[Report 1937] / Medical Officer of Health, Cardiff County Borough & Port.

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City and Port of Cardiff

PUBLIC HEALTH DEPARTMENT

ANNUAL REPORT
1937

J. GREENWOOD WILSON, M.D., F.R.C.P. Lond.,
Medical Officer of Health,
School Medical Officer,
Medical Officer for Mental Deficiency
and
Medical Officer for Public Assistance.

ABERGAVENNY:
SEARGEANT BROTHERS LIMITED.
—
1938.

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Health Committee.

THE LORD MAYOR (Alderman O. CUTHBERT PURNELL, J.P.*)

Chairman :
Councillor JAMES GRIFFITHS, J.P.*†‡

Deputy Chairman :
Councillor W. R. WILLS, *†‡

Alderman	Sir C. W. MELHUISH, J.P.*	Councillor	A. J. MARTIN, †‡
Councillor	T. J. MULLINS†‡	,,	G. E. B. FREWER*
,,	R. G. ROBINSON†‡	,,	D. T. WILLIAMS†‡
,,	H. E. WHITE, J.P.†‡	,,	W. T. BANBURY†‡
,,	A. J. BEECHER†‡	,,	E. ALLAN ROBSON, J.P.
,,	G. L. FERRIER†‡	,,	J. D. WILLIAMS*†‡
,,	F. CHAPMAN*†‡	,,	F. EDWARDS.

Hospitals Sub-Committee.

The Health Committee with the following co-opted members :

Dr. R. ARMSTRONG.
Sir EWEN J. MACLEAN, J.P., M.D., F.R.C.P.
Dr. T. MCKELVEY.

Lord Pontypridd Hospital Visiting Sub-Committee.

Members of the Health Committee whose names are marked thus* with the following co-opted member :

Mr. HERBERT M. THOMPSON, J.P., M.A., LL.D.

Maternity, Child Welfare and Tuberculosis Sub-Committee.

Members of the Health Committee whose names are marked thus † with the following co-opted members :

Mrs. E. THOMAS.
Mrs. A. KERRIGAN, J.P.
Mrs. H. GRIFFITHS.
Mrs. M. D. LEWIS.
Sir EWEN J. MACLEAN, J.P., M.D., F.R.C.P.

Sanitary Services Sub-Committee.

Members of the Health Committee whose names are marked thus ‡

Special Services Committee of the Education Committee.

Chairman :
Alderman Sir W. R. WILLIAMS, J.P.

Deputy Chairman :
Councillor H. E. WHITE, J.P.

The Lord Mayor (Alderman O. CUTHBERT PURNELL, J.P.)		Councillor	T. J. MULLINS.
		,,	G. J FERGUSON.
Alderman	G. FRED EVANS, J.P.	,,	J. HEGINBOTTOM, J.P.
,,	Sir HERBERT HILES, M.B.E., J.P.	,,	MORGAN DAVIES, J.P.
,,	W. G. HOWELL.	,,	J. P. COLLINS.
,,	C. H. MCCALE.	,,	G. E. B. FREWER.
Councillor	J. HELLYER.	,,	J. D. WILLIAMS.

Co-opted Members :

Miss MABEL HOWELL. Miss M. SANDERS, J.P. REV. D. J. THOMAS.

Joint Health and Education (Medical Services) Sub-Committee.

Representatives of Health Committee:

Councillor James Griffiths, J.P. (*Chairman*)
,, W. R. Wills.
,, A. J. Beecher.
,, F. Chapman.
,, W. T. Banbury.

Representatives of Education Committee:

Alderman Sir W. R. Williams, J.P.
,, G. Fred Evans, J.P.
,, Sir Herbert Hiles, M.B.E., J.P.
The Lord Mayor (Alderman O. Cuthbert Purnell, J.P.)
Councillor R. G. Robinson.

Mental Deficiency Committee.

The Lord Mayor.

Chairman:

Councillor T. J. Mullins.

Deputy Chairman:

Councillor T. J. Kerrigan.

Councillor R. G. Robinson.
,, W. H. J. Muston.
,, J. P. Collins.
,, A. J. Martin.
,, A. Powell.
Councillor W. T. Banbury.
,, T. H. Lovitt.
,, J. D. Williams.
,, M. Roberts.
,, E. J. Cazenave.
Councillor F. G. Jeans.

Co-opted Members :

Mrs. A. Kerrigan, J.P.
Mrs. C. Cantillon.
Mrs. A. A. Evans.
Mrs. G. Powell.

Public Assistance Committee.

Chairman :

Alderman Sir C. W. Melhuish, J.P.

Deputy Chairman :

The Lord Mayor (Alderman O. Cuthbert Purnell, J.P.)

Alderman C. H. McCale.
Councillor James Griffiths, J.P.
,, J. Heginbottom, J.P.
,, Morgan Davies, J.P.
,, C. G. Moreland.
,, F. Chapman.
,, A. J. Martin.
Councillor G. E. B. Frewer.
,, A. Powell.
,, A. Weston.
,, J. D. Williams.
,, F. Edwards.
,, M. Roberts.
,, F. G. Jeans.

Co-opted Members ;

Mrs. C. Cantillon.
Mrs. A. A. Evans.
Miss E. Ingledew.
Mr. J. J. Ames.
Mr. G. D. Thomas.
Mr. G. H. Snook.
Mr. F. Ingleton.
Mr. E. J. Sawyer.

STAFF.

Medical Officer of Health, School Medical Officer, Medical Officer for Mental Deficiency and Medical Officer for Public Assistance:

J. Greenwood Wilson, M.D., F.R.C.P. Lond., D.P.H.

Deputy Medical Officer of Health:

W. Powell Phillips, M.R.C.S., L.R.C.P. D.P.H.

Assistant Medical Officers

Herbert Sheasby, M.B., Ch.B., D.P.H.
Helena J. Webster, B.Sc., M.B., B.Ch., D.P.H.
Cecil W. Anderson, M.B., Ch.B., D.P.H.
Nancy K. Gibbs, M.R.C.S., L.R.C.P., D.P.H.
Hilda A. Cohen, M.R.C.S., L.R.C.P., D.P.H.
Jean W. Smellie, M.B., Ch.B., D.P.H.
G. Edward Phillips, M.R.C.S., L.R.C.P., D.P.H.

Two Part-time Assistant Medical Officers.

Specialist Medical Officers (Part-time):

Ophthalmic Surgeon: Rupert J. Parry, M.B., B.S. (Lond.)
Orthopaedic Surgeon: A. O. Parker, M.D., C.M., M.C.P.S. (Man.)
Aural Surgeon: R. D. Owen, B.Sc., F.R.C.S. (Ed.)
Consultant (Juvenile Rheumatism): A. G. Watkins, M.D. (Lond.) M.R.C.P. (Lond.)

Dental Staff:

D. W. Elliot, L.D.S.
D. J. Andrews, L.D.S.
W. A. Sutherland, L.D.S.
P. G. Oliver, L.D.S.
C. N. Howitt, L.D.S.

Five Clerk-Attendants.

Health Visitors, School and other Nurses, and Municipal Midwives:

Supervisor: Mrs. L. Huntley.
Fifteen Health Visitors (Including two part-time Tuberculosis Nurses).
Two Tuberculosis Nurses (Whole-time).
One Venereal Diseases Nurse.
Nine School Nurses.
Two Orthopaedic Nurses.
Eighteen Municipal Midwives.

Sanitary Inspectors (Urban):

Chief Inspector: W. G. Pyatt.
One Chief Assistant Inspector.
Seventeen Assistant Inspectors.

Sanitary Inspectors (Port):

Chief Inspector: T. D. Hill.
One Chief Assistant Inspector.
Six Assistant Inspectors.

Veterinary Inspection and Meat Inspection (Abattoirs) Staff:

Veterinary Officer and Chief Inspector of Meat: John H. M. Hughes, M.R.C.V.S., D.V.S.M.
Three Assistant Inspectors of Meat.

Public Analyst's Laboratory:

Public Analyst: STANLEY DIXON, M.SC., F.I.C.
Assistant Chemist: R. G. MINOR, A.I.C.
One Laboratory Assistant.

Mental Deficiency Staff:

Visiting and Inquiry Officer: WM. C. SWEETLAND.
Visiting Officer: Miss K. POWELL.
Occupation and Training Centre:
Supervisor: Mrs. A. DASCOMBE.
One Instructress and 1 Instructor.

Clerical Staff (excluding Hospitals):

Chief Clerk: THOMAS CHANT.
Eleven male Clerks and 10 female Clerks (General Public Health Service, etc.).
Three male Clerks and 7 female Clerks (School Medical Service).

Other Staff:

One Epidemic Officer.
One Infant Protection Visitor.
One Vaccination Officer.

Hospitals:

Llandough Hospital:

Medical Superintendent: DAVID G. MORGAN, M.R.C.S., L.R.C.P. (Also Medical Officer, City Lodge)
Deputy Medical Superintendent and Physician: D. A. WILLIAMS, B.SC., M.D.
Senior Resident Surgical Officer: W. D. LOVELOCK JONES, B.SC., M.B., B.Ch., M.R.C.S., L.R.C.P.
Matron: Miss C. L. JOHN (Also Superintendent Nurse, City Lodge)
Dispenser: SELWYN DAVIES, Ph.C., M.P.S.
Almoner: Miss G. OLWEN WILLIAMS.
Five Junior Resident Medical Officers.

Visiting Consultant Staff:

Hon. Consulting Physician: Professor A. M. KENNEDY, M.D., F.R.C.P.
Physician: ABEL EVANS, M.B. B.S. (Lond.), M.R.C.P. (Lond.)
Surgeon: D. J. HARRIES, D.SC., M.D., F.R.C.S.
Gynaecologist: Professor G. I. STRACHAN, M.D., F.R.C.P., F.R.C.S., F.C.O.G.
Radiologist: T. GARFIELD EVANS, M.D. (Lond.), D.M.R.E.
Aural Surgeons: R. D. OWEN, B.SC., F.R.C.S. (Ed.); A. A. PRICHARD, M.D.
Orthopaedic Surgeon: A. O. PARKER, M.D., C.M., M.C.P.S. (Man.)
Physician for Diseases of Children: A. G. WATKINS, M.D. (Lond.), M.R.C.P. (Lond.)
Pathologist: Professor J. B. DUGUID, M.D.
Bacteriologist: W. PARRY MORGAN, M.A., M.D.
Anaesthetist: J. HARDSTAFF WEST, M.R.C.S., L.R.C.P., D.A.
Dentist: W. E. HALLINAN, L.D.S.

Isolation Hospital:

Medical Superintendent: G. EMRYS HARRIES, M.B., B.S. (Lond.), M.R.C.S., L.R.C.P., D.P.H.
Matron: Miss E. P. CHUBB.
One Resident Assistant Medical Officer.

Lord Pontypridd Hospital:
Matron: Miss M. W. FOX.

Public Vaccinators (Part-time):

J. J. Buist, M.B. (Lond.)
C. C. Ralph Downing, M.D.
A. Dower, M.D.
H. C. C. Joyce, M.R.C.S., L.R.C.P.
J. F. Dover, M.B., B.S.

Public Assistance Medical Officers:

City Lodge:

Medical Officer: David G. Morgan, M.R.C.S., L.R.C.P. (Also Medical Superintendent, Llandough Hospital)

Deputy Medical Officer: John Jones, M.B., B.Ch.
Three Resident Assistant Medical Officers.

Ely Lodge (P.L. Mental Deficiency Institution):

Medical Officer and Master: J. Rowland Payne, M.R.C.S., L.R.C.P.

District Medical Officers:

H. D. E. Whitman, M.R.C.S., L.R.C.P. (Whole-time)
E. Mervyn Jones, M.R.C.S., L.R.C.P., D.P.H. (Whole-time)
A. Dower, M.D. (Part-time)
D. W. Girvan, M.B., C.M. (Part-time)
E. Llewellyn, M.B., Ch.B. (Part-time)
A. H. Mitchell, M.B., Ch.B.(Part-time)
J. F. Dover, M.B., B.S. (Part-time)
H. C. C. Joyce, M.R.C.S., L.R.C.P. (Part-time)
M. G. Williams, M.R.C.S., L.R.C.P. (Part-time)

PREFACE.

AIR RAID PRECAUTIONS.

Preoccupation with A.R.P. having combined with illness of staff to delay publication of the annual report for 1937, a brief description of what has been accomplished on the medical side of A.R.P. may not be amiss. The general control of A.R.P. has been entrusted by the A.R.P. Committee to a Casualty Services Sub-Committee composed as follows :—*Chairman* : Councillor James Griffiths, J.P. (Chairman of the Health Committee) ; *Deputy Chairman* : Councillor W. R. Wills (Deputy Chairman of the Health Committee) ; Col. J. C. Gaskell, representing the British Red Cross Society; Dr. Edgar Llewellyn, representing the Order of St. John (Priory for Wales) ; Dr. A. B. Williamson and Dr. F. Y. Pearson, representing the British Medical Association; the Town Clerk (Mr. D. Kenvyn Rees) and the Medical Officer of Health.

The chief concern of this Sub-Committee hitherto has been to press on with at least a minimal course of first-aid training for those volunteers who desire to serve in the A.R.P. casualty services. The first-aid course for each class consists of 10 lecture-demonstrations, each one lasting about an hour and a half. The lecture-demonstrations are given by medical men and demonstrators drawn from panels prepared with the help of the representatives of the British Red Cross Society and the Order of St. John (Priory for Wales) on the Casualty Services Sub-Committee. The large hut in the City Hall quadrangle, which was vacated not long ago by the Welsh Board of Health, has lent itself admirably for conversion into two large rooms for the lecture-demonstrations. Later on it may be used as a club room for A.R.P. volunteers. At the present time, 206 females and 23 males, a total of 229, have completed first-aid courses, and 292 females are now under training. It is proposed that in the near future all these shall undergo training in anti-gas measures. A.R.P. badges are to be issued to those who have made eight attendances out of a possible 10.

It is evident, therefore, that the training of personnel is well under way. What remains to be accomplished is the completion of a revised scheme of first-aid posts. At the time of the September crisis a complete scheme had already been prepared, and a map showing the positions of all first-aid posts in the city had been published in the local press. Now, as a result partly of the lessons learned during the crisis, a new scheme of first-aid posts has been submitted to the Home Office for approval. Meanwhile, thanks to the brilliant co-operation of the City Transport Department, Cardiff is not without a first-aid post, and has the comfort of knowing that, at need, an almost unlimited number of posts like the one presently to be described could be put into commission at very short notice. The first-aid post already in existence is a mobile one, and its description is reproduced by courtesy of the Editor of the *British Medical Journal* as follows :—

> Among many examples of the rapid improvisation that became so necessary during the recent crisis the Cardiff city council's scheme for converting motor buses into mobile first-aid posts deserves special mention. Its greatest advantage was that whereas the schools that had been earmarked for first-aid posts had not, by Home Office instructions, to be adapted for their purpose until the last possible moment, and therefore could never have been ready in time, a fleet of five or more mobile first-aid posts converted from the Cardiff corporation's motor buses could have been ready for the road by zero hour. As it is, in view of the end of the crisis, only one unit has been completed, but it will serve as a model for others to be established at a moment's notice.

The vehicle chosen was a single-deck bus, which, although old enough to be replaced for passenger traffic by vehicles of more modern design, is eminently suitable for its new purpose. The chocolate, red, and yellow colouring of the bodywork has given way to the white of medical service. Glass windows, because splinterable, were removed, and the apertures filled with matching (and gas-tight) bodywork. In buses of this type the entrance for passengers and conductor is towards the rear on the near side. The outer doorway of this entrance was treated in the same way as the window apertures, and when the floor had been extended from the inner doorway over the two steps there was a recess for the reception of an exactly fitting all-steel cabinet for the storage of medical sundries. The storage capacity of this cabinet, which to economize space has overlapping sliding doors, is sufficient to take all instruments, anaesthetics, dressings, and drugs that might be required not only for first aid but for major operations such as intravenous transfusion of blood or saline and amputation.

The list of medical sundries, which, of course, is easily variable, is as follows :—

1 sterilizer.
3 pairs dressing forceps.
3 pairs artery forceps.
2 scalpels.
2 syringes (hypodermic) and 1 dozen needles.
3 pairs of dressing scissors.
1 tourniquet.
3 kidney dishes.
8 oz. sodium bicarb.
8 oz. boric powder.
8 oz. tinct. iodine.
16 oz. dettol.
4 oz. tannic acid jelly.
8 oz. acriflavine solution.
1 lb. plain lint.
1 lb. boric lint.
6 lb. absorbent wool.
8 oz. bleach ointment.
2 nail brushes.
6 towels.
3 tubes sterile catgut and needles.
1 large bottle of brandy.
8 oz. sal volatile.
1 lb. ether and chloroform.
1 ether mask.
1 tube ethyl chloride spray.
1 feeding cup.
2 pairs india-rubber gloves.
1 blood transfusion apparatus.
1 saline apparatus (including saline tablets).
1 tongue depressor.
2 eye baths.
2 boxes safety pins.
2 sterilized dressing boxes.
8 bowls.
1 measuring glass.
1 Winchester quart distilled water.
12 packets gauze (cyanide, plain, and iodoform).
3 rolls elastoplast dressings.
2 dozen burn dressings.
1 gross each 1 in., 2 in., and 3 in. bandages.
1 doz. triangular bandages.
2 dozen sterile dressings.
1 bottle boric solution (standard).
1 bottle sodium bicarb. solution (standard).
1 bottle saline solution (standard).
6 tubes morphine tablets.
1 tube strychnine.
1 bottle picric acid solution.
1 bottle calamine lotion.
Tetanus antitoxin serum.

The seats of the bus have been replaced by two-tier stretcher racks running the length of the bus with a gangway between, which gives ample room to walk and work. The racks on the off side have six stretchers, and the near side two. The stretchers are all steel. The space between the near-side stretcher rack and the cupboard already described is sufficient : (*a*) for a cupboard seat for three of the personnel, and (*b*), when the unit is in action, for a flap table large enough and strong enough for operating on to be let down over the seat. The rear panel of the bus has been cut so as to leave ample space for stretchers to be carried in, and there are two broad steps down from floor level. When not in use the space is closed to draught and even to gas by heavy canvas curtains. On the near side of the bus, between the recessed cupboard for dressings, etc., and what remains of the rear panel is another recess for washing facilities—a five-gallon water tank with tap opening over a wash-hand basin (the ordinary cheap type in a metal stand), the waste draining by a flexible metal pipe through the floor of the bus. A liquid soap container and towel rail are also fixed conveniently in the same recess.

For the rest, there are stored in various parts of the bus :—

4 stools (collapsible).
2 dressing buckets.
6 hot-water bottles (aluminium with covers).
1 lighting unit (emergency).
1 bedpan.
1 urinal.
1 set vacuum flasks (4 x 1 qt.) for hot (sterile) water supply.
1 set splints complete in box.
1 cylinder oxygen, tubing, and facepiece.
16 blankets.
6 india-rubber sheets.
12 gas masks.
2 doctors' white coats.
2 fire extinguishers.
1 floor mop.

Lighting is by the ordinary bus roof lights running off the bus battery, but as the light would be on continuously an extra battery has been fitted. In addition, there is a surgical lamp on a stand giving a particularly bright light just where it is wanted over the operating table. This is run off accumulators which will last twelve hours' continuous service. The personnel of the unit is one doctor (from the list of doctors who have volunteered for service at first-aid posts), two trained male nurse orderlies (from St. John Ambulance Corps), and one trained female nurse.

The cost of conversion (mainly overtime labour charges) was £95, and of equipment £55, making a total of £150. For the time being it is proposed to have a fleet of four of these converted buses, two (painted white) for non-gas-contaminated casualities, two (painted red) ıor gas-contaminated cases. The red buses will require all-metal fittings, and the nearside entrance towards the rear may have to be adapted for an air-lock instead of a cupboard recess; they will also have to have tanks built into the roof for larger water supplies. In both the red and the white buses it is proposed to install ventilating fans in the roof to create within the vehicle a positive air pressure sufficient to keep out gas. The height of the bus above ground is also a help in this respect.

It is proposed to use the bus in peace time for an obstetrical emergency flying squad, the establishment of which was recommended in recent maternal mortality reports. In this connexion it is suggested that although the patient in obstetrical emergencies may be too ill to travel a long distance to hospital there would be few cases in which she would be too ill to transfer to the mobile first-aid post at her door, where she would receive all necessary attention at much greater convenience to the medical staff and with correspondingly better prospects of successful results.

GENERAL COMMENTARY.

The figures usually quoted as a rough guide of the health of the city show no startling changes for good or ill. The death-rate is the same as that for 1936 and the birth-rate has risen slightly. The maternal mortality rate is again down a little, being the lowest since 1931, and the infant mortality rate, although it has risen from its record low point of 1936, is still considerably lower than the average for the previous 10 years.

Scarlet fever and diphtheria were more prevalent than in 1936, but, fortunately, scarlet fever continued to be mild in character, and the case mortality of diphtheria was lower than it had been since 1932. A study of the table on page 15, which shows the age incidence of notifiable infectious diseases, demonstrates once again how the danger of a child's contracting diphtheria increases steadily from the first birthday until the age period 5-10 years. *Hence the importance of preventive inoculation against diphtheria during the pre-school period*, whereas in Cardiff, as in most places where diphtheria immunization is carried out, despite all efforts to teach parents wisdom in this respect, the greater proportion of children inoculated is of school age. Dr. James Kerr, one of the foremost authorities on child hygiene, considers that the omission of diphtheria immunization at the time of weaning or soon after is the greatest failure of our public health system at present.

The tuberculosis death-rates in 1937 *were the lowest on record*, namely, 0·82 for tuberculosis of the respiratory system and 0·17 for other forms of tuberculosis (total, 0·99 per 1,000 population).

The cancer death-rate in Cardiff, as in other parts of the country, again rose. Although this is no cause for a panic "cancerophobia," it does serve to emphasize the need to press on with the project for the establishment of a Welsh National Radiotherapeutic Institute.

To re-index and re-write the annual report in the preface is fair neither to the report nor to the preface, and in a report of so full and varied interest, that deals with so many important aspects of the city's health services, it is extremely difficult to select for comment or emphasis one more than any other item. The list of contents itself is the most striking, because it shows the extraordinary variety of matters dealt with by a modern health department. Without implying that the other parts of the report are not equally important, it may be noted that (1) on pages 12 and 13 Dr. Webster

continues her analysis of the causes of death in the newly born, (2) on page 13 for the first time in the annual report particulars are given of unemployment and public assistance, (3) on pages 21 to 44 the Medical Superintendents of the City Isolation, Lord Pontypridd and Llandough Hospitals give their own reports on the year's work in those institutions, (4) pages 45 to 58 show a continued growth in the popularity of the accident and asthma services, (5) on page 98 the Chief Sanitary Inspector (Mr. W. G. Pyatt) maintains, in face of contrary opinions from many other parts of the country, that bed-bugs can be eradicated without resort to dangerous fumigant gases, (6) on page 112 the constitution, limits of jurisdiction, etc., of the Cardiff Port Health Authority are defined, (7) on pages 122 to 124 a new graphic method for recording rat harbourage on vessels is explained and illustrated, and (8) on pages 140 and 141 of the School Medical Service report plans are given of the two new Health and Public Assistance Centres that are expected to be ready for use early in 1939.

Appreciation.—An unsolicited (and all the more welcome) testimonial to the activities of this spending department appears on pages 8 and 9 of the Financial Report of the City Treasurer and Controller (Mr. E. W. Barker) for the year ended 31st March, 1938. Writing of the administration of the maternity, child welfare and midwifery services at a cost in the year of £24,240, Mr. Barker claims their operation over a number of years has resulted in a *large decrease in the deaths of young children and an increase of the health of adult life which cannot be measured in pounds, shillings and pence.* On page 9 of his report Mr. Barker concludes *" that there is no doubt that the health service of Cardiff is of a very high standard."*

PUBLICATIONS.

The following publications by members of the staff appeared in 1937 :—

" The Cardiff Corporation Accident Service " by Dr. J. Greenwood Wilson (with Mr. A. O. Parker). *The Medical Officer*, 16th and 23rd January, 1937.

" Social Hygiene and Public Health " by Mr. Thomas Chant. *The Medical Officer*, 30th January and 6th February, 1937.

" The Place of the Health Department in Housing Administration " by Dr. J. Greenwood Wilson. *The Journal of State Medicine*, 1937, Vol. XLV, No. 7.

" Quantity plus Quality " (The work of the League of Nations Housing Commission) by Dr. J. Greenwood Wilson. *Public Health*, 1937, Vol. L, No. 12.

" Venereal Disease in Women and Children " by Dr. Helena J. Webster. *Public Health*, 1937, Vol. LI, No. 2.

" Acute Infective Endocarditis due to *Bacterium Coli* " by Dr. G. Emrys Harries (with Dr. J. M. L. Burtenshaw). *The Lancet*, 2nd October, 1937.

J. GREENWOOD WILSON.

Public Health Department,
City Hall,
Cardiff,
November, 1938.

CITY OF CARDIFF.

PUBLIC HEALTH DEPARTMENT.

Expenditure 1936-37.

Service	Total Expenditure	Income (Excluding Government Grants)	Net Cost of Service
(1) Health, etc., Services—	£	£	£
Sanitary Expenses	16,085	509	15,576
Food and Drugs (Adulteration) Act	1,221	216	1,005
Diseases of Animals Acts	516	70	446
Midwives Acts	25	—	25
Shops Acts	540	5	535
Meteorological Station	119	—	119
	18,506	800	17,706
(2) Prevention and Treatment of Tuberculosis	33,075	446	32,629
(3) Maternity and Child Welfare Service	25,708	3,723	21,985
(4) Venereal Diseases	5,629	—	5,629
(5) School Medical Service	14,500	1,442	13,058
(6) Mental Deficiency Service	17,260	509	16,751
(7) Port Health Service	5,332	977	4,355
(8) Hospitals, etc :—			
City Isolation Hospital....	23,615	3,579	20,036
Caerau Smallpox Hospital	1,923	17	1,906
Lord Pontypridd Hospital (Dulwich House)*	1,569	1,569	—*
Llandough Hospital	78,610	17,810	60,800
Accident Unit	6,272	984	5,288
Total	£231,999	£31,856	£200,143

The School Medical Service and the Port Health Service rank for Government grants on a percentage basis, although the grants are not shown in the above statement.

Contributions out of Government funds in respect of certain other services on which percentage grants were made prior to April, 1930, are now merged in the block grant to the Council.

* Maintained out of proceeds of the Lord Pontypridd bequest.

GENERAL HEALTH SERVICE.

I.—SUMMARY OF GENERAL AND VITAL STATISTICS.

Area (acres) :—			
Including inland water, foreshore and Flat Holm			13,628
Excluding foreshore and Flat Holm			11,984
Excluding inland water, foreshore and Flat Holm			11,580
Population (Census, 1931)			223,589
Population (Estimated, mid-1937)			220,200
Number of persons per acre (exclusive of foreshore and Flat Holm)			18·3
Estimated number of inhabited houses			47,500
Estimated number of inhabited houses per acre (exclusive of foreshore and Flat Holm)			3·96
Estimated average number of persons per occupied house			4·6
Rateable value			£1,892,924
Estimated product of a penny rate			£7,160
Live births	3,400	Birth-rate per 1,000	15·4
Deaths	2,789	Death-rate per 1,000	12·6
Excess of births over deaths	Males, 235 ; Females, 376 ;		Total, 611
Deaths under 1 year	220	Death-rate per 1,000 births	64

Deaths of women in child-birth :—

	Number.	*Death-rate per 1,000 Live Births.*	*Death-rate per 1,000 Total Births.*
Puerperal sepsis	3	0·88	0·85
Other puerperal causes	10	2·94	2·82
Total	13	3·82	3·67

Deaths from various causes :—

	Number.	*Death-rate per 1,000*
Typhoid fever	2	0·01
Measles	12	0·05
Scarlet fever	2	0·01
Whooping cough	8	0·03
Diphtheria	20	0·09
Tuberculosis of respiratory system	181	0·82
Other tuberculous diseases	38	0·17
Cancer	356	1·61

II.—AREA AND POPULATION.

The total area of Cardiff (including inland water, foreshore and Flat Holm) is 13,628 acres; excluding inland water, foreshore and Flat Holm it is 11,580 acres.

According to the Census of 1931, the population of Cardiff was 223,589 (males 107,309, females 116,280) and the Registrar-General's estimate of the population for mid-1937 was 220,200.

The area and population of Cardiff are shown in municipal wards and registration sub-districts in the following table :—

Localities	Area in Acres (land and inland water)	Population	
		Census 1931	Estimated 1937
Adamsdown	1,320	17,209	15,200
Cathays	338	16,566	15,600
Gabalfa	1,463	18,703	20,100
Central	535	13,544	11,800
South	1,073	13,635	13,700
Central Registration Sub-District	4,729	79,657	76,400
Plasnewydd	233	15,056	14,200
Penylan	1,765	14,146	15,000
Roath	754	15,792	15,200
Splott	1,912	20,898	21,300
East Registration Sub-District	4,664	65,892	65,700
Llandaff* } Ely }	2,719	27,762	{ 15,400 } 15,200
Canton	247	17,273	15,900
Grangetown	949	15,403	14,900
Riverside	320	17,602	16,700
West Registration Sub-District	4,235	78,040	78,100
Whole City	13,628	223,589	220,200

*Llandaff was divided into two Wards (Ely and Llandaff) and minor alterations were made to several other Wards in November, 1936.

III.—BIRTHS.

The numbers of births and still-births registered and allocated to Cardiff during 1937, sub-divided according to sex and legitimacy, are shown in the following table :—

Births.

	Legitimate	Illegitimate	Total
Males	1,662	77	1,739
Females	1,605	56	1,661
Total	3,267	133	3,400

Still-births.

	Legitimate	Illegitimate	Total
Males	82	2	84
Females	50	4	54
Total	132	6	138

The number of live births belonging to, but registered outside, Cardiff was 32 (9 males and 23 females), whilst 417 births (226 males and 191 females) and 67 still-births (34 males and 33 females) belonging to other districts were registered in Cardiff. Allowance has been made for these corrections in the net figures shown above.

The 3,400 registered births were equivalent to a birth-rate of 15·4 per 1,000 of the population, as compared with 15·1 per 1,000 in 1936. The rates for legitimate births and illegitimate births were 14·8 and 0·6 per 1,000 respectively. The birth-rate for each of the last ten years was as follows :—

Year	*Birth-rate per* 1,000.
1928	18·0
1929	17·5
1930	16·9
1931	16·8
1932	15·7
1933	15·5
1934	15·8
1935	15·2
1936	15·1
1937	15·4

The 138 registered still-births constituted a rate of 39 per 1,000 total (live and still) births, as compared with 48 in 1936.

The following is a comparison of the birth-rate for 1937 and the preceding ten years with the birth-rates in England and Wales and the 125 Great Towns for 1937 :—

		Birth-rate per 1,000.
CARDIFF	1937	15·4
	1927-1936	16·5
England and Wales, 1937		14·9
125 Great Towns, 1937		14·9

The birth-rates for 1937 in municipal wards and registration sub-districts were as follows :—

Localities	Birth-rate per 1,000
Adamsdown	17·2
Cathays	14·0
Gabalfa	14·6
Central	11·0
South	18·6
Central Registration Sub-District	15·1
Plasnewydd	13·8
Penylan	12·2
Roath	13·3
Splott	18·8

East Registration Sub-District	15·1
Llandaff	14·1
Ely	24·2
Canton	13·3
Grangetown	16·8
Riverside	11·8
West Registration Sub-District	15·9
Whole City	15·4

IV.—DEATHS.

Deaths from All Causes.—The total number of deaths from all causes and at all ages registered during the year and allocated to Cardiff, after allowing for the necessary corrections, was 2,789 (1,504 males and 1,285 females). The death-rate per 1,000 of the population was 12·6. The total number of deaths registered in Cardiff was 2,943, but 588 of these were deaths of non-residents, which occurred mainly in hospitals and nursing homes, and 434 deaths of residents of Cardiff occurred and were registered in other areas—including Penarth, where Llandough Hospital is situated. Allowance has been made for these outward and inward transferable deaths in arriving at the net number. Of the 2,789 deaths belonging to Cardiff, 1,181, or 42·3 per cent., occurred in public institutions or nursing homes, as compared with 43·7 per cent. in 1936 and 41·6 per cent. in 1935. The death-rate for each of the last ten years was as follows :—

Year.	*Death-rate per* 1,000.
1928	11·7
1929	12·9
1930	11·4
1931	12·8
1932	12·5
1933	13·5
1934	12·3
1935	12·3
1936	12·6
1937	12·6

As stated above, the death-rate for 1937 was 12·6 per 1,000. In comparing the death-rate with that for England and Wales and other towns, however, it is necessary to make allowance for differences in the sex and age groups of the population as compared with those for England and Wales. In the following statement, in which the death-rate for Cardiff in 1937 is compared with the death-rate for the preceding ten years and with the death-rates for England and Wales and the 125 Great Towns in 1937, the necessary allowances have been made, by multiplying the death-rates by the appropriate comparability factors :—

		Death-rate per 1,000.
CARDIFF	1937	13·3
	1927-36	13·1
England and Wales, 1937		12·4
125 Great Towns, 1937		13·1

The death-rates for 1937 in municipal wards and registration sub-districts were as follows :—

Localities	Death-rate per 1,000
Adamsdown	16·5
Cathays	14·8
Gabalfa	9·6
Central	13·1
South	11·5
Central Registration Sub-District	12·9
Plasnewydd	15·8
Penylan	11·5
Roath	13·9
Splott	12·2
East Registration Sub-District	13·2
Llandaff	10·1
Ely	7·9
Canton	14·2
Grangetown	12·6
Riverside	14·4
West Registration Sub-District	11·9
Whole City	12·6

The following table, compiled from figures supplied by the Registrar-General, shows the causes of death at various ages during 1937 :—

Causes of Death	All Ages			Age Periods								
	M.	F.	Total	Under 1 yr.	1–2 yrs.	2–5 yrs.	5–15 yrs.	15–25 yrs.	25–45 yrs.	45–65 yrs.	65–75 yrs.	75 years and upwards
Typhoid and Paratyphoid Fevers	1	1	2	—	—	1	—	1	—	—	—	—
Measles	9	3	12	4	4	3	1	—	—	—	—	—
Scarlet Fever	1	1	2	—	1	1	—	—	—	—	—	—
Whooping Cough	1	7	8	2	3	3	—	—	—	—	—	—
Diphtheria	7	13	20	1	—	8	10	—	—	1	—	—
Influenza	29	21	50	—	—	1	—	1	4	19	11	14
Encephalitis Lethargica	2	—	2	—	—	—	—	—	2	—	—	—
Cerebro-Spinal Fever	1	2	3	1	—	1	1	—	—	—	—	—
Tuberculosis of Respiratory System	100	81	181	—	—	—	4	40	77	52	8	—
Other Tuberculous Diseases	21	17	38	2	2	7	6	8	8	4	1	—
Syphilis	10	—	10	2	—	—	—	1	1	5	1	—
General Paralysis of the Insane, Tabes Dorsalis	9	4	13	—	—	—	—	—	2	11	—	—
Cancer, Malignant Disease	178	178	356	—	1	—	—	1	21	153	122	58
Diabetes	13	25	38	—	—	1	—	—	1	10	18	8
Cerebral Haemorrhage, etc.	25	46	71	—	—	—	—	—	4	21	17	29
Heart Disease	355	367	722	—	—	—	5	7	35	181	225	269
Aneurysm	11	2	13	—	—	—	—	1	1	8	3	—
Other Circulatory Diseases	129	105	234	—	—	—	—	—	2	59	91	82
Bronchitis	63	39	102	11	1	3	1	1	1	31	22	31
Pneumonia (All Forms)	97	58	155	42	13	2	2	3	12	50	23	8
Other Respiratory Diseases	18	5	23	1	—	2	—	—	2	10	5	3
Peptic Ulcer	25	8	33	—	—	—	—	—	10	18	3	2
Diarrhoea, etc.	20	4	24	17	2	—	—	—	—	3	—	2
Appendicitis	9	8	17	—	—	—	3	2	4	4	2	2
Cirrhosis of Liver	2	1	3	—	—	—	—	—	1	1	1	—
Other Diseases of Liver, etc.	7	8	15	—	—	1	—	—	2	6	3	3
Other Digestive Diseases	23	14	37	4	1	—	—	3	4	9	10	6
Acute and Chronic Nephritis	50	36	86	—	—	—	—	3	9	37	25	12
Puerperal Sepsis	—	3	3	—	—	—	—	—	3	—	—	—
Other Puerperal Causes	—	10	10	—	—	—	—	2	8	—	—	—
Congenital Debility, Premature Birth, Malformations, etc.	66	57	123	120	—	—	2	—	—	1	—	—
Senility	20	38	58	—	—	—	—	—	—	1	8	49
Suicide	9	3	12	—	—	—	—	—	4	6	2	—
Other Violence	69	29	98	3	2	7	5	14	20	19	15	13
Other Defined Diseases	123	91	214	10	4	3	14	12	29	66	41	35
Causes ill-defined or unknown	1	—	1	—	—	—	—	—	—	—	1	—
All Causes	1,504	1,285	2,789	220	34	44	54	100	267	786	658	626

Cancer.—There was a further increase in the death-rate from cancer, as will be seen from the following table, which shows the death-rates for 1937, compared with those for previous years :—

	Death-rate per 1,000		
	Males	Females	Both Sexes
1937	1·68	1·55	1·61
1936	1·53	1·42	1·47
1927-1936	1·35	1·32	1·33

The deaths from cancer during 1937 are analysed according to age, sex and localisation of the disease in the following table :—

Cancer—Malignant Disease	Under 15 years		15-25 years		25-45 years		45-65 years		65-75 years		75 years and upwards		All Ages		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Both Sexes
Buccal Cavity and Pharynx	—	—	—	—	1	—	6	2	2	1	12	2	21	5	26
Digestive Organs and Peritoneum	—	—	—	—	8	4	39	33	47	35	11	16	105	88	193
Respiratory Organs	—	—	—	—	1	—	16	6	5	2	2	—	24	8	32
Uterus	—	—	—	1	—	2	—	17	—	4	—	4	—	28	28
Other Female Genital Organs	—	—	—	—	—	2	—	4	—	2	—	—	—	8	8
Breast	—	—	—	—	—	1	—	14	—	9	—	3	—	27	27
Male Genito-urinary Organs	1	—	—	—	2	—	3	—	9	—	3	—	18	—	18
Skin	—	—	—	—	—	—	3	1	—	1	1	1	4	3	7
Other or Unspecified Organs	—	—	—	—	—	—	3	6	2	3	1	2	6	11	17
Total	1	—	—	1	12	9	70	83	65	57	30	28	178	178	356

Deaths from Road Accidents.—The number of deaths from violence (excluding suicide) and the number and proportion of these due to road accidents in each year since 1923 are shown in the following table :—

Year	Total Deaths from Violence (excluding Suicide)	Deaths from Road Accidents	
		Number	Percentage
1923	100	14	*14·0*
1924	97	21	*21·6*
1925	91	23	*25·3*
1926	107	17	*15·9*
1927	103	20	*19·4*
1928	103	26	*25·2*
1929	98	16	*16·3*
1930	98	29	*29·6*
1931	93	30	*32·3*
1932	110	31	*28·2*
1933	88	26	*29·5*
1934	90	35	*38·9*
1935	89	34	*38·2*
1936	75	19	*25·3*
1937	98	30	*30·6*

The deaths from road accidents in 1937 are analysed in the following table to show the type of vehicle and the class of person involved :—

Vehicles	Fatal Accidents	Persons Killed					
		Motor Cyclists	Passengers	Pedal Cyclists	Drivers	Pedestrians	Total
Heavy motor vehicles	7	—	2	—	—	5	7
Light motor cars	12	—	—	—	3	9	12
Motor cycle	5	3	—	—	—	2	5
Pedal cycle	2	—	—	—	—	2	2
Heavy motor vehicle and pedal cycle	1	—	—	1	—	—	1
Light motor car and pedal cycle	1	—	—	1	—	—	1
Tramcar	1	—	—	—	—	1	1
Horse-drawn trolley ...	1	—	—	—	—	1	1
Total	30	3	2	2	3	20	30

Maternal Mortality.—The number of deaths due to puerperal sepsis was 3 and the number due to other puerperal causes 10, a total of 13, corresponding to death-rates of 3·82 per 1,000 live births and 3·67 per 1,000 total live and still-births.

The maternal death-rate has varied during the ten years 1928-1937 as follows :—

Year	Maternal Death-rate per 1,000 Live Births		
	Puerperal Sepsis	Other Puerperal Causes	Total
1928 ...	2·44	3·42	5·86
1929	0·76	2·80	3·56
1930	2·64	2·64	5·28
1931	1·85	1·59	3·44
1932	1·14	4·28	5·42
1933	1·45	3·49	4·94
1934	3·42	4·28	7·70
1935	2·96	1·77	4·73
1936	2·68	1·19	3·87
1937 ...	0·88	2·94	3·82

In the following table the maternal death-rate for 1937 is compared with the death-rate for the preceding ten years and with the death-rates for 1937 in England and Wales and in the 125 Great Towns :—

	Maternal Death-rate per 1,000 Live Births		
	Puerperal Sepsis	Other Puerperal Causes	Total
CARDIFF 1937....	0·88	2·94	3·82
CARDIFF 1927-1936	2·09	2·77	4·86
England and Wales, 1937	0·97	2·26	3·23
125 Great Towns, 1937	0·96	2·02	2·98

The following table shows the causes of the 13 deaths which occurred in 1937 in age periods :—

Causes of Death	Age Periods			Total
	15-25 years	25-35 years	35-45 years	
Haemorrhage following abortion	—	1	—	1
Puerperal haemorrhage	1	3	—	4
Puerperal sepsis	—	2	1	3
Puerperal albuminuria	1	—	—	1
Puerperal phlegmasia alba dolens	—	1	—	1
Puerperal embolism	—	1	—	1
Other accidents of childbirth	—	1	1	2
Total	2	9	2	13

Infant Mortality.—The number of deaths under one year of age was 220. Of these, 210 were deaths of legitimate infants and 10 were of illegitimate infants. The infant mortality rate was 64 per 1,000 live births (legitimate 64 and illegitimate 75), which is relatively low, but higher than the rates for the two previous years. The rate for each of the past ten years was as follows :—

Year.	*Deaths under 1 rear per 1,000 Births.*
1928	77
1929	84
1930	72
1931	77
1932	76
1933	77
1934	74
1935	59
1936	55
1937	64

The infant mortality rate for 1937, compared with the rate for the preceding ten years and with the rates in England and Wales and the 125 Great Towns for 1937, was as follows :—

		Deaths under 1 year per 1,000 Births.
CARDIFF	1937	64
	1927-1936	73
England and Wales, 1937		58
125 Great Towns, 1937		62

The infant mortality rates for 1937 in municipal wards and registration sub-districts were as follows :—

Localities.	Deaths under 1 year per 1,000 Births.
Adamsdown	51
Cathays	64
Gabalfa	41
Central	39
South	66
Central Registration Sub-District	53
Plasnewydd	121
Penylan	33
Roath	49
Splott	97
East Registration Sub-District	80
Llandaff	50
Ely	53
Canton	66
Grangetown	92
Riverside	59
West Registration Sub-District	64
Whole City	64

The deaths from various causes under one year of age in several age periods during 1937, compiled from figures supplied by the Registrar-General, are shown in the following table :—

Causes of Death	Under 1 week	1—2 weeks	2—3 weeks	3—4 weeks	Total under 4 weeks	4 weeks —3 months	3—6 months	6—9 months	9—12 months	Total
Measles	—	—	—	—	—	—	—	1	3	4
Whooping Cough	—	—	—	—	—	—	—	2	—	2
Diphtheria	1	—	—	—	1	—	—	—	—	1
Influenza	—	—	—	—	—	—	—	—	—	—
Tuberculosis of Nervous System	—	—	—	—	—	—	2	—	—	2
Tuberculosis of Intestines and Peritoneum	—	—	—	—	—	—	—	—	—	—
Other Tuberculosis	—	—	—	—	—	—	—	—	—	—
Syphilis	—	—	—	1	1	1	—	—	—	2
Meningitis	—	—	—	—	—	1	—	—	—	1
Convulsions	1	1	—	—	2	—	—	—	—	2
Bronchitis	1	—	—	1	2	4	4	1	—	11
Pneumonia	—	—	—	1	1	7	15	8	11	42
Other Respiratory Diseases	—	—	—	—	—	1	—	—	—	1
Inflammation of Stomach	—	—	—	—	—	1	—	—	—	1
Diarrhoea and Enteritis	—	—	—	—	—	11	4	2	—	17
Hernia, Intestinal Obstruction	—	—	—	—	—	2	—	1	—	3
Congenital Malformation	10	1	—	3	14	7	—	1	—	22
Congenital Debility	3	—	—	—	3	4	1	—	—	8
Premature Birth	52	4	1	1	58	3	1	—	—	62
Injury at Birth	7	1	—	—	8	—	—	—	—	8
Atelectasis	15	1	—	—	16	—	—	—	—	16
Icterus	2	—	—	—	2	—	—	—	—	2
Diseases of Umbilicus	—	—	—	—	—	—	—	—	—	—
Other Diseases of Early Infancy	—	2	—	—	2	—	—	—	—	2
Suffocation in Bed	—	—	—	—	—	—	—	—	—	—
Inattention at Birth	1	—	—	—	1	—	—	—	—	1
Other forms of Violence	—	—	1	—	1	—	—	—	1	2
Other Causes	1	—	—	—	1	2	2	1	2	8
All Causes	94	10	2	7	113	44	29	17	17	220
Percentage of Total Deaths under 1 year	*42·7*	*4·5*	*0·9*	*3·2*	*51·3*	*20·0*	*13·2*	*7·7*	*7·7*	—

It will be seen that the proportion of infant deaths under four weeks of age was 51·3 per cent. This proportion of the total number of deaths under one year has varied during the ten years 1928-1937 as follows :—

Year.	*Deaths under 4 Weeks per cent. of total Deaths under 1 Year.*
1928	*41·1*
1929	*43·9*
1930	*50·4*
1931	*45·2*
1932	*50·9*
1933	*45·3*
1934	*60·5*
1935	*60·3*
1936	*49·7*
1937	*51·3*

The special investigation regarding deaths of infants under one year, which was commenced in 1935, has been continued, and a report by Dr. Webster on the work for 1937 is given below.

Report by Helena J. Webster, B.Sc., M.B., B.Ch., D.P.H., on Infant Mortality.

Of the 220 deaths of infants registered during 1937, 214 cases were investigated, but in 15 of these no special information other than that already contained in the records of the department was obtainable.

The following table shows the age at death and whether premature or full-time of the cases investigated :—

Age at Death	Premature	Full-time	Total
Under 24 hours	34	10	44
1 day—1 week	23	23	46
1 week—1 month	6	14	20
1 month—3 months	8	33	41
3 months—6 months	4	24	28
6 ,, —9 ,, ...	1	17	18
9 ,, —12 ,, ...	4	13	17
Total	80	134	214

In the following table the causes of death in the various age groups (as modified and amended consequent upon the further inquiries) are given :—

Causes of Death	Under 24 hrs.		1 day-1 week		1 week to 1 month	1 month to 3 months	3 months to 6 months	6 months to 9 months	9 months to 12 months	Total
	Premature	Full-time	Premature	Full-time						
Prematurity	28	—	22	—	2	1	1	—	—	54
Asphyxia Neonatorum	5	4	—	—	—	—	—	—	—	9
Intra-cranial Haemorrhage	1	1	—	5	1	—	—	—	—	8
Atelectasis	—	2	—	4	—	—	—	—	—	6
Anencephalus	—	1	1	3	2	—	—	1	—	8
Congenital Malformations	—	—	—	—	—	3	—	—	—	3
Congenital Heart Disease	—	2	—	3	2	—	—	—	—	7
Convulsions	—	—	—	1	3	1	1	—	—	6
Icterus Neonatorum	—	—	—	1	1	—	—	—	—	2
Haemorrhage	—	—	—	2	—	—	—	—	—	2
Debility and Marasmus	—	—	—	3	—	8	2	—	—	13
Broncho-pneumonia	—	—	—	1	2	9	15	10	13	50
Bronchitis	—	—	—	—	2	5	4	—	—	11
Pemphigus	—	—	—	—	1	—	—	—	—	1
Syphilis	—	—	—	—	1	—	—	—	—	1
Septicaemia	—	—	—	—	1	—	—	—	—	1
Sclerema Neonatorum	—	—	—	—	1	—	—	—	—	1
Pyloric Stenosis	—	—	—	—	—	2	—	1	—	3
Intussusception	—	—	—	—	—	1	—	1	—	2
Gastro-enteritis	—	—	—	—	—	9	4	4	—	17
Meningitis	—	—	—	—	—	2	2	—	3	7
Acute Mastoid Disease	—	—	—	—	—	—	—	—	1	1
Accidental Death	—	—	—	—	1	—	—	—	—	1
Total	34	10	23	23	20	41	29	17	17	214

No further information has been illicited as to the reason for the large number of deaths among premature infants. In four cases the mothers had severe ante-partum haemorrhage, seven had albuminuria and excessive sickness during pregnancy, three were said to be due to a fall or accident, and in four cases there was said to be a "poor condition" of the mother. Of the remaining 36 cases of prematurity, nothing could be found to account for the premature termination of labour.

The largest number of deaths from gastro-enteritis occurred during the period 1 month—3 months, and here again most of the mothers gave a history of difficulty with feeding their infants, particularly from birth. With few exceptions, all were attending the maternity and child welfare centres.

Chest conditions—bronchitis and broncho-pneumonia—accounted for the largest number of deaths of the older infants (3 months-12 months). Six of these deaths definitely followed measles and two followed whooping cough. Again the usual history was the short illness of the infant—a chesty cough for a day or two and then the infant becoming acutely ill and dying within the next few days. Many were admitted to hospital immediately on being seen by a doctor.

V.—UNEMPLOYMENT AND PUBLIC ASSISTANCE.

Unemployment.—The Divisional Controller of the Ministry of Labour (Wales Divisional Office) has kindly supplied the following information regarding the numbers of persons aged 14 years to 64 years who were registered as being unemployed on the dates shown :—

Local Office	25th January, 1937		26th July, 1937		13th December, 1937	
	Males	Females	Males	Females	Males	Females
Cardiff	8,007	2,013	6,444	1,527	7,251	1,304
Bute Docks, Cardiff	3,758	—	3,414	—	2,364	—
Cardiff Juvenile Employment Bureau	440	761	284	561	383	444
Total	12,205	2,774	10,142	2,088	9,998	1,748

The above figures relate to an area which approximates fairly closely to the area of the City of Cardiff.

Public Assistance : Out-door Relief.—The Public Assistance Officer has kindly supplied the following information regarding out-door relief granted during the last week of 1937 :—

Number of persons in receipt of relief :—

(a) Ordinary	8,027
(b) ,, (coal only)	477
(c) Able-bodied	665

The total cost of out-door relief granted during 1937 amounted to £159,114 16s. 1d.

VI.—NOTIFIABLE DISEASES.

(Other than Tuberculosis).

The incidence of notifiable diseases (other than tuberculosis) is shown in the following table, which also shows the number of cases admitted to hospital and the number of deaths :—

Disease according to Notification	Cases Notified	Notified Cases admitted to Isolation Hospital	Deaths
Smallpox	—	—	—
Scarlet Fever	495	332	2
Diphtheria	588	582	20
Enteric Fever	15	14	2
Pneumonia*	187	—	155
Cerebro-Spinal Fever	10	8	3
Acute Poliomyelitis	—	—	1
Acute Polioencephalitis	—	—	—
Encephalitis Lethargica	—	—	2
Dysentery	17	15	—
Ophthalmia Neonatorum	32	—	—
Erysipelas	62	17	4
Puerperal Fever and Puerperal Pyrexia	88†	34	3
Malaria	1	—	—

*Only such cases of pneumonia as fall into the categories "acute primary" and "influenzal" are notifiable. Deaths from all forms of pneumonia are included in the last column.

†Including 23 cases among non-residents that occurred in institutions.

The incidence of scarlet fever and diphtheria in municipal wards and registration sub-districts was as follows :—

Localities	Scarlet Fever		Diphtheria	
	Cases Notified	Case-rate per 1,000	Cases Notified	Case-rate per 1,000
Adamsdown	22	1·51	66	4·52
Cathays	28	1·79	40	2·56
Gabalfa	37	1·84	28	1·39
Central	21	1·78	9	0·76
South	23	1·68	90	6·57
Central Registration Sub-District	131	1·73	233	3·74
Plasnewydd	19	1·34	14	0·98
Penylan	27	1·80	11	0·73
Roath	33	2·18	28	1·85
Splott	46	2·16	120	5·63
East Registration Sub-District	125	1·90	173	2·64
Llandaff	35	2·27	21	1·36
Ely	83	5·65	25	1·70
Canton	47	2·95	30	1·89
Grangetown	32	2·15	65	4·36
Riverside	28	1·77	17	1·07
West Registration Sub-District	225	2·93	158	2·06
Institutions	14	—	24	—
Whole City	495	2·24	588	2·67

The notified cases of infectious disease are analysed according to age and sex in the following table :—

Disease	Under 1 year		1-2 years		2-3 years		3-4 years		4-5 years		5-10 years		10-15 years		15-20 years		20-35 years		35-45 years		45-65 years		65 yrs. & upwards		All Ages		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
Scarlet Fever	1	4	10	9	8	10	24	25	25	23	107	114	29	39	8	18	12	17	4	6	1	1	—	—	229	266	495
Diphtheria	3	2	4	8	11	12	22	12	27	24	126	139	45	68	10	23	9	28	2	6	—	6	—	1	259	329	588
Enteric Fever	—	—	—	—	—	—	1	—	1	—	—	2	—	3	1	2	1	1	1	—	1	1	—	—	6	9	15
Pneumonia	5	8	10	5	4	6	3	3	4	2	14	3	4	3	6	1	15	12	11	8	26	16	12	6	114	73	187
Cerebro-Spinal Fever	1	—	1	—	1	—	—	—	—	—	1	—	2	1	1	—	2	—	—	—	—	—	—	—	9	1	10
Dysentery	—	—	1	1	1	1	1	—	2	1	—	—	—	4	—	—	—	2	—	1	1	1	—	—	6	11	17
Ophthalmia Neonatorum	15	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	17	32
Erysipelas	1	—	—	—	—	—	—	1	—	—	1	—	—	1	1	—	6	8	5	5	15	10	6	2	35	27	62
Puerperal Fever and Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	27	—	5	—	1	—	—	—	38	38
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	1

Smallpox.—No cases of smallpox have been notified since 1932.

Vaccination.—The following statement shows the results of the work in connection with the vaccination of infants whose births were registered during 1936 :—

Births registered during 1936	3,724
Successfully vaccinated	1,400
Insusceptible	11
Exempted	1,800
Died unvaccinated	208
Postponed	24
Removed	85
Not found	154
Remaining to be dealt with	42

The proportions of children not returned as vaccinated and of certificates of exemption from vaccination each year since 1922 are shown in the following table :—

Year	Successfully Vaccinated	Certificates of Exemption	Percentage not returned as Vaccinated	Percentage of Certificates of Exemption
1921–22	2,671	1,900	*47·7*	*37·2*
1922–23	4,223	1,538	*35·5*	*23·5*
1923–24	2,801	1,533	*44·2*	*30·5*
1924–25	2,541	1,533	*48·1*	*31·3*
1925–26	2,132	1,585	*54·2*	*34·0*
1926–27	2,027	1,255	*52·2*	*29·5*
1927–28	2,215	1,413	*47·8*	*33·2*
1928–29	1,797	1,520	*56·7*	*36·6*
1929–30	2,009	1,487	*50·1*	*36·9*
1930–31	1,905	1,507	*52·5*	*37·6*
1931–32	1,758	1,639	*54·0*	*42·9*
1932–33	1,501	1,791	*59·6*	*48·1*
1933–34	1,519	1,904	*60·4*	*49·6*
1934–35	1,399	1,856	*62·1*	*50·3*
1935–36	1,275	1,881	*65·4*	*50·9*
1936–37	1,400	1,800	*62·4*	*48·3*

For the purpose of persuading parents to have their children vaccinated a leaflet is sent to them by post immediately after the registration of birth, and the Vaccination Officer visits the homes of all children who are not vaccinated within four months of birth in respect of whom certificates of exemption have not been received. The leaflet is as follows :—

CITY OF CARDIFF.

SMALLPOX AND VACCINATION.

Vaccination provides the only assured means by which smallpox may be effectively prevented and controlled. This minor operation is best carried out in the early months of a child's life, the reason being that at this age little or no disturbance in the general health is caused by vaccination. No danger results from vaccination properly performed during infancy, the best time to carry out the operation being between the ages of 2 months and 6 months. One scratch or insertion is sufficient to afford adequate protection without leaving an unsightly scar.

History of Smallpox in this Country.

Smallpox, before the widespread adoption of vaccination, was very prevalent. Each year produced its death roll, which often amounted to thousands. The victims were usually infants and young children, though no ages were exempt from its onslaught. In order to appreciate the extent of these epidemics, it may be mentioned that in 1871 no fewer than 23,062 deaths were due to this disease and that as recently as 1902 there were 2,452 deaths from smallpox. The number of deaths gives an indication of the extreme virulence of the disease, but such figures do not provide an estimate of the permanent disfigurement and blindness remaining in the track of the epidemics. In 1922 smallpox was introduced from abroad and it spread rapidly. Fortunately, the disease was of a mild type, known as minor smallpox. This outbreak served to demonstrate the rapidity with which this highly infectious disease may spread among the unvaccinated population, in spite of every effort being made to control its course. Severe or major smallpox still exists in other countries. Approximately 50,000 people die from smallpox every year in India.

Reasons why Vaccination is Necessary.

(1) It is the only certain safeguard against smallpox.

(2) Virulent smallpox is still present in other countries and it is liable to be introduced into our own country in spite of the existing precautionary measures.

(3) Should virulent smallpox be brought into the country, the spread would probably be rapid and extensive.

(4) Aerial transport, with general speeding up of movement from place to place, brings as an accompaniment the added danger of virulent disease being introduced from abroad. The confinement of an infectious disease to a localised area is becoming increasingly difficult.

J. GREENWOOD WILSON,
Medical Officer of Health.

CITY HALL,
CARDIFF.

Scarlet Fever.—It will be seen from the figures given below that there was a considerable increase in the number of cases of scarlet fever notified as compared with the number in 1936, but that, as the disease caused only two deaths, it continued to be of a mild type

Year.	*Cases.*	*Deaths.*
1928	263	2
1929	642	2
1930	537	—
1931	632	5
1932	726	3
1933	1,308	4
1934	905	5
1935	378	2
1936	361	2
1937	495	2

Diphtheria.—There was a great increase in the number of cases of diphtheria notified as compared with the number in 1936, but the number of deaths was relatively low. The numbers of cases and deaths and the case mortality during each of the ten years 1928-37 have been as follows :—

Year.	*Cases.*	*Deaths.*	*Case Mortality per cent.*
1928	487	16	*3·3*
1929	735	30	*4·1*
1930	731	29	*3·9*
1931	589	24	*4·1*
1932	493	10	*2·0*
1933	476	19	*4·0*
1934	520	21	*4·0*
1935	349	19	*5·4*
1936	343	17	*4·9*
1937	588	20	*3·4*

Active Immunization against Diphtheria.—A full description of the scheme for the immunization of children against diphtheria was given in the report for 1935. Details of the work carried out during 1937 are set out in the two following tables :—

Persons	Subjected to Anterior Schick Test			Inoculated* but not subjected to Anterior Schick Test	Total Number Inoculated*	Failed to attend for Completion of Inoculation
	Number	Positive	Inoculated*			
Under 5 years	184	125	111	873	984	10
5 years and upwards	1,427	636	609	774	1,383	14
Total	1,611	761	720	1,647	2,367	24

*Complete course of injections.

Persons	Subjected to Posterior Schick Test			
	Negative	Positive and again Inoculated (one injection)	Total	Percentage positive
Under 5 years	668	47	715	*6·6*
5 years and upwards	1,282	101	1,383	*7·3*
Total	1,950	148	2,098	*7·0*

Enteric Fever.—Fifteen cases of enteric fever were notified, and two deaths were registered as being due to the disease. The numbers of cases and deaths during the years 1928-1937 have been as follows :—

Year.	*Cases.*	*Deaths.*
1928	2	2
1929	18	4
1930	11	—
1931	8	1
1932	8	2
1933	4	1
1934	3	1
1935	8	1
1936	10	4
1937	15	2

Ophthalmia Neonatorum.—Thirty-two cases of ophthalmia neonatorum were notified, 12 of which were notified from institutions. Of the remaining 20 cases, three were treated by private medical practitioners, 10 were treated by nurses of the Queen's Institute of District Nursing, six were admitted to City Lodge Hospital and one was admitted to Cardiff Royal Infirmary. In 31 cases the vision was unimpaired ; in the remaining case the vision was lost.

VII.—NON-NOTIFIABLE INFECTIOUS DISEASES.

Measles.—The number of deaths due to measles was 12, corresponding to a death-rate of 0·05 per 1,000 of the population, compared with three deaths and a death-rate of 0·01 in 1936. The number of deaths and the death-rate from measles during the ten years 1928-1937 were as follows :—

Year.	*Deaths.*	*Death-rate per* 1,000.
1928	21	0·09
1929	113	0·50
1930	8	0·03
1931	50	0·22
1932	10	0·04
1933	32	0·14
1934	8	0·03
1935	28	0·12
1936	3	0·01
1937	12	0·05

Whooping Cough.—Eight deaths were registered during 1937 as being due to whooping cough, corresponding to a death-rate of 0·03 per 1,000. The following is a comparison of the number of deaths and the death-rate from this disease during the ten years 1928-1937 :—

Year.	*Deaths.*	*Death-rate per* 1,000.
1928	28	0·12
1929	24	0·11

Year.	*Deaths.*	*Death-rate per* 1,000.
1930	22	0·10
1931	6	0·03
1932	24	0·11
1933	14	0·06
1934	14	0·06
1935	11	0·05
1936	12	0·05
1937	8	0·03

Diarrhoea.—The number of deaths at all ages from diarrhoea, etc., during the year was 24, being equivalent to a death-rate of 0·11 per 1,000 of the population. Of these 24 deaths, 19 occurred among children under 2 years of age, corresponding to a death-rate of 5·6 per 1,000 births. During the 10 years 1928-1937 the number of deaths from diarrhoea, etc., under 2 years and the death-rate per 1,000 births were as follows :—

Year.	*Deaths under 2 years.*	*Death-rate per 1,000 births.*
1928	46	11·2
1929	44	11·2
1930	30	7·9
1931	29	7·7
1932	30	8·6
1933	30	8·7
1934	34	9·7
1935	22	6·5
1936	19	5·6
1937	19	5·6

Influenza.—During the year there were 50 deaths due to influenza, being equivalent to a death-rate of 0·22 per 1,000 of the population, as compared with 40 deaths and a death-rate of 0·18 per 1,000 in 1936. The following table shows the numbers of deaths registered as being caused by influenza and respiratory diseases and the proportion of such deaths to the total number of deaths from all causes during the ten years 1928-1937 :—

Year	Number of Deaths from			Proportion per cent. of Deaths from All Causes
	Influenza	Respiratory Diseases	Influenza and Respiratory Diseases	
1928	42	389	431	*16·2*
1929	89	425	514	*17·6*
1930	23	292	315	*12·4*
1931	60	379	439	*15·3*
1932	57	287	344	*12·3*
1933	141	354	495	*16·4*
1934	16	245	261	*9·6*
1935	32	222	254	*9·3*
1936	40	291	331	*11·8*
1937	50	280	330	*11·8*

Home Nursing of Pneumonia.—The following is a summary of the work done during 1937 by nurses of the Queen's Institute of District Nursing in connection with the arrangement whereby the Institute undertakes the home nursing of cases of pneumonia:—

Cases referred for nursing during the year	95
Visits made during the year	1,063

VIII.—CITY ISOLATION HOSPITAL.

Cases of the following diseases are admitted to the hospital :—Enteric fever, scarlet fever, diphtheria, cerebro-spinal fever, epidemic encephalitis, acute poliomyelitis, bacillary dysentery, erysipelas, food poisoning, puerperal fever and puerperal pyrexia, Cases of measles and whooping cough are also admitted on a selective basis, and cases of these diseases and other minor infectious diseases are admitted from public institutions. The arrangements at the hospital for the treatment of patients suffering from puerperal fever and puerperal pyrexia are not satisfactory. A proposal to provide a new block for the purpose, at an estimated cost of £7,000 (including £750 for furnishing and equipment) was therefore considered during 1937, but the scheme was ultimately abandoned in favour of admitting the cases to the side wards of the medical ward for females at Llandough Hospital as from 9th May, 1938.

The number of patients admitted to hospital, the average daily number of patients under treatment, the number of patient-days and the average duration of residence of the patients admitted are shown in the following table :—

Disease according to Diagnosis after Admission	Patients Admitted	Average Daily Number of Patients	Patient-days	Average Duration of Residence in days
Scarlet Fever	341	31	10,527	31
Diphtheria	561	97	32,131	57
Other Diseases	591	30	15,919	27
All Diseases	1,493	158	58,577	39

Report for 1937 *of G. Emrys Harries, M.B., B.S., (Lond.,) M.R.C.S., L.R.C.P., D.P.H., Resident Medical Superintendent of the City Isolation Hospital.*

During the year all the permanent buildings of the Isolation Hospital were in full use, with the exception of Pavilion 5, which was temporarily closed for about two months for painting purposes. Owing to the considerable increase in the number of patients admitted, it was found necessary to open Caerau Hospital at the beginning of November, mainly for the reception of scarlet fever patients.

The health of the nursing and domestic staff was generally satisfactory. Six nurses contracted diphtheria and one scarlet fever. Eighteen nurses developed other conditions—mainly mild attacks of tonsillitis. Two maids developed diphtheria, and 13 others suffered from various mild illnesses—mostly tonsillitis.

Fifty-five members of the staff were Schick tested and 18 who were ascertained to be susceptible were inoculated against diphtheria, while 25 were Dick tested, one of whom was found to be positive and was therefore inoculated against scarlet fever. Eighteen nurses who were in contact with cases of enteric infection received prophylactic courses of T.A.B. vaccine.

The usual lectures and tutorials were given during the year. Thirteen nurses sat the preliminary State Examination and only one failed, while 22 sat the Final Examination and all were successful.

In the course of the year, 1,493 patients (including patients from other areas) were admitted to the wards.

Scarlet Fever.—Three hundred and fifty-nine patients were admitted to the wards, of whom 341 were true cases of scarlet fever. Seventeen of the others suffered from a variety of adventitious rashes, but one other proved to be a case of enteritis and broncho-pneumonia, from which the patient succumbed. In addition, four patients notified as cases of scarlet fever were found to be suffering from measles ; these are referred to in the section of this report dealing with that disease.

The type of scarlet fever prevailing was again of a mild character. Of the 341 cases, 338 were finally classified as simple, two as septic or sub-septic (one being a surgical case), and one as toxic. Twenty cases received doses (9,000 units or more) of scarlatinal anti-toxin. Seven cases also received prophylactic doses of measles serum owing to the fact that they were measles contacts. Seventeen of the true cases of scarlet fever suffered concurrently from other diseases, mainly diphtheria, measles, broncho-pneumonia and chickenpox.

The principal complications met with were as follows :—

Complication.	*Cases.*	*Percentage.*
Adenitis	55	*16·13*
Albuminuria	41	*12·02*
Arthritis	1	*0·29*
Herpes	8	*2·35*
Nephritis	2	*0·59*
Otalgia	10	*2·93*
Otorrhoea	19	*5·57*
Quinsy	1	*0·29*
Rhinitis	27	*7·91*
Jaundice	1	*0·29*
Rheumatism	1	*0·29*

There were three deaths, being respectively (1) a child of 3 years who was admitted after mastoidectomy (post-mortem examination showed a large temporosphenoidal abscess on left side), (2) a boy of 4 years who died from faucial haemorrhage due to vascular erosion, and (3) a baby of 1 year, whose death was due to broncho-pneumonia. Classifying these three deaths to scarlet fever, the hospital mortality rate was 0·88 per cent.

Two hundred and fifty-seven cases of scarlet fever received ¼ to 1 tablet of Prontosil three times daily for a period of ten days following admission, while 84 served as a control group. It was found that there was no appreciable difference in the proportion of complications in the two groups.

Diphtheria.—Seven hundred and four patients were admitted to the wards, of whom 561 were true cases of diphtheria, 54 were carriers, while the remaining 89 suffered from non-diphtheritic conditions. Of the latter group, the majority suffered merely from a variety of throat conditions, 73 of these being either tonsillitis or quinsy. The remaining cases were finally diagnosed as follows :—1 septic throat, 1 stomatitis, 3 laryngitis, 3 laryngismus stridulus, 1 stridulous laryngitis, 1 bronchitis, 1 broncho-pneumonia, 1 rhinitis, 1 lobar pneumonia (fatal), 1 thrush, 1 coryza, and 1 syphilis.

There were 18 deaths amongst the 561 true cases of diphtheria, giving a case mortality of 3·21 per cent. Of these 18 cases, eight were moribund on admission and died within 24 hours, eight died within 7 days, and the remaining two died on the tenth and eleventh days respectively after admission to hospital.

Table showing Type of Diphtheria and Mortality :—

Type	Number	Died	Mortality per cent.
Faucial	362	5	*1·38*
Faucial and nasal	101	10	*9·90*
Faucial and aural	3	—	—
Faucial, nasal and aural	6	—	—
Faucial, nasal and laryngeal	2	—	—
Faucial and laryngeal	14	2	*14·29*
Laryngeal	5	1	*20·00*
Laryngeal and nasal	1	—	—
Nasal	60	—	—
Nasal and aural	2	—	—
Aural	3	—	—
Vaginal	1	—	—
Empyema wound	1	—	—
Total	561	18	*3·21*

It will be seen from the above table that the diphtheria mortality rate for the year was 3·21 per cent., as compared with 4·81 per cent. in 1936.

The type of diphtheria prevailing generally was not of a very severe character, but in 33 cases it was considered necessary to administer serum intravenously.

Of the 22 cases of laryngeal obstruction referred to in the previous table, 13 were treated with steam and in four instances tracheotomy was also performed ; one case only was unsuccessful—a child of 2 years, who died within 12 hours after admission. Two of the other laryngeal cases also died (both within one day of admission). The hospital mortality rate amongst the laryngeal diphtheria cases was therefore 13·64 per cent.

Types of Post-diphtheritic Paralysis :—

Type.	*Number.*
Palatal paresis	29
Pharyngeal paralysis	2
Ciliary paresis	6
Facial paralysis	4
Nuchal paralysis	6
Strabismus	3
Diplopia	1
Total	51

Thirty-four patients in all suffered from paralysis. The paralysis rate was therefore 6·06 per cent., as compared with 5·7 per cent. in 1936, and 4·8 per cent. in 1935.

Table showing Diphtheria Death-rate according to the Day of Disease on which Serum was given :—

Day of Disease on which Serum given	Number of Patients	Number of Deaths	Number of Deaths per cent.
1st	24	—	—
2nd	146	2	*1·30*
3rd	124	5	*4·03*
4th	73	4	*5·48*
5th	53	5	*9·43*
Later than 5th	141	2	*1·41*
Total	561	18	*3·21*

Of the patients who died, 10 were under 5 years, six were in the 5-10 years group, and of the remaining two cases, one was a boy of 12 years who also suffered from tuberculous peritonitis, which largely contributed to his death, and the other was a woman aged 63 years, who was admitted moribund on the sixth day of disease and died an hour after admission.

Measles.—Two hundred and one patients were admitted to hospital as cases of measles, 197 of whom proved to be true cases of the disease. In the remaining four instances the final diagnosis in each case was amended as follows :—(1) broncho-pneumonia and pneumococcal meningitis (fatal), (2) chickenpox and broncho-pneumonia, (3) erythema, and (4) arsenical rash.

Of the 197 true cases of measles, four died. The hospital mortality rate was therefore 2·03 per cent., as compared with 4·35 per cent. in 1936.

The principal complications met with were :—

Broncho-pneumonia	37
Otorrhoea	18
Adenitis	3
Rhinitis	9
Albuminuria	13
Diphtheria	5
Lobar pneumonia	1
Scarlet fever	1
Parotitis	1
Nephritis	1
Bronchitis	1
Whooping cough	2

It is noteworthy that amongst the true cases of measles four were originally notified as scarlet fever, as also were three others as diphtheria.

The following table summarises the age incidence and deaths of measles cases admitted :—

Age	Number	Deaths	Cause of Death
1— 3 months	2	—	—
4— 8 months	7	1	Broncho-pneumonia
9—11 months	12	—	—
1— 2 years	40	2	1 broncho-pneumonia ; 1 miliary tuberculosis
2— 3 years	22	—	—
3— 4 years	26	—	—
4— 5 years	30	—	—
5— 6 years	28	—	—
6— 7 years	17	1	Pneumococcal meningitis
7—10 years	5	—	—
10—20 years	3	—	—
Over 20 years	5	—	—
Total	197	4	

Death in each of the cases mentioned was due to complications present on admission, with the exception of the one case which developed miliary tuberculosis.

The low death-rate from measles this year (2·03 per cent.) is again largely attributable to the fact that all cases of broncho-pneumonia are nursed on open-air balconies day and night, and, in addition, all cases received ¼ to 2 tablets of Prontosil orally daily as a prophylactic against secondary streptococcal infections, such as otorrhoea and broncho-pneumonia. No case developed broncho-pneumonia subsequent to admission.

As in previous years, apart from patients admitted with measles from other institutions, cases were chosen for admission on a selective basis of overcrowding and poverty and the presence of complications, particularly broncho-pneumonia.

Enteric Fever.—Twenty-seven cases were admitted as likely to be suffering from enteric infection, and, in addition, two other cases notified as meningitis were found to be suffering from para-typhoid B.

Of the 29 cases, 13 were found to be true cases of para-typhoid B, whilst 11 were cases of typhoid fever. The five remaining cases were respectively :—1 pyaemia, septic pericarditis and otitis media (fatal) ,1 acute infective endocarditis (fatal), 1 allergic erythema, 1 pleurisy and meningism, and 1 lobar pneumonia.

Amongst the 24 cases of enteric fever there was only one death—a youth of 19 years, who succumbed to intestinal haemorrhage and toxaemia. The mortality rate for enteric fever was therefore only 4·17 per cent.

Bacillary Dysentery.—Twenty-three patients were admitted with a diagnosis of bacillary dysentery, of whom 19 were of the Sonne type and 3 of the Flexner Z type. The remaining patient proved to be a case of multiple polyposis of the colon, and was therefore transferred to Llandough Hospital for further treatment. The 22 cases of bacillary dysentery all made satisfactory recoveries.

Erysipelas.—Forty-nine patients were admitted as suffering from this disease, the diagnosis being confirmed except in two instances. The two exceptions were finally classified as suffering from (1) septicaemia and cellulitis due to chickenpox (fatal) and (2) septic thoracic wound ; the latter case was erroneously transferred to this hospital from another institution after a chest closure operation following a street accident. This case was remarkable for the fact that although the heart and lungs had been exposed by extensive chest lacerations, the patient made a satisfactory recovery.

Four deaths occurred amongst the 47 true cases of erysipelas. The causes of death were (1) facial erysipelas and concurrent diabetes in a woman aged 66 years, (2) erysipelas and auricular fibrillation (present on admission) in a man aged 36 years, (3) erysipelas and streptococcal meningitis in an infant of 7 weeks, and (4) erysipelas and chronic bronchitis in a man aged 77 years. The death-rate was therefore 8·51 per cent.

Cerebro-Spinal Fever.—Eighteen patients were admitted as possible cases of this disease and were finally classified as follows :—

	Number.	*Deaths.*
Cerebro-spinal fever	14	6
Apical pneumonia	1	—
Bronchitis	1	—
Diabetic coma	1	—
Circumorbital cellulitis	1	—
Total	18	6

In addition to the foregoing, two cases were also notified as cerebro-spinal fever, but were found on admission to be cases of para-typhoid B, and are therefore referred to in the section of this report dealing with enteric fever.

Whooping Cough.—Nineteen patients were admitted as likely to be suffering from whooping cough, all except two proving to be true cases. These two cases proved to be respectively (1) bronchitis and (2) coryza.

Two of the true cases (aged 1 year and 1 year and 5 months respectively) suffering from broncho-pneumonia died, and as these were the only deaths, the mortality rate was 11·76 per cent.

Whooping cough cases are admitted to this hospital on the same selective basis as described in the section of this report dealing with measles.

Chickenpox.—Ten patients were admitted on account of chickenpox. One of them was found to be incubating measles on admission. All made uneventful recoveries.

Puerperal Pyrexia.—Forty-five cases were admitted and were finally classified as follows :—

	Number.	*Deaths.*
Septicaemia	12	3
Septicaemia phlegmasia alba dolens and pleurisy	1	—
Sapraemia	21	—
Sapraemia and phlegmasia alba dolens	3	—
Sapraemia and pulmonary embolism	1	1
Sapraemia and mentally unstable	2	—
Mastitis	1	—
Breast abscess	1	—
Pyrexia	1	—
Phlegmasia alba dolens	2	—
Total	45	4

The case mortality was 8·89 per cent.

All the patients, with the exception of the two cases of phlegmasia alba dolens, received Prontosil.

Food Poisoning.—Only one case was admitted during the year, the infecting organism proving to be of the Salmonella group. The patient made a satisfactory recovery.

Other Diseases.—In addition to the aforementioned diseases, there were admitted to the wards 35 patients who were finally classified as follows :—

	Number.
Quinsy	1
Influenza	3
Influenza and rheumatism	1
Convalescent tonsillectomy	1
Pemphigus (non-specific)	7
Catarrhal jaundice	3
Septic finger	2
Septic knee	1
Pleurisy	1
Dysmenorrhoea	1
Malaria	1
Tonsillitis	13
Total	35

All the above cases made satisfactory recoveries, with the exception of one fatal case of pemphigus in an infant of 8 days.

Schick and Dick Tests.—The following table shows the number of scarlet fever patients who were Schick tested and the number of diphtheria patients who were Dick tested during the year :—

	Number Positive	Number Negative	Total	Percentage Positive
Schick Test	134	111	245	*54·69*
Dick Test	62	82	144	*43·06*

Active Immunization.—As in previous years, active immunization against diphtheria in all cases admitted to the hospital for conditions other than diphtheria was again carried out when the signed consent of a parent could be obtained. The number of true cases of scarlet fever Schick tested was 245, and of these 134 were found to be positive. Of these 134 cases, 52 were completely immunized* while in hospital, and 56 were partially immunized, arrangements being made for the completion of the course of injections, including subsequent Schick testing, at the public health clinics after discharge of the patients from hospital.

In addition, 45 patients suffering from other conditions were Schick tested, of whom 24 were found to be positive ; 3 of these were completely immunized* whilst in hospital.

*Completed full course of prophylactic injections and subsequently reacted negatively to the Schick skin test for susceptibility to diphtheria.

Laboratory Work.—During the year, 4,483 bacteriological examinations of various kinds were conducted in the hospital laboratory, as compared with approximately 3,000 in 1936. The specimens examined were mainly diphtheria swabs, but included also specimens of cerebro-spinal fluid, sputum, urine, etc.

Special examinations, such as virulence tests, were again kindly carried out by Dr. W. Parry Morgan at the Cardiff and County Public Health Laboratory.

I have much pleasure in paying tribute to the nursing and other staffs of this hospital for their loyalty and devotion to duty, and would also like to express my appreciation to the Medical Officer of Health and the staff of the Public Health Department for their ready co-operation and assistance at all times.

IX.—LORD PONTYPRIDD HOSPITAL (DULWICH HOUSE) AND THE RHEUMATISM SUPERVISORY SCHEME.

Report for 1937 *of Cecil W. Anderson, M.B., Ch.B., D.P.H., Medical Superintendent of Lord Pontypridd Hospital.*

Twenty-two patients were in hospital on 31st December, 1936 and 112 were admitted during 1937. The number of patients discharged was 112, leaving 22 in hospital on 31st December, 1937. No deaths occurred at the hospital during the year. Four cases were not treated to a conclusion for the following reasons :—

Removed by parents against medical advice	1
Removed to Isolation Hospital —	
Diphtheria	1
Diphtheria carriers	2
Total	4

Of the 112 patients admitted, 45 were boys and 67 were girls, their ages varying from 4 years to 15 years.

The number of cases admitted each year since 1929, according to sex, is shown in the following table :—

Year	Boys	Girls	Total
1929....	35	37	72
1930....	57	58	115
1931....	51	103	154
1932....	40	103	143
1933....	42	66	108
1934	52	76	128
1935....	45	78	123
1936....	49	71	120
1937....	45	67	112
Total	416	659	1,075

The reasons for the admission of the 112 cases during 1937 were as follows :—

Chorea alone	10
Chorea and early carditis	16
Rheumatic pains alone	12
Rheumatic pains and early carditis	55
Chorea and rheumatic pains	1
Chorea, rheumatic pains and early carditis	4
Chorea and valvular disease of the heart	1
Rheumatic pains and valvular disease of the heart	6
Arthritis and early carditis	2
Erythema nodosum alone	1
Erythema nodosum and early carditis	3
Tachycardia alone	1
Total	112

The condition of the heart on admission and discharge of the 108 cases admitted and treated to a conclusion is set out in the following table :—

Condition of Heart	On Admission	On Discharge
Normal	19	63
Minor cardiac manifestations	82	41
Major cardiac manifestations	7	4
Total	108	108

The average period spent in hospital by the 108 patients who were treated to a conclusion was 76 days.

The following table gives the condition of the heart on admission and discharge of all cases treated to a conclusion since the opening of the hospital in April, 1929 :—

Years 1929-37	Condition of Heart			Total
	Normal	Minor Cardiac Manifestations	Major Cardiac Manifestations	
On admission	106	774	138	1,018
On discharge	612	304	102	

The sedimentation tests carried out in the hospital during 1937 numbered 260.

Ninety patients were Schick tested in hospital, 40 of whom were positive. Sixteen of these positive reactors were inoculated with diphtheria prophylactic in hospital, the remaining 24 being referred to the special immunization clinic on discharge for completion of the inoculations.

The following is a record of the supervisory work carried out during the year :—

Cases remaining under supervision at beginning of year		1,593
New cases attending		393
Cases discharged from supervision on attaining 14 years of age	305	
Other cases who ceased to be supervised :—		
Left Cardiff	17	
Died	6	
Discharged (not suffering from rheumatism)	76	
Ceased to attend	100	
	——	504
Cases remaining under supervision at end of year		1,482
Total attendances :—		
At routine Rheumatism Clinics		3,470
At Out-patient Department of Lord Pontypridd Hospital		90
Routine clinic sessions held		163
Out-patient clinic sessions held		37
Average attendance at routine clinic sessions		21·3
Average number of new cases at routine clinic sessions		2·4
Average attendance at Out-patient Department		2·4

The following table shows the condition of the heart in the 305 cases that ceased to remain under supervision because of attaining the age of 14 years :—

	On Ascertainment	On Discharge
Normal	122	184
Minor heart manifestations	148	86
Major heart manifestations	35	35
Total	305	305

The types of heart disease present in the 35 cases having major heart manifestations on discharge were as follows :—

Mitral regurgitation	26
Mitral stenosis	8
Aortic regurgitation	1
Total	35

X.—LLANDOUGH HOSPITAL.

Report for 1937 *of David G. Morgan, M.R.C.S., L.R.C.P., Medical Superintendent of Llandough Hospital.*

This is the fourth annual report dealing with the activities of Llandough Hospital. It will be noticed from the comparative statistical table on page 44 that over 600 more cases were treated in 1937 than in 1936, and approximately 1,000 more than in 1934. It is also interesting to note that since the hospital was opened in October, 1933, over 17,000 patients have passed through the wards.

In spite of the increased number of admissions, the average daily number of beds occupied remains at about the same figure, whilst the number of patient-days shows a slight reduction. This is explained by the fact that the average stay in hospital in 1937 was 22·3 days, as against 28·5 days in 1934. This means that the patients are more expeditiously treated, and also that as far as possible chronic cases are not admitted, as the hospital is not intended for them.

The number of operations performed exceeded that of the previous year by 300, and pathological investigations have increased by 2,700. An additional technical laboratory assistant was appointed during the year to cope with the latter increase. After negotiations with the Welsh National School of Medicine, a regular service by the Professor of Pathology and his staff was instituted. No hospital can render the best service to its patients without the expert help of a Pathologist and a Biochemist.

After rendering excellent service since the hospital was opened, Professor A. M. Kennedy found it impossible to continue to pay regular visits to and take full clinical responsibility for the medical wards, but we were fortunate in retaining his association with the hospital as Honorary Consulting Physician, and he is still available for consultation in certain cases. The rearrangement whereby Dr. Abel Evans and Dr. D. A. Williams were appointed physicians has worked well.

The results of the Hospital and State Examinations for nurses continue to be satisfactory.

It is noted that the number of cases admitted from the Administrative County of Glamorgan is less than in 1936, but it is too early to predict whether the reduction is of any significance.

The amount of money collected by the Almoner shows an increase of £2,427 6s. 10d. The receipts have gone up substantially every year and the result is very gratifying.

We can only reiterate what has been said before about the very excellent library service rendered to the patients by the City Librarian with the help of the Order of St. John of Jerusalem and the Red Cross Society.

The Asthma Clinic and the Accident Unit, both housed at the City Lodge, are very intimately associated with the hospital. Reports dealing with both services are appended. The way in which the work of both has increased is remarkable and is sufficient proof that they are rendering important service. The accommodation for and the staffing of the Asthma Clinic will have to be reviewed owing to the enormous expansion of the work.

Nurses' Training School.

The hospital is approved by the General Nursing Council as a Training School for Nurses.

On completion of three years' training, nurses are required to sit the Hospital Examination and the final State Examination for admission to the general part of the State Register of Nurses. To the nurse who most distinguishes herself in the Hospital Examination each year, the Esther Roffey gold medal is awarded. To those nurses who satisfy the examiners, certificates of training and Training School badges are granted. Based on the results of the Hospital Examination, nurses who so desire are accepted for training at City Lodge Hospital for the certificate in midwifery granted by the Central Midwives Board.

Examination results during 1937 :—

	Passed.	*Failed.*
Hospital Final Examination	18	—
State Examination—Final	22	1
Certificate of Central Midwives Board	6	1

Social Service Department.

The Almoner is in charge of the Social Service Department. The duties chiefly undertaken by the department are as follows :—

To interview all patients admitted and discharged, and the relatives of all patients who die in hospital.

To assess and as far as possible to collect payments for treatment and maintenance.

To control the waiting list and arrange for the admission of patients to hospital.

To arrange for the transfer to the Cardiff Royal Infirmary of patients who need radium treatment.

To arrange for the admission of County patients through the Relieving Officers or on payment of the full maintenance rate.

To prepare accounts for treatment and maintenance of Glamorgan County Council and other cases.

To make application to the Cardiff Royal Infirmary for vouchers for cases admitted to hospital who are contributors to the Cardiff Royal Infirmary contributory scheme.

Number of interviews :—

Patients admitted	4,747
Patients discharged	4,417
Relatives of patients who died	334
Total	9,498

During the year, 1,332 patients were unable to make any payment for treatment.

Income.—The income collected during the year 1937 was £6,944 6s. 10d., as compared with £4,517 0s. 0d. in 1936, showing an increase of £2,427 6s. 10d. The income was derived in the following manner :—

	£	s.	d.
Collected in Hospital	4,397	4	1
Received from Cardiff Royal Infirmary	2,547	2	9
Total	£6,944	6	10

Accident Unit.—The Almoner attends at the Accident Unit at the City Lodge on Tuesday and Thursday mornings to collect out-patient fees, to investigate the financial position of the patients treated, and to make claims under the provisions of the Road Traffic Act. The income collected during 1937 was £235 6s. 4d., as compared with £68 13s. 6d. in 1936, showing an increase of £166 12s. 10d.

Cardiff Royal Infirmary Contributory Scheme.—During 1937, 658 cases were admitted to the hospital through the Cardiff Royal Infirmary contributory scheme, whereby £1 7s. 6d. per week is paid in respect of each patient for a maximum period of four weeks.

Radium Treatment.—Fourteen patients were transferred to the Cardiff Royal Infirmary during 1937 for radium treatment.

Samaritan Fund.—During the year, 212 necessitous patients or their dependants were assisted by the Samaritan Fund. At the end of the year there was a balance of £32 12s. 6½d. in hand, and the following is a statement of the account :—

	£	s.	d.
Cash in hand 1st January, 1937	27	5	11½
Donations	10	17	8
Income from collecting boxes in hospital	10	18	3½
	£49	1	11
Expenditure	16	9	4½
Balance in hand 31st December, 1937	£32	12	6½

The assistance given was as follows :—

Payments for bus fares	201
Grants for food	7
Families assisted with a grant for rent	3
Grant for an artificial limb for an ex-patient	1
Total	212

Hospital Library Service.

The Hospital Library Service is now well established. There is no doubt as to the appreciation of the service by the patients, many of whom through the service have read books for the first time in their lives. In October, 1937, a new stock of books, numbering 350, was supplied from the Central Library. Forty-six books were specially obtained from the Central Library on the request of patients. The number of books issued during 1937 shows a substantial increase of 1,767 over the number issued during 1936—10,603, as against 8,836. The average number issued weekly was 204. During 1937, 120 books were presented to the hospital library by patients and staff (including the nurses). The Red Cross Society and the Order of St. John of Jerusalem continue to render valuable service in distributing the books.

Time-Table of Consultants' Attendances.

Monday	Morning	Mr. D. J. Harries, Surgeon. Dr. W. Parry Morgan, Bacteriologist. Dr. T. Garfield Evans, Radiologist.
	Afternoon	Mr. A. O. Parker, Orthopaedic Surgeon.
Tuesday	Morning	Dr. A. A. Prichard, Aural Surgeon. Dr. A. G. Watkins, Physician for Diseases of Children. Dr. T. Garfield Evans, Radiologist.
	Afternoon	Mr. D. J. Harries, Surgeon. Dr. J. Hardstaff West, Anaesthetist.

Wednesday	Morning	Dr. Abel Evans, Physician.
	Afternoon	Professor G. I. Strachan, Gynaecologist.
Thursday	Morning	Mr. D. J. Harries, Surgeon. Dr. T. Garfield Evans, Radiologist.
	Afternoon	Mr. R. D. Owen, Aural Surgeon. Dr. J. Hardstaff West, Anaesthetist.
Friday	Afternoon	Dr. A. G. Watkins, Physician for Diseases of Children. Mr. D. J. Harries, Surgeon. Mr. W. E. Hallinan, Dentist.
Saturday	Morning	Dr. Abel Evans. Professor G. I. Strachan, Gynaecologist. Dr. J. Hardstaff West, Anaesthetist.

In addition, three attendances weekly are made by the Professor of Pathology and his assistants of the Welsh National School of Medicine.

Time-Table of Admission Clinics.

Monday	Afternoon	Admission department for medical cases and Asthma Clinic (Dr. D. A. Williams).
Tuesday	Afternoon	Admission department for surgical cases (Dr. W. D. Lovelock-Jones).
Thursday	Afternoon	Admission department for medical cases and Asthma Clinic (Dr. D. A. Williams).
Friday	Afternoon	Admission department for surgical cases (Dr. W. D. Lovelock-Jones).

STATISTICS.

Beds Provided.

Male	Medical	68	
	Surgical	34	
	Fracture and Orthopaedic	20	
		——	122
Female	Medical	68	
	Surgical	34	
	Gynaecological	34	
	Fracture and Orthopaedic	14	
		——	150
Children	General	64	
	Ear, Nose and Throat	9	
		——	73
	Total	....	345

Beds—

Average daily complement	345
Average daily number available	342
Average daily number occupied	291
Average daily percentage occupied	*85*
Average length of stay of patients—days	22·3
Average number of patients per occupied bed	16·3
Average number of admissions daily	13
Maximum number occupied	329 on 11th June.
Minimum number occupied	226 on 27th December.

Nursing Staff—

Average strength daily	107
Average number of occupied beds per nurse	2·7

PATIENTS.

Patients in hospital on 1st January, 1937	243	
Admitted	4,747	
	——	4,990
Discharged	4,417	
Died	334	
	——	4,751
		——
Patients in Hospital on 31st December, 1937		239
		——
Patients admitted from City of Cardiff		4,294
Patients admitted from Administrative County of Glamorgan and other areas		453
Patients discharged in the normal manner		4,304
Patients discharged against medical advice		113
Patients discharged to :—		
Their own or relatives' homes	4,037	
Cardiff Public Assistance Institution	283	
Other institutions or hospitals	97	
	——	4,417
Deaths		334
		——
Total		4,751
		——

Classification of Patients treated to a Conclusion.

Male patients :—		
Under 2 years	147	
Over 2 and under 16 years	662	
Over 16 years	1,407	
	——	2,216

Female patients :—		
Under 2 years	115	
Over 2 and under 16 years	614	
Over 16 years	1,806	
	——	2,535
Total		4,751

Results of Treatment or the Termination.

	Number.	*Percentage.*
Cured	2,906	*61·2*
Improved	1,031	*21·7*
No change	458	*9·6*
Worse	22	*0·5*
Died	334	*7·0*

Analysis of Deaths.

Age at Death—Years	Males	Females	Total	Percentage
Under 1	28	14	42	*12·6*
1 — 2	6	3	9	*2·7*
2 — 5	1	8	9	*2·7*
5 — 15	6	8	14	*4·2*
15 — 25	17	9	26	*7·8*
25 — 35	9	9	18	*5·4*
35 — 45	15	9	24	*7·2*
45 — 55	29	24	53	*15·9*
55 — 65	41	28	69	*20·6*
65 — 75	37	17	54	*16·1*
Over 75	10	6	16	*4·8*
Total	199	135	334	*100·0*

	Treated	Percentage	Died	Case Mortality per cent.
Medical Cases	1,958	*41·2*	215	*11·0*
Surgical and Gynaecological Cases	2,793	*58·8*	119	*4·3*

	Number.	*Percentage.*
Deaths within 24 hours of admission	62	*18·6*
Deaths 24 to 48 hours after admission	25	*7·5*
Deaths 48 to 72 hours after admission	10	*3·0*
All other deaths	237	*70·9*
Total	334	*100·0*

Number of inquests	12
Number of inquests per 100 deaths	*3·6*
Number of autopsies per 100 deaths	*9·9*

Classification of the Diseases and Conditions for which the 4,751 *discharged patients were primarily treated.*

	Males		Females		Total
	Discharged	Died	Discharged	Died	
Diseases due to Infection :—					
Influenza	8	—	8	—	16
Pneumococcal infection—Lungs	41	11	19	5	76
Miscellaneous	—	2	1	2	5
Rheumatic Fever—Acute with carditis	24	5	17	2	48
Acute without carditis	14	—	13	—	27
Sub-acute with carditis	—	—	3	—	3
Sub-acute without carditis	5	—	11	—	16
Chorea with carditis	—	—	2	—	2
Chorea without carditis	6	—	13	—	19
Syphilis (congenital, primary, secondary)	2	2	1	—	5
Tuberculosis—Lungs	21	1	7	1	30
Brain and meninges	—	2	—	7	9
Intestines and peritoneum	3	2	8	1	14
Genito-urinary	2	—	3	1	6
Bones and joints	6	—	2	1	9
Glands	2	—	6	—	8
Miscellaneous	3	—	4	—	7
Miscellaneous	19	—	15	—	34
Diseases of the Nervous System :—					
Peripheral neuritis, sciatica, neuralgia	20	—	5	1	26
Tabes dorsalis	4	—	4	—	8
Disseminated sclerosis	4	—	1	—	5
Other diseases of the spinal cord	3	—	1	—	4
Inflammation of cerebral meninges	—	—	—	1	1
General paralysis of the insane and syphilis of the meninges	5	—	2	—	7
Paralysis agitans	—	—	1	—	1
Haemorrhage, embolism and thrombosis of cerebral meninges	4	7	9	6	26
Injuries of brain	22	—	6	—	28
Epilepsy	4	—	7	—	11
Mental deficiency	2	—	—	—	2
Psycho-neuroses	23	—	38	—	61
Other diseases of the nervous system	10	2	12	—	24
Diseases of the Eye	1	—	3	—	4
Diseases of the Ear :—					
Diseases of the middle ear, including antrum	1	—	1	—	2
Diseases of the mastoid process	7	—	7	—	14
Otitis media	6	—	13	1	20
Other diseases of the ear	12	—	6	—	18
Diseases of the Nose :—					
Inflammation of mucous membrane	—	—	1	—	1
Diseases of the septum nasi	14	—	3	—	17
Diseases of the accessory sinuses	5	—	7	—	12
Other conditions	28	—	19	—	47
Diseases of the Circulatory System :—					
Diseases of the endocardium	1	2	4	—	7
Mitral stenosis and mitral regurgitation	6	5	10	3	24
Aortic stenosis and aortic regurgitation	8	3	6	1	18
Diseases of the myocardium	8	5	14	3	30
Auricular fibrillation	5	—	5	2	12

	Males		Females		Total
	Discharged	Died	Discharged	Died	
Diseases of the Circulatory System—*cont.*					
Other diseases of the heart	2	—	3	—	5
Arterio-sclerosis	9	4	4	5	22
Aneurysm and aortitis (syphilitic)	6	2	3	—	11
Thrombosis and embolism	—	2	2	3	7
Vasomotor disorders	—	—	2	—	2
Essential hypertension	2	2	24	3	31
Diseases of the veins	6	—	9	—	15
Diseases of Blood, Blood-forming Organs and Lymphatic System :—					
Purpura	2	1	5	—	8
Pernicious anaemia	6	—	12	1	19
Splenic anaemia	—	1	—	—	1
Achlorhydric anaemia	—	—	1	—	1
Secondary anaemia	2	—	8	—	10
Leukaemia	1	1	—	3	5
Diseases of the lymphatic system	24	—	27	—	51
Diseases of the Endocrine Glands :—					
Exophthalmic goitre	1	—	1	—	2
Toxic adenoma	4	1	39	1	45
Goitre	1	—	4	—	5
Other conditions	1	—	6	1	8
Diseases of the Breast	2	—	3	—	5
Diseases of the Respiratory System :—					
Diseases of the larynx and pharynx	4	—	3	—	7
Bronchitis—Acute	16	1	24	2	43
Chronic	17	4	12	—	33
Bronchiectasis	7	1	2	—	10
Asthma—secondary	—	1	—	—	1
Broncho-pneumonia	30	15	27	8	80
Fibrosis of lung	2	—	1	—	3
Pleurisy and other diseases of the pleura	15	—	8	—	23
Empyema	5	1	4	—	10
Other diseases of the respiratory system	1	2	3	1	7
Diseases of the Digestive System :—					
Diseases of the lips, mouth, jaws and palate	2	—	2	—	4
Tonsillitis and quinsy	8	—	24	—	32
Enlarged tonsils and/or adenoids	293	—	386	—	679
Gastritis	12	—	13	—	25
Enteritis and gastro-enteritis	15	6	23	2	46
Gastric ulcer	36	1	11	—	48
Gastric ulcer—perforated	—	2	—	1	3
Duodenal ulcer	29	—	9	—	38
Duodenal ulcer—perforated	1	1	—	—	2
Appendicitis—Acute	51	6	45	3	105
Sub-acute and chronic	41	—	42	—	83
Colitis	1	—	11	1	13
Hernia—Inguinal	108	1	20	—	129
Femoral	3	—	6	—	9
Umbilical and ventral	3	—	8	—	11
Strangulated	4	1	6	—	11
Miscellaneous	4	1	1	—	6
Intussusception	—	1	—	—	1
Volvulus	—	—	1	—	1
Megacolon	1	—	—	—	1
Coeliac disease	2	—	1	—	3
Diverticula of colon	—	2	1	—	3
Intestinal obstruction	3	4	2	1	10
Constipation	15	—	3	—	18
Ischio rectal abscess	13	—	7	—	20
Fistulae, including fissures of the anus	11	—	6	—	17
Haemorrhoids	47	—	14	—	61
Prolapse of rectum	1	—	1	—	2
Pancreatitis	1	—	—	—	1
Infective jaundice	3	—	5	1	9

	Males		Females		Total
	Discharged	Died	Discharged	Died	
Diseases of the Digestive System—*cont.*					
Cholecystitis	8	1	13	—	22
Calculi of gall bladder	4	—	12	1	17
Adhesions following operation	5	—	5	—	10
Pyloric stenosis	1	—	1	—	2
Other conditions	22	3	7	2	34
Diseases due to Disorders of Nutrition or Metabolism :—					
Diabetes mellitus	31	2	31	6	70
Marasmus	6	3	10	6	25
Feeding difficulties	6	—	10	—	16
Asthma—allergic	41	—	36	—	77
Other allergic conditions	8	—	8	—	16
Rickets	1	—	—	—	1
Other metabolic diseases	1	—	—	—	1
Diseases of the Generative System :—					
Senile enlargement of the prostate	21	8	—	—	29
Other diseases of the male generative organs	90	2	—	—	92
Diseases of the ovary	—	—	11	—	11
Salpingitis	—	—	21	—	21
Diseases of the uterine ligaments and adjacent peritoneum	—	—	4	—	4
Metritis	—	—	12	—	12
Endometritis	—	—	14	—	14
Chronic inflammation of the cervix	—	—	176	—	176
Displacement of uterus	—	—	40	2	42
Diseases of vagina	—	—	36	—	36
Diseases of the vulva, clitoris and urethra	—	—	16	—	16
Dysmenorrhoea	—	—	10	—	10
Menorrhagia and metrorrhagia	—	—	8	—	8
Abortion	—	—	139	—	139
Ectopic gestation	—	—	2	—	2
Sterility	—	—	12	—	12
Toxaemias of pregnancy	—	—	39	1	40
Diseases of the Bones, Joints, Muscles and Fasciae :—					
Osteitis	2	—	2	—	4
Osteomyelitis—Acute and chronic	12	1	5	—	18
Arthritis—Acute	—	1	3	—	4
Chronic	6	—	6	—	12
Rheumatoid arthritis	6	—	16	—	22
Diseases of the tendons and sheaths of tendons	—	—	1	—	1
Diseases of the bursae	8	—	6	—	14
Displaced internal semilunar cartilage	11	—	1	—	12
Other diseases	31	—	20	—	51
Diseases of the Areolar Tissue and Skin :—					
Cellulitis	19	1	10	1	31
Boils, carbuncles or abscesses	51	2	37	2	92
Dermatitis, eczema or impetigo	4	—	5	—	9
Erythema nodosum	—	—	3	—	3
Other diseases of the skin	4	—	15	—	19
Diseases of the nails	2	—	2	—	4
Diseases of the Urinary Organs :—					
Glomerulo-tubular nephritis—Acute and sub-acute	10	—	14	—	24
Chronic	17	14	14	8	53
Pyelonephritis and pyonephrosis	1	—	2	2	5
Pyelitis	4	—	25	—	29
Perinephritis and perinephric abscess	2	—	—	—	2
Renal calculus	14	1	6	1	22

	Males		Females		Total
	Discharged	Died	Discharged	Died	
Diseases of the Urinary Organs—*cont.*					
Cystitis	5	—	5	—	10
Vesical calculus	2	—	1	—	3
Urinary disorders	5	3	5	—	13
Injuries :—					
Burns and scalds	17	1	16	1	35
Wounds and bruises	20	—	6	—	26
Multiple and miscellaneous injuries	15	—	10	—	25
Fractures—Skull	4	2	3	—	9
Bones of face and jaw	—	—	1	—	1
Clavicle	3	—	3	—	6
Humerus	1	—	1	—	2
Ulna	—	—	1	—	1
Radius	6	—	1	—	7
Ulna and radius	1	—	1	—	2
Small bones of hand and wrist	6	—	—	—	6
Ribs	4	—	—	—	4
Spine	3	—	—	—	3
Femur	20	—	8	2	30
Tibia	2	—	3	—	5
Fibula	1	—	1	—	2
Tibia and fibula	9	—	1	—	10
Patella	3	—	1	—	4
Small bones of foot	6	—	1	—	7
Miscellaneous	1	—	2	—	3
Dislocations	1	—	2	—	3
Tumours—Benign :—					
Nervous system	2	—	—	—	2
Breast	—	—	4	—	4
Thyroid glands	—	—	1	—	1
Bones	2	—	2	—	4
Lips, mouth, tongue and fauces	1	—	1	—	2
Ovary and uterus	—	—	35	2	37
Cervix	—	—	10	—	10
Vagina and vulva	—	—	2	—	2
Bladder	2	—	—	—	2
Miscellaneous regions	1	—	2	—	3
Tumours—Malignant :—					
Nervous system	1	—	—	—	1
Breast	1	—	9	—	10
Respiratory system	7	6	1	4	18
Thyroid gland	—	—	1	—	1
Bones	2	—	2	—	4
Lips, mouth, tongue and fauces	3	—	1	—	4
Pharynx, larynx and oesophagus	8	7	3	1	19
Stomach	13	9	4	5	31
Intestines	6	6	3	1	16
Rectum and anus	3	4	3	—	10
Pancreas, liver and gall bladder	2	2	—	2	6
Ovary and uterus	—	—	3	—	3
Cervix	—	—	8	2	10
Kidneys	1	—	1	—	2
Bladder	2	—	1	2	5
Prostate	2	2	—	—	4
Miscellaneous regions	2	1	3	1	7
Cysts	6	—	16	1	23
Lipoma	1	—	5	—	6
Malformations	6	1	14	3	24
Miscellaneous :—					
Other diseases	80	2	72	1	155
No abnormality detected	46	—	51	—	97
Total	2,017	199	2,400	135	4,751

Summary of Diseases and Conditions in Order of Frequency.

Diseases of the digestive system	971
Diseases of the eye, ear, nose and throat	846
Diseases of the generative organs	664
Diseases due to infection	334
Diseases of the circulatory system	279
Tumours	247
Diseases of the respiratory system	217
Diseases of the nervous system	204
Injuries	191
Diseases of the urinary system	161
Diseases of the areolar tissue and skin	158
Diseases of the bones, joints, muscles, etc.	138
Other diseases	341

Work of Departments.

Pathological	Investigations	9,732
Surgical	Major operations	672
	Minor operations	1,763
Dental	Patients	97
	Attendances for treatment	127
Radiological	Patients investigated	1,330
	Investigations	3,535
Massage	Patients	20
	Treatments	461
Ultra-Violet Light	Patients	28
	Treatments	244
Admission	Patients seen	3,179
Nurses' Sick Room	Admissions	72

Pathological Department.

Analysis of Investigations.

Swabs—Ear, nose and throat	5
Pus—Stained smears for organisms	177
Cultures for organisms	20
Smears—Stained for gonococci	23
Blood—Counts (full)	1,119
Leucocyte counts	1,396
Platelet and reticulocyte counts	46
Coagulation bleeding time	12
Grouping	20
Chemical investigations	496
Cultures for organisms	33
Cerebro-spinal fluid—Various investigations	202
Pleural fluid—Various investigations	57
Urine—Microscopy of centrifugal deposit	1,360
Bacteriological investigations	54
Chemical investigations	3,529
Fractional test meals	193
Sputum—Stained smears for tubercle bacilli	306
Faeces—Bacteriological investigations	64
For occult blood	27
Chemical investigations	7
Pathological sections reported	471
Post-mortem examinations	33
Clinical photographs	9
Miscellaneous investigations	73
Total	9,732

In addition to the above-mentioned investigations, which were conducted at the Hospital Laboratory, many ear, nose and throat swabs, and specimens of blood for the Wassermann reaction, were examined at the Cardiff and County Public Health Laboratory.

Analysis of Operations Performed.

	Major	Minor	Total
On skin and superficial structures	3	101	104
On arteries, veins and lymphatics	2	25	27
On bones and joints	41	142	183
On muscles, tendons, bursae and fasciae	2	16	18
Amputations	16	3	19
On skull, brain and spine	3	3	6
On mouth, pharynx and oesophagus	5	9	14
On thyroid and accessory glands	44	—	44
On breast	10	9	19
On thorax and contents	15	6	21
On abdominal wall and cavity	363	20	383
On stomach and duodenum	23	—	23
On intestines, rectum and anus	16	130	146
On liver, gall bladder, pancreas and spleen	6	—	6
On kidney and urinary tract	17	49	66
On male generative organs	16	107	123
On female generative organs	68	402	470
On ear, nose and throat	20	741	761
Unclassified	2	—	2
Total	672	1,763	2,435

Operations performed by Consultant Staff	1,066
Operations performed by Resident Medical Staff	1,369

Dental Department.

Number of patients treated	97
Attendances for treatment	127

Analysis of Attendances.

For extractions under general anaesthetic	86
For extractions with local anaesthetic	40
For examination without extractions	1
Total	127

Total number of teeth extracted	665

Radiological Department.

Analysis of Investigations.

Skull for injury	95
Skull and contents for disease or deformity	91
Lungs, mediastinum and pleural conditions	676
Heart and aorta	18
Oesophagus, stomach and intestines	989
Biliary passages	162
Urinary system	389
Generative system	10
Bones and joints for injury	568
Bones and joints for disease or deformity	498
Dental	20
Miscellaneous—for foreign bodies, etc.	19
Total	3,535

Special Methods of Investigation :—	
Barium meals	805
Barium enemata	134
Cholecystograms	110
Lipiodol injections	33
Urograms—intravenous	206
Total	1,288

Number of patients investigated	1,330
Average number of investigations per patient	2·7
Average number of investigations per discharged patient	0·74
Percentage of appearances abnormal	*57·5*

Massage and Light Department.

	Massage	Ultra-violet Light
Patients treated	20	28
Remaining under treatment on 31st December, 1937	2	2
Patients discharged from department	18	26
Number of treatments	461*	244

Nurses' Sick-Room.

Complement of nursing staff on 31st December, 1937	109
Average daily complement of nursing staff	107
Average daily complement of nurses available for duty	105
Nurses off duty sick during the year	67†
Nursing days lost (sick leave included)	794
Average number of nursing days lost per annum :—	
Per sick nurse	11·85
Per nurse of the average daily complement	7·5

*All medical cases.

†Five nurses off duty twice, making 72 admissions to the Nurses' Sick-room.

Disabilities.	*Number.*
Rheumatism	2
Ear, nose and throat conditions	22*
General debility	12
Gastric disturbance	7
Injuries	1
Conjunctivitis	2
Breast abscess	1
Septic conditions of skin	12†
Influenza	2
Appendicitis	3‡
Catarrhal jaundice	2
Measles	1§
Scarlet fever	4§
Diphtheria	1§
Total	72

* Including 2 minor operations. † Including 2 minor operations.
‡ Major operations. § Transferred to Isolation Hospital.

Comparative Table.

	1934	1935	1936	1937
Beds—				
Average daily complement	345	345	345	345
Average daily number available	343	343	342	342
Average daily number occupied	292	293	292	291
Average daily percentage of available beds occupied	*85*	*86*	*85*	*85*
Average number of patients per occupied bed	12·8	13·2	14·1	16·3
Average daily complement of nursing staff available	102	107	101	105
Average daily number of admissions	10·2	10·5	11·3	13
Patient days	106,590	106,859	106,733	106,023
Average length of stay per patient in days	28·5	27·7	25·9	22·3
Medical cases	1,404	1,498	1,456	1,958
Surgical cases	2,336	2,360	2,667	2,793
Total cases treated to a conclusion	3,740	3,858	4,123	4,751
Percentage of patients—				
Cured or recovered from acute attack	*58·6*	*57·4*	*60·7*	*61·2*
Improved	*27·0*	*24·4*	*21·1*	*21·7*
No change	*6·5*	*9·6*	*9·8*	*9·6*
Worse	*0·2*	*0·2*	*0·2*	*0·5*
Died	*7·7*	*8·4*	*8·2*	*7·0*
Pathological investigations	5,263	6,148	7,015	9,732
Autopsies per 100 deaths	*16·6*	*18·4*	*17·2*	*9·9*
Operations—				
Major	991	1,266	762	672
Minor	928	714	1,365	1,763
Dental—				
Patients treated	115	109	89	97
Treatments	180	143	113	127
Radiological—				
Patients investigated	1,222	1,371	1,555	1,330
Investigations	2,193	2,282	2,646	3,535
Massage—				
Patients treated	64	45	45	20
Treatments	974	826	752	461
Ultra-violet Light—				
Patients treated	64	89	22	28
Treatments	581	802	121	244
Patients seen at Admission Department	1,222	2,986	2,294	3,179
Admissions to Nurses' Sick-room	47	58	78	72
Sum received at Hospital for treatment and maintenance	£1,947 3s. 7d.*	£3,815 13s. 2d.	£4,517 0s. 0d	£6,944 6s. 10d.

*February to December.

ACCIDENT SERVICE.

After its second complete year of working, it is possible to show a steady increase in the number of patients attending the Accident Unit. During the year, 1,755 new cases were referred to the Unit, compared with 958 new cases in 1936. The total number of attendances of out-patients was 8,029, compared with 4,415 in 1936.

The large number of patients attending has caused difficulties in dealing with them without overcrowding, and this means that some extension of the present premises at City Lodge is essential for the efficient working of the Unit.

That the work is still increasing is further shown by the fact that the number of new patients referred in the second half of the year was 1,019, compared with 736 in the first half.

The increase during the year has been in all classes of cases, the most striking being the number referred by the Police—246, compared with 106. The number of industrial cases referred has increased satisfactorily, but it is still felt that there are many more cases of this class that would benefit by the facilities offered by the Accident Unit.

Sex of patients :—	
Males	1,070
Females	685
Total	1,755
Sources from which new cases were derived :—	
Private practitioners	880
Police	246
Other sources	629
Total	1,755
Method of dealing with cases :—	
As In-patients at :—	
(a) City Lodge (Accident Unit beds)	169
(b) City Lodge (Other beds)	43
(c) Llandough Hospital	127*
As Out-patients at the Unit	1,461
Classification of type of accident :—	
Industrial accidents	249
Road accidents	486
Other accidents (e.g., domestic, sport, etc.)	1,020
Total	1,755
Operations performed by the Accident Unit Staff at Llandough Hospital :—	
Fractures and traumatic surgery	73
Orthopaedic operations	31
Total	104

*Including 45 cases transferred from beds at City Lodge.

The total number of attendances of out-patients was 8,029, and the following were the conditions treated :—

FRACTURES.

Skull—Vault		1
Base		7
Bones of Face and Jaw		9
Clavicle		33
Humerus	Head and neck	16
	Shaft	7
	Condylor and supra-condylor	28
Radius	Head	20
	Shaft	86
	Colles	108
Ulna	Olecranon	13
	Shaft	47
	Styloid	—
Small bones of Hand and Wrist	Scaphoid	5
	Rest of Carpus	1
	Metacarpals	26
	Phalanges	27
Ribs		15
Sternum		2
Scapula	Body	3
	Glenoid and neck	—
Pelvis		4
Spine	Cervical	—
	Dorsal	—
	Lumbar	4
	Transverse processes and spinous processes	3
	Sacrum	1
	Coccyx	—
Femur	Upper end	26
	Shaft	16
	Lower end	2
Tibia	Upper end	7
	Shaft	35
	Lower end	30
Fibula	Upper end	6
	Shaft	20
	Lower end	46
Patella		7
Small bones of Foot	Astragalus	2
	Oscalcis	8
	Midtarsals	3
	Metatarsals	15
	Phalanges	13

DISLOCATIONS.

(A) Simple :—		
Upper Limb	Shoulder, including acromio clavicular	9
	Elbow	12
	Wrist and hands	6
Lower Limb	Hip	—
	Knee	1
	Ankle	—
	Subastragaloid	—
	Foot	—
Jaw		2
Sterno-clavicular joint		—
Spine....		—
(B) Fracture Dislocations :—		
Upper Limb	Shoulder, including acromio clavicular	3
	Elbow	4
	Wrist and hands	5
Lower Limb	Hip	—
	Knee	—
	Ankle	1
	Subastragaloid	—
	Foot	—
Sterno-clavicular joint		—
Spine....		—
Ligamentous injuries		268
Synovitis		65
Old Fractures		43
Miscellaneous		653

ASTHMA CLINIC.

The demands being made on the Asthma Clinic at City Lodge continue to increase. During 1937, 352 new patients attended the clinic, being almost treble the number seen during the first year. The number of attendances during 1937 was 6,085—seven times the number in the first year.

Year.	*Number of New Patients.*	*Number of Attendances.*
1935	128	858
1936	294	3,564
1937	352	6,085

This rapid increase in the amount of work has at times severely taxed the facilities at our disposal.

Approximately 90 per cent. of the new patients attending the clinic were referred by their own private practitioners, and 10 per cent. were referred by medical officers of the Public Health Department. There was also an increase in the number of the new patients who reside outside Cardiff. During 1936, 13·6 per cent. of the new patients lived outside Cardiff ; in 1937 the proportion was 15·3 per cent. Many of these patients come long distances for investigation of their condition and for advice on further treatment at home.

The number of patients suffering from asthma who were admitted to Llandough Hospital during 1937 was 77—a decrease of 11 as compared with 1936. This is, of course, understandable, as it is now becoming more generally known that treatment can be obtained at the clinic, and only in certain cases is there need for admission of the patients to hospital.

During 1937 arrangements were made with the Merthyr Tydfil Public Assistance Committee, the Glamorgan Public Assistance Committee, the Mountain Ash Urban District Council and the Carmarthen County County Council for the treatment of cases, the cost being borne by the authorities concerned. Inquiries have also been received from the Breconshire County Council and the British Legion, but no definite arrangements have yet been made.

The method of investigation and treatment remains unchanged. Each patient is investigated with regard to his or her sensitivities, and the treatment advised aims mainly at the complete elimination of these substances from the patient's environment and/or diet. Where this is impossible, desensitization by a course of injections is carried out. Breathing exercises are also taught at the clinic and are found to be of considerable value.

The results of the treatment of asthma by breathing exercises which have been published show that 20 per cent. are clinically cured and another 50 per cent. improved, and if the results are analysed in patients in whom asthma commenced under the age of 10 years, 30 per cent. are clinically cured and 50 per cent. are improved. The facilities at our disposal at the clinic at present leave room for considerable improvement. There is no doubt that properly organized classes for teaching breathing exercises would be of very considerable benefit to children and adults who suffer from asthma. It is also felt that much ill-health could be remedied or avoided if every school child who suffers from asthma could be taught these breathing exercises. Arrangements are now (1938) being made to improve the facilities for breathing exercises on these lines. In the book on *Physical Exercises for Asthma*, published by the Asthma Research Council, it is stated that "having learnt the proper way to breathe, the majority of patients can prevent an attack progressing by doing the exercises; they feel they have a method of relief in their own hands and lose their fear of attacks, thus acquiring confidence—a most important matter for every asthmatic."

During the course of routine investigation at the clinic it has not infrequently been found that the taking of milk made certain children ill. In view of the widespread efforts throughout the country to supply milk to children at school, an investigation has been carried out with a view to finding the percentage that were upset by (allergic to) milk. Eleven hundred and fifty children have been investigated, and it is estimated that 5·5 per cent. of the school children in Cardiff are actually allergic to milk and that 19·1 per cent. are probably allergic to milk. It is also of considerable interest that a true dislike of milk in these children is an indication of an active milk sensitivity or an indication of a past sensitivity. The results indicate that all children cannot take milk with impunity and that those who have an idiosyncrasy to it must avoid it or suffer. The refusal or disinclination of many children to take milk should be given due consideration, as their attitude in many cases is a natural protection against their suffering from allergic reactions. It is known that desensitization to milk, as to other foods, not infrequently occurs as a result of its omission from the diet over a lengthened period, and the degree of tolerance often varies with the interval. Thus, milk should not be forced on such children, but rather withheld from them.

XI.—POOR LAW MEDICAL SERVICE.

A summary of the work of the district medical officers during 1937 is given in the following table :—

Name of District	Whether Whole or Part-time D.M.O.	Attendances of Patients at Surgery	Attendances of Patients at Surgery for Medicine only	Visits to Homes of Patients	Individual Persons dealt with during the Year
Roath	Whole-time	12,423	5,248	7,908	4,169
Central	do.	12,279	6,605	2,073	3,187
Canton	Part-time	2,570	14	1,540	836
South	do.	1,517	914	425	488
Splott	do.	2,041	875	1,406	671
Adamsdown	do.	6,651	2,775	1,415	1,052
Gabalfa	do.	1,031	394	672	412
Llanishen	do.	75	—	167	23
Ely*	do.	1,362	555	809	904
Total ...	—	39,949	17,380	16,415	11,742

*Separated from Canton district ; additional district medical officer commenced duty on 1st April, 1937.

The following tabular statements show the hospital provision and the work undertaken during 1937 in connection with the institutional treatment of the sick at the City Lodge and Ely Lodge Poor Law Institutions.

City Lodge.

(1) Classification of the accommodation for the sick and the number of beds occupied on 31st December, 1937 :—

Classification of Wards	Number of Wards	Beds							
		Men		Women		Children (under 16 years)		Total	
		Provided	Occupied	Provided	Occupied	Provided	Occupied	Provided	Occupied
Medical	6	22	19	34	30	—	—	56	49
Surgical									
Chronic Sick	32	238	237	123	121	—	—	361	358
Children	1	—	—	—	—	42	42	42	42
Venereal Disease	2	10	6	18	12	—	—	28	18
Tuberculosis	2	20	9	20	13	2	2	42	24
Maternity	4	—	—	45	22	—	—	45	22
Mental Disease	2	4	1	4	—	—	—	8	1
Other	4	11	8	10	1	—	—	21	9
Total	53	305	280	254	199	44	44	603	523

(2) In-patients :—

1.	Total number of admissions (including infants born in hospital)	3,292
2.	Number of women confined in hospital	475
3.	Number of live births	439*
4.	Number of still-births	43
5.	Number of deaths among the newly born	20
6.	Total number of deaths among children under one year	21
7.	Number of maternal deaths among women admitted to hospital for confinement	2
8.	Total number of deaths	470
9.	Total number of discharges (including infants born in hospital)	2,822
10.	Duration of stay of patients included in 8 and 9 above :—	
	(*a*) Under four weeks	2,351
	(*b*) Four weeks and under thirteen weeks	624
	(*c*) Thirteen weeks or more	317
11.	Number of beds occupied :—	
	(*a*) Average during the year	510
	(*b*) Highest	541
	(*c*) Lowest	464

*Twins in seven cases.

(3) Out-Patients :—

1.	Cases after discharge from this hospital and Llandough Hospital attend for continuation treatment. Casualties after treatment are referred to private practitioners or, if urgent, admitted to this hospital or Llandough Hospital.	
2.	Total number of persons seen in the out-patient department	3,501
3.	Number of these persons who were subsequently admitted for in-patient treatment in the institution	160
4.	Number of these persons who had received in-patient treatment in the institution	53
5.	Total number of attendances in the out-patient department	13,473

(4) Classification of in-patients who were discharged from or who died in the institution during the year :—

Disease Groups	Children (under 16 years)		Men and Women	
	Discharged	Died	Discharged	Died
Acute infectious disease	18	—	11	—
Influenza	1	—	7	—
Tuberculosis :—				
Pulmonary	2	2	81	38
Non-pulmonary	8	—	14	7
Malignant disease	—	—	50	67
Rheumatism :—				
Acute rheumatism (rheumatic fever) together with sub-acute rheumatism and chorea	2	—	7	—
Non-articular manifestations of so-called "rheumatism" (muscular rheumatism, fibrositis, lumbago and sciatica)	—	—	8	—
Chronic arthritis	—	—	27	—
Venereal disease	15	—	59	3
Puerperal pyrexia	—	—	1	—
Puerperal fever :—				
Women confined in the hospital	—	—	15	—
Other cases	—	—	1	—
Other diseases and accidents connected with pregnancy and child-birth	—	—	54	2
Mental diseases :—				
Senile dementia	—	—	95	—
Other	4	—	227	1
Senile decay	—	—	48	121
Accidental injury and violence	53	1	229	16
Diseases of the :—				
Nervous system and sense organs	15	—	113	7
Respiratory system	13	4	112	21
Circulatory system	3	1	178	125
Digestive system	31	—	51	7
Genito-urinary system	7	—	50	18
Skin	112	1	77	2
Other diseases	30	18	109	8
Mothers and infants discharged from maternity wards (not included above) :—				
Mothers	—	—	472	—
Infants	412	—	—	—
Persons not falling under any of the above headings	—	—	—	—
Total	726	27	2,096	443

Ely Lodge.

(1) Classification of the accommodation and the number of beds occupied on 31st December, 1937 :—

Classification of Wards	Number of Wards	Beds							
		Men		Women		Children (under 16 years)		Total	
		Provided	Occupied	Provided	Occupied	Provided	Occupied	Provided	Occupied
Mental Disease	14	144	137	198	177	4	4	346	318
Mental Defectives		59	59	44	44	59	31	162	134
Other	4	20	19	9	9	—	—	29	28
Total	18	223	215	251	230	63	35	537	480

(2) In-patients :—

Total number of admissions	111
Total number of deaths	62
Total number of discharges	49

Duration of stay of patients :—

(*a*) Under four weeks	14
(*b*) Four weeks and under thirteen weeks	14
(*c*) Thirteen weeks or more	83

Number of beds occupied :—

(*a*) Average during the year	473
(*b*) Highest	484
(*c*) Lowest	464

(3) Classification of in-patients who were discharged from or who died in the institution during the year :—

Disease Groups	Children (under 16 years)		Men and Women	
	Discharged	Died	Discharged	Died
Influenza	—	—	—	6
Tuberculosis :—				
Pulmonary....	—	—	—	—
Non-pulmonary	—	1	—	—
Malignant disease	—	—	—	2
Mental diseases :—				
Senile dementia	—	—	37	53
Other	—	—	—	—
Other diseases	—	—	12	—
Total	-	1	49	61

XII.—HOSPITAL ACCOMMODATION.

The following tabular statement shows the amount of hospital accommodation for the sick and others in need of special care provided by the City Council and other bodies, classified according to the type of function each subserves :—

Institution	Total available Beds		Approximate Number available for Cardiff
Llandough Hospital		345	311
Isolation Hospital		149*	149*
Caerau Smallpox Hospital		31†	31†
Lord Pontypridd Hospital (Dulwich House)		25	25
City Lodge Poor Law Institution‡ :—			
Acute Diseases	126		
Maternity	45		
Tuberculosis	42		
Mental Cases	8		
Chronic and Aged Infirm	361		
Other	21		
		603	520
Ely Poor Law Institution‡ :—			
Mental Cases (including Mental Defectives)	508		
Chronic and Aged Infirm	29		
		537	452
Mental Hospital		790	690
Total Rate-provided		2,480	2,178
Cardiff Royal Infirmary :—			
General	380		
Maternity	25		
Convalescent Home	54		
		459	260
Prince of Wales' Hospital :—			
General	64		
Country Branch	68		
		132	12
Royal Hamadryad Seamen's Hospital		74‖	74‖
Total Voluntary		665	346
Grand Total		3,145	2,524
Sanatoria and Hospitals of the Welsh National Memorial Association—Tuberculosis		—	200

*Total adult accommodation on the basis of 144 sq. ft. per adult bed. This represents about 230 available beds and cots when allowance is made for children under 10 years.

†On the basis of 154 sq. ft. per adult bed, representing about 48 available beds when allowance is made for children under 10 years.

‡The accommodation for chronic and aged infirm in the City Lodge and Ely Institutions and for patients suffering from mental diseases, disorders or defects at Ely Institution fluctuates slightly with requirements. Many of the beds set apart for chronic cases at the City Lodge are really occupied by patients requiring continuous medical or surgical and nursing care. The figures for Ely Institution also include accommodation approved by the Board of Control for mental defectives who are chargeable to the Mental Deficiency Committees of the Authorities responsible for their maintenance.

‖For seamen only.

XIII.—TUBERCULOSIS.

New Cases of Tuberculosis.—The following tables show the age distribution and localisation of the disease among new cases of tuberculosis coming to the knowledge of the department during 1937.

Cases of Tuberculosis by Age and Sex :—

Age Periods—Years	New Cases					
	Tuberculosis of the Respiratory System			Other Forms of Tuberculosis		
	Males	Females	Total	Males	Females	Total
0— 1	—	—	—	1	1	2
1— 5	3	2	5	6	9	15
5—10	1	3	4	9	5	14
10—15	3	3	6	8	11	19
15—20	22	12	34	15	9	24
20—25	19	35	54	2	6	8
25—35	51	26	77	6	13	19
35—45	29	18	47	7	5	12
45—55	22	9	31	4	3	7
55—65	21	5	26	2	1	3
65 and upwards	1	5	6	2	2	4
Total	172	118	290	62	65	127

Cases of Tuberculosis by Localisation of Disease and Sex :—

Form of Tuberculosis	New Cases		
	Males	Females	Total
Respiratory System	172	118	290
Nervous System	5	10	15
Intestines and Peritoneum	7	6	13
Vertebral Column	9	2	11
Bones and Joints	13	9	22
Disseminated Tuberculosis	1	1	2
Other Forms	27	37	64
Total	234	183	417

Sources of Ascertainment.—The new cases of tuberculosis were ascertained as follows :—

Source	Tuberculosis of Respiratory System	Other Forms of Tuberculosis	Total
General Medical Practitioners	77	19	96
Welsh National Memorial Association	147	46	193
Medical Officers of Institutions	46	50	96
Other Medical Officers	9	1	10
Otherwise ascertained	11	11	22
Total	290	127	417

Home Conditions of New Cases.—A detailed analysis is given below showing the living and sleeping conditions within their own tenements of 254 new cases of tuberculosis of the respiratory system that came to the knowledge of the department during 1937.

Living accommodation of 254 patients in private houses at the time of their coming to the knowledge of the department :—

Rooms in Tenement (*i.e.*, house or part of house occupied by one family)	Patients			Total Number of Persons in Household			
	Males	Females	Total	Over 10 years	Under 10 years	Lodgers	Total
1 room	3	1	4	5	—	—	5
2 rooms	17	15	32	65	25	—	90
3 rooms	19	17	36	104	27	—	131
4 rooms and over	106	76	182	766	133	1	900
Total	145	109	254	940	185	1	1,126

In addition to the foregoing 254 cases, there were 7 cases (4 males and 3 females) in institutions and 15 cases (13 males and 2 females) in lodging houses at the time of notification. Information as to the living accommodation of the remaining 14 cases (10 males and 4 females) could not be ascertained for various reasons.

Sleeping accommodation of 254 patients suffering from tuberculosis of the respiratory system and living in private houses at the time of their coming to the knowledge of the department :—

Rooms in Tenement (*i.e.*, house or part of house occupied by one family)	Patients				Contacts		
	With Room to Self	With Bed but not Room to Self	With neither Bed nor Room to Self	Total	Sleeping in same bed as Patient	Sleeping in separate Bed but in same room as Patient	Total
1 room	3	—	1	4	1	—	1
2 rooms	4	3	25	32	30	23	53
3 rooms	13	4	19	36	22	17	39
4 rooms and over	97	17	68	182	75	38	113
Total	117	24	113*	254	128	78	206

* Including 83 married persons.

It will be seen that 117, or 46·0 per cent., of the new cases had sleeping rooms to themselves, and that the number of persons exposed to infection by sleeping in the same bedrooms as patients was 206.

Known Cases of Tuberculosis.—Cases of tuberculosis remaining on the register of notifications at the end of 1937 were as follows :—

Tuberculosis of the Respiratory System :—

Males	667	
Females	460	
Total		1,127

Other Forms of Tuberculosis :—		
Males	228	
Females	226	
Total		454
Grand Total		1,581

The total number of known cases was nine more than that at the end of 1936.

During 1937 the tuberculosis nurses made 399 first visits and 2,140 revisits to the homes of patients.

Deaths.—The numbers of deaths from tuberculosis of the respiratory system and from other forms of tuberculosis during 1937 were 181 and 38, the death-rates per 1,000 being 0·82 and 0·17 respectively. The tuberculosis death-rates per 1,000 in each of the ten years 1928-1937 were as follows :—

Year	Tuberculosis of the Respiratory System	Other Forms of Tuberculosis	All Forms of Tuberculosis
1928	1·01	0·20	1·21
1929	1·14	0·20	1·34
1930	0·94	0·21	1·15
1931	1·06	0·23	1·29
1932	1·05	0·21	1·26
1933	1·05	0·21	1·26
1934	0·93	0·22	1·15
1935	0·97	0·22	1·19
1936	0·87	0·18	1·05
1937	0·82	0·17	0·99

It is satisfactory to note that the death-rates from tuberculosis of the respiratory system and from other forms of tuberculosis in 1937 were the lowest on record.

In the following table the numbers of deaths and death-rates from tuberculosis for each municipal ward and registration sub-district are given :—

Localities	Tuberculosis of the Respiratory System		Other Forms of Tuberculosis		All Forms of Tuberculosis	
	Deaths	Death-rate per 1,000	Deaths	Death-rate per 1,000	Deaths	Death-rate per 1,000
Adamsdown	21	1·41	8	0·55	29	1·99
Cathays	9	0·58	3	0·19	12	0·77
Gabalfa	10	0·49	4	0·20	14	0·69
Central	11	0·94	1	0·08	12	1·02
South	8	0·58	2	0·14	10	0·73
Central Registration Sub-District	59	0·78	18	0·24	77	1·02
Plasnewydd ...	9	0·63	—	—	9	0·63
Penylan	7	0·47	3	0·20	10	0·67
Roath	12	0·79	1	0·07	13	0·86
Splott	17	0·80	3	0·14	20	0·94
East Registration Sub-District	45	0·68	7	0·11	52	0·79
Llandaff	6	0·39	2	0·13	8	0·52
Ely	14	0·95	3	0·20	17	1·15
Canton	16	1·01	1	0·06	17	1·07
Grangetown	18	1·21	3	0·20	21	1·41
Riverside	21	1·33	4	0·25	25	1·58
West Registration Sub-District	75	0·98	13	0·17	88	1·15
Institutions (Place of residence unknown)	2	—	—	—	2	—
Whole City	181	0·82	38	0·17	219	0·99

As usual, the highest death-rates occurred in Adamsdown, where the majority of the foreign and maritime population reside.

The two following tables show the age distribution and localisation of the disease among the deaths from tuberculosis during 1937.

Deaths from Tuberculosis by Age and Sex :—

Age Periods—Years	Deaths					
	Tuberculosis of the Respiratory System			Other Forms of Tuberculosis		
	Males	Females	Total	Males	Females	Total
0— 1	—	—	—	1	1	2
1— 5	—	—	—	4	5	9
5—10	—	—	—	2	2	4
10—15	1	3	4	—	2	2
15—20	6	8	14	3	2	5
20—25	8	18	26	—	3	3
25—35	23	21	44	2	1	3
35—45	20	13	33	5	—	5
45—55	24	12	36	3	1	4
55—65	14	2	16	—	—	—
65 and upwards	4	4	8	1	—	1
Total	100	81	181	21	17	38

Deaths from Tuberculosis by Sex and Localisation of Disease :—

Form of Tuberculosis	Deaths		
	Males	Females	Total
Respiratory System	100	81	181
Central Nervous System	3	11	14
Intestines and Peritoneum	4	2	6
Vertebral Column	6	—	6
Other Bones and Joints	1	—	1
Disseminated Tuberculosis	5	2	7
Other Forms	2	2	4
Total	121	98	219

The number and proportion of cases that died in 1937 that were previously unknown to the department will be seen from the following figures :—

	Total Number of Deaths	Deaths of Cases previously unknown	
		Number	Percentage
Tuberculosis of the Respiratory System	181	9	*4·9*
Other Forms of Tuberculosis	38	12	*31·6*
Total	219	21	*9·6*

Treatment.—The following tables give particulars of the examination and treatment of Cardiff cases under the scheme of the Welsh National Memorial Association during 1937.

1.—Work of the Dispensary.

	Tuberculosis of the Respiratory System				Other Forms of Tuberculosis				Total				Grand Total
	Adults		Children		Adults		Children		Adults		Children		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A.—New cases examined during the year (excluding contacts) :—													
(*a*) Definitely tuberculous	133	89	3	5	16	20	13	10	149	109	16	15	289
(*b*) Diagnosis not completed*	—	—	—	—	—	—	—	—	36	35	18	8	97
(*c*) Non-tuberculous	—	—	—	—	—	—	—	—	199	187	52	70	508
B.—Contacts examined during the year :—													
(*a*) Definitely tuberculous	2	1	1	—	—	—	—	—	2	1	1	—	4
(*b*) Diagnosis not completed*	—	—	—	—	—	—	—	—	—	4	8	6	18
(*c*) Non-tuberculous	—	—	—	—	—	—	—	—	18	45	20	27	110
C.—Cases written off the Dispensary Register as :—													
(*a*) Recovered	6	7	—	1	2	9	18	12	8	16	18	13	55
(*b*) Non-tuberculous (including cases previously diagnosed and entered on the Dispensary Register as tuberculous)	—	—	—	—	—	—	—	—	226	244	84	116	670
D.—Number of cases on Dispensary Register on December 31st:—													
(*a*) Definitely tuberculous	414	275	23	32	73	78	64	68	487	353	87	100	1,027
(*b*) Diagnosis not completed	—	—	—	—	—	—	—	—	41	44	33	25	143

*i.e., remaining undiagnosed on 31st December.

1.	Number of cases on Dispensary Register on January 1st	1,112
2.	Number of cases transferred from other areas and cases returned after discharge under head 3 in previous years	29
3.	Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases " lost sight of "	111
4.	Cases written off during the year as dead (all causes)	161
5.	Number of attendances at the Dispensary (including contacts)	7,263
6.	Number of Insured Persons under Domiciliary Treatment on December 31st	8
7.	Number of consultations with medical practitioners :—	
	(*a*) Personal	284
	(*b*) Other	2,073
8.	Number of visits by Tuberculosis Officers to homes (including personal consultations)	242
9.	Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	1,848
10.	Number of :—	
	(*a*) Specimens of sputum examined in connection with Dispensary work	512
	(*b*) X-ray examinations made in connection with Dispensary work	2,126
11.	Number of " Recovered " cases restored to Dispensary Register and included in A (*a*) and A (*b*) above	—
12.	Number of " T.B. plus " cases on Dispensary Register on December 31st	514

2.—Residential Treatment.

		In Institutions on Jan. 1st	Admitted during the year	Discharged during the year	Died in Institutions	In Institutions on Dec. 31st
Number of doubtfully tuberculous cases admitted for observation	Adult males	2	11	12	—	1
	Adult females	1	11	10	—	2
	Children	1	6	5	—	2
	Total	4	28	27	—	5
Number of patients suffering from Tuberculosis of the Respiratory System	Adult males	88	219	157	47	103
	Adult females	67	128	102	33	60
	Children	10	12	11	1	10
	Total	165	359	270	81	173
Number of patients suffering from Other Forms of Tuberculosis	Adult males	11	24	25	3	7
	Adult females	7	13	10	—	10
	Children	20	26	25	2	19
	Total	38	63	60	5	36
Grand Total		207	450	357	86	214

3.—Results of Observation of Doubtfully Tuberculous Cases Discharged from Residential Institutions.

Diagnosis on Discharge from Observation	Pulmonary Cases												Non-Pulmonary Cases						Total		
	Sanatorium						Hospital														
	Stay under 4 weeks			Stay over 4 weeks			Stay under 4 weeks			Stay over 4 weeks			Stay under 4 weeks			Stay over 4 weeks					
	M	F.	Ch	M.	F	Ch	M.	F.	Ch.	M.	F.	Ch.	M.	F	Ch.	M.	F.	Ch	M.	F	Ch.
Tuberculous	1	—	—	—	1	—	1	1	—	3	3	—	1	1	1	—	—	1	6	6	2
Non-Tuberculous	—	—	—	—	—	—	1	—	—	1	—	2	—	—	—	3	2	—	5	2	2
Doubtful	—	—	—	—	—	—	1	—	—	—	2	1	—	—	—	—	—	—	1	2	1
Total	1	—	—	—	1	—	3	1	—	4	5	3	1	1	1	3	2	1	12	10	5

4.—Immediate Results of Treatment of Definitely Tuberculous Patients Discharged from Residential Institutions.

(*a*) Sanatorium (Pulmonary Cases).

Condition at time of Discharge	Duration of Residential Treatment												Total
	Under 3 months*			3-6 months			6-12 months			More than 12 months			
	M.	F.	Ch.	M.	F.	Ch	M.	F.	Ch.	M.	F.	Ch.	
Quiescent	—	—	—	—	10	—	—	1	3	—	—	—	14
Not Quiescent	11	1	—	7	8	1	8	5	—	10	—	—	51
Died	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	11	1	—	7	18	1	8	6	3	10	—	—	65

(*b*) Hospital (Pulmonary Cases).

Condition at time of Discharge	Duration of Residential Treatment												Total
	Under 3 months*			3-6 months			6-12 months			More than 12 months			
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Quiescent	—	1	—	1	2	—	—	1	1	—	—	–	6
Not Quiescent	29	19	2	35	19	—	33	19	3	10	10	1	180
Died	13	13	—	13	10	—	7	3	—	2	1	—	62
Total	42	33	2	49	31	—	40	23	4	12	11	1	248

*Patients whose stay in residential institutions has not exceeded 28 days are not included.

(*c*) Hospital (Non-Pulmonary Cases).

Condition at time of Discharge	Duration of Residential Treatment												Total
	Under 3 months*			3-6 months			6-12 months			More than 12 months			
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Quiescent	1	—	—	—	—	—	—	1	4	1	1	4	12
Not Quiescent	4	3	5	7	1	5	1	2	2	2	—	2	34
Died	1	—	1	—	—	—	—	—	—	2	—	1	5
Total	6	3	6	7	1	5	1	3	6	5	1	7	51

*Patients whose stay in residential institutions has not exceeded 28 days are not included.

XIV.—VENEREAL DISEASES.

The following is a summary of the returns for 1937 from treatment centres established under the Public Health (Venereal Diseases) Regulations, 1916 :—

	Cardiff Royal Infirmary	Royal Hamadryad Seamen's Hospital*	Auxiliary Centre for Mothers and Children	Institution outside Cardiff	Total
A. Number of *persons residing in Cardiff* dealt with during the year for the first time and found to be suffering from :—					
Syphilis	92	109	13	—	214
Soft Chancre	2	113	—	2	117
Gonorrhoea	230	346	120	4	700
Conditions other than Venereal	118	32	62	3	215
Total	442	600	195	9	1,246
B. Number of attendances of all patients residing in Cardiff	14,962	9,944	2,879	40	27,825
C. Aggregate number of "in-patient days" of all patients residing in Cardiff	—	2,407	—	105	2,512

Examination during 1937 of pathological material from *patients residing in Cardiff* and patients at institutions in or belonging to Cardiff :—

	Microscopical		Serum Tests		
	Spirochetes	Gonococci	Wassermann	Others for Syphilis	For Gonorrhoea
Specimens examined at Treatment Centres :—					
Cardiff Royal Infirmary	—	554	563	2	—
Royal Hamadryad Seamen's Hospital*	35	114	—	—	—
Specimens examined at the Cardiff and County Public Health Laboratory from :—					
Treatment Centres :—					
Royal Hamadryad Seamen's Hospital*	—	—	208	—	—
Auxiliary Centre for Mothers and Children	—	237	87	—	1
Public Health Department	—	2	1,309	—	—
Other sources	2	254	1,828	—	85
	2	493	3,432		86
Total	37	1,161	3,995	2	86

During the year, 971 doses of arsenobenzene compounds were supplied in 65 instances to 20 individual private medical practitioners.

*The figures relate to seamen only, whether residents of Cardiff or not.

The following table shows the numbers of *all persons* dealt with for the first time at the Cardiff treatment centres during each of the years 1928-1937* :—

Year	Syphilis		Soft Chancre		Gonorrhoea		Conditions other than Venereal		Total		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Both Sexes
1928	397	162	89	4	728	178	247	142	1,461	486	1,947
1929	407	130	102	4	697	178	212	163	1,418	475	1,893
1930	388	118	108	—	730	161	187	153	1,413	432	1,845
1931	360	136	91	—	510	157	179	141	1,140	434	1,574
1932	327	114	104	—	585	146	163	135	1,179	395	1,574
1933	378	88	92	—	577	140	175	125	1,222	343	1,565
1934	291	94	93	—	656	131	154	115	1,194	340	1,534
1935	323	88	87	—	609	136	136	96	1,155	320	1,475
1936	291	97	104	—	669	167	165	80	1,229	344	1,573
1937	290	60	123	—	696	177	168	77	1,277	314	1,591

The following table gives the results of treatment and other particulars regarding *all persons* dealt with at the Cardiff treatment centres during 1937 :—

	Syphilis		Soft Chancre		Gonor-rhoea		Conditions other than Venereal		Total		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Both Sexes
Number of cases under treatment or observation on 1st January	184	330	8	—	243	177	14	6	449	513	962
Number of cases dealt with for the first time*	290	60	123	—	696	177	168	77	1,277	314	1,591
Number of cases discharged after completion of treatment and final tests of cure	48	17	73	—	212	38	154	62	487	117	604
Number of cases which ceased to attend before completion of treatment	163	36	17	—	241	43	—	—	421	79	500
Number of cases which ceased to attend after completion of treatment but before final test of cure	52	7	4	—	154	10	—	—	210	17	227
Number of cases transferred to other centres or to institutions, or to care of private practitioners	48	4	26	—	124	10	—	—	198	14	212
Number of cases remaining under treatment or observation on 31st December	163	326	11	—	208	253	28	21	410	600	1,010

* Including cases that returned after being removed from the registers and cases transferred from other centres.

XV.—MATERNITY AND CHILD WELFARE.

Notification of Births and Still-births.—The following statement shows the number of births and still-births notified as having occurred in Cardiff during 1937 :—

	Births.	*Still-births.*
Medical Practitioners	25	—
Municipal Midwives	490*	15*
Midwives of Queen's Institute of District Nursing	485	14
Private Midwives	1,882	70
Parents	1	—
Maternity Hospital (Cardiff Royal Infirmary)	468	67
City Lodge Hospital	447	46
Total	3,798 †	212 ‡

* Municipal midwifery service commenced 30th July, 1937.
† Including 413 not belonging to Cardiff.
‡ ,, 58 ,, ,, ,, ,,

Child Welfare Centres.—The following is a record of the attendances at the 10 child welfare centres :—

Number of Sessions	Attendances				Total	Average Attendance at each Session
	Children under 1 year		Children 1 year to 5 years			
	First	Subsequent	First	Subsequent		
708	2,204	24,557	334	16,077	43,172	61

The total number of children who attended at the centres during the year was as follows :—

Children under 1 year at the end of the year	2,442
Children between 1 year and 5 years at the end of the year	3,287
Total	5,729

The following tabular statement shows the conditions found by medical officers in 2,207 infants under one year and 308 children between one and five years who were examined for the first time during 1937 and the diseases or defects discovered subsequent to first examination :—

	Examined for first time		Diseases or Defects found in Children subsequent to their first examination	
	Under 1 year	1 to 5 years	Under 1 year	1 to 5 years
Number examined :—				
Normal	1,513	78	—	—
Individual cases found with Diseases or Defects	694	230	—	—
Diseases or Defects found :—				
Injury at Birth	4	—	—	—
Congenital Malformation or Defect	66	5	22	19
Prematurity	53	—	8	4
Congenital Debility	38	—	19	5
Malnutrition (cause not specified) or Debility (not congenital)	99	35	6	7
Anaemia (cause not specified)	27	16	100	65
Diseases or Defects of :—				
Skin (Non-syphilitic) :				
Systemic	25	6	151	155
Contagious	12	22	109	216
Irritative	63	13	282	161
Eye : Ophthalmia Neonatorum	26	—	14	20
Squint	5	11	12	41
Other	25	7	128	66
Ear : Otorrhoea	11	5	177	126
Other	9	—	37	47
Nose and Throat :				
Enlarged Tonsils and/or Adenoids	3	17	26	151
Other	18	8	85	119
Heart and Circulation : Congenital	5	—	6	6
Rheumatic	—	—	—	—
Other	2	1	15	72
Respiratory System (non-tuberculous)	35	14	599	428
Digestive System : Hernia—Umbilical	90	5	54	30
Other	19	4	41	2
Other Diseases	89	17	783	301
Nervous System : Chorea	—	—	—	—
Other	2	10	23	40
Genito-urinary System : Phimosis	67	12	38	24
Other	3	—	45	56
Tuberculosis : Pulmonary—				
Definite	—	—	—	1
Suspected	—	—	1	5
Non-Pulmonary	—	5	2	21
Defective Teeth	2	64	22	212
Rickets	1	12	26	67
Other Deformities	16	6	25	119
Rheumatism (not Cardiac or Nervous)	1	—	—	8
Syphilis	—	—	5	1
Other Diseases or Defects	20	9	38	157

Ante-natal and Post-natal Clinics.—The record of attendances at the six ante-natal clinics is given in the following statement :—

Number of Sessions	Attendances				Total	Average Attendance at each Session
	Expectant Mothers		Post-natal Cases			
	First	Subsequent	First	Subsequent		
420	1,969	6,370	32	7	8,378	20

In the following table the number of notified births (live and still) belonging to Cardiff and the number of expectant mothers who attended the ante-natal clinics for the first time during each of the years 1932 to 1937 are given :—

	1932	1933	1934	1935	1936	1937
(*a*) Total number of notified births (live and still)	3,754	3,576	3,632	3,519	3,568	3,539
(*b*) Number of expectant mothers who attended the ante-natal clinics	1,466	1,418	1,669	1,627	1,794	1,969
(*c*) Percentage of notified births represented by (b)	*39·0*	*39·6*	*45·9*	*46·2*	*50·2*	*55·6*

An analysis regarding 1,769 expectant mothers who attended the ante-natal clinics for the first time during 1937 and who were confined during 1937 is given below.

Miscarriages occurred in 20 instances and still-births in 22. Six of the women died from puerperal causes. Twin births occurred in 16 instances.

Type of case :—	
Primipara	612
Multipara	1,157
Total	1,769

Of these 1,769 women, 783 were found to be suffering from 1,021 diseases, abnormalities or defects, as follows :—

Abnormalities of the thyroid gland	12
Albuminuria	96
Anaemia	52
Conditions requiring caesarean section	2
,, ,, version	45
Contracted pelvis	29
Debility	5
Dental defects requiring treatment	349
Foetal abnormality	1
Haemorrhage	53
Haemorrhoids	8
Heart conditions	11
Hydrometra	11
Malnutrition	4
Oedema	103
Phlebitis	4
Pyelitis	3
Respiratory diseases	8
Skin diseases	7
Vaginal discharge	142
Varicose veins	59
Vomiting	13
Other diseases	4
Total....	1,021

Place of confinement :—

Private dwelling houses	903
Maternity Hospital (Cardiff Royal Infirmary)	353
City Lodge Hospital	400
Private Maternity Homes	28
Outside Cardiff	55
Not traced	30
Total	1,769

Since June, 1925, pregnant women attending the ante-natal clinics have been subjected to a blood test for syphilis, namely, the Wassermann reaction. During 1937 the number of tests made was 1,298, of which 13, or 1·0 per cent., were found to be positive. From June, 1925, to the end of 1936 the number of tests made was 10,369, of which 223, or 2·1 per cent. were positive. During the first three-and-a-half years, i.e., from June, 1925, to the end of 1928, the percentage found positive was 3·1. There has therefore been a definite and satisfactory decline in the number of expectant mothers found to be suffering from syphilis. Expectant mothers found to be suffering from the disease are referred for treatment to the special treatment centre for mothers and children, which is conducted in close co-operation with the maternity and child welfare section of the department.

The following is a record of attendances at the special post-natal clinic :—

Number of Sessions	Attendances.			Average Attendance at each Session
	First	Subsequent	Total	
43	178	34	212	5

An analysis of 210 post-natal cases dealt with (including cases dealt with at ante-natal clinics) is given below.

Type of case :—

Primipara	110
Multipara	100
Total	210

Pregnancy :—

Normal	178
Abnormal	32
Total	210

Labour :—

Normal	191
Abnormal	19
Total	210

Puerperium :—

Normal	208
Abnormal	2
Total	210

Of these 210 cases, 77 were found to be suffering from 100 diseases, abnormalities or defects, as follows :—

Albuminuria	3
Anaemia	4
Laceration of cervix or perineum	5
Prolapse	15
Retroversion	23
Sub-involution	2
Vaginal discharge	47
Other diseases	1
Total	100

Maternity Hospitals.—The number of expectant mothers admitted to the Maternity Hospital (Cardiff Royal Infirmary) was as follows :—

Complicated cases sent by General Practitioners	40
Cases admitted through Ante-natal Clinics	342
Total	382

Expectant mothers are also admitted through ante-natal clinics to the City Lodge Hospital for confinement, the Health Committee being responsible for the net cost of their maintenance. The number of cases admitted to the institution under this arrangement during the year was 328.

Maternity and Nursing Homes.—At 31st December, 1937, there were 19 registered nursing homes, 11 providing for maternity cases only, 5 providing for surgical and/or medical cases only, and 3 providing for both maternity and other cases. The total number of beds in these nursing homes was 153, of which 80 were available for maternity cases. The number of visits of inspection paid by a medical officer of the department to the homes during the year was 24.

Extra-Domiciliary Confinement.—The number and proportion of births and still-births belonging to Cardiff and registered in Cardiff as having occurred away from private dwelling-houses during 1937 are given below :—

Place of Birth	Number	Number per 1,000 Total Births
Maternity Hospital (Cardiff Royal Infirmary)	355	100
City Lodge Hospital	436	123
Private Nursing and/or Maternity Homes ..	361	102
Total	1,152	325

Dental Clinics.—The following is a record of the work carried out at the dental clinics in connection with maternity and child welfare :—

	Mothers	Children	Totals
Inspected	323	263	586
Treated	299	240	539
Attendances :—			
For inspection	335	263	598
For treatment	1,343	285	1,628
Teeth extracted	2,911	902	3,813
Teeth filled	4	9	13
Dressings	14	3	17
Scalings	22	—	22
Anaesthetics administered :—			
General	454	275	729
Local	47	—	47
Supplied with dentures	185	—	185
Dentures supplied :—			
Full upper	160	—	160
Partial upper	12	—	12
Full lower	124	—	124
Partial lower	17	—	17

Domiciliary Visits by Health Visitors.—The following is a summary of the visits made by the health visitors :—

Births—First visits		2,999
Births and infant deaths—Combined visits		32
Infant death investigations		190
Still-birth investigations		137
Subsequent visits	Infants under one year	5,939
	Children over one year	8,415
Ante-natal cases	First visits	83
	Re-visits	69
Infectious Diseases :—		
Ophthalmia neonatorum	First visits	40
	Re-visits	52
Puerperal fever	First visits	10
	Re-visits	—
Measles	First visits	2,127
	Re-visits	43
Whooping cough	First visits	242
	Re-visits	6
Mumps	First visits	152
	Re-visits	2
Financial inquiries		832
Other visits		6,973
Total		28,343

Milk for Mothers and Infants.—Milk was supplied free of charge in necessitous cases and on medical certificates to the following extent :—

	Tuberculin Tested Milk			Dried Milk		
	Persons supplied with Milk	Applications for a month's supply	Pints granted	Persons supplied with Milk	Applications for a month's supply	Pounds granted
Expectant Mothers	260	593	18,032	129	209	1,254
Nursing Mothers	480	1,837	55,833	1	2	12
Children under 1 year	149	1,294	39,315	371	1,496	8,976
Children 1 yr to 5 yrs	382	4,250	129,357	6	55	330
Total	1,271	7,974	242,537	507	1,762	10,572

Midwives.—The number of midwives practising in Cardiff at the end of the year was 102. They are classified as follows :—

According to qualifications :—	
Bona fide	3
Certificate of Central Midwives Board	99
Total	102
According to type of practice :—	
Municipal midwifery service (domiciliary)	18
Queen's Institute of District Nursing	8
At City Lodge Hospital (Maternity Wards)	9
At Cardiff Royal Infirmary (Maternity Branch)	6
At private nursing homes	22
Private practice	39
Total	102

Officers of the department made 118 visits of inspection of midwives, and midwives' appliances, etc., were disinfected in three instances.

The following is a record of the practice of midwives in Cardiff during the year in relation to the births which were the subject of visits by the health visitors :—

Attendances at births by midwives* as ascertained by health visitors :—	
(*a*) Alone	1,277
(*b*) With a medical practitioner :—	
(*i*) Medical practitioner engaged	488
(*ii*) Medical practitioner called in emergency	639
Attendances at still-births by midwives* :—	
(*a*) Alone	40
(*b*) With a medical practitioner :—	
(*i*) Medical practitioner engaged	26
(*ii*) Medical practitioner called in emergency	37

*Other than those engaged in midwifery at Cardiff Royal Infirmary and City Lodge Hospital.

The municipal midwifery service established under the provisions of the Midwives Act, 1936, was fully described in the report for 1936. The scheme, which came into operation on 30th July, 1937, has worked satisfactorily, and it has not been necessary to make any alteration in the original arrangements.

To the end of 1937, 15 midwives surrendered their certificates under section 5 (1) of the Act of 1936. The total amount of compensation paid to these midwives was £1,718 7s. 8d.

Medical Practitioners called in by Midwives in Emergency.—During the year the number of instances in which medical practitioners were called in by midwives in emergency was 1,171, and claims for fees were made by practitioners in 941 cases. The fees claimed totalled £1,410 17s. 6d., and in 245 instances fees amounting to £315 13s. 11d., were reclaimed from the persons responsible. The sum actually recovered during the year was £211 17s. 4d.

The following statement gives the reasons for medical help being summoned by midwives. :—

(1) MOTHER :—		
(*a*) *Pregnancy*—		
Miscarriage (including abortion)	117	
Haemorrhage	14	
Albuminuria and oedema and other toxic causes	56	
Other causes	31	
	——	218
(*b*) *Labour*—		
Abnormal presentation	32	
Premature labour	22	
Obstructed and delayed labour	325	
Placenta praevia, ante-partum heamorrhage and eclampsia, and other toxic causes	66	
Post-partum haemorrhage and retained and adherent placenta	32	
Ruptured perineum	165	
Other causes	34	
	——	676
(*c*) *Lying-in*—		
Pyrexia, secondary post-partum haemorrhage and phlegmasia and other septic causes	45	
Other causes	39	
	——	84
(2) INFANT—		
Debility	43	
Inflammation of or discharge from eyes	60	
Other causes	90	
	——	193
Total		1,171

Puerperal Fever and Puerperal Pyrexia.—Statistics regarding cases of puerperal fever and puerperal pyrexia notified during the year are given in the section dealing with notifiable diseases (page 13), but as the work involved comes within the province of maternity and child welfare it is referred to here. Eighty-eight cases of puerperal fever and puerperal pyrexia were notified. General practitioners sought the assistance of the department in several cases, and two specialist consultations took place.

Home Nursing.—The following is a record of the work done by the Queen's Institute of District Nursing for the maternity and child welfare section of the department :—

Disease of Defect	Cases carried over from 1936		Cases referred for Treatment during 1937		Total	
	Cases	Visits	Cases	Visits	Cases	Visits
Skin :—Impetigo	3	50	56	986	59	1,036
Other Skin Diseases	—	—	22	280	22	280
Eye :—Ophthalmia and Ophthalmia Neonatorum	3	87	26	970	29	1,057
Other Eye Defects	5	76	72	1,393	77	1,469
Minor Ear Defects	6	152	31	818	37	970
Miscellaneous	3	16	96	1,074	99	1,090
Total	20	381	303	5,521	323	5,902

Maternity Bags.—Maternity bags were lent by the department in 20 necessitous cases.

Home Helps.—Home helps were provided by the department in 223 instances in which mothers confined at home were without adequate domestic help and without means of obtaining it.

Crippling Defects and Orthopaedics.—The following is a summary of the work carried out at the orthopaedic clinic during 1937 :—

	Children under School Age.
Consultation Clinic :—	
Examined for first time	189
Recommended for treatment and/or appliances for for first time	99
Recommended for further treatment and/or appliances	104
Recommendations for :—	
Treatment in Hospital	24
Treatment at Clinic (Special and Routine)	73
Application of plaster at Accident Unit	29
Appliances	24
Special boots	1
Alterations to boots	69
Other forms of treatment	7
Treated at Clinic for first time	24
Attendances at Clinic	661
Routine Treatment (massage, electricity, exercises, etc.) :—	
Treated at Clinic for first time	75
Attendances for routine treatment	1,427

The following statement relates to treatment at and provision of appliances, etc., through the Prince of Wales' Hospital, Cardiff, during 1937 :—

Hospital Treatment—	*Children under School Age.*
Admitted to Prince of Wales' Hospital :—	
(*a*) Day cases	2
(*b*) Other cases	17
Under treatment at Prince of Wales' Hospital at end of 1937	10
On Prince of Wales' Hospital waiting list at end of 1937 :—	
(*a*) Day cases	—
(*b*) Other cases	4

Other treatment or provision (including appliances, etc., provided following hospital treatment) :—	
Appliances provided	21
Appliances altered	4
Alterations to boots	49
Application of plaster	46
Other forms of treatment provided	31

The diseases or defects found in children examined for the first time during the year have been classified as follows :—

Diseases or Defects.	*Number.*
Flat feet	21
Bow legs	33
Talipes	29
Poliomyelitis	1
Rickets	8
Spastic paralysis	5
Birth palsy	4
Congenital malformation or deformity	4
Congenital dislocation of hip	1
Torticollis	10
Knock knee	18
Metatarsus varus and intoeing	18
Coxa vara	1
Trauma	7
Other defects	29
Total	189

The following is a classification of the cases discharged during the year :—

Reason.	*Number.*
Cured	115
Improved	14
Unlikely to benefit further	1
Left the district	5
Failed to attend for treatment	16
Other reasons (including trivial defects)	33
Total	184

Nose and Throat Defects.—The following is a summary of the work done in connection with the treatment of children under school age suffering from enlarged tonsils and/or adenoids :—

Examined at Clinic for first time	133
Received operative treatment at Llandough Hospital	12
Received other forms of treatment at Clinic	32
Total attendances at Clinic	245

Visual Defects.—The following statement summarises the work done in connection with the examination of visual defects in children under school age :—

Attended Clinic for first time	69
Examined for errors of refraction	37
For whom spectacles were prescribed	35
For whom spectacles were provided :—	
(*a*) By parents	19
(*b*) By Council free of charge	14
Treatment for other eye defects prescribed and provided	22
Total attendances at Clinic	171

Measles.—The hospital treatment of cases of measles under five years of age is undertaken as part of the maternity and child welfare scheme of the Council. Particulars as to the cases admitted to hospital during 1937 are contained in the report on the Isolation Hospital (page 21).

Venereal Diseases.—Tabular statements relating to the work of the special treatment centre for mothers and children are included in the section dealing with venereal diseases (page 62).

Radiography.—The number of individual cases referred from the maternity and child welfare centres for radiography was 118, the total number of radiograms taken being 161. The parts of the body that required X-ray examination in the 118 cases were as follows :—

Wrist	123
Shoulder	2
Hip	15
Thigh	1
Knee	2
Leg	1
Foot	2
Spine	7
Total	153

Artificial Sunlight Treatment.—The number of children under five years of age treated by artificial sunlight for the first time and their ailments are shown in the following table :—

Diseases.	*Children.*
Debility	12
Nervous debility and/or malnutrition	4
Rickets	38
Total	54

The total number of attendances of children for treatment was 648. Thirty-two expectant mothers also received treatment for the first time, the total number of attendances being 232.

Child Life Protection.—The following statement gives particulars of the numbers of persons and children registered at the end of 1937 and visits by the visitor specially engaged in this work during the year :—

Persons on the register who were receiving children for reward at the end of the year	66
Children on the register :—	
(*a*) At the end of the year	73
(*b*) Who died during the year	—
First visits	7
Routine visits	625
Special visits	145

Adoption of Children Act, 1926.—The visitor specially engaged in duties in connection with child life protection dealt with 25 cases during the year in which the Council acted as guardian *ad litem.*

XVI.—PUBLIC HEALTH LABORATORY.

Cardiff and County Public Health Laboratory.—The numbers of specimens and samples examined for Cardiff during 1937 were as follows :—

Bacteriological Examinations :—	
Water Supplies	326
Milks for Tubercle Bacilli	273
Milks for General Examination	1,032
Ice Creams for General Examination	96
Sputa for Tubercle Bacilli	912
Urines for Tubercle Bacilli	13
Other specimens for Tubercle Bacilli	52
Rodents for Plague	441
Specimens for :—	
Diphtheria	3,969
Enteric Fever (Serum)	132
Enteric Fever (Other Specimens)	275
Dysentery	188
Food Poisoning Organisms	46
Gonorrhoea	583
Syphilis (Wassermann Reaction)	3,432
Syphilis (Spirochaeta Pallida)	2
Ringworm	2
Cerebro-Spinal Fluids	25
Other Examinations	104
Chemical Examinations :—	
Water Supplies	248
Milks and Milk Products	82
Ice Creams	96
In connection with Atmospheric Pollution	41
In connection with Ultra-Violet Radiation	382
Other Examinations	4
Total	12,756

The numbers of specimens examined for suspected disease in patients resident in Cardiff, together with the results, are shown below :—

Suspected Disease	Positive Results	Negative Results	Total	Percentage of Positive Results
Diphtheria	590	3,379	3,969	*14·9*
Enteric Fever	67	340	407	*16·4*
Tuberculosis	231	746	977	*23·6*
Gonorrhoea	102	481	583	*17·5*
Syphilis—				
Wassermann Reaction	450	2,982	3,432	*13·1*
Spirochaeta Pallida	—	2	2	—

XVII.—FOOD INSPECTION.

Meat Inspection at Municipal Abattoirs.—The following tables set out in detail the work done in connection with meat inspection during the year.

Animals slaughtered and whole carcases found diseased which were surrendered and destroyed or otherwise dealt with by arrangement with the owners :—

	Roath Abattoir		Canton Abattoir		Total	
	Slaughtered	Diseased or unsound and destroyed	Slaughtered	Diseased or unsound and destroyed	Slaughtered	Diseased or unsound and destroyed
Bulls	36	1	37	1	73	2
Cows	572	27	619	31	1,191	58
Heifers	2,627	12	728	7	3,355	19
Steers	1,766	6	383	—	2,149	6
Calves	5,962	7	1,102	14	7,064	21
Sheep and lambs	28,836	27	15,873	108	44,709	135
Pigs	21,824	70	7,123	66	28,947	136
Total	61,623	150	25,865	227	87,488	377

Instances in which tuberculosis was found :—

	Roath Abattoir		Canton Abattoir		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Cattle:—						
Bulls	17	*47·2*	14	*37·8*	31	*42·4*
Cows	249	*43·5*	254	*41·0*	503	*42·2*
Heifers	190	*7·2*	97	*13·3*	287	*8·5*
Steers	71	*4·0*	42	*10·9*	113	*5·2*
Calves	12	*0·2*	10	*0·9*	22	*0·3*
All Cattle	539	*4·9*	417	*14·5*	956	*6·9*
Pigs	539	*2·5*	300	*4·2*	839	*2·9*

Causes of destruction of carcases :—

Cause	Beef	Veal	Mutton and Lamb	Pork	Total
Tuberculosis	72	8	—	117	197
Dropsy	—	—	4	1	5
Emaciation	3	1	7	2	13
Dropsy and emaciation	6	—	109	5	120
Moribund	—	—	2	—	2
Decomposition	—	—	2	—	2
Other causes	4	12	11	11	38
Total	85	21	135	136	377

Approximate weight of diseased or unsound meat surrendered and destroyed or otherwise dealt with by arrangement with the owners :—

	Tons	cwt.	lb.
Carcases of—			
Beef	23	14	58
Veal	—	10	91
Mutton and lamb	2	3	54
Pork	5	8	11
Part carcases of—			
Beef	4	0	67
Veal	—	—	19
Mutton and lamb	—	—	72
Pork	2	3	76
Offal of—			
Beasts	26	19	6
Calves	—	3	31
Sheep and lambs	2	9	102
Pigs	3	18	50
Total	71	12	77

Meat Inspection at Private Slaughter-houses.—The numbers of animals slaughtered were as follows :—

Sheep and lambs	282
Pigs	3,099
Total	3,381

Tuberculosis was found in carcases of pork in 258 instances, the proportion being 8·3 per cent. Twenty-four unsound carcases of pork were destroyed, the cause in 21 instances being tuberculosis ; in the other three instances the causes were emaciation (two) and abscesses with fever (one).

The total weight of unsound meat surrendered at private slaughter-houses and destroyed by arrangement with the owners was 2 tons 18 cwt. 78 lb.

Unsound Food Exposed or Intended for Sale.—The following is a record of the work done by the sanitary inspectors in connection with inspection of food exposed or intended for sale during the year :—

	Number of Inspections.
Retail butchers' shops	2,906
Wholesale meat shops and stores	636
Butchers' food preparation premises	371
Provision shops and stores (wholesale and retail)	476
Butter and margarine factories	78
Wholesale margarine dealers	83
Food stalls	381
Food vehicles and hawkers' stores	330
Ice cream premises and barrows	566
Restaurants	290
Greengrocery and fruit shops and stores (wholesale and retail)	665
Fish shops and stores (wholesale and retail)	258
Fried fish shops	422
Markets	206
Hospitals and institutions	6
Railway stations	1
Other registered food premises	60
Other premises	56
Total	7,791

One hundred and forty-nine notices were served for the remedy of insanitary conditions in food premises, of which 120 were complied with.

Approximate weight of diseased or unsound food found in shops and stores and destroyed or disposed of by the owners otherwise than as food for human consumption :—

	Tons	cwt.	lb.
Beef	—	11	27
Veal	—	6	51
Mutton and lamb	—	8	47
Pork	—	7	30
Offal	—	8	11
Fish	—	8	63
Poultry	—	1	105
Rabbits	—	1	87
Ham and bacon	1	1	43
Other provisions	5	18	63
Vegetables	—	2	6
Eggs	—	4	77
Total	10	0	50

Meat Hawkers.—Twelve certificates for one year were granted under section 108 of the Cardiff Corporation Act, 1930, to persons not keeping butchers' shops in the city who desired to sell meat or meat products from vehicles, baskets or barrows, after approval of their storage accommodation.

Cooked or Preserved Meat and Other Food.—All made-up food premises have to be registered under the provisions of the Cardiff Corporation Act, 1934. The number of premises on the register is 263, including 119 fried fish shops.

Food Supplies to Institutions.—Periodical visits to Corporation institutions were again made for the purpose of examining foodstuffs supplied, to ascertain that they were of satisfactory quality and in accordance with contracts. Samples of various foods were obtained and submitted to the Public Analyst for analysis.

Disposal of Unsound Food.—The question of the disposal of unsound food received further consideration during the year, and a deputation from the Corporation visited Birmingham, Wolverhampton and Coventry for the purpose of seeing disposal plants in operation. It was decided that the erection of a disposal plant would not be economical, but the installation of an incinerator was suggested. No definite decision has yet been reached and, in the meantime, all unsound food is being taken by a private firm for the manufacture of fertilisers.

Milk Inspection.—The application of one retail purveyor of milk for registration was refused on the grounds that his premises were unsuitable.

The following is a statement showing the method of milk distribution in Cardiff in June, 1937 :—

Character of Business	Number of Vendors		Total
	Selling over 6 gallons per day	Selling under 6 gallons per day	
From dairy premises	170	1	171
From shops—loose and bottled milk	24	42	66
From shops—bottled milk only	—	387	387
Direct from farms in the City	15	—	15
Direct from farms or dairy premises outside the City	97	1	98
Total	306	431	737

The approximate number of gallons of milk sold per day by all vendors in June, 1937, was 11,013, an increase of 89 gallons compared with the quantity sold per day in June, 1936. Included in the total quantity sold per day in June, 1937, were 605 gallons of Tuberculin Tested Milk, 127 gallons of Accredited milk and 1,558 gallons of Pasteurised milk.

Most of the milk consumed in Cardiff is produced beyond the city boundaries. The number of cowkeepers in Cardiff at the end of the year was 22. One cowkeeper was licensed to produce Tuberculin Tested milk and seven were licensed to produce Accredited milk. All the cattle were regularly examined by the Veterinary Officer and the cowsheds were regularly inspected by sanitary inspectors.

The following is a record of the examination of cows by the Veterinary Officer :—

Month	Cowkeepers whose Premises were visited	Visits	Cows in Milk		Cows excluded from Dairy Herds	Cows not in Milk	
			Examined	Found diseased		Examined	Found diseased
January	24	28	320	5	2	54	—
February	24	29	329	6	3	51	—
March	22	27	299	6	3	42	—
April	22	30	318	7	5	40	—
May	22	31	325	5	4	45	1
June	12	15	163	2	1	21	—
July	24	30	348	4	2	51	—
August	22	29	311	4	2	43	—
September	21	26	290	4	2	37	—
October	22	27	289	8	3	61	—
November	22	30	291	6	4	68	—
December	20	29	250	6	3	65	—

Thirteen cows affected with tuberculosis were slaughtered during 1937 in terms of the Tuberculosis Order, 1925.

The Veterinary Officer accompanied officers of other local authorities when examining cows at farms situated outside Cardiff, from which milk sold in Cardiff was found to contain tubercle bacilli, in five instances. He examined 56 cows in milk and nine cows not in milk. Of the 56 cows in milk examined, 11 were found to be diseased, and three were excluded from dairy herds as the result of clinical examination.

Tubercle Bacilli in Milk.—The number of routine samples of milk examined for the presence of tubercle bacilli was 265, of which nine, or 3·4 per cent., were found to be positive. The percentage of samples in which tubercle bacilli were found during the ten years 1927-36 was 4·3. The milk was produced outside Cardiff in all the cases in which tubercle bacilli were found during 1937 and the action prescribed by section 4 of the Milk and Dairies (Consolidation) Act, 1915, was taken in each case.

When pigs slaughtered at the abattoirs are found to be affected with tuberculosis, the Veterinary Officer endeavours to ascertain where they are reared, and when this information is obtained samples of milk from the farms are taken if they happen to be in Cardiff; in other cases the Authority in whose districts the farms are situated are informed. In one case during the year this procedure resulted in the discovery of a tuberculous milk supply, and appropriate action was taken to eliminate the cause of infection.

Routine Bacteriological Examination of Milk.—During the year, 336 samples of ordinary commercial milk were submitted for bacteriological examination. Of these, 206, or 61·3 per cent., attained the standard for Tuberculin Tested and Accredited milk.

Graded Milks.—The following is a statement of the numbers of licences for the various grades of milk and the number of individual dealers under the Milk (Special Designations) Order, 1936, as at 31st December, 1937:—

Description	Number
(1) Producers' licences to use the designation "Tuberculin Tested"	1
(2) Producers' licences to use the designation "Accredited"	7
(3) Dealers' licences to use the designation "Tuberculin Tested"—	
(*a*) Bottling establishments	26
(*b*) Shops	29
(*c*) Supplementary	9
(4) Dealers' licences to use the designation "Accredited"—	
(*a*) Bottling establishments	5
(*b*) Shops	1
(*c*) Supplementary	2
(5) Dealers' licences to use the designation "Pasteurised"—	
(*a*) Pasteurising establishments	3
(*b*) Shops	16
(6) Individual dealers—	
(*a*) Licensed to use the designation "Tuberculin Tested"—	64
(*b*) Licensed to use the designation "Accredited"	8
(*c*) Licensed to use the designation "Pasteurised"	19

The number of samples of Tuberculin Tested and Accredited milk submitted for bacteriological examination during the year was 620, of which 509, or 82·1 per cent. attained the prescribed standard. In addition, 73 samples of Pasteurised milk were examined, of which 67, or 91·8 per cent., attained the prescribed standard for this grade of milk. In every instance of a sample being below standard steps were taken to ascertain the cause and to effect improvement.

Ice Cream.—The manufacture and sale of ice cream is subject to similar provisions to those governing the preparation of cooked and preserved food. The number of such premises on the register is 423, and since powers of control were obtained considerable improvement has been effected in the methods employed in the making of this product. Manufacturers are now asked to set apart a separate building for the purpose and to have a satisfactory water supply and washing facilities available.

The number of samples of ice cream submitted for bacteriological and chemical examination was 96, the results of which were as follows :—

	Number of Samples.
Number of bacteria per c.c. :—	
Under 100,000	34
100,000—200,000	12
200,000—500,000	11
500,000—1,000,000	36
Over 1,000,000	3
Presence of *Bacillus Coli* :—	
Absent in 1 c.c.	10
Present in 1 c.c.	25
,, ,, 1/10 c.c.	19
,, ,, 1/100 c.c.	23
,, ,, 1/1,000 c.c.	10
,, ,, 1/10,000 c.c.	9

Forty-nine of the samples contained starch and 15 contained gelatine.

Legal Proceedings.—The following is a summary of legal proceedings taken during the year in connection with food, etc., inspection :—

Acts, etc., under which Proceedings were taken	Number	Fined	Cautioned	To pay costs only	Dismissed	Withdrawn	Amount of Fines and Costs
							£ s. d.
Food and Drugs (Adulteration) Act, 1928	13	9	1	1	—	2	37 12 4
Milk and Dairies Acts and Orders	16	12	1	3	—	—	12 17 0
Merchandise Marks Act, 1926	4	3	—	—	—	1	9 0 0
Total	33	24	2	4	—	3	£59 9 4

Report for 1937 *of Mr. S. Dixon, M.Sc., F.I.C., Public Analyst.*

The work carried out in the City Analyst's Laboratory during the year 1937 is summarised in the following table, which shows the total number of samples examined and reported upon and the sources from which they were derived :—

Under the Food and Drugs (Adulteration) Act	1,463
Imported Food for Port Health Authority	47
Under the Fertilisers and Feeding Stuffs Act	26
Under the Pharmacy and Poisons Act	1
Under the Rag Flock Acts	13
For the Public Health Department	15
For the Public Works Committee	20
For the Estates Committee	1
For the Central Contracts Committee	13
For the Visiting (Mental Hospital) Committee	97
For the City Coroner and City Police	17
From a Flock Factory	21
Total	1,734

These numbers are compared in the table below with those for previous years.

Total Number of Samples Examined, 1929-1937.

Year	Food and Drugs Act	Imported Food	Fertilisers and Feeding Stuffs Act	Rag Flock Acts	A Flock Factory	Miscellaneous	Total
1929	1,006	11	12	3	—	5	1,037
1930	1,004	69	20	3	—	33	1,129
1931	1,141	56	20	9	—	47	1,273
1932	1,302	24	17	12	14	325	1,694
1933	1,486	32	19	11	21	56	1,625
1934	1,450	51	16	8	22	63	1,610
1935	1,449	32	20	5	24	88	1,618
1936	1,408	51	22	12	13	158	1,664
1937 ...	1,463	47	26	13	21	164	1,734

It will be seen that the majority of the samples dealt with are taken under the Food and Drugs (Adulteration) Act, 1928, and the other Acts mentioned, but a very considerable amount of time is also involved in the analysis of miscellaneous articles received from the various departments of the Corporation. Some of the latter are submitted in order to ascertain whether articles supplied conform with specifications laid down in contracts, others are related to health matters, while those examined for the City Coroner and the Police have consisted of viscera and other articles taken in connection with deaths, suspected poisoning, safe-breaking, etc.

Food and Drugs (Adulteration) Act, 1928.—The total number of samples of food and drugs submitted for anlaysis under the Food and Drugs (Adulteration) Act, 1928, by the Sampling Officers of the Urban Sanitary Authority during the year was 1,463. This represents 6·5 samples taken for each 1,000 of the population of Cardiff as given in the census return for 1931. Ninety, or 6·1 per cent., were returned as adulterated or of unsatisfactory composition. This percentage is somewhat higher than that for the whole of England and Wales, as will be seen in the following table, in which comparison is also made with previous years.

Percentage of Adulteration.

Year	Cardiff			England and Wales		
	Number Examined	Number Adulterated	Percentage Adulterated	Number Examined	Number Adulterated	Percentage Adulterated
1929	1,006	20	*2·0*	133,584	7,260	*5·4*
1930	1,004	33	*3·3*	136,515	6,496	*4·8*
1931	1,141	46	*4·0*	136,169	6,324	*4·6*
1932	1,302	67	*5·1*	137,981	7,019	*5·1*
1933	1,486	60	*4·0*	138,171	7,601	*5·5*
1934	1,450	87	*6·0*	140,583	7,451	*5·3*
1935	1,449	76	*5·2*	143,831	7,972	*5·5*
1936	1,408	85	*6·0*	146,438	7,802	*5·3*
1937	1,463	90	*6·1*	151,370	8,401	*5·5*

The number and nature of the articles examined and the number of each variety classed as adulterated are shown below :–

Description of Sample	Number Examined	Number Adulterated
Apricots, Dried	5	—
Arrowroot	4	—
Barley, Pearl	4	—
Beer	6	2
Boric ointment	3	—
Brandy	3	—
Brawn	3	—
Butter	36	—
Camphorated oil	8	—
Candied peel	2	—
Cherries, Glacé	2	—
Cider	1	—
Cinnamon, Ground	2	—
Cocoa	2	—
Coffee	6	—
Cream	19	—
Cream of Tartar	2	—
Flour	6	—
Fruit juices and cordials	4	—
Gin	10	—
Ginger, Ground	2	—
Golden syrup	2	—
Iodine, Tincture of	3	—
Iodine paint	1	—
Jam	2	2
Mace, Ground	1	—
Margarine	19	—
Meat, Minced	4	—
Milk	1,181	80
Milk, Condensed	4	—
Milk, Skimmed	1	—
Mineral waters, Sweetened	2	—
Nutmegs, Ground	1	—
Oatmeal	2	—
Peas, Canned	2	—
Pepper	17	1
Pepper, Cayenne	2	—
Raisins	6	—
Rice	8	—
Rice, Ground	5	—
Rice flour	1	—
Rum	4	1
Sardines, Canned	2	—
Sausages	4	—
Sugar	4	—
Sulphur ointment	2	—
Sultanas	12	—
Tea	8	—
Vinegar	19	4
Whiskey	13	—
Wine	1	—
Total	1,463	90

Milk.—The Sale of Milk Regulations, 1901, enact that where any sample of milk contains less than 3 per cent. of fat or 8.5 per cent. of non-fatty solids it shall be presumed to be adulterated until the contrary is proved.

The average composition of the milk samples examined during 1937 and for the years 1929-1937 is shown in the next two tables.

Average Composition of all Milk Samples for each Month.

Month	1937				1929-1937			
	Number of Samples	Fat per cent.	Solids Not-fat per cent.	Total Solids per cent.	Number of Samples	Fat per cent.	Solids Not-fat per cent.	Total Solids per cent.
Jan.	104	*4·03*	*8·69*	*12·72*	567	*3·81*	*8·78*	*12·59*
Feb.	79	*4·00*	*8·75*	*12·75*	658	*3·80*	*8·74*	*12·54*
March	91	*3·86*	*8·77*	*12·63*	604	*3·73*	*8·74*	*12·47*
April	112	*3·95*	*8·70*	*12·65*	640	*3·67*	*8·76*	*12·43*
May	95	*3·53*	*8·83*	*12·36*	656	*3·56*	*8·83*	*12·39*
June	104	*3·54*	*8·74*	*12·28*	665	*3·56*	*8·83*	*12·39*
July	141	*3·61*	*8·75*	*12·36*	763	*3·67*	*8·73*	*12·40*
Aug.	65	*3·63*	*8·71*	*12·34*	605	*3·71*	*8·79*	*12·50*
Sept.	104	*3·85*	*8·77*	*12·62*	733	*3·81*	*8·84*	*12·65*
Oct.	92	*3·88*	*8·72*	*12·60*	762	*3·96*	*8·87*	*12·83*
Nov.	95	*3·97*	*8·74*	*12·71*	625	*3·99*	*8·83*	*12·82*
Dec.	99	*3·92*	*8·82*	*12·74*	621	*3·88*	*8·79*	*12·67*
Whole Period	1,181	*3·81*	*8·75*	*12·56*	7,899	*3·76*	*8·80*	*12·56*

It will be observed that the fat content of milk is at its lowest in the months of May and June and that it gradually increases until November, after which there is a gradual fall until the minimum is reached. The non-fatty solid content is fairly constant throughout the year.

Average Composition of all Milk Samples, 1929-1937.

Year	Number of Samples	Fat per cent.	Solids-not-fat per cent.	Total Solids per cent.
1929	487	*3·71*	*8·87*	*12·58*
1930	519	*3·69*	*8·90*	*12·59*
1931	600	*3·79*	*8·78*	*12·57*
1932	797	*3·72*	*8·81*	*12·53*
1933	987	*3·72*	*8·78*	*12·50*
1934	1,083	*3·78*	*8·80*	*12·58*
1935	1,097	*3·81*	*8·83*	*12·64*
1936	1,148	*3·77*	*8·74*	*12·51*
1937	1,181	*3·81*	*8·75*	*12·56*
1929-1937	7,899	*3·76*	*8·80*	*12·56*

During these nine years the fat has varied from 3·69 per cent. in 1930 to 3·81 per cent. in 1935 and 1937, while the non-fatty solids have ranged between 8·74 per cent. in 1936 and 8·90 per cent. in 1930.

Although the averages in the above tables are well above the limits given in the Sale of Milk Regulations, even during the early summer months, these Regulations do not fix a minimum standard of composition for genuine milk, since there are individual cows and a few herds yielding milk which does not reach these limits, and the High Court has held that a genuine milk is one which is sold in the same condition in which it is given by the cow. Comparison of the results of analysis of samples of unsatisfactory composition with the results yielded by samples taken after supervision of the corresponding milking of the same cows (known as appeal-to-cow samples) is therefore invaluable in establishing whether adulteration has taken place or whether the milk is of naturally poor quality, and, as a general rule, in those cases where it is likely that legal proceedings will be taken, the milk is traced back to its source and this comparison is made.

For the purpose of differentiating between milk which is naturally low in non-fatty solids and that which is low in this constituent by reason of the presence of extraneous water, the Hortvet freezing-point test continues to be of the greatest service. Its value depends upon the fact that genuine milks have freezing points lying within a comparatively narrow range of temperature, and any appreciable deviation from this range towards zero is indicative of the presence of added water. That the freezing point of genuine milk is a much more constant property than the non-fatty solid content is well illustrated by the following results, which have been obtained with 181 appeal-to-cow samples procured since the beginning of 1932, when the test was first used in this laboratory.

Herds—69 Samples.

Range of non-fatty solids = 8·18% to 9·66%; variation from minimum = 16·3%.
Range of freezing points = —0·531°C. to —0·558°C.; variation from minimum = 5·1%.

Individual Cows—112 Samples.

Range of non-fatty solids = 6·34% to 9·99%; variation from minimum = 57·5%.
Range of freezing points = —0·533°C. to —0·575°C.; variation from minimum = 7·3%.

Before legal proceedings are instituted, however, confirmation is always obtained by a chemical examination and the determination of the freezing point of a corresponding appeal-to-cow sample.

Of the 1,181 samples of milk examined, 80, or 6·7 per cent., were returned as adulterated or of unsatisfactory composition. It will be seen from the following table that this percentage is the highest since 1929, and it justifies the increased attention which is being given to this important commodity.

Percentage of Adulteration of Milk Samples, 1929-1937.

Year	Number of Samples	Number Adulterated	Percentage Adulterated
1929	487	9	*1·8*
1930	519	15	*2·9*
1931	600	25	*4·2*
1932	797	50	*6·3*
1933	987	48	*4·9*
1934	1,083	60	*5·5*
1935	1,097	67	*6·1*
1936	1,148	76	*6·6*
1937	1,181	80	*6·7*

Particulars of the 80 samples classified as adulterated are given in the next table. The deficiencies in fat and non-fatty solids are based upon the presumptive limits prescribed by the Sale of Milk Regulations (Fat 3·0 per cent.; Non-fatty solids 8·5 per cent.), and the percentages of added water on the freezing points (Hortvet) of the samples, 0·530°C. being taken as the minimum freezing-point depression (Hortvet) for genuine milk.

Adulterated Milk, 1937.

Number of Sample	Deficiency in Fat per cent.	Deficiency in Non-fatty Solids per cent.	Freezing-point Depression (Hortvet) °C.	Minimum percentage of Added Water	Designation
50	—	7	0·483	7	
51	1	1½	0·513	2	
62	—	6	0·493	6	
63	—	5	0·500	5	
64	—	5	0·499	5	
104	—	6	0·504	4	T.T.
107	5	—	—	—	T.T.
205	5	—	—	—	T.T.
256	15	—	—	—	T.T.
268	11	—	—	—	
282	6	—	—	—	Accredited
304	24	—	—	—	
307	26	—	—	—	
314	6	—	—	—	
316	8	—	—	—	T.T.
329	—	5	0·508	3½	T.T.
397	16	—	—	—	T.T.
405	23	—	—	—	
470	4	—	—	—	T.T.
472	12	—	—	—	T.T.
485	8	—	—	—	
486	6	4½	0·490	6½	
505	17	—	—	—	Accredited
506	9	—	—	—	Accredited
507	6	—	—	—	Accredited
520	9	—	—	—	T.T.
528	4	—	—	—	
535	12	—	—	—	
536	11	—	—	—	
550	4	—	—	—	Pasteurised
560	7	—	—	—	T.T.
566	21	—	—	—	T.T.
569	8	—	—	—	T.T.
571	16	—	—	—	T.T.
573	9	—	—	—	T.T.
574	11	—	—	—	T.T
575	6	—	—	—	T.T.
577	11	—	—	—	T.T.
578	22	—	—	—	T.T.
593	4	—	—	—	T.T.
621	—	1	0·520	1½	
623	14	—	—	—	T.T.
628	4	—	—	—	T.T.
634	4	—	—	—	T.T.
676	—	7½	0·481	8	
696	26	—	—	—	
716	—	8	0·475	8	
735	18	—	—	—	
740	9	—	—	—	
751	6	—	—	—	
761	6	—	—	—	Accredited
782	13	—	—	—	
809	9	—	—	—	T.T.
815	5	—	—	—	
850	7	—	—	—	T.T.
966	10	—	—	—	T.T.
973	10	—	—	—	T.T.
986	6	—	—	—	T.T.
1,044	—	16	0·436	16	
1,045	—	6	0·487	7	
1,057	4	—	—	—	
1,063	—	12	0·459	12	

Number of Sample	Deficiency in fat per cent.	Deficiency in non-fatty solids per cent.	Freezing-point Depression (Hortvet) °C.	Minimum percentage of Added Water	Designation
1,064	—	*13*	0·452	*13*	
1,102	*7*	—	—	—	T.T.
1,132	*12*	*10*	0·485	*7½*	
1,137	—	*2*	0·505	*4*	
1,142	*16*	*30*	0·351	*30*	
1,151	*11*	*9*	0·494	*6*	
1,156	*18*	*15*	0·462	*11½*	
1,157	*18*	*15*	0·462	*11½*	
1,162	*8*	*24*	0·383	*25*	
1,276	—	*6½*	0·476	*8½*	
1,277	—	*3*	0·491	*6*	
1,290	—	*2*	0·493	*6*	
1,291	—	*3*	0·485	*7*	
1,347	*15*	—	—	—	T.T.
1,366	—	*8½*	0·471	*9½*	
1,378	*1*	*8½*	0·457	*12*	
1,393	—	*7*	0·460	*11½*	
1,394	—	*9½*	0·453	*12½*	

The following are details of investigations made in respect of some of the samples of milk.

The results obtained upon the examination of three related samples were :—

Number of Sample	Source	Fat per cent.	Non-fatty Solids per cent.	Total Solids per cent.	Observations
304	From retailer	*2·26*	*8·68*	*10·94*	Deficient of 24% of fat
314	From producer in course of delivery to retailer	*2·82*	*8·59*	*11·41*	Deficient of 6% of fat
326	Appeal-to-cow sample	*2·15*	*8·72*	*10·87*	Deficient of 28% of fat

These samples consisted of evening milk. It was evident that the cows were yielding a product having a very low fat content. In view of the present state of the law, no legal action could be taken against the producer, but the retailer was informed of the quality of the milk he was obtaining and advised to change his source of supply. The producer was a cattle dealer and the cows were in a very poor condition. It is an anomaly that milk of this composition obtained from underfed or improperly fed cows must be regarded as genuine, though no housewife would consider it of the "nature, substance or quality demanded." Since milk plays such an important part in nutrition, a minimum limit might well be fixed for the fat content of merchantable milk in the interests of the consumer.

Milk No. 307, procured on a Sunday from a retailer, contained only 2·21 per cent. of fat and was therefore deficient to the extent of 26 per cent. when compared with the minimum limit of the Sale of Milk Regulations. Samples Nos. 312 and 313, taken on the same evening from the supplier in course of delivery to the retailer, were genuine, containing 3·30 and 4·21 per cent. of fat. It was ascertained that this retailer had also purchased a large quantity of skimmed milk on the day that the deficiency occurred, though he sold none of this as such. He was summoned, pleaded guilty, and was fined £2.

Sample No. 716 was also taken on a Sunday from a retailer. It contained 8 per cent. of added water, while sample No. 719, taken on the same evening in course of delivery from the producer to this vendor, proved to be genuine. The retailer was fined £2. He admitted the presence of added water in the milk, but said that he could not account for it.

Milks numbered 1,044 and 1,045 were obtained at the premises of a retail dairy. They contained 16 per cent. and 7 per cent. respectively of added water, and it was ascertained that they were taken from the evening and morning milk delivered by a certain producer. On the same evening samples Nos. 1063 and 1064 were obtained from the producer at the time of delivery of the milk to the dairy. These contained 12 per cent. and 13 per cent. respectively of added water, while corresponding evening and morning appeal-to-cow samples, Nos. 1,065 and 1,066, obtained on our behalf by the Glamorgan County Council, showed that the milk as produced by the cows was of very good quality. The differences in composition between these appeal-to-cow samples and the earlier ones are shown below.

Evening Milk.

ber ple	Source	Fat per cent.	Non-fatty Solids per cent.	Total Solids per cent.	Ash per cent.	F.P.(H) °C.	Observations
4	From dairy	*3·75*	*7·14*	*10·89*	*0·66*	—0·436	Contained 16% of added water.
4	From producer in course of delivery to dairy	*3·97*	*7·37*	*11·34*	*0·72*	—0·452	Contained 13% of added water.
5	Appeal-to-cow sample	*4·89*	*8·71*	*13·60*	*0·77*	—0·540	Genuine.

Morning Milk.

45	From dairy	*3·57*	*7·97*	*11·54*	*0·72*	—0·487	Contained 7% of added water.
63	From producer in course of delivery to dairy	*3·02*	*7·48*	*10·50*	*0·69*	—0·459	Contained 12% of added water.
66	Appeal-to-cow sample	*3·64*	*8·95*	*12·59*	*0·80*	—0·550	Genuine.

It was evident from these results that adulteration had taken place before arrival of the milk at the dairy. Legal proceedings were instituted against the farmer in respect of the sale of samples 1,063 and 1,064, and he was fined £2, with 12/9 costs.

Sample No. 1,142, taken at a dairy, contained only 5·94 per cent. of non-fatty solids, and its freezing point indicated that it contained at least 30 per cent. of added water. A further sample, No. 1,162, was taken from the producer at the time of delivery of the milk to the dairy. This was found to contain only 6·42 per cent. of non-fatty solids, being a deficiency of 24 per cent. when compared with the presumptive limit of 8·5 per cent., while its freezing point indicated the presence of about 25 per cent. of added water. Appeal-to-cow samples were taken for comparison. The differences in composition between these and the samples taken at the dairy are shown below, and they confirmed the conclusion that the latter were adulterated with water to the extent indicated by their low non-fatty solids and freezing-point depressions.

Mixed Evening and Morning Milk.

Number of Sample	Source	Fat per cent.	Non-fatty Solids per cent.	Total Solids per cent.	Ash per cent.	F.P.(H) °C.	Observations
1,142	From dairy	*2·50*	*5·94*	*8·44*	*0·53*	—0·351	Contained 30% of added water.
1,162	From producer in course of delivery to dairy	*2·75*	*6·42*	*9·17*	*0·57*	—0·383	Contained 25% of added water.
1,168	Appeal-to-cow sample (mixed milk)	*4·15*	*8·81*	*12·96*	*0·79*	—0·547	Of excellent quality.

Separate Evening and Morning Appeal-to-cow Samples.

1,166	Evening milk	*4·43*	*8·89*	*13·32*	*0·81*	—0·550	Of excellent quality.
1,167	Morning milk	*3·98*	*8·78*	*12·76*	*0·78*	—0·546	Of excellent quality.

Sample No. 1,137, obtained at a dairy, was deficient of 2 per cent. of non-fatty solids when compared with the minimum limit given in the Sale of Milk Regulations, and its freezing point indicated that it contained a small proportion of extraneous water. It was recommended that further samples should be procured, and Nos. 1,276 and 1,277 were obtained later from this supply. In view of the unsatisfactory nature of these, samples Nos. 1,290 and 1,291 were taken from the producer in course of delivery to the dairy, and these were followed by corresponding appeal-to-cow samples Nos. 1,292 and 1,293. The results of the analysis are tabulated below.

Morning Milk.

Number of Sample	Source	Fat per cent.	Non-fatty Solids per cent.	Total Solids per cent.	Ash per cent.	F.P.(H) °C.	Observations
1,137	From dairy	*3·50*	*8·31*	*11·81*	—	—0·505	Contained 4% of added water.
1,277	From dairy	*3·63*	*8·22*	*11·85*	*0·71*	—0·491	Contained 6% of added water.
1,291	From producer in course of delivery to dairy	*3·50*	*8·24*	*11·74*	*0·69*	—0·485	Contained 7% of added water.
1,295	Appeal-to-cow sample	*3·59*	*9·33*	*12·92*	*0·79*	—0·561	Of excellent quality.

Evening Milk.

1,276	From dairy	*4·32*	*7·92*	*12·24*	*0·69*	—0·476	Contained 8½% of added water.
1,290	From producer in course of delivery to dairy	*4·20*	*8·33*	*12·53*	*0·69*	—0·493	Contained 6% of added water.
1,292	Appeal-to-cow sample	*4·75*	*9·01*	*13·76*	*0·75*	—0·546	Of excellent quality.

The producer was summoned in respect of the sale of the milk from which samples Nos. 1,290 and 1,291 were taken. He had previously been fined at Cardiff £20 and £3 3s. 0d. costs for selling milk grossly adulterated with water in December, 1935, and he was again fined £20 and ordered to pay 16/- costs.

A similar procedure was adopted in respect of two other samples, Nos. 1,366 and 1,378, taken from the evening and morning milk delivered by another supplier to this same dairy, and which were also of unsatisfactory composition. Comparison of the results of analysis of two corresponding samples taken subsequently from the producer in course of delivery to the dairy (Nos. 1,393 and 1,394) with evening and morning appeal-to-cow samples (Nos. 1,396 and 1,397), proved that the former contained added water to the extent of not less than 9½ and 12 per cent. respectively, and the farmer, who pleaded guilty and attributed the adulteration to interference by one of his farm hands, was fined £4 and 12/8d. costs.

The producer of the milk from which samples Nos. 50, 51, 62, 63 and 64 were taken was warned, and observations were kept on this source of supply. Since the close of the year under review, further adulteration occurred, legal proceedings were instituted, and he was fined.

Investigations were also made in a number of cases where the milk was low in fat only and suitable action was taken by the Chief Sanitary Inspector in respect of these and other unsatisfactory samples.

Articles other than Milk.—During the year, 282 samples other than milk were examined. The number and nature of the various articles are set out on page 84. Ten, or 3·5 per cent., were returned as adulterated, and particulars of these are tabulated below.

Articles other than Milk—Adulterated Samples.

No. of Sample	Article	Nature of Adulteration or Irregularity
5	Rum	Being 37·7 degrees under proof.
354	Pepper	Contained 50 per cent. of ground rice.
398	Vinegar	Deficient of 20·5 per cent. of acetic acid.
1,189	Beer	Contained 1/3 grain of lead per gallon.
1,190	Beer	Contained 1/8 grain of lead per gallon.
1,456	Jam	Contained 95 parts of sulphur dioxide per million.
1,457	Jam	Contained 65 parts of sulphur dioxide per million.
1,458	Vinegar	Deficient of 7 per cent. of acetic acid.
1,459	Vinegar	Deficient of 40 per cent. of acetic acid.
1,462	Vinegar, Malted	Consisted of artificial vinegar.

Pepper No. 354 was supplied in a container which bore the following notice :—" Prepared Pepper.—As various spices and ingredients are added during the grinding, this pepper is sold as a mixed article and is warranted to be of choice quality." This article contained not less than 50 per cent. of ground rice. It is unlikely that the vendor of an article of this composition is protected by such a label, for this admixture is undoubtedly made " fraudulently to increase its bulk, weight or measure."

Six samples of beer were examined for the presence of lead. They contained the following amounts, expressed as grains of metallic lead per gallon of beer :—1/140, 1/90, 1/70, 1/32, 1/8 and 1/3. I regard 1/20 grain of lead per gallon as the maximum that should be allowed in beer, and the last two samples, which were obtained from the same hotel, were returned as adulterated. In my opinion, lead pipes, whether tin-lined, tin-washed or plain, are unsuitable for drawing beer through, and the existing pipes in the three hotels at which these samples were taken have been replaced by others of more satisfactory material.

The alcoholic strength of potable spirits must not be reduced below 35 degrees under proof. Rum, No. 5, was 37·7 degrees under proof, which is equivalent to the presence of 4·1 per cent. of excess water. The vendor, who was summoned, was fined £1.

The maximum amount of sulphur dioxide permitted in jam is 40 parts per million. The two samples examined contained amounts in excess of this limit and the vendors, who were informed of this irregularity, drew the attention of the manufacturers to the matter.

The three samples of vinegar that were deficient in acetic acid consisted of artificial vinegar, and the deficiencies undoubtedly were due to the excessive dilution of " vinegar essence," which is a strong solution of acetic acid coloured with caramel or an aniline dye. Such vinegar is devoid of the esters and other bye-products of fermentation which give to malt vinegar its characteristic piquancy and flavour. Nos. 398 and 1,459 were obtained from the same vendor—a street hawker who has persistently sold this article deficient in acetic acid—and he was fined £5 for each of these offences.

The bottle in which sample No. 1,462 was supplied was labelled " Vinegar Malted " and the word " Unfermented " was stamped in copying ink on the top of the label. The term " Vinegar Malted " was obviously used to convey the impression that the contents consisted of malt vinegar, which is a product derived wholly from fermentation processes, but this article had the characters of an artificially prepared vinegar. Since the close of the year this matter has been given further attention.

Public Health (Preservatives, etc., in Food) Regulations.—No preservatives were found in any of the samples of milk, cream, butter or margarine. In the following table the various articles in which preservatives were detected and the amounts present are shown :—

Article	Number Examined	Number containing Preservative	Sulphur Dioxide in parts per million	
			Amounts found	Maximum permitted
Apricots, Dried	5	5	420, 560, 775, 1,110, 1,175	2,000
Candied peel	2	2	8, 70	100
Cherries, Glacé	2	2	15, 25	100
Cider	1	1	185	200
Fruit Juices and Cordials	4	3	180, 185, 240	350
Jam	2	2	*65, 95*	40
Mineral waters, Sweetened	2	1	12	70
Raisins	6	2	190, 465	750
Sausages	4	3	150, 170, 320	450
Sultanas	12	2	395, 645	750

Two samples of black-currant jam contained preservative in excess of the maximum limit prescribed by the Regulations, and the vendors were asked to direct the attention of the makers to the irregularity.

Summary of Legal Proceedings.—The results of prosecutions undertaken in respect of samples obtained during the year are summarised in the following table :—

No. of Sample	Article	Result of Analysis	Result of Prosecution
307	Milk	Deficient of 26 per cent. of fat.	Fined £2.
716	Milk	Contained 8 per cent. of extraneous water.	Fined £2.
1,063	Milk	Contained 12 per cent. of extraneous water.	Fined £2 and 12/9 costs.
1,064	Milk	Contained 13 per cent. of extraneous water.	
1,162	Milk	Contained 25 per cent. of extraneous water.	Paid £2 9s. 6d. costs.
1,290	Milk	Contained 6 per cent. of extraneous water.	Fined £20 and 16/– costs (second offence).
1,291	Milk	Contained 7 per cent. of extraneous water.	
1,393	Milk	Contained 11½ per cent. of extraneous water.	Fined £4 and 12/8 costs.
1,394	Milk	Contained 12½ per cent. of extraneous water.	
5	Rum	Contained 4 ·1 per cent. of excess water.	Fined £1.
398	Vinegar	Deficient in acetic acid to the extent of 20 ·5 per cent.	Fined £5.
1,459	Vinegar	Deficient in acetic acid to the extent of 40 per cent.	Fined £5.

The total of the fines and costs in respect of samples examined during the year amounted to £45 10s. 11d. Comparison with previous years is made below :—

Year	Prosecutions	Convictions	Dismissed	Fines	Costs	Total
				£ s. d.	£ s. d.	£ s. d.
1929	5	1	4	6 0 0	—	6 0 0
1930	16	12	4	18 0 0	3 9 6	21 9 6
1931	14	14	—	24 15 0	6 6 7	31 1 7
1932	17	13	4	23 10 0	11 6	24 1 6
1933	7	6	1	29 0 0	1 18 6	30 18 6
1934	19	16	3	38 10 0	22 6 0	60 16 0
1935	11	11	—	33 0 0	8 14 0	41 14 0
1936	18	17	1	83 0 0	8 6 4	91 6 4
1937	12	12	—	41 0 0	4 10 11	45 10 11
1929-1937	119	102	17	£296 15 0	£56 3 4	£352 18 4

Imported Food.—In addition to the samples of food and drugs analysed for the Urban Sanitary Authority, 47 samples of imported food were examined for the Port Health Authority. They comprised the following articles :—

Apricots, Dried	1	Raisins	33
Cherries, Canned	1	Sardines	2
Figs, Dried	3	Sausage casings	1
Lemon juice	1	Sultanas	1
Pea flour	1	Tomato Ketchup	1
Peaches, Dried	1	Tongue, Canned	1
Total	47		

A sample of raisins from South Africa and another from Australia were free from sulphur dioxide, while one from Spain contained sulphur dioxide not exceeding the prescribed limit of 750 parts per million. Of 30 samples from California, seven were free from sulphur dioxide, 18 contained permissible amounts of this preservative and five samples drawn from two consignments contained excessive quantities, viz., 800, 880, 900, 900 and 950 parts of sulphur dioxide per million.

Other articles which contained preservatives complied with the requirements of the Regulations.

The canned cherries contained 0·5 grain of tin per lb., the tomato ketchup contained 16 parts of copper per million, calculated on the dry matter of the sample, and the sardines 1 part of lead per million. These amounts are not excessive.

Fertilisers and Feeding Stuffs Act, 1926.—Particulars of the samples submitted under this Act and details of the samples which were unsatisfactory in composition are given in the following tables :—

Article	Number Examined	Number Unsatisfactory in Composition
Barley meal	2	—
Bran	7	—
Middlings	2	—
Oat feed	1	—
Oats, Sussex ground	1	—
Pollards	5	1
Sharps	5	3
Weatings	1	—
Wheat shorts	2	—
Total	26	4

Unsatisfactory Samples.

No. of Sample	Article	Nature of Adulteration or Irregularity
150	Sharps	Contained at least 20% of tapioca meal.
151	Sharps (official sample)	Contained at least 20% of tapioca meal.
158	Pollards	Fibre content overstated. Guaranteed — Found Fibre content .... 9·5% — 7·1%
162	Sharps	Contained an excess of fibre. Guaranteed — Found Fibre content .... 7·0% — 9·9%

Although several samples of sharps and other wheat offals were taken with a view to tracing the source of the adulteration of the material from which samples Nos. 150 and 151 were taken, all these were free from admixture with tapioca meal.

The irregularities in the fibre content of the other two samples were not serious.

Rag Flock Acts, 1911 *and* 1928.—Two of 13 samples of rag flock obtained from upholsterers did not conform to the standard of cleanliness required by the Rag Flock Regulations, 1912. These two samples were taken from old mattresses, the flock in which was being used for upholstering furniture, and the user was summoned and fined 5/- in respect of each sample.

Twenty-one samples of flock taken from a flock factory were also examined. This material continues to be of satisfactory nature and cleanliness.

Public Health Department.—Sixteen samples consisting of stout, vomit, six filter pads, three ciders, two beers, milk, flour and a disinfectant were examined for this department. The disinfectant was submitted under the Pharmacy and Poisons Act, and the filter pads and cider were examined in connection with an investigation of the source of copper in a sample of cider taken by another Local Authority. The two samples of beer contained undesirable amounts of lead, viz., 0·35 and 0·42 grain per gallon.

Public Works Committee and the Estates Committee.—Of the 21 samples of mortar submitted by the City Engineer, 20 were for the Public Works Committee and one for the Estates Committee. One sample of plasterer's mortar was very deficient in lime, the proportion of dry slaked lime to ashes being approximately one to six, whereas the specification for this article requires it to contain one volume of lime to not more than three volumes of ashes. Two other samples were also low in lime content.

Central Contracts Committee.—Two samples of carbolic soap, one of pale yellow soap, one of soap powder and nine of foodstuffs supplied by contractors to the Corporation were examined and reported upon to this Committee.

Visiting (Mental Hospital) Committee.—Determinations were made of the amounts of arsenic in 81 specimens of cerebro-spinal fluid taken from patients after treatment with certain drugs, and also in seven solutions and nine samples of biological material, for the Director of Research at the Biochemical Laboratories of the Mental Hospital.

The results obtained since these examinations were commenced in 1935 have been collated and discussed in a paper on *The Trypanocidal Activity and Arsenic Content of the Cerebro-spinal Fluid after Administration of Arsenic Compounds*, by Drs. F. Hawking, T. J. Hennelly and J. H. Quastel, published in the Journal of Pharmacology and Experimental Therapeutics, Vol. 59, No. 2, 1937.

City Coroner and the City Police.—Seventeen samples, consisting of viscera, urine and other articles, were submitted for analysis in connection with the death of three people.

A sample of liver was examined for the presence of irritant poison, with negative results, and microscopical examinations by the Pathologist showed that death in this case was due to natural causes.

In a case where the ordinary post-mortem examination suggested that death was due to some irritant poison, the viscera and urine, after hydrolysis and extraction with ether, yielded a total of 180 grains of crystalline residue, which proved to be salicylic acid. This amount of salicylic acid is equivalent to 235 grains of aspirin, and the Coroner returned an open verdict, death being due to aspirin poisoning.

In connection with the death of a coal-trimmer, the water content, total mineral matter and total silica in each of two lungs were determined.

XVIII.—HOUSING.

The following is a statement in the form required by the Ministry of Health in relation to housing :—

1. *Inspection of Dwelling-houses during the Year* :—

(1)	(*a*)	Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	7,096
	(*b*)	Number of inspections made for the purpose	13,279
(2)	(*a*)	Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	702
	(*b*)	Number of inspections made for the purpose	1,233
(3)		Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	—
(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	2,191

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	2,165

3. *Action under Statutory Powers during the Year* :—

(*a*)—Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936 :

(1)		Number of dwelling-houses in respect of which notices were served requiring repairs	120
(2)		Number of dwelling-houses which were rendered fit after service of formal notices :—	
	(*a*)	By owners	112
	(*b*)	By Local Authority in default of owners	8

(*b*)—Proceedings under Public Health Acts :—

(1)		Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	218
(2)		Number of dwelling-houses in which defects were remedied after service of formal notices :—	
	(*a*)	By owners	208
	(*b*)	By Local Authority in default of owners	—

(*c*)—Proceedings under Sections 11 and 13 of the Housing Act, 1936 :

(1)		Number of dwelling-houses in respect of which Demolition Orders were made	38
(2)		Number of dwelling-houses demolished in pursuance of Demolition Orders	—

(*d*)—Proceedings under Section 12 of the Housing Act, 1936 :

(1)		Number of separate tenements or underground rooms in respect of which Closing Orders were made	—
(2)		Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	—

4. *Housing Act*, 1936 (Part IV)—*Overcrowding* :—

(*a*)—(i) Number of dwellings overcrowded at the end of the year	708
(ii) Number of families dwelling therein	741
(iii) Number of persons dwelling therein	4,866
(*b*)—Number of new cases of overcrowding reported during the year	5
(*c*)— (i) Number of cases of overcrowding relieved during the year	526
(ii) Number of persons concerned in such cases	2,593
(*d*)—Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	—

Overcrowding.—The City Council decided during the year to build an additional 2,000 houses for general purposes ; of these, 1,000 are to be allocated for the abatement of overcrowding. The programme is to complete 500 houses during each year for our successive years.

Council Housing Estates.—Duties in connection with the supervision of Council houses continue to increase, particularly in connection with the transfer of overcrowded families on the estates and with the rehousing of families from condemned houses.

There has been a considerable increase in the number of applications received from tenants of Council houses for transfer to other houses on the Council estates during the year. The majority of these applications were made on medical grounds, which could not be supported on investigation. Applications for transfer and applications for preferential consideration for Council houses are now referred to the department, and reports are submitted to the City Treasurer and Controller for consideration by the Committee responsible for the allocation of houses. In particular, any family a member of which is suffering from tuberculosis and whose accommodation is so inadequate as to cause a danger of infection, is given preference for a house immediately. In some of these cases it has been found that after the family had moved into a Council house they sub-let a portion of it, thereby bringing about the same conditions as when they were in rooms, in consequence of which an undertaking in writing has now to be signed by the head of the family to the effect that if granted a Council house he will guarantee not to sub-let any portion of it.

A welcome addition to the Council housing estates was the erection of 25 cottages for aged couples. These cottages are of the bungalow type, comprising one living room, one bedroom, bathroom, kitchenette and other conveniences. They have proved to be such a boon that the Council are contemplating the erection of others. A portion of the cost of these cottages was borne by a private donor, the Corporation bearing the remainder, and each cottage is let at an inclusive rental of 4/6d. per week.

The number of Council houses found to be infested with bugs shows a considerable reduction compared with previous years, and the following table indicates the decrease since 1930, when periodical visits of inspection were first introduced :—

Year	Vacant Houses inspected	Vacant Houses found to be verminous	Percentage found to be verminous
1930	321	98	*30·5*
1931	347	93	*26·8*
1932	419	91	*21·7*
1933	435	89	*20·5*
1934	452	110	*24·3*
1935	445	110	*24·7*
1936	539	105	*19·5*
1937	554	81	*14·6*

Eradication of Bed Bugs.—The number of vacant Council houses found to be infested with bugs is shown on page 97, and, in addition, 155 privately-owned houses were found to show evidence of infestation. Disinfestation was carried out in each instance. The method adopted for freeing houses from bugs on the Council estates is the stripping of the woodwork, the application of the flame of a blow-lamp, followed by spraying with an insecticide or a disinfecting fluid. In minor cases of infestation spraying with an insecticide is usually sufficient. This work is undertaken by Corporation workmen acting under the supervision of the Sanitary Inspector who is responsible for the supervision of the sanitary condition of all Council houses. Hydrocyanic-acid gas is not used, owing to its highly dangerous properties, and so far no more effective method than the blow-lamp has been found. It is considered that this method of treatment is effective in 90 per cent. of cases when carried out by a trained staff of workmen.

Prospective tenants of Council houses have their furniture and effects inspected before being allotted a house. In cases where the standard of cleanliness is not good, rehousing is deferred until it is shown that the applicant has made a serious effort to secure some improvement.

When condemned houses are found to be bug infested, the bedding is taken to the steam disinfector, and any furniture likely to harbour bugs is treated with a blow-lamp and an insecticide on the day that rehousing takes place. The family is then followed up after rehousing, and supervision is not relaxed until the department is satisfied that all danger of infestation of the new house is over. In very few cases has bug infestation been transferred to new houses, and, in fact, it is pleasing to record that the reaction of tenants who have previously been living under sordid conditions has been excellent.

The measures taken to educate tenants on the evils of bug infestation are continuous. So far as Council houses are concerned, periodical inspections are made by the Sanitary Inspector, and suitable action is taken if any house is found to show neglect. Advice is also given on ways of avoiding infestation, and tenants are encouraged to report immediately bugs are discovered.

The same methods are employed in connection with privately-owned houses, and the department keeps in stock a supply of sprays and fluid ; the sprays are loaned free of charge and the fluid is sold at cost price.

Houses-let-in-lodgings.—The number of houses on the register is 15. Many other houses come within this category and will have to be dealt with when the pressure of work brought about by housing and overcrowding is reduced.

Housing Acts.—The programme of slum clearance under the Housing Act, 1930, has been completed, with the exception of the rehousing of coloured families. During the year, a further survey of the city was undertaken, and all additional unfit houses and basements were scheduled for suitable action. Representations were made under section 11 of the Housing Act, 1936, in respect of 101 houses, and the following are the results of such action :—Demolition Orders made, 38 ; undertakings accepted not to use the premises for human habitation, 36 ; undertakings to recondition the properties accepted, 26 ; in abeyance, 1. There are still a few houses and a number of basements to be dealt with, and representations regarding these will be made during 1938.

The clearance of the houses in the Wood Street area in connection with its development for the purpose of a public hall, 'bus station, etc., has now been completed and all the families have been re-housed. This work threw an additional burden on the department, as every house in the area was found to be verminous.

The number of houses repaired under section 9 of the Housing Act, 1936, was 888, of which 768 were dealt with by informal notices and 120 by formal notices. In eight instances the repairs were executed by the Council in default of the owners.

XIX.—GENERAL SANITARY ADMINISTRATION.

Statements as to the nature and extent of the work done during 1937 in connection with general sanitary inspection are given below.

General Sanitary Inspection.

Complaints of nuisances received 2,406

	Inspections or Visits	Intimation Notices		Statutory Notices	
		Served during year	Complied with during the year	Served during the year	Complied with during the year
Houses inspected	7,096	2,191*	2,165†	218	208
Re-inspections of houses	13,279	—	—	—	—
Houses inspected and recorded	702	—	—	—	—
Re-inspections of recorded houses	1,233	—	—	—	—
Premises other than houses inspected for nuisances	127	4	1	—	—
Owners and contractors interviewed	1,923	—	—	—	—
Knackers' yards	28	1	1	—	—
Slaughter-houses	661	—	—	—	—
Milkshops, etc.	1,612	99	95	—	—
Cowsheds	183	—	—	—	—
Offensive trades	86	5	2	—	—
Workshops—					
Bakehouses	195	9	5	—	—
Bootmakers	78	1	—	—	—
Dressmakers and milliners	47	1	2	—	—
Laundries	16	—	2	—	—
Tailors	94	12	10	—	—
Miscellaneous	247	8	8	—	—
Factories—					
Bakehouses	143	7	6	—	—
Bootmakers	31	—	—	—	—
Laundries	17	1	1	—	—
Tailors	5	1	1	—	—
Dressmakers and milliners	3	—	—	—	—
Miscellaneous	643	19	16	—	—
Workplaces	265	12	5	—	—
Tailors' outworkers	9	—	—	—	—
Seamen's lodging houses (day)	741	93	64	—	—
,, ,, ,, (night)	58	—	—	—	—
Common lodging houses (day)	60	4	4	—	—
,, ,, ,, (night)	—	—	—	—	—
Houses-let-in-lodgings	143	4	4	—	—
Tents, vans, sheds and similar structures	62	1	1	—	—
Amusement places	143	8	7	—	—
Public houses	43	2	2	—	—
Schools	53	—	—	—	—
Swimming baths	50	—	—	—	—
Water supplies	12	—	—	—	—
Water courses	44	—	—	—	—
Refuse tips	59	1	—	—	—
Accumulations	446	102	101	—	—
Sewers	65	1	1	—	—
Drains	2,946	52	47	—	—
Public urinals	168	1	1	—	—
Cesspools	17	—	—	—	—
Back lanes	231	2	1	—	—
Rat infestation	843	21	20	—	—
Premises where swine or other animals are kept	210	12	12	—	—
Marine store hawkers	79	3	2	—	—
Overcrowding	527	—	—	—	—
Smoke and grit observations	199	2	1	—	—
Visits not classified	3,677	—	—	—	—

* Including 89 under section 9 of the Housing Act, 1936.

† ,, 117 ,, ,, ,, ,, ,, ,, ,, ,,

Nuisances Abated, Repairs Executed, etc.

Houses :—	
Walls repaired	418
Outside plastering repaired	672
Inside plastering repaired	878
Damp-proof courses inserted	72
Floors renewed or repaired	653
Floors ventilated	74
Roofs renewed or repaired	940
Shutes, downpipes or gutters renewed or repaired	772
Chimneys repaired	328
Ceilings repaired	440
Doors and frames repaired	408
Lighting and ventilation of rooms improved	48
Window sashes or frames renewed or repaired	805
Window cords renewed	727
Staircases repaired	124
Grates or ovens repaired or renewed	469
Boilers provided or repaired	141
Food stores provided or improved	77
Washhouses provided or improved	84
Out-buildings repaired	26
Obstructive out-buildings demolished	17
Walls or ceilings cleansed or redecorated	153
Bedding cleansed or destroyed	21
Rooms treated for vermin	183
Overcrowding abated	8
Yard paving relaid or repaired	518
Nuisances from animals abated	8
Accumulations removed	63
Ash-bins provided	3
Water supply provided	11
Water taps or pipes repaired	29
Water samples taken for analysis	17
Miscellaneous repairs and nuisances abated	391
Drainage :—	
Drains tested (smoke)	171
,, ,, (chemical)	391
New drains constructed	72
Drains reconstructed	87
Drains repaired	334
Drains cleansed	282
Drains cleansed or repaired by Corporation in default of owners	8
Inspection or intercepting chambers provided or repaired	57
Intercepting traps fixed	10
Soilpipes or ventilating shafts fixed or repaired	47
Rain-water pipes disconnected	5
Gullies fixed	135
Troughs provided	626
Troughs trapped or waste pipes repaired	138
Bath waste pipes trapped or repaired	19
Lavatory basins trapped or waste pipes repaired	18
Additional w.c.'s provided	38
W.c.'s reconstructed	99
Drain inlet inside house abolished	3

NUISANCES ABATED, REPAIRS EXECUTED, ETC.—(cont.)

Lighting and ventilation of w.c.s improved	32
New pans and traps fixed	1,040
W.c. pans cleansed	37
Flushing apparatus provided	824
Flushing apparatus repaired	50
Miscellaneous repairs	389

Cesspools :—

Abolished and house connected to sewer	16

Seamen's Lodging Houses :—

Limewashing or cleansing carried out	114
Bedding removed	31
Verminous rooms treated	58
Bedsteads cleansed or repaired	365
Accumulations removed	4
Washing accommodation provided	5
Other repairs	11
W.c.'s repaired	4
Additional w.c. accommodation provided	3

Common Lodging Houses :—

Limewashing or cleansing carried out	6
Verminous rooms treated	1
Miscellaneous repairs	4

Urinals :—

Additional urinals provided	3
Walls repaired or made impervious	1
Flushing apparatus fixed or repaired	1

Tents, Vans or Sheds :—

Removed	5

Amusement Places :—

W.c.'s repaired	6
Additional w.c. accommodation provided	2
Cleanliness improved	9
Other repairs	7

Eradication of Bed Bugs (excluding Council houses) :—

Houses infested with bed bugs	155
Houses disinfested	116

Dairies, Cowsheds and Milkshops :—

New dairies constructed	3
Existing cowsheds improved	5
Paving repaired	6
Lighting or ventilation improved	4
Limewashing or cleansing carried out	36
Accumulations of manure removed	6
Drainage improved	6
Other repairs	2

NUISANCES ABATED, REPAIRS EXECUTED, ETC.—(cont.)

Ice Cream Premises :—	
Limewashing or cleansing carried out	27
Accumulations removed	1
Premises improved	3
Use of unsuitable premises discontinued	2
Applications for registration refused	1
Water supply provided	3
Washing-up sinks provided	3
Ash-bins provided	4
Other repairs	3
Food Shops, Kitchens, etc. :—	
Storage arrangements improved	5
Accumulations removed	5
Cleanliness improved	11
Ash-bins provided	2
Washing-up sinks fixed	9
Lighting or ventilation improved	6
Water supply provided	3
Inside drain inlets abolished	1
Other repairs	9
Fried Fish Shops :—	
Applications for registration refused	1
Water supply provided	7
Washing-up sinks provided	11
New ranges fitted	11
Ash-bins provided	6
Cleansing carried out	21
Storage accommodation provided or improved	5
Drainage improved	4
Accumulations removed	8
Unsuitable premises discontinued	6
Lighting and ventilation improved	6
Other repairs	1
Offensive Trades :—	
Accumulations removed	2
Cleanliness improved	1
Other repairs	1
Stables :—	
Accumulations of manure removed	22
Paving repaired or renewed	2
Manure receptacles provided or repaired	5
Limewashing carried out	19
Drains provided	1
Back Lanes :—	
Accumulations removed	14
Surfaces repaired	1
Miscellaneous repairs or nuisances abated	12

Common Lodging Houses.—There are six registered Common Lodging Houses, two of them being large and the remainder of a small type.

Seamen's Lodging Houses.—The number of licensed Seamen's Lodging Houses has decreased considerably and there are now only 64.

Offensive Trades.—The following is a list of established offensive trades :—

Artificial Manure Manufacturers	2
Fat Melters	2
Tripe Boilers	22
Rag and Bone Dealers	19
Gut Scrapers	2

The premises are kept under regular observation. Fortunately, most of those which are liable to cause effluvium nuisances are situated in a remote part of the city, some distance from dwelling-houses.

During the year, five applications to establish the business of rag and bone dealer were refused on the grounds that the localities in which it was proposed to establish them were unsuitable, the Health Committee having decided to restrict the establishment of these trades to the only area in Cardiff suitable for the purpose.

Choked and Defective Drains.—During the year action was taken under section 98 of the Cardiff Corporation Act, 1930, in nine cases in which the owners or occupiers failed to carry out the work, and no difficulty was experienced in recovering the costs incurred.

Flushing Cisterns.—During the year, 824 flushing cisterns were installed to hand-flushed closets, making a total of 12,797 since the work was commenced in February, 1931. With few exceptions, the problem of hand-flushed closets is now disposed of.

Conservancy System Closets.—The numbers of closets remaining on the conservancy system at the end of the year were as follows :—

Earth closets	5
Privies	66
Total	71

Cesspools.—There are 30 cesspools receiving drainage from dwelling-houses and three cesspools in connection with factories.

Drainage and Sewerage : Roath Area Flood Prevention Works.—Two float operated, vertical spindle, axial flow, electric motor type pumps, of 13,500 gallons per minute capacity each, were installed in Waterloo Gardens to discharge into Roath Brook storm-water in excess of six times dry weather flow from Waterloo Road, Marlborough Road and Albany Road intercepting sewers.

Public Cleansing.—There has been no appreciable difference in the collection and disposal of refuse from previous years. Refuse is collected twice weekly from all dwelling houses and daily from shopping centres, and is disposed of by controlled tipping.

Water Supply.—All premises within the city are supplied with water from the public supply, with the exception of 24 houses, three farms and farmhouses, and five dairies, which obtain their supplies from 22 wells and two springs. Samples from these wells and springs are taken regularly, and recent reports show that 16 are satisfactory, four are moderate, three are doubtful and one is contaminated. All practicable steps are being taken to improve the sources of supply where they are unsatisfactory, but it is not possible at present to connect these premises to the public water mains.

The public water supply has been satisfactory in both quality and quantity, and during the drought in the autumn of 1937 no restriction of supply—even for the washing of cars or watering gardens—was made.

Swimming Baths.—There is one covered swimming bath, which is equipped with a modern continuous filtration plant. Open-air bathing is obtainable at two swimming baths and also at Roath Park Lake. The two open-air swimming baths are equipped with continuous filtration plants. Samples of water are taken for analysis and bacteriological examination weekly during the bathing season.

A private swimming bath owned by a large firm, but which is also open to the public, is now subject to supervision under the provisions of the Public Health Act, 1936, and although the Corporation have not made by-laws covering this type of bath, regular inspections and sampling of the water are carried out. The need for such supervision is indicated by the fact that when the bathing season opened, the first sample showed evidence of sewage contamination, but this was remedied following consultations with officials of the firm.

Smoke Abatement.—Cardiff suffers but little from smoke nuisances, and it has not been necessary to take legal action in respect of any offences during the year. Several complaints of grit nuisance have been received, but the factory proprietors concerned in each case have been ready to co-operate with the department in carrying out remedial measures.

Rat Destruction.—The following is a summary of the work of the department in connection with the destruction of rats :—

Amount of poison sold (tins)	128
Number of baits laid in public sewers....	4,554
Number of baits eaten	4,080
Number of baits laid elsewhere	22,863
Number of baits eaten	17,996
Total number of baits laid	27,417
Total number of baits eaten	22,076

During the year, 336 live rats and 902 dead rats from premises in the city were submitted to the Department of Zoology, National Museum of Wales, for identification and for examination of their parasitic fleas, for comparison with those submitted from ships and the docks.

Factories, Workshops and Workplaces.—Details of the sanitary inspection of factories, workshops and workplaces under the Factory and Workshop Act, 1901, are given in the following tables :—

1.—Inspection of Factories, Workshops and Workplaces.

Premises	Number of		
	Inspections	Written Notices	Prosecutions
Factories (including Factory Laundries)	842	28	—
Workshops (including Workshop Laundries)	677	31	—
Workplaces (other than Outworkers' premises included in Part 3 of this Report)	265	12	—
Total	1,784	71	—

2.—Defects Found in Factories, Workshops and Workplaces

Particulars	Number of Defects	
	Found	Remedied
Nuisances under the Public Health Acts :—		
Want of Cleanliness	88	78
Want of Ventilation	—	—
Overcrowding	—	—
Other Nuisances	20	18
Sanitary accommodation — insufficient	7	6
Sanitary accommodation — unsuitable or defective	18	18
Sanitary accommodation — not separate for sexes	4	4
Breach of special sanitary requirements for bakehouses (Sec. 97 to 100)	—	—
Total	137	124

3.—Home Work.

Nature of Work	Outworkers' Lists, Section 107							Outwork in Unwholesome Premises, Section 108		Outwork in Infected Premises, Sections 109, 110	
	Lists received from Employers						Notices served on Occupiers as to keeping or sending lists				
	Sending twice in the year			Sending once in the year							
	Lists	Outworkers		Lists	Outworkers			Instances	Notices served	Instances	Orders made (S.110)
		Contractors	Workmen		Contractors	Workmen					
Wearing Apparel—											
(1) Making, etc.	32	—	100	7	—	28	41	—	—	—	—
(2) Cleaning and washing	—	—	—	—	—	—	—	—	—	—	—

4.—Registered Workshops.

Workshops on the Register (S. 131) at the end of the Year	Number
Bakers	109
Bootmakers	146
Dressmakers and milliners	49
Laundries	14
Tailors	113
Miscellaneous	320
Total Number of Workshops on Register	751

5.—Other Matters.

Class	Number
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (Sec. 133)	—
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts but not under the Factory Act :—	
Notified by H.M. Inspector	8
Reports (of action taken) sent to H.M. Inspector	5
Other (Notices of Occupation of Workshops received from H.M. Inspector)	21
Underground Bakehouses in use at the end of the year	—

Shops.—The following is a summary of the work done under the Shops Acts and in connection with the sanitary inspection of shops :—

Closing Orders in operation	15
Observations of shops under Closing Orders	2,397
Observations of shops as to weekly half-holidays	3,759
Inspections of shops	2,881
Infringements of Shops Acts	61
Notices requiring sanitary defects to be remedied :—	
Served	122
Complied with	98

Local Orders were made giving one hour's extension of the opening hours to bakers on the Thursday preceding Good Friday, and a similar Order was granted to fish, game and poultry dealers and to fruit and vegetable dealers for the Saturdays immediately preceding each Bank Holiday and for the Thursday preceding Good Friday.

A Weekly Half-Holiday Order for greengrocers, fruiterers and fishmongers was made, making it compulsory for such shops to be closed not later than 1.30 p.m. on Wednesdays.

Seven applications have been granted to Jewish traders under section 7 of the Shops (Sunday Trading Restriction) Act, 1936, permitting them to remain open until 2 p.m. on Sunday, provided they close the whole of Saturday, and three applications from Kosher butchers to open on Sundays, subject to the conditions laid down in the Retail Meat Dealers' Shops (Sunday Closing) Act, 1936, were also granted.

Some difficulty was experienced with a firm of grocery and provision merchants who have several branches in the city regarding the provision of heating facilities. The firm objected to and failed to comply with notices requiring them to provide heating facilities on the grounds that artificial heating would be deleterious to the foodstuffs stocked. Legal proceedings were eventually taken against the firm, and the case for the prosecution was that the Act of 1934 granted no exemptions in this respect, that the temperature which should be maintained, namely, 55°F., was reasonable, as such a temperature was much lower than the normal temperatures which had to be contended with in the summer months, and that the Act was framed to secure the comfort of the assistants and the question of damage to foodstuffs was irrelevant. The Stipendiary Magistrate dismissed the summonses on a technical point, but the cases were re-opened on fresh evidence at a later date and convictions were obtained.

There are approximately 5,000 shops in the city, and inspections in connection with the provision of sanitary conveniences, washing facilities, ventilation, heating, etc., have taken up a considerable amount of time. Although, wherever practicable, separate conveniences and washing facilities are insisted upon for each shop, the provision of these facilities is impossible in many cases. Up to date, 121 exemption certificates in connection with the provision of sanitary conveniences and 65 exemptions from the provision of washing facilities have been granted. Such exemptions are only given when similar facilities are available within a reasonable distance.

Pharmacy and Poisons Act, 1933.—During the year, 112 licences were renewed and 18 new licences were issued.

New Legislation.—The year has been remarkable for the amount of new legislation that came into operation. In particular, there was the consolidation of the Public Health Acts into the Public Health Act, 1936, and, although this measure will prove advantageous in the long run, its introduction threw a considerable amount of additional work on the department owing to the difference in procedure and the new powers it contains. The inspection of offices, for instance, is now provided for, but it will be some time before the records of all the offices in the city can be completed. Another new Act was the Shops (Sunday Trading Restriction) Act, 1936, which, for the first time, deals with Sunday trading, but is difficult to administer owing to the many exemptions which it contains. The Retail Meat Dealers' Shops (Sunday Closing) Act, 1936, and the Housing Act, 1936, are other new Acts, the latter simply consolidating previous legislation, without amendment, and for this reason has simplified procedure.

The Health Committee recognised that the additional duties thrown on the department necessitated an increase in staff, and consequently appointed two additional sanitary inspectors.

Legal Proceedings.—The following is a summary of legal proceedings taken during the year in connection with general sanitary administration :—

Acts, etc., under which proceedings were taken	Number	Fined	Cautioned	To pay cost only	Dismissed	Withdrawn	Amount of Fines and Costs
							£ s. d.
Shops Acts	64	36	10	13	4	1	13 10 0
Public Health Act, 1936 (Sec. 107)	3	1	—	—	1	1	10 0
Housing Act, 1936 ...	22	2	—	19	—	1	3 11 0
Cardiff Corporation Act, 1930 (Sec. 101) ...	6	3	—	3	—	—	4 9 0
Merchant Shipping Act, 1894 (Sec. 214, Sub-sec. 5) ...	4	4	—	—	—	—	2 15 0
Total	99	46	10	35	5	3	£23 15 0

XX.—ATMOSPHERIC POLLUTION.

This section is compiled from data supplied by Mr. J. H. Sugden, M.Sc., F.I.C., of the Cardiff and County Public Health Laboratory, under whose direction the analyses and measurements are undertaken.

Deposit Gauge.—Atmospheric pollution observations made with a deposit gauge in Cardiff during 1937 are given in the following table :—

Month	Rainfall (mm)	Grammes per Square Dekametre (Metric Tons per Hundred Square Kilometres)								
		Insoluble Matter			Soluble Matter		Total Solids	Included in Soluble Matter		
		Tar	Carbonaceous other than Tar	Ash	Loss on Ignition	Ash		Sulphates (SO_3)	Chlorine (Cl.)	Ammonia (NH_3)
January	126	4	137	229	132	366	868	101	96	4
February	153	4	100	161	153	383	801	116	83	3
March	107	4	157	206	72	209	648	72	45	3
April	105	4	129	212	70	148	563	63	23	3
May	62	4	81	162	53	97	397	39	12	3
June	27	4	51	118	28	65	266	29	9	1
July	78	4	91	126	52	94	367	56	8	1
August	13	4	76	122	33	57	292	27	4	1
September	40	4	92	130	49	107	382	28	27	1
October	101	4	101	149	82	140	476	56	25	3
November	57	4	152	203	67	125	551	51	20	1
December	52	4	104	154	64	149	475	55	32	3
Total	921	48	1,271	1,972	855	1,940	6,086	693	384	27
Mean	76	4	106	164	71	162	507	58	32	2

Sulphur Pollution.—Since January, 1935, the amount of atmospheric sulphur dioxide has been measured by the lead peroxide method in Splott—a municipal ward in which iron and steel works are situated—as well as at the City Hall. The results, together with the calculated approximate volumes per million of air, for 1937 are tabulated in the following table :—

Month	Main direction of Wind	Milligrams SO_3 per 100 sq. cm. per day			Calculated volume SO_2 per million of air		
		Splott	City Hall	Difference	Splott	City Hall	Difference
January	To works	3·25	1·34	1·91	0·090	0·037	0·053
February	—	3·96	1·04	2·92	0·110	0·029	0·081
March	To works	3·00	1·58	1·42	0·083	0·044	0·039
April	—	3·53	1·27	2·26	0·098	0·035	0·063
May	—	2·77	0·91	1·86	0·077	0·025	0·052
June	—	3·08	0·68	2·40	0·086	0·019	0·067
July	From works	3·04	0·52	2·52	0·084	0·014	0·070
August	To works	2·58	0·64	1·94	0·072	0·018	0·054
September	To works	2·38	1·00	1·38	0·066	0·028	0·038
October	—	2·26	1·22	1·04	0·063	0·034	0·029
November	To works	2·51	1·97	0·54	0·070	0·055	0·015
December	To works	3·24	2·05	1·19	0·090	0·057	0·033

Ultra-violet Radiation.—The mean daily units of ultra-violet radiation, as measured by the acetone methylene blue method, in Cardiff during 1937 were as follows :—

Month	Mean Daily Radiation Units	
	Penylan (Suburban)	City Hall (Central)
January	0·18	0·18
February	0·23	0·21
March	0·30	0·26
April	0·53	0·50
May	1·14	1·03
June	1·53	1·48
July	1·60	1·50
August	1·80	1·80
September	0·96	0·92
October	0·47	0·47
November	0·29	0·30
December	0·25	0·23

XXI.—METEOROLOGICAL OBSERVATIONS.

The Climatological Station, which is situated at Penylan, Cardiff, is under the control of the Medical Officer of Health. The geographical position of the Station is Latitude 51° 30′N., Longitude 3° 10′W., and the height of the Station above mean sea level is 203 feet. Observations are made daily at 9.0 a.m. and 9.0 p.m. (G.M.T.) Summaries of the observations made during 1937 are given in the following tables :–

Barometric Pressure and Relative Humidity.

Month	Attached Thermometer (Mean)	Mean Barometric Pressure*		Hygrometer*		
		Uncorrected	Reduced to Mean Sea Level and Temp. 32° F.	Dry Bulb (Mean)	Wet Bulb (Mean)	Mean Relative Humidity
	°F.	Inches.	Inches.	°F.	°F.	%
January	43	29·540	29·719	41·7	40·8	*94*
February	44	29·398	29·507	42·5	41·2	*90*
March	39	29·440	29·667	38·2	36·4	*85*
April	50	29·673	29·869	48·7	46·2	*84*
May	55	29·843	30·024	53·2	50·1	*82*
June	60	29·925	30·092	58·4	54·2	*76*
July	61	29·889	30·059	59·7	56·5	*80*
August	65	29·949	30·155	62·9	59·1	*78*
September	58	29·768	29·936	56·6	53·6	*81*
October	52	29·788	29·978	50·8	48·5	*85*
November	43	29·825	30·124	41·6	40·5	*92*
December	39	29·662	29·950	38·5	37·3	*89*
	51	29·725	29·923	49·4	47·0	*85*

* From observations at 9 a.m. and 9 p.m. (G.M.T.)

Temperature.

Month	Absolute Maximum	Absolute Minimum	Mean of Maximum	Mean of Minimum	Mean Temperature	Difference from Average (48 years)
	°F.	°F.	°F.	°F.	°F.	°F.
January	54	27	47·0	37·2	42·1	+ 2·0
February	53	30	48·2	38·8	43·5	+ 3·3
March	56	26	45·4	36·5	40·9	— 1·6
April	64	36	56·1	43·4	49·7	+ 3·3
May	77	40	62·6	46·9	54·7	+ 2·0
June	75	42	66·9	50·4	58·7	+ 1·3
July	76	46	67·5	54·0	60·7	0·0
August	82	47	73·1	53·9	63·5	+ 3·1
September	76	43	65·4	50·2	57·8	+ 1·3
October	67	39	57·6	46·4	52·0	+ 1·7
November	56	26	47·5	38·0	42·7	— 1·5
December	54	27	44·1	35·0	39·5	— 1·6
	82	26	56·8	44·2	50·1	+ 1·2

Terrestrial Radiation, Underground Temperature and Sunshine.

Month	Temperature			Bright Sunshine	
	Grass Minimum (Mean)	Underground (Mean)		Total Duration	Difference from Average (29 years)
		1 ft.	4 ft.		
	°F.	°F.	°F.	Hours	Hours
January	36·5	42·6	46·0	34·1	— 19·2
February	37·3	42·3	44·9	59·8	— 16·3
March	31·4	40·0	43·8	106·1	— 12·1
April	41·8	48·6	46·2	108·2	— 57·6
May	43·0	55·3	51·0	207·2	+ 5·7
June	46·9	60·3	55·2	181·7	— 36·8
July	52·0	62·5	58·1	124·2	— 83·8
August	51·4	63·9	60·1	233·1	+ 46·6
September	46·7	59·1	59·2	159·7	+ 13·4
October	43·1	53·7	56·4	82·0	— 24·0
November	34·3	45·9	51·9	56·6	— 9·2
December	31·2	40·4	46·5	48·0	— 1·2
	41·3	51·2	51·6	1,400·7*	—194·5

* =31·5 % of possible duration and a daily average of 3·82 hours.

Rainfall.

Month	Total	Difference from Average (48 years)	Greatest Fall in 24 hours*		Number of Rain-days (0·01 inch or more)	Duration
			Amount	Day		
	Inches	Inches	Inches			Hours
January	4·90	+ 0·95	0·84	5th	24	103·75
February	6·39	+ 3·46	0·86	7th	26	143·00
March	3·72	+ 0·75	0·74	17th	21	68·75
April	3·84	+ 1·14	0·68	15th	16	69·00
May	2·35	— 0·23	0·36	21st	13	39·25
June	1·10	— 1·53	0·37	12th	13	17·25
July	3·12	+ 0·15	1·36	15th	15	43·50
August	0·38	— 3·64	0·26	16th	5	15·25
September	1·94	— 1·25	0·60	9th	17	34·50
October	4·09	— 0·72	1·49	29th	11	58·25
November	2·40	— 1·40	0·91	22nd	14	42·50
December	2·24	— 2·42	0·46	10th	15	49·00
	36·47	— 4·74	1·49	29th Oct.	190	684·00

* 24 hours ended 9 a.m. (G.M.T.) next day.

XXII.—MISCELLANY.

Ambulance Facilities.—Ten motor ambulances are available for use in Cardiff. Five are owned by the Corporation—Isolation Hospital, two ; Llandough Hospital, one ; Police, two. One belongs to the Cardiff Royal Infirmary, one to the Prince of Wales Hospital, two to the Order of St. John of Jerusalem (Priory for Wales) and one is privately owned.

Disinfection.—Disinfection was carried out at 409 houses during the year, and 8,989 articles of bedding, clothing, etc., were removed to and disinfected at the Disinfection Station ; 498 infected articles were destroyed by arrangement with or at the request of the owners.

Cleansing Station.—The total number of baths for scabies, pediculosis, etc., undertaken at the Cleansing Station was 454.

Public Mortuary.—Ninety-six bodies (74 males, 22 females) were taken to the Public Mortuary and 48 post-mortem examinations were performed there.

PORT HEALTH SERVICE.

I.—CONSTITUTION, LIMITS OF JURISDICTION, ETC., OF THE CARDIFF PORT HEALTH AUTHORITY.

The Cardiff Port Sanitary (now Health) Authority was constituted in 1882 by a Provisional Order of the Local Government Board (now the Ministry of Health), which was made under section 287 of the Public Health Act, 1875. By a Provisional Order, dated 27th July, 1893, the limits of jurisdiction of the Authority were extended, and on 15th September, 1894, an Order, which came into operation on 9th November, 1894, was made constituting the Authority permanently.

Section 5 of the Public Health Act, 1936, which came into operation on 1st October, 1937, provided that Port Sanitary Districts and Port Sanitary Authorities constituted under any previous Act are to be known as and styled Port Health Districts and Port Health Authorities. The Cardiff City Council, as the Cardiff Port Health Authority, on 26th July, 1937, decided to ask the Minister of Health to make an Order amending the Order constituting the Authority, so as to conform with the Local Government Act, 1933, and the Public Health Act, 1936.

Under the Order of 1894 the Council of the Borough (now City) of Cardiff was constituted the Port Sanitary Authority for the area. The Order provided that the " Authority may from time to time appoint Committees consisting of members of such Authority for the exercise of any powers, which, in the opinion of such Authority, can be properly exercised by Committees, but the acts of every such Committee shall, unless otherwise directed by the Port Sanitary Authority, be submitted to such Authority for approval." The Order also provided " that a Committee so appointed shall in no case be authorised to borrow money or to issue any precept for contributions or to enter into any contract."

The jurisdiction of the Authority extends to so much of the Port of Cardiff as is comprised within the following lines :—" A straight line drawn south from the seaward extremity of the common boundary of the Parishes of Sully and Lavernock to the boundary of the said Port and a line following and coincident with the boundary of the said Port from its commencement at the River Rumney to the point at which the straight line firstly hereinbefore mentioned meets such boundary, together with the water of the said Port of Cardiff within such limits, and the place or places for the time being appointed as the Customs Boarding Station or Stations for such part of the said Port, and every other place for the time being appointed for the mooring or anchoring of ships for such part of the said Port under any regulations for the prevention of the spread of diseases issued under the authority of the Statutes in that behalf, and the docks, basins, harbours, creeks, rivers, channels, roads, bays and streams belonging to such part of the said Port." The district therefore includes the waters contiguous to Penarth Urban and Cardiff Rural Districts.

The Authority have all the powers, rights, duties, capacities, liabilities and obligations of an Urban Sanitary Authority under certain sections of the Public Health Acts " so far as those sections are applicable to waters within the jurisdiction of " the Authority " or to ships coming or being within the said jurisdiction, or to persons upon any such ship or brought by any such ship within the said jurisdiction, or to goods or things upon any such ship, or to goods or things landed from any such ship, and being within the said jurisdiction, and which in the opinion of the said Authority or their Medical Officer of Health requires to be disinfected or destroyed."

II.—SHIPPING ENTERING THE PORT.

The following table (compiled from information kindly supplied by H.M. Collector of Customs) shows the annual number of arrivals and tonnage of vessels since 1928 :—

Year	Number of Arrivals			Tonnage		
	From Foreign	Coastwise*	Total	From Foreign	Coastwise*	Total
1928	3,205	4,530	7,735	3,389,525	1,695,890	5,085,415
1929	3,531	4,601	8,132	3,652,185	1,891,215	5,543,400
1930	3,210	4,368	7,578	3,182,124	1,820,183	5,002,307
1931	2,433	4,271	6,704	2,467,542	1,689,505	4,157,047
1932	2,089	4,401	6,490	2,337,218	1,702,412	4,039,630
1933	1,903	4,388	6,291	2,017,207	1,778,635	3,795,842
1934	1,791	4,567	6,358	1,891,385	1,858,569	3,749,954
1935	1,804	4,137	5,941	1,935,007	1,939,521	3,874,528
1936	1,729	4,244	5,973	1,752,174	2,007,477	3,759,651
1937	1,876	4,601	6,477	1,887,637	2,265,038	4,152,675

The number and tonnage of vessels entering the port (including Penarth) inspected by officers of the Port Health Authority during 1937 are set out below :—

Ministry of Health Table A.

		Number	Tonnage	Number Inspected by		Number reported defective	Number of Vessels on which defects were remedied	Number of Vessels reported as having or having had during the voyage infectious disease on board
				Medical Officer	Sanitary Inspector			
From Foreign	Steamers	1,526	1,737,132	78	547	268	236	14
	Motor	243	138,984	14	71	10	6	—
	Sailing	101	9,437	5	16	—	—	—
	Fishing	6	2,084	—	—	—	—	—
Total Foreign		1,876	1,887,637	97	634	278	242	14
Coastwise	Steamers	1,479	1,800,901	6	467	215	200	11
	Motor	323	184,457	—	47	12	8	—
	Sailing	55	8,761	—	3	1	—	—
	Fishing	335	38,717	—	17	6	6	—
Total Coastwise		2,192	2,032,836	6	534	234	214	11
Total Foreign and C'stwise		4,068	3,920,473	103	1,168	512	456	25

* Including tugboats, sand barges, pleasure steamers, etc.

The following table shows the number of vessels entering the port which were dealt with by the department each month during 1937:—

Month	From Foreign	Coastwise	Total
January	139	204	343
February	149	176	325
March	173	199	372
April	157	187	344
May	147	149	296
June	156	180	336
July	157	181	338
August	146	174	320
September	162	179	341
October	165	198	363
November	159	189	348
December	166	176	342
Total	1,876	2,192	4,068

The nationalities of the several types of vessels entering the port which were dealt with by the department during 1937 are shown in the following table :—

Nationality	Steam	Motor	Sailing	Total
American (U.S.A.)	2	—	1	3
Belgian	22	—	—	22
Brazilian	1	—	—	1
British	2,273	323	55	2,651
Chinese	3	—	—	3
Danish	72	2	—	74
Dantzigian	1	—	—	1
Dutch	9	84	—	93
Egyptian	3	—	—	3
Esthonian	65	—	—	65
Finnish	32	—	—	32
French	184	98	99	381
German	43	—	—	43
Greek	113	1	—	114
Hungarian	4	—	—	4
Irish	52	17	1	70
Italian	27	—	—	27
Japanese	2	—	—	2
Latvian	24	—	—	24
Norwegian	181	12	—	193
Portuguese	8	2	—	10
Rumanian	2	—	—	2
Russian	16	5	—	21
Spanish	45	1	—	46
Swedish	140	21	—	161
Yugo-Slav	22	—	—	22
Total	3,346	566	156	4,068

III.—CHARACTER OF TRADE.

Passenger Traffic.—The passenger traffic at the port is relatively small and casual and cannot be classified in the form prescribed by the Ministry of Health (*Table B*). The numbers of inward and outward passengers, all of whom travelled by cargo vessels, were 259 and 137 respectively.

Cargo Traffic.—The principal imports are iron ore, pitwood, fruit, vegetables, grain and provisions. The principal exports are coal, coke, patent fuel and flour. Amongst the countries and places with which the port trades mainly are Spain, France, Portugal, Italy, Norway, the Baltic Ports, United States of America, Argentina, Brazil, Canada and North Africa.

The following figures regarding imports and exports during 1928-37 have kindly been supplied by the Chief Docks Manager :—

Year	Imports (tons)	Exports (tons)
1928	1,730,940	8,970,143
1929	1,981,165	10,144,026
1930	1,711,970	8,963,328
1931	1,451,436	7,543,488
1932	1,185,010	6,944,230
1933	1,179,451	6,482,230
1934	1,250,725	6,584,936
1935	1,274,694	6,631,882
1936	1,560,034	5,530,620
1937	1,781,516	6,281,142

IV.—WATER SUPPLY.

The water supply for the port and shipping is derived entirely from the Cardiff Corporation supply by means of hydrants installed at convenient points.

Section 75 of the Cardiff Corporation Act, 1894, provides that " where the Medical Officer of Health of the Cardiff Port Sanitary Authority is satisfied that the water in any tank, cistern, cask or other fixed receptacle in any ship, vessel or boat within the district of that authority, used or likely to be used by man for drinking or domestic purposes, is so polluted as to be injurious to health, the Medical Officer of Health of such Authority may cause to be emptied and cleansed any such tank, cistern, cask or other fixed receptacle." This simplifies the procedure, because under section 140 of the Public Health Act, 1936, an order of a court of summary jurisdiction would first have to be obtained.

During the year, 119 samples of drinking water from ships were submitted to the Cardiff and County Public Health Laboratory for bacteriological examination, the results being as follows :—

Satisfactory	99
Moderate purity	15
Doubtful purity....	2
Contaminated	3
Total	119

Notices were served on the masters of the vessels having contaminated water or water of doubtful purity on board, and in all instances the tanks were emptied, cleansed, and refilled at this port.

V.—PORT SANITARY REGULATIONS, 1933.

The arrangements made for the operation of the Port Sanitary Regulations, 1933 were fully described in the annual report for 1933.

Wireless Installations.—The results of inquiries made during the year regarding the number of vessels carrying wireless installations (excluding vessels under 500 net registered tons) are shown in the following table :—

	Vessels arriving		Total
	From Foreign	Coastwise	
With Wireless	837	624	1,461
Without Wireless	269	140	409
Total	1,106	764	1,870

These inquiries have been undertaken since 1926, and it will be seen from the following table that there has been a slight increase in the proportion of vessels with wireless installations arriving at this port :—

Year	Percentage of Vessels with Wireless Installations		
	From Foreign	Coastwise	All Arrivals
1926	*67·3*	*52·1*	*63·9*
1927	*75·6*	*74·8*	*75·4*
1928	*78·6*	*67·0*	*75·4*
1929	*74·8*	*68·8*	*73·2*
1930	*69·9*	*72·0*	*70·5*
1931	*71·1*	*77·2*	*72·9*
1932	*67·1*	*69·2*	*67·8*
1933	*67·9*	*77·5*	*71·4*
1934	*69·7*	*77·8*	*72·8*
1935	*68·4*	*78·8*	*72·4*
1936	*75·2*	*81·3*	*77·8*
1937	*75·7*	*81·7*	*78·1*

Cases of Infectious Disease landed from Vessels.—The following table shows the nature of eight cases of notifiable infectious diseases landed from vessels during the year :—

Ministry of Health Table C.

Disease	Number of Cases during 1937		Number of Vessels concerned	Average Number of Cases for previous 5 years
	Passengers	Crew		
Pneumonia	—	1	1	0·6
Malaria	—	2	2	7·6
Tuberculosis	—	5	5	2·8

The cases referred to in the above table were dealt with as follows :—

Disease	Admitted to Royal Hamadryad Seamen's Hospital	Allowed to return Home	Treated aboard Ship	Total
Pneumonia	1	—	—	1
Malaria	—	1	1	2
Tuberculosis	4*	—	1	5
Total	5	1	2	8

* Three of these were subsequently repatriated.

Other Cases of Infectious Disease.—Nine other cases of infectious disease that were dealt with by the port health staff were ascertained to fall properly within the province of urban administration and were therefore referred to the districts to which they belonged, as follows :—

Disease	Cardiff	Barry	Total
Pneumonia	1	—	1
Malaria	2	1	3
Tuberculosis	5	—	5
Total	8	1	9

Cases of Infectious Disease occurring on Vessels during the Voyage but disposed of prior to Arrival.—Nineteen cases of infectious disease were reported to have occurred on 17 vessels during the voyage and were disposed of prior to arrival.

Ministry of Health Table D.

Disease	Number of Cases during 1937		Number of Vessels concerned	Average Number of Cases for previous 5 years
	Passengers	Crew		
Pneumonia	—	5	5	1·2
Dysentery	—	1	1	0·4
Malaria	—	11	9	6·8
Tuberculosis	—	2	2	2·4

Cleansing and Disinfection.—Thirty-seven seamen discovered to be suffering from scabies were treated at the Cleansing Station belonging to the Cardiff City Council, their clothing being disinfected at the Disinfecting Station, which is situated adjacently. One-hundred and fifty-three vessels were reported to be infested with bugs, and, after inspection, notices were served requiring the masters to take all necessary steps to eradicate them. Verminous or infected beds to the number of 1,377 were destroyed.

Venereal Diseases.—The following tabular statement shows the number of cases of venereal diseases dealt with at the special treatment centre for seamen at the Royal Hamadryad Seamen's Hospital each year since 1928 :—

Year	Persons attending at the Centre for the First Time					Total Attendances	Aggregate Number of In-patient Days
	Syphilis	Soft Chancre	Gonorrhoea	Conditions other than Venereal	Totals		
1928	205	83	344	14	646	15,347	3,195
1929	239	96	348	21	704	15,027	2,093
1930	235	112	367	17	731	12,670	1,639
1931	176	84	209	18	487	9,853	1,372
1932	198	95	297	19	609	10,004	1,707
1933	194	86	255	14	549	9,918	2,220
1934	190	90	285	25	590	9,717	2,185
1935	186	80	295	28	589	9,674	2,261
1936	164	93	324	20	601	9,455	2,312
1937	109	113	346	32	600	9,944	2,407

The treatment centre forms part of the scheme of the Cardiff City Council for the diagnosis and treatment of venereal diseases, and further details of the work undertaken during 1937 are contained in the report on the general health service of the city.

Twenty cases of venereal disease came to the knowledge of officers of the Authority during the year and were recommended for treatment at the centre.

Psittacosis.—The number of parrots dealt with under the Parrots (Prohibition of Import) Regulations, 1930, with the object of preventing the introduction of psittacosis, was 53.

VI.—MEASURES AGAINST RODENTS.

It is a routine duty of inspectors to examine all vessels carefully for evidence of rat infestation. Deratisation of vessels is carried out by sulphur dioxide or hydrocyanic acid gas, the work being undertaken by private contractors under the supervision of officers of the department. During the year, 1,331 rats were destroyed by this method, and, of these, 328 were submitted to the Cardiff and County Public Health Laboratory for examination for the detection of plague.

During 1937 the number of deratisation certificates issued was 121 and the number of deratisation exemption certificates issued was 288, making a total of 409. The fees received by the Port Health Authority in respect of certificates during the year amounted to £773 6s. 6d.

On all vessels from plague-infected ports and on all grain-laden vessels arriving at the port a rat-catcher is employed. By this means 365 rats were caught, 94 of which were examined for plague.

In order to prevent the passage of rats from ships to the shore, the use of rat-guards on mooring ropes is insisted upon, and gangways are raised at night-time whenever possible. Advice regarding the rat-proofing of vessels is given to masters and other officers of ships.

Systematic visits are paid by inspectors to quays, wharves and warehouses in the vicinity of the docks, and owners and occupiers are advised as to the best means of eradicating rodents. In most instances warehouses are reasonably rat-proof, possessing concrete floors and sliding, close-fitting doors. The importance of rendering all buildings near the docks rat-proof is constantly emphasised on owners and occupiers by the inspectors.

Extensive baiting around the docks is undertaken systematically by the dock owners (the Great Western Railway Company) and by owners and occupiers of premises in the vicinity of the docks under the supervision of officers of the department. During the year, 190,409 poison baits were laid and 707 rats and 32 mice were found dead as a result of these measures.

For the purpose of surveying the area around the docks for rats periodically, the district is divided into four areas, as follows :—

No. 1. Penarth Dock, Windsor Slipway to Glamorganshire Canal Entrance.

No. 2. Glamorganshire Canal, West Dock to West Side of East Dock.

No. 3. East Side of East Dock to North Side of Roath Dock.

No. 4. South Side of Roath Dock, Roath Basin and Queen Alexandra Dock.

A rat-catcher is engaged for a period of one week on each area. Traps are set and the live rats caught are submitted to the Department of Zoology of the National Museum of Wales for classification and for identification of their parasitic fleas and later to the Cardiff and County Public Health Laboratory to be examined for plague.

The whole district is surveyed in this way at least once every four weeks, and valuable information is being obtained as to the prevalance of rats, their species and the extent of their infestation by fleas. During the year, 61 rats were caught under this scheme, of which 19 were submitted for classification and for examination for plague.

Leaflets containing full information regarding deratisation of ships are issued to (*a*) shipowners and shipping agents and (*b*) fumigation contractors.

The following table shows the numbers of deratisation and deratisation exemption certificates issued during each year since 1929 :—

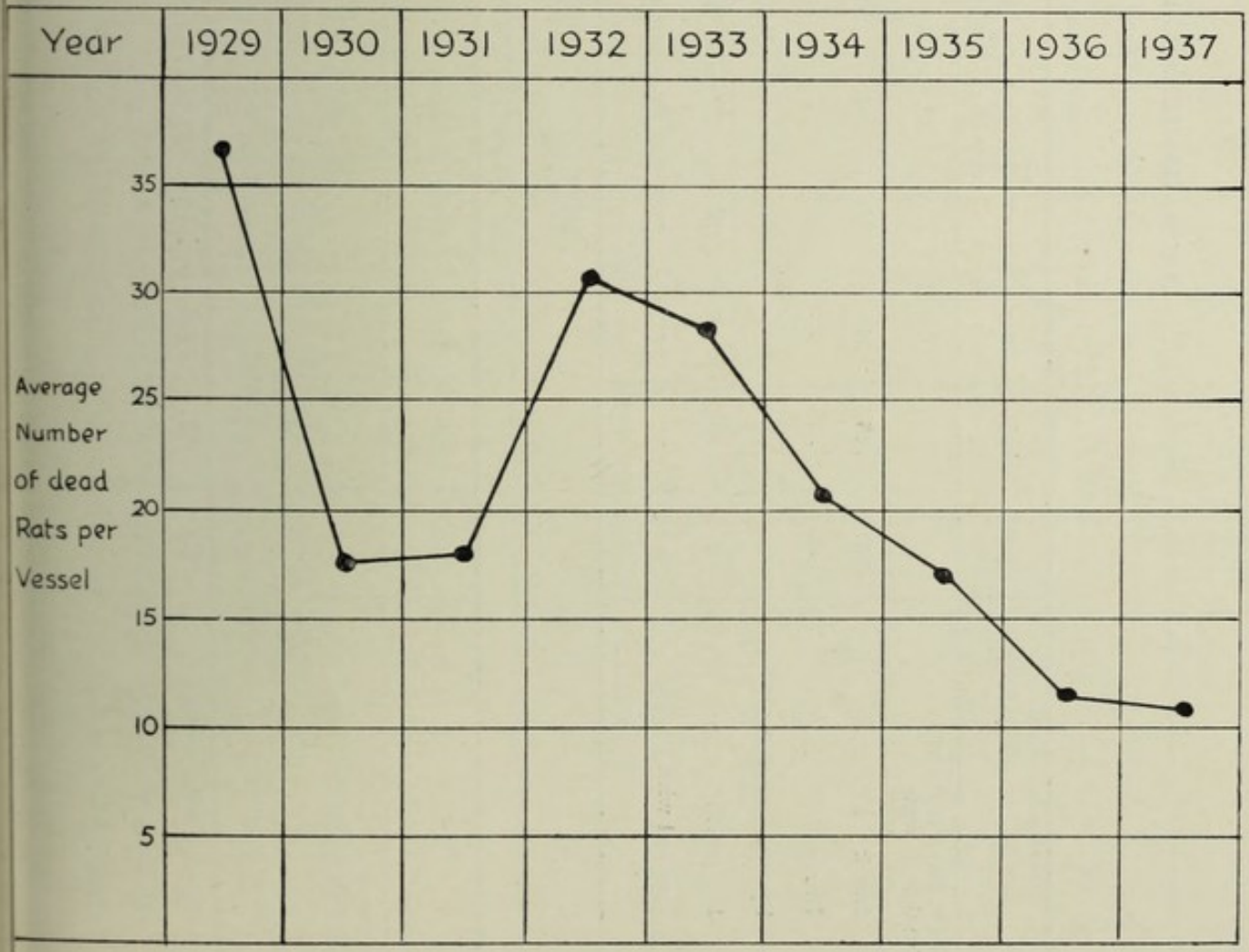
Year	Deratisation Certificates		Deratisation Exemption Certificates		Total
	Number	Percentage	Number	Percentage	
1929	181	*62*	110	*38*	291
1930	236	*36*	420	*64*	656
1931	195	*32*	407	*68*	602
1932	121	*23*	411	*77*	532
1933	124	*26*	353	*74*	477
1934	126	*28*	328	*72*	454
1935	109	*23*	357	*77*	466
1936	126	*30*	295	*70*	421
1937	121	*30*	288	*70*	409

The increase in the numbers during 1930 was due to the effect of the Public Health (Deratisation of Ships) Regulations, 1929, which became operative on 1st January, 1930, but which have since been replaced by the Port Sanitary Regulations, 1933.

The following table shows the number of fumigations of vessels, the total number of dead rats found after fumigation and the average number of dead rats found per vessel during each of the years 1929-1937 :—

Year	Number of Fumigations of Vessels	Total number of Rats found dead after Fumigation	Average Number of dead Rats found per Vessel
1929	181	6,697	37 ·00
1930	236	4,241	17 ·97
1931	195	3,530	18 ·10
1932	121	3,725	30 ·79
1933	124	3,532	28 ·48
1934	126	2,584	20 ·51
1935	109	1,908	17 ·50
1936	126	1,517	12 ·04
1937	121	1,331	11 ·00

Diagram showing the decline in the average number of dead rats found per vessel after fumigation since 1929 :—



Rats Destroyed during 1937.

Ministry of Health Table E.

(*a*) *Vessels.*

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total in Year
Number of Rats—													
Black	167	145	313	78	61	283	64	124	218	117	92	34	1,696
Brown	—	—	—	—	—	—	—	—	—	—	—	—	—
Species not recorded	—	—	—	—	—	—	—	—	—	—	—	—	—
Examined	27	49	46	21	22	36	18	37	50	44	48	24	422
Infected with Plague	—	—	—	—	—	—	—	—	—	—	—	—	—

Ministry of Health Table F.

(*b*) Docks, Quays, Wharves and Warehouses.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total in Year
Number of Rats—													
Black	9	14	1	10	2	—	—	9	—	2	—	2	49
Brown	—	—	—	—	—	2	6	—	—	—	4	—	12
Species not recorded	111	107	17	14	180	46	31	44	39	38	39	41	707
Examined	2	—	—	6	2	2	1	4	—	1	—	1	19
Infected with Plague	—	—	—	—	—	—	—	—	—	—	—	—	—

Ministry of Health Table G.

MEASURES OF RAT DESTRUCTION ON PLAGUE "INFECTED" OR "SUSPECTED" VESSELS OR VESSELS FROM PLAGUE-INFECTED PORTS ARRIVING IN THE PORT DURING THE YEAR.

Total Number of such Vessels arriving	Number of such Vessels fumigated by SO_2	Number of Rats killed	Number of such Vessels fumigated by HCN	Number of Rats killed	Number of such Vessels on which trapping, poisoning, &c., were employed	Number of Rats killed	Number of such Vessels on which measures of Rat destruction were not carried not
1	2	3	4	5	6	7	8
89	4	154	2	74	10*	162	78

*Three of these were also fumigated by SO_2 and two by HCN and are included in columns 2 and 4.

Ministry of Health Table H.

DERATISATION CERTIFICATES AND DERATISATION EXEMPTION CERTIFICATES ISSUED DURING THE YEAR.

NET TONNAGE	Number of Ships	Number of Deratisation Certificates issued					Number of Deratisation Exemption Certificates Issued	Total Certificates Issued
		After fumigation with			After Trapping, Poisoning, etc.	Total		
		HCN	Sulphur	HCN and Sulphur				
1	2	3	4	5	6	7	8	9
Ships up to 300 tons	81	—	—	—	—	—	81	81
,, from 301 tons to 1,000 tons	56	1	1	—	—	2	54	56
,, from 1,001 tons to 3,000 tons	176	14	63	—	—	77	99	176
,, from 3,001 tons to 10,000 tons	96	10	32	—	—	42	54	96
,, over 10,000 tons	—	—	—	—	—	—	—	—
Total	409	25	96	—	—	121	288	409

Graphic Method for Recording Rat Harbourage on Vessels.—There has been a very marked decline in the rat population of vessels since the Public Health (Deratisation of Ships) Regulations, 1929, became operative. Regular inspection and, when necessary, fumigation of ships are showing excellent results. Nevertheless, it is highly desirable that a determined effort should be made towards the eradication of conditions on ships which afford the rat an opportunity of colonisation. The port sanitarian and the shipowner should in this respect have a common object, for by reducing the rat harbourage to a minimum the necessity of repeated fumigation will be obviated, thereby bringing about a considerable reduction in delay and expense to shipping. There are numerous factors which have a direct bearing upon the rat population on ships. It is not uncommon for a vessel which has a large amount of harbourage repeatedly to be found free of rats, because it is in a trade route where the opportunities for rats to gain access are not great. It is a fact, however, that vessels which are well rat-proofed may carry cargo and trade with ports which are known to offer the maximum opportunity for the rats to establish themselves on the ship, but, in spite of this, they have repeated exemptions from fumigation, simply because the rats find conditions on the ship inimical to reproduction and colony formation.

Port Health Authorities should make it their business not only to examine vessels thoroughly for the presence of rats, but also to form a very good estimate as to the potential sources of rat harbourage on ships which visit their ports. Certain ports in the United States of America have instituted a method of recording in a graphic manner the rat harbourage found, by indicating on a sketch of the vessel the actual sites where rat harbourage exists. A modification of this procedure has been carried out in Cardiff during 1937. The port sanitary inspectors, when carrying out inspections for exemption or deratisation certificates, at the same time record, on special cards devised for the purpose, the situations where rats are likely to find temporary or permanent harbourage. A reproduction of one of the cards faces this page. A coloured stamp is placed on the approximate situation of the harbourage, and the appropriate number designating the type of harbourage is placed over the stamp. The stamp is in three colours (blue, green and red) indicating slight, moderate and gross rat harbourage.

The potentialities of the harbourage are classified as slight, moderate and gross. The assessment of degree is bound to vary with the individual inspector who carries out the inspection, but with the exchange of information amongst the different inspectors a very useful degree of unification in procedure has been established. In general the term " slight harbourage " is used to designate situations where a rat is not likely to remain undisturbed for a prolonged period when the ship is in normal traffic or where there is not much shelter for it. " Moderate harbourage " indicates that the rat may remain undisturbed for a longer period, but that conditions are not ideal for the establishment of a colony. " Gross harbourage " indicates that conditions prevail which would offer ample opportunity for rat colonisation should the rodents once gain access. Definition of rat harbourage, considered in conjunction with rat infestation in the forms of droppings, runways, tracks, gnawings, live rats, dead rats, nests and rat odour, forms an essential part of the fumigation process. The precise knowledge gained by completing the graphic record furnishes the inspector with invaluable information when supervising fumigation. It serves to focus effort upon the situations that offer the rat an opportunity of escaping from lethal concentration of the fumigant.

During 1937 the number of vessels regarding which the locations and degrees of rat harbourage were graphically recorded was 306. The results for vessels under and over 1,500 net registered tonnage are given on page 124. From the results it will be observed that the smaller vessel has less rat harbourage. This is accounted for largely by the fact that a great number of the small craft have the engines situated astern, while the cargo space consists of one large hold offering a minimum degree of harbourage for rats. Gross harbourage was found most commonly in the following sites in the large and small vessels :—(1) Ceiling over tank top and bilges, (2) cased spaces at ship's side

1. Ceiling over tank top and bilges.
2. Cased spaces at ship's side in lower holds and 'tween decks.
3. Wooden linings in holds and 'tween decks.
4. Bulkhead casings.
5. Insulated holds and 'tween decks.
6. Casings around stanchions.
7. Vertical pipe casings.
8. Horizontal pipe casings.
9. Forepeak stores.
10. Engineers' storerooms.
11. Refrigerating rooms and ice boxes.
12. Lifebelt boxes.
13. Firehose boxes.
14. Provision storerooms.
15. Potato lockers.
16. Underdeck casings.
17. Overhead insulation.
18. Galley fixtures.
19. Lockers in saloon.
20. Lockers in officers' berths.
21. Washstands.
22. Screens over steam heaters.
23. Lockers in alleyways.
24. Double bulkheads.
25. Casings in crew accommodation.
26. Ventilating trunks.
27. Raised wooden platforms in shaft alley.
28. Lockers.
29. Afterpeak stores.
30. Raised transom in poop.
31. Lifeboats.

S.S. .....

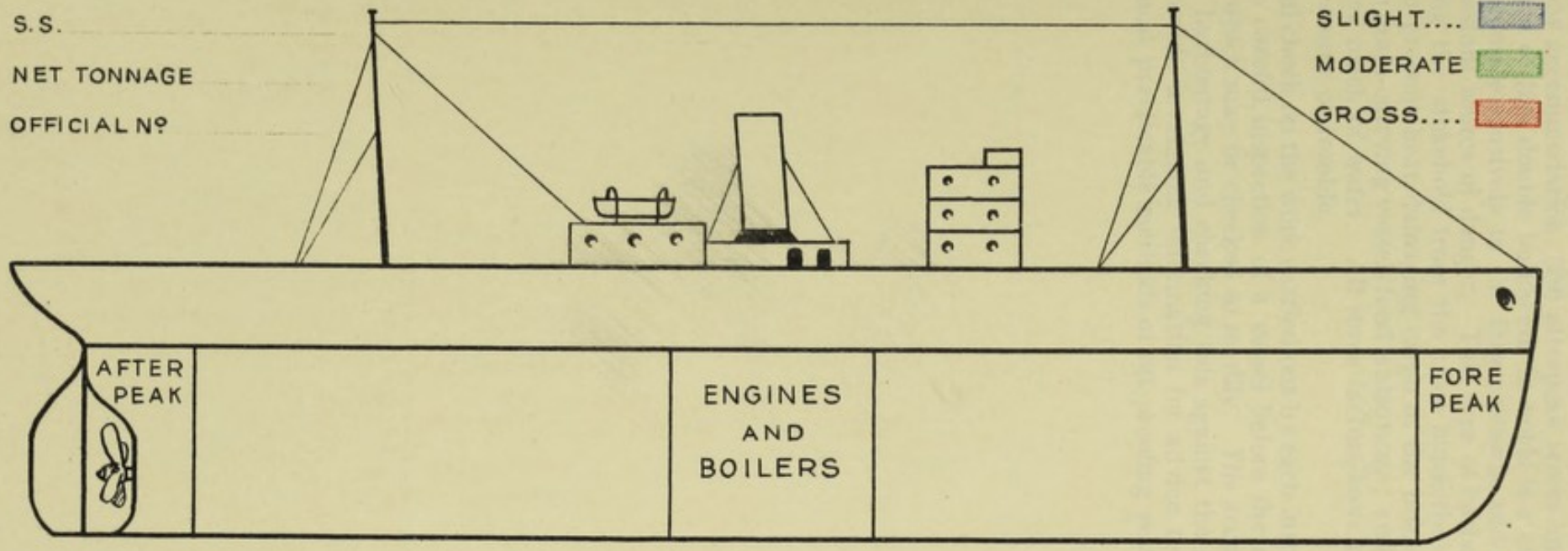
NET TONNAGE .....

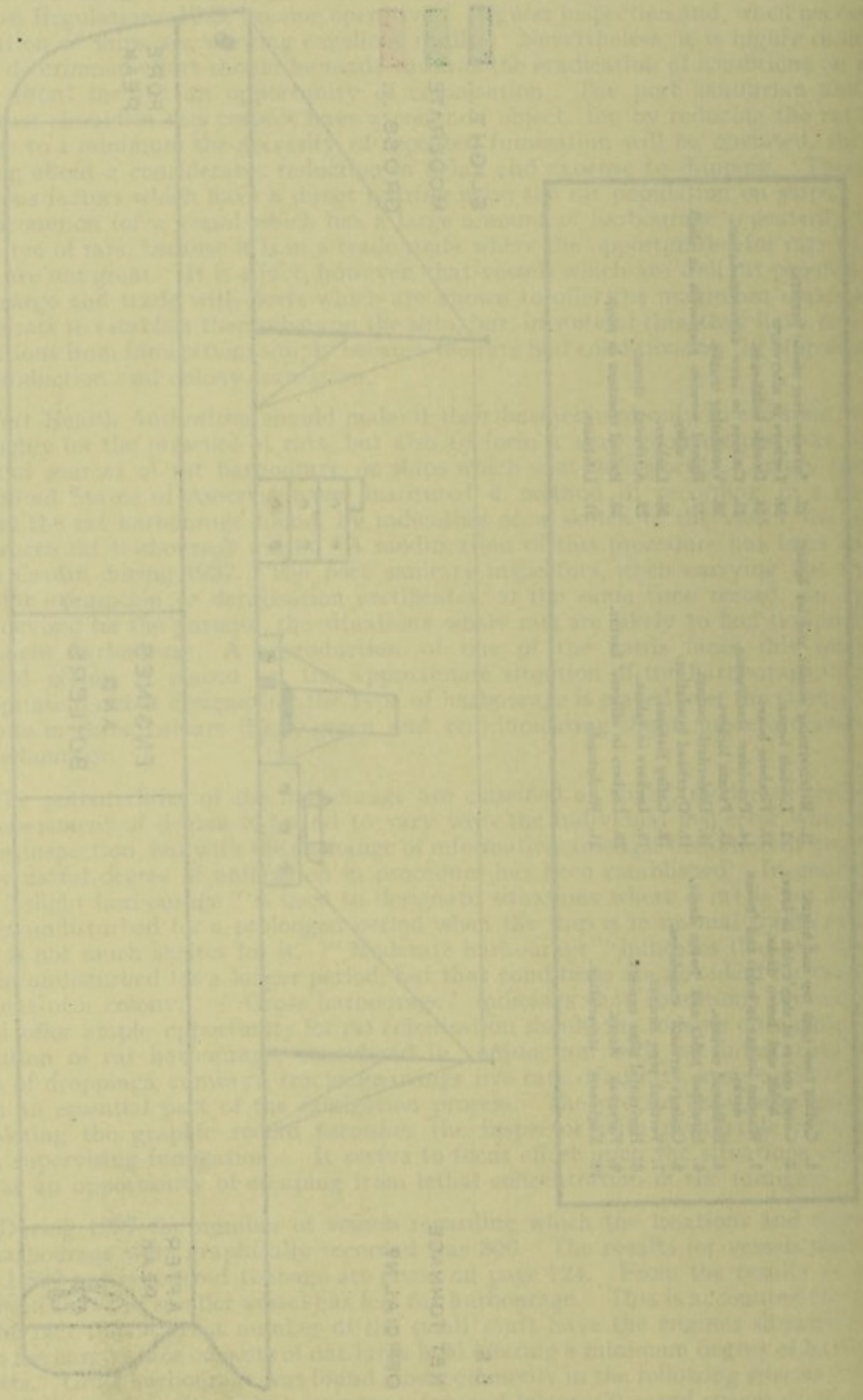
OFFICIAL Nº .....

SLIGHT.... ▨

MODERATE ▨

GROSS.... ▨





in lower holds and 'tween decks, (3) wooden linings in holds and 'tween decks, (4) bulkhead casings, (25) casings in crew accommodation, (29) afterpeak stores and (30) raised transom in poop. The presence of (24) double bulkheads in holds is a class of harbourage which has been found almost exclusively in the larger vessels, and unless this is carefully rat-proofed it is a constant source of danger. This type of harbourage is usually on the bulkhead separating the stokehold from the cross bunkerhold, the wooden insulation being so placed to prevent heat damaging cargo in the hold. The warmth seems to attract the rat, and in grain-carrying vessels food is also near ; and being so near the stokehold it is within easy reach of water. All these factors have tended to make this harbourage a constant source of trouble.

The system provides a most useful check on the work carried out by each inspector, and certainly provides a stimulus to careful inspection of a vessel before the results are committed to paper in a manner which may be checked so readily. The accumulation of detailed data concerning rat harbourage and checking this against the actual results of fumigation should also provide invaluable information for advice to shipowners with regard to the best and most practicable methods of rat-proofing vessels.

Location and Degrees of Rat Harbourage.

Site of Harbourage	126 Vessels under 1 500 Net Tonnage						180 Vessels over 1 500 Net Tonnage					
	Slight		Moderate		Gross		Slight		Moderate		Gross	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
1. Ceiling over tank top and bilges	8	*6·3*	13	*10·3*	69	*54·7*	3	*1·7*	22	*12·2*	141	*78·3*
2. Cased spaces at ship's side in lower holds and 'tween decks	13	*10·3*	7	*5·5*	14	*11·1*	51	*28·3*	27	*15·0*	24	*13·3*
3. Wooden linings in holds and 'tween decks	4	*3·2*	9	*7·1*	23	*18·2*	11	*6·1*	14	*7·7*	54	*30·0*
4. Bulkhead casings	13	*10·3*	2	*1·6*	4	*3·2*	60	*33·3*	8	*4·4*	13	*7·2*
5. Insulated holds and 'tween decks	—	—	—	—	—	—	5	*2·7*	1	*0·6*	2	*1·1*
6. Casings around stanchions	30	*23·8*	3	*2·4*	1	*0·8*	97	*53·8*	6	*3·3*	—	—
7. Vertical pipe casings	46	*36·5*	4	*3·2*	1	*0·8*	112	*62·2*	11	*6·1*	—	—
8. Horizontal pipe casings	33	*26·2*	7	*5·5*	—	—	86	*47·8*	9	*5·0*	—	—
9. Forepeak stores	64	*50·8*	32	*25·4*	1	*0·8*	77	*42·8*	96	*53·3*	2	*1·1*
10. Engineers' storerooms	70	*55·5*	28	*22·2*	—	—	80	*44·4*	93	*51·7*	1	*0·6*
11. Refrigerating rooms and ice boxes	10	*7·9*	10	*7·9*	—	—	46	*25·5*	68	*37·8*	—	—
12. Lifebelt boxes	44	*34·9*	4	*3·2*	—	—	113	*62·8*	10	*5·5*	—	—
13. Firehose boxes	34	*27·0*	4	*3·2*	—	—	109	*60·5*	9	*5·0*	—	—
14. Provision storerooms	69	*54·7*	22	*17·4*	1	*0·8*	94	*52·2*	83	*46·1*	1	*0·6*
15. Potato lockers	35	*27·7*	4	*3·2*	—	—	95	*52·7*	27	*15·0*	—	—
16. Underdeck casings	21	*16·6*	5	*4·0*	—	—	99	*55·0*	18	*10·0*	1	*0·6*
17. Overhead insulation	21	*16·6*	4	*3·2*	—	—	74	*41·1*	13	*7·2*	—	—
18. Galley fixtures	48	*38·1*	33	*26·2*	—	—	50	*27·7*	101	*56·1*	—	—
19. Lockers in saloon	48	*38·1*	43	*34·1*	1	*0·8*	48	*26·6*	119	*66·1*	1	*0·6*
20. Lockers in officers' berths	48	*38·1*	45	*35·7*	—	—	66	*36·6*	103	*57·2*	1	*0·6*
21. Washstands	27	*21·4*	32	*25·4*	—	—	42	*23·1*	99	*55·0*	—	—
22. Screens over steam heaters	1	*0·8*	3	*2·4*	—	—	3	*1·7*	9	*5·0*	—	—
23. Lockers in alleyways	2	*1·6*	2	*1·6*	—	—	19	*10·5*	10	*5·5*	—	—
24. Double bulkheads	1	*0·8*	1	*0·8*	1	*0·8*	3	*1·6*	14	*7·8*	14	*7·8*
25. Casings in crew accommodation	51	*40·5*	34	*27·0*	9	*7·1*	115	*63·9*	48	*26·6*	7	*3·8*
26. Ventilating trunks	—	—	1	*0·8*	1	*0·8*	6	*3·3*	7	*3·8*	—	—
27. Raised wooden platforms in shaft alley	18	*14·3*	33	*26·2*	—	—	22	*12·2*	119	*66·1*	4	*2·2*
28. Lockers	26	*20·6*	28	*22·2*	—	—	31	*17·2*	87	*48·3*	—	—
29. Afterpeak stores	27	*21·4*	20	*15·8*	3	*2·4*	63	*35·0*	61	*33·9*	35	*19·4*
30. Raised transom in poop	—	—	3	*2·4*	6	*4·8*	3	*1·6*	38	*21·1*	34	*18·9*
31. Lifeboats	40	*31·7*	60	*47·6*	—	—	26	*14·4*	138	*76·7*	3	*1·7*

VII.—HYGIENE OF CREW SPACES, ETC.

During the year, 4,068 vessels, with a total tonnage of 3,920,473, were visited by inspectors on arrival or as soon afterwards as practicable. The number of persons in the crews carried by these vessels was 73,987. In addition, 4,270 re-inspections of ships in dock were made, and 512 orders were given to masters and others in connection with nuisances and sanitary defects.

Ministry of Health Table J.

CLASSIFICATION OF NUISANCES.

Nationality of Vessel	Number Inspected during the year	Defects of original construction	Structural defects through wear and tear	Dirt, vermin and other conditions prejudicial to health
British	702	37	596	880
Other Nations	466	72	304	167

The following table shows the number of the defects referred to in the preceding table which were remedied during the year :—

Nationality of Vessel	Defects of original construction	Structural defects through wear and tear	Dirt, vermin and other conditions prejudicial to health
British	17	518	874
Other Nations	25	230	160

The defects and nuisances dealt with during 1937 were as follows :—

Insufficient ventilation	68
,, lighting	16
Defective ventilators	57
,, skylights and deck-lights	20
,, steam heaters, stoves, stove-pipes, etc.	97
,, sanitary conveniences, flushes, etc.	139
,, side ports, deck-prisms, etc.	264
,, bulkheads	10
,, floors	30
,, doors	16
,, bunks and bedsteads	33
,, food-lockers	118
,, baths, wash-hand basins and waste-pipes	42
,, drain pipes	10
,, cable casings	10
,, hawse-pipes	9
Leaking decks	70
Verminous crew quarters	265
Dirty crew quarters	344

Dirty messrooms	91
,, food-lockers	99
,, sanitary conveniences....	122
,, bathrooms and wash-houses	33
,, fresh-water tanks	10
Foul bilges	5
Foul accumulations	55
Miscellaneous	23
Total	2,056

Owing to more detailed inspections of vessels, greater numbers of structural defects and of conditions attributed to dirt and vermin have been recorded than in preious years.

During 1937 a number of recently constructed vessels arrived at the port, and it is satisfactory to be able to record that on each of them much thought had been directed to improvement in the construction of the accommodation for crew. In these new vessels central heating installation for the heating of berths, messrooms, drying rooms and wash-houses was provided, and improved ventilation and lighting and the provision of separate messrooms, food-lockers, clothes-lockers, oilskin-lockers, wash-houses and water-closets of the pedestal type, with adequate flushing arrangements, were also notable features.

Although the improvement made in the crew accommodation on new vessels is gratifying, there is much leeway to be made up on the older type of vessel. This question is receiving the close attention of the department and, with the co-operation of the Board of Trade, several vessels have been reconditioned in order to bring them as near as possible to the standard laid down for new vessels. The co-operation and assistance of the Principal Officer and the Surveyors of the Board of Trade have been invaluable and are very much appreciated.

VIII.—FOOD INSPECTION.

Examination of imported food is carried out by the food inspectors in the dock-side warehouses and occasionally on board ships.

The principal food imports during the year were from Australia and New Zealand and consisted of beef, mutton, pork, lamb, offal, butter, cheese, flour and fresh and dried fruits. From Canada and United States of America lard, cheese, flour, cereals, canned meats, fruit and fish were imported, and from European countries condensed milk, cheese, bacon, fresh tomatoes, canned tomatoes, dried and canned fruits and vegetables. Additional to these direct imports, large quantities of foodstuffs, trans-shipped at other ports in the United Kingdom, arrived by coastwise traffic.

A percentage examination of all food is made. If the food examined is found to be in good condition, the whole consignment is released for distribution, but if found to be diseased or unsound the whole consignment is detained until a complete examination is carried out. Diseased and unsound articles of food are destroyed under the supervision of the food inspectors. Samples of foodstuffs are submitted to the Public Analyst and to the Bacteriologist for examination. Importers also carry out a trade examination of their goods in the warehouses under the supervision of the food inspectors.

A preliminary inspection of meat imports is carried out in the transit sheds on the dock-sides, the importers then being allowed to transfer the cargo to the local cold stores, where a further examination is made. The glandular examination of carcases of mutton and of lamb carcases weighing over 42 lb. was continued, but very few cases of caseous lymphadenitis were found.

Imported Foodstuffs.—The quantities of various kinds of foodstuffs imported during the year are shown in the following table :—

Description	Tons	cwt.	Bags	Bales	Barrels	Boxes	Miscellaneous
Bacon	—	—	—	3,149	—	—	—
Barley	—	—	1,230	—	—	—	—
Biscuits	—	—	130	—	—	3	76 skips
Butter	—	—	—	—	190	19,660	—
Caraway Seed	—	—	3	—	—	—	—
Cereals	5	—	80	—	—	23,073	—
Cheese	—	—	—	—	—	30,589	—
Chicory	—	—	—	—	—	25	—
Coffee	—	—	28	—	—	100	—
Condiments	—	—	20	—	—	53,185	—
Confectionery	—	—	—	—	—	525	—
Cream, Canned	—	—	—	—	—	6,060	—
Eggs	—	—	—	—	—	110	—
Fat, Edible	—	—	2,024	10	599	4,330	—
Fish, Canned	—	—	—	—	—	566	—
Fish, Dried	—	—	—	41	—	—	—
Fish, Fresh	5,855	14	—	—	—	—	—
Fish, Pickled	59	—	—	—	16	—	—
Fish, Salted	—	—	340	—	—	—	—
Flour	56	—	41,330	—	—	—	—
Fruit, Canned	—	—	—	—	—	34,478	—
Fruit, Dried	—	—	—	—	—	7,100	—
Fruit, Fresh	17	—	—	—	55,418	287,840	250 baskets
Fruit Juice	—	—	—	—	100	—	—
Fruit Pulp	—	—	—	—	199	—	—
Glucose	—	—	—	—	85	—	—
Hops	—	—	—	33	—	—	—
Honey	—	—	—	—	—	1	—
Lard	—	—	—	—	—	28,074	—
Macaroni	—	—	—	—	—	5,862	825 packets
Malt	—	—	50	—	—	—	—
Margarine	—	—	—	—	—	32,725	—
Meat, Canned	—	—	—	—	—	12,115	—
Meat, Preserved	—	—	—	—	—	29	—
Milk, Canned	—	—	—	—	118	107,722	—
Milk Dried	—	—	—	—	—	30	—
Nuts	—	—	154	—	—	—	—
Oats, Rolled	—	—	1,467	—	—	43,294	—
Olive Oil	—	—	—	—	14	6	—
Rice	—	—	1,519	—	—	—	—
Salt	—	—	320	—	—	—	—
Sugar	5,870	—	15,467	—	—	300	—
Tomatoes, Canned	—	—	—	—	—	7,066	—
Tomato Juice	—	—	—	—	—	25	—
Vegetables, Canned	—	—	—	—	—	77,301	—
Vegetables, Dried	—	—	14,696	—	—	—	—
Vegetables, Fresh	—	—	277,177	—	—	1,439	33,917 baskets
Vegetables, Salted	—	—	—	—	1,369	—	12,115 drums
Wheat	85,547	—	—	—	—	—	—
Wine	—	—	—	—	304	4	—
Yeast	—	—	—	—	—	35	—

Imported Meat.—In addition to the foodstuffs already referred to, seven cargoes of frozen meat were imported, the quantities being as follows :—

Carcases of lamb	72,074
Carcases of mutton	15,479
Carcases of pork	3,643
Carcases of veal	68
Quarters of beef	16,692
Quarters of veal	108

Sides of pork	8
Boneless beef (bags)	756
Sundries—hearts, livers, tongues, etc. (bags)	681
Calf livers (bags)	1,382
Ox livers (boxes)	3,209
Ox kidneys (boxes)	1,097
Ox tails (boxes)	967
Offal (boxes)	20
Offal (bags)	1,180

The quantities of various kinds of foodstuffs withheld from human consumption during the year were as follows :—

	Tons	cwt.	lb.
Cereals	—	—	10½
Fish, Canned	—	—	1½
Fruit, Canned	2	10	76¼
Fruit, Dried	—	7	65
Fruit, Fresh	81	8	80
Lard	—	—	57
Meat, Canned	—	1	90¾
Meat, Preserved	—	17	111
Milk, Canned	—	3	67½
Milk, Dried	—	4	32
Sugar	1	4	0
Vegetables, Canned	1	16	75
Vegetables, Fresh	119	19	0
Wheat	24	1	102
Total	232	16	96½

Public Health (*Imported Food*) *Regulations*, 1925, *Public Health* (*Imported Food*) *Amendment Regulations*, 1933, *and Public Health* (*Preservatives, etc., in Food*) *Regulations*, 1925-27.—During the year, 47 samples of imported food were submitted to the Public Analyst for analysis. The nature, country of origin and number of samples are shown in the following table :—

Nature	Country of Origin	Number of Samples
Cherries, Canned	Italy	1
Dried Apricots	America	1
Dried Figs	Greece	1
Dried Figs	Turkey	2
Dried Peaches	America	1
Lemon Juice	Italy	1
Pea Flour	Scotland	1
Raisins	America	31
Raisins	South Africa	1
Raisins	Spain	1
Sardines	Morocco	1
Sardines	Portugal	1
Sultanas	Greece	1
Sausage Casings	Holland	1
Tomato Ketchup	Canada	1
Tongue, Canned	Germany	1

Forty-two of the samples were reported to be genuine or to contain preservatives within the limits laid down by the Public Health (Preservatives, etc., in Food) Regulations, and five samples of raisins were reported to contain preservatives in excess of the prescribed limits. The consignments of raisins, comprising 950 cases from America, which contained an excess of preservatives were re-exported.

Bacteriological and Chemical Examinations.—Three samples were submitted for bacteriological examination. The nature, country of origin and number of samples are shown in the following table :—

Nature of Sample	Country of Origin	Number or Samples	
		Bacteriological	Chemical
Tongue, Canned	Germany	1	—
Veal, Canned	Denmark	2	—

The sample of canned tongue proved to be approximately sterile, the physical characters being normal. The samples of canned veal showed no evidence of bacterial growth and no gas pressure when opened, and the physical characters were good.

Public Health (Imported Milk) Regulations, 1926.—No fresh milk was imported during the year.

Public Health (Shell-fish) Regulations, 1934.—There are no shell-fish beds or layings within the area under the jurisdiction of the Port Health Authority.

IX.—MISCELLANY.

Medical Inspection of Aliens.—The following is a summary of the work done during the year in connection with the medical inspection of aliens :—

	Total Number.	*Number Inspected by Medical Inspectors.*
Aliens (excluding alien seamen) landing at the port	214	100
Aliens refused permission to land by Immigration Officer	17	—
Totals	231	100
Number of vessels carrying alien passengers		74
Number of such vessels dealt with by the Medical Inspector		17

Analysis of aliens landing :—		
Residents returning	2	
In transit	6	
Visitors	66	
Business	97	
Seamen	39	
Ministry of Labour permit—Males	3	
Ministry of Labour permit—Females	1	
Coming to settle, not holding Ministry of Labour permit	—	
Total		214

Of the 100 aliens medically inspected, 77 who intended taking up employment and remaining in the country over three months and one who came for educational purposes were referred by the Immigration Officer for detailed medical examination.

Diseases of Animals Acts, etc.—The various orders under the Diseases of Animals Acts with reference to the importation of animals were strictly enforced during the year. Two hundred and forty-nine dogs and 628 cats were brought to the port on vessels, and two vessels arrived direct from scheduled countries with three sheep and three pigs on board. All the vessels were visited regularly during their stay in port to ensure that the requirements of the Orders were observed.

One hundred and fifty-nine horses, 65 pit ponies and 2,363 head of cattle were landed at the Imported Animals Wharf during the year from Canada.

Cardiff is one of the comparatively few ports in Great Britain at which live cattl- may be imported, being licensed for this purpose by the Board of Agriculture and Fisheries. Every facility is provided for this important branch of the import trade, and the advantages offered at Cardiff have attracted during the past few years many consignments of live cattle from Canada, South Africa, and Ireland.

Considerable extensions have been carried out at the cattle lairs, where modern lairage for 760 fat or 950 light head of cattle is available. New offices have also been provided for the officers of the Ministry of Agriculture and Fisheries and representatives of the various merchants connected with the trade.

Canal Boats.—The Chief Port Sanitary Inspector, who is also Inspector of Canal Boats, has reported that he made 57 inspections of canal boats during the year and found infringements of the Regulations made under the Canal Boats Act, 1877, regarding painting in six instances. Verbal instructions were given, and the infringements in each case were remedied. The number of boats (not propelled by motor) on the register was seven, each with accommodation for two males. The sanitary condition of the canal boats generally was satisfactory.

SCHOOL MEDICAL SERVICE.

I.—STAFF.

The medical staff consists of the School Medical Officer, a Deputy Medical Officer and nine Assistant Medical Officers (including two who are engaged in a part-time capacity). The members of the medical staff devote part time only to the school medical service, as they are also engaged in the work of other sections of the Public Health Department. The staff-time devoted by the Deputy Medical Officer and Assistant Medical Officers to the school medical service is equivalent to the whole time of four medical officers. There are in addition three part-time Specialist Medical Officers—Ophthalmic, Orthopaedic and Aural Surgeons.

The other staff engaged in the school medical service comprises five Dentists, five Dental Clerk-Attendants, a Supervisor of Nurses, 11 School Nurses, a Chief Clerk and 10 Clerks (seven of whom are females). The Supervisor of Nurses, two of the Nurses who are engaged in orthopaedic work and the Chief Clerk are also employed in other sections of the department.

Dr. G. E. Phillips, Assistant Medical Officer, who was employed in a temporary capacity from 1st October, 1936, was appointed permanently in December, 1937, as from 1st January, 1938. Mr. H. B. Wilson, Dentist, resigned on 30th September, 1937, and his place was taken by Mr. C. N. Howitt on 14th October, 1937. An additional Dentist (Mr. P. G. Oliver) and a Dental Clerk-Attendant were appointed and commenced duty on 13th September, 1937. The only other changes of staff that occurred were in the personnel of the two part-time Assistant Medical Officers on 1st October, 1937, and in the personnel of the clerical staff.

II.—CO-ORDINATION.

The school medical service is very completely co-ordinated with all other public health work under the Medical Officer of Health, who is also School Medical Officer. The service is also carried on in close co-operation with the Education Department (including school attendance officers), head teachers and all voluntary agencies in Cardiff concerned with the health and welfare of school children.

III.—SCHOOL HYGIENE.

The Public Works Department of the City Council is primarily responsible for the sanitary and structural condition of school buildings. Defects found by medical officers and sanitary inspectors, however, are reported to the Director of Education, by whom they are referred to the appropriate committee to be remedied.

IV.—MEDICAL INSPECTION.

Routine medical inspection of the following groups of children attending elementary schools was undertaken during the year, as required by the Board of Education :—

(*a*) Entrants, within 12 months of admission.

(*b*) Second age group, i.e., children between the ages of 8 and 9 years.

(*c*) Third age group, i.e., children who had attained the age of 12 years.

Routine medical inspections are carried out at the schools and the parents of children to be examined are notified beforehand and invited to be present. Children outside the routine age groups who are considered by head teachers to require special attention are presented for inspection at the time routine inspections take place. Most of the special inspections, however, are conducted at the school clinics.

The numbers of elementary school children inspected at routine medical inspections were as follows :—

	Boys	Girls	Total
Entrants (within 12 months of admission)	1,650	1,620	3,270
Second Age Group (8 to 9 years)	1,459	1,479	2,938
Third Age Group (over 12 years)	1,318	1,338	2,656
Other Routine Inspections	64	36	100
Total	4,491	4,473	8,964

The number of elementary school children specially inspected and the number of re-inspections undertaken were as follows :—

		Boys	Girls	Total
Special Inspections	At School	230	336	566
	At School Clinic	2,576	3,010	5,586
	Total	2,806	3,346	6,152
Re-inspections	At School	549	617	1,166
	At School Clinic	2,363	2,974	5,337
	Total	2,912	3,591	6,503

V.—FINDINGS OF MEDICAL INSPECTION.

Details of the diseases and defects found by routine and special medical inspection are given in Table IIA, page 158. Of the 8,964 elementary school children inspected at routine inspections, 1,942, or 21·6 per cent., were found to require treatment (excluding defects of nutrition, uncleanliness and dental disease). The percentages of the three groups requiring treatment, as compared with the percentages for the two previous years, were as follows :—

Age Groups	Percentage of Children found to require Treatment		
	1935	1936	1937
Entrants (within 12 months of admission)	*18·2*	*17·6*	*19·8*
Second Age Group (8 to 9 years)	*22·2*	*19·0*	*22·3*
Third Age Group (over 12 years)	*22·5*	*20·2*	*23·3*

It will be seen that there was a slight increase in 1937 in each age group.

Of the 6,152 individual children specially inspected, 3,779, or 61·4 per cent., were found to require treatment (excluding defects of nutrition, uncleanliness and dental disease).

The number and proportion of elementary school children in whom diseases or defects requiring treatment or to be kept under observation were found are shown in the following table :—

Diseases or Defects	Diseases or Defects found at Routine Inspection		Diseases or Defects found at Special Inspection	
	Number	Percentage	Number	Percentage
Skin diseases	189	2·11	1,515	24·62
Defective vision and squint	733	8·17	161	2·61
External eye diseases	75	0·83	102	1·66
Defective hearing	80	0·89	70	1·13
Other ear diseases	132	1·47	157	2·55
Chronic tonsillitis	515	5·74	204	3·31
Adenoids only	36	0·40	33	0·53
Chronic tonsillitis and adenoids	89	0·99	61	0·99
Other nose and throat defects	77	0·86	186	3·02
Enlarged cervical glands	165	1·84	115	1·87
Defective speech	33	0·37	24	0·39
Diseases of the heart and circulation	384	4·28	381	6·19
Non-tuberculous dsieases of the lungs	258	2·88	330	5·36
All forms of tuberculosis (including suspects)	20	0·22	43	0·70
Diseases of the nervous system	98	1·09	232	3·77
Deformities	146	1·63	68	1·10
Other diseases and defects (excluding defects of nutrition, uncleanliness and dental diseases)	499	5·56	1,546	25·13

Nutrition.—The nutrition of children inspected in the routine age groups is classified in detail in Table IIB, page 159. It will be seen that of 8,964 children inspected, the nutrition of 66, or 0·7 per cent., was excellent, 8,299, or 92·6 per cent., was normal, 468, or 5·2 per cent., was slightly sub-normal and that in 131, or 1·5 per cent., it was bad. This is the third year for the nutrition of children to be classified in this way, and it is satisfactory to record that the slight improvement noted in the condition of the children inspected in 1936, as compared with the condition of those inspected in 1935, was maintained in 1937. This will be seen from the following table, in which the percentages are given under the several headings :—

		Entrants (within 12 months of admission)	Second Age Group (8 to 9 years)	Third Age Group (over 12 years)	Other Routine Inspec-tions	Total
Nutrition of Children Inspected :—						
Excellent	1935	3·3	3·4	4·9	4·0	3·8
	1936	1·4	3·1	3·6	2·9	2·7
	1937	1·2	0·6	0·3	—	0·7
Normal	1935	91·6	86·6	86·0	86·0	88·0
	1936	92·1	90·0	89·5	90·2	90·6
	1937	93·9	90·7	93·1	91·0	92·6
Slightly Sub-normal	1935	3·4	6·6	7·9	8·0	6·0
	1936	5·2	4·5	5·5	6·9	5·1
	1937	4·0	6·3	5·5	7·0	5·2
Bad	1935	1·7	3·4	1·2	2·0	2·2
	1936	1·2	2·4	1·4	—	1·6
	1937	0·9	2·4	1·1	2·0	1·5

In the report for 1936 the results of an inquiry that was made with the object of estimating the possible effect of certain sociological factors upon the state of nutrition in school children was reported upon. The results of routine medical inspections were used as a basis for selecting two groups of children, namely, those who were classified as excellent and those classified as bad according to a clinical estimation of their nutritional state. The inquiry was continued on similar lines during 1937.

The numbers of children at present under consideration comprise 31 whose nutrition was classified as excellent (group A) and 77 children whose nutrition was classified as bad (group D). The total of 108 children investigated closely approximates the material used in the previous inquiry, when a total of 110 children was considered.

The average size of each family in group A was 4·8 persons, compared with an average of 5·9 persons in group D. This difference in the size of the family unit in the two groups confirms the figures obtained last year, when the families in group A averaged 5·4 persons and in group D 6·1 persons. The average gross weekly income for the families of children in group A was £3 6s. 3d., whereas in group D it amounted to £3 0s. 5d. This again emphasises that there is a difference between the economic position of the families where excellent nutrition is found and those in which a bad nutritional state is encountered. The larger size of the family proves an additional factor in restricting the family budget of those in group D.

The manner in which the income is apportioned has again been divided into two main categories: (1) weekly expenses other than food, which includes unemployment insurance, trade union contributions, essential travelling expenses and domestic outgoings, such as rent, rates, coal, gas, electricity, cleaning materials, clothing clubs, hire purchase, medical attention and other necessities. In group A the money expended each week in this manner amounted to £1 11s. 3½d., while in group D it amounted to £1 11s. 0d. (2) The weekly food bill in group A was £1 6s. 10d., and in group D £1 5s. 10d. The results obtained are tabulated below:—

Nutritional Group	Number of Cases Investigated	Average number in Each Family	Gross Weekly Income	Weekly Expenses other than on Food	Weekly Food Bill
A (Excellent)	31	4·8	£3 6s. 3d.	£1 11s. 3½d.	£1 6s. 10d.
D (Bad)	77	5·9	£3 0s. 5d.	£1 11s. 0d.	£1 5s. 10d.

The expenditure upon food has been further analysed in order to ascertain the actual amount of money expended on the different classes of food. The results obtained in this way correspond in general with those which were obtained in a similar comparison which was made in 1936. The families in group A are in a more favourable position with regard to the money spent upon meat, vegetables, fruit and dairy products, whereas group D spent more money upon cereals and bread. An analysis of food expenditure in the two groups is contrasted as follows:—

Type of Food	Average Weekly Expenditure	
	Group A (Excellent)	Group D (Bad)
Cereals and Bread	4/8	5/7
Butter, Margarine and Fat	4/–	4/2
Sugar	1/2	1/3
Meat, Fish, and Prepared Meat Foods	6/6	5/7
Vegetables and Fruit	3/8	2/9
Milk, Milk Products and Eggs	4/6	4/–
Tea, Coffee, etc.	2/4	2/6
Total	£1 6s. 10d.	£1 5s. 10d.

Making use of the summary system, which provides a record of each child's medical history from infancy until school-leaving age, a comparison into the health of the two groups of children was possible.

Infant Feeding.—In 25 children in group A and 64 children in group D the methods of infant feeding were ascertained. No significant differences were found between the two groups :—

Method of Feeding	Group A (25 children)		Group D (64 children)	
	Number	Percentage	Number	Percentage
Breast (up to 6 months)	17	*68 ·0*	25	*54 ·7*
Partly Breast (up to 3 months)	4	*16 ·0*	18	*28 ·1*
Artificial (1st month)	4	*16 ·0*	11	*17 ·2*

In no instance was a history of rickets encountered among the 25 children in group A, but in group D five children, or 7 ·8 per cent., out of the 64 investigated showed definite signs of rickets during infancy. Of the children who showed signs of rickets, three, or 60 per cent., were breast fed up to six months.

Infectious Diseases.—The incidence of the common infectious diseases and juvenile rheumatism is also compared, with no signal variation being noticeable between the groups :—

Diseases	Group A (25 children)		Group D (64 children)	
	Incidence	Percentage	Incidence	Percentage
Measles	11	*44 ·0*	40	*62 ·5*
Whooping Cough	15	*60 ·0*	31	*48 ·4*
Scarlet Fever	2	*8 ·0*	5	*7 ·8*
Diphtheria	—	—	5	*7 ·8*
Mumps	2	*8 ·0*	2	*3 ·1*
Chicken-pox	7	*28 ·0*	15	*23 ·4*
Juvenile Rheumatism	1	*4 ·0*	7	*10 ·9*

Respiratory Diseases.—Diseases of the lower respiratory tract appear to have a higher incidence in those who are badly nourished. This observation was made in last year's investigation and it is again evidenced in the present results :—

Diseases	Group A (25 children)		Group D (64 children)	
	Incidence	Percentage	Incidence	Percentage
Bronchitis	2	*8 ·0*	22	*34 ·4*
Pneumonia	2	*8 ·0*	7	*10 ·9*

Common Diseases connected with the Upper Air Passages.—The incidence of these affections very closely simulate one another :—

Diseases	Group A (25 children)		Group D (64 children)	
	Number	Percentage	Number	Percentage
Enlarged Tonsils and/or Adenoids	6	*24 ·0*	15	*23 ·4*
Otorrhoea	3	*12 ·0*	7	*10 ·9*
Cervical Adenitis	4	*16 ·0*	10	*15 ·6*

Conclusions.—In considering the results of this investigation it is well to bear in mind the similar survey that was made last year. Once more it appears that the economic factor varies with the two nutritional groups, those who are malnourished being on a lower economic level, which is reflected in their diet.

The incidence of diseases of the lower respiratory tract again bears a relationship to the nutritional state.

Entrants.—Parents or guardians are asked to supply particulars as to the medical history of entrants prior to their routine medical inspection. During 1937 information was received regarding 2,880 of the 3,270 children inspected as entrants, from which the following table has been compiled :—

Diseases	Boys		Girls		Both Sexes	
	Number	Percentage	Number	Percentage	Number	Percentage
Measles	906	*62·5*	931	*65·1*	1,837	*63·8*
Whooping cough	509	*35·1*	578	*40·4*	1,087	*37·7*
Chickenpox	324	*22·3*	316	*22·1*	640	*22·2*
Scarlet fever	65	*4·5*	63	*4·5*	128	*4·5*
Diphtheria	23	*1·6*	29	*2·0*	52	*1·8*
Mumps	54	*3·7*	50	*3·5*	104	*3·6*
Rheumatism	7	*0.5*	14	*1·0*	21	*0·7*
Chorea	—	—	—	—	—	—
Tuberculosis	—	—	4	*0·3*	4	*0·1*
Bronchitis	64	*4·4*	58	*4·1*	122	*4·2*
Pneumonia	57	*4·0*	72	*5·0*	129	*4·5*
Other diseases	166	*11·4*	130	*9·1*	296	*10·3*

Of the 3,270 entrants medically inspected, 649 were found to require immediate treatment (excluding uncleanliness and dental disease) and, in addition, many diseases or defects were found which required to be kept under observation. The numbers of *all* diseases or defects found in 1,503 of the entrants inspected, whether requiring treatment or to be kept under observation, were as follows :—

Diseases or Defects.	*Number.*
Skin diseases	94
Defective vision	13
External eye diseases	98
Ear diseases	53
Diseases of nose and throat	378
Heart diseases	90
Anaemia	26
Lung diseases (non-tuberculous)	129
Tuberculosis—	
Pulmonary	2
Non-pulmonary	3
Dental diseases	756
Other defects and diseases	213
Total	1,855

Taking all diseases and defects into consideration, 45·9 per cent. of the entrants were found to be defective, as compared with 42·3 per cent. in 1936 and 41·9 per cent. in 1935.

Re-inspection of Children found with Defects.—When carrying out routine inspections at schools the medical officers re-inspect children previously found with certain diseases or defects. During 1937 the number of children re-inspected in this way was 1,352, the number of diseases or defects from which they had suffered being 1,775. The results of these re-inspections are given in the following table, from which it will be seen that of the total number of diseases or defects, 847 had been treated under the Authority's scheme, 124 had been treated elsewhere and 804 had not been treated.

	Cured or Improved	No Improvement	Worse	Total Number of Defects
TREATED UNDER THE AUTHORITY'S SCHEME :—				
Eye diseases	253	6	—	259
Ear diseases	52	9	—	61
Diseases of nose and throat	140	11	—	151
Heart diseases	23	23	—	46
Anaemia	14	2	—	16
Lung diseases (non-tuberculous)	61	3	—	64
Tuberculosis—				
Pulmonary	—	—	—	—
Non-pulmonary	—	—	—	—
Nervous diseases	36	4	—	40
Deformities	49	14	—	63
Other defects and diseases (excluding uncleanliness, infectious skin diseasesand dental disease)	134	13	—	147
Total	762	85	—	847
Percentage	*90·0*	*10·0*	—	*10·0*
TREATED ELSEWHERE :—				
Eye diseases	11	1	—	12
Ear diseases	3	1	—	4
Diseases of nose and throat	5	—	—	5
Heart diseases	7	4	—	11
Anaemia	5	—	—	5
Lung diseases (non-tuberculous)	19	4	—	23
Tuberculosis—				
Pulmonary	1	—	—	1
Non-pulmonary	1	—	—	1
Nervous diseases	4	3	—	7
Deformities	18	3	—	21
Other defects and diseases (excluding uncleanliness, infectious skin diseases and dental disease)	29	5	—	34
Total	103	21	—	124
Percentage	*83·1*	*16·9*	—	*10·0*
NOT TREATED :—				
Eye diseases	55	85	38	178
Ear diseases	5	3	—	8
Diseases of nose and throat	138	127	7	272
Heart diseases	65	81	—	146
Anaemia	4	1	—	5
Lung diseases (non-tuberculous)	43	15	—	58
Tuberculosis—				
Pulmonary	—	—	—	—
Non-pulmonary	—	—	—	—
Nervous diseases	4	4	—	8
Deformities	11	19	—	30
Other defects and diseases (excluding uncleanliness, infectious skin diseases and dental disease)	59	40	—	99
Total	384	375	45	804
Percentage	*47·8*	*46·6*	*5·6*	*10·0*
Grand Total	1,249	481	45	1,775
Percentage	*70·4*	*27·1*	*2·5*	*10·0*

VI.—"FOLLOWING UP" AND THE WORK OF SCHOOL NURSES.

In addition to the advice given by the medical officers to parents who are present at the inspection of their children, appropriate notices are sent directing their attention to diseases or defects discovered. Lists of defective children are also sent to head teachers with a view to their co-operation in seeing that treatment is obtained. As a result of the notices sent to parents, many children attend the school clinics for further inspection and/or treatment or obtain treatment elsewhere without visits to their homes by school nurses. The parents of all children requiring treatment who are not seen at the clinics, or are not otherwise ascertained to have received treatment, are subsequently visited by school nurses, who impress upon them the need for treatment. The following is a summary of the work of the school nurses in this connection during the year :—

Diseases or Defects	First Visits	Revisits	Total
Defects of vision	924	339	1,263
Defects of teeth	534	131	665
Defects of ear, nose and throat	623	219	842
Other defects	2,867	832	3,699
Total	4,948	1,521	6,469

Amongst other work undertaken by the school nurses may be mentioned the systematic examination at the schools of children for uncleanliness, attendance at the clinics in connection with medical inspection, medical treatment and dental treatment, the treatment of minor ailments under the supervision of medical officers, the following up of children who have received treatment at the clinics, and the treatment at the Corporation Cleansing Station of children suffering from scabies.

As shown above, the total number of visits paid by the nurses to the homes of children was 6,469, and the following is a summary of other work done by them during the year :—

Number of—

Special visits to schools	398
Examinations of children for uncleanliness	40,682
Children found with vermin and/or nits	2,407
Re-examinations of children previously found unclean	1,802
Children found to have been cleansed	303
Children suffering from scabies dealt with at the Cleansing Station	119
Number of baths given	257

VII.—ARRANGEMENTS FOR TREATMENT.

Clinics.—Special inspections, refractions, treatment of minor ailments and dental treatment are undertaken at the Central and Canton Clinics, and special inspections, treatment of minor ailments and dental treatment at Gabalfa and Splott Clinics. Splott Clinic—a private house purchased at a cost of £612 and adapted and furnished for clinic purposes at a total cost of £850—was opened for use on 1st September, 1937.

New clinic premises are now being erected in South and Ely municipal wards, plans of which are reproduced on pages 140 and 141. It will be seen that, in addition to school clinic accommodation, the new buildings will also provide accommodation for maternity and child welfare centres and for public assistance purposes (including surgeries for district medical officers, dispensaries, and offices for relieving officers), the public assistance portions of the buildings being structurally separate. The total estimated cost of the land, buildings, furniture and equipment is £23,792 (£11,107 for the premises in South ward and £12,685 for the premises in Ely ward). Of this sum, £18,080 is being borrowed under the Education Acts and £5,712 under the Poor Law Acts. The Health Committee will pay rent to the Education Committee for the use of the accommodation provided for maternity and child welfare purposes. It is anticipated that the buildings will be ready for use early in 1939.

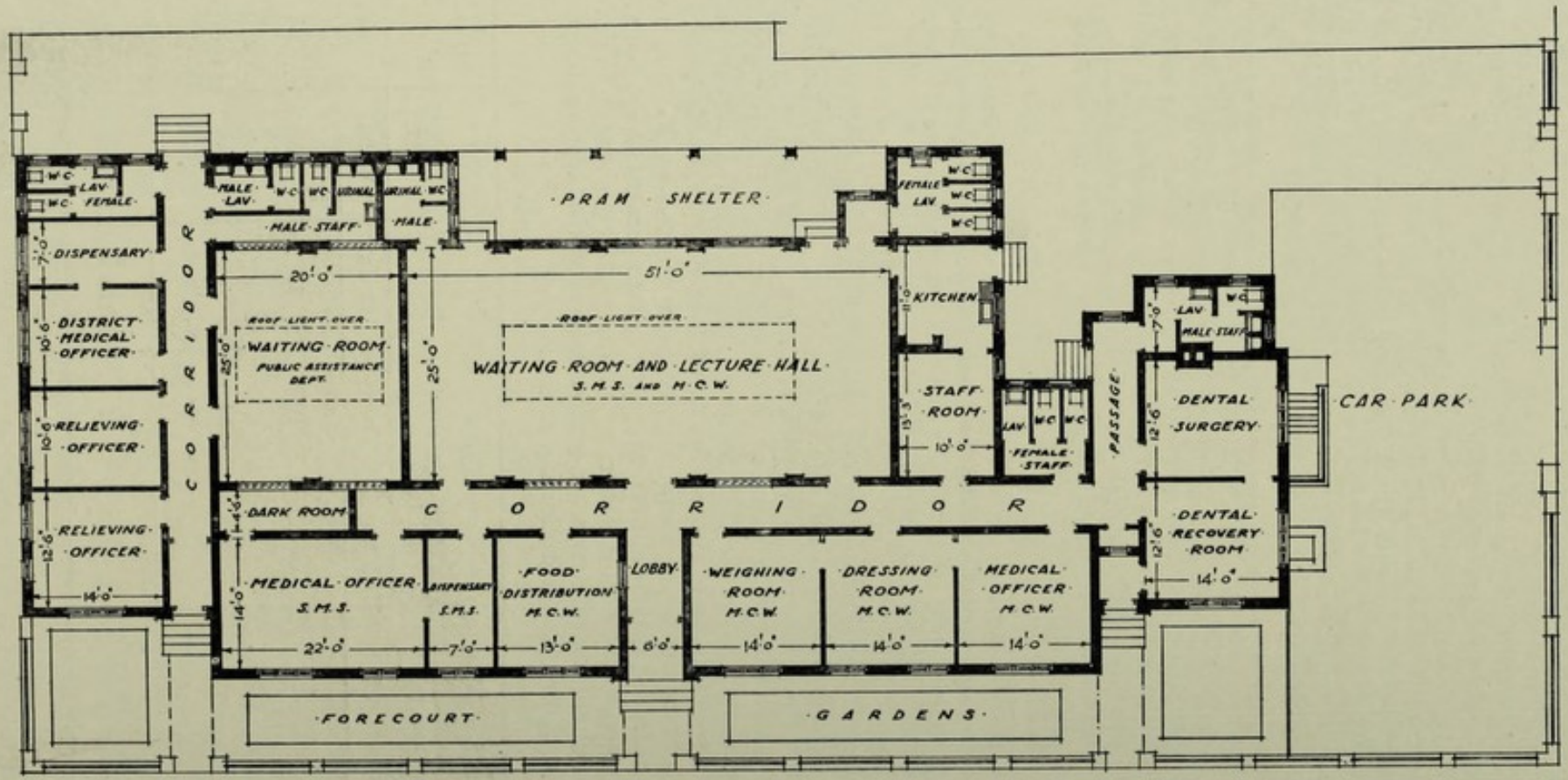
Malnutrition.—Children suffering from malnutrition are either referred for special inspection at the school clinics or followed up by the school nurses, and parents are advised as to appropriate methods of treatment. Free meals and milk are provided in financially necessitous cases. Cod-liver oil and malt, cod-liver oil, and iron and ammonium citrate are provided through the clinics at cost price for cases in which they are prescribed. In certain instances malnourished children are admitted to the Open-Air School (see page 150).

Uncleanliness.—Cleanliness surveys are carried out systematically by the school nurses at the schools (see page 138) and printed instructions regarding methods of destroying vermin and nits are sent to parents when necessary. Special combs for eradicating nits are sold by the department at cost price.

Minor Ailments and Diseases of the Skin.—The treatment of minor ailments and diseases of the skin is undertaken at the school clinics. Details of the treatment carried out during 1937 are given in the statistical tables (page 162), from which it will be seen that 2,110 cases received treatment at the clinics, as compared with 2,142 in 1936. Special attention is given to the treatment of ringworm ; the number of cases treated by or under the supervision of the medical staff was 81. When necessary and with the consent of the parents cases of scalp ringworm are treated by X-rays, but during 1937 four cases only received this form of treatment. Arrangements have been made whereby nurses of the Queen's Institute of District Nursing render assistance in the home nursing and treatment of minor ailments, and particulars of the work undertaken by them during 1937 are shown in the following table :—

Diseases or Defects	Cases Carried over from 1936		Cases Referred for Treatment during 1937		Total	
	Cases	Visits	Cases	Visits	Cases	Visits
Skin :—						
Impetigo	1	10	46	762	47	772
Other skin diseases	—	—	6	115	6	115
Minor eye defects	—	—	6	73	6	73
Minor ear defects	1	24	4	189	5	213
Miscellaneous	8	41	92	1,050	100	1,091
Total	10	75	154	2,189	164	2,264

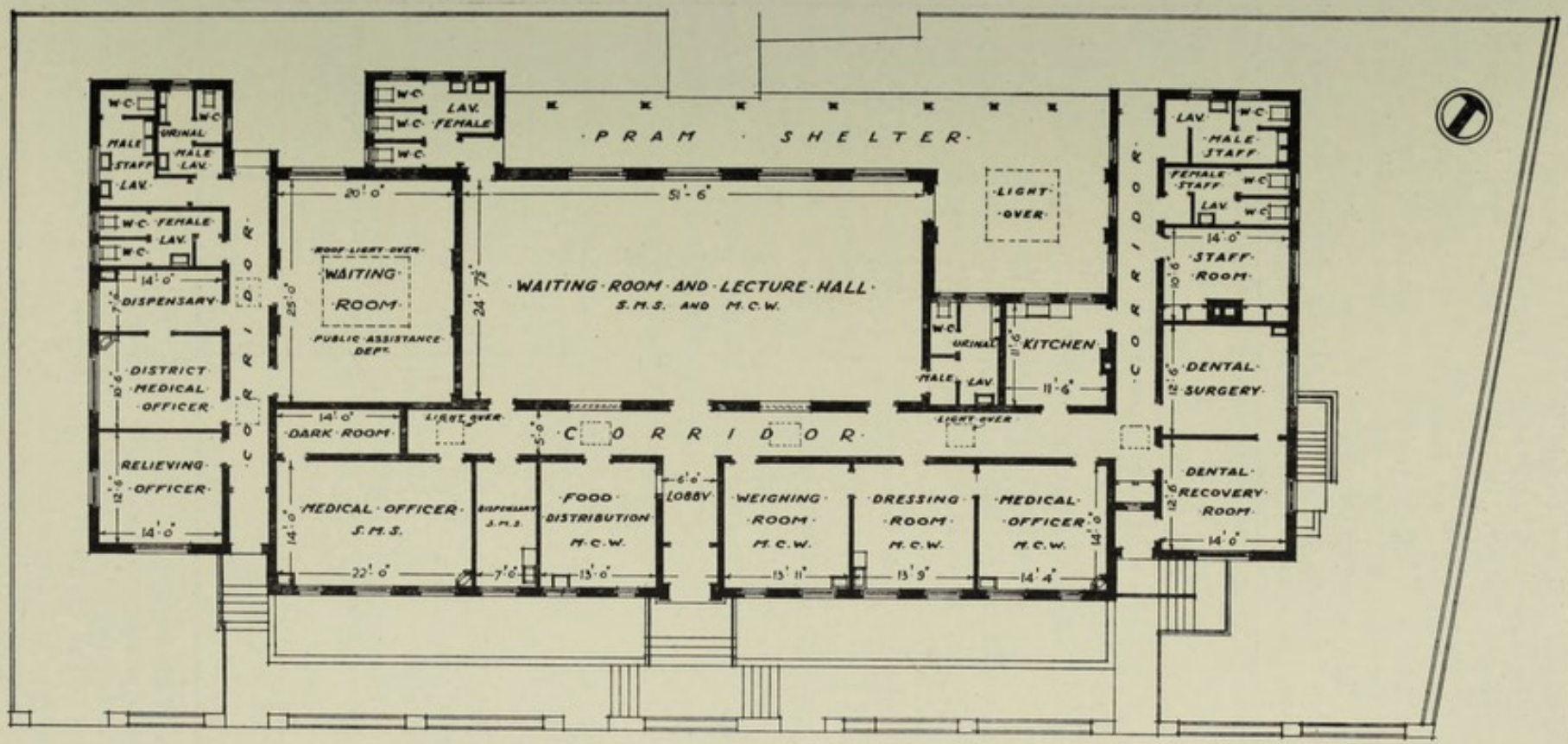
: CLINIC · ETC. · FOR · GRANGETOWN · AND · SOUTH · CARDIFF :



· GROUND · PLAN ·

Gm. N. Whitaker M.I.C.E.
City Architect

: CLINIC ETC FOR ELY CARDIFF :



: GROUND FLOOR PLAN :

GEO. H. WHITAKER M.I.C.E.
CITY ARCHITECT

Visual Defects and External Eye Diseases.—Visual defects and external eye diseases are treated at the school clinics. In addition to a medical officer on the staff who devotes part time to the work, a specialist ophthalmic surgeon is engaged for two sessions weekly. Spectacles are supplied through the department at very reasonable prices, and in necessitous cases they are supplied free of charge. Particulars of the treatment of visual defects are given on page 162, from which it will be seen that 1,642 children were dealt with at the clinics, 1,376 of whom were examined for errors of refraction and 266 were treated for other defects. Spectacles were prescribed for 1,297 children and in 1,162 instances they were known to have been obtained.

The diseases and defects discovered in all the children who were dealt with at the vision clinics during the year are shown in the following table :—

Diseases or Defects	Number of Diseases or Defects		
	Boys	Girls	Total
Squint	78	93	171
Errors of refraction—			
Hypermetropia	245	302	547
Myopia	104	121	225
Astigmatism—			
Hypermetropic	254	313	567
Myopic	80	116	196
Mixed	34	72	106
Conjunctivitis	57	62	119
Phlyctenular conjunctivitis	4	9	13
Blepharitis	42	73	115
Keratitis	1	3	4
Interstitial keratitis	—	1	1
Choroiditis	2	—	2
Corneal ulcer	3	7	10
Corneal nebulae	13	12	25
Nystagmus	8	6	14
Injury to eye	1	—	1
Meibomian cyst	6	3	9
Cellulitis of eyelid	1	2	3
Ptosis	—	1	1
Cataract—Congenital	6	1	7
,, —Traumatic	1	—	1
Dermoid cyst	—	1	1
Leucoma adhaerens	2	1	3
Epicanthus	1	4	5
Hordeolum	2	2	4
Optic atrophy	1	—	1
Optic neuritis	—	1	1
Exophthalmos	—	1	1
Total	946	1,207	2,153

Nose and Throat Defects.—Children suffering from nose or throat defects who are found to require treatment are specially examined at the school clinics, and those found to need operative treatment are admitted to Llandough Hospital—the Cardiff Municipal General Hospital. The children are admitted to hospital the day before the operation and, if well enough, are discharged the day following the operation. Owing to the relatively long distance of Llandough Hospital from the centre of the city, the children are conveyed to and fro by motor ambulance. The number of defects treated at the clinic or hospital was 815, of which 379 were treated by operation (135 enlarged tonsils only, 10 adenoids only, 232 enlarged tonsils and adenoids and two other defects).

As mentioned in the report for 1936, Mr. R. D. Owen was appointed as Aural Surgeon in a part-time capacity for the purpose of examining ear, nose and throat cases regarding which a specialist opinion is desirable. The first special clinic was held on 30th October, 1936, and from that date until the end of 1937, 10 clinics were held, a total of 212 children having been examined, 45 of whom were found not to require treatment. The recommendations in the cases requiring treatment or observation were as follows :—

	Number of Defects.
Treatment in Llandough Hospital :—	
For radical mastoid or other operative treatment of the ear	9
For removal of polypi	2
For removal of nasal obstruction, drainage of antrum, etc.	11
For removal of adenoids and/or enlarged tonsils	61
For exploratory examination under anaesthetic	4
Treatment and supervision at Ear, Nose and Throat Clinic	55
Treatment by Nurses of the Queen's Institute of District Nursing	1
Admission to Oral School for the Deaf	2
Admission to Speech-training Classes	2
Operative treatment for deflected septum when older	3
Other forms of treatment	3
Referred to own medical practitioner	2
Referred to Cardiff Royal Infirmary	2
For further observation at various periods	15

Ear Disease and Defective Hearing.—The treatment of ear diseases or defects is carried out at the school clinics by or under the supervision of the medical officers. Many of the cases of otorrhoea are treated by zinc ionisation. Altogether, the number of defects treated at the clinics was 407.

The statement below shows the results of the testing of children with the audiometer during 1937. Children shown to be deaf by the test are subsequently examined by a medical officer at the school clinics and, if found to present any difficulty, are referred to the specialist aural surgeon for further examination. It will be seen that a number of the children, although shown to be deaf by the audiometer test, were found on special examination to suffer from no abnormality.

		Number of Children.
Tested with audiometer at school		982
Retested		321
Found defective after retesting :—		
Defective in one ear	42	
Defective in both ears	26	
Total		68

	Number of Children.
Subsequently examined at school clinics :—	
Found to be normal	14
Found normal after treatment	19
Further treatment required	20
Unlikely to benefit further	1
Total	54
Failed to attend at first appointment	13
Refused to attend school clinics or left school	1

Dental Defects.—Dental inspection of children at the schools and treatment at the school clinics are undertaken by five school dentists. Particulars of the work done during 1937 will be found on page 164. The total number of elementary school children inspected by the dentists was 23,678, of whom 17,694 were found to require treatment. The number of children who were treated was 7,951, 3,540 of whom had received treatment previously.

Orthopaedic and Postural Defects.—The orthopaedic clinic is closely associated with the municipal accident unit at the City Lodge. There is a medical officer on the staff of the department who specialises in dealing with children suffering from crippling defects and, in addition, a specialist orthopaedic surgeon is engaged in a consultative capacity. Children requiring indoor hospital treatment are admitted to the Prince of Wales Hospital—a voluntary orthopaedic hospital—and all the appliances required by children attending the clinic are provided through that institution.

The following is a summary of the work carried out at the orthopaedic clinic during 1937 :—

	Children of School Age.
Consultation Clinic :—	
Examined for first time	256
Recommended for treatment and/or appliances for first time	130
Recommended for further treatment and/or appliances	135
Recommendations for :—	
Treatment in Hospital	38
Treatment at Clinic (Special and Routine)	139
Appliances	14
Alterations to appliances	5
Special boots	4
Alterations to boots	83
Other forms of treatment	8
Treated at Clinic for first time	5
Attendances at Clinic	859
Routine treatment (massage, electricity, exercises, etc.) :—	
Treated at Clinic for first time	124
Attendances for routine treatment	3,312

The following statement relates to treatment at and provision of appliances, etc., through the Prince of Wales' Hospital, Cardiff, during 1937 :—

	Children of School Age.
Hospital Treatment :—	
Admitted to Prince of Wales' Hospital—	
(*a*) Day cases	1
(*b*) Other cases	9
Under treatment at Prince of Wales' Hospital at end of 1937	2
On Prince of Wales' Hospital waiting list at end of 1937—	
(*a*) Day cases	—
(*b*) Other cases	20
Other treatment or provision (including appliances, etc., provided following hospital treatment) :—	
Appliances provided	36
Appliances altered	14
Special boots provided	7
Alterations to boots	116
Other forms of treatment provided	6

The diseases or defects found in children of school age examined at the clinic for the first time during the year have been classified as follows :—

Diseases or Defects.	*Number.*
Defective posture	103
Scoliosis	6
Flat feet	42
Bow legs	1
Talipes	1
Rickets	1
Poliomyelitis	1
Spastic paralysis	2
Birth palsy	1
Congenital malformation or defect	3
Torticollis....	10
Perthes' disease	1
Knock-knee	14
Metatarsus varus and intoeing	2
Coxa vara	1
Claw feet	6
Trauma	10
Other defects	51
Total	256

The following is a classification of the cases discharged during the year :—

Reason.	*Number.*
Cured	187
Improved	59
Unlikely to benefit further	10
Left the district	6
Failed to attend for treatment	36
Over school age	50
Other reasons (including trivial defects)	62
Total	410

Heart Disease and Rheumatism.—School children suffering from heart disease and rheumatism are kept under close supervision at special rheumatism clinics. Cases of acute rheumatism are admitted to the Lord Pontypridd Hospital (Dulwich House)—a municipal hospital of 25 beds which is specially reserved for the purpose. Details of the work undertaken at the clinics and at the hospital are contained in the report on the general health service. The number of school children remaining under supervision at the end of the year was 1,482, a decrease of 111 compared with the number at the end of the previous year.

Tuberculosis.—The department co-operates closely with the Tuberculosis Institute of the Welsh National Memorial Association, by which body the treatment of tuberculosis is undertaken, all cases of tuberculosis and suspected tuberculosis being referred to the Tuberculosis Physician for diagnosis and/or treatment.

Other Defects and Diseases.—Children found to be suffering from minor defects or diseases not already mentioned are referred for special examination at the school clinics, where parents receive advice as to the treatment required, and in some instances suitable remedies are provided at the clinics. Children suffering from defects or diseases for the treatment of which no special provision has been made are visited by school nurses, who advise the parents as to the appropriate means of obtaining treatment.

Radiography.—Radiography is carried out by the department. During the year, 45 school children were referred from the clinics to be radiographed, the total number of radiograms taken being 112. Seventy-one parts of the body required X-ray examination in the 45 cases as follows :—

Teeth	6
Spine	20
Shoulder	3
Arm	2
Elbow	3
Wrist	1
Finger	3
Hip	15
Knee	8
Thigh	3
Leg	5
Foot	2
Total	71

VIII.—INFECTIOUS DISEASES.

Constant attention is paid to preventing the spread of notifiable and non-notifiable infectious diseases amongst school children. As soon as notifiable diseases, such as scarlet fever and diphtheria, come to the knowledge of the department the homes of the patients are visited by an officer of the general health service and arrangements are made for the isolation of the patients, either at the Isolation Hospital or in their own homes. Nearly all cases of diphtheria are admitted to the Hospital. All children who have been in contact with cases of notifiable infectious diseases are excluded from school for the prescribed periods by means of exclusion certificates, copies of which are sent to the schools and to school attendance officers, re-admission certificates also being sent in due course. Active immunization of school children against diphtheria, especially of those in infants' schools, is undertaken as time and opportunity permit. Head teachers are supplied with instructions as to the periods of exclusion from school of patients and contacts in all infectious diseases. An arrangement is also in operation whereby the names and addresses of school children who are absent from school on account of non-notifiable diseases, such as measles, chickenpox, whooping cough and mumps, are supplied by head teachers on appropriate forms in order that they may be visited by officers of the department with a view to preventing the spread of infection.

The numbers of school children notified to be suffering from various infectious diseases during the year were as follows :—

Scarlet fever	321
Diphtheria	441
Enteric fever	5
Pneumonia	37
Cerebro-spinal fever	5
Erysipelas	2
Dysentery	4
Tuberculosis—Respiratory	8
,, —Other forms	37

The following cases of non-notifiable infectious diseases were intimated by head teachers or school attendance officers, or were otherwise ascertained :—

Chickenpox	664
Measles	2,110
Rubella	3
Whooping cough	197
Mumps	125

Vaccinal State of School Children.—Of 10,558 elementary and high school children inspected at routine inspection during 1937, 5,122, or 48·5 per cent., were found to be vaccinated. During the ten years 1928-37 the proportion of children inspected who were found to have been vaccinated has declined from 60·9 per cent. to 48·5 per cent., as follows :—

Year.	*Percentage Vaccinated.*
1928	*60·9*
1929	*56·4*
1930	*57·4*
1931	*56·1*
1932	*58·1*
1933	*54·5*
1934	*52·6*
1935	*50·3*
1936	*50·3*
1937	*48·5*

IX.—OPEN-AIR EDUCATION.

Classes are held in playgrounds during appropriate weather at schools where the facilities are suitable ; at several schools the holding of classes in the open-air is a special feature. Children are also taken to the public parks for certain lessons in the summer months.

Greenhill Open-Air School, which is situated at Rhiwbina, outside the city boundary, is used for the education of physically defective (delicate) children. The accommodation at this school is for 120 children, who are selected for admission mainly on the grounds of malnutrition and anaemia ; pre-tuberculous children and children who are tuberculosis contacts, but who do not themselves suffer from tuberculosis, are admitted also. The children in attendance are conveyed to and from the open-air school by motor 'buses, and nourishing meals are provided for them on the school premises. After varying periods of attendance at the open-air school, children are re-admitted to the ordinary elementary schools. A report upon the children in attendance during 1937 is given on page 150.

X.—PHYSICAL TRAINING.

Physical training is well organised and supervised in all the schools—in the girls' and infants' schools by a female organiser and in the boys' schools by a male organiser. Instructional classes in physical education for teachers are held during the winter months. The children receive training in minor and major organised games, such as netball and rounders for girls, soccer football, rugby football, baseball and cricket for boys, and swimming, national dancing and folk dancing for girls and boys.

XI.—PROVISION OF MEALS.

Necessitous school children are supplied with dinners by contract at 15 canteens in various parts of the city and with a ration of pasteurised milk at schools instead of breakfast. Many parents avail themselves of the privilege of having their children provided with milk who, mainly owing to pride, are unwilling for them to have dinners at the canteens. Arrangements have also been made for children, whose parents are willing to bear the cost, to be provided with milk at schools. The daily ration of milk supplied free is half-a-pint for children over 8 years of age and one-third of a pint for younger children. Under the voluntary arrangement one-third of a pint is supplied to children of all ages.

The average numbers of children provided with dinners and/or milk daily during each of the years 1933 to 1937 have been as follows :—

Year	Average Number of Necessitous Children provided with Dinners daily	Average Number of Necessitous Children provided with Milk daily	Average Number provided with Milk daily under the Voluntary Arrangement
1933	2,090	2,693	3,686
1934	2,487	3,347	5,595
1935	2,351	3,475	10,118
1936	2,203	3,474	9,727
1937	1,852	3,194	10,222

It will be seen that the numbers of necessitous children provided with free dinners and milk are declining and that the number provided with milk on payment is increasing.

XII.—CO-OPERATION OF PARENTS, TEACHERS, SCHOOL ATTENDANCE OFFICERS AND VOLUNTARY BODIES.

Parents.—The majority of parents show great interest in the medical inspection and treatment of their children, and the indifference of the minority, especially in regard to the necessity of preventive dental treatment and the treatment of minor ailments, is deplored. Parents are invited by notices to attend the routine inspections at school and in many cases they accompany their children to the school clinics.

Teachers.—Teachers co-operate very well in all the work that is done. In connection with routine medical and dental inspections they prepare the inspection schedules and marshal the children for inspection. Head teachers are provided with lists showing the children who are recommended for treatment and they co-operate in ensuring that it is obtained. They are also provided with stamped-addressed forms for notifying the names and addresses of children who require special attention and of children who are absent from school owing to non-notifiable infectious diseases (measles, whooping cough, mumps, etc.) to the department, and the assistance rendered by them in this way is invaluable.

School Attendance Officers.—The co-operation between the school attendance officers and the school medical service staff is as complete as possible. Children who are absent from school and who are in need of attention are reported by them, and they render useful service in dealing with negligent parents who fail to arrange for their children to keep appointments at the school clinics.

Voluntary Bodies.—Voluntary bodies concerned with children's welfare also co-operate very closely in the work. The scheme whereby nurses of the Queen's Institute of District Nursing undertake the treatment of minor ailments in the homes of the children, in respect of which the Education Committee pay the Institute £100 per annum, continues to work satisfactorily. Particulars of the work done by them in 1937 are given on page 139. Serious difficulties arising out of parental neglect are referred to inspectors of the National Society for the Prevention of Cruelty to Children, who deal with them promptly and effectually. Two voluntary bodies that provide holidays for children at seaside homes co-operate with the department in the selection of senior school children who are likely to benefit thereby.

XIII.—BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

Blind, deaf, defective and epileptic children come to the knowledge of the department through various channels, but they are ascertained mainly through routine medical inspection at schools and through notification by head teachers and school attendance officers. The numbers of such children who are known to the department are given in detail in the table on pages 159 to 161.

Mentally Defective Children.—It will be seen from the table referred to that the number of mentally defective children not transferable to the Mental Deficiency Authority was 123, of whom 111 were attending the special day school. The remaining 12 children are supervised at home by officers of the department. There were also 11 children who, in addition to being mentally defective, suffered from serious physical defects; seven of these were also in attendance at the special day school.

During the year, 73 children suspected to be mentally defective were specially examined or re-examined. The results are classified as follows:—

Feebleminded and suitable for education in a special school	26
Transferred to the care of the Mental Deficiency Authority	5
Dull and backward	32
Backward only	7
Unstable and neurotic	1
Referred to Child Guidance Clinic	1
Normal	1
Total	73

Twenty-eight children were notified to the Mental Deficiency Authority during 1937, particulars of whom are classified in the following table :—

Diagnosis	Boys	Girls	Total
1. (i) Children incapable of receiving benefit or further benefit from instruction in a Special School :—			
(*a*) Idiots	1	1	2
(*b*) Imbeciles	3	3	6
(*c*) Others	3	3	6
(ii) Children unable to be instructed in a Special School without detriment to the interests of other children :—			
(*a*) Moral Defectives	—	—	—
(*b*) Others	1	—	1
2. Feebleminded children notified on leaving a Special School on or before attaining the age of 16	6	7	13
3. Feebleminded children notified under Article 3 of the 1928 Regulations, *i.e.*, " special circumstances " cases	—	—	—
4. Children who in addition to being mentally defective were blind or deaf	—	—	—
Total	14	14	28

Mentally Retarded Children.—Special classes for mentally retarded children, known as " delta " classes, are held at two elementary schools. Children, regarding whose mental condition there is some doubt, are admitted to the classes from elementary schools. They are examined periodically by a medical officer of the department to decide as to the form of education for which they are most suitable. Children who make sufficient progress are allowed to return to ordinary elementary schools, while others who are found to be feebleminded are admitted to the special day school. At the end of the year, 27 children were in attendance at the classes.

Special Schools.—There are special day schools for mentally defective, blind (including partially blind), deaf, and physically defective children, the numbers in attendance being given in the table on pages 159 to 161. The children attending these schools are regularly inspected and closely supervised by medical officers of the department.

Greenhill Open-Air School.—The number of physically defective children on the register at the end of 1937 was 134, and the average attendance during the year—excluding August—was 107. Forty-six children (29 boys and 17 girls) were admitted to the school, and 55 (34 boys and 21 girls) were discharged. The following are the principal diseases or defects found in the children admitted during the year :—

Diseases or Defects.	*Number.*
Anaemia	6
Malnutrition	8
Anaemia and malnutrition	12
Quiescent tuberculosis (non-pulmonary)	1
Post-rheumatic debility	5
Post-pneumonic debility	8
Anorexia	3
Chronic bronchitis	3
Total	46

Five of these children had previously shown clinical signs suggestive of tuberculosis, but at the time of admission none of them suffered from active tuberculosis. There was a history of tuberculosis in the parents or brothers and/or sisters in 12 of the children admitted.

The following table shows the average increases in weight and height of 49 of the 55 children who were discharged from the school during 1937. The remaining six children attended for periods of less than three months.

Average Period in School (Months)	Number of Children in Group	Average Age on Discharge (Years)	Average gain in Weight (Pounds)	Average gain in Height (Inches)
3	9	10·29	0·17	0·33
6	9	9·85	3·28	—
9	7	10·88	5·75	1·88
12	2	10·33	12·50	2·00
15	7	11·76	7·57	2·18
18	5	11·82	4·95	3·58
21	6	11·71	9·71	3·88
24	3	9·69	8·42	2·00
57	1	14·00	25·50	—

XIV.—FULL-TIME COURSES OF HIGHER EDUCATION FOR BLIND, DEAF, DEFECTIVE AND EPILEPTIC STUDENTS.

No special courses of higher education for blind, deaf, defective or epileptic students have been arranged. Suitable blind students, however, receive special training at the cost of the Education Committee at the Cardiff Institute for the Blind, where males are taught to make baskets, mats, cork ship-fenders, brushes and coal bags, and females are taught knitting, weaving, chair-caning and light basket-making. At the end of the year, 10 blind persons (five males and five females) were receiving training under this arrangement. Other students who come within the categories referred to are admitted to residential schools elsewhere, and at the end of the year there were three crippled students (two males and one female) and one epileptic student (a female) who were being maintained by the Education Committee at such schools.

XV—NURSERY SCHOOLS

There is at present no nursery school in Cardiff, but the building of the proposed nursery school, which is to be provided in conjunction with Severn Road Council Infants' School and which was referred to in the report for 1936, will shortly be commenced. Plans and specifications have been prepared, and invitations for the submission of tenders for the erection of the premises and for application to be made to the Ministry of Health for sanction to the proposed loan have been authorised.

XVI.—SECONDARY SCHOOLS AND OTHER INSTITUTIONS OF HIGHER EDUCATION.

The high schools provided by the Education Committee number eight (four for boys and four for girls) and all the facilities of the school medical service are available for the pupils. There are also a secondary school for boys and two secondary schools for girls that are aided by the Committee ; arrangements have been made for the medical inspection and treatment of pupils attending the school for boys and one of the schools for girls through the school medical service. High and secondary school pupils are medically inspected on entering and prior to leaving school. Details of the number of pupils inspected, of the findings of inspection and of the treatment undertaken during 1937 are given in the statistical tables on pages 165 to 169.

XVII.—PARENTS' PAYMENTS.

Charges are made for certain forms of treatment provided through the school medical service, parents being required to pay according to an approved scale of family income, but treatment and spectacles are provided free of charge for children belonging to families whose incomes fall below the scale. Fees are charged for operative treatment of nose and throat defects, dental treatment and in-patient orthopaedic treatment. Charges are also made for orthopaedic appliances and for spectacles. Application forms have to be filled in and signed by parents, who, unless willing to pay the full charge, are required to supply complete particulars of their incomes from all sources. The fees for dental treatment are payable at the time of treatment and the cost of spectacles before they are supplied, but all other payments are collected by collectors employed by the City Council after accounts have been issued.

XVIII.—HEALTH EDUCATION.

Every opportunity is taken by the medical officers, dentists and school nurses to disseminate knowledge on the maintenance of health amongst children and their parents with whom they come into contact, and large quantities of illustrated literature issued by the Dental Board of the United Kingdom and the Health and Cleanliness Council are supplied periodically to schools for distribution amongst the children.

Sex education is conducted very successfully amongst senior school children of both sexes by officers of the Alliance of Honour. This teaching is undertaken only with the consent of parents, over 90 per cent. of whom readily consent for their children to receive the instruction, which they themselves are reluctant and in many cases unable to give.

XIX.—SPECIAL INQUIRIES.

Apart from the inquiry into the sociological facts behind the findings of the nutritional condition of school children at routine medical inspections, which was commenced in 1936 and continued during 1937, and on which a report is given on pages 134 to 136, no special inquiries were made during the year.

XX.—MISCELLANY.

Medical Examination of Teachers.—The number of newly appointed and other teachers examined by the medical staff was nine (three males and six females).

Juvenile Employment.—Forty-three children (30 boys and 13 girls) were medically examined on the request of the Juvenile Employment (Education) Officer as to suitability and fitness for employment and 22 children (3 boys and 19 girls) were examined in connection with the issue of entertainment licences.

Junior Instruction Centres.—There are two Junior Instruction Centres (one for males and one for females) and arrangements are made through the school medical service for the medical inspection and treatment of the pupils who are not entitled to benefit or treatment under the National Health Insurance Acts. During the year, 411 pupils (157 boys and 254 girls) were medically inspected at the centres, of whom 126, or 30·6 per cent., were found to require medical treatment and 181, or 44·0 per cent., to require dental treatment. Fifty-eight pupils were dealt with by medical officers at the school clinics (minor ailments 24, defective vision 24, nose and throat defects four, and crippling defects six) and the number that received dental treatment at the clinics was 75.

Classes for Speech Training.—The average number of children attending the special classes for speech training during the year was 69, the total number of individual children dealt with being 100. The numbers admitted and discharged were 27 and 51 respectively. Of the 51 children discharged, 20 were withdrawn by their parents without having completed treatment or were discharged owing to mental incapacity. The classification at the time of discharge of the remaining 31 was as follows :—

Provisionally cured	20
Much improved	10
Improved	1
Total	31

As usual, at the close of each term, head teachers, were asked to supply reports on the progress made, in their opinion, by children attending the classes. The following is a summary of the reports received :—

	1st Term.	*2nd Term.*	*3rd Term.*
Cured	6	3	2
Much improved	22	13	17
Improved	30	37	21
Not improved	9	13	11
No definite report	10	1	6
Total	77	67	57

Head Teachers also supplied reports at the end of the year regarding 74 scholars who had passed through the special classes and who were still attending school. These reports are summarised as follows :—

Cured	12
Much improved	21
Improved	26
Not improved	11
Relapsed	2
No definite report	2
Total	74

The instructress continued to visit the schools and homes of children attending the special classes and to make after-care visits to children who had left school. She made, altogether, 368 visits to schools and to the homes of children in attendance and of those who had attended the classes but had since left school. The condition of the speech of 72 of those to whom after-care visits were made is summarised as follows :—

Cured	40
Very much improved	8
Much improved	8
Improved	7
Improvement maintained	5
Variable	1
Relapsed	3
Total	72

The following is a note by Dr. G. E. Phillips, an Assistant Medical Officer, and Miss T. G. Collins, the Instructress, on speech defects and on the work of the special classes for speech training during the year :—

Perhaps there is no disorder common to so many people which has been as baffling in its origin and variable and intractable in treatment as stammering. The catalogue of varieties of treatment used during the past century by otherwise learned men make fantastic reading. One is surprised at the rapidity of the change in attitude on the subject since the beginning of the present century. The advice given by the Delphic oracle to Bathos that he should leave his home for the more Southern Libia as a cure for his " halting speech " can be applied to sufferers in a modern age, for it is well to remember that stammering is largely a result of an inability on the part of the stammerer to adjust himself to the complexities and contradictions of the environment in which he is. We notice the wisdom of the oracle, too, in the suggestion that Bathos' new home should be in the south. In modern times the predominant number of stammerers are found in the northern countries. Perhaps this may be due to the more complex civilisations of these countries.

To our knowledge no systematic investigation has been done among stammerers living away from their homes. Boome and Richardson in their book, *The Cure and Treatment of Stammering*, state that it is for us to help to adjust the child to his environment rather than to remove him from it. Often, however, through apathy of parents and general attitude of defeatism, it is impossible for the child to shake off the effects of an environment which has been instrumental in causing his stammer.

The cases which, in our opinion, would benefit by treatment while away from their homes are those among whom the habit factor is predominant and those emotional cases who need a complete break from old associations in order to establish their newly-found confidence in themselves.

At present the organisation of stammerers attending the special classes is into classes of a like age. There seems much to commend class treatment, and Boome and Richardson remark that team work possible in this method is of beneficial effect. Most stammerers fall into two groups which respond to treatment with emphasis upon either relaxation and suggestion or direct speech training, according to the difficulty with which the child is faced. It is often not realised by those at home and at school that stammering is more far-reaching in effect upon the character of the child than is the case in a speech defect such as a lisp or nasal speech. Whereas in the latter the difficulty is uniform in severity and localised in effect, the child who stammers is met with a bewildering series of difficulties, which may well have the result of making him lose his sense of social responsibility.

Since July, 1937, two classes for treatment of speech defects have been held and 10 children have attended. The cases included five lallers, three lispers, one with nasal speech and one case of high-frequency deafness. By December three cases were discharged as cured, one was transferred to the Oral School for the Deaf and one was discharged as unsatisfactory. It will be seen that, although fewer children can be admitted owing to the individual nature of the work, a cure is established more rapidly than in the case of stammerers. The disability of being unable to make certain sounds is, in the case of lispers, often overcome in one or two lessons. It is, however, necessary for the child to have constant practice in conversation and reading before the cure is firmly established.

Child Guidance Clinic.—The Child Guidance Clinic is held at Gabalfa School Clinic, where four rooms are suitably furnished and equipped for the purpose. During 1937 the staff consisted of Dr. J. Walker, Psychiatrist (part-time), Dr. G. Seth, Psychologist (part-time), Miss Joan Yates, B.A., Social Worker (whole-time), and a whole-time

female clerk. The following is a summary of the work done at and in connection with the clinic during the year :—

(1) Number of patients referred to the clinic during the year :—

Boys	36
Girls	25
Total	61

(2) Number of patients carried forward from 1936 :—

Boys	32
Girls	27
Total	59

(3) Sources of ascertainment of patients dealt with for the first time :—

Parents or Guardians	2
Juvenile Courts	5
Social Agencies	3
Schools	11
School Medical Service	35
Private Medical Practitioners	3
Other sources	2
Total	61

(4) Problems for which the 61 patients were referred to the clinic :—

Backwardness	2
Stealing	8
Nervousness	7
Difficult and/or unmanageable	5
Temper	3
Enuresis	19
Speech difficulties	6
Lying	2
Sex difficulties	2
Truancy and/or wandering	2
Night terrors and fears	3
Restlessness and sleeplessness	5
Screaming	5
Feeding difficulties	1
Lack of concentration	6
Various	7
Total	83

(5) Ages of patients dealt with for the first time :—

Years	Boys	Girls	Total
4	2	—	2
5	1	—	1
6	4	3	7
7	—	2	2
8	3	2	5
9	5	4	9
10	—	6	6
11	5	1	6
12	4	3	7
13	10	2	12
14	2	1	3
15	—	1	1
Total	36	25	61

(6) How the patients were dealt with :—

Service of Clinic	49
Diagnosed only	12
Total	61

(7) Results of treatment of patients discharged :—

Adjusted	22
Partially adjusted	17
Unadjusted	16
Transferred to other agencies	4
Unsuitable for further treatment	9
Total	68

(8) Number of patients waiting to be dealt with at end of year :—

Boys	11
Girls	8
Total	19

(9) Work of Sections :—

(*a*) *Psychiatric* :—

New patients dealt with	58
Re-examinations	186
Interviews with parents	69

(*b*) *Psychological* :—

New patients dealt with	72
Re-examinations	28
Interviews with parents or teachers	33

(*c*) *Social Service* :—

Interviews with parents, etc., at clinic	143
Visits to homes of patients	319
Other visits concerning patients	154

(10) Staff conferences regarding patients 133

XXI.—STATISTICAL TABLES.

ELEMENTARY SCHOOLS.

TABLE I.

MEDICAL INSPECTION.

A.—Routine Medical Inspections.

Number of inspections in the prescribed Groups :—	
Entrants (within 12 months of admission)	3,270
Second Age Groups (8 to 9 years)	2,938
Third Age Group (over 12 years)	2,656
Total	8,864
Number of other Routine Inspections	100
Grand Total	8,964

B.—Other Inspections.

Number of Special Inspections	6,152
Number of Re-inspections	6,503
Total	12,655

C.—Children Found to Require Treatment.

Number of individual children found at routine medical inspection to require treatment (excluding defects of nutrition, uncleanliness and dental disease):—

Group (1)	For Defective Vision (excluding Squint) (2)	For all other Conditions recorded in Table II A. (3)	Total (4)
Entrants (within 12 months of admission	18	646	649
Second Age Group (8 to 9 years)	221	497	656
Third Age Group (over 12 years)	233	436	619
Total (Prescribed Groups)	472	1,579	1,924
Other Routine Inspections	—	22	18
Grand Total	472	1,601	1,942

Note.—No individual child is counted more than once in any column of this table; for example, a child suffering from defective vision and from adenoids appears once in column 2, once in column 3 and *once only* in column 4.

ELEMENTARY SCHOOLS.

TABLE II.

A.—DEFECTS FOUND BY MEDICAL INSPECTION.

DEFECT OR DISEASE	Routine Inspections — No. of Defects		Special Inspections — No. of Defects	
	Requiring Treatment	Requiring to be kept under observation, but *not* requiring Treatment	Requiring Treatment	Requiring to be kept under observation, but *not* requiring Treatment
Skin — (1) Ringworm—Scalp	4	—	12	—
Skin — (2) ,, Body	6	—	107	—
Skin — (3) Scabies	33	—	204	—
Skin — (4) Impetigo	89	—	976	—
Skin — (5) Other Diseases (Non-Tuberculous)	55	2	211	5
Total (Heads 1 to 5)	187	2	1,510	5
Eye — (6) Blepharitis	41	1	34	—
Eye — (7) Conjunctivitis	4	—	9	—
Eye — (8) Keratitis	2	—	5	—
Eye — (9) Corneal Opacities	2	2	5	—
Eye — (10) Other Conditions (excluding Defective Vision and Squint)	17	6	39	10
Total (Heads 6 to 10)	66	9	92	10
(11) Defective Vision (excluding Squint)	472	153	129	15
(12) Squint	95	13	16	1
Ear — (13) Defective Hearing	65	15	67	3
Ear — (14) Otitis Media	99	2	98	3
Ear — (15) Other Ear Diseases	28	3	40	16
Nose and Throat — (16) Chronic Tonsillitis only	224	291	142	62
Nose and Throat — (17) Adenoids only	29	7	31	2
Nose and Throat — (18) Chronic Tonsillitis and Adenoids	74	15	45	16
Nose and Throat — (19) Other Conditions	59	18	150	36
(20) Enlarged Cervical Glands (Non-Tuberculous)	102	63	88	27
(21) Defective Speech	16	17	21	3
Heart and Circulation — Heart Disease :-				
Heart and Circulation — (22) Organic	84	96	71	77
Heart and Circulation — (23) Functional	27	120	37	58
Heart and Circulation — (24) Anaemia	49	8	119	19
Lungs — (25) Bronchitis	52	34	61	36
Lungs — (26) Other Non-Tuberculous Diseases	66	106	141	92
Tuberculosis — Pulmonary :—				
Tuberculosis — (27) Definite	—	—	—	—
Tuberculosis — (28) Suspected	10	4	9	11
Tuberculosis — Non-Pulmonary :—				
Tuberculosis — (29) Glands	2	1	10	9
Tuberculosis — (30) Bones and Joints	1	2	3	—
Tuberculosis — (31) Skin	—	—	1	—
Tuberculosis — (32) Other Forms	—	—	—	—
Total (Heads 29 to 32)	3	3	14	9
Nervous System — (33) Epilepsy	4	3	8	5
Nervous System — (34) Chorea	18	6	50	12
Nervous System — (35) Other Conditions	60	7	106	51
Deformities — (36) Rickets	3	—	—	—
Deformities — (37) Spinal Curvature	2	—	6	2
Deformities — (38) Other Forms	126	15	44	16
(39) Other Defects and Diseases (excluding Defects of Nutrition, Uncleanliness and Dental Disease)	381	118	1,075	471
Total	2,401	1,128	4,170	1,058

B.—CLASSIFICATION OF THE NUTRITION OF CHILDREN INSPECTED DURING THE YEAR IN THE ROUTINE AGE GROUPS.

AGE GROUPS	Number of Children Inspected	Excellent		Normal		Slightly Sub-normal		Bad	
		Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Entrants (within 12 months of admission)	3,270	39	*1·2*	3,071	*93·9*	130	*4·0*	30	*0·9*
Second Age Group (8 to 9 years)	2,938	17	*0·6*	2,664	*90·7*	186	*6·3*	71	*2·4*
Third Age Group (over 12 years)	2,656	10	*0·3*	2,473	*93·1*	145	*5·5*	28	*1·1*
Other Routine Inspections	100	—	—	91	*91·0*	7	*7·0*	2	*2·0*
Total	8,964	66	*0·7*	8,299	*92·6*	468	*5·2*	131	*1·5*

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

(NO CHILD ENTERED UNDER MORE THAN ONE HEADING).

BLIND CHILDREN.

At Certified Schools for the Blind	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
7	—	—	—	7

PARTIALLY SIGHTED CHILDREN.

At Certified Schools for the Blind	At Certified Schools for the Partially Sighted	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
—	32	5	—	—	37

DEAF CHILDREN.

At Certified Schools for the Deaf	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
26	—	—	1	27

PARTIALLY DEAF CHILDREN.

At Certified Schools for the Deaf	At Certified Schools for the Partially Deaf	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
—	—	2	—	—	2

MENTALLY DEFECTIVE CHILDREN.
FEEBLEMINDED CHILDREN.

At Certified Schools for Mentally Defective Children	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
111	—	—	12	123

EPILEPTIC CHILDREN.
CHILDREN SUFFERING FROM SEVERE EPILEPSY.

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
2	—	—	2	4

PHYSICALLY DEFECTIVE CHILDREN.
A.—TUBERCULOUS CHILDREN.
I.—Children Suffering from Pulmonary Tuberculosis.
(Including pleura and intra-thoracic glands).

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
3	—	6	4	13

II.—Children Suffering From Non-Pulmonary Tuberculosis.
(Tuberculosis of all sites other than those shown in I above).

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
14	—	22	6	42

B.—DELICATE CHILDREN.
(Children—except those included in other groups—whose general health renders it desirable that they should be specially selected for admission to an open-air school).

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
132	—	—	—	132

C.—CRIPPLED CHILDREN.
(Children—other than those diagnosed as suffering from tuberculous and in need of treatment for that disease—who are suffering from a degree of crippling sufficiently severe to interfere materially with a child's normal mode of life).

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
4	66	—	3	73

D.—CHILDREN WITH HEART DISEASE.

(Children whose defect is so severe as to necessitate the provision of educational facilities other than those of the Public Elementary School).

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
22	38*	5	5	70

CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Combination of Defect	At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
Feebleminded and crippled	5	—	—	—	5
Feebleminded and epileptic ..	2	—	—	4	6

* These children attend school only when fit to do so.

ELEMENTARY SCHOOLS.

TABLE IV.

TREATMENT TABLES.

GROUP I.—Minor Ailments (excluding Uncleanliness, for which see Table VI).

Defect or Disease	Number of Defects treated or under treatment during the year		
	Under the Authority's Scheme	Otherwise	Total
Skin :—			
Ringworm—Scalp—			
(i) X-ray Treatment	4	—	4
(ii) Other	7	—	7
Ringworm—Body	70	—	70
Scabies	211	1	212
Impetigo	1,008	48	1,056
Other Skin Disease	201	3	204
Minor Eye Defects :—			
(External and other, but excluding cases falling in Group II)	31	6	37
Minor Ear Defects	407	4	411
Miscellaneous (*e.g.*, minor injuries, bruises, sores, chilblains, etc.)	171	93	264
Total	2,110	155	2,265

GROUP II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I).

Defect or Disease	Number of Defects dealt with		
	Under the Authority's Scheme	Otherwise	Total
Errors of Refraction (including Squint)	1,376	3	1,379
Other Defect or Disease of the Eyes (excluding those recorded in Group I)	266	—	266
Total	1,642	3	1,645

Defect or Disease	Number of Children for whom Spectacles were			
	Prescribed		Obtained	
	Under the Authority's Scheme	Otherwise	Under the Authority's Scheme	Otherwise
Errors of Refraction (including Squint)	1,297	3	1,162*	3

* Including 501 free of charge.

GROUP III.—Treatment of Defects of Nose and Throat.

	Number of Defects			
	Tonsils only	Adenoids only	Tonsils and Adenoids	Other Defects
Received Operative Treatment—				
Under the Authority's Scheme, in Hospital	135	10	232	2
By Private Practitioner or Hospital, apart from the Authority's Scheme	6	1	1	—
Total	141	11	233	2
Received other forms of treatment	428			
Total number treated	815			

GROUP IV.—Orthopaedic and Postural Defects.

	Under the Authority's Scheme			Otherwise			Total number treated
	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopaedic clinic	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopaedic clinic	
Number of children treated	9	—	388	—	—	—	397

TABLE V.

Dental Inspection and Treatment.

(1) Number of Children inspected by the Dentists :—

(a) Routine Age-groups	*Aged* 3	149		
	4	687		
	5	1,741		
	6	1,910		
	7	2,459		
	8	2,544		
	9	2,381	Total	22,172
	10	2,437		
	11	2,418		
	12	2,317		
	13	2,027		
	14	1,073		
	15	29		
(b) Specials				1,506
Grand Total				23,678

(2)	Found to require treatment		17,694
(3)	Actually treated		7,951*
(4)	Attendances made by children for treatment		13,769
(5)	Half-days devoted to :—		
	Inspection	129	
	Treatment	1,720	
	Total		1,849
(6)	Fillings :—		
	Permanent teeth	5,398	
	Temporary teeth	193	
	Total		5,591
(7)	Extractions :—		
	Permanent teeth	4,091	
	Temporary teeth	14,686	
	Total		18,777
(8)	Administrations of general anaesthetics for extractions		7,608
(9)	Other operations :—		
	Permanent teeth	1,533	
	Temporary teeth	8	
	Total		1,541

* Including 3,540 who had received treatment previously.

TABLE VI.

Uncleanliness and Verminous Conditions.

(i)	Average number of visits per school made during the year by the School Nurses	3·1
(ii)	Total number of examinations of children in the schools by School Nurses	40,682
(iii)	Number of individual children found unclean	2,407
(iv)	Number of individual children cleansed under Section 87 (2) and (3) of the Education Act, 1921	—
(v)	Number of cases in which legal proceedings were taken :—	
	(a) Under the Education Act, 1921	—
	(b) Under School Attendance Byelaws	—

SECONDARY AND HIGH SCHOOLS.

TABLE I.

MEDICAL INSPECTION.

A.—Routine Medical Inspections.

Number of Routine Inspections	1,694

B.—Other Inspections.

Number of Special Inspections	268
Number of Re-inspections	377
Total	645

C.—Children Found to Require Treatment.

Number of individual children found at routine medical inspection to require treatment (excluding defects of nutrition, uncleanliness and dental disease) :—

Group (1)	For Defective Vision (excluding Squint) (2)	For all other Conditions recorded in Table II A. (3)	Total (4)
All children inspected	161	135	283

Note.—No individual child is counted more than once in any column of this table ; for example, a child suffering from defective vision and from adenoids appears once in column 2, once in column 3 and *once only* in column 4.

SECONDARY AND HIGH SCHOOLS.

TABLE II.

A.—DEFECTS FOUND BY MEDICAL INSPECTION.

DEFECT OR DISEASE	Routine Inspections — No. of Defects		Special Inspections — No. of Defects	
	Requiring Treatment	Requiring to be kept under observation, but *not* requiring Treatment	Requiring Treatment	Requiring to be kept under observation, but *not* requiring Treatment
Skin — (1) Ringworm—Scalp	—	—	—	—
Skin — (2) ,, Body	—	—	—	—
Skin — (3) Scabies	3	—	—	—
Skin — (4) Impetigo	3	—	2	—
Skin — (5) Other Diseases (Non-Tuberculous)	9	—	4	—
Total (Heads 1 to 5)	15	—	6	—
Eye — (6) Blepharitis	2	1	1	—
Eye — (7) Conjunctivitis	—	—	2	—
Eye — (8) Keratitis	—	—	—	—
Eye — (9) Corneal Opacities	—	—	—	—
Eye — (10) Other Conditions (excluding Defective Vision and Squint)	1	—	2	—
Eye — Total (Heads 6 to 10)	3	1	5	—
(11) Defective Vision (excluding Squint)	161	25	7	1
(12) Squint	5	—	—	—
Ear — (13) Defective Hearing	11	5	—	—
Ear — (14) Otitis Media	5	—	1	—
Ear — (15) Other Ear Diseases	1	—	—	—
Nose and Throat — (16) Chronic Tonsillitis only	11	10	—	—
Nose and Throat — (17) Adenoids only	1	—	—	—
Nose and Throat — (18) Chronic Tonsillitis and Adenoids	1	—	—	—
Nose and Throat — (19) Other Conditions	8	1	6	—
(20) Enlarged Cervical Glands (Non-Tuberculous)	2	4	1	1
(21) Defective Speech	5	—	—	—
Heart and Circulation — Heart Disease :— (22) Organic	8	17	4	2
Heart and Circulation — (23) Functional	9	15	1	1
Heart and Circulation — (24) Anaemia	7	—	1	1
Lungs — (25) Bronchitis	1	1	—	—
Lungs — (26) Other Non-Tuberculous Diseases	1	8	10	3
Tuberculosis — Pulmonary :— (27) Definite	—	—	—	—
Tuberculosis — (28) Suspected	—	—	—	—
Tuberculosis — Non-Pulmonary :— (29) Glands	1	—	1	—
Tuberculosis — (30) Bones and Joints	—	—	—	—
Tuberculosis — (31) Skin	—	—	—	—
Tuberculosis — (32) Other Forms	—	—	—	—
Total (Heads 29 to 32)	1	—	1	—
Nervous System — (33) Epilepsy	—	—	—	—
Nervous System — (34) Chorea	—	—	—	—
Nervous System — (35) Other Conditions	4	—	1	1
Deformities — (36) Rickets	—	—	—	—
Deformities — (37) Spinal Curvature	3	—	—	—
Deformities — (38) Other Forms	19	4	10	2
(39) Other Defects and Diseases (excluding Defects of Nutrition, Uncleanliness and Dental Disease)	35	17	31	20
Total	317	108	85	32

B.—CLASSIFICATION OF THE NUTRITION OF CHILDREN INSPECTED DURING THE YEAR AT ROUTINE MEDICAL INSPECTION.

Number of Children Inspected	Excellent		Normal		Slightly Sub-normal		Bad	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
1,694	10	*0·6*	1,637	*96·6*	40	*2·4*	7	*0·4*

SECONDARY AND HIGH SCHOOLS.

TABLE III.

TREATMENT TABLES.

GROUP I.—Minor Ailments (excluding Uncleanliness).

Defect or Disease	Number of Defects treated or under treatment during the year		
	Under the Authority's Scheme	Otherwise	Total
Skin :—			
Ringworm—Scalp—			
(i) X-ray Treatment	—	—	—
(ii) Other	—	—	—
Ringworm—Body	—	—	—
Scabies	1	—	1
Impetigo	1	—	1
Other Skin Disease	—	—	—
Minor Eye Defects :—			
(External and other, but excluding cases falling in Group II)	—	—	—
Minor Ear Defects	11	—	11
Miscellaneous			
(*e.g.*, minor injuries, bruises, sores, chilblains, etc.)	5	—	5
Total	18	—	18

GROUP II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I).

Defect or Disease	Number of Defects dealt with		
	Under the Authority's Scheme	Otherwise	Total
Errors of Refraction (including Squint)	265	8	273
Other Defect or Disease of the Eyes (excluding those recorded in Group I)	14	—	14
Total	279	8	287

Defect or Disease	Number of Children for whom Spectacles were			
	Prescribed		Obtained	
	Under the Authority's Scheme	Otherwise	Under the Authority's Scheme	Otherwise
Errors of Refraction (including Squint)	233	7	230*	7

* Including 9 free of charge.

GROUP III.—Treatment of Defects of Nose and Throat.

	Number of Defects			
	Tonsils only	Adenoids only	Tonsils and Adenoids	Other Defects
Received Operative Treatment—				
Under the Authority's Scheme, in Clinic or Hospital	8	1	6	—
By Private Practitioner or Hospital, apart from the Authority's Scheme	—	—	—	1
Total	8	1	6	1
Received other forms of treatment ...	12			
Total number treated	28			

GROUP IV.—Orthopaedic and Postural Defects.

	Under the Authority's Scheme			Otherwise			Total number treated
	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopaedic clinic	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopaedic clinic	
Number of children treated ...	3	—	20	—	—	—	23

TABLE IV.

Dental Inspection and Treatment.

(1)	Number of children inspected by the Dentists :—		
	(*a*) Routine Age-groups....		—
	(*b*) Specials		836
(2)	Found to require treatment		830
(3)	Actually treated		894*
(4)	Attendances made by children for treatment		2,958
(5)	Half-days devoted to :—		
	Inspection	†	
	Treatment	†	
	Total		†
(6)	Fillings :—		
	Permanent teeth	2,242	
	Temporary teeth	2	
	Total		2,244
(7)	Extractions :—		
	Permanent teeth	763	
	Temporary teeth	201	
	Total		964
(8)	Administrations of general anaesthetics for extractions		467
(9)	Other operations :—		
	Permanent teeth	773	
	Temporary teeth	—	
	Total		773

* Including 598 who had received treatment previously.

† Special sessions are not devoted to inspection and treatment of secondary and high school children ; the numbers of sessions devoted to inspection and treatment of all children are shown on page 164.

MENTAL DEFICIENCY SERVICE.

The mentally defective persons under the care of the Mental Deficiency Committee are classified according to sex, age and form of mental defect in the tables given below. The total number of ascertained defectives for the care of whom the Committee were responsible at the end of 1937 was 640—an increase of 21 over the number at the end of the previous year. Of the total number of cases, 235 were in institutions or under statutory guardianship, the institutions in which they were placed being shown in Table VII. The number of ascertained cases remaining at home was 404, of whom 287 were under statutory supervision and 117 under voluntary supervision; one remained to be appropriately dealt with. In addition, there were 76 cases in institutions under Lunacy Orders and 11 cases in poor-law institutions but not under Orders, who would be dealt with more appropriately under the Mental Deficiency Acts. There were also four cases under consideration but not ascertained definitely to be mentally defective.

Difficulty was experienced during the year in obtaining institutional accommodation for adult mental defectives, in consequence of which special permission had to be sought from the Board of Control for some of them to be admitted to the Public Assistance Institution, Ely, Cardiff, as this institution already had its full complement of cases. The Glamorgan County Council propose to extend Hensol Castle Colony, and the Cardiff Mental Deficiency Committee have agreed to take up 60 beds there (including the 35 already occupied), so that eventually it will be possible to accommodate another 25 Cardiff cases at the Colony.

Fewer cases have been transferred to the care of the Mental Deficiency Committee by the Education Committee during the year—28, as compared with 41 in 1936. The reduction is due mainly to the fact that under the Mental Deficiency Act, 1927, it is possible to deal with low-grade mental defectives by placing them in institutions before they attain the age of seven years without waiting for them to be transferred from the care of the Education Committee.

It will be seen on reference to Table III that 32 and 35 defectives were attending the Occupation and Training Centres respectively. The useful work of the Centres has always been carried on under great difficulties in unsuitable premises. The question of providing adequate and suitable premises has been under consideration for several years, and a site for a new building has now been obtained at Pengam, Cardiff, where it is intended to erect a new combined Occupation and Training Centre at a cost of approximately £4,400. The furniture and equipment required are estimated to cost £300, and the net extra estimated annual cost (including the cost of the conveyance of the children and young persons in attendance from the town centre to the new premises) is £430.

TABLE I.

SUMMARY OF WORK, 1937.

(1) Cases examined for the first time :—

	Males.	*Females.*	*Total.*
Idiots	1	1	2
Imbeciles	2	4	6
Feebleminded	13	10	23
Unclassified	1	1	2
Not mentally defective	6	2	8
Total	23	18	41
(2) Re-examinations	56	43	99

Table I *continued—Summary of Work*, 1937.

	Males.	*Females.*	*Total.*
(3) Removed from list of ascertained cases under supervision at home—			
(i) Removed to institutions at instance of Local Authority–			
(*a*) Obligatory	8	6	14
(*b*) Permissive	—	—	—
(ii) Removed to institutions at instance of Public Assistance Committee–			
(*a*) Under Lunacy Orders	—	—	—
(*b*) Other cases	4	2	6
(iii) Deceased	3	1	4
(iv) Left Cardiff	5	2	7
(v) Admitted to Mental Hospitals	—	1	1
(vi) Decertified	1	—	1
Total	21	12	33
(4) Removed to institutions (not previously under supervision at home)	3	2	5
(5) Total number removed to institutions or placed under guardianship at the instance of Local Authority	11	8	19
(6) Transferred from one institution to another	3	—	3
(7) Institution or guardianship cases that ceased to be chargeable to the Local Authority—			
(i) Deceased	1	3	4
(ii) On licence	2	4	6
Total	3	7	10
(8) Instances in which licence from institutions or guardianship was granted	2	6	8
(9) Instances in which cases on licence were returned to guardianship or institutions	—	2	2

Table I *continued—Summary of work,* 1937.	*Males.*	*Females.*	*Total.*
(10) Cases in which Orders lapsed and cases discharged from Orders	3	5	8
(11) Died in Mental Hospitals or Poor-law Institutions	—	3	3
(12) Visits paid by Visiting Officers			2,032

Table II.

Sources of Ascertainment of Cases Examined for First Time.

Source of Ascertainment	Idiots	Imbeciles	Feeble-minded	Unclassified	Not Mentally Defective	Total
Local Education Authority	1	3	17	—	—	21
Officers of Public Health Department	1	2	2	2	2	9
Public Assistance Department	—	—	1	—	3	4
Parents, Guardians or Relatives	—	1	—	—	—	1
Other Sources	—	—	3	—	3	6
Total	2	6	23	2	8	41

Table III.

Position at 31st December, 1937.

	Males.	*Females.*	*Total.*
(1) Obligatory Cases :—			
(*a*) In Institutions	111	94	205*
(*b*) Under Guardianship	1	3	4
(*c*) On Licence from Institutions	5	10	15
(2) Cases in regard to whom the Local Authority contributes under permissive powers :—			
(*a*) In Institutions	6	4	10
(*b*) On licence from Institution	—	1	1
Total	123	112	235
(3) Cases in Institutions under Lunacy Orders ascertained to be mentally defective :—			
(*a*) Ely Lodge	33	34	67
(*b*) Mental Hospitals	2	7	9
Total	35	41	76

* Including 16 cases (8 males and 8 females) maintained by the Board of Control.

Table III *continued—Position at* 31*st December*, 1937.	*Males.*	*Females.*	*Total.*
(4) Cases at home—ascertained to be defective :—			
(*a*) Under Statutory Supervision	160	127	287
(*b*) Under Voluntary Supervision	49	68	117
(*c*) Supervised for other Authorities	2	6	8
Total	211	201	412
(5) Attending Occupation Centre—included in (4) :—			
(*a*) Under Statutory Supervision	16	14	30
(*b*) Under Voluntary Supervision	1	1	2
Total	17	15	32
(6) Attending Training Centre—included in (4):—			
(*a*) Under Statutory Supervision	14	19	33
(*b*) Under Voluntary Supervision	1	1	2
Total	15	20	35
(7) " Subject to be dealt with " but action not yet taken :—			
(*a*) Notified by Local Education Authority	1	—	1
(*b*) In Poor Law Institutions	3	8	11
Total	4	8	12
(8) Under consideration but not ascertained to be defective	3	1	4

Table IV.

Classification of Known Cases.

	In Institutions or under Guardianship (including cases on licence, etc.)			Under Supervision at Home		
	Males	Females	Totals	Males	Females	Total
Idiots	17	11	28	9	3	12
Imbeciles	46	23	69	51	63	114
Moral Defectives	—	1	1	—	1	1
Feebleminded	59	75	134	146	127	273
Post-encephalitic Deterioration	—	2	2	1	—	1
Unclassified or not examined	1	—	1	2	1	3
Total	123	112	235	209	195	404

Table V.

Ages of Cases in Institutions or Under Guardianship

(including Cases on Licence, etc.)

Ages—Years	Idiots		Imbeciles		Moral Defectives		Feeble-minded		Post-encephalitic Deterioration		Unclassified		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
4	1	—	1	—	—	—	1	—	—	—	—	—	3
5	1	—	—	—	—	—	—	—	—	—	—	—	1
6	1	—	—	1	—	—	—	—	—	—	—	—	2
7	—	—	1	—	—	—	—	—	—	—	—	—	1
9	1	—	1	—	—	—	—	—	—	—	—	—	2
10	1	—	—	—	—	—	—	—	—	—	—	—	1
11	1	1	1	—	—	—	—	—	—	—	—	—	3
12	—	—	—	2	—	—	—	—	—	1	—	—	3
13	3	—	1	1	—	—	—	—	—	—	—	—	5
14	1	—	1	—	—	—	1	1	—	—	—	—	4
15	2	—	—	1	—	—	1	3	—	—	—	—	7
16	—	2	1	1	—	—	2	3	—	—	—	—	9
17	—	1	—	—	—	—	2	3	—	—	—	—	6
18	—	—	3	—	—	—	2	3	—	—	—	—	8
19	—	1	3	—	—	—	—	2	—	—	—	—	6
20—25	3	3	16	6	—	—	14	20	—	—	—	—	62
25—30	2	1	6	2	—	1	17	11	—	1	1	—	42
30—40	—	1	8	8	—	—	13	22	—	—	—	—	58
Over 40	—	1	3	1	—	—	—	7	—	—	—	—	12
Total	17	11	46	23	—	1	59	75	—	2	1	—	235

Table VI.

Ages of Cases under Supervision at Home.

Ages—Years	Idiots		Imbeciles		Moral Defectives		Feeble-minded		Post-encephalitic Deterioration		Unclassified		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
5	—	—	—	1	—	—	1	—	—	—	2	—	4
6	—	1	—	2	—	—	—	—	—	—	—	—	3
7	—	—	1	—	—	—	1	—	—	—	—	—	2
8	—	1	3	2	—	—	—	2	—	—	—	—	8
9	1	—	1	—	—	—	1	1	—	—	—	—	4
10	—	—	—	—	—	—	3	—	—	—	—	—	3
11	—	—	1	4	—	—	—	1	—	—	—	—	6
12	—	—	2	—	—	—	1	2	—	—	—	—	5
13	—	—	2	3	—	—	4	3	—	—	—	—	12
14	—	—	1	3	—	—	5	2	—	—	—	—	11
15	—	1	1	2	—	—	5	4	—	—	—	—	13
16	—	—	2	2	—	—	10	9	—	—	—	—	23
17	2	—	2	4	—	—	14	12	—	—	—	—	34
18	—	—	7	3	—	—	13	8	—	—	—	—	31
19	—	—	1	2	—	—	8	5	—	—	—	—	16
20—25	4	—	15	14	—	—	41	31	—	—	—	—	105
25—30	—	—	4	5	—	—	18	12	—	—	—	—	39
30—40	1	—	4	12	—	1	16	21	1	—	—	—	56
Over 40	1	—	4	4	—	—	5	14	—	—	—	1	29
Total	9	3	51	63	—	1	146	127	1	—	2	1	404

Table VII.

Cases in Institutions or under Guardianship.

(*a*) Obligatory Cases.

Name of Institution, Etc.	Idiots	Imbeciles	Moral Defectives	Feeble-minded	Post-encephalitic Deterioration	Unclassified	Total
(a) Institutions :—							
Besford Court Catholic Mental Welfare Hospital, Worcester	—	—	—	3	—	—	3
Cardiff Public Assistance Institution, Ely, Cardiff	24	43	—	37	1	—	105
Etloe House, Leyton, Essex	—	1	—	2	—	—	3
Hensol Castle Colony, near Pontyclun, Glam.	—	6	—	29	—	—	35
Hortham Colony, Bristol	—	—	—	15	—	—	15
House of Help, Bath	—	—	—	2	—	—	2
Monkton Hall Home, Jarrow-on-Tyne	—	—	—	1	—	—	1
Moss Side State Institution, Maghull	—	2	—	2	—	1	5
Mount Tabor Certified Institution, Basingstoke	—	—	—	2	—	—	2
Pield Heath House, Hillingdon, Uxbridge	—	1	—	—	—	—	1
Rampton State Institution, Retford	—	—	1	9	1	—	11
Rock Hall House, Combe Down, Bath	—	1	—	—	—	—	1
Royal Earlswood Institution, Redhill	—	1	—	—	—	—	1
St. Elizabeth's Home for Epileptics, Much Hadham, Herts.	—	—	—	3	—	—	3
St. Joseph's Home, The Croft, Sudbury	—	—	—	4	—	—	4
St. Mary's Home, Painswick, Stroud, Glos.	—	—	—	4	—	—	4
St. Raphael's Colony for Epileptics, Barvin Park, Herts.	—	—	—	3	—	—	3
St. Teresa's Home, Lewisham	—	—	—	3	—	—	3
Seafield House, Seaforth, near Liverpool	—	—	—	1	—	—	1
Stoke Park Colony, Stapleton, Bristol	—	9	—	8	—	—	17
(b) Guardianship :—							
Central Association for Mental Welfare, London	—	1	—	—	—	—	1
Under Guardianship of Parents	—	—	—	1	—	—	1
Approved Homes	1	—	—	1	—	—	2
Total	25	65	1	130	2	1	224

(*b*) Permissive Cases.

Name of Institution	Idiots	Imbeciles	Feeble-minded	Total
Cardiff Public Assistance Institution, Ely, Cardiff	3	2	1	6
Etloe House, Leyton, Essex	—	—	1	1
Hensol Castle Colony, near Pontyclun, Glam.	—	1	1	2
Royal Earlswood Institution, Redhill	—	1	—	1
Stoke Park Colony, Stapleton, Bristol	—	—	1	1
Total	3	4	4	11

Table VIII.

Cases under Supervision at Home in Need of Institutional Care and Cases Requiring Alternative Institutional Accommodation as at 31st December, 1937.

	Under Supervision at Home		Unsuitably placed in Institutions				Total		
			Under Lunacy Orders		Not Under Orders				
	M	F	M	F	M	F	M	F	Both Sexes
Idiots	1	—	4	6	—	—	5	6	11
Imbeciles	—	—	17	17	—	2	17	19	36
Moral Defectives	—	—	1	—	—	—	1	—	1
Feebleminded	—	—	14	16	1	5	15	21	36
Post-encephalitic Deterioration	—	—	—	1	—	—	—	1	1
Total	1	—	36	40	1	7	38	47	85