell fish in Port River ; revision of Poisons Regulations ; malt extract and cod liver oil ; jelly crystals, and fruit flavoured jelly crystals ; freedom from contamination of flavoured ices, fruit ice blocks, milk ice blocks, and other similar frozen food ; addition of boric acid to junket tablets ; drugs ; colouring of canned green peas ; milk delivery vehicles ; amendment of regulations relating to milk ; chilled and preserved eggs ; and pulping of eggs.

The Chief Secretary was advised of those matters in which the committee considered that action was necessary.

Water Supply.—During 1937, the Advisory Committee on Water Supplies Examination consisted of the Engineer-in-Chief (Mr. H. T. M. Angwin) as Chairman, the Engineer for Water Supply (Mr. C. G. F. Johnson), the Chairman of the Central Board of Health (Dr. A. R. Southwood), Professor J. B. Cleland, Dr. E. Angas Johnson, and Dr. A. E. Platt. The function of the committee is to advise on different matters concerning water supply, particularly as regards public health.

Vendors of Milk.—The Central Board continued to provide for the licensing of vendors of milk and the registration of their premises in the majority of the local board districts outside the metropolitan area. The number licensed for the year ended 30th June, 1937, was 395. In the metropolitan area, the Metropolitan County Board exercises control, licensing 1,591 vendors. Thirty-five local boards effecting licensing in their districts licensed 273 vendors.

Examinations of Milk Samples.—In this State much use is now being made of the methylene blue or reductase test, as modified by Professor G. S. Wilson, of London. The Department of Chemistry has examined 3,800 specimens by this method in the past two years. Of these, 107 samples, or 2·8 per cent., proved unsatisfactory. In these cases, the local authority concerned makes futher investigations at the dairies, and endeavours to trace the source of contamination.

The Central Board has had a small series of samples of mixed milks investigated for the presence of tubercle bacilli. In no case were tubercle bacilli detected.

Summer or Temperance Drinks.—Complete supervision of the scores of beverages marketed is impossible, but every attempt is made to ensure the wholesomeness of goods sold to the public. Correct labelling of summer or temperance drinks is required. An examination of labels used in connection with such drinks at

one country centre showed that many of them did not comply with the Food and Drugs Regulations. Copies of labels used by the various aerated water manufacturers throughout the country areas were then obtained and were considered from the point of view of the general labelling provisions and the required declaration of preservatives. Irregularities were noticed in regard to the name and business address of the manufacturer not being included in the label, declaration of preservative, excess preservative, and the use of the word "squash" or the word "crush" or words of similar significance, when the drink was not manufactured from crushed fruit or fruit squash. In the absence of information regarding the constituents of the various drinks the subject of their compliance with the specific standards was not considered.

Testing of Spirits.—Following the agreement made between the Honourable the Chief Secretary and the members of the Brands Protection Association, Mr. T. L. Gepp was appointed an inspector under the Food and Drugs Acts on the 28th January. Under the agreement the inspector's powers were limited to certain spirits. The association pays the salary and other expenses of the inspector. During the year he examined 5,625 spirits at various hotels throughout the State and submitted 98 samples for analyses. Legal proceedings were taken in respect of 52 of the samples.

Dangerous Drugs.—The Dangerous Drugs Act of 1934 was proclaimed on 15th April, 1937, to come into operation on the 1st October, 1937, and regulations under the Act were gazetted on 22nd September and 8th December. In South Australia the British system of control is adopted. Professor A. Killen Macbeth visited England in 1935, and held an Honorary Commission from the Governor to make investigations into poisons and dangerous drugs legislation and administrative procedure. Professor Macbeth's recommendations have been largely incorporated in the regulations in this State. In an article in *Public Health Notes* Professor Macbeth explained the main features as follows :—

> South Australian legislation provides that only authorised persons may have dangerous drugs in their possession. The more important of the drugs covered by the Act are (1) the raw materials, coca leaves, raw opium, and Indian hemp or resins derived from Indian hemp (all of which are restricted to wholesale dealers who import them for the preparation of galenicals); (2) prepared materials, such as medicinal opium and extracts or tinctures of Indian hemp; (3) pure drugs such as codeine and dionin (wholesale control only) and cocaine, ecgonine, and morphine; derivatives of morphine (such as heroin, dilaudide, eucodal); and preparations containing the drugs or their derivatives—subject to certain exemptions.
>
> In virtue of their professional qualifications and registration medical practitioners, dentists, veterinary surgeons, and pharmaceutical chemists, regularly carrying on business, are authorised to be in possession of and to procure and supply dangerous drugs. All such drugs must be kept under lock and key. Records of all drugs procured and supplied must be kept in a prescribed form, but for the puposes of the Act administration by a doctor or a dentist to a patient in the course of their professional work, or by a veterinary surgeon, to an animal, is not regarded as supply.
>
> Members of the public can only obtain dangerous drugs in accordance with a prescription. Only medical practitioners and veterinary surgeons (for animal treatment only) can issue prescriptions for dangerous drugs, and these prescriptions must conform strictly to specific requirements laid down in the regulations.
>
> Prescriptions for dangerous drugs can only be dispensed by a medical practitioner or a pharmaceutical chemist (or an assistant under their direct supervision) or by a veterinary surgeon. The pharmacist is guilty of an offence if he dispenses a prescription which is not in accordance with the regulations. On the last occasion on which a prescription is dispensed it must be impounded by the pharmacist and retained for two years.
>
> A registered pharmaceutical chemist in the employment of a hospital or institution may obtain an authority to be in possession of dangerous drugs for the purpose of his profession. He will be responsible for the custody of such drugs and the keeping of records. Such drugs may only be issued by the pharmacist, or dispensed, upon the written order of a medical practitioner on the staff of the hospital, and are for the use only of patients undergoing treatment in the hospital. All other hospitals must obtain their dangerous drugs for treatment of patients in the ordinary way by having a doctor's prescription dispensed.

Poisons Regulations.—The necessity for revising the regulations relating to the Sale of Poisons, with the view to bringing them up to date, became apparent. The Advisory Committee under the Food and Drugs Act therefore appointed a sub-committee consisting of Professor A. Killen Macbeth (Professor of Chemistry of the University of Adelaide), Mr. C. E. Chapman (Government Analyst), and Mr. E. F. Lipsham (Pharmaceutical Chemist) to consider the matter of such revision.

The sub-committee, after considering the subject, prepared a draft of the proposed regulations, and submitted it to the committee. Consistent with the interests of the public health, every endeavour was made by the sub-committee to meet the wishes of the several bodies concerned.

The proposed legislation is largely based on the Poisons Rules of Great Britain, such rules having already been adopted in New Zealand and South Africa. The special conditions existing in South Australia, however, were constantly borne in mind in framing the regulations, and important modifications were introduced to meet the case, especially as regards poisons used in the primary industries.

The Advisory Committee adopted the proposed regulations and advised that they be brought into force.

PART V.

THE PREVENTION AND CONTROL OF INFECTIOUS DISEASES.

The Incidence of Infectious Diseases.—Table V. shows the incidence and number of deaths from infectious diseases throughout the State during the past three years.

TABLE V.

Infectious Diseases.	Cases Reported.			Deaths.		
	1935.	1936.	1937.	1935.	1936.	1937.
Cerebro-Spinal Meningitis	3	2	2	1	1	—
* Chickenpox	1,192	1,423	1,223	—	—	—
Diphtheria	526	1,279	774	19	30	27
Dysentery—Amoebic	1	4	4	—	3	1
Dysentery—Bacillary	—	5	19	1	3	2
Encephalitis Lethargica	2	2	4	2	3	5
Endemic Typhus Fever	14	13	6	1	3	—
Erysipelas	95	121	110	6	6	3
Favus	3	—	—	—	—	—
Influenza	705	135	143	25	14	10
Malaria	2	—	—	—	—	—
Measles	454	88	72	—	—	—
* Mumps	84	198	107	—	—	—
Paratyphoid Fever	2	1	—	—	—	—
Poliomyelitis Anterior Acuta	18	5	85	2	—	2
Puerperal Fever	46	89	58	8	9	6
Pulmonary Tuberculosis	318	266	331	233	199	225
Scarlet Fever	461	397	214	—	1	2
Typhoid Fever	29	51	27	5	3	4
Whooping Cough	3,616	751	684	25	9	5

* Not notifiable, 25th November, 1937.

Diphtheria.—An appreciable fall is shown in the number of diphtheria cases reported. Many local boards have conducted immunization campaigns under the scheme formulated by the Central Board in 1934. Supplies of anatoxin (formalinised toxoid) are issued free of charge to local boards and to approved institutions. During the year approximately 3,500 children were immunized under the scheme.

During an outbreak of diphtheria at Quorn, South Australia, four cases were reported where children who had been immunized many months before had contracted the disease. From three of these cases cultures of C. diphtheriae were obtained and submitted to detailed examination with the result that all three strains were found to belong to the gravis type. The special investigation into the Quorn outbreak was conducted by Dr. A. E. Platt, bacteriologist on the staff of the Government Laboratory of Pathology and Bacteriology, on behalf of the Central Board. Dr. Platt contributed an article on the subject to the July issue of *Public Health Notes.*

Poliomyelitis.—In November an epidemic of *poliomyelitis* (infantile paralysis) began. This is dealt with in Part VI. of this report.

Chicken-pox and Mumps.—Arising out of the consideration of hospital arrangements for persons suffering from infectious diseases, the board recommended that chicken-pox and epidemic parotitis (mumps) be removed from the list of diseases which are "infectious diseases" within the meaning of The Health Act. The proclamation declaring that the above diseases shall cease to be infectious diseases appeared in the *Government Gazette* of the 25th November.

PART VI.

POLIOMYELITIS.

Warning of an Outbreak.—South Australia had been little troubled by infantile paralysis during recent years. Such outbreaks as did occur were sporadic rather than epidemic. The numbers of cases and deaths (the figures for the latter being shown in brackets) occurring in the years 1931 to 1936 consecutively were :—37 (6), 18 (2), 13 (0), 4 (1), 18 (2), 5 (0). No cases occurred during the first half of 1937 ; one case occurred (at Port Augusta) in July.

In Melbourne in June, 1937, there began what was to become a very extensive epidemic. From that date up to 31st January, 1938, 1,766 cases were reported in Victoria ; there were 92 deaths.

When the Melbourne outbreak declared itself as an epidemic, it appeared likely that other States would, in course of time, be similarly affected. Early in November a number of cases occurred at Launceston (Tasmania), and South Australia and New South Wales later reported outbreaks.

In a memorandum to the Minister of Health (Sir George Ritchie, K.C.M.G.), dated 9th August, 1937, the Chairman of the Central Board of Health stated *inter alia* :—

> The spread of infection from patients to direct contacts. . . .a striking feature of the Melbourne outbreak, has not been commonly observed in other outbreaks. The Melbourne experience shows that the nursing of patients in strict isolation and the control of the movements of contacts are matters of great importance. Whether the disease in this highly infectious form is likely to spread to South Australia is a question impossible to answer. For the present it is desirable that the travelling of children between Melbourne and the other cities should be limited to necessary circumstances ; already most of the arrangements for school holiday tours have been abandoned.

Preparations.—Through the courtesy of the Victorian State Health Department, the Central Board was kept informed of the developments in Melbourne, and was able to make suitable preparations for handling the outbreak here. A statement issued by the Central Board on 1st September contained the following paragraphs :—

> The Central Board of Health considers that unnecessary travelling, especially of children, to and from Victoria is inadvisable. The Board also advises that any child arriving in this State from Victoria should be kept apart from other children for a period of three weeks.
>
> It is realised that spread of the disease to this State might be prevented if all communication with Victoria were interrupted, but such interference with the social and economic life of the community is not practicable. Panic legislation is unwise. The best safeguard is the full co-operation of the general public, and especially of parents and guardians of children, in observing the recommendations made.

The Central Board of Health also forwarded on 1st September, a recommendation to the Minister of Health that a special Advisory Committee on Infantile Paralysis should be appointed. The Government appointed the committee, consisting of Dr. A. R. Southwood (Chairman), Sir Henry Newland, Drs. F. S. Hone, E. Weston Hurst, and H. H. E. Russell. This committee held its first meeting on 10th September, and from the middle of November onwards it met weekly. Dr. L. W. Jeffries was subsequently appointed a member. The committee has kept a general oversight of the developments of the epidemic, and has done much to co-ordinate the work of various authorities and organisations.

Arrangements for Isolation.—In this State, as elsewhere, it had not been the practice for sufferers from infantile paralysis to be considered sufficiently infectious to require treatment in isolation during any stage of the illness. Patients were treated at home or in general hospitals. The Melbourne experience indicated that special precautions were desirable during the early stage of the illness, and one of the first decisions of the advisory committee was to advise the Central Board that sufferers should not be admitted to general hospitals during the first three weeks of illness. Provisions for isolation at home or admission to the Metropolitan Infectious Diseases Hospital was advised. The Central Board also advised the Minister of Health that additional regulations under The Health Act were necessary to provide for the isolation of sufferers and the control of contacts. Regulations were gazetted on 2nd September, 1937, and the Central Board sent a circular to local boards embodying the new regulations and explaining the method of administration.

Provision of Respirators.—Many of the Melbourne patients suffered from paralysis of the muscles of breathing, and an important development in treatment was the use of mechanical respirators for these cases. The Central Board was authorised by the Government to have suitable respirators manufactured locally, and to make them available on loan to the Metropolitan Infectious Diseases Hospital. The Central Board forthwith ordered the manufacture of the respirators ; it has bought eight of these machines on behalf of the Government, and made them available on loan to the Metropolitan Infectious Diseases Hospital. Two respirators were also bought by the Adelaide Hospital Board and were similarly loaned. Arrangements were also made to equip the Government hospitals at Mount Gambier, Port Lincoln, and Port Pirie with respirators.

Research.—On the 16th December, Dr. Hurst placed before the Chairman of the Advisory Committee a proposal that a special research should be instituted forthwith and stated that a grant from the Medical Research Council was being sought. Dr. Southwood telephoned Dr. Holmes, Acting Director-General at Canberra, supporting the request. On 14th January the committee noted with great satisfaction that a grant of £600 had been made by the National Health and Medical Research Council to the Institute of Medical Science for poliomyelitis research. Dr. E. Weston Hurst, Director of the Institute, is conducting an investigation into factors governing the spread of the disease. Through the resources of the grant Dr. Heaslip has been engaged to assist Dr. Hurst in the work.

Subsidence of the Outbreak.—At the time of this report (April, 1938) the epidemic is abating. Several special circulars have been issued by the Central Board during the epidemic, and further reports will be published in *Public Health Notes* and elsewhere.

PART VII.

RESEARCH INTO RHEUMATIC INFECTIONS.

Central Board Proposals.—At a meeting of the Central Board of Health on 30th March, 1937, the Chairman referred to the matter of rheumatic infection, and stated that, although strictly it was not one of the " infectious diseases " coming within the purview of the Board's activities, he thought it would be well for the Board to give attention to it. After discussion the Board decided to appoint a small committee informally to discuss the health aspects of the subject and to make any suitable recommendations.

Subsequently a committee consisting of the following was appointed :—Dr. A. R. Southwood and Professor J. B. Cleland representing the Central Board of Health, Dr. L. W. Jeffries and Dr. J. W. Rollison representing the Adelaide Hospital, and Dr. E. Britten Jones and Dr. R. L. Thorold Grant representing the Adelaide Children's Hospital. Dr. E. Weston Hurst has since been added to the Committee.

The Committee, after reviewing the subject, proposed that a research worker, medically qualified, be appointed to investigate the various aspects of rheumatic infection, and considered that, if a money grant was made available by the National Health and Medical Research Council to provide for this specified research worker, a most useful piece of investigation could be provided.

Research Grant Approved.—The Rheumatic Research Committee submitted a scheme of investigation and, through the Central Board, a grant was sought from the National Health and Medical Research Council. On 9th December the Central Board was informed that the Council had approved a grant of £500 for one year for an inquiry into the epidemiology of rheumatic infection in South Australia. The research will be conducted under the aegis of the Central Board during the forthcoming year.

PART VIII.

THE PREVENTION AND CONTROL OF PULMONARY TUBERCULOSIS.

Incidence.—A detailed review of this subject was given in our report for 1936. It is not proposed to repeat the observations made there. They are still applicable. Table VI. shows cases and deaths since 1901.

TABLE VI.

Years.	Cases Reported.	Deaths.
Average for the period, 1901-1905	341	300
Average for the period, 1906-1910	427	331
Average for the period, 1911-1915	476	317
Average for the period, 1916-1920	534	344
Average for the period, 1921-1925	513	332
Average for the period, 1926-1930	461	306
Average for the period, 1931-1935	363	252
1936	266	199
1937	331	225

Co-operation between Departments.—The conduct of the Chest Clinic at the Adelaide Hospital, of the Bedford Park Sanatorium, and of the Morris Hospital is the responsibility of the Department of the Inspector-General of Hospitals. The local boards of health supervise the sanitary condition of patients' homes, and information regarding home circumstances and contacts is collected at the Central Board Office. In the case of patients in the metropolitan area, this information is transmitted to the Chief Medical Officer for Tuberculosis Services (Dr. J. G. Sleeman). In this way an effective liaison is established between authorities responsible for different branches of the work. It is also desired that health inspectors on local board staffs will, at their visits to patients' homes, stress the value of examination of contacts as a case-finding measure.

Research into Tuberculosis.—At the Australasian Medical Congress held in Adelaide in August, special sessions were devoted to consideration of the tuberculosis problem. The high incidence of tuberculosis in young women was thought to require further research. The matter of aiding an inquiry in this State was considered at the December meeting of the National Health and Medical Research Council. It was decided by the Council to postpone definite plans, pending a preliminary study of case reports and statistical returns. These indicate that young women in this State are somewhat more liable to contract tuberculosis than those elsewhere in Australia. The reason for this is not apparent. It is probable that if a survey of the chest condition of a large group of young women in the metropolitan area of Adelaide were conducted, and the results compared with parallel investigations in other Australian cities, some features of the problem would be clarified. It is hoped that a grant will be made available by the Council this year.

PART IX.

CONCLUDING REMARKS.

1. The report shows that the general health of the people is fairly satisfactory.

2. Continued emphasis must be laid on the fact that the responsibility for and the privilege of undertaking public health developments in this State rest with local boards of health. The Central Board is, at all times, ready to advise and guide local boards.

3. Sanitation is still the basis of good health work. Every local board should strive to attain and maintain the highest degree of sanitary excellence in its area. Clean, tidy towns show proper civic pride, and reflect a healthful state of mind and body of the people.

4. Local boards, especially in country areas, are reminded that the careful disposal of refuse and night-soil is the most important sanitary requirement. There is no justification for taking risks by neglect in this matter.

5. The new legislation relating to dangerous drugs is being administered by the Central Board. The introduction of this measure is part of a world-wide plan for controlling a serious menace.

6. The biggest epidemic of poliomyelitis ever recorded in this State began in November, 1937. At the end of the year the epidemic was continuing. A summary of its extent and other features will be given in our next report. The Central Board greatly appreciates the valuable work of the Special Advisory Committee on Infantile Paralysis.

7. The promotion of a special research into rheumatic infections is a new feature of our work. The inquiry is being assisted by a grant from the National Health and Medical Research Council.

8. Preventive medicine is assuming greater importance in world affairs. It behoves all concerned in the development and administration of its various departments to be ever ready to test and to adopt suitable measures for the promotion of the public health.

A. R. SOUTHWOOD, Chairman.

E. ANGAS JOHNSON,
HARRY S. HATWELL,
F. C. LLOYD,
} Members.

S. C. STENNING, Secretary.

Adelaide, 4th April, 1938.