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County Borough of Southampton

Annual Report

ON THE

Health

OF THE

County Borough

AND THE

Port of Southampton

For the Year 1946

BY

H. C. MAURICE WILLIAMS, O.B.E.

M.R.C.S., L.R.C.P., D.P.H.

Medical Officer of Health of the County Borough and Port of Southampton,
Medical Superintendent of the Municipal Hospitals,
Medical Officer to the Education, Public Assistance,
and Mental Deficiency Acts Committees,
Medical Referee to the Southampton Crematorium.

1947

The Hughes Printing House

Eastleigh and Southampton

CONTENTS

LIST OF COMMITTEES CONCERNED WITH THE WORK OF THE DEPARTMENT.

HIS WORSHIP THE MAYOR Councillor F. S. Smith, J.P.
ex-officio Member of Committees.

HEALTH COMMITTEE.

Chairman : Alderman Mrs. V. F. King, B.A.
Alderman J. Austin.
Alderman E. Sakoschansky, M.R.C.S., L.R.C.P.
Alderman Mrs. B. M. Sakoschansky.
Alderman T. H. Sanders.
Councillor Mrs. L. B. Barnard.
Councillor J. Boyle.
Councillor Mrs. K. Cawte.
Councillor Mrs. M. W. Earley.
Councillor R. E. Edmunds.
Councillor Mrs. V. B. Fletcher.
Councillor E. G. Last.
Councillor Mrs. B. Leach.
Councillor W. Lewis.
Councillor G. T. Mundy
Councillor Mrs. R. M. Stonehouse.

MATERNITY AND CHILD WELFARE COMMITTEE.

Chairman : Alderman E. Sakoschansky, M.R.C.S. L.R.C.P.

The Members of the Health Committee, together with the following co-opted Members :—

Mrs. L. Millard Arnold, B.Sc.
Mrs. E. Harvey
Mrs. W. B. Paice.
Mrs. W. N. Watts.

MENTAL DEFICIENCY ACTS COMMITTEE.

Chairman : Councillor Mrs. R. M. Stonehouse.

Alderman Mrs. V. F. King. B.A.

Alderman Mrs. B. M. Sakoschansky.

Councillor Mrs. L. B. Barnard.

Councillor Mrs. K. Cawte.

Councillor T. Crothers.

Councillor Mrs. M. W. Earley.

Councillor S. L. Hawkins.

Councillor Mrs. B. Leach.

Councillor W. F. Penny.

Councillor W. H. Stone.

Councillor W. C. Tomlins.

Mrs. L. Dyas.

Mrs. V. M. Featherstone.

Mrs. N. Musker.

Mr. J. Pacey.

Mr. F. W. Short.

Mrs. H. Squibb.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

(A.) FULL TIME.

Medical Officer of Health	H. C. Maurice Williams, O.B.E., M.R.C.S., L.R.C.P., D.P.H.
Deputy Medical Officer of Health	W. P. Cargill, B.Sc., M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H.
Clinical Tuberculosis Officer ..	W. D. Beck, M.D., M.R.C.S., L.R.C.P.
Clinical Venereal Diseases Officer and Pathologist	R. M. Warren, B.A., M.B.. Ch.B., D.P.H.
Senior Assistant School Medical Officer	G. R. Taylor, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.
Assistant Medical Officers of Health	Ruby J. B. Slater, M.B.,Ch.B., D.P.H. Enid W. Brett, L.R.C.P., L.R.C.S., H. P. Fowler, M.B., Ch.B., D.P.H., D.T.M. and H.
Resident Medical Superintendent, Borough Hospital	M. K. Jardine, M.B., Ch.B.
Assistant Resident Medical Officer, Borough Hospital	Hilda R. Harris, M.B., Ch.B.
Junior Resident Medical Officer, Borough Hospital	Barbara Corlett, M.B., B.S.
Resident Obstetric Medical Officer, Borough Hospital	Martha Lebermann, M.D.
Resident Medical Officer, Isolation Hospital	Marie Norton, L.R.C.P., L.R.C.S., L.M.
Junior Resident Medical Officer, .. Isolation Hospital	
Matron, Borough Hospital	Miss D. M. Hoar, S.R.N., S.C.M.
1st Assistant Matron, Borough Hospital	Miss E. W. Ryder, S.R.N., S.C.M.
2nd Assistant Matron, Borough Hospital	Miss E. M. Taylor, S.R.N., S.C.M.
Matron, Isolation Hospital ..	Miss D. James, S.R.N., S.C.M.
Assistant Matron, Isolation Hospital	Miss M. E. Buckland, S.R.N., S.C.M.
School Dental Officers	L. J. Haworth, L.D.S.
	C. A. Blanden, B.D.S.
	Lorna M. J. Ewart, L.D.S.
	E. H. Randerson, L.D.S.
Chief Sanitary Inspector	E. B. Rose, Cert. R.S.I., M.R.S.I., Certificate Meat and Foods.
Chief Port Sanitary Inspector	W. H. J. Hurst, Cert. R.S.I., Certificate Meat and Foods.
Senior Meat and Food Inspector ..	C. Birch, Cert. R.S.I., Certificate Meat and Foods.

Senior Factories and Shops Inspector	B. T. TANNER, Cert. R.S.I., A.R.S.I.
Superintendent Health Visitor ..	MISS C. M. RITCHIE, S.R.N.
Supervisor of Midwives ..	MISS E. K. STEEL, S.R.N., S.C.M.
Principal Administrative Assistant ..	C. MASTERMAN.
Chief Clerk	W. J. MANNING.

(B.) PART TIME.

Visiting Physican Borough Hospital ..	D. FISHER, M.B., Ch.B.
Visiting Surgeon, Borough Hospital ..	S. N. LYTLE. F.R.C.S. (Eng.)
Deputy Visiting Surgeon, Borough Hospital	L. A. RICHARDSON, M.A., F.R.C.S.
Visiting Obstetrician and Gynaecologist	R. W. KNOWLTON, M.A., M.D., F.R.C.S. (Eng.), M.C.O.G.
Visiting Orthopaedic Surgeon ..	H. H. LANGSTON, F.R.C.S. (Eng.)
Visiting Anaesthetist, Borough Hospital	G. G. HAVERS, M.R.C.S., L.R.C.P., D.A.
Visiting Radiologist	W. F. H. IVES, L.R.C.P., L.R.C.S., L.F.P.S.
Visiting Ophthalmic Surgeon	J. KEYMS, B.A., M.B., B.Ch., B.A.O.
Visiting Aural Surgeon	J. B. SUGDEN. M.B., B.S., D.L.O.
District Medical Officers :—	
No. 1 District	P. O'CONNELL, L.R.C.P., L.R.C.S.
No. 2 ,, ...	S. B. CHAMBERS, M.R.C.S., L.R.C.P.
No. 3 ,, ...	A. J. GRIMSTON, M.B., Ch.B.
Nos.4 and 5 Districts	H. W. JAMES, M.R.C.S. L.R.C.P.
No. 6 District	G. A. COGGIN, M.R.C.S., L.R.C.P., D.L.O.
No. 7 ,, ...	R. J. VERNON, M.B., B.Ch., M.R.C.S., L.R.C.P.
No. 8 ,, ...	R. V. HAVARD, M.R.C.S., L.R.C.P.
No. 9 ,, ...	R. FRANKLING, L.M.S.S.A.
No. 10 ,, ...	W. A. ELLIOTT, M.B., B.S.
Public Vaccinators :—	
No. 1 District	E. A. SAUNDERS, M.R.C.S., L.R.C.P.
No. 2 ,, ...	J. E. A. SIMPSON, M.B., Ch.B.
Nos. 3 and 4 Districts	S. R. SAUNDERS, B.SC., M.B., Ch.B., D.Obst.R.C.O.G.
Nos. 5 and 6 Districts ..	R. J. VERNON, M.B.,B.Ch., M.R.C.S., L.R.C.P.
No. 7 District	R. V. HAVARD, M.R.C.S., L.R.C.P.
No. 8 ,, ...	M. M. WICKHAM, M.B., B.S.
No. 9 ,, ...	W. A. ELLIOTT, M.B., B.S.

County Borough and Port of Southampton.

ANNUAL REPORT

OF

The Medical Officer of Health.

To The Mayor, Aldermen, and Councillors of the County Borough of Southampton.

Mr. Mayor, Ladies and Gentlemen,

In accordance with my statutory duty as your Medical Officer of Health, I have the honour to present for your information and consideration my Sixteenth Annual Report on the health and sanitary circumstances of the County Borough of Southampton for the year ended 31st December, 1946.

The passing of the National Health Services Act, 1946, to come into operation during 1948, provides for a comprehensive Health Service designed to secure improvement in the physical and mental health of the people of England and Wales, and the prevention, diagnosis and treatment of illness. The Act has made provision for the taking over of all the Hospital Services, the establishment of a General Practitioner Service and the extension of the present Health Authority Service. In order that the schemes should be fully efficient and smooth running in their execution it is of the greatest importance that the full co-operation and co-ordination of the three authorities responsible for the running of the varying Services should be maintained on all levels.

The Local Health Authority will be responsible under the Act for making provision for Vaccination, Immunisation; Ambulance Services; Midwifery; Health Visiting; Home Nursing; Prevention of illness, Care and After-Care; Domestic Help: Duties under the Lunacy, Mental Treatment and Mental Deficiency Acts; Care of Mothers and Young Children; Health Centres.

In many of these provisions the necessity for providing full co-operation with both the private practitioner and hospital authorities is apparent and it will be of the greatest importance that the committees dealing with these services should take this into consideration when formulating their proposals. The fact that many patients will be passed from one service to the other may, without full co-operation, will lead to delay in treatment with detriment to both the individual and the services generally.

The immunisation of the child population against diphtheria continued during the year and there was a slight increase in the number of children immunised as compared with last year. The value of national and local campaigns to encourage immunisation was shown by the large number of acceptances received during the campaign in September and it would appear that without this extra effort both nationally and locally to encourage acceptance the number of cases dealt with would be greatly reduced.

As will be seen by the statistics given on page 46 75% of the children between 5 and 15 years of age had received preventative treatment whereas from the age of 1 to 4 years only 51% had been treated (after deducting the birth rate for the year from the estimated mid-year population given by the Ministry of Health). Increased effort should, therefore, be made to encourage the under 5's to receive treatment and with the extension of the Infant Welfare Centres throughout the town it is hoped that in future years a higher percentage of acceptance will be attained.

In view of the serious shortage of nurses throughout the country a nursing recruitment campaign was organised in Southampton from January to March, 1946, to run concurrently with the national campaign. Every form of advertisement was utilised, with lectures, film shows, brains trusts and public meetings, and at the public exhibition staged in March there was a total attendance of 12,822 persons.

The immediate result of this campaign was very satisfactory as will be seen by the report given on page 114 but its full value to the recruitment of nurses will only be revealed in the future when the careers of school leavers are under the consideration of interested parents.

A mass radiography survey was carried out in Southampton from the 31st July, to the 21st December, 1946. The Portsmouth unit carried out this survey in accordance with arrangements with the Ministry of Health whereby the use of the unit was allowed to neighbouring authorities until such time as more units are available in the country. The unit was established at the Oatlands House Clinic, Winchester Road, and although these premises were not centrally situated and could not be considered ideal for the purpose,

a total of over 17,000 X-Ray Examinations was carried out. A full report by the Director of the mass radiography unit will be found on page 71 and it is alarming to note that 5% of the number attending were found to have evidence of pulmonary tuberculosis. Many other abnormal conditions of the chest were also found as shown in table 5 of the report. The success of this scheme is shown by the large attendances and the useful purpose which was served in tracing the many chest conditions which could only be obtained by X-Ray methods. Mass radiography has demonstrated its usefulness for diagnostic purposes and extension of the scheme to other parts of the body should be a consideration of the authorities concerned.

During the war years the national emergency required the mobilisation of all available sources of labour and the opening of the day nurseries in Southampton in 1942 provided for the care of children under 5 years of age and thus released mothers for work in essential industries. During this period when hundreds of day nurseries were operating throughout the country valuable information became available in determining their true value in relation to the welfare of the child, and it can be said that with fully trained and efficient staffing, the companionship of children of like age and the collective training in regular habits and table manners have been of considerable benefit to the child. These arrangements have given many mothers the experience of temporary freedom from domestic responsibilities, and I feel that if day nurseries are discontinued commercial establishments will be set up and the care of the children may be left in untrained hands.

I would like to record my very sincere appreciation to the Chairmen and Members of the Health, Maternity and Child Welfare, Mental Deficiency Acts, Education, Housing and Public Assistance Committees for the sympathic and careful consideration which they have shown to my many suggestions and recommendations.

Finally, I would like to express gratitude to all members of my staff for their loyal and competent service during a very difficult year.

I am, Mr. Mayor, Ladies and Gentlemen,

Your obedient servant,

H. C. Maurice Williams

Medical Officer of Health.

General Provision of Health Services

and

Sanitary Circumstances of the Area

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

The following particulars are inserted by the request of the Ministry of Health.

Hospitals provided or subsidised by the Local Authority.

A. (1) BOROUGH HOSPITAL.

This Hospital, previously known as Shirley Warren Infirmary, was, on the transfer of the functions of the Poor Law Guardians under the Local Government Act, 1929, appropriated by the County Borough Council for the purpose of a General Hospital, and for the reception of the sick under the Public Health Acts. The administration and control of the Hospital were delegated by the Borough Council to the Health Committee.

A detailed Report on the Borough Hospital is given on page 84

(2) ISOLATION HOSPITAL.

This Hospital, known as the Southampton Isolation Hospital and Sanatorium, was opened in 1900, and is situated at Millbrook within the County Borough.

The Hospital is constructed of brick, and stands on high ground, sloping to the south. The buildings consist of an entrance lodge, out-bathing station, mortuary, administration block, five pavilions, one of which was erected in 1905, laundry, ambulance block, disinfector, and other buildings. In addition to this accommodation there are two huts, containing 16 beds each, which were erected for the reception of military cases in 1916.

The total number of beds provided for infectious cases is 123 and 25 cots ; together with 107 beds for the treatment of Tuberculosis, as shewn under the heading, B (1) Tuberculosis.

Four pavilions with a small administrative block and boiler house were erected by the War Department in 1940 for the purpose of catering for infectious disease cases occurring in Service personnel in this area, each pavilion accommodating 25 beds. It is anticipated that this accommodation will be handed over to the Borough Council, and will be allocated for the treatment of tuberculosis. The bed accommodation will need to be reduced for this purpose, but it is anticipated that four pavilions will accommodate 68 beds.

Provision has been made for any future extensions necessary, the buildings having been arranged with that end in view. The

original site contained 10.25 acres, and in 1915 the Corporation acquired the adjoining land and buildings, which comprised an additional area of about 44 acres, making a total of 54.25 acres, but in 1937 the Health Committee transferred to the Housing Committee 4.5 acres for the building of 48 houses, leaving the present acreage of land belonging to the Health Committee at 49.75 acres.

(3) ROYAL SOUTH HANTS AND SOUTHAMPTON HOSPITAL.
This is a voluntary Hospital, containing 280 beds.

(4) SOUTHAMPTON CHILDREN'S HOSPITAL.
This is a voluntary Hospital for the treatment of children, and contains 55 beds.

(5) FREE EYE HOSPITAL.
This is a voluntary Hospital of 26 beds, specialising in the treatment of eye conditions.

B. (1) TUBERCULOSIS.
One Hundred and seven beds are available for the treatment of cases of tuberculosis in pavilions set aside for this purpose at the Isolation Hospital.
(2) MATERNITY.

A Maternity Unit attached to the Borough Hospital, was opened during 1937.

Ambulance Facilities.
An ambulance service is provided by the Health Committee. For detailed report see page 111.

Clinics and Treatment Centres.
The following Clinics and Treatment Centres are provided by the Local Authority :—
Maternity Centres and Infant Clinics :—
Cardigan Road.
Itchen Secondary School.

Welfare Centres :—
Cardigan Road Welfare Centre, Cardigan Road.
Itchen Welfare Centre, Whites Road, Bitterne.
Borough Hospital Welfare Centre, Tremona Road, Shirley Warren.
Bitterne Park Welfare Centre, Cobden Avenue.
St. Albans Welfare Centre, Burgess Road.

Tuberculosis Dispensaries :—

Mount Pleasant School.
Itchen Secondary School.

School Clinics (see separate Report) :—

Mount Pleasant School.
Itchen Secondary School.
Bassett Green School (Branch).
Shirley Warren School (Branch).
St. John's School (Branch).
Aldermoor School (Branch).

Treatment Centre for Venereal Diseases :—

Cardigan Road (Males).
Cardigan Road (Females).
Southampton New Docks (Males).
Southampton Old Docks (Males).
Borough Hospital (In-Patients).

Professional Nursing in the Home.

(a) GENERAL.

Nursing is provided by the Queen Victoria Jubilee Nurses' Institute for cases brought to their notice by the Health Visitors. A grant is made by the Council to the Institute in aid of this work. Particulars of the work carried out by the Institute is given on page 36

(b) INFECTIOUS DISEASES.

Cases are removed to the Isolation Hospital for treatment where proper isolation or adequate nursing arrangements cannot be provided in their homes. Cases of measles, chicken pox and other diseases coming to the knowledge of the department are visited by the Health Visitors, and, if necessary, removed to theIsolation Hospital. Disinfection is carried out at the home after removal or recovery of cases, and the bedding and other articles removed to the West Quay Disinfecting Station.

Midwives.

The number of midwives practising in the area during the year was 46, all of whom are certificated midwives.

On the 30th July, 1937, a Municipal Midwifery Service was commenced.

Maternity and Nursing Homes.

The number of registered Nursing Homes at the present time is 17.

Chemical Work.

The Chemical work is carried out by the Public Analyst in the Borough Laboratory.

Legislation in Force.

LOCAL ACTS DEALING WITH SANITARY MATTERS :

The Southampton Improvement Act, 1844. The Southampton Corporation Act, 1910. The Southampton Corporation Act, 1931. The Southampton Corporation Act, 1937.

GENERAL ADOPTIVE ACTS.

Public Health (Amendment) Act, 1890, except Part IV. Public Health (Amendment) Act, 1907. Public Health Act, 1925.

BYE-LAWS.

Common Lodging Houses ; Houses let in Lodgings ; Slaughter-houses ; New Streets and Buildings ; Drainage of existing houses ; Tents, vans, sheds, or other similar structures ; For the prevention of nuisances arising from snow, filth, dust, ashes and rubbish, and for prevention of keeping animals on any premises so as to be injurious to health ; Spitting in public places ; Offensive Trades ; Supervision and control of hairdressers' premises.

MORTUARY.

A new Mortuary opened on the 4th February, 1936, situated adjoining the Disinfecting Station at West Quay, is well equipped and of modern design.

A full description of this building was given in my Annual Report for the year 1935.

SANITARY CIRCUMSTANCES OF THE DISTRICT.

The following particulars have been kindly supplied by the Waterworks Engineer :—

SOUTHAMPTON CORPORATION WATERWORKS.

The statutory area of supply of the Corporation's Water Undertaking extends to 220 square miles, and includes, in addition to a large country district, the Boroughs of Southampton, Eastleigh and Romsey.

The present supply is derived from wells in the upper chalk at Otterbourne, Twyford and Timsbury, and from the River Itchen at Otterbourne. The supply from the River Itchen is a recent development of the undertaking and was first brought into use in June 1942. The first instalment of the works of the River Itchen Supply has been designed to produce a supply of 3,500,000 gallons a day and the Corporation has power to abstract 10,000,000 gallons a day from the river; so there is ample water available for the immediate further development of the town's water supply.

The water from the Corporation's wells is a typical chalk water clear and bright in appearance, free from solid matter in suspension and having a total hardness of about 16° Clark's scale. Prior to the outbreak of war in September, 1939, the water at each of the well supply pumping stations was softened, by the lime process, down to a hardness of about 8° before distribution. On the outbreak of war, however, owing to the proximity of the lime kilns to the pumping stations and the danger at night from the glare of burning kilns, the softening process was suspended. Softening was resumed during the summer of 1946 and is at present being carried out to such extent as is possible, having regard to the amount of lime available from time to time whilst fuel restrictions controlling the amount of coal and coke allocated for the burning of lime are in force. A gradual return to the pre-war standard of softening will be made as futher supplies of lime become available. All water from the wells is sterilised by means of the "Choloramine" process before being pumped into supply.

The water from the River Itchen is of similar character to the water from the Corporation's wells and of about the same degree of hardness, but is subject to considerable variation in quality depending on local weather and other conditions. The water is pumped from the river to combined purification and softening works. The water passes through a series of tanks where sedimentation, assisted by the addition of sulphate of alumina, and softening by the addition of lime, take place; it is then filtered through rapid gravity

sand filters and is finally sterilised by means of the Chloramine process before being pumped into supply.

Samples of water are taken regulary from the various sources of supply and submitted to bacteriologial examination. The following table shows the number of samples taken from each source and the results of the examination.

BACTERIOLOGIAL EXAMINATION OF WATER, 1946.

Description of Water	Total No. of Samples	Coliform Bacilli—MacConkey, 2 days, 37°C. Number of samples showing probable numbers present in 100 ml.					
		Nil	1 to 2 present	3 to 10 present	11 to100 present	101 to 1,000 present	More than 1,000 present
Otterbourne :							
Well	26	9	3	8	6	Nil	Nil
Treated	53	51	2	Nil	Nil	Nil	Nil
Twyford :							
Well	28	4	4	11	9	Nil	Nil
Treated	53	50	2	1	Nil	Nil	Nil
Timsbury :—							
Well	26	15	4	6	1	Nil	Nil
Treated	53	52	1	Nil	Nil	Nil	Nil
River Itchen :—							
River	33	Nil	Nil	Nil	Nil	12	21
Treated	53	49	2	2	Nil	Nil	Nil
Distribution ..							
System	35	35	Nil	Nil	Nil	Nil	Nil

During the year ended 31st March 1947, the average daily consumption throughout the Corporation's area of supply was 13,673,000 gallons. During July 1946, the month in which the greatest quantity of water was consumed, the average daily rate amounted to 14,199,000 gallons, and on the 4th February 1947, following a period of severe frost, the heaviest day's consumption during the year occurred, when the quantity amounted to 16,710,000 gallons. The estimated civilian population within the Corporation's " water limits " is 311,000.

The following information is included on the instructions of the Ministry of Health.

(i) (a) The quality of the water has been satisfactory.

(b) The quantity of the water has been satisfactory.

(ii) Bacteriological examinations of the raw water are made once a fortnight and of the treated water once a week. The number of examinations and the results obtained are shown in the Table on page 17.

(iii) The water has no plumbo-solvent action.

(iv) All water supplied by the Water Undertaking is sterilised by means of the chloramine process before being pumped into supply.

(v) The total number of houses to which supplies are connected in the Borough is 45,964, but all these are not at present occupied, some being in various stages of repair. The Registrar General's estimate of the population within the Borough is 159,750 persons, practically all of whom are provided with piped water supplies.

(a) Number of dwelling houses within the Borough of Southampton supplied from public water mains 45,964.

(b) Number of dwelling houses within the Borough of Southampton supplied by means of standpipes—Nil.

Vital Statistics

Births, Deaths and Infantile Mortality

VITAL STATISTICS.

BIRTHS—

	Males	Females	Total
Legitimate	1,726	1,736	3,462
Illegitimate	174	162	336
TOTAL ..	1,900	1,898	3,798

Birth Rate	23.77
Number of Stillbirths	123

DEATHS—

Number of Deaths	2,026
Death Rate	12·68

Maternal Mortality Rate—

Per thousand live births	3.42
Per thousand total births	3.31
Number of women dying in, or in consequence of, childbirth	13
Deaths of infants under one year of age per 1,000 births	41·07
Number of Deaths from Pulmonary Tuberculosis ..	98
Rate per 100,000 population	61.34
Number of Deaths from Non-Pulmonary Tuberculosis	14
Rate per 100,000 population	8.76

POPULATION—

Registrar General's estimated population at the middle of 1946	159,750

BIRTHS.

The total number of births occurring among residents of the Borough was 3,798 as compared with 3,387 in the previous year. The actual number of births registered in the Borough was 3,979 of which 338 were non-resident.

The birth-rate was 23.77 which is a decrease of 0.03 compared with the previous year. The birth-rate in 1945 was 23.80.

The excess of births over deaths was 1,772.

Of the total of 3,798 births, 1,900 were males and 1,898 females.

The number of illegitimate births recorded was 336, of which 174 were males and 162 females.

The Notification of Births Act came into operation in the Borough on the 9th March, 1908. This Act requires any person in attendance upon the mother within six hours after the time of birth, to notify the Medical Officer of Health in writing of such birth within thirty-six hours of the birth having occured.

DEATHS.

The death-rate of the County Borough for the year was 12.68 per 1,000 of the population, being a decrease of 0.87 compared with the previous year.

The total deaths registered in the Borough amounted to 1930, of which 230 were non-residents. Two hundred and ninety-one deaths of residents of the Borough occured in other districts in England and Wales.

Of the 1930 deaths registered in the Borough, 841, equal to 47.72 per cent., occurred in Public Institutions.

CLASSIFICATION OF CAUSES OF DEATH ACCORDING TO DISEASES

Cause of Death	Males	Females	Total
1. Typhoid and Paratyphoid Fevers	—	—	—
2. Cerebro Spinal Fever	—	—	—
3. Scarlet Fever	—	—	—
4. Whooping Cough	2	2	4
5. Diphtheria	2	—	2
6. T.B. of Resp. System	60	38	98
7. Other forms of T.B.	9	5	14
8. Syphilitic Diseases	17	1	18
9. Influenza	7	9	16
10. Measles	4	1	5
11. Acute Poliomyelitis and Polio-Encephalitis	—	—	—
12. Acute Inf. Encephalitis ..	1	—	1
13. Cancer of Buccal Cavity .. Oesophagus (M) .. Uterus (F)	19	13	32
14. Cancer of Stomach and Duodenum	39	20	59
15. Cancer of Breast	—	29	29
16. Cancer of all other sites ..	100	74	174
17. Diabetes	2	10	12
18. Intra. Vascular Lesions ..	97	125	222
19. Heart Disease	284	274	558
20. Other Disease of Circulatory System	24	31	55
21. Bronchitis	74	35	109
22. Pneumonia	53	42	95
23. Other Resp. Disorders ..	16	4	20
24. Ulcer of Stomach or Duodenum	22	1	23
25. Diarrhoea under 2 years ..	27	12	39
26. Appendicitis	3	2	5
27. Other Digestive Disorders ..	19	26	45
28. Nephritis	40	32	72
29. Puerperal Sepsis	—	3	3
30. Other Maternal Causes ..	—	10	10
31. Premature Birth	26	19	45
32. Congenital Malformation, Birth Injuries, Infant Diseases ..	23	17	40
33. Suicide	8	6	14
34. Road Traffic Accidents ..	12	5	17
35. Other Violent Causes ..	21	19	40
36. All other Causes	84	66	150
Totals	1,095	931	2,026

INFANTILE MORTALITY.

The deaths of infants under one year of age recorded during the year was 156, consisting of :

	Legitimate.	Illegitimate.
Male ..	.. 87	10
Female ..	.. 52	7

During the last ten years the infantile mortality rate has been as follows :—

Year	*Infantile Mortality Rate*	*Year*	*Infantile Mortality Rate*
1937 ..	.. 48.6	1942 ..	.. 40.86
1938 ..	.. 50.58	1943 ..	.. 38.9
1939 ..	.. 46.29	1944 ..	.. 46.36
1940 ..	.. 50.6	1945 ..	.. 56.09
1941 ..	.. 52.15	1946 ..	.. 41.07

Maternity and Child Welfare

MATERNITY AND CHILD WELFARE.

1 (a) MIDWIVES ACTS, 1918-36. INSURANCE SCHEME.

The Insurance Scheme makes provision for any expectant mother, who comes within the income limit of £250 per annum, on her booking a Midwife. The premium of 7/6 for a first pregnancy, and 6/- for any subsequent pregnancy, payable to the Medical Officer of Health, will insure her against any liability that may be incurred by the services of a doctor being requisitioned by the midwife on a Form 'A' in accordance with the rules of the Central Midwives' Board. This benefit takes effect after the expiration of seven days of the date of the official receipt.

The number of cases from whom the insurance fee was received under this Scheme during the year was 783.

The following statement shows the amount of insurance fees received and payments made to doctors for the financial year 1st April to 31st March, with comparative figures for 1946.

Year ended 31st March.	No. of insured cases.	Insurance fees received.	Payments to Doctors.	Loss on Insurance Scheme.
		£	£	£
1946	762	248	374	126
1947	709	236	445	209

It is pointed out that there is an overlap during the first few months of each period due to the payments to doctors for which the insurance fees have been received previously.

(b) INSPECTION OF MIDWIVES.

The number of notifications of intention to practise in the County Borough received during the year was 46, this number includes practising midwives in the Maternity Unit, Nursing Homes, and domiciliary service. The supervision of municipal and private district midwives is carried out by a Supervisor of Midwives appointed by the Council. 38 routine inspections were made during the year.

The wearing of caps, overalls, masks and gloves were advocated to reduce the danger of infection. In all cases where infection occurred the midwife was immediately replaced by a Queen's Nurse and the Midwife and her appliances disinfected. Disinfection is carried out at the Disinfecting Station, West Quay, a trained nurse being in attendance to supervise treatment, or at home during week-ends if the infection is not of a serious nature.

Six midwives were disinfected for the following cause :—

Contacts with puerperal pyrexia	At West Quay	3
	At Home	3

Particulars of notifications received by the Local Supervising Authority, and visits made in connection with midwifery work during the year are as follows :—

Notifications :—	
Intention to practise	46
Sending for medical aid	763
Stillbirths	31
Artificial feeding	80
Death of infant	6
Contact with infectious disease	7
Puerperal Pyrexia	12
Ophthalmia Neonatorum	9
Laying out dead bodies	—
Visits :—	
By Inspector of Midwives—	
Routine inspection of midwives	38
Routine inspection of Maternity Homes ..	58
By Inspector and Health Visitors—	
Special visits of enquiry	1121

The following show details of the Form 'A's issued by midwives requesting the attendance of medical help :—

	Mother	Child
Ante-natal—		
Referred to private practitioners ..	676	—
Referred to Ante-natal Clinic ..	87	—
Albuminuria	27	
Miscarriages	32	
Ante-Partum haemorrhage	29	
Unsatisfactory general condition ..	201	
Labour—		
Delivery	98	
Post-Partum haemorrhage	13	
Ruptured Perineum	137	
Retained placenta	15	
Breech and footling	43	
Malformation	—	3
Feebleness	—	18
Puerperium—		
Rise in temperature	11	
Varicose veins	11	
Eyes	—	30

Post-natal—

Unsatisfactory general condition	..	23

(c) MIDWIVES ACT, 1936.

A Municipal Midwifery Service provided by the Corporation under the Midwives Act, 1936, came into operation on the 31st July, 1937, and provided for twenty municipal midwives. In Southampton during 1946 there were only nine municipal midwives practising under the Act.

There is a general shortage of midwives throughout the country and the major problem in engaging extra staff is the obtaining of housing accommodation for them. Several competent midwives have already left the service owing to these housing problems. The provision of apartments is made extremely difficult owing to the irregular hours of midwives, the telephone enquiries and visiting of patients, and householders are very reluctant to suffer these inconveniences which occur day and night. Many midwives have relatives living with them and it would be preferable to provide a flat or house, otherwise the Midwifery Service will be seriously affected.

The following are details of the work carried out by domiciliary municipal midwives :—

Number of cases—			
Maternity	..	77	1214
Midwifery	..	1137	
Number of times called in on Form " A's "			
Ante-natal	..	152	
Delivery	..	103	400
Post-Natal and Infants	..	145	
Number of Forms " B "	..	—	
" " " " C "	..	13	
" " " " D "	..	—	
" " " " E "	..	—	
" " " " F "	..	19	
Number of cases of—			
Ophthalmia Neonatorum	..	—	
Pemphigus Neonatorum	..	—	
Puerperal Pyrexia	..	4	
Stillbirths	..	17	
Neo-natal deaths	..	5	
Number of patients removed to hospital	..	26	

Number of attendances by midwives at ..	
Municipal Clinics—	
Ante-natal	197
Infant welfare centres	12

GAS AND AIR ANALGESIA.

During the year 1946 a course on Gas and Air Analgesia was held at the Borough General Hospital, and of the nine municipal midwives taking this course seven were successful.

Twelve machines have been purchased and it is hoped to commence this service in the new year. The fee fixed will be 5/-. Gas and Air will be given at the patient's wish at the midwives discretion. All patients requesting this treatment will be required to have an examination by a medical practitioner, principally at the Ante-Natal Clinics or their own doctor if preferred.

(d) HOME HELPS.

There were only two Home helps operating during 1946. It has been extremely difficult to obtain the services of women for this type of work, although enquiries have been made to the various Women's Voluntary Services and Committees for help in obtaining suitable applicants.

The Department gave financial help to those patients unable to afford the full cost of the services of the Home Helps.

(e) NURSING HOME REGISTRATION ACT, 1927.

All the registered Nursing Homes were inspected quarterly and the general conditions were found to be satisfactory.

The following is a record of the action taken during the year—

(1)	Number of applications for registration	5
	Number withdrawn	1
(2)	Number of Homes registered ..	17
(3)	Number of orders made refusing or cancelling registration	Nil
(4)	Number of appeals against such orders	Nil
(5)	Number of cases in which such orders have been	
	(a) Confirmed on appeal ..	Nil
	(b) Disallowed	Nil
(6)	Number of applications for exemption from registration	Nil

(7) Number of cases of exemption :—

(a) Granted	Nil
(b) Withdrawn	Nil
(c) Refused	Nil

(f) STILLBIRTHS

During the year there were 123 stillbirths.

(g) OPHTHALMIA NEONATORUM.

The number of Ophthalmia Neonatorum cases notified during the year was nine, vision was unimpaired in all cases.

WELFARE CENTRES.

There are five Municipal Welfare Centres at present established in Southampton where mothers with their children may attend for medical examination and advice on the care of infants. The attendances at these Centres have greatly increased compared with previous years and it would appear that parents are now appreciating the value of the help which experienced staff can give in matters relating to child welfare.

The main Clinic at Cardigan Road had over 20,000 attendances at the four weekly sessions and this building is totally inadequate to deal with such large numbers of patients.

It is hoped that next year the services conducted at Cardigan Road will be moved to The Health Centre, Kings Park Road, where provision has been made for a very large waiting room and the necessary consulting rooms.

There are two voluntary Welfares run by the Southampton Babies' Welfare Workers Committee where excellent work is being carried out. In May 1946 the voluntary Welfare at St. Alban's was taken over by the Department as great difficulty had been experienced in obtaining voluntary assistants to do the work.

ATTENDANCES AT WELFARE CENTRES.

	Mothers	Children	Total
Cardigan Road ..	9,864	10,768	20,542
Itchen	4,581	4,806	9,387
Borough	5,083	5,309	10,392
Bitterne Park ..	2,674	3,161	5,835
St. Alban's ..	1,607	1,766	3,373
TOTAL	23,809	25,720	49,529

	Number of weighings	Consultations with doctor re children
Cardigan Road ..	9,884	3,067
Itchen	4,563	1,004
Borough	4,646	1,435
Bitterne Park ..	3,084	915
St. Alban's ..	1,679	542
TOTALS	23,856	6,963

Facilities are available at the Welfare Centres for the purchase of Dried Milk and Malt and Cod Liver Oil; other nutriment preparations are also provided.

MOTHERCRAFT CLASSES.

It has been impossible to recommence this very important service owing to the lack of accommodation but it is hoped to provide these facilities at the new Health Centre which will be ready for occupation in 1947.

PREMATURE INFANTS.

Where the home conditions are suitable and the parents are capable of taking care of the infant, the midwife in charge applies for special equipment which is supplied by the Department, and the baby remains at home. The midwife continues to attend until the feeding is fully established; the infant gaining and the mother quite capable of caring for the infant herself. Home visits are then made by the Health Visitor at regular intervals.

If the facilities at home are not suitable for the care of the infant transfer is immediately made to hospital by ambulance in a special cot with a fully trained Midwife in attendance. On discharge from hospital the Health Visitor keeps the case under supervision.

The following are details of premature babies notified during 1946 :—

(1) At home	80
(2) In hospital	93
Number of those born at home :—	
(a) Nursed entirely at home ..	72
(b) Died during the first 24 hours	4
(c) Who survived at the end of one month	72
Number in hospital :—	
(a) Who survived the first 24 hours	16
(b) Who survived at end of one month.	72

Gynaecological, Post-Natal and Ante-Natal Clinics.

Facilities are available at two gynaecological clinics, three ante-natal clinics and two post-natal clinics. These are conducted at Cardigan Road, Itchen Secondary School and the Maternity Unit of the Borough General Hospital In addition to the trained Midwives, pupil midwives attend regularly at Cardigan Road and the Maternity Unit Clinics for the Ante-Natal Sessions. There has been an increase in the attendances at these Clinics as compared with 1945. The following is a summary of attendances :—

Cardigan Road.

Ante-natal—		
New	1,251	
Old	7,847	
		9,098
Post-natal—		
New	125	
Old	227	
		352
Gynaecological.		
New	452	
Old	1,695	
		2,147

Itchen Clinic.

Ante-natal		
New	412	
Old	2,366	
		2,778
Post-natal		
New	7	
Old	18	
		25
Gynaecological		
New	31	
Old	58	
		89

MATERNITY UNIT.

Ante-natal		
New	401	
Old	2654	3055

HEALTH VISITING IN THE HOMES.

There are at present only nine Health Visitors to carry out this work, although the establishment of Health Visitors is 19 and it is hoped that more nurses will soon be available for this work. Great difficulty has been experienced in performing the Health Visiting in view of the grave shortage of staff and in many cases it has been necessary to transfer Health Visitors from one area to another to deal with emergencies.

Each Health Visitor is responsible for a defined district for all branches of Public Health work, including visiting for Tuberculosis, School Health and Maternity and Child Welfare, together with the weighing, measuring and cleanliness of all scholars attending schools in the area. Each Health Visitor also attends the Infant Welfare Centres and the branch School Clinics. There are also two Health Visitors who are employed whole time at the Clinics.

The following are details of visits made by Health Visitors during the year 1946. :—

Expectant Mothers	476
First visits to infants under one year of age	4,004
Re-visits to infants under one year of age	10,513
Re-visits to children over one year of age and under school age	15,587

SUPERVISION OF FOSTER CHILDREN UNDER THE INFANT LIFE PROTECTION ACTS.

Under these Acts quarterly visits are made and reports submitted to the Medical Officer of Health. These are in addition to the usual periodic visits made by the Health Visitors. The following details show the number of Foster Mothers and children being dealt with during the year :—

Number of persons on register	22
Number of children in their care	25

DAY NURSERIES.

The provision of Day Nurseries in Southampton to meet the needs of women with young children who, by the exigencies of war, were required to augment or replace man power in essential industries, was given careful consideration and the establishment of the day nurseries presented problems which demanded either siting near the factory, en route to the factory or near the housing area where the children were living; the availability of satisfactory bus services and the provision of suitable premises. It was decided to site the nurseries in the dormitory districts and with this in mind the first nursery was opened in a villa which had, before the war, been occupied by the medical superintendent in the grounds of the Borough General Hospital. This fortunately adjoined a municipal housing estate, a district in which many of the women lived who worked in the factories. The second nursery was established in a house which had previously been used as a nursing home, but which had been requisitioned as a rest hostel by the Public Assistance Committee. The third and fourth nurseries were established in the woodwork department of a secondary school and in the sports pavilion of a university college respectively, both these Nurseries being close to large housing estates.

During 1946 the nurseries continued to operate providing accommodation for 160 children until in March the Swaythling Day Nursery had to be closed as the building was required by the University College for educational purposes. The children normally attending this Nursery were transferred to the Northlands Nursery, together with the equipment and staff, and extension of this nursery was made to deal with the increased number of children.

Each Nursery is staffed by a matron or warden, who is a State Registered Nurse or a State Registered Children's Nurse, together with Nursery Assistants in such proportion as to allow a ratio of approximately one nurse to every five children. Since the inception of the Day Nursery Scheme great difficulty has been experienced in the constant staff changes which have taken place. Many of the Day Nursery staffs have, after a comparatively short period, left the service in order to get married. It is interesting to note the apparently high proportion of marriages taking place among the staff employed in this work as compared with other branches of the service. The constant changes of staff do, however, have a disturbing influence on the children.

The buildings provided for these services were by no means ideal for the purpose and considerable improvisation had to be made. Plans are now being prepared, however, for the conversion of a Warden Centre and First Aid Post as Day Nurseries which will

provide better accommodation for the children and staff with the provision of all the facilities which were found lacking in the previous accommodation.

The following are details of the attendances at the Day Nurseries :—

	Northlands.	Borough.	Itchen.	Swaythling.
Number of places	50	50	30	30
Average Daily number on Register	44.36	23	32.33	24.64
Average Daily Attendance	24.61	18.43	22.78	15.8
Total attendances for the year.	6,715	4,456	6,644	947

As the Nurseries are under the direct control of the Public Health Department it has been the general practice to arrange for an Assistant Medical Officer of Health to carry out routine medical inspection of all children in attendance at intervals of approximately two months. Children are given a full medical examination and those requiring treatment are referred to the Clinics for reference to the Specialist Services.

Outbreaks of infectious disease are the main anxieties of the Day Nurseries and the matron or warden is of the greatest assistance in providing information and bringing to the notice of the Medical Officer of Health any suspected cases of infectious disease.

QUEEN'S INSTITUTE OF DISTRICT NURSING.

During the year, the Institute has again rendered very valuable assistance in the nursing of cases.

I give below particulars of the diseases from which patients were suffering, the number of cases and visits paid :—

Diseases	Cases		Visits
Pneumonia ..	57		1,084
Tuberculosis	19		549
Influenza ..	6		98
Miscarriages	7		80
Breast abscess	10		188
Erysipelas ..	1		3
Meningitis ..	1		1
Total	101	Total	2,003
Midwifery			
Puerperal Pyrexia	5		
Midwife suspended	5	Total	259
Midwifery complications	13		
Total	23		
Children Under 5 years.			
Gastro-enteritis	2		9
Ophthalmia Neonatorum	1		6
Impetigo	2		20
Pemphigus Neonatorum	1		46
Others medical and surgical not including pneumonia	75		407
Total	81	Total	488
Grand Total Cases	205	Grand Total Visits	2,750

ORTHOPAEDIC CLINIC.

The Orthopaedic Clinic is held on the mornings of Wednesday and Saturday of each week, the first and third Wednesdays of each month being reserved for cases suffering from major defects when the clinic is conducted by a surgeon from Lord Mayor Treloar Cripples' Hospital, Alton. The remaining sessions are carried out under the supervision of an Assistant Medical Officer of Health.

A total of 2,615 attendances were made at the clinic during 1946.

The Remedial Exercise Centres established at the schools now number 21. These Centres provide remedial exercises for the correction of mild postural defects and flat feet and are kept under the observation of an Assistant School Medical Officer.

The following table gives details of the defects treated during the year :—

CONGENITAL—

Syndactyly	6
Talipes	24
Torticollis	11
Spine	3
Spina Bifida	6
Dislocation of Hip	8
Dislocation Patellae	3
Short Leg	3
Cleft Lip and Palate	6
Cleft Lip	2
Cleft Palate	8
Exostosis	2
Thumb	1
Other Forms	12

TRAUMATIC—

Old Fracture	3
Scarring	4
Sprains	1
Adolescent Slipped Epiphysis	1
Other Forms	4

OTHERS—

Kypholordosis	8
Kyphosis	24
Scoliosis	82
Lordosis	17
Spine	1
Poor Posture	224
Pes Planus	349
Pes Cavus	7
Pes Valgus	173
Pes Varus	1
Pes Plano Valgus	7
Hallux Valgus	281
Metatarsus Varus	4
Coxa Valga	3
Other Foot Deformities	281
Plantar Wart	1
Equino Cavus	2
Right Arm Deformity (Amputation)	1
Other Forms	142

RICKETS—

Genu Valgum	343
Genu Varum	11
Other Forms	6

INFLAMMATIONS—

Arthritis	7
Osteomyelitis	5
Osteochondritis	1
Other Forms	2

PARALYSIS—

Erb's Palsy	2
A.P.M.	19
Spastic Hemiplegia	5
Spastic Paraplegia	9
Spastic Monoplegia	3
Bilateral Flacid Paralysis	1
Poliomyelitis	3
Bell's Paralysis	1

TUBERCULOSIS—

Spine	3
Hip	11
Upper Limb	6
Lower Limb	5
Cervical Adenitis	1
Other Forms	9
Various other conditions	6
	2,175

ANALYSIS OF ATTENDANCES AT THE ORTHOPAEDIC CLINIC, 1946.

Classification.	Under School Age.		School Age.		Over School Age.		Total.	
	New	Old	New	Old	New	Old	New	Old
Tuberculosis— Spine	—	—	—	3	—	3	—	6
Hips	—	—	2	17	—	7	2	24
Other Joints ..	1	—	2	34	1	3	4	37
Other Crippling Diseases— Feet and others ..	106	261	394	1266	3	17	503	1544
Spine	8	29	140	290	2	11	150	330
Rickets–	1	—	2	—	—	—	3	—
Total	116	290	540	1610	6	41	662	1941
Cases from County ..	—	—	—	—	—	—	3	9
						Total	665	1950

Notifiable Infectious Diseases

INFECTIOUS DISEASES

Number of Notifications received during the year :—

Scarlet Fever	196
Diphtheria	36
Enteric Fever	4
Puerperal Pyrexia	14
Erysipelas	39
Cerebro Spinal Fever	10
Acute Poliomyelitis	4
Ophthalmia Neonatorum	10
Pemphigus Neonatorum	—
Dysentery	3
Malaria	4
Pneumonia	92
Measles	73
Whooping Cough	224
Tuberculosis (Pulmonary)	273
Tuberculosis (Non-Pulmonary)	31
	1,013

The following table shows the number of notifications received of Infectious Diseases, which have been classified in age groups and Municipal Wards.

CASES OF INFECTIOUS DISEASES NOTIFIED DURING THE YEAR, CLASSIFIED IN AGES AND LOCALITIES.

DISEASE	Number of Cases notified at Ages—Years							Total Cases Notified in each Municipal Ward																
	Under 1 year	1 & under 5 years	5 & under 15 years	15 & under 25 years	25 & under 45 years	45 & under 65 years	65 and upwards	Town	St. Mary's	Northam	Trinity	Newtown	All Saints	Bevois	Bannister	Freemantle	Millbrook	Shirley	Portswood	St. Denys	Bitterne & Pear Tree	Bitterne & Sholing	Woolston	St. Nicholas	Institutions
Scarlet Fever	1	43	122	16	13	—	1	4	12	5	4	7	5	6	6	8	16	23	4	11	11	38	16	20	136
Diphtheria	—	6	14	8	8	—	—	2	1	1	2	4	1	1	4	—	1	1	3	2	3	1	1	8	36
Para Typhoid Fever	—	—	2	1	1	—	—	—	—	1	—	1	—	—	1	—	—	1	—	—	—	—	—	—	4
Puerperal Pyrexia	—	—	—	5	9	—	—	—	—	2	—	—	—	—	1	1	—	7	—	—	—	2	1e	—	10
Erysipelas	—	—	1	—	11	16	11	2	1	2	—	2	—	1	—	1	2	14	—	2	1	4	3	4	16
C.S.M.	2	3	1	2	1	—	1	—	—	—	1	—	2	2	—	—	—	2	—	1	1	1	—	—	10
Acute Poliomyelitis	—	—	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	2	4
Pemphigus Neon	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ophthalmia Neonatorum	10	—	—	—	—	—	—	—	—	—	1	—	1	1	—	—	—	3	—	—	—	1	1	2	5
Dysentery	—	—	1	—	—	2	—	—	—	—	1	1	—	—	—	—	—	—	—	—	1	—	—	—	2
Malaria	—	—	—	—	4	—	—	—	—	—	1	—	—	—	—	—	1	2	—	—	—	—	—	—	1
Pneumonia	15	20	5	4	15	23	10	2	—	2	5	5	3	9	7	4	15	21	1	—	4	8	3	3	3
Measles	10	31	28	3	1	—	—	—	—	1	2	2	2	2	6	2	7	9	2	3	4	7	3	21	8
Whooping Cough	23	123	77	—	1	—	—	—	—	5	—	11	7	15	5	9	26	45	5	17	21	42	9	7	20
Totals	61	226	254	40	64	41	23	10	14	19	17	33	21	37	30	25	68	128	15	36	47	105	37	67	255

DIPHTHERIA.

The number of notifications of diphtheria received during the year was 36, compared with 26 in 1945.

IMMUNISATION AGAINST DIPHTHERIA.

During 1946, 3,221 children received complete treatment during the year as compared with 3,095 in the previous year.

A Local Campaign to encourage the acceptance of Diphtheria Immunisation was inaugurated in Southampton in September and lasted for approximately three months. This local effort conincided with the National Campaign launched by the Ministry of Health. Full advantage was taken of press publicity together with slides shown at the local cinemas and posters in the Corporation trams and omnibuses.

In addition a personal letter to parents was printed in pamphlet form and contained statistics showing the progress on immunisation over a period of ten years together with a corresponding decrease in the diphtheria case rate from 741 cases in 1935 to 26 cases in 1945. A consent form for completion by the parent was included in the letter. The pamphlets were fowarded to the Head Teachers of all the Southampton schools for distribution to the children in attendance. The final result of the Campaign was most encouraging, 1,825 children receiving complete treatment up to the end of the year and an additional 2,008 children receiving the first protective injection. A further 2,192 children who had been immunised previously received additional injections to ensure that immunity was maintained.

In order to cope with the large number of cases involved special clinics were arranged in the majority of the schools in addition to the normal clinic facilities.

TABLE A.

The following table gives details of the treatment undertaken during the year :—

Number of Protective Injections :—		
Toxoid Antitoxin Floccules,	First Injection	3,274
,, ,, ,,	Second Injection	12
,, ,, ,,	Third Injection	17
Alum Precipitated Toxoid,	First Injection	3,262
,, ,, ,,	Second Injection	3,204
,, ,, ,,	Additional ,,	2,466
		8,969
Number of Primary Schick Tests	..	Nil
Number of Post Schick Tests	.. ..	Nil

TABLE "B"

IMMUNISATION IN RELATION TO CHILD POPULATION.

Number of children who had completed a full course of Immunisation at any time up to 31st December, 1946

Age at 31.12.46. .. .. i.e. Born in year.	Under 1 1946.	1 1945.	2 1944.	3 1943.	4 1942.	5–9 1937–1941.	10–14 1932–1936.	Total Under 15
Number Immunised.	2	1065	1658	1421	1390	7913	9480	22929
Estimated mid-year population 1946.	14,540					23,060		37,600

DIPHTHERIA NOTIFICATIONS AND DEATHS IN RELATION TO IMMUNISATION.

Notifications.			Deaths.		
Age at Date of Notifications.	Number of Cases Notified.	Number of Cases included in preceding column in which the child has completed a full course of Immunisation	Age at date of Death.	Number of Deaths	Number of Cases included in preceding column in which the child has completed a full course of Immunisation.
Under 1	—	—	Under 1	—	—
1	1	—	1	—	—
2	1	—	2	—	—
3	2	1	3	—	—
4	1	1	4	—	—
5 to 9	9	3	5 to 9	2	—
10 to 14	4	1	10 to 14	—	—
Totals.	18	6	Totals.	2	—

Venereal Diseases

VENEREAL DISEASES.

The year has been notable as the busiest since the Clinics were first established. Public interest has been aroused in the subject of venereal disease and the magnitude of the problem is stimulating responsible bodies in giving every support they can to combat this scourge. It has been emphasised on many occasions that field work, namely bringing of cases to the Clinic for diagnosis and treatment requires the utmost attention. Well planned publicity is of great use in bringing to the notice of the public the significance of the seriousness of these diseases.

Co-operation between ecclesiastical, educational and medical bodies provides a firm foundation on which to erect the structure of the social service side and to bring it in line with the already very efficient methods of diagnosis and treatment.

Incidence.

Early syphilis showed a very sharp rise; male cases totalled 130 for the year, as compared with 48 and 49 in 1945 and 1938 respectively, whereas female cases reached the alarming figure of 99, as compared with 56 in 1945 and 9 in 1938.

Acute gonorrhoea in males totalled 653 as against 130 in 1945 and 285 in 1938. The corresponding figures for the female clinic were 140 in 1946, 114 in 1945 and 55 in 1938.

Such a marked increase in the rates of both syphilis and gonorrhoea was not anticipated although it was realised and forecast that there would be some increase this year. The factors responsible appear to be a post-war lowering of the moral code, intensified locally by the importation of undesirable elements during the war and still persisting intermittently. In addition, the national publicity campaign and the general knowledge of the efficiency of penicillin treatment have resulted in greater numbers seeking advice.

The increased activity of the port has also resulted in more seamen attending.

Non-venereal cases totalled 1,031 males and 271 females in 1946 as compared with 472 males and 260 females in 1945.

Age Incidence.

No significant change was noticeable in this respect; there is still a distressing number of young persons being brought to the clinic for diagnosis.

Source of Patients.

Once again patients have been referred by general practitioners, hospitals, other branches of the Health Department and local institutions. The most cordial relations and every co-operation have characterised this side of the work.

Out-Patients.

The introduction of outpatient treatment for syphilis by means of oil wax penicillin has resulted in a great increase in the number of attendances and cases seen by the medical officers. 11,302 male and 4,769 female visits have been recorded as against 5,481 and 4,587 respectively in 1945. It should be mentioned that the easing of the burden on the medical officer by the part time assistance of the assistant medical officers has been a great help.

The dock clinics have developed as is shown by the following figures. In the year 1946, 1,043 visits were recorded in the Old Docks, and 743 in the New Docks as compared with 751 and 153 in 1945.

Summary.

Sufficient has been said to show that the position with regard to the venereal diseases is perturbing and Southampton, like many other seaports, has a special problem in connection with these diseases. By tackling the problem energetically and enlisting the support of interested bodies through the development of the social services who will assist in contact tracing, case holding and follow up, an improvement can be looked for in the future.

TREATMENT OF VENEREAL DISEASES

Return relating to all Persons who were treated at the Treatment Centres during the year ended 31st December, 1945.

	Syphilis		Soft Chancre		Gonorrhoea		Non-Venereal or undiagnosed conditions		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals
1. Number of cases on 1st January under treatment or observation	15	105	—	—	31	—	38	18	48	161	209
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	17	8	—	—	7	4	—	—	24	12	36
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from— ..											
Syphilis, primary	107	46	—	—	—	—	—	—	107	46	153
,, secondary	21	45	—	—	—	—	—	—	21	45	66
,, latent in first year of infection*	2	8	—	—	—	—	—	—	2	8	10
,, all later stages	22	10	—	—	—	—	—	—	22	10	32
,, congenital	4	5	—	—	—	—	—	—	4	5	9
Soft Chancre	—	—	7	—	—	—	—	—	7	—	7
Gonorrhoea, 1st year of infection ..	—	—	—	—	653	140	—	—	653	140	793
,, later	—	—	—	—	1	9	—	—	1	9	10
Non-venereal conditions	—	—	—	—	—	—	1031	271	1031	271	1302
Conditions remaining undiagnosed at 31st December	—	—	—	—	—	—	5	—	5	—	5

Return relating to all Persons at the Treatment Centres—*continued.*

	Syphilis		Soft Chancre		Gonorrhoea		Non-venereal or undiagnosed Conditions		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals
4. Number of cases dealt with for the first time during the year under report known to have received treatment for the same infection, or to have been under observation, at other Centres, or Service Hospitals or by General Practitioners approved under Ministry of Health Circular 2226	122	19	2	—	232	6	—	—	356	25	381
Total of Items, 1, 2, 3, and 4	310	246	11	—	924	197	1036	289	2281	732	3013
5. Number of cases discharged after completion of treatment and final tests of cure or after diagnosis as non-venereal	28	23	2	—	260	86	888	271	1178	380	1558
6(*a*). Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from :—											
Syphilis, primary	21	14	—	—	—	—	—	—	21	14	35
,, secondary	9	20	—	—	—	—	—	—	9	20	29
,, latent in 1st year infection* ..	2	2	—	—	—	—	—	—	2	2	4
,, all later stages	2	3	—	—	—	—	—	—	2	3	5
,, congential	3	2	—	—	—	—	—	—	3	2	5
Soft Chancre	—	—	1	—	—	—	—	—	1	—	1
Gonorrhoea, 1st year of infection ..	—	—	—	—	8	32	—	—	8	32	40
,, later..	—	—	—	—	—	4	—	—	—	4	4

Return relating to all Persons at the Treatment Centres—*continued*

6(*b*). Number of cases under treatment or observation which died :—											
From the disease	—	—	—	—	—	—	—	—	—	—	—
From treatment	—	—	—	—	—	—	—	—	—	—	—
From other causes	1	—	—	—	—	—	—		1	—	1
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure	16	37	—	—	265	26	—	—	281	63	344
8. Number of cases transferred to other Centres, or to institutions, or to care of private practitioners	62	29	5	—	270	16	83	—	420	45	465
9. Number of cases remaining under treatment or observation on 31st December ..	166	116	3	—	121	33	65	18	355	167	522
Total of Items 5, 6, 7, 8 and 9 ..	310	246	11	—	924	197	1036	289	2281	732	3013
10. Number of cases in the following stages of Syphilis **included in Item** 6 which failed to complete one course of treatment of either penicillin or of arsenic and bismuth -:—											
Syphilis, primary	12	3	—	—	—	—	—	—	12	3	15
,, secondary	4	4	—	—	—	—	—	—	4	4	8
,, latent in 1st year of infection*	—	—	—	—	—	—	—	—	—	—	—
,, all later stages	1	—	—	—	—	—	—	—	1	—	1
,, congenital	—	—	—	—	—	—	—	—	—	—	—
11. Number of attendances (*a*) for individual attention of the medical officer(s)	3931	2451	29	—	4387	1507	2955	811	11302	4769	16071

Return relating to all Persons at the Treatment Centres—*continued.*

	Syphilis		Soft Chancre		Gonorrhoea		Non-venereal or undiagnosed conditions		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals
(*b*) for intermediate treatment, *e.g.*, irrigation, dressing	1373	259	3	—	3145	1275	378	—	4899	1534	6433
Total attendances	5304	2710	32	—	7532	2782	3333	811	16201	6303	22504
12. In-patients :— Name of Institution (if other than the Treatment Centre) Southampton Borough Hospital. (*a*) Total number of persons admitted for treatment during the year ..	80	94	3	—	12	5	—	4	95	103	198
(*b*) Aggregate number of " in-patient days " of treatment given.. ..	846	1114	41	—	144	71	—	39	1031	1224	2255

							Other Diseases				
							M.	F.			
13. Number of cases treated with penicillin ..	104	89	—	—	625	146	32	—	761	235	996

	Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Totals		
14. Number of cases of congenital syphilis in Item 3 above classified according to age periods	2	1	—	—	—	1	2	3	4	5	

Return relating to all Persons at the Treatment Centres—*continued.*

	Microscopial		Cultural	Serum		Cerebro-spinal fluid	Others for diagnosis of Ven. Disease
	for Syphilis	for Gonorrhoea	for Gonorrhoea	for Syphilis	for Gonorrhoea		
15. PATHOLOGICAL WORK :—							Trich. Vag
(*a*) Number of specimens examined at, and by the medical officer, of the Treatment Centre ..	362	1500	—	—	—	—	1027
(*b*) Number of specimens from patients attending at the Treatment Centre sent for examination to an approved laboratory	5	4510	416	2777	108	10	—

* " Syphilis latent in the first year of infection" applies to cases presenting no clinical signs of Syphilis, but discovered (by blood test etc,) to have contracted the disease within the preceding 12 months.

Statement showing the services rendered at the Treatment Centres during the year, classified according to the areas in which the patients resided.

Total Attend-ances.	Number of Cases					Name of County or County Borough
	Syphilis	Soft Chancre	Gonorr-hoea	Conditions other than V.D.	Total	
17391	151	4	477	752	1384	Southampton
2437	44	1	127	195	367	Hampshire
28	3	—	2	6	11	Wiltshire
122	3	—	15	31	49	London
17	—	—	2	1	3	Sunderland
495	5	—	32	43	80	Scotland
9	—	—	—	4	4	Northumberland
115	3	—	18	13	34	Liverpool
53	1	—	5	9	15	South Wales
19	1	—	1	2	4	Durham
3	—	—	—	2	2	Cornwall
7	—	—	—	1	1	North Wales
2	—	—	—	1	1	Somerset
3	1	—	—	—	1	Suffolk
31	1	—	1	7	9	Kent
37	1	—	1	9	11	Yorkshire
27	—	—	—	1	1	Channel Isles
1	—	—	—	4	4	Birmingham
4	1	—	—	1	2	Berkshire
2	—	—	—	1	1	Staffordshire
6	—	—	—	5	5	Essex
5	—	—	—	1	1	Lincolnshire
32	—	—	2	5	6	Manchester
16	—	—	—	1	1	Surrey
2	—	—	—	—	—	Dover
59	—	1	7	13	21	Northern Ireland
4	—	—	—	2	2	Gloucestershire
33	—	—	5	5	10	Bristol
916	34	1	73	78	186	Foreign
180	3	—	4	12	19	India
52	1	—	4	9	14	Dorset
17	—	—	2	3	5	Devonshire
37	—	—	6	2	8	Cheshire
41	—	—	2	5	7	Portsmouth
2	—	—	—	—	—	Leicester
2	1	—	—	1	2	Hereford
79	5	—	1	4	10	Southern Ireland
2	—	—	—	1	1	Bedford
7	—	—	—	1	1	Nottingham
15	—	—	—	5	5	Sussex
31	—	—	3	8	11	Lancashire
15	—	—	—	2	2	Malta
16	—	—	2	2	4	Newcastle
34	—	—	—	2	2	Isle of Wight
77	2	—	6	12	20	U.S.A.
136	3	—	5	33	41	Service R.N.
1	1	—	—	—	1	Service R.A.F.
3	1	—	—	2	3	Isle of Man
1	—	—	—	1	1	Norfolk
18	1	—	—	—	1	Cumberland
1	1	—	—	1	1	Derbyshire
1	—	—	—	—	—	Hastings
1	—	—	—	1	1	Northampton
22645	268	7	803	1300	2376	Total.

Tuberculosis and Cancer

TUBERCULOSIS.

The year 1946 saw the approach of more normal conditions, but there have been post-war difficulties and problems.

There has been a shortage of sanatorium facilities; wards have remained closed owing to lack of Nursing staff. At short notice many men and women have had to be accommodated in the sanatorium on arrival from overseas. This influx of non-borough patients has tended to lengthen the waiting list of local patients.

Much overcrowding has inevitably arisen from the scarcity of houses and living accommodation, and this has had and will have a serious effect on the problem of tuberculosis in the future.

The difficulty in obtaining the more essential foodstuffs and the long waiting queues has not improved the health of tuberculous patients, and the morale of many was lowered by the dull monotonously rainy weather which prevailed throughout the year.

Tuberculosis work is cumulative in its various aspects as statistics later in this report will show. The limited accommodation at Mount Pleasant School has made the working of the tuberculosis dispensary difficult, but it is anticipated that more convenient accommodation will be found in the new Health Centre at King's Park Road in 1947.

Mortality.

The number of deaths from tuberculosis during the year 1946 was the lowest on record. They numbered 93 pulmonary and 14 non-pulmonary. Of the latter there were 8 cases of meningitis, 5 cases of miliary and 1 of disease of the lumbar spine and a psoas abscess.

Notifications.

Tuberculosis is a notifiable disease whether in the infectious or non-infectious stage. It is a wrong policy to delay notification until tubercle bacilli appear in the sputum. Special attention is given to notified patients. Their houses are visited by a health visitor who reports on their condition and ascertains the contacts therein. A notified case is allowed priority food if there is the slightest activity of disease. There are many advantages in identification because it enables the Clinical Tuberculosis Officer to ensure attendance at the Dispensary. A notified pulmonary case cannot be discharged as cured under 5 years. Tuberculosis may appear in any part of the body and for statistical purposes is classified as pulmonary and non-pulmonary. Notifications may be primary as when a medical practitioner informs the Health Department on the appropriate form, or they may be received indirectly by information received posthumously, or by the transfer of a patient to the borough.

The number of Primary Notifications received during the year was Pulmonary 273, Non-pulmonary 31, Total 304. In addition 63 pulmonary and 21 non-pulmonary cases came to the notice of the department otherwise than by formal notification. Total notifications Pulmonary 336, Non-pulmonary 52. Grand Total 388.

DISPENSARY REGISTER.

	Pulmonary	Non-pulmonary.
Notified patients on Dispensary Register 1st January 1946.	2,092	261
Notified patients on Dispensary Register 31st December, 1946. ..	1,814	174

The following table shows the distribution.

Pulmonary				Non-Pulmonary				Total				Grand Total
Adults		Children		Adults		Children		Adults		Children		
M	F	M	F	M	F	M	F	M	F	M	F	
985	695	75	59	60	56	24	34	1045	751	99	93	1988

THE TUBERCULOSIS DISPENSARIES.

There are two dispensaries, the main one being situated at Mount Pleasant School, and a subsidiary one at Itchen Secondary School.

The Clinical Tuberculosis Officer conducts sessions at Mount Pleasant School on the mornings of Monday, Tuesday, Wednesday and Friday, and the evening session on Thursday, and at Itchen Secondary School on Monday evening and Thursday morning. The evening sessions are intended for workers, or for those who have good reason for being unable to attend in the day time.

Dispensary work consists of :—

(a) The examination of new patients.
(b) The examination of contacts.
(c) The observation of suspects.
(d) The supervision and treatment of notified patients.
(e) Clerical work.

THE EXAMINATION OF NEW PATIENTS.

New patients are those referred to the department for the first time. They live within the county borough and are sent by medical

practitioners. A few attend on the recommendation of health visitors. A very few attend without prior consultation with their doctors, because they feel they may suffer from tuberculosis. This latter practice is not encouraged. The Ministry of Labour refers men to the department who state on their medical examination for National Service, that they have suffered from chest disease in the past. These people are not necessarily local ones and may come from outlying towns. People are also examined for an assessment of their ability to undertake certain work especially in connection with the training scheme of the Ministry of Labour.

All new patients are systematically examined. An appointment for an x-ray made, and the sputum examined where possible; Sometimes a blood test is made. The patient is asked to attend a week later for the result of these investigations, and at this interview the nature of any illness is discussed and treatment arranged accordingly.

The Examination of Contacts.

The examination of contacts is of extreme importance, for it is by this means that unsuspected active, old or very recent tuberculosis may be found. Contact examination is not limited to the patient's immediate family but includes others living in the same house. This sometimes causes temporary embarrassment until it is pointed out that tuberculosis is largely environmental and not hereditary in origin. It is gratifying to note the change in outlook over the last decade. Formerly contacts were often reluctant to be examined, but an increasing knowledge of health matters by the laity has reduced the reserve and secrecy that one formerly found in tuberculosis work.

The Observation of Suspects.

It is only in the minority of sick people sent to the dispensary that definite diagnosis of tuberculosis can be found on the initial examination. In others where symptoms and signs point to a tuberculous infection a period of observation is suggested. It is generally possible to arrive at a definite diagnosis within a few weeks.

The Supervision and Treatment of Notified Patients.

Many notified persons have quiescent or arrested disease. They may or may not have been treated in a sanatorium. By regular supervision the Clinical Tuberculosis Officer is able to ascertain the progress of such disease. Notified children and non-insured persons are supplied with appropriate medicine from the department. Weekly gold injections are given to those who commenced a course in the sanatorium. These injections given in small doses over a long period. Periodic x-ray and sputum examinations are arranged. Out-

patients on pneumothorax or pneumoperitoneum treatment receive their refills at the sanatorium. Accordingly these attendances are not recorded in the summary of the dispensary work.

CLERICAL WORK.

This work consists of the maintenance of records of notifications and deaths, register cards, health visitors visits, weekly and quarterly returns, all correspondence and reports to medical practitioners, the making of appointments, and filing of case notes and skiagrams, the booking of stock issued, and the arrangement for admission to the Sanatorium. Some of this work is technical in nature and can only be carried out by the Clinical Tuberculosis Officer.

Summary of Dispensary work for the year 1946.

New patients examined	1,135
Contacts examined	415
Others who attended for observation or treatment	11,282
TOTAL	12,832

TUBERCULOSIS GRANT.

In order to help patients suffering from pulmonary tuberculosis who need sanatorium or domiciliary treatment, the Government grants financial assistance if earning power has been interrupted. This Grant is allowed to those who are likely to resume useful employment within a reasonable time and is sanctioned on the recommendation of the Clinical Tuberculosis Officer. The time limit is usually two years, but may be extended a further period in special cases. There are three kinds of payments :—

1. Maintenance allowance. This is based on a standard scale.
2. Discretionary allowance. This is for exceptional expense the patient might have and is additional to the above.
3. Special payments. These are separate from the above and cover such items as pocket money for a young person, cost of domestic help or expenses connected with visiting.

The following table summarises this work during the year 1946.

Cases receiving grant 1st January 1946	38
New cases given grant during the year	117
Cases taken off grant during the year	52
Remaining 31st December 1946.	103

Health Visitors.

When a patient is found to be suffering from tuberculosis, a health visitor calls at the home. She advises on methods of minimising infection, ascertains names of contacts, and reports on the general state of the house. She re-visits these patients at intervals and by this means she proves invaluable in keeping the department in touch with its patients. Approximately 10 visits are undertaken by each health visitor weekly, but owing to the shortage of staff the total visits have fallen short of our aim.

During the year 1,755 visits were made.

Domiciliary visits.

The Clinical Tuberculosis Officer visits patients at their homes at the request of medical practitioners. For those people with limited means where the help of a skiagram is desirable, he can saction the use of an ambulance to convey the patient to and from the hospital for this purpose.

During the year the Clinical Tuberculosis Officer paid 93 visits. On one occasion an artifical pneumothorax was carried out in the patient's house.

Extra Nourishment.

Suffers from active tuberculosis are allowed by the Ministry of Food extra milk and fat. At the end of the year this amounted to 2 pints of milk daily and 1 oz of fat weekly. When there is disease in the throat or alimentary canal which makes swallowing painful, extra eggs may be issued. These reccommendations are made on the appropriate form of the Ministry of Food.

The continual purchase of milk is sometimes a great financial burden and in these cases the Clinical Tuberculosis Officer may recommend the issue of free milk by the Health Committee. The whole financial circumstances of the patient are investigated before this is done.

During the year approximately 120 were assisted in this way.

Non-Pulmonary Tuberculosis.

Cases of bone and joint tuberculosis are referred to the Orthopoedic department which is under the Clinical control of Mr. H. H. Langston, F.R.C.S. This also applies to glandular tuberculosis which does not respond to conservative treatment.

Tuberculous meningitis still remains a fatal disease in spite of the early hopes of streptomycin.

Abdominal tuberculosis usually responds to sanatorium treatment but sometimes opening the abdomen is essential and this is carried out in the Borough Hospital.

Genito-Urinary tuberculosis needs special hospital investigation and treatment.

Tuberculous disease of the eye is treated in the sanatorium and the local lesion is supervised by the Royal Free Eye Hospital.

Lupus has been treated at Morland Hall where special work with calciferol has been carried out.

Radiographic Examinations.

X-rays play a major part in the management of tuberculosis. All new patients and most contacts are examined by this means as a routine. Usually this is for a suspected pulmonary lesion, but where symptoms and signs point to a lesion in some other part of the body, appropriate films are taken. The use of the fluographic screen is a rapid method for determining the degree of a pneumothorax or the presence of fluid therein but is not sufficiently accurate to detect early disease or the spread of older lesions. Patients are therefore x-rayed at intervals and all pneumothorax patients are x-rayed at 3 monthly intervals as a routine.

Skiagrams are taken at the Borough Hospital and the Borough Sanatorium. At the latter institution a radiographer attends on Tuesdays and Fridays from 2 p.m. until 7 p.m., and works in close co-operation with the Clinical Tuberculosis Officer who is conducting pneumothorax refill sessions, and seeing new patients during these hours. Many take the opportunity of having a skiagram taken during visiting hours on Friday evening. All films taken in the sanatorium are interpreted by the Clinical Tuberculosis Officer. Skiagrams taken for the tuberculosis department during 1946 were

At the Borough Hospital	1,397
At the Sanatorium	2,477
Total	3,874

Mass Radiography.

A Mass Radiography Unit visited Southampton during the last 5 months of the year. Over 17,000 people made use of the opportunity it afforded of having their chests radiographed, and nearly 1,000 were recalled for a large x-ray. The unit proved very beneficial for a number of early unsuspected cases of tuberculosis were found. Practically all those who were discovered have attended the dispensary. A few have been given sanatorium treatment and placed under supervision. It cannot be denied that the work of the unit gave a new lease of life to many people who without its aid would have become acute or chronic sufferers from tuberculosis in the future. The comparatively small number of advanced cases found

reflected well on the work of the medical practitioners and their collaboration with the department. A full report of this service will be found on page 71.

Laboratory Work.

The laboratories at the Borough Hospital and Isolation Hospital give valuable service to the department. The sputa of all patients is examined at intervals. Sometimes in undoubted cases of tuberculosis the sputa must be examined many times before the tubercle bacillus is found. The presence of these organisms in the sputa affects the classification, treatment and prognosis of the disease.

Useful information concerning the progress of the disease is obtained by estimating the fall of red blood corpuscles over an hourly or two hourly period. The fall is more rapid in the more acute stages of the disease. It is a routine procedure on admission of a patient to the Sanatorium and is repeated at intervals during his stay. A final test is done before discharge from the Sanatorium, and later when the patient attends for an x-ray.

Throat swabs are taken when signs suggest a throat infection.

The presence of anaemia or syphilis is discovered by appropriate blood tests.

Some patients suffer from diabetes mellitus, and tests in connection with this disease are carried out.

Other parients suffer from indigestion, and causation is often found by a fractional test meal.

During 1946 at the Borough Hospital there were 528, and at the Borough Sanatorium 1,535, sputa examinations carried out; a Total of 2.063. These figures do not include sputum examinations in connection with the Radiography unit.

Blood sedimentation rate tests numbered 410. These figures do not include many unrecorded tests performed by the Clinical Tuberculosis Officer and the Nursing staff.

Institutional Treatment.

Borough Sanatorium.

This is situated in the Borough Isolation Hospital, Oakley Road, Millbrook. At the end of 1946 the following beds were available,

Male 51, Female 44, Children 12. Total 107

Another 29 beds could not be used owing to shortage of staff.

In the early part of the year there were 29 available beds for chronic males at the Borough Hospital, but this ward ceased admitting cases of tuberculosis in May. Accordingly the Sanatorium is the only institution in the Town employed in the treatment of tuberculosis.

The Sanatorium is mostly used for pulmonary cases, but there are a few non-pulmonary ones. The children's ward is for non-infectious cases only.

The sanatorium is equipped with an operating theatre, X-ray apparatus, dental department and laboratory.

Out-patients needing refills for artifical pneumothorax or artificial pneumoperitoneum attend the Sanatorium on Tuesday and Friday. These sessions are from 2 p.m. until 7 p.m. A Radiographer also is in attendance during these hours.

The Clinical Tuberculosis Officer visits the Sanatorium daily.

A Dental Surgeon visits the Sanatorium weekly.

An Ear, Nose and Throat Specialist visits the Sanatorium at regular intervals.

The Resident Medical Officer of the Isolation Hospital is available for emergencies.

Consultations with other specialists are arranged when necessary.

Throughout the year there were long waiting lists for men and women. This was brought about by a shortage of beds; the arrival of men and women from overseas who had to be accomodated for longer or shorter periods; the transfer of cases from Royal South Hants and Borough Hospitals; the detection of early cases by Mass Radiography; and the fairly extensive Dispensary work which produced its own numbers of patients. Consequently the Clinical Tuberculosis Officer has been compelled to reduce a patient's stay in the Sanatorium to the minimum.

Patients in Sanatorium 1st Jan., 1946	76
Admitted during the year	326
Discharged during year	251
Died in Sanatorium during the year	42
Remaining 31st Dec., 1946	105

Of the 326 patients admitted, 40 were from the Port, 15 were Service cases and 6 from outside the Borough.

A summary of Dental treatment is given below.

Patients examined	138
Teeth extracted	67
Teeth filled	46
Scaling	11
Other Operations	6

OTHER INSTITUTIONS.

The following table shows the admissions of patients to other institutions. This is usually for specialised treatment.

	Male	Female	Children.
Lord Mayors Treloars Hospital, Alton.	—	1	2
Morland Hall, Alton. ..	1	3	—
Royal National Sanatorium, Ventnor.	3	—	—
Royal National Sanatorium, Bournemouth.	—	1	—
Preston Hall, Kent. ..	2	—	—
Brompton Hospital, London.	4	—	—
Royal Orthopaedic Hospital, Stanmore.	1	1	—
Naval Hospital, Haslar. ..	—	1	—

THERAPEUTIC MEASURES.

The sheet anchor for the treatment of all forms of tuberculosis is rest. Apart from bed rest the measures which have been used for this end have been artificial pneumothorax, artificial pneumoperitoneum, phrenic evulsion, thoracoplasty, and in non-pulmonary cases appropriate splinting. A few pleural effusions which have shown underlying lesions have been replaced by air, and the case converted into one of pneumothorax. Abdominal tuberculosis with ascities has been aspirated or the abdomen opened.

The use of gold salts has been considered in suitable cases. They have been given in small doses over a long period, beginning in the Sanatorium, and being maintained by weekly injections at the dispensaries.

Tuberculin except for diagnostic purposes has not been used.

The use of calciferol for lupus has been extensively tried out at Morland Hall with apparently successful results.

In spite of the difficult food situation, the diet in the Borough Sanatorium has remained at a high standard in variety and quantity, and no complaint of more than a trivial nature was received during the year. Appreciation should be expressed to the Matron and Nursing Staff of the Sanatorium of the way their work has been conducted in this very trying year.

ARTIFICIAL PNEUMOTHORAX.

This valuable form of treatment consists in introducing air between the pleural layers, thereby reducing the movement of the diseased lung. The operation may be unilateral or bilateral. Sometimes it is not possible to do this as past pleurisy has caused the pleural layers to be adherent to each other. After a successful induction air must be replenished at longer or shorter intervals. The average interval is about a fortnight. The treatment is maintained for several years if possible.

Summary of this work for 1946. :—

	Males.	Females	Total
Patients receiving treatment 1st Jan., 1946 ..	82	63	145
Successful inductions ..	16	19	35
Unsuccessful inductions	2	1	3
Patients transferred to Borough	20	4	24
Patients transferred out of Borough	11	5	16
Treatment abandoned :—			
Cured or maximum benefit	9	5	14
Died	5	—	5
Patients receiving treatment 31st Dec., 1946 ..	93	76	169
Refills during year ..	2,166	2,273	4,439

ARTIFICIAL PNEUMOPERITONEUM.

This is another method of reducing the mobility of the lungs. Air is introduced into the cavity of the abdomen thereby pushing up the diaphragm which separates the abdomen from the chest. It is useful in most cases of tuberculosis where circumstances will not allow pneumothorax or the more serious operation of thorocoplasty. Artificial pneumoperitoneum is often assisted by the operation of phrenic evulsion.

Summary of this work for 1946 :—

	Males	Females	Total
Patients receiving treatment 1st Jan., 1946 ..	—	—	—
Successful inductions ..	12	8	20
Patients transferred to Borough	3	—	3
Patients transferred out of Borough	1	—	1
Patients receiving treatment 31st Dec., 1946 ..	14	8	22
Refills during year ..	200	111	311

PHRENIC EVULSION.

This operation which is performed unilaterally reduces mobility of one lung by paralysing one half of the diaphragm. The nerve supplying the half of the diaphragm is injured in the neck. The operation is generally followed by artificial pneumoperitoneum.

During the year 9 patients were subjected to this operation.

THORACOPLASTY.

This is a serious operation and needs special surgeons for its performance. The ribs over the diseased lung are removed and complete collapse of the underlying lung results. The operation is performed in comparatively healthy individuals with unilateral lesions. One patient had this operation during the year.

SILICOSIS AND ASBESTOSIS (MEDICAL ARRANGEMENTS) SCHEME, 1931.

Under the above Scheme, which was issued by the Home Office, every employer engaged in an industry or process included in the First Schedule to the Scheme is required to arrange for the initial examination of any workman engaged by him within two months of his commencing to be employed in the industry or process, and any workman found at such examination to be suffering from tuberculosis or otherwise failing to reach the standard of health and physique prescribed must be suspended from employment in the industry or process.

The Clinical Tuberculosis Officer is authorised by the Council to carry out the initial examinations of workmen engaged in the industry, for which the Home Office pay a fee of 6/- for each examination to the Local Authority.

PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925.

These Regulations give local authorities power to require tuberculous employees, who are in an infectious state, engaged in the milk trade, to discontinue their employment or occupation.

It was not found necessary to take any action under these Regulations during the year.

PUBLIC HEALTH ACT, 1936—SECTION 172.

This section gives power to local authorities to enforce any person suffering from tuberculosis of the respiratory tract, who is in an infectious state, without proper lodging or accommodation, and who is a serious risk of infection to other persons, to be removed to a suitable hospital or institution.

No action was taken under this section during the year.

CLASSIFICATION.

For statistical purposes, cases are divided up according to the classification suggested by the Ministry of Health :—

I. All patients are grouped according to age and sex, those under the age of 15 being classed as children.

II. Classification into pulmonary or non-pulmonary.

III. Patients suffering from pulmonary tuberculosis are divided into :—

Class T.B. minus.—Those in whom tubercle bacilli have not been found in the sputum.

Class T.B. plus.—Those in whom tubercle bacilli have been found in the sputum.

This latter class is again futher sub-divided into :—

Group 1. Cases with slight constitutional disturbance and with the disease limited to the apex of one lobe only.

Group 2. Cases which cannot be included in groups 1 or 3.

Group 3. Cases with profound systemic disturbance with marked impairment of function, and with little chance of recovery.

IV. Patients suffering from non-pulmonary tuberculosis are classified according to the site of lesion.

The tables given are those suggested by the Ministry of Health, and adopted for the sake of uniformity throughout the Service.

The results of treatment are described by the following terms :—

Quiescent.—Cases which have no signs of active disease.

Arrested.—Cases which have been quiescent for at least two years.

Cured.—Cases in which the disease has been arrested for at least three years.

Improved.—Cases where the general condition is better.

No material improvement.—All other patients.

SURVEY OF THE TUBERCULOSIS DEPARTMENT 1933 to 1946 EXCLUDING WAR YEARS.

	1933	1934	1935	1936	1937	1938	1945	1946	
MORTALITY									
Pulmonary	159	173	148	131	127	119	95	93	
Non-Pulmonary	26	17	13	15	19	13	19	14	
Total	185	190	161	146	146	132	114	107	
NOTIFICATIONS ..	232	782	449	419	351	329	224	409	
New Patients	—	699	785	722	869	901	862	1133	
Contacts	41	781	659	566	493	391	308	415	
Disp. Attendance ..	4905	10369	12453	11499	11646	12473	8927	12832	
Visits by C.T.O. ..	—	75	92	64	101	92	55	93	
Visits by H.Vs.	—	8138	7246	7591	6657	5012	1374	1755	
Sputa Exams	—	854	731	643	845	1536	781	2063	
X-Ray Exams	—	1171	1234	1172	2020	2598	3527	3874	
PNEUMOTHORAX	—								
Patients Receiving	—								PNEUMOPERITONIUM
Treatment 31st Dec. ..	—	21	23	28	39	65	145	169	22
Inductions ..	—	9	8	12	18	35	39	35	20
Refills	—	450	501	708	1050	2210	4196	4439	311
	—								
DISPENSARY REGISTER	—								
Pulmonary	—	1122	1400	1415	1735	1720	2092	1814	
Non-Pulmonary	—	101	111	131		166	261	174	

Report on the Mass Radiography Survey of the County Borough of Southampton, carried out during the period 30th July to 21st December 1946, inclusive.

The report is divided into two sections, the first dealing with general matters connected with the survey and the second being statistical.

1. GENERAL.

(a) Co-operation of Departments.

I think it may be said without doubt that the survey was a success. This was only possible as the result of the full co-operation of the Health Department and I would like to express my thanks to the Medical Officer of Health and to his staff. The Architect's Department also gave excellent co-operation. In particular I would like to mention the very valuable help given by the Clinical Tuberculosis Officer, Dr. W. D. Beck, on whom fell the burden of the considerable amount of work resulting from the finding of cases of tuberculosis and of those requiring observation. I would also like to mention the very valuable work done by Miss Oldham in the Pathological Department of the Borough Hospital. Miss Oldham undertook a considerable amount of extra work very willingly and was most helpful and co-operative throughout the time that I had the pleasure of knowing her.

(b) Co-operation of the Public.

This was good as is shown by the figures of the numbers of persons x-rayed. The demand was great and even though the unit was working at high pressure we could have spent considerably longer in Southampton at the same pressure. Only one female case who was advised to obtain the opinion of the Tuberculosis Officer refused this advice, but a full report was made to her private practitioner, who looked after her. One other case, this time a man who was found to be suffering from active tuberculosis, stated that he had no private doctor and refused to let me communicate with the Tuberculosis Officer in spite of all entreaties. This man is of a low mentality but raises a difficult administrative problem, which, in his particular case, is unsolved.

(c) Co-operation of Employers.

On the whole the co-operation of the employers was good. The great mass of the Dock workers, however, were not examined because of the decision of the South Coast Engineering snd Shipbuilding Employers' Association not to grant time off to their em-

ployees. In my opinion this was a short-sighted policy, making for friction between employers and employees, as was demonstrated by the remarks made by the deputation from the employees received by the Medical Officer of Health on this very subject. I fully apperciate the difficulty of employers in these days of a shorter working week for more money, but they neglect the psychological factor—the feeling of confidence and co-operation which the workers in a factory get from an understanding, sympathetic employer who is prepared to prove that he is interested in the working conditions and the health of his employees. The employers also appear to neglect the loss to their own production from sickness and the risk of infection of their key personnel and the men and women on whom money is being spent in training. The only definite reason I was able to obtain for this refusal was that on Clydeside a similar examination to the one suggested was done out of working hours. This is, in fact, quite untrue, as I personally have confirmed from the Medical Director of the unit concerned. A supporting objection put foward was the distance between the Docks and the headquarters of the unit. To overcome this we made tentative arrangements to do the x-raying in a suitable building in the Docks themselves, but permission to use this building for the purpose was refused.

The decision of the association caused one period of slackness owing to the fact that some firms concerned cancelled their appointments at short notice while awaiting the final decision of the Association.

I may add that I was extremely uneasy about this matter as I had fears that the unit was likely to cause friction between employers and employees, but am glad to say that these fears proved groundless.

(d) Siting of the Unit.

The Unit used Oatlands House, Winchester Road, as a headquarters and these premises (a private house) were found suitable. There were, of course, minor difficulties of heating and film drying, but these were, in a large degree, overcome. The site was not an ideal one, being rather out of the centre of Southampton, but was used owing to the fact that the centre of Southampton is on Direct Electrical Current, which cannot be used by the Unit. Even so the general public responded well and many employers provided transport for their employees. In the case of one firm the unit was moved to its premises.

In the future the electrical supply situation should not be so difficult as it is hoped that we will soon be supplied with a mobile darkroom van, which has its own generator. This should enable us to use a building nearer the centre of the town and will make us independent of a main supply of the wrong type.

(e) Hospital Beds.

By the kindness and co-operation of the Medical Superintendent of the Borough Hospital, two male and two female beds were put at my disposal, and our visit to Southampton demonstrated the great value of these investigation beds. Patients were admitted immediately and were discharged within a week. There was thus the minimum waste of time and psychological distress to the patient and a diagnosis was reached rapidly, which was of great value to the Tuberculosis Officer, the general practitioner and myself. I am very grateful to Dr. Harris, who looked after these patients, and to Dr. Jardine with whose co-operation the arrangements worked so smoothly.

(f) Staff Accommodation.

The first week of the visit was marred by some high-handed action on the part of some members of the staff following an objection to their previously approved accommodation. My own view on this matter is that some of their objections were sound but there was no excuse for the action taken, which is much regretted. Three members refused to remain at the accommodation provided and paid the sum due in lieu of notice so that no expense fell on the Council. After consultation between the Medical Officers of Health of Portsmouth and Southampton, a settlement was made whereby the senior members of the staff had their allowance reduced, part of the difference being added to the allowance given to the clerks, each individual being responsible for his or her own accommodation and debts. The Council gained financially by this new arrangement and the scheme worked satisfactorily.

(g) Danger from Scattered Radiation.

This danger, which is a very real one, is much increased in a Mass Radiography Unit to that in an ordinary X-ray Unit because of the number of exposures made in a Mass Unit. Tests were very kindly carried out by Mr. J. R. Clarkson, Physicist at the Royal South Hants and Southampton Hospital, who was kind enough to send us a full report on the radiation measurements which he took during a normal working morning. I am glad to say that this report shows that the precautions taken against absorption are adequate and satisfactory.

(h) Recommendations.

If the Unit should be asked to visit Southampton for a future survey, the following recommendations are made, bearing in mind the fact that it is assumed that the Unit will have a mobile darkroom van available at the time of such a survey.

(i) SITING. A more central position must be found. Owing to the fact that the mobile darkroom van has its own generator, there should be no electrical objections, such as were the case in the 1946 visit, to such a site.

(ii) Special attempts should be made from the highest quarters to enlist the support of the South Coast Engineering and Shipbuilding Employers' Association and the Southern Railway. It may be of interest that in a survey performed since leaving Southampton the Southern Railway have been very co-operative, and reference to this experience might be made.

(iii) Staff accommodation, if required, should be on the basis of a cash allowance payable weekly, the individual being responsible for his or her own arrangements and debts after initial suitable accommodation has been found by the Health Department for the first period of the stay. This scheme has the advantage that once the initial accommodation has been found, accommodation difficulties remain the responsibility of the unit only, no embarrassment or difficulties are brought to the Health Committee, and the individual has free choice of accommodation. It has the advantage that the members of the staff do not have to live as well as work together.

(iv) Arrangements should be made for hospital beds to be available for investigation on the lines of the scheme adopted in 1946.

(i) CONCLUSION.

In conclusion I take some pride in reproducing an unsolicited letter which was sent to me at the end of our stay in Southampton by the County Borough of Southampton Panel Committee :—

COUNTY BOROUGH of SOUTHAMPTON.

PANEL COMMITTEE.

5, Manor Road,
Itchen,
Southampton.
1st February 1947.

Dr. J. D. Lendrum,
Director, The Mass Radiography Unit,
Portsmouth.

Dear Dr. Lendrum,

Thank you for your letter of 30th December 1946, when you moved your Unit to Portsmouth. I laid this information before the L.M. and P. Committees at their last meeting and I am happy to inform you that I was desired to acquaint you with their views in the

following terms, " Several members expressed their satisfaction with the results obtained and with the exemplary spirit of ethics and co-operation displayed by the Director and his Staff, and it was RESOLVED (unan.) That Dr. Lendrum be acqainted with the Committees' views and that The Health Department be notified of this decison and be similarly advised."

I should like to add my personal thanks for your great kindness on the occasion of my election to the Presidency of the Southern Branch, B.M.A., at a time when I was so run down that I was unable to summon up sufficient strength to prepare an " address " at short notice.

With all best wishes, and kind regards,
Yours sincerely,
(signed) John Clayre,
Hon. Sec.

I am very glad that the General Practitioners of Southampton felt as they did about the visit of the unit. It is surprising how much opposition we meet from some sections, and whereas the opposition from medical men is not against the theory of Mass Radiography, there always appears to be at first ,a feeling that the Medical Director will act merely as the " driver of a sausage machine " neglecting all psychological and social factors connected with the individual patient. The position of the Medical Director is in fact a very difficult one since every patient expects, perhaps quite naturally, to receive a definite answer, and as anyone who has worked in connection with chest diseases will appreciate, this is impossible to give in many cases. The psychological aspect of the work probably takes up more time than any other single aspect.

2. STATISTICAL TABLES.

TABLE 1. TOTAL NUMBERS EXAMINED

	C.B. of Southampton		Tatchbury Mount Colony	Combined Total
	M	F	M only	
No. attending for X-Ray ..	9,912	7,129	321	17,362
No. attending for Large Film ..	997		35	1,032
No. attending for Large Film as % of total X-Rayed ..	5·8		10·9	5·9
No. attending for Clinical Examination	577		—	577
No. attending for Examination as % of total X-Rayed ..	3·4		—	3·4
No. attending for Examination as % of total Large Films	57·9		—	57·9

This shows that an average of 868 individuals were X-rayed in each week while the Unit was at Southampton and takes no regard of actual working days, which were reduced owing to moves and to public holidays, etc. Comment has already been made that there was one less busy period, owing to the cancellation of appointments previously arranged.

TABLE 2.

CASES SHEWING EVIDENCE OF

PULMONARY TUBERCULOSIS (ALL TYPES)

	C.B. of Southampton		Tatchbury Mount Colony	Total		Combined Total
	M	F	M only	M	F	
No. Examined ..	9,912	7,129	321	10,233	7,129	17,362
No. found to have evidence of P.T. ..	504	326	31	535	326	861
As % of Total ..	5·1	4·6	9·7	5·2	4·6	5·0

TABLE 3.
CASES OF ACTIVE PULMONARY TUBERCULOSIS
BY TYPE OF DISEASE

	C.B. of Southampton		Tatchbury Mount Colony	Total	
	M	F	M only	M	F
No. Examined	9,912	7,129	321	10,233	7,129
Type of Cases Primary..	—	2	—	—	2
Post-Primary	36	38	4	40	38
Tuberculosis Effusion	1	—	—	1	—
Total Cases	37	40	4	41	40
Rate per 1,000 examined ..	3·73	5·61	12·46	4·01	5·51
Combined rate	4·52			4·61	

The combined rate for the Unit for the whole of 1946 was 3·88.

TABLE 4. Cases of ACTIVE Pulmonary Tuberculosis by Age Groups.

		Age Groups										Total	
		Under 17		17—24		25—34		35—44		Over 45			
		M	F	M	F	M	F	M	F	M	F	M	F
C. B. of SOUTHAMPTON	Total examined	1,484	1,876	1,232	2,226	2,610	1,194	2,226	1,037	2,360	796	9,912	7,129
	No. of Cases	1	3	4	26	4	12	3	3	16	1	37	40
	Rate per 1,000 examined	0·67	1·60	3·25	11·68	1·53	5·86	5·39	2·89	6·78	1·26	3·73	5·61
TATCHBURY MOUNT	Total Examined	70	—	94	—	73	—	50	—	34	—	321	—
	No. of Cases	—	—	2	—	2	—	—	—	—	—	4	—
	Rate per 1,000 examined	—	—	21·28	—	27·40	—	—	—	—	—	12·46	—
Total	Total Examined	1,554	1,876	1,326	2,226	2,683	1,194	2,276	1,037	2,394	796	10,233	7,129
	No. of Cases	1	3	6	26	6	7	12	3	16	1	41	40
	Rate per 1,000 Examined	0·64	1·60	4·52	11·68	2·24	5·86	5·27	2·89	6·68	1·26	4·01	5·61
Unit's rate for whole of 1946		0·84	4·26	4·51	8·25	2·19	3·19	4·45	1·96	5·57	1·97	3·41	4·38
Portsmouth Rate for 1946		1·68	5·82	17·05	8·21	7·97	1·67	4·83	2·47	12·61	2·84	4·51	4·96

It will be noted that Southampton's rate for males approximates very closely the Unit's findings for the whole year, although there is a tendency for Southampton's rate to be higher in the higher age groups.

With regard to females, however, whereas there is a marked difference in Southampton's favour in the under 17 age group, the Southampton figure is nearly 3½ per thousand higher in the 17—24 age group and 2¾ per thousand higher in the 25—34 age group. The figures show a similar tendency, however, in each case.

Comparison with the Portsmouth rate for 1946 is not statistically sound as only 2,600 individuals were examined and these were mostly in the smaller age groups. Even so this demonstrates the appalling figure of 17·05 cases per thousand examined in the 17—24 age group in the case of men and 8·2 per thousand examined in the case of women. It should be added that only 176 men came into this group in Portsmouth, whereas 731 women were involved. There is no doubt, however, that all these figures demonstrate the appallingly high rate of active tuberculosis in young age groups, in particular the female 17—24 group.

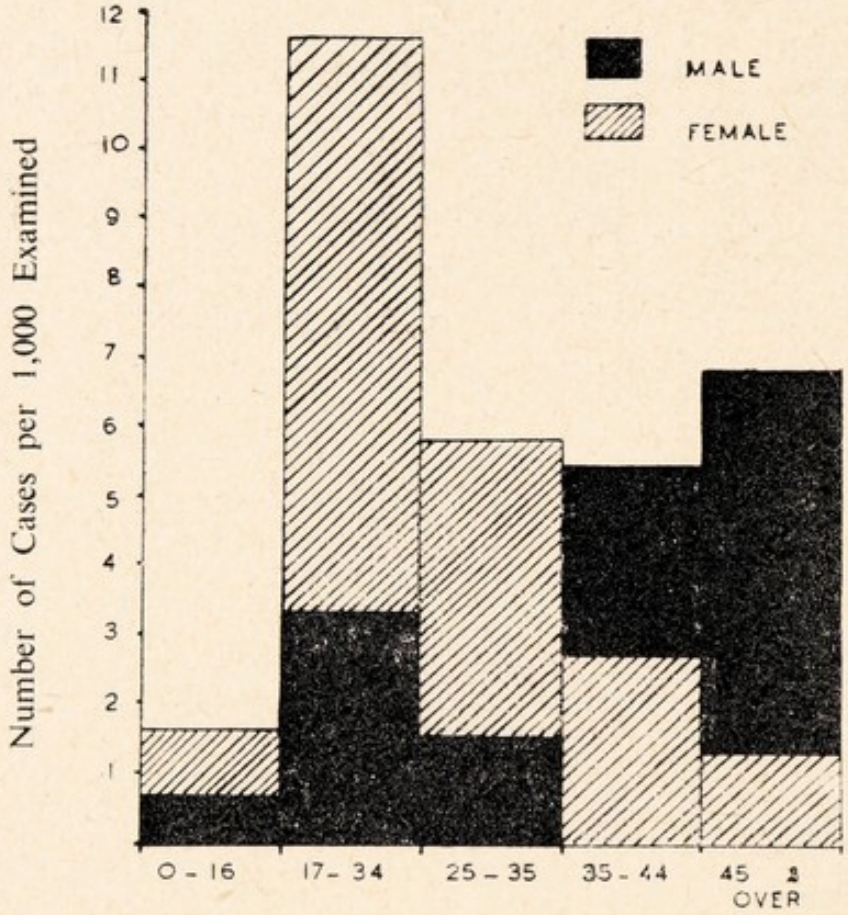
SUMMARY OF FINDINGS

Abnormality	C.B. of Southampton		Tatchbury Mount Colony	Total		Combined Total
	M	F	M only	M	F	
Total Examined ..	9,912	7,129	321	10,233	7,129	17,362
Total Abnormalities ..	1,083	564	59	1,142	564	1,706
Included in the above :—						
PULMONARY TUBERCULOSIS :						
Active	37	40	4	41	40	81
Inactive	467	286	27	494	286	780
NON-PULMONARY TUBERCULOSIS	2	—	—	2	—	2
OTHER PULMONARY :						
(*a*) NEW GROWTHS :—						
Carcinoma of Bronchus	4	—	—	4	—	4
Dermoid Cyst ..	1	—	—	1	—	1
Carcinoma (Secondaries)	—	1	—	—	1	1
Pleural Tumour ..	—	1	—	—	1	1
(*b*) OTHER						
Emphysema/Bronchitis	36	4	1	37	4	41
Pneumonia ..	6	6	1	7	6	13
Bronchiectasis ..	16	7	—	16	7	23
Non-tuberculous Fibrosis	23	9	—	23	9	32
Pneumokoniosis ..	3	—	—	3	—	3
Basal Fibrosis ..	12	4	—	12	4	16
Pleural Thickening ..	216	51	3	219	51	270
Non-tuberculous Effusion	4	1	—	4	1	5
OTHER GROWTHS :—						
Carcinoma of Breast	—	1	—	—	1	1
CARDIO-VASCULAR :						
(*a*) Congenital Heart Disease	1	1	—	1	1	2
(*b*) Acquired Heart Disease	96	51	4	100	51	151
Included in (*b*) :—						
Aneurysm—Cardiac	1	—	—	1	—	1
,, of Arch of Aorta	2	1	—	2	1	3
,, of Descending Aorta	1	1	—	1	1	2
Cardaic Failure ..	5	3	—	5	3	8
Failure with Fibrillation	2	—	—	2	—	2
Lutembacher's Syndrome	—	1	—	—	1	1
MISCELLANEOUS : ..						
Syphilis of Lung ..	—	1	—	—	1	1
Sarcoidosis	—	1	—	—	1	1
Congenital Cystic Lung	1	—	—	1	—	1
Diaphragmatic Hernia ..	1	—	—	1	—	1
Foreign Bodies in Chest	13	—	—	13	—	13
ANATOMICAL :						
Azygos Lobe	10	9	—	10	9	19
Cervical Rib	11	22	—	11	22	33
Hemi-vertebra ..	—	2	—	—	2	2
Other Bony	122	83	8	130	83	213
Dextrocardia	2	3	—	2	3	5

It will be noted that the listed total of abnormalities exceeds the total abnormalities given at the top of the Table. The reason for this is that the figure of 1,706 under the latter heading is the number of individuals, whereas the total figure under the separate he adings isthe number of abnormal findings, a double diagnosis being made in some cases.

TABLE 6.

ACTIVE TUBERCULOSIS INCIDENCE BY AGE GROUPS



It will be noted that there are differences between these figures and the figures as given in the Annual Report of the Medical Officer of Health of Portsmouth. These differences are due to the fact that the Tables as presented here are more up to date, even though they are as yet still incomplete owing to our continued failure to obtain a statement of diagnosis in certain particular cases.

J. D. LENDRUM.
DIRECTOR.

CANCER.

The Corporation have entered into an arrangement with the Royal South Hants and Southampton Hospital under the Cancer Act, whereby the Corporation bears the cost of the treatment of all Southampton patients suffering from this condition.

Dr. A. G. C. Taylor, Radiotherapist, has kindly supplied the following figures relating to Southampton patients:—

TABLE OF CASES TREATED.

1940	1941	1942	1943	1944	1945	1946
216	158	175	209	202	253	342

CASES REGISTERED AND PROVED MALIGNANT AT SOUTHAMPTON, FOR WHICH THE LOCAL AUTHORITY IS RESPONSIBLE.

Site	*Radio-therapy*	*Other treatment*	*No treat-ment*	*Total*
Buccal Cavity	27	4	3	34
Digestive Organs ..	15	18	42	75
Respiratory Organs ..	14	2	10	26
Female Genital Organs	60	21	6	87
Male Genital Organs ..	2	6	1	9
Urinary Tract ..	8	1	4	13
Skin	73	3	2	78
Nervous System ..	3	—	2	5
Sarcoma	9	2	4	15
Totals	211	57	74	342

Municipal Hospitals and Municipal Laboratories

BOROUGH HOSPITAL.

The Borough Hospital, previously known as the Shirley Warren Poor Law Infirmary, was appropriated under the Local Government Act as a General Hospital under the Public Health Acts, and the administration of the institution was transferred to the Health Committee.

The hospital consists of four male pavilions of eight wards, and four female pavilions of seven wards. In addition there are in each pavilion, on an average, four side wards containing three or four beds.

On the male side of the hospital, St. Michael's Pavilion consists of a lower ward in which acute surgical cases are exclusively treated, the side wards being devoted to the treatment of boys over five and under sixteen years of age, and an upper ward, to which chronic inoperable surgical cases are periodically transferred from the lower ward. These wards are visited on three days a week by the visiting surgeon. Shirley Pavilion consists of a lower ward in which acute medical cases are treated, and an upper ward to which chronic medical cases are drafted as occasion arises. The visiting physician controls the treatment of patients in these wards on his visits three days a week. Portswood Pavilion is at the moment out of commission owing to the lack of nursing staff, but it is intended in the future to nurse acute and chronic medical cases in the lower and upper wards respectively. During the year 1946 the advanced male tuberculosis cases, which had originally been treated in the upper ward, were transferred to the Isolation Hospital. Finally, in St. John's Pavilion, the lower ward is used for Ear, Nose and Throat cases which are admitted from the clinics. They are admitted on a Thursday afternoon, operated upon on Friday morning by an Aural Specialist, and discharged on the following morning. There is on this ward a well equipped operating theatre. The upper ward was converted, during 1946, into a Children's Ward, to admit children of both sexes up to the age of five. It consists of eighteen cots and ten beds and both surgical and medical cases are treated in this ward.

On the female side of the hospital, St. Lawrence Pavilion is the female surgical unit, and in the lower ward acute surgical cases are treated. This section is under the care of the visiting surgeon. The upper ward is devoted to the treatment of chronic surgical cases. All Saints' Pavilion is reserved for the treatment of acute medical cases in the lower ward, while the upper ward is used for chronic medical cases. This pavilion is under the charge of the visiting physician. The lower side wards are reserved for female staff patients. During 1946 Lower St. Mary's was converted into a Gynaecological Ward of thirty beds. Previously it had been used as a Children's Ward, for admission of children up to five years of age, and contained thirty-

eight cots, but as the admission rate had never approached the number of cots available the ward was to a considerable degree too large for the purpose for which it was intended. It has proved to be an excellent ward for Ante-Natal and Gynaecological cases and is filling a much needed requirement, since up to this time the Ante-Natal and Gynaecological cases had been treated on Lower St. Lawrence Ward with the acute Surgical cases, and this arrangement had proved by no means satisfactory. The upper ward is used for female senile cases.

The Maternity Unit was opened on 29th April, 1937, by the then Chairman of the Health Committee, the late Alderman Mrs. L. M. Foster Welch, J.P. The Unit is divided into five sub-units, namely:—Reception, lying-in, combined labour and operating sections, isolation section, and an ante-natal out-patient clinic. This is an up-to-date building, most tastefully decorated and admirably equipped for the most recent advances in obstetrical procedure.

The new X-ray, Massage and Electrical Department was opened in 1940 by Sir Wilson Jameson, Chief Medical Officer, Ministry of Health.

Access from the hospital to this department is by means of a corridor opening off the existing corridor opposite Portswood Ward, while the out-patients' entrance is from the service road opposite the Nurses' Home Annexe. Patients from either approach gain access to the waiting room with possible seating for fifty, and lavatory accommodation for both sexes.

The main radiographic and screening room is equipped with a combination shockproof radiographic and screening table in addition to screening gear and high tension generators for specialised investigations in the gastro-intestinal tract and short-time radiography respectively. A simple radiographic table is provided to enable the mobile unit to be used for simple radiography as well as a dental chair and unit for dental X-ray work. A small wash-up and W.C. opens off the main radiographic room for the preparation of barium meals, etc.

The dark room communicates with the main radiographic room by means of a light lock and is equipped with built-in developer units, safelights, light-proof film container and cassette pass box giving direct access to the main radiographic room. The washing tank passes through the wall into the film drying room equipped with a film drying cabinet and packing bench, enabling films to be viewed while wet if urgently required without interrupting work in the dark room.

A room equipped for superficial therapy is provided with direct access to the service corridor adjoining a fully protected operator's cubicle, the latter having a special observation window which permits the transmission of sound but not X-rays. The electric generator and transformer room is provided with an automatic cut-out switch on the door.

The sister-radiographer's office and radiologists' consulting room, the latter equipped with stereoscopic viewing and radical examinations, are provided in close proximity to the waiting room.

A plaster room, also equipped for clinical photography, is incorporated in the department, while the radiant heat and massage room is equipped with five cubicles for massage, radiant heat, ultra-violet, infra-red, intensive ultra-violet applied locally, and electro-therapy respectively. Eight changing cubicles are planned to cater for a fluctuation of cases attending the various units of the department.

Three sessions for X-ray examinations are held by the Visiting Radiologist on Monday and Friday afternoons, and Wednesday mornings. The patients undergoing X-ray examination are selected partly from hospital in-patients and partly from tuberculosis out-patients selected by the Tuberculosis Officer from his dispensary patients.

Finally in addition to the theatres on the Maternity Unit and Lower St. John's Ward, there is a well-equipped general operating theatre. The chief operating day is on a Thursday morning, but urgent operations may prove necessary on any day and at any time during the week.

ALMONER'S DEPARTMENT.

Since 1945 the Red Cross Society, together with the St. John's Ambulance and Women's Voluntary Service, have between them organised a hospital car service to bring out-patients to and from the hospital, and this has proved a great boon to many patients who would otherwise have been unable to come to the hospital for their treatment. A tribute of appreciation is, therefore, due to the administrative officers and car drivers of this service for the admirable manner in which they have developed a much needed amenity.

OPERATIVE SURGERY.

As will be seen from Table " E " 1,123 operations were successfully performed during the year. Of this number 395 were Tonsils and Adenoids, Mastoid operations, etc., performed by the Aural Surgeon. This constitutes a considerable increase over previous years and has entailed a morning and afternoon session on the major

operating day, which is held every Thursday. The Ear, Nose and Throat work has also considerably increased since the appointment of Mr. J. B. Sugden as Ear, Nose and Throat Surgeon.

X-RAY AND PHYSIOTHERAPY DEPARTMENT.

Dr. W. F. H. Ives retired from his position as Radiologist to the hospital in 1946 after many years devoted service. His position has bene filled by the appointment of Dr. D. V. Rice.

MATERNITY UNIT.

During the year 1,244 women were confined in the Maternity Unit. There were 1,185 live births and 67 still births.

SENILE AND CHRONIC PATIENTS.

During the year 1946, out of a total of 400 deaths, 129 were over the age of 70 and 93 over the age of 60. Between the ages of 1 and 20 there were 6 deaths.

TABLE A.—Table showing the classification of the accommodation for acute and chronic sick and Maternity cases, and the number of beds occupied on the 31st December, 1947.

Classification of Wards	No. of Wards	BEDS							
		Men		Women		Children (under 16 years of age)		Total	
(1)	(2)	Provided (3)	Occupied (4)	Provided (5)	Occupied (6)	Provided (7)	Occupied (8)	Provided (9)	Occupied (10)
1. Medical	2	32	21	20	17	—	—	52	38
2. Surgical	3	26	19	60	40	—	—	86	59
3.* Chronic Sick	7	152	82	90	82	—	—	242	164
4. Children	2	—	—	—	—	42	8	42	8
5. Venereal (Side Wards) ..	4	6	2	6	1	—	—	12	3
6. Isolation	3	—	—	6	—	—	—	6	—
7. Maternity	15	—	—	55	45	—	—	55	45
Totals	36	216	124	237	185	42	8	495	317

*—Patients needing hospital treatment because they are suffering from some chronic disease; also infirm patients whose medical and nursing needs approximate to those of chronic patients. These numbers include two chronic sick wards of sixty-four beds which are at the present moment out of service owing to the prevailing shortage of nurses.

TABLE B.

STATISTICS RELATING TO THE YEAR ENDED 31ST DECEMBER, 1946.

1.	Total number of admissions (including infants born in hospital)	5,175
2.	Number of women confined in hospital	1,244
3.	Number of live births	1,184
4.	Number of still births	67
5.	Number of deaths among the newly born (*i.e.* under 4 weeks of age)	45
6.	Total number of deaths among children under one year (including those given under No. 5)	53
7.	Number of maternal deaths among women admitted to the hospital	10
8.	Total number of deaths	400
9.	Total number of discharges (including infants born in hospital)	5,175
10.	Duration of stay of patients, included in Nos. 8 and 9 above, whose stay was for the following periods:—	
	(*a*) Under four weeks	4,635
	(*b*) Four weeks and under thirteen weeks	382
	(*c*) Thirteen weeks or more	158
11.	Number of beds occupied during the year:—	
	(*a*) Average	325
	(*b*) Highest, on 24th August, 1946	363
	(*c*) Lowest, on 28th September, 1946	286
12.	Number of surgical operations under general anaesthetic (excluding dental operations)	1,123
13.	Number of abdominal sections	169

OUT-PATIENTS.

During the year 5,681 patients passed through the Out-Patients Departments of the Borough Hospital, as under:—

	Cases	*Attendances*
Ante-natal cases	401	2,644
Massage and X-ray ..	—	3,017
Totals	401	5,681

TABLE C.

Classification of In-Patients who were discharged from or who died in the Institution during the year ended 31st December, 1946.

Disease Groups	Children (under 16 years of age)		Men and Women	
	Discharged	Died	Discharged	Died
A. Acute Infectious Disease ..	3	—	—	—
B. Influenza	—	—	7	—
C. Tuberculosis:—				
Pulmonary	1	—	112	18
Non-Pulmonary	1	2	7	
D. Malignant Disease	—	—	45	54
E. Rheumatism, including:—				
(1) Acute rheumatism (rheumatic fever) together with sub-acute rheumatism and chorea				
(2) Non-articular manifestations of so-called "rheumatism" (muscular rheumatism, fibrositis, lumbago and sciatica	2	—	16	2
(3) Chronic arthritis ..				
F. Venereal Disease	14	—	184	—
G. Puerperal pyrexia or fever ..	—	—	12	—
H. Other diseases and accidents connected with pregnancy and childbirth	—	—	247	—
I. Mental Diseases:—				
(a) Senile dementia ..	—	—	3	1
(b) Other	—	—	2	—
J. Senile Decay	—	—	3	2
K. Accidental injury	11	—	67	1
In respect of cases not included above:—				
L. Disease of the Nervous System and Sense Organs	2	—	29	29
M. Disease of the Respiratory System ..	441	5	231	112
N. Disease of the Circulatory System ..	2	2	21	39
O. Disease of the Digestive System ..	33	6	188	9
P. Disease of the Genito-Urinary System	10	1	296	46
Q. Disease of the Skin	27		56	3
R. Other Diseases	102	2	122	21
S. Mothers and infants discharged from Maternity Wards:—				
Mothers	—	—	1345	5
Infants	1133	40	—	—
Totals	1782	58	2993	342

TABLE D.

Classification of number of deaths occurring at the different age periods between the 1st January and 31st December, 1946.

1.	Above 90 years of age	2
2.	Between 80 and 90 years	35
3.	„ 70 and 80 years	92
4.	„ 60 and 70 years	93
5.	„ 50 and 60 years	61
6.	„ 40 and 50 years	21
7.	„ 30 and 40 years	21
8.	„ 20 and 30 years	16
9.	„ 10 and 20 years	4
10.	„ 5 and 10 years	—
11.	„ 1 and 5 years	2
12.	Under 1 year	8
13.	Under 4 weeks	45
	Total	400

TABLE E.

Operations performed at the Borough Hospital from 1st January to 31st December, 1946.

1.	Abdominal Sections (not including those under No. 4)	169
2.	Operations on Bones and Joints:—	
	(a) Amputations	1
	(b) Other operations on Bones and Joints	18
3.	Genito-Urinary Operations	99
4.	Gynaecological Operations:—	
	(a) Major	66
	(b) Minor	140
5.	Operations on Ear, Nose and Throat:—	
	(a) Tonsils and Adenoids	374
	(b) Mastoids	4
	(c) Miscellaneous	17
6.	Dental Operations	2
7.	Miscellaneous and minor operations including skin grafts, incisions and drainage of abscesses, etc.	194
8.	Plasters	39
	Total	1123

ARCHITECT'S REPORT ON DESIGN FOR PROPOSED SURGICAL BLOCK AT THE BOROUGH GENERAL HOSPITAL, SHIRLEY WARREN, SOUTHAMPTON.

The Surgical Block has been sited to the north of the existing central corridor of the Hospital on the site of the present Tennis Courts between the X-ray Department and St. John's Ward. Patients access will be from the central Hospital corridor at a point opposite the entrance to Shirley Ward.

The elevational treatment is to be in rustic facing bricks similar to the X-ray Department and fenestration is by windows having 100% opening area with 9in. brick mullions. These window types have proved effective for ventilation in both the Maternity Unit and the X-ray Department. Flower boxes have been incorporated in the balustrade to the balconies giving an added interest to patients.

Planning is based upon the best principles of Surgery together with recent research in America and the Continent. The ground floor may be divided into Operating Theatre Suite and a Nursery Unit of 17 beds. The first floor consists of a Nursing Unit of 29 Beds.

GROUND FLOOR.

Operating Theatre Suite.

This suite has direct access for Patients from the Ward Corridor together with a separate access for Staff. The suite comprises symmetrical planning of two operating theatres each having an anaesthetic room located in a quiet position. The central sterilising room is planned to provide circulation of instruments and drums from the Operating Theatre through the sterilisers and back to the Operating Theatre. A Wash-up room for staff scrubbing up is located with direct access to either Operating Theatre. A pair of swing doors shut off this section from the remainder of the suite, and this section will be air conditioned with sterile air.

Staff Robing and Rest Rooms for Surgeons and Nurses are fitted with clothing lockers, showers and W.C. and are planned having an entrance from the non sterile corridor and exit for use after changing direct into the Sterile Section.

An office is provided for the Theatre Sister and a glazed partition enables the Sister to exercise full control over the work room where Nursing Staff prepare dressing drums etc. A central instrument room is provided with adequate instrument cupboards and a work bench to enable sterile sets of instruments and trays to be prepared for issue to the Wards on demand.

Cold Rooms for the storage of drugs, anaesthetics and rubber goods are provided, together with Linen Rooms for Theatre Linen, Robes and Dressings.

NURSING UNIT OF 17 BEDS.

Access for Patients and Visitors is from the existing corridor, the entrance hall having a bed lift and staircase giving access to the first floor. The entrance hall to the Ward, also incorporates a recess with a sink for the preparation of patients flowers and a cupboard for the storage of vases.

The Nursing Unit includes a 12 bedded Ward which is sub divided into groups of 4 beds having glazed screens 7ft. high between each group with beds parallel to the external walls. This method of bed planning prevents glare from the windows worrying the patient and at the same time gives a more friendly atmosphere of a small Ward; Recovery Ward of 3 beds fully equipped for blood transfusions and having direct access from the corridor to the Operating Theatre suite for patients returning from the Theatre and two single Wards for dangerously ill cases together with Duty Room, Ward Kitchen, Sluice Room and Patients Bathrooms and W.C's.

FIRST FLOOR.

NURSING UNIT OF 29 BEDS.

The entrance hall to the Ward has a bed lift and staircase giving access to the ground floor, and will have direct access from the proposed first floor central hospital corridor. This entrance hall incorporates a recess with a sink for the preparation of patients' flowers and a cupboard for the storage of vases.

The Nursing Unit includes one 12 bedded Ward, one 8 bedded Ward, one 4 bedded Ward and 5 single Wards, together with a Duty Room, Ward Kitchen, Linen Room, Sluice Room, Staff Cloakroom, and Patients' Bathroom and W.C's. A recess having adequate sun light is planned off the Ward corridor to be equipped with arm chairs, occasional tables and chairs for the use of convalescent patients.

At the northern end of the Nursing Unit is the Plant and Machine Room housing the air conditioning and sterilising apparatus for the Operating Theatre suite.

The room over the N.W. Operating Theatre has been planned as a Students' Room for the use of nursing staff in training and refresher courses for General Practitioners under the National Health Bill. These students will be enabled to have a clear view of all operations being carried out in the Operating Theatre on the ground floor by means of viewing panels in the mirror lined dome which

incorporates the shadowless lighting for the Operating Theatre. This dome also incorporates a book rest for students note books and has proved very satisfactory in several modern Hospitals on the Continent including the Beaujon Hospital at Paris.

A Laboratory is also included for clinical examinations, and urine testing and is planned within easy access of the students room to enable students to carry out histological examinations.

GENERAL.

All Wards will include built in bed lockers, a clothes locker for each patient, and a suite of lavatory basins. Patients' bell indicators, reading lamps at the head of each bed, and wireless points are incorporated in the metal glazed screens.

A built in medicine cupboard is included in each Ward Corridor having an inner safe for the storage of dangerous drugs and an indicator light to show when this is open.

A balcony having access from each Ward, and wide enough to take patients beds has been included on both floors. This balcony will receive the afternoon and setting sun.

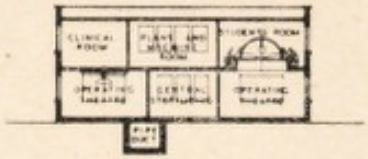
Glazing to all Ward windows will be of Vita glass.

Floors generally will be of ridged rubber floor tiles with Terrazzo for such rooms as the Operating Theatres, Anaesthetic Rooms, Sluice Rooms and Bathrooms.

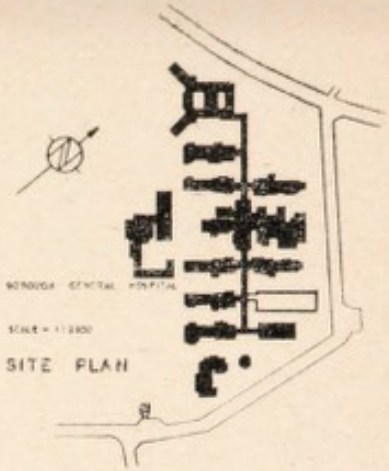
Walls generally will be finished in a flat oil paint of cream or pale green pastel shades, while the two large wall surfaces to the Day recess will be decorated with murals depicting health and recovery.

The walls of the Operating Theatre will be finished in dark blue-green mottled tiles.

EAST ELEVATION

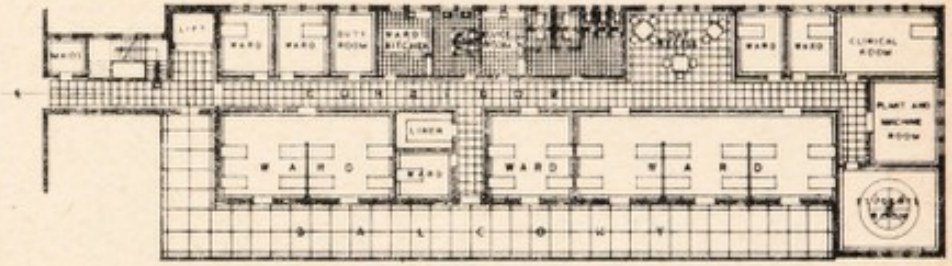


SECTION



SITE PLAN

GROUND FLOOR PLAN



FIRST FLOOR PLAN

DAVISTON MA B ARCH ARIBA MTPI
BOROUGH ARCHITECT
CIVIC CENTRE,
SOUTHAMPTON

COUNTY BOROUGH OF SOUTHAMPTON

PROPOSED SURGICAL BLOCK - BOROUGH HOSPITAL

SCALE : ONE INCH TO SIXTEEN FEET

H.C. MAURICE WILLIAMS O.B.E.
M.R.C.S., L.R.C.P. D.P.H.
MEDICAL OFFICER OF HEALTH

DRAWING NO. A. 51. 2.

ISOLATION HOSPITAL and SANATORIUM.

The total number of cases admitted to the Isolation Hospital and Sanatorium during the year was 902, compared with 917 in 1945, 835 in 1938, and 908 in 1937.

The interior and exterior of Pavilions A, B, and C were painted, also the exterior of Pavilions D, E, and F.

Scarlet Fever.

One hundred and fifty four cases of Scarlet Fever were admitted during the year compared with 244 in 1945. No deaths occurred. The majority of cases were mild in type and there were very few complications; those which did arise responded satisfactorily to chemotherapy.

Diphtheria.

Thirty three cases of Diphtheria were admitted during the year, compared with 59 cases in 1945. Two deaths occurred.

Measles.

Forty four cases of measles were admitted during the year, compared with 175 in 1945. There were six deaths, these being due to Encephalitis and Bronco Pneumonia occurring in debilitated repatriated patients from Sumatra.

Erysipelas.

Eighteen cases of Erysipelas were admitted during the year. compared with 33 cases in 1945. One death occurred due to Cavernous Sinus Thrombosis.

Enteric Fever.

Six cases of Enteric Fever were admitted during the year. One of these was extremely severe in type, the others were mild in type occurring in patients who had been vaccinated against Typhoid. There were no fatal cases.

Whooping Cough.

Forty six cases of Whooping Cough were admitted during the year, compared with 20 cases in 1945. Two deaths occurred due to secondary Bronco Pneumonia and Cerebral Haemorrhage.

Anterior Poliomyelitis.

Three cases of Anterior Poliomyelitis were admitted, compared with 11 cases in 1945. One case, which was of the progressive ascending paralytic type with subsequent intercostal and diaphragmatic involvement, died.

ISOLATION HOSPITAL AND SANATORIUM.

This Table shows all admissions to the Isolation Hospital and Sanatorium and includes all cases admitted from vessels in the port, cases admitted from neighbouring districts, and naval and military cases.

DISEASE NOTIFIED OR SUSPECTED	Cases remaining in Hospital 1st January, 1946	Admitted	Discharged	Died	Remaining in Hospital 31st December, 1946
uberculosis	72	326	251	42	105
arlet Fever and Complications ..	29	154	176	—	7
arlet Fever Contacts	—	6	6	—	—
fected Urticaria Papulosa	—	2	2	—	—
easles and Complications	—	44	37	6	1
hicken Pox	—	23	19	—	4
ubella	—	5	5	—	—
umps	3	34	37	—	—
onvalescent Glandular Fever ..	—	1	1	—	—
astoiditis	—	1	1	—	—
orrhoea Alveolaris	—	1	1	—	—
nk Disease	—	1	1	—	—
uberculous Meningitis	—	2	—	2	—
eningococcal Meningitis	1	14	10	2	3
ellulitis of Orbit and Meningitis ..	—	1	—	1	—
erebral Abscess and Meningitis ..	—	1	—	1	—
septic Lymphocytic Meningitis ..	—	1	1	—	—
eningism	—	3	3	—	—
titis Media	—	1	1	—	—
iphtheria	7	31	24	2	12
iphtheria Carriers	—	10	10	—	—
asal Diphtheria	—	1	1	—	—
aryngeal Diphtheria	—	1	1	—	—
aryngitis	—	1	1	—	—
onsillitis and Complications	1	55	56	—	—
tyriasis Rosea	—	1	1	—	—
atarrhal Laryngitis and Rhinitis ..	—	9	9	—	—
aratyphoid Fever	3	—	3	—	—
yphoid Fever	—	6	5	—	1
moebic Dysentery	—	1	1	—	—
acillary Dysentery	—	3	2	—	1
steomyelitis of the Ilium	—	1	1	—	—
olitis	—	1	1	—	—
fluenza	—	4	4	—	—
nterior Poliomyelitis	1	3	3	1	—
bservation Poliomyelitis	—	2	2	—	—
fective Jaundice	1	2	3	—	—
rysipelas	2	18	18	1	1
mpetigo	—	2	1	—	1
abies	—	6	6	—	—
leroderma	—	1	1	—	—
ptic Rash	—	1	1	—	—
xyuriasis	—	1	1	—	—
yphilis	—	3	3	—	—
C/F	120	785	709	58	135

ISOLATION HOSPITAL AND SANATORIUM (continued)

DISEASE NOTIFIED OR SUSPECTED	Cases remaining in Hospital 31st December 1946	Total Number of Admissions	Discharged	Died	Remaining in Hospital 31st December 1946
B/F	120	785	709	58	135
Salmonella Infections excluding B.Typhosus	—	8	7	—	1
Vincents Angina	—	2	2	—	—
Contact Smallpox	—	3	3	—	—
Malaria	—	1	1	—	—
Whooping Cough and Complications ..	—	46	41	2	3
Broncho Pneumonia	—	6	5	1	—
Double Lobar Pneumonia	—	1	1	—	—
Bronchitis	—	12	12	—	—
Rheumatic Fever	—	1	1	—	—
Serum Sickness	—	2	2	—	—
Generalized Vaccinia	—	1	1	—	—
Pemphigus Neonatorum	—	4	4	—	—
Duodenal Ulcer	—	1	1	—	—
Gastro Entiritis	—	18	17	1	—
Fibrositis of Neck & Cervical Adenitis ..	—	2	2	—	—
Cerebral Haemorrhage	—	2	2	—	—
Carditis and Pleurisy	—	1	1	—	—
Pyelitis	—	1	1	—	—
Urethral Stricture	—	1	1	—	—
Abscesses in various sites	—	4	4	—	—
	120	902	820	62	140

MUNICIPAL LABORATORIES.

The details of the work carried out are enumerated under the following summary:—

Bacteriological Laboratory, Borough Hospital.

Diphtheria.

Swabs cultured and examined	1,357

Sputa.

Specimens submitted by:—

T.B. Clinic, including Dr. Lendrum—Mass Radiography	1,420
Medical Practitioners	316

Vincent's Angina.

Smears	847

Urine Examinations.

Specimens submitted by:—

Borough Hospital	623
Medical Practitioners	410

Faeces Examinations.

Occult Blood Examinations	117
Other examinations	49
Miscellaneous Examinations	52

V.D. Clinic.

Smears	2,596
Urines	102
Urine specimens submitted from Borough Hospital	314
Smears—Borough Hospital and Medical Practitioners	721

Mental Deficiency Acts

The Southampton Mental Welfare Association

MENTAL DEFICIENCY ACTS, 1913-38.

The obligations placed on the Local Authority to make provision for the care and treatment of the mentally defective have been fully reported in previous reports.

Under the Joint Agreement, dated 12th June, 1931, between the County Boroughs of Southampton and Bournemouth, and the County Council of Hampshire, accommodation is provided at Coldeast Colony and Tatchbury Mount Colony for those persons who require care, protection and treatment.

At the Coldeast Colony accommodation is provided for women and children of both sexes, and at Tatchbury Mount Colony males only are received.

During the year Petitions were presented to the Justices and Orders under the Acts obtained in respect of fourteen patients, and seven other cases were ordered by the Magistrates to be committed to the Training Colonies following their appearance before the local Courts on various charges.

Fifteen patients were classified as feebleminded, and six as imbeciles. These were dealt with as under:—

Admitted to institutions:—

Coldeast Colony	1 male
	10 females
Tatchbury Mount Colony ..	10 males

In addition to those patients in respect of whom Orders under the Acts were obtained, a considerable number were examined and found suitable for institutional treatment, but could not be admitted owing to the shortage of accommodation, which is still acute. The names of these patients were placed on the waiting list for admission as soon as possible.

Twenty-eight cases were notified by the Local Education Authority to the Local Control Authority under Section 57 (3) of the Education Act, 1944. Two of these cases were admitted to institutions, and twenty-six were recommended for Statutory Supervision and placed under the care of the local Mental Welfare Association.

Where defectives admitted to institutions show progress and improvement after a period of training, the possibility of granting leave of absence on licence from the institution to the care of their parents or other responsible person is considered. The majority of these cases obtain suitable employment and become self-supporting and useful members of the community.

Before leave of absence on licence from an institution is granted, the home conditions are investigated and careful enquiry made as to the care, supervision and protection which would be available for the patient in the event of licence being granted. These reports are submitted to the visiting Committee of the respective institutions. Periodical reports are obtained in respect of all patients on licence.

Fifty-six patients were granted leave of absence on licence from the institutions during the year. Nine patients were returned to the Colonies and their licences cancelled. Of this number two were re-admitted for medical treatment; two were returned to the institution because the conditions of their employment had become unsuitable; three were re-admitted because of unsatisfactory behaviour, and two owing to lack of adequate supervision and control being exercised over them at home.

Two deaths of defectives occurred during the year, one female at Coldeast Colony, and one male at Tatchbury Mount Colony.

During the year eight defectives were discharged from under the Mental Deficiency Acts.

The following is a summary of the patients in institutions, under Guardianship, and on licence at the end of the year, for whom the Local Authority are responsible.

(A) In Institutions.		
Males under 16 years	26	
Males over 16 years	98	
Females under 16 years	19	
Females over 16 years	82	
		225
(B) Under Guardianship.		
Brighton Guardianship or other approved Guardian.		
Males	3	
Females	1	
		4
(C) On Licence.		
To care of parent or other approved person.		
Males	32	
Females	14	
		46

In those cases where it is considered unnecessary to proceed with the making of Orders under the Mental Deficiency Acts, the defectives are placed under the care and supervision of the Southampton Mental Welfare Association.

The Association follows up the cases and visits them regularly, submitting reports on their progress and the conditions under which they are living; and obtaining information in respect of cases in which further action under the Acts appears to be desirable.

The number of cases under Statutory and Voluntary Supervision at the end of the year were as under:—

STATUTORY SUPERVISION.		
Males	106	
Females	111	
		217
VOLUNTARY SUPERVISION.		
Males	93	
Females	88	
		181

THE SOUTHAMPTON MENTAL WELFARE ASSOCIATION

The Southampton Mental Welfare Association continued its work of supervising mentally defective persons in the Borough, and reports that during the year nearly two thousand visits were paid to their homes.

Now that cases tend to be ascertained at a somewhat ealier age, the help and advice given to parents by the Association should be of even greater value in ensuring that care and training are suitably directed from infancy.

At the end of the year twenty-four children were on the register of the Occupation Centre run by the Association, the curriculum of which includes handicrafts and speech training, as well as useful domestic tasks.

An Inspector of the Board of Control visited the Centre in December, and reported:—

" Numbers have increased, and attendance is especially high when it is borne in mind that children travel by ordinary 'buses and trams. The pupils in attendance are divided into two groups. To-day twelve young children formed the 'Nursery' class, and nine older ones worked together. Throughout all the work which I saw there is a happy spirit of co-operation. Occupations were well suited to each group."

So far, few defectives have taken advantage of their right to register for employment under the Disabled Persons Act, but those who are considered employable and have difficulty in obtaining work, are encouraged to do so.

The limited number of vacancies in Special Schools for training the higher-grade children reduces the proportion of those who are able to take their part in the community as useful citizens, although many are indeed supporting themselves, and under supervision are able to lead useful lives.

Miscellaneous

1. Vaccination
2. Southampton Crematorium
3. Civil Ambulance
4. Domestic Help Scheme
5. Nursing Recruitment Campaign
6. Dispensary

VACCINATION.

The Borough is divided into nine vaccination districts, a Public Vaccinator (doctor) being appointed to each district, with the exception of districts Nos. 3 and 4 which are combined. Separate Public Vaccinators are also appointed for the Borough Hospital, and Children's Homes.

The particulars in the following table are supplied by the Registrar General. It will be noticed that the number of births shown differs from those recorded as belonging to the Borough; the births in this table refer to all children born and registered in the Borough, and include therefore children residing in other towns.

RECORD OF VACCINATIONS CARRIED OUR IN SOUTHAMPTON SINCE 1939.

Year	Births	Successfully Vaccinated	Died Unvaccinated	Insusceptible to Vaccination	Conscientious Objection	Postponed and whereabouts unknown, or removed to other districts	Percentage Successfully Vaccinated
1939	2994	1438	120	8	1103	325	48.0
1940	2751	1164	110	13	915	549	42.3
1941	1198	550	58	12	399	179	45.9
1942	1764	923	85	21	513	221	52.3
1943	2091	1069	82	14	639	287	51.1
1944	2791	1450	118	6	793	424	52.0
1945	3418	1748	154	10	906	346	51.1
1946	3992	21919*	180	28	839	404	54.8

*—These figures do not relate to the births registered in 1946, but are the numbers of successful primary vaccination of children under 14, and declarations of conscientious objection actually received in 1946, irrespective of the dates of birth of the children to whom they relate.

SOUTHAMPTON CREMATORIUM.

During the year ended 31st December, 1946, 675 cremations were carried out at the Southampton Crematorium, representing an increase of 70 over the previous year, and a 44% increase in two years.

168 of those cremated died in Southampton, representing 25% of the whole.

From its inception in July, 1932, until the end of 1946, cremations carried out at Southampton Crematorium numbered 5,979.

The total for all crematoria for the year 1946 was in the region of 50,000, compared with the 1945 figure of 42,963.

The ever increasing acceptance of the cremation ideal by the public, which the statistics for the year reveal, afford cause for satisfaction, as do the evidences of growing approval on the part of the Government and the departments conserned, and the manifest desire of local authorities to supply crematoria at the earliest possible date.

CIVIL AMBULANCE SERVICE.

On the 3rd September, 1939, the Civil Ambulance Service, which had been conducted previously in connection with the Fire Brigade Service, was transferred to the Health Committee.

During the war years, the ambulances were manned by a full time staff augmented by the voluntary part-time service of members of the St. John's Ambulance Brigade and British Red Cross Societies. In addition to the normal daily accident and removal cases, the unit greatly assisted in dealing with enemy air raid casualties. These trained personnel were an example, in their speed, efficiency, and devotion to duty, to the full-time and volunteer members of the First Aid parties who were so essential to the working of the war-time Medical Services.

The Civil Ambulance Service of six ambulances is served by a supervisor, 12 ambulance drivers and 12 ambulance attendants. At the present time, a full-time rota of duties is maintained whereby the busy day periods are manned to full capacity and the night hours served by only two ambulance teams.

A total of 7,064 cases were dealt with during the year, most of which were of 5-10 mile journeys but in 38 cases journeys of over 50 miles were necessary. There were 1,463 accident cases, 451 cases for the Public Assistance Department and 157 Ministry of Health Emergency Medical Service cases. The remaining 4,993 were ordinary removal cases.

The following table shows the ambulance cases each month:—

YEAR 1946.	Borough General Hospital	Free Eye Hospital	Isolation Hospital	Childrens Hospital	Royal South Hants Hospital Ordinary Cases	Accidents	Calls Answered Not Required or Cancelled	Public Assistance West End and Knowle	Annex/Romsey Tatchbury Mount Home of Recovery Cold East Colony	Private Addresses and Nursing Homes	Total number of Calls each month Ordinary cases	Total mileage Ordinary cases	Total number of Calls each month E.M.S.	Total mileage E.M.S. cases	Total number of calls, ordinary and E.M.S. cases	Total mileage ordinary and E.M.S. cases
January ..	201	1	65	9	125	96	20	51	14	21	603	6531	36	807	639	7338
February ..	149	—	49	17	112	96	12	46	3	22	506	5197	35	916	541	6113
March ..	173	—	54	12	106	98	14	44	5	18	524	5438	39	697	563	6135
April	163	—	52	10	118	131	28	33	5	19	559	6294	19	777	578	7071
May	155	—	32	9	124	140	19	54	3	16	552	5344	21	333	573	5677
June	164	—	35	10	120	123	28	35	1	3	519	5135	11	163	530	5298
July	167	2	51	14	97	130	18	36	2	11	528	5431	23	865	551	6296
August ..	144	1	40	19	113	118	21	29	1	29	515	5529	25	1040	540	6569
September ..	148	1	44	12	108	100	20	33	3	15	484	5609	22	973	506	6582
October ..	133	—	25	9	125	101	24	24	1	20	462	5267	23	1811	485	7078
November ..	141	1	42	11	108	98	26	24	1	16	468	4293	11	554	479	4847
December ..	170	4	38	12	104	125	22	28	1	20	524	4973	12	894	536	5867
TOTALS ..	1908	10	527	144	1360	1356	252	437	40	210	6244	65041	277	9830	6521	74871

DOMESTIC HELP.

The Domestic Help Scheme was commenced in Southampton in February, 1945, with the appointment of a Supervisor who was made responsible for maintaining a register of Domestic Helpers, receiving applications under the scheme, and securing reimbursement of the costs in accordance with the financial circumstances of the accepted cases. The expenditure of the scheme is reimbursed by the Exchequer.

The scheme makes provision to provide domestic help to the following types of cases:—

(a) Housewives falling sick or in need of surgical operation.

(b) Supervision of children when housewife is summoned to husband in hospital.

(c) Elderly persons who are infirm or suddenly falling ill.

(d) On occasions when several family members are ill at the same time.

The Scheme was further expanded during 1946 and at the end of the year ten full time and nine part time workers were engaged.

During the year 161 applications for help have been received and this was provided in respect of 142 cases.

Numerous letters have been received expressing appreciation of the services rendered by the workers.

DISPENSARY.

For many years a central Dispensary has been provided to serve the Clinic Health Services and where all prescriptions can be dispensed and sent to the various Clinics throughout the town for distribution to the patients. There is a qualified Dispenser in charge and in addition to the dispensing of prescriptions and the mixing and checking of stores of medicines, a comprehensive stock of medical requisites is retained for clinic use.

During the year the following work was carried out:—

NUMBER OF PRESCRIPTIONS

Maternity and Child Welfare ..	1880
School Medical	6934
Tuberculosis	3832
Venereal Diseases	3
Orthopaedic	14
	12663

NURSES RECRUITMENT CAMPAIGN.

JANUARY/MARCH, 1946.

In conjunction with the National Campaign to encourage recruitment to the Nursing Profession a Committee was formed representing the following hospitals and nursing organisations:—

Borough General Hospital
Borough Isolation Hospital
West End Institution
Royal South Hants. & Southampton Hospital
Southampton Children's Hospital
Free Eye Hospital
Coldeast Colony
Tatchbury Mount Colony
British Red Cross Society
St. John Ambulance Brigade
Queens Nursing Association
Pre-Nursing Schools.

Incorporated in the Committee were representatives of the Committees and Staffs of the Health, Education and Public Assistance Departments together with officials of the Ministry of Information and the Ministry of Labour.

A three months' campaign was planned to cover the Southampton and immediate neighbourhood and full advantage was taken of press advertising publicity coupled with public meetings, brains trusts, films and lectures.

A very successful Nursing Exhibition was arranged at the Art Gallery, Civic Centre, from March 16th to March 23rd, officially opened by Dr. Somerville Hastings, M.P. where an up-to-date model ward was staged with models representing cases of post-operative squint, fractured femur and blood transfusion. Great interest was shown by the public in the Drinker iron lung which was in full working order and in the penicillin display, nurses training equipment, the oxygen tent and other models and stands which were on view.

A second gallery contained the exhibits of a general nature which included the National Travelling Exhibition and attractive stands displaying occupational therapy work made by patients at Coldeast Colony, Tatchbury Mount Colony and West End Institution. The pre-nursing class at the Girls' Grammar and Junior Technical Schools stands call for special comment on account of the great interest aroused by the quality and educational value of the exhibits shown.

Other stands were provided by the British Red Cross, St. John Ambulance Brigade, The Queens Nursing Association and the Local Day Nurseries.

With the exception of the travelling picture display all the exhibits were provided and erected by the responsible Sub-Committee and apart from those supplied by the hospitals themselves all models were generously loaned by the Southampton Co-operative Society.

The loan of flowers and hot house plants by Tatchbury Mount Colony greatly increased the attractiveness of the display.

The Southern Daily Echo throughout the Exhibition and the Campaign were of great assistance and gave the Campaign very generous publicity.

Attendances at the Exhibition were unexpectedly high, 12,822 persons having paid visits during the week's run. This number is far in excess of the attendances at the L.C.C. Exhibition and is more than three times the number visiting the Portsmouth Exhibition.

Film shows at the Exhibition were seen by a total of 3,201 persons.

Coinciding with the Exhibition very attractive shop window displays were arranged by local firms.

Some time must necessarily elapse before the full recruitment value of the Campaign can be estimated but the following figures serve to illustrate the immediate result:—

Forms of Application received by the Matrons of the Hospitals concerned	31
Recruits to Pre-Nursing Class	20
Recruits to St. John Ambulance Brigade (cadets) ..	12
Recruits to British Red Cross Society (cadets) ..	40
Enquiries made at the Ministry of Labour Bureau at the Exhibition	147

The whole cost of the Campaign was borne by the Committees of the Corporation Departments, the Hospitals and the Nursing Organisations concerned.

ATTENDANCES.

A. *Daily visits to the Exhibition.*		B. *Attendances to Films*
Saturday, March 16th	962	—
Sunday, „ 17th	845	—
Monday, „ 18th	1179	300
Tuesday, „ 19th	1547	524
Wednesday, „ 20th	2055	413
Thursday, „ 21st	1944	632
Friday, „ 22nd	1294	354
Saturday, „ 23rd	2996	978
Totals	12822	3201

C. *Attendances at Brains Trust.*

Monday, March 18th ..	150
Friday, March 22nd ..	78

D. Attendance at Open Meeting at Polygon Hotel ..	250
Conducted Tours of School Children	16
Interested Enquiries at Information Centre	147

Sanitary Services

and

Food and Drugs Acts

SANITARY INSPECTION.

The following summary shows the particular work carried out under the various Acts administered by the Department, and nuisances abated during the year :—

General Inspection of Houses and re-visits	7,541
Inspection on complaint	3,121
Housing Act and re-visits	—
Inspections under Building Bye-Laws	663
Drains tested and re-tested	333
Cinemas	11
Premises Disinfected	690
Visits for infectious disease	440
Preliminary Notices	1,785
Legal Notices	452
Premises drained to sewer	5
Drains cleared and repaired	362
Drains Reconstructed	6
W.C. pans fixed	175
Water laid on to W.C.'s	—
Bath and sink wastes cleared	65
Verbal Notices to abate nuisances	38
Sanitary sinks fixed in houses	47
Damp walls remedied	151
Houses cleansed and decorated	45
Roofs of houses repaired	388
Eaves, guttering and rain water pipes	152
Floors, walls and windows repaired	574
Dustbins provided	183
Yards paved and drained	3
Offensive Matter removed	38
Yards repaired	12
Verminous premises	20
Grates, Coppers, etc.	97
Miscellaneous repairs	83

ARTICLES DISINFECTED AT WEST QUAY DISINFECTING STATION.

Beds, Mattresses and Covers	19,312
Bolsters and pillows	13,955
Blankets and Quilts, Sheets, Counterpanes	23,508
Books	231
Sundries	9,788
TOTAL	66,794

DRAINAGE UNDER THE BUILDING BYE-LAWS.

Number of inspections during progress of work	663
Number of drains tested and re-tested	333

WORK CARRIED OUT UNDER THE SOUTHAMPTON CORPORATION ACTS AND BYE-LAWS, RELATING TO THE DRAINAGE OF EXISTING BUILDINGS.

The following works were supervised by the Department after notification :—

Drains re-laid	1
Drains cleared and repaired	3
Inspection chambers constructed	2
Water closets reconstructed	—
Sanitary sinks provided	—
New gully traps	2
Ventilating shafts	—

COMMON LODGING HOUSES

There is one Common Lodging House in the Borough with Registered accommodation for 59 persons.

23 visits were made during the year and the premises were generally kept in a satisfactory condition.

HOUSING STATISTICS, 1946.

The following particulars are given in the form required by the Ministry of Health.

1. Inspection of dwelling-houses during the year :—

(1)	(*a*)	Total number of dwelling houses inspected for housing defects (under the Public Health or Housing Acts)	3,870
	(*b*)	Number of inspections made for the purpose..	10,662
(2)	(*a*)	Number of dwelling houses (included under sub-head (1) above) which were inspected and recorded under the Housing (Consolidated) Regulations. 1925	nil
	(*b*)	Number of inspections made for the purpose	nil
(3)		Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ..	nil
(4)		Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	1,785

2. Remedy of defects during the year without service of formal notices :—

Number of defective dwelling -houses rendered fit in consequence of informal action by the Local Authority or their officers	38

Proceedings under the Public Health Acts :—

(1)		Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	1,785
(2)		Number of dwelling houses in which defects were remedied after service of formal notices :—	
	(*a*)	By owners	1,115
	(*b*)	By Local Authority in default of owners ..	nil

RATS AND MICE DESTRUCTION ACT.

In connection with the duties imposed under the Rats and Mice (Destruction) Act :—

Visits and re-visits on complaint	3,670
Rats destroyed	18,156
Mice destroyed	1,029
Rats destroyed in sewers	7,568
Visits made in Block Control Survey	13,286
Rats destroyed in survey	13,842
Total number of rats destroyed	39,566.

Report on Measures taken to destroy Rats in Soil Sewers in the County Borough of Southampton, 1945—46.

During the early years of the war, it was realised that the loss of food through destruction and/or contamination by rodents could not be tolerated under food rationing and shipping losses.

Under powers given by Defence (General) Regulations, 1939, the Ministry of Food issued an Infestation Order, 1943, which made it obligatory on all Local Authorities to operate the Rats and Mice Destruction Act, 1919. Its general purport was to ensure that the provisions of that Act should form the basis of a continuous campaign for the destruction of rats and mice. In order to make this campaign effective, Local Authorities were instructed to survey their districts and submit reports on the degree of rodent infestation within their areas.

On 9th November, 1943, a general "Direction" was issued from the Ministry of Food to proceed with the destruction of rats and mice under the terms laid down in the Rats and Mice Destruction Act, 1919, as amended by the Infestation Order, 1943.

On 22nd August, 1945, a "Specific Direction" was given to proceed with the treatment of sewers, with a promise of financial aid if the campaign was carried out in accordance with the procedure laid down by the Ministry.

Briefly this technique involved :—

1. Prelimimary work :—
   - (*a*) Loosening manhole covers;
   - (*b*) Fitting bait trays;
   - (*c*) Preparation of maps, etc.
2. Prebaiting and poisoning and a subsequent treatment.

On the receipt of the " Direction," the Borough Engineer was informed, and arrangements were made for the preliminary work to be undertaken, in the first instance in the Woolston area. The decision to commence operations in this part of the town had been reached at an earlier date, owing to the amount of heavy military traffic passing through other parts of the Borough.

Existing sewer maps indicated that the Woolston area contained 244 manholes, and from these sewer maps, sections of the area, containing an average of 70 manholes, were reproduced on a larger scale, and each manhole was numbered. The party or parties engaged on this preliminary work were given these maps, together with a form describing the situation of the manholes (i.e. whether in streets or gardens). The Woolston area had been subjected to heavy bomb damage and the preliminary work disclosed that some manhole covers were buried under building debris, others concreted in place of covers, some proved to be " lamp inspection holes ", and in others the sewers were running fully charged with water. This reduced the actual number of manholes eased and prepared for treatment from 244 to 65 in the Woolston area.

With this information, it was necessary, before active treatment could be commenced, to revise the section maps and to plot routes. Before commencing the second stage, namely, prebaiting, arrangements were made with the Ministry of Labour to engage the services of Italian Prisoners of War, in order to provide the number of sewer men to complete the parties necessary to operate the area.

On the 29th October, prebaiting began with damp sausage rusk. The recommended amount of 6 ozs. was deposited on the benching, or, where this was not practicable, in trays already fitted during the preliminary work. This procedure was repeated for four days, and and the prebait takes recorded daily ; on the fifth day, 12 oz. of poison bait was placed in all manholes which had shown a " take " on any or all days. The poison used in this first treatment was " Zinc Phosphide." The result of the treatment will be seen in the appended tables.

After a period of three weeks a second treatment of post baiting was undertaken. This second treatment was necessary in order to destroy any young rats which might not have been old enough to have left their nests on the day of poisoning. This treatment, like the first, was carried out in accordance with the Ministry of Food's technique, but only those manholes from which poison had been taken in the first treatment, together with the manholes immediately adjacent on either side to these, were baited. Prebaiting in this treatment was carried out with soaked bread and " arsenic " used as poison bait.

From the returns made by the operators, the number

of rats destroyed in the campaign, calculated by the Minstry's formula, totalled 7,568, but I consider this a conservative estimate, as the uneaten poison bait was allowed to remain subsequent to the poisoning day, and it is reasonable to suppose that many of those poison points were afterwards consumed by rats.

An analysis of the campaign is set out below, and the following are my observations :—

The actual rodent infestation of the sewer system before the campaign was undertaken was not accurately known, but, from information obtained during the past, the older parts of the system, particularly in the lower part of the town, were thought to be heavily infested. This area was partially demolished by enemy action, and the destruction of the shopping centre, associated with damaged drains, may have influenced the rat population to migrate as surface infestations.

Now that the campaign has been completed, we have for the first time a fairly accurate knowledge of the degree of infestation, and, where drainage systems are suspected, investigations will be carried out on surface infestation.

The destruction of rats in sewers differs in some respects from surface destruction, and the daily returns show some interesting features. The key to most variations is to be found in the fact that the baiting points (manholes) are fixed, and, in consequence, bait cannot be placed as is usual with surface prebaiting at a point which the rat customarily passes. In surface baiting, the prebait is taken regularly, and the " take " increases as the confidence of other rats is obtained, whereas, with sewer baiting, it is found that manholes may be visited by rats and bait taken on two or three successive days and then on the last day of prebaiting, no bait taken on that day or poison on the following day. There are many variations, and it would appear that the travel of rats in the sewers is not so regular as is the case with surface " runs "

An interesting comparison of first and second treatment is given by an example in Area D., where there was an estimated kill of 570 rats in the first treatment, and only 20 in the second, whilst in Area G., which showed a kill of 1,005 in the first treatment, 407 were destroyed in the second. Over all the drainage systems, the average kill in the second treatment was 22% of the kill in the first.

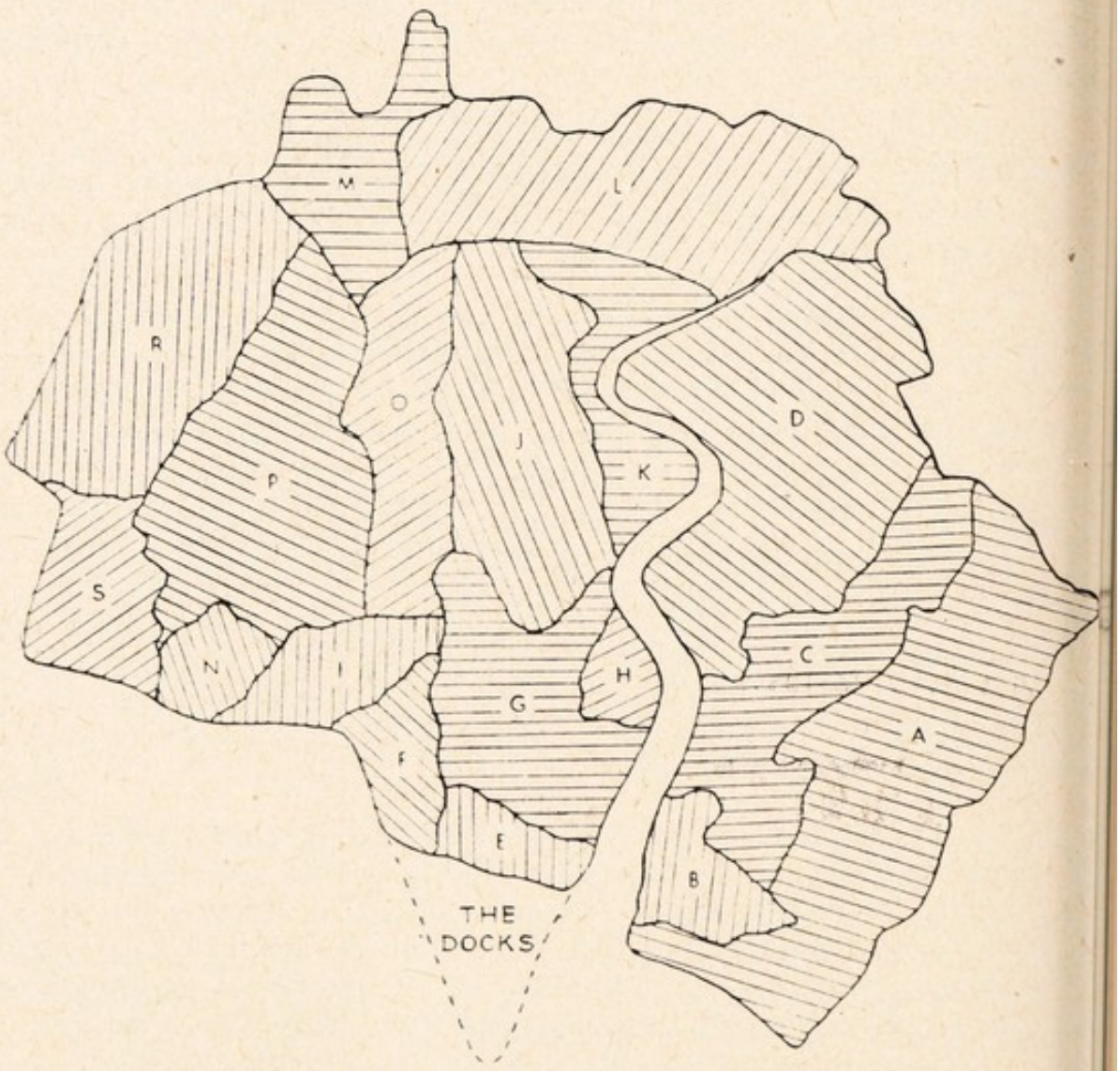
Charts which embody all data likely to be useful to the Ministry have been kept, and will be forwarded to them when a claim for reimbursement, in accordance with the terms of the " Direction ", is made. The following is a summary of this detailed information :

The campaign covered a period of 25 weeks. 4,040 manholes were surveyed in the preliminary work. 2,833 manholes were baited in the first treatment. 1,164 manholes were baited in the second treatment.

The average number of manholes baited by each party was—61 on the first treatment, 48.5 on the second treatment.

These averages were less than were anticipated, but were influenced by—(*a*) Winter darkness, and the early return to the camp of the prisoners of war. (*b*) The wide distribution of manholes. (*c*) The adjustment between number of manholes in each system and parties necessary to deal with them.

MAP SHOWING DIVISION OF THE SOUTHAMPTON SEWAGE SYSTEM INTO AREAS FOR TREATMENT.
(See Tables 1 and 2.)



WOOLSTON Drainage System
Areas A. B. C. D.
TOWN Drainage System
Areas E.F.G.H.I.

PORTSWOOD Drainage System
Areas J. K. L.
SHIRLEY Drainage System
Areas M.N.O.P.R.S.

TABLE I.

FIRST TREATMENT

Area	No. of Manholes	Prebait takes	Poison takes	Bodies found	Estimated kill	Remarks
A.	40	—	—	—	—	Poisoning in B. test bating
B.	165	70	38	—	470	
C.	257	49	29	—	367	
D.	192	45	38	1	570	
E.	44	9	7	—	112	
F.	171	68	54	7	787	
G.	249	96	75	2	1,005	
H.	51	28	19	—	187	
I.	96	62	59	—	885	
J.	269	43	33	—	457	
K.	74	8	8	3	90	
L.	222	22	18	—	180	
M.	47	2	2	—	15	
N.	75	16	12	—	105	
O.	139	37	23	1	292	
P.	336	53	33	—	427	
R.	231	18	8	—	75	
S.	175	13	12	—	165	
	2,833	639	468	14	6,189	

TABLE II.

SECOND TREATMENT.

Area	No. of Manholes	Prebait takes	Poison takes	Bodies found	Estimated kill
B.	113	4	—	—	—
C.	94	7	6	—	80
D.	97	3	1	—	20
E.	8	4	4	—	67
F.	100	31	14	—	213
G	169	33	29	—	407
H.	48	22	7	—	113
I.	93	15	12	—	160
J	91	12	11	—	100
K	15	—	—	—	—
L	58	4	4	—	80
M	—	—	—	—	—
N	30	3	2	—	13
O	71	9	7	—	47
P	103	8	8	—	53
R	45	2	2	—	13
S	29	2	2	—	13
TOTAL	1,164	159	109	—	1,370

BLOCK CONTROL.

Following the completion of the initial treatment of the sewers, the rodent operatives began a systematic survey of the whole borough by block control methods. All premises within defined areas were visited and where evidence of the existence of rats found, trial baits were laid and where taken were followed by treatment.

During the first few months of this work certain facts operating against its complete success became increasingly apparent, the chief factor being the occupiers responsibility under the Rats and Mice Destruction Act 1919 for the cost of destruction of infestations found on their premises. In congested areas the onus of responsibility is very difficult of proof and when decided took time to bring about agreement to pay. In addition to this delay, it was realised that there was reluctance to volunteer information of rat infestations and incentives for occupiers of small means to mask traces in order to escape the financial obligation.

In order to remove these difficulties and expedite the survey throughout the country the Ministry of Food offered to make arrangements with Local Authorities, and relieve the financial responsibility of occupiers of private dwellings for the financial year. These arrangements were conditional and their acceptance depended chiefly on the Local Authority carrying out this survey in accordance with a scheme approved by the Ministry and also that the Local Authority accepted responsibility for 40% of the cost of any treatment carried out in private premises within the scheme.

These proposals were accepted by the Council and a scheme duly submitted and approved by the Ministry on 29th July, 1947. The initiation of this scheme had the effect of speeding up the survey and treatment which proceeded more rapidily when occupiers co-operated and gave assistance.

From the beginning of the survey in April to the end of the year 13,286 premises had been surveyed with an estimated kill of 13,842 rats.

FACTORIES ACT 1937.

SUMMARY OF VISITS DURING YEAR 1946.

Factories	172
Bakehouses	111
Miscellaneous	353
TOTAL	892

Reports received from H.M. Inspector of Factories during the year :—

Nature of Report	Number received	Action taken		
		Verbal Notice	Written Notice	Premises became void
Contravention of the Sanitary Accommodation Regulations, 1938. ..	34	30	1	3
Schedule 3. ..	3	3	—	—
TOTALS ..	37	33	1	3

BAKEHOUSES.

There are 56 bakehouses on the Register of Factories.

A total of 111 visits of inspection have been made during the year. Ten defects were found and were remedied, nine by verbal and one by written notice. The general standard of cleanliness has been reasonably good and in spite of difficulty in procuring labour and material the provisions as to limewashing have been generally observed.

HOMEWORK—FACTORIES ACT, 1937, SECTION 110.

In accordance with the requirements of the Act, 6 lists were sent in during February and 5 during August.

These lists contained the names and addresses of 9 and 7 outworkers respectively.

Inspections have been made in all the outworkers' premises reported. No instances have been found of homework being carried on in unwholesome premises. Present-day conditions with regard to clothes rationing, shortage of materials, etc., are reflected in the comparatively few outworkers reported as compared with the pre-war period. There are signs, however, that the practice of employing outworkers is being resumed in some trades, notably glove making.

FACTORIES.

Defects Found and Remedied.

	Factories with M.P.	Factories without M.P.	Bakehouses	Totals
Drains cleared or repaired	1	—	1	2
Sanitary conveniences:—				
Provided to premises	7	6	—	13
New pans fixed	2	—	—	2
Flushing cisterns repaired or renewed	1	2	—	3
Lighting provided	1	—	—	1
Intervening ventilated space provided	1	2	—	3
Properly indicated	1	2	—	3
Cleansed and limewashed	5	9	—	14
Provided with doors and fastenings	7	4	—	11
Premises limewashed	—	2	4	6
New dustbins provided	—	—	—	—
Inadequate ventilation remedied	—	1	1	2
Overcrowding abated	—	2	—	2
Floors renewed and repaired	—	—	1	1
Accumulations of rubbish removed	—	1	—	1
Lavatory basins provided	2	—	—	2
New sinks fitted	1	1	—	2
Sink wastes renewed or repaired	—	2	—	2
Total	29	34	7	70

SHOPS ACT, 1912—1936.

During the year, 435 visits of inspection were made under the Acts. Verbal warnings were given in 57 cases where infringements were noted and 4 Statutory Notices were served. The Council granted one Certificate of Exemption under Section 10 (6) of the Shops Act, 1934.

The majority of the inspections carried out were directed to ensuring that Section 10 of the 1934 Act, which deals with arrangements for the health and comfort of shop workers, was being satisfactorily observed. In this connection it is gratifying to note that the earlier closing of shops as compared with pre-war days, has resulted in a general reduction of working hours for shop assistants. (One result of this has been the absence during the year of any cases where shop assistants under the age of 18 were working excessive hours.) Similarly, the Shops (Hours of Closing) Act, 1928, is receiving general compliance now that the earlier closing imposed by war conditions is being continued.

THE RAG FLOCK ACTS, 1911 and 1928.

There are no premises in the district in which Rag Flock is manufactured. Bedding manufacturers and upholsterers obtain their supplies from factories outside the Borough. Wartime controls and restrictions continued to prevent the opening of new businesses and supplies of flock appeared to be short, even in the case of firms enjoying priority of supply.

Three samples of Rag Flock were taken during the year and submitted to the Borough Analyst for examination, the results being as follows :—

No. of Sample	*Chlorine as Chlorides.*
1	20 parts per 100,000.
2	15 ,, ,, ,,
3	11.25 ,, ,, ,,

NOTE :—The limit of chlorine permitted by the Act is 30 parts per 100,000.

FACTORIES.

Inspections for Purposes of Provisions as to Health.

Premises	Number of		
	Inspections	Written Notices	Occupiers prosecuted
Factories with mechanical power ..	332	1	—
Factories without mechanical power ..	165	—	—
Other premises under the Act .. (including works of building or engineering construction, but not including outworkers premises)	42	—	—
Total	539	1	—

DEFECTS FOUND.

Defect	Number of Defects			Number of defects in respect of which prosecutions instituted
	Found	Remedied	Referred to H.M. Inspector	
Want of cleanliness (S.1.)	6	6	—	—
Overcrowding (S.2.)	2	2	—	—
Unreasonable temperature (S.3.)	—	—	—	—
Inadequate ventilation (S.4.)	1	1	—	—
Ineffective drainage of floors (S.6.)	1	1	—	—
Sanitary Conveniences (S.7.) — Insufficent or	2	2		
Unsuitable or defective ..	34	34	—	—
Not separate for sexes ..	3	3	—	—
Other Offences .. .. (Not including offences relating to Homework or offences under the sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921, and re-enacted in the Third Schedule to the Factories Act, 1937.)	23	21	2	—
Total	72	70	2	—

OUTWORK IN UNWHOLESOME PREMISES.

Section III of the Act of 1937.

NIL.

ICE CREAM.

The control of materials maintained by the Ministry of Food continued through the year. This was reflected in the very small number of applicants for registration under Section 127 of the Southampton Corporation Act, 1931. The number of new registrations approved by the Council amounted to 20, 14 of them being manufacturers. It is of interest to note in this connection that permits for materials were not granted by the Ministry of Food except where proof could be produced that the applicant was manufacturing ice cream during a stated period immediately prior to the outbreak of war.

This requirement, however, has not prevented some applications being made to the Council and in at least two cases premises and persons have been registered for manufacturing purposes, and have subsequently been prevented from commencing by the operation of the Ministry of Food restrictions mentioned above.

The number of premises on the register at the end of the year is compared with the number at the outbreak of war in the following table :—

Type of Registration	1939	1946
Manufacturers	82	41
Vendors	299	69
TOTALS ..	381	110

The outbreak of Typhoid Fever in Aberystwyth during July and August, the origin of which was traced to a manufacturer of ice cream, led to considerable publicity in the national press. Its repercussions were felt in all parts of the country and local authorities were naturally on the qui vive as a result. No cases of Typhoid Fever occurred in Southampton, but as a precaution, arrangements were made for all premises in the town where ice cream was either manufactured or sold to be visited. It was explained to everyone concerned that it would be a wise practice for all persons coming into contact with ice cream to submit samples of faeces and urine for examination, in order to ascertain whether there existed among these people any Typhoid Fever carriers.

As a result of these investigations, 79 specimens of faeces and 80 urine were submitted to the Ministry of Health Laboratory at Winchester. All proved to be negative. In the course of this work, opportunity was taken to carry out a complete check of the Ice Cream Register as it stood in 1939, and a total of 539 visits were made to the 381 premises involved. It is gratifying to record that every co-operation was given by the manufacturers and vendors concerned. This was no doubt due in a large measure to the publicity given to the Aberystwyth outbreak, and the fact that the local investigation was commenced whilst this was fresh in people's minds.

The number of persons asked to submit specimens was 89. All these complied with the request with the exception of 9. Of the latter number, however, one volunteered to submit specimens to his own doctor, and another undertook to submit specimens when the Ice Cream Trade re-started in 1947. There was only one direct refusal without any valid reason.

During the year a total of 751 visits was made to ice cream premises. This figure includes the 539 referred to above.

In the late summer, the Ministry of Health published the draft of the proposed Ice Cream (Heat Treatment) Regulations, although no date for their coming into operation was given.

During the year 26 samples were taken and submitted to the Borough Analyst for examination. Details of these are given overleaf.

(1)	(2)	(3) B. Coli.		(4)	(5)	(6)
No. of Sample	No. of Bacteria per c.c.	Present in	Absent from	Percentage of Fat	Starch P—present A—absent	Boric Acid A—absent
1	9,200	1/1000	—	1.42	P	A
2	80,000	1/10	1/100	0.57	A	A
3	70,400	1/10	1/100	3.41	P	A
4	76,800	1/10	1/100	3.41	P	A
5	1,900	—	1/10	Nil	A	A
6	800,000	1/10	1/100	3.41	P	A
7	2,160	—	1/10	Nil	A	A
8	24,600	1/10	1/100	1.42	P	A
9	77,600	1/1000	—	1.7	A	A
10	Infinity	1/1000	—	Trace	A	A
11	178,000	1/100	1/1000	1.99	P	A
12	20,000,000	1/1000	—	Nil	P	A
13	20,000,000	1/1000	—	0.25	P	A
14	1,825,000	1/100	1/1000	Nil	A	A
15	512,000	—	1/10	3.41	P	A
16	12,800	1/1000	—	4.54	P	A
17	58,400	1/1000	—	0.28	P	A
18	225,000	1/1000	—	Trace	P	A
19	144,000	1/1000	—	0.28	A	A
20	26,400	1/10	1/100	2.27	P	A
21	22,600	1/100	1/1000	8.34	A	A
22	76,800	1/10	1/100	Nil	P	A
23	256,000	1/1000	—	Nil	P	A
24	205,000	1/1000	—	3.4	A	A
25	35,000	1/1000	—	1.7	P	A
26	600	1/10	1/100	11.3	P	A

NOTES : Ref. col 3, the sample was regarded as satisfactory where B.Coli was absent in a dilution of 1/100 C.C.
Sample No. 20 was taken from a stall in the open street. The result of the analysis is a tribute to the care taken by the vendor.

Ice cream makers are allowed an allocation of margarine by the Ministry of Food; col.4 is a commentary on the results achieved by various makers.

SUPERVISION AND INSPECTION OF MEAT AND OTHER FOODS.

Sampling, Food and Drugs Acts, Milk Special Designations Orders and Milk Supply.

In carrying out the inspection of food the following visits were made to premises where food is prepared, stored or sold viz:—

1688	visits	to Slaughterhouses.
127	,,	,, Butchers Shops
54	,,	,, Sausage making premises.
1773	,,	,, Miscellaneous shops, stores' markets etc.
121	,,	,, Dairies and Cowsheds
15	,,	,, Schools (re milk supply).

SLAUGHTERHOUSES.

Slaughtering has been carried out in three slaughterhouses requisitioned by the Ministry of Food. No carcases or offals were removed until after examination by qualified Inspectors of the Health Department. In common with many slaughterhouses throughout the country, there is lack of sufficient hanging and cooling space, the slaughterhouses were originally "private" slaughterhouses, and are too congested owing to the number of animals now being killed.

From these slaughterhouses meat is allocated to the butchers shops in Southampton, Eastleigh, Romsey and New Forest areas.

The handling and transport of carcases and offals from slaughter houses to butchers shops has been, and still is, very unsatisfactory. Conferences with Ministry of Food officials have not altered or remedied these unsatisfactory conditions.

In my opinion, the only satisfactory manner in which freshly killed unwrapped meat can be transported, is by suspension upon rails in the transporting vehicle. In the present conditions when meat is stacked upon the floor of the vehicle, it is impossible to keep it free from contamination by dirt, which is carried into the vehicle by the driver's boots when loading and unloading the vehicle.

34,966 animals were slaughtered during the year. Details of the various kinds of animals, and condemnations are shown in the table which follows later.

BUTCHERS SHOPS, SAUSAGE MAKING PREMISES, FOOD SHOPS, DAIRIES, ETC.

Owing to material and labour difficulties, it has not been possible to carry out desirable alterations or renovations.

FOOD UNFIT FOR HUMAN CONSUMPTION.

Meat and other foods owned by the Ministry of Food and found to be diseased or otherwise unfit for human consumption, are taken over by another Department of the Ministry of Food for salvage purposes. All other condemned foods are, if suitable, salvaged at the Corporation's Concentrator plant for pig or poultry feeding.

DISEASED OR UNSOUND MEAT.

The following carcases, parts of carcases and organs were found to be unfit for human consumption on account of disease or other reasons. Details of the various kind of animals and percentage affected by disease, follow this summary in a tabulated form.

BEEF	266 whole carcases	157 quarters.
	2998 livers	1826 lungs
	537 skirts	862 hearts
	1110 heads and tongues	544 spleens
	278 mesenteries	320 tripes
	271 tails	59 kidneys
PORK	26 whole carcases	4 quarters
	77½ heads	200 plucks
MUTTON	24 whole carcases	22 quarters
	1998 plucks	
VEAL	22 whole carcases	84 plucks

Weight of meat condemned in slaughterhouses 154,702 lbs.

,, ,, offal ,, ,, ,, 105,663 lbs.

Unsound or damaged meat condemned in shops and stores 4,975 lbs.

	Steers, Heifers & Bulls	Cows	Sheep and Lambs	Calves	Pigs, Sows & Boars
Number of animals killed	4,859	3,394	13,547	11,518	1,648
All diseases EXCEPT Tuberculosis. .. Whole carcases condemned	3	20	24	20	13
Carcases of which some part or organ was condemned.	786	897	1,999	59	112
Percentage affected ..	16.23	27.02	14.93	0.68	7.58
Tuberculosis ONLY Whole carcases ..	46	198	—	2	13
Carcases of which some part or organ was condemned	538	991	—	6	96
Percentage affected ..	12.01	35.03	—	0.07	6.61

The following articles of food, by reason of decomposition or damage were found to be unfit for human consumption and were voulntarily surrendered, and salvaged when suitable for pig or poultry feeding. Butter, Margarine, Lard and Cheese were returned to the manufacturers through trade channels, in accordance with a Ministry of Food " Instruction."

MEAT AND MEAT PRODUCTS.

293 lbs. Bacon 202 lbs. Sausages

Weight 495 lbs.

GROCERIES, SWEETMEATS, ETC.

344 lbs. Dried Milk	131 lbs. Tea	90 lbs. Sugar
1203 lbs. Margarine	248 lbs. Butter	22 lbs. Peanut Butter
247 lbs. Cheese	523 lbs. Cocoa	335 lbs. Chocolate & Sweets
1629 lbs. Cereals	968 lbs. Flour	16 lbs. Biscuits
350 lbs. Cake	2922 lbs. Bread	786 lbs. Cake & pudding mixture
896 lbs. Pearl Barley	392 lbs. Soup Powder	932 lbs. Dried Fruits
26 lbs. Jam	218 pkts. Dried Egg	20 lbs. Oddments

Weight 12,298 lbs.

POULTRY, RABBITS, EGGS, ETC.

4262 lbs. Poultry & Ducks	32 lbs. Rabbits	3071 Shell Eggs
9 lbs. Pork Pies	560 lbs. Sausage Rusk	336 lbs. Glucose
		420 lbs. Yeast

Weight 8690 lbs.

VEGETABLES AND FRUIT.

5 tons Cabbage	1 ton 15 cwt. Celery	19 ton 4½ cwt. Potatoes
6½ cwt. Green Peas	212 lbs. Dried Beans	48 lbs. Peaches
27 jars Pickles		

Weight 59226 lbs.

FISH.

395 st. Herrings	834 st. Fillets	100 st. Plaice Soles etc.
84 st. Megrims	36 st. Bream	93 st. Skate
23 st. Hake	18 st. John Dory	154 st. Whiting
227 st. Mackerel	246 st. cured Had-	98 st. Kippers
49 st. Bloaters	dock and Codling	85 st. Shrimp & Prawns
542 lbs. Lobsters	450 lbs. Crabs	122 st. Mixed fish

Weight 36888 lbs.

CANNED GOODS.

5308 tins of milk	1925 tins Fish	2697 tins meat
3077 tins vegetables	272 tins Fruit	277 tins jam
23 tins meat roll	19 tins sausage	320 tins soup etc.
15 tins paste	meat	4 tins cheese
5 tins puddings	8 tins macaroni	

Weight 18974 lbs.

TOTAL WEIGHT OF FOOD, including diseased and unsound meat and offal found unfit for human consumption—179 TONS 8½ CWT.

MILK.

There were 4 Cow Keepers and 15 Dairies registered within the Borough during the year.

1 Cow keeper produced and bottled Tuberculin Tested Milk.

3 Cow keepers produced ordinary milk, the whole of which was sold to a local firm of dairymen for pasteurisation.

3 Dairymen process and retail Pasteurised milk at 4 licensed premises.

2 Dairymen process and retail Heat Treated Milk under licence from the Ministry of Food.

All remaining Dairymen, with one exception, sell milk which

has been pasteurised, although not using a " Special Designations " label.

All milk supplied to schools and hospitals is pasteurised or T.T. certified. It is considered that 99% of the milk consumed daily in Southampton has been subjected to satisfactory heat treatment.

211 samples were chemically examined, the results of these examinations are seen in the Food and Drugs Sampling Table which follows later in this Report.

Average content of milk examined,

Fat 3.92%. Non fatty solids 8.92%. This average was obtained from 33 samples of Tuberculin Tested Milk and 178 samples of ordinary milk.

MILK SPECIAL DESIGNATIONS ORDER.

The following licences were granted by this Local Authority,

1 Licence to produce and bottle Tuberculin Tested Milk.
4 Licences to produce Pasteurised Milk (Holder method).
3 Dealers Licences to use the designation " Tuberculin Tested."
1 Supplementary Licence to use the designation " Tuberculin Tested."

2 Dealers Licences to use the designation Pasteurised.
1 Supplementary Licence to use the designation Pasteurised.
33 Samples of Tuberculin Tested Milk were examined:—
3 did not comply with the prescribed conditions, the remainder were satisfactory.

93 samples of Pasteurised milk were examined:—
16 did not comply with the prescribed condidtions viz 16 failed the Methylene Blue Test, 3 of which also failed to pass the Phosphatase Test.

HEAT TREATED MILK (MINISTRY OF FOOD LICENCE).

Two dairymen were licensed to produce " Heat Treated " milk.
30 samples were examined:—

5 failed to comply with the full standard requirements, one of which also failed to pass the Phosphatase Test.

NOTE: the majority of samples are taken in the streets and Public Institutions.

SAMPLING—FOOD AND DRUGS ACT, 1938.

During the year 402 samples were obtained for examination by the Public Analyst. A table of the various articles is shown followed by a summary of unsatisfactory samples and remarks regarding them.

Number of samples taken.	Article.	Satis-factory	Not Satis-factory	Number of samples taken.	Article.	Satis-factory	Not Satis-factory
6	Aspirins	6	—	3	Ice Cream	—	3
7	Baking Powder	7	—	6	Jam	6	—
6	Bi Carbonate Soda	6	—	13	Lard	10	3
6	Bismuth Tablets	5	1	12	Margarine	12	—
3	Boracic Ointment	3	—	3	Meat Paste	2	1
13	Butter	13	—	211	Milk	192	*19
6	Calcium Lactate	6	—	6	Mustard	6	—
6	Camphorated Oil	6	—	9	Sausages or Sausage Meat	4	5
6	Castor Oil	6	—	6	Saccharine	6	—
6	Cheese	6	—	11	Soft Drinks	5	6
6	Cocoa	6	—	6	Soup	6	—
6	Coffee	6	—	3	Sulphur Ointment	3	—
3	Fish Paste	3	—	1	Table Jelly	1	—
11	Gelatine	11	—	6	Vinegar	5	1
6	Hydrogen Peroxide	6	—	3	Zinc Ointment	3	—
6	Iodine	6	—				

* 13 unsatisfactory milk samples were taken from the same farmer in the course of tracing the cause of a slight amount of added water. The "appeal to the cow" samples revealed that the first two gallons passed through the milking machine at A.M. and P.M. contained added water; the milk passed through after this was satisfactory. The unsatisfactory conditions were soon rectified and subsequent samples were satisfactory.

For details, see summary of unsatisfactory samples which follows this report.

SUMMARY OF UNSATISFACTORY SAMPLES.

No. of Sample in Register	Formal or Informal	Article	Remarks
21	I.	Lard	Found to be cooking fat, warning to shopkeeper.
23	I.	Lard	Found to be cooking fat, warning to shopkeeper.
			Fat / Non Fat solids / Freezing point test / Added water
33	F.	Milk	4.25% / 8.26% / indicated / 2.8%
34	F.	,,	3.55% / 8.11% / ,, / 4.5%
35	F.	,,	2.85% / 8.22% / ,, / 3.2% (5% deficient in fat)
37	F.	,,	5.15% / 7.94% / ,, / 6.5%
38	F.	,,	3.05% / 8.36% / ,, / 1.6%
39	F.	,,	3.60% / 7.94% / ,, / 6.5%
			These were six samples taken from a consignment of 8 churns from one farmer in transit to a dairy, the other two samples were genuine milk—see following samples.
			Fat / Non Fat solids / Freezing point test / Added water
42	F.	,,	4.40% / 8.25% / indicated / 2.9%
43	F.	,,	3.20% / 8.25% / ,, / 2.9%
44	F.	,,	3.40% / 8.23% / ,, / 3.1%
45	F.	,,	3.55% / 8.36% / ,, / 1.6%
47	F.	,,	6.95% / 8.13% / ,, / 4.3%
			These were samples of 8 samples procured at the farm—3 samples were genuine– see following samples
			Fat / Non fat solids / Freezing point test / Added water
48	F.	,,	2.85% / 8.52% / indicated / 2.2%
54	F.	,,	4.70% / 8.61% / ,, / 3.3%
			These were " appeal to the cow " samples—the Inspector being present at the time of milking. They were taken from the first 2 gallons passed through the milking machine A.M. and P.M. respectively; 8 other samples taken after these after these first two samples were satisfactory.
143	I.	Milk	8.3% deficient in fat.
144	I.	Milk	10.0% deficient in fat.
			These were informal samples taken for heat treatment examination. Subsequent formal samples were satisfactory.

Unsatisfactory samples —*continued.*

No. of sample in Register	Formal or Informal	Article	Remarks
145	I.	Vinegar	7.546% deficient in Acetic Acid. Formal sample unobtainable.
162	I.	Ice Cream	Boric Acid absent. Based upon the standard of Accredited Milk, these samples were unsatisfactory
163	I.	Ice Cream	Boric Acid absent.
164	I.	Ice Cream	Boric Acid absent.
193	I.	Pork Sausages	15.5% deficient in meat content—subsequent formal sample satisfactory.
194	I.	Pork Sausage meat	21.4% defiicient in meat content—see sample 221.
195	I.	,, ,, ,,	30.3% deficient in meat content—see sample 222.
199	I.	Milk	3% deficient in fat—this was an opened bottle of milk submitted to Department by a private person—subsequent formal sample taken from the dairyman was satisfactory.
206	I.	Soft drink	30.0% deficient in acid.
207	I.	Lemonade	26.6% deficient in acid. Subsequent formal samples were satisfactory.
208	I.	Lemonade	19.3% deficient in acid. See formal sample 251.
209	I.	Lemonade	40.0% deficient in acid. See formal sample 252.
221	F.	Pork Sausage meat	39,7% deficient in meat content—the analyst certificate was not received early enough to institute proceedings under the Food and Drugs Act, therefore a prosecution was taken by the Ministry of Food-Meat Products Order, 1944. Fines amounting to £10 and 7 guineas costs were imposed.
222	F.	Pork Sausage meat	17.8% deficient in meat content prosecution taken by the Ministry of Food for similar reason as preceding offence—Fines amounting to £10 and 3 guineas costs were imposed.
230	I.	Milk	Fat 2.30% Non Fat Solids 8.88%—this was one of 9 samples taken in transit from a farmer to a dairy. The average fat content of the 9 samples was excellent, no action taken.
251	F.	Soft drink	24.0% deficient in Citric Acid.

Unsatisfactory samples—*continued.*

No of Sample in Register	Formal or Informal	Article	Remarks
252	F.	Soft drink lemonade	26.6% deficient in Citric Acid. Satisfactory explanation given to M.O.H.
283	I.	Milk	Fat 2.70%. Non-fat solids. 9.33%. This sample was obtained for pasteurisation examination; other samples from the same firm, and subsequent formal samples were satisfactory.
315	I.	Lard	Not genuine lard—cooking fat—shopkeeper warned.
326	I.	Milk	Fat. 2.90%. Non fat solids 8.70%. This sample was obtained for pasteurisation examination–subsequent formal samples were satisfactory.
357	I.	Bismuth Tablets	20.7% Calcium Carbonate declared found to contain 15.1%. Letter sent to vendors—who withdrew stocks for re-labelling.
378	I.	Meat Paste	12.5% deficient in meat content—a formal sample was not obtainable, all stocks of this consignment had been sold. A letter was sent to the manufacturers who stated that they were not aware that there is now (Dec. 1946.) no control on the maximum per centage of meat content and that they would at once increase the meat content of their products.

MISCELLANEOUS SAMPLES SUBMITTED TO BOROUGH ANALYST FOR VARIOUS REASONS, COMPLAINTS, ETC.

4 Dried Milk	Found to be rancid.
2 Tins Sardines	Both normal
1 Chocolate Fig Bar	Normal
1 Sponge Mixture	Mouldy
1 Tin Crayfish	Normal
1 Bottle of Milk	Sour
1 Tin Pilchards	Normal
1 Tin Salmon	Complaint of pieces of glass—found to be Ammonia Phosphate crystals—no action.
1 Tin Salmon	Normal
1 Flour	Mite Infested
4 Household Milk	All Normal
2 Tins Evaporated Milk	Both Normal
2 Milk Bottles	Dirty

SLAUGHTER OF ANIMALS ACT.

13 licences to slaughter and stun animals were granted during the year.

PUBLIC HEALTH (SHELLFISH) REGULATIONS.

No known infringements of the Regulations occurred during the year.

FERTILIZER AND FEEDING STUFFS ACT.

3 Informal samples were obtained and analysed under the above Act—all samples complied with the guarantee.

County Borough of Southampton

ANNUAL REPORT

ON THE

HEALTH

OF THE

PORT OF SOUTHAMPTON

For the Year 1946

BY

H. C. MAURICE WILLIAMS, O.B.E.

M.R.C.S., L.R.C.P., D.P.H.,

Medical Officer of Health

TO THE

County Borough and Port of Southampton.

STAFF OF THE SOUTHAMPTON PORT HEALTH AUTHORITY.

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‡H. C. MAURICE WILLIAMS, O.B.E., M.R.C.S., L.R.C.P., D.P.H.
Port Medical Officer of Health and Medical Officer of Health for the County Borough of Southampton.

‡W. P. CARGILL, M.B., D.P.H.
Deputy Port Medical Officer of Health and Deputy Medical Officer of Health for the County Borough of Southampton.
‡—(Also acts as Inspector of Aliens)

H. P. FOWLER, M.B., Ch.B., D.P.H.
Assistant Port Medical Officer of Health and Assistant Medical Officer of Health for the County Borough of Southampton. (Appointed 2nd Sept. 1946—it is regretted that Dr. Fowler died 11th Nov. 1946 after a short illness).
(Also acted as Inspector of Aliens).

W. H. J. HURST, R.S.I. Certificate Meat and Foods.
Chief Port Health Inspector. (Retired 30.9.46.)

†C. P. C. PARKER, R.S.I. Certificate Meat and Foods.
Food Inspector.

*P. MANSFIELD, R.S.I. Certificate Meat and Foods.
Assistant Port Health Inspector.

§ E. MATTHEWS, R.S.I. Assistant Port Health Inspector.

*T. C. H. ROGERSON, R.S.I. Assistant Port Health Inspector.
(Returned to Port Health Staff on 2.10.46.)

*J. C. PEARSON, R.S.I. Assistant Port Health Inspector.

*—Board of Trade Master Mariner's Certificate.
§—Board of Trade Chief Engineer's Certificate.
†—Certificate Naval Architecture.

Southampton Port Health Authority

ANNUAL REPORT

FOR THE

Year Ended 31st December, 1946

BY

H. C. MAURICE WILLIAMS, O.B.E.

M.R.C.S., L.R.C.P., D.P.H.,

Port Medical Officer of Health and Medical Inspector of Aliens

To the Chairman and members of the

Health Committee.

Mr. Mayor, Ladies and Gentlemen,

I have the honour to present my report on the Port Health Service in Southampton for the year 1946.

During the year 1946, 660 vessels from foreign ports were dealt with by this Authority, exclusive of all transports and hospital ships of the U.S. registry, and of transports and ships not of U.S. registry but mainly carrying U.S. troops. These latter were dealt with and cleared by the United States Army Medical Authorities in co-ordination with the Port Medical Officer, and so eased a very considerable burden from the limited medical and sanitary staffs of the civil Port Health Authority.

The passenger traffic of the port has shown a steady increase, noticeably from the Channel Islands, the United States of America, Canada, South Africa, India, Australia and New Zealand.

A number of civilian sick have been landed from 24 hospital ships—6 of which arrived from Germany and 18 from ports principally in the Far and Middle East. Of the many patients landed and dealt with by the Port Health Authority, 201 required immediate hospital treatment and were transferred to local hospitals. Of this number 84 arrived from Germany and 117 from other countries.

During the year five vessels arriving in the Port had smallpox on board, or had disembarked a case or cases during the voyage. The action taken in respect of these vessels and cases is summarised on page 179 of the Report.

The British Overseas Airways Corporation flying boats continue to be operated from Poole, but owing to unsuitable weather conditions at Poole two of their craft were diverted to this Port where passengers were disembarked.

A motor launch has been acquired for the use of the Port Health Authority, and will, as in pre-war years be used for boarding oil-tankers at the Fawley and Shell-Mex jetties, and other vessels which do not berth in the docks.

The operation of the launch will greatly facilitate visits to outlying vessels in the Port Health Area.

I wish to take this opportunity of thanking the Chairman, and Members of the Health Committee for their kindness and support and also the various Government and Port Officials for their ready co-operation with the Department in carrying out the work entrusted to the Port Health Authority.

I am,

Mr. Mayor, Ladies and Gentlemen,

Your obedient servant,

H. C. Maurice Williams

Port Medical Officer.

GENERAL PROVISION.

The Port and Harbour of Southampton are controlled by the Southampton Harbour Board as constituted by the Southampton Harbour Act, 1913.

The Port Health Authority, which was permanently constituted by an Order of the Local Government Board, dated June 8th, 1893, is "the Mayor, Aldermen and Burgesses of the Borough of Southampton acting by the Council," It exercises Port functions in waters abutting upon the County Borough of Southampton, the Urban Sanitary District of Fareham, and the Rural Districts of New Forest, Romsey and Stockbridge, and Winchester.

Since the first day of October, 1935, when the Southampton Port Sanitary Order, 1935, came into force the Southampton Port Sanitary Area was further increased, and the Mayor, Aldermen, and Burgesses acting by the Council are constituted permanently the Port Sanitary Authority for the district. The new area is now defined :—

> A straight line from Stone Point to East Lepe Buoy, thence in a straight line to Gurnard Ledge Buoy, thence in a straight line to a point one cable north of Egypt Point, thence in a straight line to Prince Consort Shoal Buoy, thence in a straight line to Old Castle Point, thence in a straight line to the most northerly point of Ryde Pier, thence in a straight line to the junction of the Western and Southern Boundary of the Portsmouth Port Sanitary Authority, thence in a straight line to the most Southerly point of the pier of the Southern Railway at Stokes Bay, thence in a straight line to the Lee Point Sewer Buoy, thence in a straight line to Hill Head ; together with the waters of those parts of the said Customs Ports within such limits, and all docks, basins, harbours, quays, wharves, creeks, rivers, channels, roads, bays, and streams within those parts of the said Customs Ports, and the places which may from time to time be appointed as the Customs boarding station or stations for those parts of the said Customs Ports, and the places for the time being appointed for the mooring or anchoring of ships for those parts of the said Customs Ports under any regulations for the prevention of the spread of diseases issued under the Authority of the statutes in that behalf and for the purposes of any such regulations as aforesaid shall also extend to any ship which in pursuance thereof or of any directions given thereunder shall be moored or anchored at the place appointed thereunder as aforesaid, or which shall be on its way thither.

Section IV.—PORT HEALTH REGULATIONS, 1933 and 1945.

1. ARRANGEMENTS FOR DEALING WITH "DECLARATION OF HEALTH."

The following routine has continued to work satisfactorily throughout the year :—

(a) That where a vessel is first boarded by an officer of the Port Health Authority, that officer shall retain the "Declaration of Health." and leave an " All Clear" Certificate on board for the Customs Officer.

(b) That where an Officer of Customs and an Officer of the Port Health board a vessel together, the latter officer shall take the " Declaration of Health " and hand the " All Clear " Certificate to the Customs Officer.

(c) That where a vessel is first boarded by a Customs Officer, that Officer shall take the " Declaration of Health." and forward it to the Port Health Authority as soon as possible, and the officer of the Port Health Authority receiving the " Declaration of Health " shall sign a receipt, if required.

Where a vessel has been boarded by an officer of H.M. Costums prior to the visit by an officer of the Port Health Authority, a form is left with the master indicating the condition reported on the " Declaration of Health " and stating whether the vessel has been :—

(a) Granted full pratique.

(b) Granted modified pratique.

(c) Or detained for inspection by the Port Medical Officer.

Vessels which trade exclusively within the " home trade " limits are not required to present a " Declaration of Health " but the Southampton Port Health Authority request them to complete a blue medical certificate, giving essential particulars regarding infectious disesase (actual or suspected) on arrival.

2. BOARDING OF VESSELS.

All vessels which berth within the Docks, and all vessels anchoring elsewhere and landing passengers by tender at this Port, are boarded on arrival by an officer of the Port Health Authority and H.M. Customs.

Other vessels which berth outside the Docks are boarded by H.M. Customs, and if requiring attention, are dealt with later by the Port Health Authority.

All vessels which arrive from any foreign Port or seaboard which is included in the list prepared pursuant to the provisions of Article II, and any vessels which have had a case of infectious disease during the voyage are visited by one of the port Medical Officers.

3. NOTIFICATION TO THE AUTHORITY OF INWARD VESSELS REQUIRING SPECIAL ATTENTION (WIRELESS MESSAGES, LAND SIGNAL STATIONS, INFORMATION FROM PILOTS, CUSTOMS OFFICERS, ETC.).

The Minister of Health, by notice published in the " London Gazette," 31st October, 1933, declared that the provisions of Article 6 of the Port Sanitary Regulations, 1933, shall apply to the Southampton Port Sanitary district as from 1st February, 1934.

The section in question reads as follows :—

6. (1) Where the Minister has by notice published in the ' London Gazette ' declared that the provisions of this Article shall apply to any district specified in the notice, the master of any foreign-going ship fitted with a suitable wireless transmitting apparatus, on approaching such a district from a foreign port, shall, if any person on board has symptoms which may be indicative of infectious disease other than tuberculosis, or if there are any circumstances requiring the attention of the medical officer, send to the Port Health Authority a wireless message embodying such of the information set out in the Second Schedule to these regulations as are applicable.

(2) Any wireless message so required to be sent so as to reach the Port Health Authority not more than twelve, and not less than four hours, before the time at which the ship is expected to arrive in the district.

(3) Any wireless in wireless code delivered to the Port Health Authority shall, unless otherwise provided in the notice published pursuant to paragraph (1) of this article, conform with the section relating to the 1931 International Code of Signals."

Arrangements have been made for the reception (and decoding, if necessary) of wireless messages sent direct to the Port Health Office, and the telegraphic address of " Portelth Southampton " has been registered by the Post Office.

Wireless messages are also received through Agents approved by the Port Health Authority. Before this approval is given, however, agents are required to furnish evidence that they possess facilities for receiving such messages at all times of the day or night, and can undertake prompt transmission to the Port Health Office of any messages received by them relating to the state of health on board.

The following agents, having satisfied these requirements, have been approved as agents for the purpose of Article 6 of the Regulattions :—Anglo American Oil Co.; B. Ackerley & Co.; Canadian Pacific Company; Coast Lines Limited; Cunard White Star

Limited; Escomb McGrath & Co.; Kellar Bryant & Co.; Haswell & Co.; McGregor, Gow & Holland; T. Meadows & Co.; W. H. Muller & Co.; R. & J. H. Rea, Ltd.; and Wainwright Bros.

The following companies elected to send their messages direct from the vessels to the Port Health Authority :—

Southern Railway Company; Dawson Bros., Ltd.; General Steam Navigation Co.; Royal Mail Lines Ltd.; Union Castle Company; Sandell Bros.; J. Horn & Son; Stephenson & Clarke, Ltd.

Towards the end of the year, the pre-war practice of sending wireless messages from vessels was resumed in a few instances, but in the majority of cases, such information regarding infectious disease or any other circumstances requiring the attention of the Medical Officer on incoming vessels was made available to the Port Health Authority through the services of the shipping companies or the Sea Transport Officer.

H.M. Customs advise the Port Health Authority of any cases of sickness which come to their notice on outlying vessels.

4. Mooring Stations Designated under Article 10 : (a) Within the Docks, (b) Outside the Docks.

The following " Mooring Stations " have been established with the concurrence of the Customs and Harbour Authorities, and the consent (where necessary) of the Minister of Health :—

Inner Mooring Stations.

(a) For vessels bound for the Southern Railway Docks, for Agwi Jetty, or for Shell-Mex Jetty.—The usual place of mooring, subject to the vessel being moored at least six feet from the quay or jetty.

(b) For vessels bound for places in the Southampton Port Sanitary Area other than those specified at (a)—Between Hythe Pier and the Pilot Cutter Moorings in Southampton Water.

Outer Mooring Stations.

(a) For vessels not exceeding 500 feet in length.—Between Hamble Spit Buoy and Shell-Mex Jetty in Southampton Water.

(b) For vessels exceeding 500 feet in length.—At Stokes Bay.

5. Particulars of any Standing Exemption from the Provisions of Article 14.

In view of the comprehensive arrangements in force at this Port to secure that incoming vessels are met on arrival by an officer of the Port Health Authority, the only standing exemption to Article 14

applies to vessels which berth outside the Southern Railway Docks, and reads as follows :—" That healthy vessels from an infected port should be allowed to proceed to their own berth and to unload, but the Medical Officer of Health should be in formed as soon as possible. That, in event of the ship being unhealthy, the Customs Officer will notify the Port Health Authority at the earliest possible moment and detain the ship."

The above arrangements have been found to work satisfactorily, and no further standing exemptions are contemplated.

6. Experience of Working Article 16.

The provisions of Article 16 have given rise to no difficulty, and have been willingly observed by all concerned.

Permits are issued by the Port Medical Officer on the application of shipping companies for employees to board in-coming vessels for the purpose of conveying and distributing mails, etc., prior to the vessel being released from control under the Port Health Regulations, 1933 and 1945.

These permits would be withheld in the event of serious infectious disease being present.

Our practice of requiring addresses of passengers landing at Southampton from all vessels, except those which have called exclusively at North Atlantic ports during the voyage, has been continued throughout the year.

The declaration of address and notification of change of address system, advocated by the Association of Port Health Authorities, has been adopted for contacts disembarking at this port.

7. (a) Premises and Waiting Rooms for Medical Examination.

Premises and waiting rooms for medical examinations are provided in connection with the rooms used by the Immigration Officers; on the larger vessels using this port, adequate facilities for medical examination are usually available on board.

(b) Cleansing and Disinfection of Ships, Persons and Clothing, and other Articles.

Disinfection of quarters is carried out in all cases of infectious disease by the staff of the Health Department, or by the Shipping Companies under the supervision of the Port Health Authority.

Formalin spray is the method employed together with thorough cleansing. Should fumigation be required, this is carried out, under the supervision of the Port Health Authority, by firms of chemists who specialise in this work. Contacts requiring disinfection are taken to the Disinfecting Station at West Quay, where fully-equipped bathrooms are available. Clothing and other articles are also dealt

with at this station by means of steam disinfectors.

(c) PREMISES FOR THE TEMPORARY ACCOMMODATION OF PERSONS FOR WHOM SUCH ACCOMMODATION IS REQUIRED FOR THE PURPOSE OF THE REGULATIONS.

No special accommodation is set aside for this purpose, but this could easily be arranged, should the occasion arise, at one of the hospitals situated within the Borough.

(d) HOSPITAL ACCOMMODATION AVAILABLE FOR PLAGUE, CHOLERA, YELLOW FEVER, SMALLPOX, AND OTHER INFECTIOUS DISEASES.

The following hospitals are provided by the Southampton Corporation or made available for use of the Corporation for cases or suspected cases of infectious disease arriving at this Port :—

(1) Isolation Hospital, Millbrook—171 beds are available for these cases.

(2) Smallpox Hospital, Crabwood, near Winchester—arrangements have been made with the Southampton County Council for the provision of 12 beds for small pox cases.

(e) AMBULANCE TRANSPORT.

The motor ambulances provided by the Corporation are available for the port.

(f) SUPERVISION OF CONTACTS.

The procedure for ascertaining passengers' destinations has been described in dealing with the working of Article 16, and the Medical Officer of Health of the district to which such passengers are proceeding is informed by letter, giving necessary particulars. Contacts remaining in the Borough are kept under observation by the Medical Officer of Health.

The same procedure applies to seamen who are paid off in this port.

When drafts proceed to military depots they are kept under surveillance by military authorities.

8. ARRANGEMENTS FOR BACTERIOLOGICAL EXAMINATION OF RATS FOR PLAGUE.

All rats caught or found dead about Docks or on vessels are brought to the Port Health Office, where they are examined, and a proportion submitted to post-mortem examination by the medical officers, specimens being forwarded to the Municipal Laboratory for microscopical and cultural examination.

9. ARRANGEMENTS FOR OTHER BACTERIOLOGICAL OR PATHOLOGICAL EXAMINATION.

This work is carried out by the Pathologist at the Municipal Laboratory, or at the Public Health Laboratory at Winchester.

10. THE DIAGNOSIS AND TREATMENT OF VENEREAL DISEASE AMONG SAILORS UNDER INTERNATIONAL ARRANGEMENTS.

The treatment centre at the corner of New Road and Cardigan Road, Southampton, and two Clinics situated in the Old and New Docks respectively, are devoted entirely to the treatment of venereal diseases, and provide all facilities for treatment for sailors under the International Convention.

The centres are under the charge of a full-time Venereal Diseases Medical Officer and Pathologist, and facilities are provided for daily treatment. The treatment centres enjoy the co-operation of ships' surgeons and shipping companies, who accept certificates of fitness to resume duty issued by the Venereal Diseases Medical Officer.

Cases of venereal disease on board vessels in the Port, coming to the notice of the Port Medical Officers are referred, in the first instance to the centre in Cardigan Road; and subsequently receive further treatment, either at the centre or at one of the clinics situated in the docks.

Leaflets giving particulars of the facilities available, are left by the Port Health Inspectors on board vessels visited by them.

Notices giving particulars about these diseases are renewed regularly, and are fixed in all the public lavatories in the docks.

11. ARRANGEMENTS FOR THE INTERMENT OF THE DEAD.

The Port shares the facilities of the town for this purpose, the Corporation providing cemeteries and a modern crematorium.

The Municipal Mortuary at West Quay Esplanade is available as required.

12. OTHER MATTERS REQUIRING OR RECEIVING ATTENTION.

As required by Article 2, a complete list of infected ports and seaboards is compiled each month by the Port Medical Officer of Health, and six copies fowarded to the Chief Preventive Officer, additions or amendments being notified weekly. Copies are also supplied to the inward pilots, and the Manager, Southampton Airport, and Imperial Airways Ltd.

THE PORT HEALTH AMENDMENT REGULATIONS, 1945.

The Port Sanitary Regulations, 1933, are amended by the Port Health Regulations, 1945, which came into operation 1st December, 1945; and may be cited as the Port Health Regulations, 1933 and 1945.

Examination of the new Regulations show no basic change in present procedure of Port Health Authorities, but amendments have been made which should be of assistance to Authorities in the important service they administer.

THE PRINCIPAL AMENDMENTS ARE :—

Art 2. Provides that for " Port Sanitary Authority " wherever these words occur there shall be substituted " Port Health Authority ". There are other minor amendments in this article.

Art. 3. Requires the Master of a ship from a foreign port, after making a Declaration of Health at the first port of call in the United Kingdom, to report on arrival at any other port in England and Wales every case of illness which has occurred on the ship since the making of the declaration and has not already been reported.

Art. 4. The following words shall be inserted at the end of paragraph (1) of Article 19 of the principal regulations (which relates to the steps to be taken, on the arrival of a ship from a foreign port at an approved port, to keep down the rats) :- " For the purpose of this article, a ship which, having during the previous six months called at a foreign port shall be deemed to have arrived from a foreign port notwithstanding that it may, since its last call at a foreign port, have called at a port outside England and Wales other than a foreign port ".

Art. 5. Amends paragraph (1) of Article 22 of the principal regulations (which relates to the examination of persons proposing to embark on a ship who are suspected to be suffering from certain infectious diseases) by inserting after the word " smallpox " :—" or from any other disease with respect to which a declaration has been made by the Minister under Article 23 of these regulations or by the Secretary of State under any corresponding provision relating to Scotland."

Art. 6. The following article shall be substituted for Article 23 of the principal regulations :—
" Where the Minister has, by notice published in the London Gazette, declared a district to be infected with plague, cholera or yellow fever, or with any other disease

which in his opinion constitutes a menace to other countries by reason of its spread or potential spread, or to be a district in which typhus fever or smallpox exists in an epidemic form then, until the notice is revoked by a subsequent notice published in the London Gazette, the medical officer shall comply with any requirement which may be made by the Minister for preventing the spread of the disease, and in particular (but without prejudice to the generality of the foregoing) the following provision of this part of these regulations shall operate in that district."

Art. 7. (1) The following words shall be inserted in sub paragraph (f) of paragraph (1) of Article 30 of the principal regulations (which sub paragraph empowers a medical officer to prohibit certain persons from leaving a ship, or from leaving it save upon conditions) after the word "conditions":—"(being, in the case of a person who is suffering from, or who has been exposed to infection from, a disease to which any part of the Fourth Schedule to these regulations relates, conditions which do not require anything which could not be required under that Part)".

(2) The following proviso shall be inserted at the end of the said paragraph (1) which sets out the powers and duties under the regulations of medical officers :—" Provided that a medical officer shall not cause, or be required to cause, a ship to be used for the purpose of isolation of a person who is suffering from, or has been exposed to infection from, an infectious disease unless isolation can be effected without delaying or unduly interfering with the movements of the ship."

Art. 8. Paragraph (2) of Article 33 of the principal regulations (which paragraph sets out the duties of persons under surveillance) there shall be substituted the following paragraph :—

"(2) Every person who is placed or kept under surviellance in pursuance of these regulations shall :—(a) give facilities for any medical examination required by the medical officer of health of any local authority in whose area he may be during the period of surveillance; (b) furnish all such information as any such medical officer of health as aforesaid may reasonably require with a view to ascertaining the person's state of health; (c) if so instructed by the medical officer, report on arrival in the district of any local authority, to the medical officer of health of the local authority, and thereafter during the period of surveillance report to that officer at such intervals as he may require.

Provided that no instructions shall be given under sub paragraph (c) of this paragraph by a medical officer unless the Minister by directions to the authority has authorised the giving of such instruction."

Art. 10. The following paragraph shall be substituted for paragraph 4 of Part D of the Fourth Schedule to the principal regulations (which part relates to measures to be taken in the case of smallpox) :—

(a) be offered vaccination and placed under surveillance for a period not exceeding fourteen days after the date of arrival of the ship, or

(b) be placed under surveillance for the said period without vaccination, or

(c) be offered vaccination and isolated until the result of the vaccination is known and thereafter kept under surveillance until the fourteenth day after the date of the arrival of the ship.

Provided that the medical officer shall not impose a requirement set out in sub paragraph (c) or sub paragraph (d) of this paragraph unless in his opinion there is exceptionally serious risk of introduction of smallpox into the country.

In this paragraph " recent vaccination " means vaccination followed either by an immune reaction observed within seventy-two hours of vaccination or by the formation of typical vaccinal vesicals, not earlier than three years and not later than fourteen days before the arrival of the ship."

Art. 11. Set out the revised form of " Declaration of Health " to be completed, in pursuance of Article 13 of the principal regulations, by the master of any foreign-going ship which arrives from a foreign port.

PART 1.

TABLE "A"

SECTION 1—AMOUNT OF SHIPPING ENTERING THE PORT DURING THE YEAR 1946.

	Number	Net tonnage	Number Inspected		Number reported to be defective	Number of vessels on which defects were rem died	Number of vessels reported as having, or having had, during the voyage infectious disease on board
			By the Medical Officer of Health	By the Port Health Inspectors			
FROM FOREIGN							
Steamers	1,337	4,508,933	267	436	43	40	127
Motor	447	1,758,323	48	179	10	9	38
Sailing	6	2,803	—	2	—	—	—
Fishing	—	—	—	—	—	—	—
Flying Boats	—	—	1	1	—	—	—
Total Foreign	1,790	6,270,059	316	618	53	49	165
FROM COASTWISE							
Steamers	2,558	872,743	5	215	43	22	8
Motor	7,155	884,680	2	158	10	4	1
Sailing	96	7,723	—	3	1	1	—
Fishing	—	—	—	—	—	—	—
Flying Boats	—	—	—	—	—	—	—
Total Coastwise	9,809	1,765,146	7	376	54	27	9
Total Foreign and Coastwise	11,599	8,035,205	323	994	107	76	174

NOTE. Of the 323 vessels visited by the Medical Officer of Health, 42 were boarded by the Medical Officer of Health alone, and 281 were boarded by both Medical Officer of Health and Port Health Inspectors.

Section II.—CHARACTER OF TRADE OF PORT.

TABLE "B"

(A) PASSENGER TRAFFIC DURING 1946.

Number of Passengers	PLACES OUT OF EUROPE				Continent of Europe	Channel Islands	Transmigrants
	1st Class	2nd Class	Tourist Class	3rd Class			
Inwards ..			FIGURES		NOT	AVAILABLE	
Outwards ..							

The figures relevant to Table B, normally supplied by the Board of Trade, were not available at the time of submitting this report.

The following table compiled from information supplied by the courtesy of the Southern Railway Company, Southampton Docks, indicates the volume of passenger traffic during 1946.

The total figures for inward and outward traffic does not include members of H.M. Armed Forces, or Government sponsored civilian passengers.

Country.	Passengers Inward	Passengers Outward
Australia and New Zealand ..	5,072	4,606
Belgium	442	—
Canada	4,962	19,095
Channel Islands	96,606	109,605
Dutch East Indies	1,626	881
Far East	2,868	1,871
France	824	28
Germany	110	—
Holland	—	3,234
India	6,797	5,554
Mexico	—	—
Middle East	5,340	2,987
South Africa	7,778	9,341
South America	375	711
United States	29,318	59,299
West Africa	864	1,048
West Indies	235	—
Pleasure Cruises	—	—
Miscellaneous	182	155
Totals	163,399	218,415

(B) CARGO TRAFFIC.

Principal Imports : Foodstuffs (including meat, vegetables, tomatoes, grain) raw materials, manufactured articles, specie, timber, tobacco and Government Stores.

Cargoes are imported from the Channel Islands, ports in Europe, North and South America, Canada, Asia, Africa, Australia, New Zealand and other ports throughout the World.

Principal Exports : Leather wear, manufactured articles and machinery, tobacco, motor vehicles, and Government Stores.

Cargoes are exported to the Channel Islands, ports in the British Empire, and other ports throughout the World.

Coastwise Trade : Cargoes landed include coal from the North East Coast and South Wales ports, transhipped goods and home produce from various ports in the United Kingdom .

Section III.—SOURCE OF WATER SUPPLY

(1) (A) FOR THE PORT. (B) FOR SHIPPING.

The water supply to the port and for vessels is the same as supplied to the town of Southampton. This water is derived from deep wells sunk into the chalk at Otterbourne, Twyford, and Timsbury.

Special sampling taps have now been fitted at the following locations in the Southampton Docks :—

(1) Port Health Office	Old Docks.
(2) Transformer House	New Docks, (East End).
(3) Pump House	New Docks, (West End).

Samples of water are taken weekly from each of these taps and submitted for bacteriological and chemical examination.

Samples of water are also taken from time to time from the quayside hydrants supplying water to vessels.

The Southampton Corporation supplies water to the whole of the Docks, and mains are available at every berth for supplying vessels.

There are hydrants for the supply of water at the Town Quay, Shell-Mex and Agwi Jetties, and at the wharves at Eling, Redbridge, and on the River Itchen.

(2) HYDRANTS AND HOSEPIPES.

Hydrants used for supplying vessels are of the recessed type built into the quay side, and adequately drained. Each hydrant is

fitted with a short stand pipe protected by a metal screw cap. When not in use the hydrant " box " is covered by a close fitting plate flush with the quay side.

Hosepipes used for connecting the hydrants with vessels are of the canvas or rubber hose type and when not in use these are stored in special boxes at positions throughout the Docks.

Inspection of the hydrants and hose connection etc., are made from time to time during the year.

(3) WATER SUPPLY VESSELS.

The following vessels are equipped for supplying drinking water to vessels which do not berth.

S/Tug " Canute "	Water	carrying	capacity	45	Tons.
S/Tug " Clausentum "	,,	,,	,,	45	,,
S/Tug " Romsey "	,,	,,	,,	100	,,
Dumb Barge " Eagle "	,,	,,	,,	30	,,

The last named is fitted with a single metal tank installed in the hold of the vessel.

The suitability of these vessels for water carrying purposes, and the sanitary condition of the water tanks are satisfactory.

Section V.—MEASURES AGAINST RODENTS.

1. STEPS TAKEN FOR DETECTION OF RODENT PLAGUE : (A) IN SHIPS IN THE PORT. (B) ON QUAYS, WHARVES, WAREHOUSES, ETC., IN THE VICINITY OF THE PORT.

All vessels entering the port are inspected for indication of rat infestation, and all rats caught on ships or about the docks are examined by the staff of the Port Health Office, a proportion being selected for post-mortem and bacteriological examination.

2. MEASURES TAKEN TO PREVENT THE PASSAGE OF RATS BETWEEN SHIPS AND THE SHORE.

The following regulations are enforced in the case of all vessels from infected ports, grain carrying ships, or vessels showing evidence of rat infestation, and have been voluntarily adopted by practically all the shipping companies in the case of other vessels.

(1) That the ship be so moored that at no point is she less than six feet from the quay or wharf.

(2) That all ropes, warps, etc., used for mooring the ship be fitted with canvas rat-guards, two feet long, the same to

be daily coated with tar, or fitted with shields or discs; all such rat-guards when fitted to be clear of ship and quay, and readjusted with rise and fall of the tide.

(3) That no gangway, shoot, plank, etc., connecting the ship with the shore, except that which is in actual use, be permitted; and that any gangway, shoot, plank, etc., while connecting the ship with the shore, and not in constant use, shall have a man in attendance day and night. The gangway shall be provided with a light from sunset to sunrise.

(4) Booms and other appliances provided for the purpose of keeping the ship in position, and connecting the ship with the quay, shall be kept coated with tar parcelling at least three feet in length, and the tar renewed daily.

3. Method of Deratisation of : (a) Ships. (b) Premises in the Vicinity of Docks or Quays.

(a) On Ships.

(1) Trapping and poisoning.—Regular trapping on board ship is carried out by the Shipping Companies, the majority of whom employ professional rat-catchers. Poison baits have been used in several instances during the year as an accessory method.

(2) Fumigation.—During the year 13 vessels entered the Port on which it was found necessary to carry out fumigation, or part fumigation owing to the prevalence of rats or other vermin on board.

Fumigations for which deratisation certificates were issued totalled 37; the fumigant used being Zyklon—1; H.C.N. Liquid—12; H.C.N. in absorbant—23; and Sulphur—1.

In all cases where deratisation certificates were asked for by Companies, the work was supervised and approved throughout by the Port Health Authority.

(b) Premises in the Vicinity of Docks and Quays.

The Southern Railway Company employ two full-time rat-catchers about the docks, warehouses, etc., the method employed being trapping and poisioning.

4. Measures taken for the Detection of Rat Prevalence in Ships and on Shore.

Systematic inspection is carried out for rat traces and harbourage on all vessels, quays, wharves, and warehouses. The

systematic measures which are carried out for the destruction of rats, referred to in the previous section, resulted in 4,679 rats being caught (2,166 on vessels and 2,513 on shore).

RAT-PROOFING.

(a) To what extent are docks, wharves, warehouses, etc., rat-proof ?

The standard of rat-proofing of the sheds, wharves, and warehouses is, generally speaking satisfactory—this statement however, can only be applied to such structures which have escaped bomb damage, or where war damage repairs have been effected.

(b) Action taken to extend rat-proofing.

(i) In ships—schedules of work are served in all cases where it is found necessary to correct or protect rat harbourage or runs in vessels requiring deratisation exemption certificates.

(ii) On shore—practically all the existing cargo sheds are of metal construction with concrete floors.

It is anticipated that all buildings and sheds to be erected under the post war reconstruction programme for the old and new docks will embody all the modern principles to prevent rat harbourage, and this work when completed, together with the repair of bomb damaged buildings, and the return of normal maintenance, will reduce rat harbourage to a minimum.

During the year two large cargo and passenger receiving sheds in the old docks have been reconstructed; in both sheds the existing timber floors have been removed and concrete floors laid.

TABLE "E" RATS DESTROYED DURING 1946. (1) ON VESSELS.

Number of rats	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black	152	291	98	213	256	264	162	110	44	148	382	46	2166
Brown	—	—	—	—	—	—	—	—	—	—	—	—	—
Species not recorded	—	—	—	—	—	—	—	—	—	—	—	—	—
Examined	152	291	98	213	256	264	162	110	44	148	382	46	2166
Infected with Plague	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE "F" RATS DESTROYED DURING 1946. (2) IN DOCKS, QUAYS, WHARVES, AND WHAREHOUSES.

Number of rats	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black	3	43	30	17	10	7	4	28	8	3	2	—	156
Brown	186	146	185	192	205	229	231	200	209	169	230	176	2358
Species not recorded	—	—	—	—	—	—	—	—	—	—	—	—	—
Examined	189	189	215	209	215	236	235	228	217	172	232	176	2513*
Infected with Plague	—	—	—	—	—	—	—	—	—	—	—	—	—

Of the above number of rats caught in Docks, etc., the number caught in the New Docks was 1267

* The totals in E and F of rats examined include 30 Bacteriologically examined.

Measures of Rat Destruction on Plague " Infested " or " Suspected " vessels form Plague-infected Ports arriving in the Port during the year 1946.

TABLE " G "

Total Number of such vessels arriving	Number of such vessels fumigated by S.O.2.	Number of rats killed	Number of such vessels fumigated by H.C.N.	Number of rats killed	Number of such vessels on which trapping, poisoning etc. were carried out	Number of rats killed	Number of such vessels on which measures of rat destruction were not carried out
1	2	3	4	5	6	7	8
130	Nil	Nil	14	225	9	336	107

DERATISATION CERTIFICATES AND DERATISATION EXEMPTION CERTIFICATES ISSUED DURING THE YEAR 1946.

TABLE " H "

Net Tonnage	Number of ships	Number of Deratisation Certificates issued							Number Deratisation Exemption certifict's issued	Total Certificates issued
		After fumigation with					After trapping, poisoning, etc.	Total		
		Zyklon B	Liquid H.C.N. in absorbent	Liquid H.C.N.	H.C.N. Galardi	S.O.2.				
Ships up to 300 tons	25	—	2	4	—	—	—	7	19	25
,, from 301 to 1,000 tons	29	—	2	4	—	1	—	7	22	29
,, from 1,001 to 3,000 ,,	16	—	1	—	—	—	—	1	15	16
,, from 3,001 to 10,000 tons ..	44	1	7	4	—	—	—	12	32	44
,, over 10,000 tons ..	24	—	11	—	—	—	—	11	13	24
TOTALS ..	138	1	23	12	—	1	—	37	101	138

Section VI.—HYGIENE OF CREW SPACES.

Regular inspection of crew spaces has been made during the year; nuisances and structural defects have been dealt with as under :

Verbal notices to abate nuisances	92
Written notices to abate nuisances	7
Letters to Ministry of Transport	5
Letters to Owners	3

In carrying out inspections consideration has been given to the Board of Trade pamphlet entitled " Instructions as to the Survey of Masters and Crew Spaces." This pamphlet was published in 1937 and the instructions have, as in previous years, proved helpful in assessing the general standards desirable in ship accommodation.

TABLE " J "

Nationality of vessels	Number inspected during 1946	Defects of original construc-tion	Structural defects through wear and tear	Dirt, verminand other conditions prejudicial to health
British	1000	19	52	90
Other Nations	223	—	1	11

The following table shows details of defects and nuisances found, and the number remedied.

	Defects Found	Complied with
Accumulation of rubbish, stagnant water etc.	2	2
Dampness in crews' quarters ..	8	6
Defective ventilation	4	1
,, radiators, or steam heaters in crews' quarters ..	1	1
,, ports	12	7
,, bunks	2	2
,, floors	2	2
,, or missing doors to crews' quarters	4	3
,, or missing clothes lockers	2	1
,, or absence of flushing apparatus to W.C's ..	8	3
,, or obsolete W.C's. ..	1	—
,, W.C's., pans or seats, etc.	10	6
,, or missing stoves ..	2	2
,, deckheads, decklights and hawse pipes	13	8
,, bulkheads	1	—
,, ship's side plating ..	2	—
Insanitary crews' quarters	17	11
Insanitary W.C's., wash-places, etc.	8	7
Water tanks, defective or dirty condition	3	3
Ships's stores in accommodation ..	1	1
Verminous quarters, etc.	51	47
Smoke nuisances	2	2
Defective soil pipes, waste pipes, etc.	3	2
Absence of deckhead sheathing ..	1	1
Absence of lighting	2	—
Absence of washing facilities ..	2	2
Choked scuppers	1	—
Other nuisances, ...	8	4
TOTALS ..	173 on 107 vessels	124 on 76 vessels

Nuisances were abated on 2 vessels in respect of Notices served in 1945.

Section VII.—FOOD INSPECTION IN THE PORT

Report on the working of the Public Health (Imported Food) Regulations, 1937; Public Health (Preservatives etc., in Food) Regulations 1925 to 1940; Public Health (Imported Milk) Regulations, 1926.; Public Health (Meat) Regulations, 1924.; Public Health (Shell-fish) Regulations, 1934; for the year 1946.

The inspection, examination and control of foodstuffs imported under the above regulations in this port has been greatly facilitated by the assistance rendered by Officers of H.M. Customs and Excise, Southern Railway Company and Shipping Companies, the Shipping Agents, and the Meat and Fruit Importing Companies.

The amount of foodstuffs landed in the port was 132,440 tons —this figure shows a considerable increase over that of the year 1945, due in main to the renewal of trade between this port and those of the Empire countries.

The various foodstuffs landed during the year are listed in the following table, together with the countries of origin.

Fruit (Apples, Oranges, Grapes, Peaches, and Apricots)	41,913	tons	S. Africa, U.S.A., Palestine and Spain
Potatoes	10,021	,,	British Isles
Tomatoes	23,792	,,	Channel Islands
Crayfish	138	,,	South Africa
Grain	31,447	,,	Canada and U.S.A.
Meat	6,002	,,	Australia, New Zealand and South Africa
Butter	2,378	,,	Australia, New Zealand and South Africa
Preserves	2,528	,,	Canada, Australia, New Zealand, South Africa and U.S.A.
Coffee	1,448	,,	,,
Canned Fruit	764	,,	,,
Canned Meat	2,378	,,	,,
Canned Goods (Not otherwise enumerated)	3,449	,,	,,
Eggs (Dried)	674	,,	,,
Cheese	891	,,	,,
Eggs (Shell)	363	,,	,,
Eggs (Liquid)	211	,,	,,
Fruit (Dried)	286	,,	,,
Fruit (Juices and Pulp)	225	,,	,,
Milk Powder	360	,,	,,
Peas (Dried)	333	,,	,,
Patent Foodstuffs	154	,,	,,
Lard and Fat	152	,,	,,
Foodstuffs (Not otherwise enumerated)	435	,,	,,
Wines and Spirits	1,508	,,	,,
Vegetables (Not otherwise enumerated)	590	,,	,,

Notices served during the year under the Public Health (Imported Food) Regulations, 1937, were as follows :—

Form A (Notice to surrender)	2
Condemnation Notes issued (Food destroyed) ..	65
Condemnation Notes issued (Food used for animal feeding or inedible purposes) ..	108
Notification sent during the year to Medical Officers of Health of other districts in respect of food consignments requiring further examination on arrival at their destination ..	5

The sections of this report dealing with condemned food, and the analysis of foodstuffs, etc., have for the most part been compiled from records of action taken in respect of ship's surplus stores, and ship's stores, which have deteriorated in vessels, or other foodstuffs, which, on being landed have required examination and classification before being disposed of by the Ministry of Food through their salvage division.

These foods, not being ship cargoes, are strictly speaking, not imported foods as interpreted under the Public Health (Imported Food) Regulations, 1937, but were treated as such in view of the fact that the majority of the foodstuffs dealt with were originally foreign produce, or of foreign manufacture, and in every case were landed with the intention of being used for home consumption.

Such stores on being landed by the Shipping Companies are handed over to the salvage department of the Ministry of Food who in turn arrange for the warehousing, or in the case of meats, for cold storage of the foodstuffs.

The Salvage Officer notifies this Authority of such action, and classification of the food is made by the Port Food Inspector.

The commodities then were placed under the following categories :—

(a) Fit for human consumption.
(1) Fit for sale by retail.
(2) Suitable for catering purposes only.
(3) Fit for manufacturing purposes only.
(b) Unfit for human consumption but considered suitable for animal food.
(c) Destruction only.

This arrangement for the examination and disposal of surplus ships' stores has worked satisfactorily throughout the year, giving the Authority control over foods landed for home consumption, and assisting the salvage division to obtain a maximum residual value for such foods on their subsequent allocation.

QUANTITIES OF MEAT LANDED IN THE PORT FOR THE YEAR 1946.

	Country of Origin				
	Australia	New Zealand	South Africa	United States	Totals
Beef Quarters ..	—	—	2,602	—	2,602
Beef Sundries ..	3,339	—	—	—	3,339
Mutton and Lamb Carcases	135,061	177,472	—	—	312,533
Pork Carcases and Sides ..	4,716	—	1,384	—	6,100
Offal	5,886	—	428	102	6,416
TOTALS ..	149,002	177,472	4,414	102	330,990

OFFAL.

All offal has been subject to a percentage examination at the time of landing and was found to be in a satisfactory condition.

CANNED GOODS.

The total amount of canned food imported during the year was 394,443 packages.

The general standard of canning has been good and samples submitted for analysis have been satisfactory.

Inspection of these goods is usually arranged to coincide with that made by H.M. Customs Officer. This method facilitates the working of both Customs and Public Health Regulations.

THE PUBLIC HEALTH (IMPORTED MILK) REGULATIONS, 1926.

There was no importation of milk during the year under the above Regulations.

THE PUBLIC HEALTH (MEAT) REGULATIONS, 1924.

Under Part VI (Transport and Handling) inspection of all meat conveyances has been systematically made, and general supervision of the handling of meat in ships, cold stores, cargo sheds, etc., has been carried out.

CASEOUS LYMPHADENITIS.

A percentage examination of consignments of mutton and lamb (42 lbs in weight and over) has been carried out in the cargo sheds or on the quayside. It has not always been practicable to carry out a full 5% examination of consignments, owing to lack of cold storage facilities and the urgency of despatch by the Ministry of Food.

No case of caseous lymphadenitis has been detected during the year.

ANALYSIS OF IMPORTED FOODSTUFFS

As provided by the Public Health (Preservatives, etc., in Food) Regulations 1925—1940, and the Public Health (Imported Food) Regulations 1937, the following list shows the samples of foodstuffs taken and submitted for analysis during the year.

No.	Nature of Sample	Country of Origin	Result of Analysis	Remarks
1	Salmon (Canned)	Canada	Tin 0.17 grains per Lb.	Satisfactory
2	,,	,,	Tin 0.13 grains per lb.	,,
3	,,	,,	Tin 0.27 grains per lb.	,,
4	,,	,,	Tin 0.12 grains per lb.	,,
5	Herrings (Canned)	Not known	Tin 0.28 grains per lb.	Ships stores. Upon examination showed disintegration of content without other abnormalities.
6	Plums	U.K.	Hydrogen present in gas.	Item condemned.
7	Pemmican	U.K.	Vacuum satisfactory rich in beef oleo, fit for use. Nourishing value not impaired.	Satisfactory
8	Pemmican	U.K.	Vacuum good. No recrystallization of fat. Fit for issue.	Satisfactory
9	Pure Ground Sweet Almonds	U.K.	Genuine Ground Almonds caked in part by the action of water.	Returned to Manufacturers for Salvage action.
10	Tomatoes	Jersey	Copper varied 14 p.p.m. to 116 p.p.m. average 45 p.p.m. Arsenic and Lead absent.	Presence of copper undersirable. Easily removed by wiping.

ANALYSIS OF IMPORTED FOODSTUFFS—*continued.*

No	Nature of Sample	Country of Origin	Result of Analysis	Remarks
11	Tomatoes	Jersey	Copper varied 15 p.p.m. to 112 p.p.m. average 50 p.p.m. Arsenic and Lead absent	Copy of reports 10 and 11 with letter to Jersey Exporters Tomato Panel.
12	Liquid Green Colour	Canada	No injurious metals.	None.
13	Custard Powder	Not known	Negative results.	ex Ship's Stores
14	,, ,,	,, ,,	,, ,,	,, ,, ,,
15	Rolled Oats	,, ,,	Normal	,, ,, ,,
16	Spice Cummin	,, ,,	Excess of ash insoluble in acid (Sand) 5.1%.	Suitable for veterinary work.
17	Spice Mixed Condiments	Not known	Moisture 13.7& Ash insoluble in H.C.I. (Sand) 0.7%.	Satisfactory.
18	ditto.	,, ,,	Moisture 10.2% Ash insoluble in H.C.I. (Sand) 1.6%.	,,
19	Spice Coriander	,, ,,	Moisture 11.6% Ash insoluble in H.C.I. (Sand) 2.2%.	,,

ANALYSIS OF IMPORTED FOODSTUFFS—*continued.*

No	Nature of Sample	Country of Origin	Result of Analysis	Remarks
20	Spice Ginger	Not known	Moisture 12.7% Ash insoluble in H.C.I. (Sand) 0.8%.	Satisfactory
21	Spice Fenugreek	,, ,,	Moisture 13.7% Ash insoluble in H.C.I. (Sand) 1.1%.	,,
22	Spice Cloves	,, ,,	Satisfactory.	None.
23	Spice Peppercorn	,, ,,	Satisfactory.	None.
24	Spice Lardemoms	,, ,,	Satisfactory.	None.
25	Spice Fennel	,, ,,	Moisture 14.2 %Ash insoluble in H.C.I. (Sand) 1.8%.	Satisfactory
26	Spice Cassia	,, ,,	Satisfactory.	None.
27	Whole Egg Roasted	U.S.A.	Satisfactory.	Appears to have a limited use.

Imported Food Condemned.

The total amount of food condemmed during the year was 206 tons, 6cwts. and 11¾ lbs. Surrenders were voluntary in all cases.

Description	Packing and Quantities Condemned	Weight Condemned			
		Tons.	Cwts.	Qrs.	lbs.
Apricots (dried)	38 boxes		14	2	11
Arrowroot	7 tins			1	22
Bones	Loose		1	2	24
Bacon	1 Piece				3
Bread (rye)	1 loaf				¾
Biscuits	716,355 packets	8	7	2	9
Barley	8½ bags		7	2	24
Brussel Sprouts (canned)	2 tins				2
Beetroot (canned)	40 tins			2	18
Beans (canned)	49 tins			1	18
Currants	10 boxes		3	1	20
Custard Powder	1 tin				7
Cheese	1 Piece				4
Cornflour	3½ boxes			3	16
Cereals (prepared)	297 packets		1	3	10½
Cocoa	11 tins				11
Confectionery	Packages		6	3	17
Carrots (canned)	1 tin				3
Coffee Whole	67 bags	4	3	3	0
Coffee (ground)	14½ tins				14½
Dates	2 boxes		1	1	0
Egg (dried)	1 packet				3
Figs (dried)	10 boxes		4	2	3
Fish (canned)	465 tins		3	3	22¾
Fish (fresh)	1 box			1	22
Flour	1,810 bags	108	7	1	27
Fruit (dried)	12 packets				12
Fruit (canned)	2,208 tins	2	2	2	13
Grapefriut	1 box			3	0
Gelatine	1 packet				10
Grapes	Part box				8
Hops	1 packet				2
Herbs	1 packet				2
Jam	10 tins			1	13
Kidneys (ox)	1 Carton			1	12
Lamb	2 carcases			1	26
Lamb (trimmings)	Various			1	4
Livers (ox)	23 cartons		13	1	23
Livers (sheep)	11 cartons		5	1	4
Lemons	1 box			1	12
Meat (fresh)	Cuts		2	2	16
Meat (canned)	148 tins		1	0	15¾
Milk (canned)	261 Tins		2	0	17
Milk (dried)	8 tins				2
Marcaroni	19 boxes		11	3	14
Marmalade	12 tins			1	1
Malt	3 tins		1	0	25
		127	11	2	11¾

IMPORTED FOOD CONDEMNED *(continued)*

Description	Packages and Quantities Condemned	Weight Condemned			
		Tons.	Cwts.	Qrs.	lbs.
Mutton (cuts)	Various			1	8
Oranges	Loose		14	1	2
Oatmeal	21 bags	1	0	0	26
Pears (dried)	18 boxes		4	1	22
Pears	Loose		3	0	4
Peaches (dried)	20 boxes		9	0	6
Peas (canned)	22 tins			1	13
Pickles	492 bottles		5	3	24½
Pepper (red)	1 packet				1
Potatoes	25 bags	1	5	0	0
Pork (pieces and trimmings)	Various		3	1	20
Prunes	15 boxes		3	1	26
Rasins	18 boxes		7	1	26
Rabbits	17 cases		11	0	6
Salmon (canned)	39 tins			1	0
Sausages, Pork (canned)	1 tin				2
Mutton and Sheep	Carcases	2	13	1	13
Semolina	1 box		1	0	13
Sage	5 packets				5
Salad Cream	1 bottle				½
Soup	6 tins				6
Spaghetti	16 boxes		4	0	2
Salt	40 bags	2	3	0	10
Spice	83 packets			2	26
Sultanas	4 boxes			3	14
Syrup	1 tin				2
Sugar	6 bags				15
Tangerines	Loose			3	19
Tea	1 packet				1
Tomatoes	Loose	3	0	3	19
Vegetables, Mixed, (canned)	1 tin				1
Wheat	Loose	64	0	0	0
Wholemeal	10 bags		5	0	0
Yeast	74 packets		6	2	14
Sausages	40 cartons		9	0	17
	TOTAL	206	6	0	11¾

METHOD OF DISPOSAL.

CONDEMNED FOOD—

Method of disposal	Tons.	Cwts.	Qrs.	lbs.
Released for animal food	188	1	1	13¼
Released for inedible manufacturing purposes ..	7	4	2	15
Destroyed by burning or dumping ..	11	0	0	11½
TOTAL	206	6	0	11¾

PUBLIC HEALTH (SHELL FISH) REGULATIONS, 1934.

The Southampton Shell Fish Order, 1936, made under the above Regulations, still being in force, forbids persons from collecting cockles, winkles or mussels for the purposes of sale for human consumption from laying within the prescribed area as defined in the Order.

During the year under review, limited observations have been made, but no infringements of the Order have been observed.

DANGEROUS DRUGS.

Two certificates were issued under the Dangerous Drugs (3) Regulations, 1923, during the year under review.

The drugs were required by vessels in order to complete the medical equipment on board.

INFECTIOUS DISEASE.

The cases of infectious disease reported by vessels on arrival at Southampton are shown in Table VII.

The following table shows the disposal of cases of infectious diseases landed at this Port, and to which of the Town Council's Hospitals the case was removed :—

	Cases Notified	Cases removed to Isolation Hospital	Cases removed to Borough Hospital
Chickenpox ..	41	6	—
Dengue Fever ..	1	1	—
Diphtheria	6	4	—
Dysentery	53	6	—
Gastro Enteritis ..	422	2	—
Jaundice	2	2	—
Malaria	50	—	3
Measles	610	29	—
Mumps	31	6	—
Pneumonia ..	38	—	10
Pyrexia of unknown origin	14	5	2
Tonsillitis	20	6	1
Tuberculosis ..	309	41	44
Typhoid and Paratyphoid Fever	7	4	—
Vaccinia	3	3	—
Venereal	74	—	4
Whooping Cough ..	15	8	—
Influenza	13	1	5
Rash	1	1	—
TOTAL ..	1,710	125	69

The above cases are included in the total of infectious cases reported by vessels which arrive in the Port shown in Tables VII. and VIII.

SMALLPOX

Five ships which arrived in the port had smallpox on board, or had disembarked a case or cases during the voyage.

Ship " A " arrived on 14th January from Bombay.

A Serviceman sickened on 4th January, and was diagnosed as suffering from smallpox on 8th January, He was isolated on board, and all the passengers and crew, with two exceptions, were vaccinated before the ship arrived in Southampton. The diagnosis was confirmed on the arrival of the ship at an outer mooring station, and all persons on board were subjected to medical inspection. The necessary surveillance prescribed in the Port Health Regulations was arranged. The two passengers who had objected to vaccination were offered vaccination, or isolation for a period of fourteen days; one chose to be vaccinated, and the other, a service man, was isolated in a service hospital.

Ship " B " arrived on 23rd February from Singapore, having disembarked a case of smallpox at Gibraltar on 20th February. All passengers and crew, with the exception of one serviceman, were vaccinated before the ship arrived at the outer mooring station. Medical inspection was carried out on arrival and surveillance arranged. The objector to vaccination was isolated for fourteen days.

Ship " C " had disembarked two mild cases of smallpox at Suez nine days before she arrived in Southampton on 28th February from Sydney via Bombay. A third man became ill on 25th February and although on arrival he was considered to be most probably a case of chickenpox, he was isolated in the smallpox hospital until the diagnosis of chickenpox was confirmed. Medical inspection of passengers and crew was carried out on the arrival of the ship, and surveillance arranged.

Ship " D " arrived on 9th March from Bombay. On the morning of arrival a wireless message was received stating that there were two cases of chicken pox on board. As the message arrived too late for the vessel to be directed to anchor at an outer mooring station, she was boarded on arrival at her berth. It was found that one case was certainly smallpox. The vessel was sent to an outer mooring station and vaccine obtained from London and delivered to the ship by launch. All persons on board were vaccinated and medically inspected. The case was disembarked by launch on 10th March after which pratique was granted, and the ship was permitted to berth. The diagnosis in this case was subsequently confirmed by laboratory

investigations. The second case, an infant, was also isolated in the smallpox hospital, but the diagnosis of chicken pox made when the ship arrived was later confirmed.

Ship " E " arrived on the 2nd May from Bombay, having disembarked a case of smallpox at Suez. All passengers and crew had been vaccinated, and the patient and fourteen direct contacts in the ship's hospital ward had been disembarked at Suez. The vessel was boarded at an outer mooring station. Medical inspection was carried out and surveillance arranged.

A sixth ship arrived from Rangoon on the 11th April. On arrival she was reported to be free from infectious disease, and the passengers disembarked normally. One passenger, a serviceman who had embarked at Rangoon on the 18th March, fell ill on the 14th April in Manchester. He was admitted to a General Hospital on the 17th April, and on the 18th he was removed to the Isolation Hospital as a case of typhus fever. On the 20th April his illness was diagnosed as smallpox, and he was removed to a Smallpox Hospital. No contacts of this case developed smallpox.

MEASLES.

During the year a vessel arrived from Singapore with 360 cases of measles on board. 150 earlier cases had recovered before the ship arrived.

The vessel had a total of 4,551 passengers on board of whom 3,808 were Dutch repatriates who on arrival at Southampton were to be transferred to other vessels and taken to Rotterdam.

Owing to past privations and malnutrition the physical condition of many of the adults and children on board was very poor, and many more cases of measles developed amongst the passengers awaiting transfer in this Port.

It was found necessary to remove 14 of the more seriously ill cases of measles to the Borough Isolation Hospital, and 355 cases of measles proceeded in vessels to Rotterdam.

CASES OF ENTERITIS AND DIARRHOEA ARRIVING ON VESSELS.

During the year 489 cases of gastro-enteritis or diarrhoea were reported on vessels arriving at this Port. Of this number, 4 were admitted to hospitals in Southampton, 1 proceeded in the vessel to London, 1 was removed to a military hospital, 3 proceeded home and 480 had recovered and were able to proceed to their destinations.

The following is a report of action taken in respect of one of the vessels concerned.

Upon the arrival of the vessel at Southampton on the 27th May, the Port Health Authority was notified of recent cases of gastro-enteritis on board for which no cause had been found. The vessel was visited by the Medical Officer on the 28th May, with Port Health Inspector and full assistance was given by the Ship's Medical Officer, Chief Steward and Staff in investigating the outbreak.

ITINERARY. Southampton, Freetown, Lagos, Freetown, Southampton.

INCIDENCE OF GASTRO-ENTERITIS.

Date.	Cases. Passengers	Crew
12 May 1946	25	—
13 ,, ,,	—	2
14 ,, ,,	—	1
15 ,, ,,	—	2
16 ,, ,,	—	2
17 ,, ,,	40	20
18 ,, ,,	6	6
19 ,, ,,	1	1
20 ,, ,,	20	25
21 ,, ,,	—	2
22 ,, ,,	1	1
23 ,, ,,	—	—
24 ,, ,,	—	—
25 ,, ,,	2	3
26 ,, ,,	4	6
27 ,, ,,	3	—

Thus it was apparent that both passengers and crew were affected, but all the members of the crew affected were dining room and bedroom stewards who did not take their meals aft.

The ordinary seamen feeding aft were not affected.

Three acute outbreaks occurred on the 12th, 17th and 20th May, followed by sporadic cases throughout the rest of the voyage.

The first member of the crew to report sick was a cook.

No children were affected by the outbreak although they took their meals in the main saloon with their parents (30 children).

All 25 passengers in the first outbreak had identical meals, the first symptoms occurring at midnight 4½ hours after the last meal. In the second outbreak 90% of those affected had identical food but the onset was not so explosive and could not be ascribed to food taken at any particular meal.

CLINICAL PICTURE.

The symptoms were repeated vomiting followed by diarrhoea

or loose stools. Patients appeared shocked during acute stage. Pyrexia was absent or slight, not exceeding 99°F. Symptoms gradually subsided and patients were well after 4—6 days. Several passengers and members of the crew were affected twice.

Food Storage and Preparation.

Inspection was made with the Ship's Medical Officer and Chief Steward and was confined to serving rooms. food preparation rooms, and kitchens serving the main dining saloon, and all food storage rooms. As the ship had docked no food was under preparation at the time of inspection.

The general state of cleanliness was good, but an unused cream making machine adjacent to the main serving room was dirty. Cupboards and refrigerators were clean and well washed out. No odd items of food were left lying about on shelves, but two tins of mouldy sausage meat were found in a cupboard of the meat preparation room (not used on voyage). The chief steward, confectioner and pastrycook, stated that all prepared custard, blancmange and jellies were made up fresh each day from powder, and were stored in cold rooms prior to use.

The main storage and refrigeration rooms were satisfactory.

The stewards and cooks were clean. There was no history of chronic intestinal upset in any member of kitchen staff prior to this trip.

Investigations.

Examination of beef and fish eaten on board on 17th May was made at Porto Lagos. B. coli and Strep. faecalis were found, and the specimens were considered not to be very satisfactory.

Samples.

The following samples of food were taken at this Port for examination, and the organisms found are also given :—

(1) Specimen of fish as served 17th May—Profuse growth Staphylococci and B. Coli.

(2) Specimen of Breakfast Sausage—A few colonies of Staphylococci.

(3) Specimen of Saveloy found in food serving room.—Gross contamination with B. Proteus.

(4) Jelly—little growth.

(5) Bottled Water (Schweppes)—Satisfactory.

STOOLS.

Two specimens of stools of cases which had occurred on board were examined, but as these were many days old they were of little value. One showed a rather profuse growth of staphylococci.

FOOD HANDLERS.

Eight cooks and stewards handling and preparing food at main dining saloon were sent to the Borough Hospital for bacteriological examination of fresh stool. No carriers of B. dysentericae, enteric or food poisioning organisms were detected.

DRINKING WATER SUPPLY.

The water in the main tanks on the homeward voyage was taken on board at Lagos and Freetown.

Three samples were taken on 29th May by the Port Health Inspectors and submitted to the Borough Analyst for examination—these were found to be far from satisfactory.

The samples were obtained from (1) main tanks—tap in engine room (Freetown water), (2) iced water in pantry (Freetown water), (3) tap in galley (Southampton water).

The result of the analysis showed presumptive coliform counts per 100 ml. of 3, 3, and 90 respectively, together with high bacterial counts on culture—faecal coli were also present in all three samples. It was established that there was gross contamination of the water, either in the main tanks or service supply line, or in both of these sources.

The owners were requested to take the necessary action to remedy the condition of the water supply on board, and the following work was carried out :—16 domestic tanks in No. 3 lower hold; central domestic tank, afterpeak tank, and 6 double bottom tanks were emptied and cement washed. Four double bottom tanks and the Forepeak tank were chlorinated. Two chlorinations of one hours duration were carried out on the whole of the service pipe system throughout the vessel.

Before the vessel sailed the whole of the drinking water on board was chlorinated on the basis of 2 parts per million free chlorine.

TABLE "C".

Cases of Infectious Disease landed from Vessels.

Disease	Number of cases during 1946		Number of vessels concerned	Average number of cases for previous 5 years
	Passengers	Crew		
Anterior Poliomyelitis ..	6	—	6	0.2
Cerebro-Spinal Meningitis ..	1	—	1	0.6
Chickenpox ..	11	—	8	3.8
Dengue Fever ..	—	1	1	Nil
Diphtheria ..	2	4	6	1.0
Dysentery ..	24	3	13	3.4
Enteric Fever ..	4	1	5	0.4
Erysipelas ..	—	—	—	0.6
German Measles ..	3	—	2	1.2
Influenza ..	1	6	7	2.6
Malaria ..	14	9	16	2.8
Measles ..	32	2	11	1.6
Mumps ..	4	2	4	3.0
Pneumonia ..	17	9	21	4.2
Pyrexia ..	12	1	11	3.0
Scarlet Fever ..	2	—	2	6.4
Smallpox ..	3	—	3	Nil
Tonsillitis ..	5	9	10	3.8
Tuberculosis ..	157	5	57	27.4
Venereal Disease ..	24	34	26	8.2
Whooping Cough ..	9	—	4	0.8
Total ..	331	86	214	—

TABLE "D"

Cases of Infectious Diseases occurring on Vessels during the Voyage, but disposed of prior to Arrival.

Disease	Number of cases during 1946		Number of vessels concerned	Average number of cases for previous 5 years
	Passengers	Crew		
Anterior Poliomyelitis ..	3	—	3	Nil
Cerebro-Spinal Meningitis ..	2	—	2	0.4
Chickenpox ..	7	2	6	Nil
Dengue Fever ..	—	—	—	Nil
Diphtheria ..	—	—	—	0.6
Dysentery ..	1	—	1	0.2
Encephalitis ..	1	—	1	Nil
Enteric Fever ..	2	—	2	0.2
Erysipelas ..	—	—	—	Nil
German Measles ..	—	—	—	Nil
Influenza ..	—	2	1	Nil
Malaria ..	3	2	5	0.2
Measles ..	6	—	1	0.6
Mumps ..	—	—	—	Nil
Pneumonia ..	—	1	1	1.6
Pyrexia ..	—	—	—	0.8
Scarlet Fever ..	—	—	—	Nil
Smallpox ..	4	—	3	Nil
Tonsillitis ..	—	—	—	0.6
Tuberculosis ..	10	—	7	1.0
Venereal Disease ..	—	—	—	3.4
Whooping Cough ..	1	—	1	Nil
Total ..	40	7	34	—

TABLE VII.

Infectious and other Diseases.

Table showing the number of cases reported on vessels arriving in the Port of Southampton, and how they were dealt with during the year 1946.

Disease	Total cases reported.	How Dealt With: Removed to Borough hospital or Nursing Homes	Removed to Military or Naval hospitals.	Landed at other Ports before arriving at Southampton.	Proceeded in Vessels to other Ports.	Landed at Southampton but did not proceed to hospital.	Died at Sea.	Convalescent on arrival.
Abscesses ..	3	3	—	—	—	—	—	—
Accidents ..	72	53	—	—	4	14	1	—
Appendicitis ..	14	7	1	1	3	1	—	1
Bronchitis ..	3	2	—	—	—	1	—	—
Cancer	14	7	—	—	—	2	5	—
Cellulitis	6	2	3	—	1	—	—	—
Cerebro-Spinal Meningitis ..	4	—	—	2	—	1	—	1
Chickenpox ..	41	9	1	9	1	1	—	20
Dengue Fever ..	1	1	—	—	—	—	—	—
Diabetes	2	1	—	—	—	1	—	—
Diarrhoea.. ..	67	—	1	—	—	2	—	64
Diphtheria ..	6	4	1	—	—	1	—	—
Dysentery ..	53	6	21	—	4	1	1	20
Eczema	13	2	—	—	4	7	—	—
Encephalitis ..	1	—	—	—	—	—	1	—
Gastro Enteritis ..	422	4	—	—	1	1	—	416
Glandular Fever ..	2	—	1	—	—	1	—	—
Heart Disease ..	51	23	6	—	—	10	12	—
Influenza ..	13	6	—	2	1	1	—	3
Insanity	109	79	1	—	1	25	3	—
Leprosy	2	—	—	—	2	—	—	—
Malaria	50	17	3	—	22	3	5	—
Measles	610	29	3	6	386	5	—	181
Mumps	31	6	—	—	13	—	—	12
Nephritis	8	2	2	—	—	1	3	—
Pneumonia ..	38	21	5	1	9	2	—	—
Paralysis	4	2	—	—	—	2	—	—
Pleurisy	12	9	1	—	—	2	—	—
Poliomyelitis ..	9	4	—	3	—	2	—	—
Pyelitis	1	—	—	—	—	1	—	—
Pyrexia	14	10	2	—	1	1	—	—
Rheumatism ..	6	4	—	—	1	1	—	—
Scarlet Fever ..	2	—	1	—	—	—	—	1
Smallpox	8	3	—	4	—	—	—	1
Tonsillitis ..	20	8	4	—	6	2	—	—
Tuberculosis ..	309	99	3	—	137	60	10	—
Typhoid and Para typhoid ..	7	4	—	2	—	1	—	—
Venereal Disease ..	74	9	20	—	16	29	—	—
Whooping Cough ..	15	8	—	1	5	1	—	—
Other Diseases ..	261	126	39	1	17	58	17	3
Total ..	2378	570	119	32	635	241	58	723

TABLE VIII

Infectious diseases.

Reported on vessels arriving in the Port of Southampton during the 10 years 1937—46.

	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
Cerebro-Spinal Meningitis ..	1	2	2	33	1	—	1	1	1	4
Cholera	—	1	—	—	—	—	—	—	—	—
Chickenpox	26	26	36	8	—	1	1	11	11	41
Diphtheria	7	7	3	2	—	1	—	8	2	6
Dysentery	18	11	23	7	—	—	—	—	18	53
Enteric Fever and Para Typhoid Fever	15	13	9	3	—	—	—	—	4	7
Measles	41	121	59	33	—	—	—	1	38	610
Mumps	13	15	19	2	1	—	2	5	20	31
Poliomyelitis	3	1	7	2	—	—	—	—	1	9
Plague	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	6	7	10	5	—	—	—	1	32	2
Smallpox	—	—	2	2	—	—	—	—	—	8
Tuberculosis	137	172	172	80	1	3	—	7	136	309
Typhus Fever	—	—	1	—	—	—	—	—	—	—
Whooping Cough	5	12	7	—	—	—	—	—	4	15
Yellow Fever	—	—	—	1	—	—	—	—	—	—

DEATHS AT SEA.

Fifty-eight deaths at sea were reported to have occurred on vessels on their voyage to Southampton :—

Accidents	1	Insanity	3
Cancer	5	Malaria	5
Dysentery	1	Nephritis ..	3
Encephalitis ..	1	Tuberculosis ..	10
Heart Disease ..	12	Other Diseases	17

TABLE IX.

Fumigation of Vessels.

The following table gives particulars of the vessels fumigated under the supervision of thePort Health Authority.

Date	Vessel	Fumigant used	Rats found after fumigation
24.1.46	Atlantis	H.C.N. in absorbent	5
30.1.46	Carnarvon Castle	,, ,, ,,	1
15.3.46	Athlone Castle	,, ,, ,,	Nil (6 Mice)
3.4.46	Pasteur	,, ,, ,,	1
10.4.46	Principessa Giovanna	H.C.N. Liquid	Nil
8.4.46	Fort Rouille	H.C.N. Liquid	47
23.4.46	Almanzora	H.C.N. in absorbent	68
26.4.46	Andes	,, ,, ,,	Nil
29.4.46	Winchester Castle	,, ,, ,,	3
29.4.46	Stirling Castle	,, ,, ,,	1
29.4.46	Nyroca	,, ,, ,,	Nil
23.5.46	Gaston Micard	H.C.N. Liquid	14
3.6.46	Aquitania	H.C.N. in absorbent	43
3.6.46	Arundel Castle	,, ,, ,,	94
8.6.46	Isle of Sark	,, ,, ,,	2
10.6.46	Somersetshire	,, ,, ,,	9
7.7.46	Port Wyndham	,, ,, ,,	17
16.7.46	Empire Parkeston	H.C.N. Liquid	80
13.7.46	Kutno	Sulphur	18
6.8.46	Queen Elizabeth	H.C.N. in absorbent and Liquid	Nil
6.8.46	M.O.W.T. 8.	H.C.N. Liquid	6
19.8.46	Llangibby Castle	H.C.N. in absorbent	5
19.8.46	Dilwara	H.C.N. Liquid	32
19.8.46	Whitstable	H.C.N. in absorbent	6
16.9.46	El Nil	H.C.N. Zyklon	1
16.9.46	Unitas 10	H.C.N. Liquid	Nil
16.9.46	Palmston	H.C.N. Liquid	14
25.9.46	Miltrap	H.C.N. Liquid	5
7.10.46	Dunnottar Castle	H.C.N. in absorbent	32
21.10.46	Atlantis	,, ,, ,,	Nil
26.10.46	Kyle Queen	,, ,, ,,	12
21.10.46	Arundel Castle	,, ,, ,,	23 (2 Mice)
2.11.46	Canterbury	,, ,, ,,	1
10.11.46	Taishan Peak	H.C.N. Liquid	3
23.11.46	Empire Peacemaker	H.C.N. Liquid	Nil
2.12.46	Winchester Castle	H.C.N. in absorbent	Nil
9.12.46	Empire Pike	H.C.N. Liquid	5
	Total : 37.	23 H.C.N. in absorbent 1 H.C.N. Zyklon 1 Sulphur 12 H.C.N. Liquid	548 (8 Mice)

PSITTACOSIS.

The Parrots (Prohibition of Import) Regulations, 1930.

The importation of any bird of the parrot species is prohibited by these Regulations, unless for consignment to the London Zoological Society, or by special permission of the Minister of Health, and enquiries are made on all incoming vessels as to the presence of any bird on board.

Notifications are received by the Port Health Authority of any cases coming to the notice of H.M. Customs.

During the year no cases of attempted smuggling of birds into the port were detected.

The following table shows the action taken during the year under these Regulations :—

Sixty-four parrots arrived on 11 vessels at this port. Of this number 24 were imported under licence of the Minister of Health, 6 were surrendered and destroyed, 32 proceeded in vessels, and 2 died during the voyage.

SHIPS' DRINKING WATER.

During the year 74 samples of drinking water were taken from a total of 11 vessels. 5 samples were taken from quayside hydrants, and 3 samples were taken from hydrants through ships' connecting hoses. All the samples were submitted for bacteriological examination and a number were also chemically analysed.

The following table shows the result of the water analysed :—

The following table shows the result of the water analysed :—

Vessel	No of Samples	No. of Presumptive Coliform Organisms per 100 ml.				Faecal Coli Present	Nitrites Present	Plate count on Agar per ml. 2 days 37°C. exceeding 1000 Bac.	No. of samples unsatisfactory
		Less than 1	1—2	3—10	More than 10				
A	1	—	—	—	1	1	—	1	1
B	13	2	2	3	6	9	—	11	12
C	2	—	1	—	1	1	—	—	1
D	1	—	—	—	1	—	—	—	1
E	1	—	—	—	1	—	—	—	1
F	26	18	4	3	1	1	3	13	14
G	1	1	—	—	—	—	—	—	—
H	1	—	1	—	—	—	—	—	—
I	2	—	—	—	2	2	—	2	2
J	16	11	1	1	3	3	2	4	5
K	10	9	1	—	—	1	—	—	1
Total	74	41	10	7	16	18	5	31	38
Quayside Hydrants									
1	1	1	—	—	—	—	—	—	—
2	1	1	—	—	—	—	—	—	—
3	1	1	—	—	—	—	—	1	1
4	1	1	—	—	—	—	—	—	—
5	1	1	—	—	—	—	—	—	—
Total	5	5	—	—	—	—	—	1	1
From hoses connecting Hydrant to vessel									
1	1	1	—	—	—	—	—	1	1
2	1	1	—	—	—	—	—	—	—
3	1	—	—	—	1	—	—	—	1
Total	3	2	—	—	1	—	—	1	2

Many of the ships' water supplies were found to be far from satisfactory—due probably to one or more of the following conditions.

(1) Exigencies of war and post war service causing some lowering of standards in maintenance of water tanks and service pipe lines.

(2) The intake of water at various foreign ports.

(3) Lack of supervision and expert guidance of workmen employed in cleaning main water tanks in vessels.

(4) The continued use of service pipe lines over long periods, particularly in large vessels, with insufficient or the complete absence of sterilization of such pipe lines.

A complete investigation was made on all the vessels where drinking water samples were found to be unsatisfactory on analysis. The following report show the action taken in respect of vessels labelled in the table above. B. C. F. J. & K., all being large passenger carrying liners.

VESSEL " B " The taking of samples, followed by tentative sampling of water established that there was contamination both in the main tanks and service supply lines.

The Owners of the vessel were requested to carry out necessary work in order to improve the condition of the water supply.

The whole of the main water tanks (24 in number) were emptied and cement washed with the exception of four double bottom tanks and a fore peak tank which were chlorinated and then emptied.

Two chlorinations of one hour duration were carried out on the whole of the service pipe line system throughout the vessel,

Further samples of water taken from the vessel on returning after a subsequent voyage were found to be satisfactory.

VESSEL " C " This vessel proceeded to her own Port, and the Port Medical Officer of the area was informed of the condition of the water.

VESSEL " F " Sampling and investigation of the water of this vessel indicated contamination in the service pipe lines to be the main contributory factor to an unsatisfactory water supply.

The service pipe line of this vessel was fitted with small carbon filters on all the branch lines leading to the taps throughout the vessel.A number of filters were dismantled and examined and it was established that all the filters were the media for a " build up " of contaminating matter which directly affected the water drawn from the taps; proof of this was demonstrated by analysing water drawn through the filters, and water taken from the union joint immediately above the filter; the water through the filter showed a high bacterial count, whilst the unfiltered water was quite satisfactory.

The Owners of the vessel have had all the filters (145 in number) removed from the service pipe lines and have installed a modern electrically operated and controlled water sterilising plant which by the addition of electrolytic sodium hypochlorite to the water automatically chlorinates all water passing from the main tanks into the gravity tank from where it is distributed throughout the vessel.

VESSEL "J" This vessel is owned by the same Company as vessel "F". The drinking water system on both vessels in many respects has identical features in structure etc.

Sixteen samples of water were taken and five of them were found to be unsatisfactory.

The vessel is at present undergoing a refit and overhaul; the Owners, during this period are removing all the pipe line filters, and are installing a central chlorinating plant as in the case of vessel "F".

VESSEL "K" Ten samples of water were taken from this vessel. Nine were found to be very satisfactory, and one unsatisfactory.

The tap giving the unsatisfactory sample was "flamed" and a retake sample was found to be satisfactory.

General Summary of Inspections carried out by the Port Health Staff, and other Statistics, during the year 1946.

Steamers (from foreign) visited	477
Motor vessels (from foreign) visited	179
Sailing vessels (from foreign) visited	2
Flying boats (from foreign) visited	2
Steamers (from coastwise) visited	215
Motor vessels (from coastwise) visited	158
Sailing vessels (from coastwise) visited	3
Total steam, motor, sailing vessels and flying boats visited	1,036

Number of British vessels visited	720
Number of British vessels re-visited..	1,009
Number of Foreign vessels visited	316
Number of Foreign vessels re-visited	145

Total vessels visited 1,036 Total vessels re-visited 1,154 Total 2,190

Number of vessels found in satisfactory sanitary condition	929
Number of vessels found in defective sanitary condition ..	107
Number of crew arriving (from foreign)	136,388
Number of passengers arriving (from foreign) including troops	361,558
Number of crew arriving (from coastwise)	12,329
Number of passengers arriving (from coastwise) ..	3,406
Total number of crew and passengers arriving (Inc Troops)	513,681

Number of passengers landed from 9 tenders in So'ton Water	449
Number of passengers landed from 9 tenders in Cowes Rds and Stokes Bay	317
Total number of passengers landed from 18 tenders	766
Total number of passengers landed from 2 Flying Boats	30
Number of rats captured, examined and destroyed	4,679
Number of rats found on 23 Vessels from Plague infected Ports	561
Number of Vessels on which rat orders were served ..	130

TABLE XI.

Showing number of vessels inspected, including re-visits, with percentage of defects.

Year	Vessels from Foreign visited	Coasting vessels visited	Total Inspec-tions	Number found defective	Percentage defective
1937	4,627	1,078	5,705	201	6.42
1938	4,968	1,204	6,172	232	6.80
1939	4,564	1,297	5,861	242	7.11
1940	3,898	979	4,877	192	8.05
1941	60	1,006	1,066	72	10.81
1942	612	839	1,451	145	19.70
1943	384	954	1,338	116	16.69
1944	1,509	386	1,895	147	10.60
1945	1,617	378	1,995	165	14.23
1946	1,643	547	2,190	107	10.32

TABLE XII.

Table showing the number of vessels visited, nationality, description, and number found defective during 1946, not including re-visits.

Nationality	Steam	Motor	Sail	Flying Boats	Total	Defective
American	121	5	—	—	126	—
Belgian	6	11	—	—	17	1
British	470	245	3	2	720	97
Danish	7	2	1	—	10	1
Dutch	14	62	—	—	76	1
Egyptian	1	—	—	—	1	1
Finnish	1	—	—	—	1	—
French	17	1	—	—	18	1
Greek	4	2	—	—	6	1
Italian	6	1	—	—	7	—
Norwegian	4	2	—	—	6	1
Panamanian	3	—	—	—	3	1
Polish	27	4	—	—	31	2
Swedish	11	2	1	—	14	—
TOTALS	692	337	5	2	1,036	107

OIL TANKERS.

During the year one hundred and twelve oil tankers arrived in Southampton Water to discharge or load oil fuel or spirit at the oil wharves at Fawley or Hamble.

The vessels came from the following ports :—

Abadan	7	Houston	3
Amsterdam	1	Lake Charles	3
Aruba	5	Los Angeles	1
Baton Rouge	1	New Orleans	1
Bayonne	1	New York	1
Baytown	2	Philadelphia	2
Bremerhaven	1	Port-a-Pierre	1
Caripito	2	Port Arthur	2
Copenhagen	1	Port Said	1
Corpus Christie	3	Puerto-la-Cruz	31
Curacao	19	Rotterdam	2
Galveston	1	Sable d'Olonne	1
Gdynia	1	South Georgia	1
Goteborg	1	Texas City	4
Hamburg	2	Trinidad	8
Harve	1		
		TOTAL	112

MEDICAL INSPECTION OF ALIENS.

Annual Return by the Medical Inspector of Aliens for the year ended 31st December, 1946.

	Total	Number inspected by the Medical Inspector	Number subjected to detailed examination by the Medical Inspector	Certificates issued				
				Lunatic idiot or M.D.	Physically Incapacitated	Suffering from acute infectious disease	Landing necessary for adequate medical examination	Transmigrants
(*a*) Total number of Aliens landing at the Port ..	19,897	18,132	168	5	5	35	—	—
(*b*) Aliens refused permission to land by Immigration Officer ..	480	—	4	3	1	—	—	—
(*c*) Transmigrants ..	—	—	—	—	—	—	—	—
Total Aliens arriving at the Port.	23,377	18,132	172	8	6	35	—	—

Total number of vessels carrying Alien passengers 364.

Number of Vessels dealt with by the Medical Inspector 287

REPORT OF THE MEDICAL OFFICER OF HEALTH ON THE POSSIBLE FUTURE DEVELOPMENT OF THE HEALTH SERVICES IN SOUTHAMPTON.

To the Chairmen and Members of the
Health and Maternity & Child Welfare Committees.

Ladies and Gentlemen,

In accordance with your wishes, I beg to submit for your consideration my own views as to the form in which the future Health Services of this Borough are likely to be organised when the National Health Service Act becomes operative in April, 1948.

The ultimate pattern is still somewhat indefinite, and may prove on its initiation and establishment to be materially different from the picture I am drawing in this report.

It is necessary in the first place for me to give a clear distinction between a Health Clinic and a Health Centre.

Health Clinics.

When I mention a Health Clinic, I refer to what is now known as a Municipal Clinic under the existing Public Health Services—premises where accommodation is provided and sessions are conducted for the following services:—

(a) An Infant Welfare Centre.

(b) Examination and treatment of minor ailments in children under five years of age referred by Medical Officers and Health Visitors via the Child Welfare Centres, Day Nurseries, etc.

(c) Examination and treatment of ante-natal and post-natal patients.

(d) Treatment of defects found at routine School Medical Inspection such as skin diseases, asthma, heart and rheumatic conditions, etc.

(e) Specialist sessions for Ear, Nose and Throat examinations, Vision and Orthopaedic cases referred by School Medical Officers, General Practitioners, etc.

(f) Ultra-violet light treatment, with massage and remedial exercises.

(g) Tuberculosis Dispensary sessions. The Tuberculosis Officer sees patients referred to him by practitioners for a second opinion, and keeps them under observation and arranges admission to sanatoria, etc.

(h) Venereal Diseases departments (male and female). Patients are referred by doctors, or attend of their own accord, and are seen by the Venereal Diseases Officer who carries out the necessary examination and treatment.

(i) Day Nurseries.

(j) Domestic Help Service.

(k) Pharmaceutical Dispensary.

(l) Dental Departments for children under five years of age, school children, ante-natal and post-natal patients, and tuberculosis cases.

The principal Health Clinic also serves as the Headquarters of the Superintendent with the District Health Visitors, and the Supervisor and Municipal Midwives.

Associated with these various services, there are clerical sections which are housed in the same building.

The description I have given is of the services normally provided in a principal clinic, and, as you will recall, in my original report I suggested two principal clinics—one on the East Park Terrace site, and one at Sydney House—where the services enumerated would normally be conducted; whereas in the three subsidiary health clinics some of the specialist services would not be provided.

There is no reference in the Act to the term " Health Clinic." and a revised designation of " Major Health Centre " may be more appropriate to these establishments. I have retained the name " Health Clinic " because my earlier report was based on the idea of continuing the Municipal Clinics.

HEALTH CENTRES.

The Health Centres adumbrated in the National Health Service Act are of a different constitution. Although Section 21 (d) states " Health Centres can also be used for the provision and organization of any service which the Local Authority require or are empowered to provide," notwithstanding this authority, their main function is to serve as communal surgeries and their layout will consist of consulting and waiting rooms for practioner consultation.

There is an obligation in the Act requiting Local Authorities to provide, equip and maintain these premises and to staff them with the necessary nursing and clerical personnel sufficient to meet the needs of the particular group of medial practioners working in and from the Centre.

It is thought that 8-10 practitioners will operate from each Centre, and should be capable of dealing with a population of approximately 15,000. The practitioners in the service will be paid

a basic salary plus a capitation fee, and, if they so desire, will be permitted to carry out private practice in addition.

Every individual member of the community will contribute to the National Health Service, and will thereby be equally entitled to its benefits. Those who seek advice privately will therefore be paying twice for the same service. There will be to a limited extent a free choice of doctor, as long as the individual doctors do not exceed the permitted number on their lists or panels.

The local Executive Council will administer the practitioner service, and the most likely arrangement will be a rota of duty for each of the doctors in that particular group. Fixed hours for consultation and domiciliary visits will therefore be arranged, leaving a free period each day for private practice.

When one of the practitioners requires the help of a consultant, he will communicate with the hospital and arrange for the consultant to see his patient, either in the patient's home or in the out-patient department of a hospital.

In the Act (Section 25), there is an obligation upon the Local Health Authority to establish a Home Nursing Service. This will be associated with the General Practitioner Service. The nurses thus employed will, I think, be attached to the Health Clinics and be distributed for work in the Health Centres or for domiciliary nursing in the particualr area covered by the Centres. Apart from disciplinary control by the Local Authority, the nurses will work directly under the medical practitioners. Permission is given in the Act for the Local Health Authority, should they so desire, to delegate these duties to a Voluntary Organisation, such as the Queen's Nurses. From my own experience, it is more advantageous for a Local Authority to administer their own service than to delegate the work to an association over which they will have only limited control.

Each of the Health Centres will require dispensaries and qualified dispensers.

Although it is suggested that each of the five Health Clinics should provide accommodation for the holding of infant welfare sessions, owing to the distance between each, it may be necessary, in addition, to provide accommodation in some of the Health Centres for this work to be carried out.

The guiding principle for the sitting of infant welfare centres is that no mother should be required to travel more than half a mile. Some advocate that infant welfare centres should be included in a community centre.

With the population of Southampton back to its pre-war figure of between 180,000 and 200,000 and assuming that each group of practitioners in a Health Centre can deal with 15,000 patients, it is safe to forecast that approximately fifteen Centres will be required to serve the Borough as it is to-day, but, when other areas are incorporated, their requirements will have to be separately reviewed.

At each of the Health Clinics, I suggest there should be included accommodation for a Health Centre, either within the Clinic itself or as an annexe within its precincts. This will therefore reduce the number of separate Health Centres from fifteen to ten.

As a Committee you have already agreed upon the situations for the five Clinics, and it will therefore be necessary for you to select sites for the location of the ten additional Health Centres.

SUB-AREAS OF ADMINISTRATION.

In 1941, I submitted a report on the post-war health organisation in which I recommended the division of the town into five areas of approximately equal population, i.e. 30,000-40,000. In each of the areas it was proposed to erect a Health Clinic. In the centre area of the town, the Clinic would serve as the Headquarters of the Service, housing not only the main clerical section, but also providing accommodation for the Specialist Services, i.e. Ear, Nose and Throat; Ophthalmic; Orthopaedic; Child Guidance; Speech Therapy, etc.

A similar Clinic on a smaller scale would be erected on the Sydney House site. This would also provide certain of the Specialist Services.

The other three Health Clinics, namely, Oatlands House, High Road, Swaythling, and Bitterne Park, would provide certain services such as the treatment of minor ailments, possibly a tuberculosis dispensary, dental treatment, ante-natal and post-natal clinics, and ultra-violet light treatment.

Each of the five Clinics would have a Senior Medical Officer in charge, who would be responsible for all the public health services within his area, and on his staff there will be a Senior Health Visitor, and Sanitary Inspector, with the necessary assistants.

The Medical Officer of Health would co-ordinate the five areas and advise his Committee on main policy.

The next question to consider is how the National Health Service Act may alter the earlier conception of the work that is going to be undertaken by the Local Authority. The only services definitely mentioned are the following:—

(i) Care of mothers and young children.

(ii) Midwifery.

(iii) Health Visiting.
(iv) Health Centres.
(v) Vaccination and immunisation.
(vi) Ambulance service.
(vii) Prevention of illness, care and after-care.
(viii) Domestic Help.
(ix) Home Nursing.

HEALTH CLINIC SERVICES.

For your information, I make certain comments on the possibility or otherwise of which services are likely to be included in a Health Clinic.

(a) Maternity and Child Welfare Section.

Although the Act states it is the duty of the Local Authority to make arrangements for the care of children under five years of age, nevertheless, it is generally agreed that eventually this work will fall upon the Practitioner Service, and the family unit principle operate. Whether or not this includes advice on infant feeding and nurture, which at present is given in an infant welfare centre, remains to be seen. Many years must elapse before a complete service of this nature can be developed by the Practitioner Service, and I am therefore of the opinion that the Health Clinics should provide the necessary accommodation for this work, together with the accommodation for the provision of treatment for minor ailments in children under five years. I have already mentioned the fact that some of the Health Centres may require this added accommodation. The rooms required for this work will consist of a large waiting room, sufficient to hold from 100-150 mothers and children; consulting rooms; test-feed and toddlers rooms.

Amongst the experts there is a diversity of opinion as to who shall carry out the work. Some of the Paediatricians consider the routine work should be carried out by persons of a consultant status, others consider that assistant medical officers for maternity and child welfare should carry out the duties as heretofore. As there is only a limited number of consultant paediatricians, it is likely that the work will be carried out by the maternity and child welfare officers.

(b) Ante-Natal and Post Natal Clinics.

Some contemplate that ante-natal and post-natal clinics will, in the new Service, be conducted as out-patient departments of the various hospitals in the area.

There are certain objections to this:—

(i). The traditional association in the minds of the public that a hospital is a place to treat disease. One naturally wants to eliminate from the minds of expectant mothers that their condition is in any way associated with any form of illness. Possibly this objection may in time be overcome when the hospitals take a bigger share in the dissemination of preventive medicine knowledge, although this is difficult to imagine, as the Act definitely severs the association between the Municipal hospitals and the practice of preventive medicine which has been entrusted during the last 50 years to the Health Departments of Local Authorities.

(ii). The distance which would of necessity have to be covered by women attending for the purpose of examination and supervision. This work may, of course, be carried out in Health Centres, either by the practitioners in the Centre or by the Specialist attending for the specific purpose of conducting special sessions.

(iii). Personally I do not consider that the Ministry of Health will encourage practitioners to undertake this work, for we had evidence of their views prior to the war when they clearly indicated that only those specially trained with post-graduate experience should undertake this work.

Weighing up these considerations, I am inclined to the view that both ante-natal and post-natal clinics will be held in the Health Clinics, and the routine examinations and advice given by the Maternity and Child Welfare Officers of the Local Authority, with special sessions to which they can refer cases to a Specialist.

The accommodation therefore required will consist of a waiting room; interviewing rooms; consulting rooms and urine testing rooms.

(c) School Medical Service.

The next service to consider in the Health Clinic is the School Medical Service.

Here again one has to give some thought to the plan envisaged that eventually school children will be inspected, examined and treated by the practitioners. As this will take a long time to develop, I consider that accommodation should be provided in the five Health Centres for the routine treatment of such conditions as skin, minor ailments, ultra-violet light, and cleansing, together with accommodation for the specialist clinics of ear, nose and throat; orthopaedic; child guidance and speech therapy.

(d) Tuberculosis and Venereal Diseases Services.

I have already referred earlier to the sections that will be dealt with in the principal clinics and in the subsidiary clinics.

In relation to Tuberculosis and Venereal Diseases, a problem similar to that of the ante-natal and post-natal services arises. In the National Health Service Act, the Tuberculosis Officer and the Venereal Diseases Officer will be transferred to the Specialist Staff of the Regional Board, and will therefore be completely independent of the Local Health Authority.

How are these services to be conducted ? My own view is that the existing Tuberculosis Dispensaries will be re-designated and called Chest Clinics. The Tuberculosis Officer will become the Chest Specialist and will deal with other conditions in addition to Tuberculosis, such as Bronchitis, Asthma, Neoplasms, etc. His work will have to be closely linked with that of another specialist, namely, the Thoracic Surgeon. Patients will, as at present, be referred by the medical practitioners, through the Health Centres or from their domiciliary practice, to the Chest Specialist at the out-patient department of the hospital.

Although much of this work will be carried out as a unit of the out-patient department in the hospitals, I think it is likely that accommodation will have to be provided in the Health Clinics, as the question of distance for the attendance of patients will again influence the situation.

Much the same plan applies to the Venereal Diseases Service. As I have already stated, the Venereal Diseases Officer becomes an Officer of the Regional Board, and, as in the case of the Tuberculosis Officer, is completely divorced from his connection with the Local Health Authority.

The same development will probably take place as in the case of the Chest Clinics. Venereal Diseases Centres will be attached to the out-patient department of Hospitals, but, in addition, accommodation will have to be provided in the Health Clinics.

(e) Day Nurseries.

Until such time as the Education Authorities are able to provide the necessary schools, the Local Health Authority will continue to administer this service. It is not contemplated that the Education Authority will at any time look after children under the age of two years, and I consider it probable that public demand will require Maternity and Child Welfare Committees to provide accommodation for children under this age.

(f) HEALTH VISITING AND MIDWIFERY SERVICES.

The Health Visiting Service and the Midwifery Service will continue to operate as at present—the only difference being that as far as health visiting is concerned much of the information relating to tuberculosis and venereal diseases will be passed from the Local Health Authority to the respective Officers of the Regional Board, i.e. the Chest Specialist and Venereal Diseases Officer.

(g) AMBULANCE SERVICE.

The Ambulance Service will presumably operate as at present from a Central Depot, and be controlled by the Local Health Authority.

(h) CENTRAL ADMISSION BUREAU.

In order that the practitioners may be kept informed as to the bed state in the various hospitals, there is the possibility of a Central Admission Bureau being established for each group of hospitals. This Central Bureau may also serve as the control room for the ambulance service.

BACTERIOLOGICAL SERVICE.

I have included in the report a chart showing the structure of the future Bacteriological Service which will be administered by the Medical Research Council independently of the Regional Board and the Local Health Authority.

There will be a parent Laboratory at Oxford, to undertake research work and the preparation of media, vaccines, etc., with a subsidiary laboratory at Winchester, and satellite laboratories at Portsmouth, Southampton, and Bournemouth, to undertake the work of the respective County Boroughs.

At each of the hospitals, there will be local hospital laboratories, the work being carried out by qualified technicians.

A Clinical Pathology Service will, in time, I think be developed on somewhat similar lines.

ADMINISTERED BY THE MEDICAL RESEARCH COUNCIL.

BACTERIOLOGICAL LABORATORY SERVICES.

PARENT LABORATORY.
OXFORD

In charge : Director of Regional Laboratories.
Function : Research, preparation of media, vaccines, etc.

SUBSIDIARY REGIONAL LABORATORY
WINCHESTER

In charge : Director of Area Laboratories.
Function : Supervision of Satellite Laboratories, Special Investigations, Rural Bacteriological Work.

	BOURNEMOUTH	SOUTHAMPTON	PORTSMOUTH
In charge :	Medical Bacteriologist.	Medical Bacteriologist.	Medical Bacteriologist.
Function :	Routine Bacteriological Investigation.	Routine Bacteriological Investigation.	Routine Bacteriological Investigation.

	Isolation Hospital	*Borough Hospital*	*Royal South Hants Hospital*	Children's *Hospital*	*Free Eye Hospital*
In charge:	Qualified Technician	Qualified Technician	Qualified Technician	Qualified Technician	Qualified Technician
Function :	To carry out routine hospital work.	To carry out routine hospital work.	To carry out routine hospital work.	To carry out routine hospital work.	To carry out routine hospital work.

HOSPITALS.

The ownership of both the Municipal and Voluntary Hospitals will be transferred to the State on or before the appointed day.

The Committee have already been informed that the boundaries of the London South-West area include the whole of Surrey, Hampshire and the Isle of Wight, with parts of Sussex, Dorset and Wiltshire, and the four County Boroughs of Croydon, Portsmouth, Southampton and Bournemouth.

The Region is based on the London University, with three of its Associated Medical Schools, namely, Westminster, St. Thomas's and St. George's.

A Regional Board will be set up by the Minister, and will presumably hold its meetings in the Metropolis.

In the case of the South West Region, as is the case with three other Regions in England and Wales, out of a total of fourteen, it is proposed to create a sub-region administered by a Regional Committee. It is thought that this Regional Committee will be given a great deal of autonomy, and will most likely be the body to appoint the specialist staffs to hospitals and generally administer the hospital services in the sub-region, referring only matters of major policy to the Regional Board. They will normally appoint a Management Committee for each group of hospitals in their particular area, for example, it is probable that there will be a Management Committee covering the group of hospitals in the County Borough of Southampton, together with the hospitals on the fringe of the County Borough, such as the Home of Recovery, the Romsey Cottage Hospital, and the Fenwick Cottage Hospital.

These Management Committees will then be required to appoint House Committees to deal with the day-to-day problems of administration in the various institutions under its control.

I think it is unlikely that either the House Committees or the Management Committees will be able to deal with the extensions or change of policy, except in the form of recommendations to the Regional Committee, and, on major issues, reference to the Regional Board.

It is probable that the House Committees will be permitted to deal with minor structural alterations, decorations and repairs, and the appointment of junior resident medical, nursing and domestic staffs in their respective institutions, submitting these recommendations to the Management Committee of the Sub-Region for formal sanction.

It is likely that the Borough Hospital will accept all the maternity cases for a much wider area than it at present serves. The Royal South Hants Hospital is likely to become a hospital for accident and emergency surgery, and may possibly deal with certain acute medical conditions. Other cases will be admitted or transferred to the Borough General Hospital, and, until such time as accommodation is provided for the care of the chronic sick, it follows that the Borough Hospital will have to take over most of this work. I think the Free Eye Hospital and the Children's Hospital will become departments associated with the two principal hospitals in the town.

The future administration of the Municipal and Voluntary Hospitals is still in doubt. Whether the practice of having medical superintendents will continue, or whether they will be replaced by lay administrators, such as has been the practice in the Voluntary Hospitals throughout the country, is uncertain. Many of the consultants favour lay administration, in the hope that it will avoid any difference of opinion on clinical matters.

Undoubtedly those at present holding such posts will remain in their present positions until such time as their retirement or resignation.

With regard to Infectious Diseases, there will be centralisation, and small hospitals at present maintained by local sanitary authorities will become redundant. It is forecast that the Infectious Diseases Hospital and Sanatorium at Shirley will be limited to the treatment of infectious diseases, and will serve a much wider area, taking in cases as far west as Lymington, north as Winchester, and as far east as Wickham.

There are many advantages in centralising infectious cases in one institution, particularly as most of the smaller fever hospitals have no resident medical staff and have not the facilities to be found in a larger institution.

In relation to smallpox, it is essential that a hospital should be set aside for the reception of cases, particularly to serve Southampton because of the port traffic. At present, the existing Southampton Smallpox Hospital is in a poor state of repair, and I have advised you not to expend any money on the buildings because I believe that in the new set up it is possible that the Eastleigh Hospital may be taken over for this purpose and will then serve Southampton, Portsmouth, Bournemouth, Winchester and the intervening rural areas.

In connection with Tuberculosis, it is likely that there will be four sanatoria in the Regional Committee area, one to serve Bournemouth, one to serve Southampton, and one to serve Portsmouth, with a small sanatorium in the Isle of Wight. These institutions will provide mainly sanatorium beds, with a proportion of their beds allocated for the treatment of very advanced cases of tuberculosis. It is suggested that in all the general hospitals a certain number of beds should be kept for the treatment of advanced cases of tuberculosis.

It is likely that a village settlement, on the lines of Papworth or Preston Hall, may be established at Bishopstoke, and, as I stated before, Thoracic Units will be provided for each Region.

One can envisage certain administrative difficulties in this new set up. It will still be the responsibility of the Medical Officer of Health to carry out epidemiological field work, but he will have no administrative authority over the Infectious Diseases Hospital,—particularly will this be difficult in connection with the Port Health work, where at present the Port Medical Officer isolates many of the minor infections, such as chickenpox, mumps and measles, which are not normally admitted to the Infectious Diseases Hospital. He also arranges for the admission of cases for observation. Whether or not he will have the authority to continue this practice in the new scheme remains to be seen.

Another disadvantage is the fact that, unless he has access to the Fever Hospital, it will be impossible for him to keep up his knowledge of the diagnosis of infectious diseases, and, in time, he will become incompetent to carry out the epidemiological field work which remains his responsibility under the Act.

The regionalisation of hospitals, and the provision of a complete medical service for the people, is long overdue. There is, however, an apparent lack of co-ordination in the Act between the Hospital Services, the Local Authority Services, and the Practitioner Services. These, it is to be hoped, will be corrected and made effective when the Minister issues his Regulations and Orders.

I am, Ladies and Gentlemen,

Your obedient Servant,

H. C. MAURICE WILLIAMS.

Medical Officer of Health.

30th December, 1946.