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City and Port of Cardiff

PUBLIC HEALTH DEPARTMENT

ANNUAL REPORT

1959

W. POWELL PHILLIPS, O.B.E., M.R.C.S., L.R.C.P., D.P.H.

Medical Officer of Health
Principal School Medical Officer
Port Medical Officer

CITY OF CARDIFF MUNICIPAL OFFICES,
GREYFRIARS ROAD,
CARDIFF.
Telephone 31033

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COMMITTEES

(As at December, 1959)

Health Committee

THE LORD MAYOR
(Alderman HELENA EVANS, J.P.)

Chairman

Alderman HELEN POOLEY, J.P.

Deputy Chairman

Councillor HILDA COHEN

Alderman	C. A. BENCE, M.R.C.S., L.R.C.P.	Councillor	F. W. JONES, J.P.
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,,	J. P. KEOHANE	,,	EVA DAVIES
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,,	A. A. HUISH	,,	DOROTHY GEORGE

Maternity and Child Welfare Sub-Committee

Chairman

Councillor GLADYS HORLE

Deputy Chairman

Alderman HELENA EVANS, J.P.

The Members of the HEALTH COMMITTEE :

The Chairman of the CHILDREN COMMITTEE
and the following co-opted Members :—

Mrs. ERIC EVANS, J.P.
Professor A. G. WATKINS
Mrs. MARGARET LEWIS
Mrs. R. E. JENKINS
Miss A. H. COLVILLE

Midwifery and Home Nursing Services Sub-Committee

Chairman
Professor G. I. Strachan

Deputy Chairman
The Lord Mayor (Alderman Helena Evans, J.P.)

The Members of the Health Committee, and the following :—

Mrs. O. Campbell
Mrs. F. M. Crafter
E. J. Davis
Mrs. E. G. Morgan
J. R. Morgan
Rev. P. Ogilvie
Miss E. M. Smith
Mrs. R. Traherne
Dr. Morgan G. Williams
Dr. J. D. Williamson

Mental Health, After-Care and Health Services Sub-Committee

Chairman
Alderman Helen Pooley, J.P.

Deputy-Chairman
Councillor Hilda Cohen, J.P.

The Members of the Health Committee
and the following co-opted Members :—

Dr. S. H. Graham
Dr. T. J. Hennelly
Mrs. G. M. Horner
Dr. M. G. Williams
Dr. G. F. Petty
Miss Mary Davies
The Hon. John H. Bruce
Dr. J. D. Williamson

Education Committee

Chairman
The Lord Mayor (Alderman Helena Evans, J.P.)

Deputy Chairman
Councillor F. Basil Bevan

Alderman	J. Walker, M.D., D.P.H., D.P.M.	Councillor	Reg. J. Fox
,,	Sir James Collins	,,	A. A. Huish
,,	C. A. Horwood, J.P.	,,	F. D. Walters
,,	Helen Pooley, J.P.	,,	S. W. Doxsey
,,	Miriam C. Bryant, J.P.	,,	J. E. H. Edwards
Councillor	A. Lincoln Hallinan	,,	Hilda Cohen, J.P.
,,	W. Groves	,,	J. N. Rees
,,	Llewelyn Jenkins, B.A.	,,	D. C. Purnell
,,	H. Ferguson Jones, J.P.	,,	A. B. Matthewson
,,	D. E. Howells	,,	Dorothy George
,,	G. A. S. Turnbull, J.P.	,,	Olwen Parry
,,	Gladys Horle	,,	R. James Fox
,,	Winifred Mathias	,,	W. H. Carling

Co-opted Members

The Rev. F. Wall
Professor Eric Evans, M.A.
Mrs. Beatrice Kennedy
Mrs. C. Wedlake
Mr. George E. Brown
The Rev. W. A. Winton
The Rev. Griffith J. Harries
Mr. E. Tear, J.P.
Mr. R. G. Robinson, J.P.

PREFACE

I have the honour to present my Annual Report on the health of the City for the year 1959.

It is customary at the outset of this preface to discuss some of the salient features of vital statistics. The population of Cardiff continues to increase and the Registrar General estimates that the population at mid-1959 was 254,200.

Births.—For some years the birth rate in Cardiff has been higher than the national average and this has persisted in 1959 with a rate of 17·86 per thousand of the population compared with 16·5 for England and Wales. The infant mortality rate was 24·45 compared with a national rate of 22·00. Neo-natal deaths in Cardiff were 17·62 per thousand live births whereas for the remainder of the country the figure was 15·8. These figures indicate the constant need to keep the ante-natal and child welfare arrangements under close review. The most promising line of action is to ensure that Hospital, General Practitioner and Local Health Authority Services work as a harmonious unit. It is important to study the histories of both institutional and domiciliary confinements. To this end a joint appointment of a clerical officer, whose salary is partly paid by the Welsh National School of Medicine and the City Council has been made. Her work will be to collect and tabulate information relating to all confinements in Cardiff.

A feature which is becoming more and more apparent is the " short-stay " hospital confinement ; the mother returning home with the baby after 48 hours. This has been brought about by force of circumstances—high demand for hospital confinements without a complementary increase in maternity beds. Another factor is emerging and that is that this procedure is becoming increasingly popular with the mothers. This is common in the United States and if it develops in this country to any degree it will call for an alteration in the pattern of the services to be provided.

Before leaving the subject of Maternal and Child Welfare attention should be drawn to the fact that during the year all of our Health Visitors had special training in the early detection of deafness. Arrangements have also been made for Dr. Barbara Meyler a Registrar at Whitchurch Hospital, to give a talk at each ante-natal centre. The purpose of this is to encourage the expectant mother to face up to any difficulties or problems which may be encountered.

Infectious Diseases.—The main emphasis today is not on the incidence of infectious illnesses but rather upon the steps which are being taken to prevent them. Certainly there was a high incidence of measles and sonné dysentery but both these illnesses were of more nuisance than danger to health. It is difficult to generalise, but many doctors with considerable experience, say that whooping cough has become a much less severe infection since mass immunisation has been undertaken. Combined immunisation against diphtheria, tetanus and whooping cough will be the routine procedure in Cardiff from the beginning of 1960. The acceptance rates in Cardiff are really excellent and this reflects credit on all those who are playing their part in this preventive treatment.

Acute rheumatism was made notifiable in Cardiff during 1959 by the application of the Acute Rheumatism Regulations, 1953, to the City. Interest has always been focussed on this disease by the Health Department. Thirty years ago the Lord Pontypridd Hospital was opened for the treatment of Juvenile Rheumatism. In 1933 there were 524 young patients voluntarily notified for observation of this condition. In 1959, the first year of " official notification," there were only 15 cases.

The routine work in connection with the prevention of tuberculosis has gained momentum during the year and the section of this report which deals with this aspect of our work should prove of interest. Attention is particularly being directed to those children who convert from a negative to a strong tuberculin reaction. If this were dealt with in detail in this preface it would allow for very little comment on other important aspects in this report.

Home Nursing and Midwifery.—Comment must be made on the transition which has taken place whereby the Home Nursing and Midwifery Service is now organised directly by the City Council. Since the National Health Service became operative a voluntary committee continued to administer these services. In 1959 the voluntary Committee ceased to function, but its members, who had given so much devoted service have become members of a Sub-Committee of the Health Committee and therefore continue to contribute their valuable experience towards the management of these services.

School Health and Student Health.—The School Health Service has not undergone any noteworthy change but it is pleasing to record that in Cardiff a reasonably satisfactory position is being maintained with regard to the complement of School Dental Officers. In the field of further education a Student Health Service has been started for pupils at Cardiff Technical Colleges. Details of this innovation are comprehensively dealt with in the body of this report.

Environmental Health.—The Chief Public Health Inspector draws attention to a major scheme of re-development in Cardiff which is the Butetown Clearance Area. The first stage has now been commenced with the Compulsory Purchase Order being confirmed. It is envisaged that there are some 2,162 houses in Cardiff which should be subject to slum clearance procedure.

The subject of atmospheric pollution is receiving close attention and the installation of smoke gauges at strategic points in the City will serve to accumulate the information and data on which a sound judgement may be based. It is of some importance that 82% of the solid fuels burnt in the City come within the classification of authorised fuel which may be used in a smoke control area. While this is very satisfactory from one point of view it complicates the issues involved when considering the designation of control areas within the City.

The Public Analyst draws attention to the gradual deterioration of the quality of milk samples. The total solids per cent which is a good guide to the quality of milk—has dropped from 12·64% in 1935 to 12·08% in 1959. These figures exclude Channel Islands Milk. This is a subject which requires the attention of milk producers.

The City Council and especially the Health Committee sustained a great loss when Alderman Mrs. Helen Pooley died in October, 1960. Since she was elected to the Council in 1946 she had a keen and vital interest in Health and indeed in all welfare services. For the past two years she was Chairman of the Health Committee. All of her colleagues and the staff feel the loss acutely.

Finally I do wish to thank all of those who have worked in the Health Services throughout the year and have really made a practical contribution to the Cardiff Public Health Service.

W. POWELL PHILLIPS

Public Health Department,
City of Cardiff Municipal Offices,
Greyfriars Road, CARDIFF.
October, 1960.

Publications

" A Case of Pulmonary Tuberculosis with Hospitalmania " by A. H. Griffith, M.B., B.S., D.P.H., Senior Medical Officer, *The Medical Officer*, 1*st May*, 1959.

" Diabetic Clinics in Cardiff—Their History, Fusion and Present Functions " by G. H. Powell, S.R.N., Dip. of Diabetics, Chief Dietitian, United Cardiff Hospitals and C. O'Shea, S.R.N., H.V. Cert. Diabetic After-Care Health Visitor, Cardiff, *Proceedings of the International Congress of the Diabetic Federation*, held at Dusseldorf, 21st-25th July, 1958.

" A Student Health Service in Cardiff Technical Colleges," by Geoffrey Ireland, B.SC., M.B., B.CL., Assistant Medical Officer, *The Medical Officer, December*, 1959.

" The Work of Health Visitors in Cardiff " by N. M. Osmond, H.V. Cert. Superintendent Health Visitor, Cardiff and P. H. Williams, F.C.C.S., Administrative Officer, Cardiff, *Mother and Child, September*, 1959.

" Tests for Phenylketonuria," by N. K. Gibbs, M.R.C.S., L.R.C.P., D.P.H., and L. I. Woolf, B.SC., PH.D., *The British Medical Journal, 26th September*, 1959. *Vol. ii, pp.* 532-535.

" Diphtheria Immunisation," by W. Powell Phillips, O.B.E., M.R.C.S., L.R.C.P., D.P.H., *The Practitioner, September*, 1959.

" B.C.G. Vaccination by Multiple Puncture," by A. H. Griffith, M.B., B.S., D.P.H., Senior Medical Officer, *The Lancet, 6th June*, 1959, *pp.* 1170-1172.

PUBLIC HEALTH DEPARTMENT STAFF (as at 31st December, 1959)

MEDICAL OFFICER OF HEALTH (CITY AND PORT) AND PRINCIPAL SCHOOL MEDICAL OFFICER

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

DEPUTY MEDICAL OFFICER OF HEALTH AND DEPUTY PRINCIPAL SCHOOL MEDICAL OFFICER

Cecil W. Anderson, M.B., Ch.B., D.P.H., T.D.D.

SENIOR MEDICAL OFFICERS

A. H. Griffith, M.B., B.S., D.P.H.
Nancy K. Gibbs, M.R.C.S., L.R.C.P., D.P.H.

ASSISTANT MEDICAL OFFICERS AND SCHOOL MEDICAL OFFICERS (Whole-time)

Jean W. Smellie, M.B., Ch.B., D.P.H.
G. Edward Phillips, M.R.C.S., L.R.C.P., D.P.H.
N. Frank, M.B., D.P.H., D.T.M.
Anne Guy, B.Sc., M.B., B.S., D.C.H., D.P.H.
Enid Curran, M.B., B.Ch., D.C.H.
Douglas Harrett, M.B., B.Ch., D.P.H.
Geoffrey Ireland, M.B., B.Ch., D.P.H.
Eight Part-time Assistant Medical Officers

VISITING SPECIALIST MEDICAL OFFICERS

Rupert Parry, M.D., B.S., F.R.C.S., Ophthalmic Surgeon
Hector A. Thomas, F.R.C.S., Aural Surgeon
Professor A. G. Watkins, M.D., F.R.C.P., Professor of Child Health
S. H. Graham, M.D., Chest Physician

DENTAL

Principal School Dental Officer—H. V. Newcombe, L.D.S.

Dental Officers

D. W. Elliot, L.D.S.
C. N. Howitt, L.D.S.
D. J. Andrews, L.D.S.
Barbara J. W. Dolby, B.D.S.(Lond.)
J. W. Lewis, L.D.S.
Five Part-time Dentists. Nine Dental Clerk-Attendants.

NURSING AND MIDWIFERY

Superintendent Health Visitor—Miss N. M. Osmond

One Deputy Superintendent. Fifty-two Health Visitors Four State Registered Nurses.
One Physiotherapist. One Social Worker.

Non-Medical Supervisor of Midwives and Superintendent of Midwifery Service—Miss Buckley

One Midwifery Tutor. Two Assistant Superintendents. Twenty-one Domiciliary Midwives.

Superintendent of Home Nursing Service—Miss G. M. Williams

Two Assistant Superintendents. Thirty-eight Domiciliary Nurses (including the equivalent of two night nurses).

SANITARY ADMINISTRATION

Chief Public Health Inspector (Urban)—W. Bate, M.A., D.P.A.

One Deputy Chief Public Health Inspector; Six Specialist Public Health Inspectors; Fourteen Public Health Inspectors; One Lady Visitor for Housing Estates; One Rodent Officer.

Chief Port Health Inspector—T. G. Newby

One Port Health Inspector; One Deratisation Officer.

VETERINARY, MEAT INSPECTION AND ABATTOIR

Veterinary Officer, Chief Meat Inspector and Abattoir Manager

J. H. M. HUGHES, M.R.C.V.S., D.V.S.M.

Four Meat Inspectors; One Additional Inspector, Diseases of Animals Acts; One Deputy Abattoir Manager.

PUBLIC ANALYST'S LABORATORY

Public Analyst—S. DIXON, M.SC., F.R.I.C.

One Deputy Public Analyst; Three Assistant Chemists; Two Laboratory Technicians

ADMINISTRATION, ETC.

Chief Administrative Assistant—A. E. BRAIN

Administrative Officers—Mental Health and Finance—W. C. SWEETLAND
Maternity, Child Welfare and School Health—P. H. WILLIAMS, F.C.C.S.

Administrative and Clerical Assistants—General, Finance, Maternity and Child Welfare, etc.—29
Sanitary Administration—5
School Health Service—16
Others—3

Ambulance Officer, Domestic Help Organiser and Deputy, Duly Authorised Officers—3; One Senior Supervisor, Occupation and Training Centres, Supervisors—5; Assistant Supervisors—5; Nursery Nurses—4; Orthoptists (Single-handed)—3; Speech Therapists—3.

GENERAL HEALTH SERVICE

1—SUMMARY OF GENERAL AND VITAL STATISTICS

Area (acres) :—	
Including inland water and foreshore	18,066
Including inland water (excluding foreshore)	15,271
Excluding inland water	14,867
Population :—	
Census, 1951	243,632
Registrar-General's estimate, mid-1959	254,200
Number of persons per acre	17·09
Estimated number of inhabited houses	66,963
Estimated number of inhabited houses per acre	4·5
Estimated average number of persons per occupied house	3·79
Rateable Value, 1/4/60	£4,449,686
Estimated product of a penny rate 1959/60	£17,250
Live Births ... 4,540. Birth-rate per 1,000 — Crude	17·86
Live Births ... 4,540. Birth-rate per 1,000 — Adjusted by A.C.F.	16·79
Deaths ... 2,727. Death-rate per 1,000 — Crude	10·73
Deaths ... 2,727. Death-rate per 1,000 — Adjusted by A.C.F.	12·01
Excess of births over deaths—Males, 945 ; Females, 868. Total	1,813
Deaths under one year ... 111. Death rate per 1,000 live births	24·45
Deaths under one month ... 80. Death rate per 1,000 live births	17·62

		Death-rate per 1,000 Total Births
Deaths arising from Pregnancy, Childbirth, or Abortion	1	0·215

Deaths from various causes :—	*Number*	*Death-rate per 1,000 population*
Meningococcal infections	—	—
Typhoid fever	—	—
Measles	1	0·004
Scarlet fever	—	—
Whooping cough	—	—
Diphtheria	—	—
Tuberculosis of respiratory system	25	0·098
Other forms of tuberculosis	6	0·024
Cancer, all forms, including leukaemia	508	1·999
Influenza	18	0·071
Acute poliomyelitis	2	0·008
Enteritis and diarrhoea (under 2 years)	—	—

II—AREA AND POPULATION

The area of Cardiff (land and inland water but excluding foreshore) is 15,271 acres.

According to the Census of 1951, the population of Cardiff was 243,632 (males 115,468, females 128,164).

The population at mid-1959, as estimated by the Registrar-General, was 254,200 and it is on this figure that the vital statistics for 1959 are computed.

III—BIRTHS

The numbers of Births and Still-births registered and allocated to Cardiff during 1959 sub-divided according to sex and legitimacy, are shown in Table I.

Live-births and crude rates per 1,000 population are compared with the England and Wales figures for past years in Table II.

Still-birth statistics and illegitimate birth figures are shown in Tables III and IV respectively.

Table I — Live Births

	Legitimate	Illegitimate	Total
Males	2,252	116	2,368
Females	2,069	103	2,172
TOTAL ...	4,321	219	4,540

Still Births

	Legitimate	Illegitimate	Total
Males	37	6	43
Females	60	7	67
TOTAL ...	97	13	110

Table II — Live Births

Year	Population	Legitimate Births	Illegitimate Births	Total	Birth Rate	England & Wales Birth Rate
1949 ...	243,500	4,544	216	4,760	19·56	16·7
1950 ...	244,600	4,204	204	4,408	18·02	15·8
1951 ...	243,627	4,142	185	4,327	17·77	15·4
1952 ...	244,800	4,140	211	4,351	17·77	15·3
1953 ...	246,600	4,216	205	4,421	17·93	15·4
1954 ...	248,000	4,280	212	4,492	18·11	15·2
1955 ...	248,400	3,985	202	4,187	16·85	15·0
1956 ...	249,800	4,251	216	4,467	17·88	15·7
1957 ...	251,300	4,361	234	4,595	18·28	16·6
1958 ...	253,300	4,347	230	4,577	18·07	16·4
1959 ...	254,200	4,321	219	4,540	17·86	16·5

Table III — Still Births

Year	Legitimate	Illegitimate	Total	Rate per 1,000 total births Cardiff	Rate per 1,000 total births England & Wales	Rate per 1,000 population Cardiff	Rate per 1,000 population England & Wales
1949	130	9	139	28	23	0·57	0·39
1950	104	9	113	25	23	0·46	0·37
1951	120	7	127	29	23	0·52	0·36
1952	103	9	112	28	23	0·46	0·35
1953	99	—	99	22	22	0·40	0·35
1954	110	7	117	25	23	0·47	0·36
1955	122	8	130	30	23	0·50	0·35
1956	113	5	118	25·7	23	0·47	0·37
1957	93	7	100	21·3	22·6	0·40	0·37
1958	92	6	98	20·9	21·6	0·39	0·36
1959	97	13	110	23·6	20·7	0·43	0·35

Table IV — Illegitimate Births

Year	Live	Still	Total	Rate per 1,000 total births Cardiff	Rate per 1,000 total births England & Wales	Rate per 1,000 population Cardiff	Rate per 1,000 population England & Wales
1949	216	9	225	46	51	0·92	0·87
1950	204	9	213	47	51	0·87	0·82
1951	185	7	192	43	49	0·79	0·75
1952	211	9	220	49	49	0·90	0·76
1953	205	—	205	45	48	0·83	0·74
1954	212	7	219	48	47	0·88	0·71
1955	202	8	209	48	48	0·84	0·70
1956	216	5	221	48	48	0·86	0·75
1957	234	7	241	51	47	0·96	0·77
1958	230	6	236	50	—	0·93	—
1959	219	13	232	49·8	—	0·91	—

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 was 2,727 (1,423 males and 1,304 females). The total number of deaths registered in Cardiff was 2,870, but 492 of these were deaths of non-residents, which occurred mainly in hospitals and nursing homes, and 349 deaths of residents of Cardiff occurred and were registered in other areas. Allowance has been made for these outward and inward transferable deaths in arriving at the net number.

The following is a comparision of the death-rate for 1959, and the preceding ten years with the death-rates for England and Wales for the same period.

Year	Deaths	Crude Death Rate	England & Wales Death Rate
1949	2,784	11·44	11·8
1950	2,837	11·59	11·6
1951	3,182	13·07	12·5
1952	2,724	11·13	11·3
1953	2,774	11·25	11·4
1954	2,872	11·58	11·3
1955	2,830	11·39	11·7
1956	2.809	11·24	11·7
1957	2,798	11·13	11·5
1958	2,777	10·96	11·7
1959	2,727	10·73	11·6

Cancer.—The number of deaths from malignant neoplasms including 11 deaths from leukaemia and aleukaemia was 508 (282 males and 226 females). The deaths are classified according to age and localisation of the disease in the Table on page 6. The total cancer deaths excluding leukaemia and aleukaemia for the previous ten years are shown below.

Year	No. of Deaths			Death Rates		
	Males	Females	Total	Males	Females	Total
1949	265	205	470	2·23	1·59	1·93
1950	243	229	472	2·11	1·76	1·93
1951	256	243	499	2·20	1·90	2·05
1952	253	229	482	2·17	1·78	1·97
1953	278	305	483	2·37	1·58	1·97
1954	261	244	505	2·20	1·89	2·04
1955	270	228	498	2·27	1·76	2·00
1956	277	233	510	2·31	1·79	2·04
1957	279	193	472	2·32	1·47	1·88
1958	243	242	485	2·02	1·83	1·91
1959	277	220	497	2·21	1·71	1·95

Deaths from Motor Vehicle Accidents.—The number of deaths due to road traffic accidents, recorded in the year was 23 (16 males and 7 females), as compared with 26 deaths during 1958 and with an average of 26 for the preceding ten years (1958-49).

Other Accidents.—Other accidents due to violence totalled 52 (34 males and 18 females) and of that number 26 were under 65 years of age—15 of them under 45 years. Home accidents accounted for 33 deaths.

Accidents in the Home.—Of the 33 accidents in the home, 26 concerned persons over 65 years of age, 20 of these being over 80 years of age. Causes of home accidents as regards the adults were, recumbency following falls, 26 ; coal gas poisoning, 1 ; burns, 3. Of the three children under 5 years of age, one aged 15 months died as a result of a blow on the head received through falling on the floor, one child aged 6 months died from cardiac inhibition due to inhalation of regurgitated stomach contents and another child aged 6 months died from asphyxia due to impaction of a feeding bottle teat in the pharynx.

Accidents other than in the Home.—Approximately half of these accidents occurred at work. Other causes were as follows :—A man aged 43 years died of haemorrhage and shock due to multiple injuries and shock sustained when an aeroplane in which deceased was a passenger crashed through loss of control, whilst flying on one engine at a low altitude. A boy of 15 years died as a result of a fractured skull and cerebral laceration caused by falling from a cliff, and a boy of 16 years died of haemorrhage and shock due to a gunshot wound in the chest. Three deaths were attributable to drowning.

Maternal Mortality.—During the year there was 1 death from pregnancy, the cause being :—

1*a*. Haemorrhage due to hysterectomy for intra uterine haemorrhage due to uterine atonia following Caesarean Section for haemorrhage due to placenta praevia. (Coroner's Inquest).

The death occurred in hospital.

Infant Mortality.—The number of deaths under 1 year was 111. Of these 101 were legitimate and 10 illegitimate. There were 68 deaths of infants under 1 week and when the 110 still-births are added, the peri-natal mortality rate is 38·28. The neo-natal deaths number 80, being 72% of the total infant deaths. As will be seen from the table below, post-natal asphyxia and atelectasis caused 33 infant deaths, pneumonia 15 deaths and birth injuries caused a further 15 deaths. Congenital malformations resulted in 24 infant deaths.

The table below compares the infant mortality rate with the preceding 10 years and with the rates for England and Wales.

Year	Infant Deaths			Neo-natal Deaths			Still Births		
	No.	Rate per 1,000 Live Births C'diff.	E. & W.	No.	Rate per 1,000 Live Births C'diff.	E. & W.	No.	Rate per 1,000 Total Births C'diff.	E. & W.
1949	149	31·0	32·4	81	17·0	19·3	139	28	22·7
1950	121	27·0	29·6	74	16·8	18·5	113	25	22·6
1951	140	32·0	29·7	82	18·9	18·8	127	29	23·0
1952	124	28·0	27·6	79	18·1	18·3	112	28	22·7
1953	119	27·0	26·8	70	15·8	17·7	99	22	22·4
1954	153	34·0	25·4	98	21·9	17·7	117	25	23·5
1955	139	33·21	24·9	81	19·1	17·3	130	30	23·1
1956	124	27·76	23·8	85	19·03	16·9	118	25·7	22·9
1957	104	22·85	22·9	78	16·97	16·5	100	21·3	22·4
1958	116	25·34	22·5	84	18·35	16·2	98	20·96	21·6
1959	111	24·45	22·0	80	17·62	15·8	110	23·65	20·7

The causes of death of infants under one year of age in age periods during 1959 (compiled from figures supplied by the Registrar-General) are shown in the following table.

Causes of Death	Under 1 wk.	1 wk.	2 wks.	3 wks.	Total under 4 wks.	1–2 mths.	3–5 mths.	6–8 mths.	9–11 mths.	Total all ages
Haemorrhagic conditions ...	1	—	—	—	1	—	—	—	—	1
Inflammatory Diseases of Central Nervous System ...	1	—	—	—	1	—	—	—	—	1
Pneumonia	—	2	1	—	3	2	8	2	—	15
Bronchitis	—	—	—	—	—	—	1	—	—	1
Spina Bifida and Meningocele	1	1	1	—	3	2	—	—	—	5
Congenital Hydrocephalus ...	—	—	—	—	—	1	—	—	—	1
Congenital Malformation of Heart	3	1	—	—	4	4	1	—	—	9
Other Congenital Malformations	3	2	—	—	5	3	1	—	—	9
Injury at Birth	14	1	—	—	15	—	—	—	—	15
Post-natal Asphyxia and Atelectasis	33	—	—	—	33	—	—	—	—	33
Haemolytic disease of Newborn	2	—	—	—	2	—	—	—	—	2
Immaturity	7	1	1	—	9	—	—	—	—	9
Obstruction by Inhalation or Ingestion	—	—	—	—	—	—	—	2	—	2
All other causes	3	1	—	—	4	1	2	—	1	8
All causes	68	9	3	—	80	13	13	4	1	111
Percentage	61·3	8·1	2·7	—	72·1	11·7	11·7	3·6	0·9	100

The following table, compiled from figures supplied by the Registrar-General, shows the causes of death at various ages during 1959 :—

Causes of Death	All Ages			Age Groups							
	M.	F.	Total	Under 1 yr.	1–4 yrs.	5–14 yrs.	15–24 yrs.	25–44 yrs.	45–64 yrs.	65–74 yrs.	75 yrs. and up wards
1. Tuberculosis of Respiratory System	19	6	25	—	—	—	—	6	12	6	1
2. Other forms of Tuberculosis	2	4	6	—	—	1	—	1	4	—	—
3. Syphilitic Disease ...	7	1	8	—	—	—	—	—	3	5	—
4. Diphtheria	—	—	—	—	—	—	—	—	—	—	—
5. Whooping Cough ...	—	—	—	—	—	—	—	—	—	—	—
6. Meningococcal Infection	—	—	—	—	—	—	—	—	—	—	—
7. Acute Poliomyelitis ...	—	2	2	—	1	—	—	1	—	—	—
8. Measles	1	—	1	—	1	—	—	—	—	—	—
9. Other Infective and Parasitic Diseases ...	1	1	2	—	1	—	—	—	—	1	—
10. Malignant Neoplasm—Stomach	58	41	99	—	—	—	1	2	37	30	29
11. Lung, Bronchus ...	110	7	117	—	—	—	—	2	62	44	9
12. Breast	—	43	43	—	—	—	—	5	21	11	6
13. Uterus	—	20	20	—	—	—	—	3	8	4	5
14. Other Maligant and Lymphatic Neoplasm	109	109	218	—	1	4	—	15	59	65	74
15. Leukaemia, Aleukaemia	5	6	11	—	—	—	1	2	5	2	1
16. Diabetes	6	10	16	—	—	—	—	—	6	3	7
17. Vascular Lesions of the Nervous System ...	121	204	325	—	—	1	—	7	51	92	174
18. Coronary Disease, Angina	343	228	571	—	—	—	—	17	180	183	191
19. Hypertension with Heart Disease ...	42	38	80	—	—	—	—	1	14	29	36
20. Other Heart Diseases	87	170	257	—	—	—	1	8	45	43	160
21. Other Circulatory Diseases	70	79	149	—	—	—	—	3	11	31	104
22. Influenza	10	8	18	—	—	—	—	—	4	8	6
23. Pneumonia	59	56	115	15	1	1	2	5	22	22	47
24. Bronchitis	128	53	181	1	—	—	—	—	44	65	71
25. Other Respiratory Diseases	19	3	22	—	—	—	—	4	10	4	4
26. Ulceration of the Stomach or Duodenum	10	8	18	—	—	—	—	—	4	2	12
27. Gastritis, Enteritis, Diarrhoea	4	4	8	—	—	—	1	2	3	1	1
28. Nephritis and Nephrosis	9	10	19	—	—	—	1	5	3	4	6
29. Hyperplasia of the Prostate	20	—	20	—	—	—	—	—	1	3	16
30. Pregnancy, Childbirth	—	1	1	—	—	—	—	1	—	—	—
31. Congenital Malformations	15	21	36	24	2	—	2	1	5	1	1
32. Other Defined and Ill-defined Diseases ...	100	139	239	69	3	1	3	10	49	43	61
33. Motor Vehicle Accidents	16	7	23	—	—	2	10	5	2	1	3
34. All Other Accidents ...	34	18	52	2	2	1	2	8	11	3	23
35. Suicide	18	5	23	—	—	—	1	9	9	2	2
36. Homicide and Operations of War	—	2	2	—	—	1	—	1	—	—	—
All Causes ...	1,423	1,304	2,727	111	12	12	25	124	685	708	1,050
Percentages of Total Deaths				4·1	·45	·45	·9	4·5	25·1	26·0	38·5

TABLE SHOWING POPULATION, BIRTH-RATES, DEATH-RATES, INFANT AND MATERNAL MORTALITY RATES, ETC. OF A NUMBER OF THE LARGER AUTHORITIES FOR 1959.

Name of Authority	England and Wales	Birmingham	Bradford	Bristol	Cardiff	Kingston-upon-Hull	Leeds	Leicester	Liverpool	Manchester	Newcastle-upon-Tyne	Nottingham	Sheffield
Registrar-General's estimated population for 1959	45,386,000	1,091,500	289,100	436,600	254,200	301,800	513,300	275,400	757,500	672,300	271,100	313,300	499,400
Comparability factor—													
(*a*) Births	—	0·95	1·00	1·00	0·94	0·96	0·98	1·01	0·93	0·96	0·97	0·96	1·01
(*b*) Deaths	—	1·14	0·98	0·97	1·12	1·22	1·14	1·02	1·22	1·17	1·12	1·13	1·10
Crude birth rate per 1,000 population	16·5	17·729	17·61	15·26	17·86	18·70	16·3	16·5	20·6	18·34	19·18	17·95	15·44
Birth rate as adjusted by factor	—	16·84	17·61	15·26	16·79	17·95	16·0	16·67	19·17	17·61	18·60	17·23	15·59
Crude death rate per 1,000 population	11·6	11·624	14·42	11·85	10·73	11·05	11·9	12·29	11·3	12·49	12·08	11·48	11·74
Death rate as adjusted by factor	—	13·25	14·13	11·49	12·01	13·48	13·6	12·54	13·8	14·61	13·53	12·97	12·91
Infant mortality rate per 1,000 live births ...	22·0	25·37	29·85	19·5	24·45	29·59	25·4	20·88	27·4	26·35	26·73	24·18	16·99
Neo-natal mortality rate per 1,000 live births ...	15·8	17·98	19·24	14·0	17·62	21·61	17·8	13·41	19·6	18·08	19·23	17·25	11·286
Stillbirth rate per 1,000 total births	20·7	21·14	23·96	19·7	23·65	23·53	19·9	19·60	23·45	24·21	22·55	19·87	20·582
Perinatal mortality rate per 1,000 total births ...	—	36·56	41·02	31·8	38·28	40·14	35·2	31·03	39·46	39·40	38·34	32·93	31·254
Maternal mortality rate per 1,000 total births ...	0·38	0·354	0·38	0·29	0·215	0·52	0·47	—	0·31	0·95	0·564	0·35	0·254
Tuberculosis rates per 1,000 population													
(*a*) Primary notifications—													
Respiratory	—	0·64	0·79	0·50	0·83	0·63	0·66	0·494	2·15	0·71	0·815	0·83	0·663
Non-respiratory	—	0·08	0·08	0·11	0·10	0·06	0·07	0·073	0·06	0·06	0·089	0·06	0·068
(*b*) Deaths—Respiratory	0·077	0·087	0·08	0·06	0·098	0·12	0·09	0·051	0·135	0·12	0·103	0·083	0·126
Non-respiratory	0·008	0·007	0·003	0·01	0·024	0·01	0·01	0·0036	0·004	0·01	0·007	0·009	0·006
Death Rates per 1,000 population from													
Cancer (all forms including Leukaemia and Aleukaemia)	2·14	2·17	2·47	2·24	1·999	2·24	2·29	2·20	2·17	2·28	2·353	2·14	2·223
Cancer of Lungs and Bronchus	0·464	0·49	0·52	0·49	0·460	0·58	0·56	0·450	0·59	0·68	0·594	0·53	0·573
Meningococcal infections	—	0·01	0·003	0·00	—	0·007	0·004	—	0·004	0·00	0·0037	—	—
Whooping Cough	—	0·00	0·003	—	—	—	0·002	—	—	—	0·0037	—	0·002
Influenza	—	0·26	0·380	0·19	0·071	0·17	0·12	0·290	0·119	0·16	0·066	0·18	0·134
Measles	—	0·00	0·003	—	0·004	0·004	0·002	—	0·001	0·00	0·0037	0·003	—
Acute Poliomyelitis and Encephalitis	—	0·00	0·000	—	0·008	—	—	—	0·001	0·00	—	0·003	—
Diarrhoea (under 2 years)	—	0·01	0·013	0·00	—	0·007	0·02	0·011	0·014	0·00	0·022	0·006	0·008
Diarrhoea (under 2 years) (per 1,000 live births)	—	0·62	0·780	0·2	—	0·35	0·48	0·659	0·704	0·24	1·154	0·355	0·519

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V—NOTIFIABLE DISEASES

Foreword

The incidence of notifiable diseases, compared with that of the previous nine years is shown in the following table :—

Disease	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950
Scarlet Fever	228	351	173	290	176	203	336	334	184	289
Whooping Cough	101	105	587	570	112	467	1,070	408	1,267	877
Diphtheria	—	—	—	1	—	—	—	—	—	—
Measles	3,609	980	4,816	122	6,869	33	1,837	2,625	3,116	2,699
Acute Pneumonia	245	329	348	242	265	191	282	182	262	185
Meningococcal Infection ...	2	6	7	7	14	15	10	6	16	9
Paralytic Acute Poliomyelitis	—	4	12	4	14	12	7	19	2	11
Non-Paralytic Acute Poliomyelitis	2	2	1	13	24	5	23	8	13	4
Acute Encephalitis (Infective)	—	—	—	3	1	—	—	—	—	—
Acute Encephalitis (post infectious)	—	—	—	2	2	3	1	1	1	1
Dysentery	1,084	639	23	115	296	228	22	235	237	248
Ophthalmia Neonatorum ...	14	50	4	7	16	14	8	2	8	22
Puerperal Pyrexia	17	57	51	174	111	155	137	114	76	46
Para-Typhoid Fever ...	4	—	—	1	8	89	2	50	2	2
Typhoid Fever	—	—	—	—	1	1	—	—	—	—
Food Poisoning	56	38	13	27	47	21	29	26	15	69
Erysipelas	38	49	31	48	37	35	51	42	50	64
Malaria	4	—	1	1	3	2	4	5	2	2
Acute Rheumatism	15	—	—	—	—	—	—	—	—	—

Comments on the Prevalence and Control of Infectious Diseases

Scarlet Fever.—228 cases (109 males, 119 females) were notified which was slightly lower than the average for the preceding nine years. As in recent years, most of the cases were very mild with no complications. Seven of the cases were admitted to the Lansdowne Hospital, mainly for domestic reasons. There were no deaths.

Whooping Cough.—There were 101 cases notified—once again the lowest figure ever recorded. Four patients were admitted to the Lansdowne Hospital. There were no deaths. Further details on whooping cough are discussed in the section on immunisation. The following table gives details by age and sex for the past ten years.

Notifications of Whooping Cough by age and sex, 1950-1959

Year	Under 1 year		1–2 years		2–3 years		3–4 years		4–5 years		5–10 years		10–15 years		15 yrs. and over		Total Sexes		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1950	59	52	57	51	64	73	70	87	60	98	83	108	2	3	4	6	399	478	877
1951	79	65	90	86	105	92	106	123	118	99	127	138	3	7	6	23	634	633	1,267
1952	25	30	21	25	36	35	36	25	28	29	58	54	1	2	1	2	206	202	408
1953	72	45	68	54	73	67	63	71	79	99	160	206	1	4	1	7	517	553	1,070
1954	25	33	25	19	34	38	22	36	31	36	77	85	1	2	–	3	215	252	467
1955	6	13	3	6	9	12	6	11	5	10	13	16	1	–	–	1	43	69	112
1956	30	41	16	15	30	28	33	35	41	40	122	121	6	9	–	3	278	292	570
1957	34	44	19	29	25	33	33	31	36	40	123	111	8	10	1	10	279	308	587
1958	10	9	6	9	2	10	6	7	9	5	10	20	1	–	–	1	44	61	105
1959	10	6	9	7	7	2	3	4	4	7	10	17	9	2	3	1	55	46	101

The percentage of the total cases in age groups up to 10 years is illustrated by the following table :—

Percentage of total cases shown in Age Groups, 1949-1959

Year	Under 1 year	1–2 years	2–3 years	3–4 years	4–5 years	5–10 years
	%	%	%	%	%	%
1950	12·6	12·3	15·6	17·9	18·0	12·2
1951	11·3	13·1	15·5	18·0	17·3	20·9
1952	13·5	11·3	17·4	14·9	14·0	27·4
1953	10·9	11·4	13·9	12·5	16·6	34·2
1954	12·4	9·4	15·5	12·4	14·3	35·3
1955	16·9	8·0	18·8	15·2	13·4	25·9
1956	10·7	5·4	10·2	12·0	14·2	42·6
1957	13·7	8·2	9·9	10·9	12·9	39·9
1958	18·1	14·3	11·4	12·4	13·3	28·6
1959	15·8	15·8	8·9	6·9	10·9	26·7

Gastro Intestinal Infections :

Typhoid Fever.—No cases occurred during the year.

Paratyphoid Fever.—Four cases occurred during the year. The three cases notified in the week ending 22nd August, all occurred in the same family. This outbreak first came to the notice of the Department when a swab from a six year old child, which had been taken by the general practitioner, proved positive to Paratyphoid B. The child had a history of diarrhoea and vomiting. Investigations were made but the source of infection could not be traced. Faecal swabs were taken from the four remaining members of the family. Of these, two from the father and another daughter aged 9 years showed Paratyphoid B. Only the father had had some vague abdominal pains but neither had suffered from diarrhoea or vomiting. The six year old child was admitted to hospital on 25th August 1959 and, in spite of intensive treatment with courses of Streptotriad, Sulphaguanidine and Chloromycetin, still showed positive swabs and had to be considered a carrier. She was discharged on 26th September, 1959 and the parents were advised on the necessary precautions to be taken to prevent the spread of infection. Eventually three consecutive negative swabs were obtained from the child. The father and sister had also received medical treatment at home and negative swabs obtained.

The other case of Paratyphoid fever notified in the week ending 26th December, 1959, was a twelve year old girl who sickened on 12th December, 1959 with headache and nausea and these symptoms persisted until she vomited several times on the 15th December. Her general practitioner treated her for gastroenteritis but, as she did not improve, a consultant paediatrician was called in on 19th December and faecal swabs taken on 22nd December. These were reported positive for Salmonella Paratyphi B on 24th December and the child was admitted to the Lansdowne Hospital. Due to the delay in diagnosing the cause of illness, it was found impossible to trace the cause of the infection. There was no history of recent illness in the other members of the family and swabs from them proved negative. The patient was treated with Chloramphenicol and Neomycin without success but, after a course of Achromycin, six negative swabs were obtained and she was discharged on 30th January, 1960.

Dysentery.—The outbreak, which was reported in the last annual report, continued until the week ending 7th March, 1959. The following table gives the number of cases, week by week :—

	Week Ending									
	January					February				March
	3	10	17	24	31	7	14	21	28	7
Cases	81	59	66	84	74	65	107	51	59	60

The number of cases notified to the Registrar Genera during the four quarters of the year, was as follows :—

Quarter ending	28th March	785
	27th June	202
	26th September	38
	26th December	59

Ninety-one cases were admitted to the Lansdowne Hospital.

Diphtheria.—There were no cases during the year. There has only been one case of diphtheria in the past ten years and this occurred in 1956.

Measles.—This was again an epidemic year for measles with 3,609 cases notified. Seventy-one cases were admitted to the Lansdowne Hospital. There were no deaths.

Pneumonia.—245 cases were notified. Eight of these were removed to the Lansdowne Hospital and others were treated in general hospitals, in and around Cardiff. Deaths cannot be correlated with the notifications because the Registrar General's heading ' Pneumonia ' covers deaths from all types of pneumonia. The age and sex distribution of the cases for 1959 are given in the following table :—

0–1 year		1–2 years		2–3 years		3–4 years		4–5 years		5–10 years		10–20 years		20–45 years		45–65 years		65 yrs. & over		Total Sexes		Grand Total
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
2	3	3	1	2	2	3	5	3	3	17	11	5	4	20	19	37	31	32	37	130	115	245

Meningococcal Infection.—Two cases were notified during the year. Both cases were young children. One, a boy aged one year and four months, died in Cardiff Royal Infirmary, the other, a male child aged ten months, was admitted to Llandough Hospital. He made a gradual recovery and was discharged after a period of 23 days.

Acute Poliomyelitis (Paralytic and Non-paralytic).—Although sixteen suspected cases of poliomyelitis were admitted to the Lansdowne Hospital during the year, in only two instances were the patients eventually found to be suffering from poliomyelitis. Both cases were non-paralytic.

The first case, which was notified to the Registrar General in the week ending 30th May, 1959, was a six year old girl living in the Splott Ward of the City. She was admitted to the Lansdowne Hospital on 27th May, 1959, and discharged on 22nd June, 1959.

The second case was notified to the Registrar General in the week ending 22nd August, 1959. The patient, a two year old girl living in the Roath Ward, was admitted to the Lansdowne Hospital on 12th July, 1959, and died two days later. It was thought that her death might be attributed to polio-encephalitis as a result of the macroscopic appearance of the brain at post-mortem. Subsequent examination of sections of the brain and the virologist's report confirmed a diagnosis of poliomyelitis (Type 1 Poliovirus).

Neither of these cases had been innoculated with poliomyelitis vaccine. Details of the work on immunisation against this disease are given in the Immunisation Section of this report.

Encephalitis Infection.—There were no cases notified during the year.

Erysipelas.—Thirty-eight cases were notified, five of which were admitted to the Lansdowne Hospital. It is not known if any deaths occurred from this disease as they are not classified separately in the Registrar's returns.

Food Poisoning.—Fifty-six cases were notified to the Registrar General during the year.

Details of food poisoning and salmonella infections are given in the following table in the form prescribed by the Ministry of Health :—

ANNUAL RETURN OF FOOD POISONING

(Salmonella Infections that are not considered to be food borne should not be included under items (2), (3) or (4), but should be shown separately under item (5)).

1. **Local Authority : Cardiff County Borough** **Year : 1959**

2. (*a*) Food Poisoning Notifications (Corrected) as Returned to Registrar General

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
4	14	17	21	56

(*b*) Cases Otherwise Ascertained

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
3	2	3	2	10

(*c*) Sypmtomless Excreters

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
—	—	—	—	Nil

Note :—Symptomless excreters should not be regarded as cases and any notification of a symptomless excreter should be corrected. The numbers for each quarter or the yearly total alone, if more convenient, may at the Authority's discretion, be entered here.

(*d*) Fatal Cases

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
—	—	—	—	Nil

3. Particulars of Outbreaks

Details of each outbreak should also be given separately as in Appendix D (ii) of Memo. 188/Med. (Revised 1958) if this information has not already been sent to the Welsh Board of Health.

Agent	No. of Outbreaks		No. of Cases		Total No. of cases
	Family Outbreaks	Other Outbreaks	Notified	Otherwise ascertained	
Agent identified : (*a*) Chemical Poisons ... (type to be stated)	—	—	—	—	—
(*b*) Salmonella (type to be stated) typhi-murium	3	—	6	—	6
reading	1	—	1	3	4
(*c*) Staphylococci ... ... (including toxin)	—	—	—	—	—
(*d*) Cl. botulinum	—	—	—	—	—
(*e*) Cl. welchii	—	—	—	—	—
(*f*) Other bacteria ... ... (to be named)	—	—	—	—	—
Totals	4	—	7	3	10
Agent not identified	9	—	19	7	26

4. SINGLE CASES

AGENT	No. of Cases		Total No. of cases
	Notified	Otherwise Ascertained	
Agent identified : (*a*) Chemical Poisons (type to be stated) ...	—	—	—
(*b*) Salmonella (type to be stated) typhi-murium	10	—	10
stanley	1	—	1
st. paul	2	—	2
bovis morbificans ...	2	—	2
heidelberg	1	—	1
(*c*) Staphylococci (including toxin)	—	—	—
(*d*) Cl. botulinum	—	—	—
(*e*) Cl. welchii	—	—	—
(*f*) Other bacteria (to be named)	—	—	—
TOTALS	16	—	16
Agent not identified	13	—	13

5. SALMONELLA INFECTIONS, NOT FOOD-BORNE

Salmonella (type)	Outbreaks		No. of cases (Outbreaks)	Single Cases	Total No. of cases (outbreaks and single cases)
	Family	Other			
typhi-murium	1	1	7	—	7
TOTALS	1	1	7	—	7

Salmonella Infections.—An outbreak occurred in a Cardiff hostel for persons who are temporarily homeless. The first case occurred on 16th September. The patient was suffering from severe attacks of diarrhoea and vomiting. A faecal swab was taken and Salmonella typhi-murium isolated. The patient was admitted to the Lansdowne Hospital on 18th September. Swabs were taken from all staff and inmates of the hostel and a further four cases—all symptomless—were discovered. One of these cases was the hostel cook ; she was excluded from duty and received medical treatment at her home. The other three cases were admitted to the Lansdowne Hospital. The organism was Phage type 34 ; a similar organism had been isolated in a sewer swab from an abattoir in a nearby town about one month previously. However, in spite of a careful investigation, no connection between the meat supplied to this hostel and this abattoir could be ascertained.

Brucella Abortus. Two cases occurred during the year but the source of infection was not traced.

Acute Rheumatism. This has been notifiable in certain specified areas, specified in the Acute Rheumatism Regulations 1953 to 1959. In the Acute Rheumatism (Amendment) Regulations, 1959, the Minister of Health extended the list of areas to include Cardiff as fron. 16th February, 1959.

The Regulations require that cases of acute rheumatism in persons under sixteen years of age shall be notified to the Medical Officer of Health.

Acute Rheumatism in Cardiff 1959

A comprehensive scheme for the diagnosis, treatment in the home and/or hospital and subsequent supervision of acute rheumatism has been in operation in Cardiff since 1929. From that time general practitioners in the city have been periodically circularised on the facilities which are available for the treatment etc., of cases of juvenile rheumatism occurring in their practice.

Lord Pontypridd Hospital, Dulwich House, was opened as a Children's Hospital for early cases of rheumatism in April, 1929 and members of the School Medical Officers' staff and Paediatricians from the Welsh National School of Medicine have been responsible jointly for the medical supervision and treatment of in-patients since then.

Regular and frequently held Rheumatism Supervisory Clinics have also been a feature of this diagnostic and follow-up scheme since its inception and these again have been staffed jointly by Local Education Authority and University staff.

The interchange of information between the children's hospital, general hospitals and the supervisory clinics has been a feature of the service and a common record card has been used by all personnel throughout.

The extension of the Acute Rheumatism Regulations, 1953 to Cardiff in 1959 following the Acute Rheumatism (Amendment) Regulations, 1959 created no significant administrative difficulties. The only difference was that formal notification of the defined condition in the specified age groups, took the place of the informal arrangements by telephone, a letter, or direct referral of cases to the supervisory clinics by general practitioners, etc., which has been the practice in the city since 1929.

During the first year of operation of the new regulations 15 cases of acute rheumatism were notified. Nine of these were in the 5-14 years age group, 6 being boys and 3 girls, and all suffered from active rheumatic heart disease with polyarthritis. The remaining cases comprised three active rheumatic heart disease alone, 2 rheumatic chorea alone and 1 rheumatic pains without heart involvement.

It is interesting to compare these figures with those for 1933, the peak year of informal notifications of rheumatism in Cardiff, when 524 new cases were referred for diagnosis and treatment or observation to the rheumatism supervisory clinics.

The final diagnosis and classification of the 15 cases notified in 1959 was made after consultations between the Medical Officer of Health, the general practitioners and hospital staffs concerned, after a period of observation of the cases either at home or at a follow-up rheumatism clinic.

As the numbers were small, no serious difficulty arose in obtaining the necessary information for compilation of the report for 1959, but with larger numbers and, especially when comparatively long periods of time intervene between the primary notification and the final diagnosis and different personnel are involved, considerable correspondence and delay in obtaining the required details may be expected.

The great reduction already noted in acute rheumatism during recent years has had its repercussions on the need for hospital beds for the treatment of children suffering from this condition. It is a significant fact that the Lord Pontypridd Hospital, Dulwich House, which as previously mentioned commenced in 1929 as part of the rheumatism schemes inaugurated by the Cardiff City Council will in the near future cease to function as a hospital for children. Since 1948 it has been administered by the Board of Governors of the United Cardiff Hospitals although the link between that authority and the Cardiff Health Department has remained close. In 1960 however, the hospital will be converted for the in-patient treatment of adult neurological cases.

The following table gives details of the cases notified during the year :—

TABULATION BY AGE, SEX AND CLINICAL CLASSIFICATION
CASES NOTIFIED AS ACUTE RHEUMATISM DURING THE YEAR 1959

Notification Area : CARDIFF COUNTY BOROUGH

Clinical Classification of Cases Notified	Age in Years								Total All Ages		Total Both Sexes
	0–4		5–9		10–14		15 over				
	M	F	M	F	M	F	M	F	M	F	
1. Rheumatism Pains and/or Arthritis without heart disease	—	—	—	—	—	1	—	—	—	—	1
2. Rheumatic Heart Disease (Active)											
(*a*) alone	—	—	—	1	1	1	—	—	—	—	3
(*b*) with polyarthritis	—	—	2	2	4	1	—	—	—	—	9
(*c*) with chorea	—	—	—	—	—	—	—	—	—	—	—
3. Rheumatic Heart Disease (Quiescent)	—	—	—	—	—	—	—	—	—	—	—
4. Rheumatic Chorea (Alone) ...	—	—	—	—	—	2	—	—	—	—	2
TOTAL Rheumatic Cases	—	—	2	3	5	5	—	—	—	—	15
5. Congenital Heart Disease	—	—	—	—	—	—	—	—	—	—	—
6. Other non-rheumatic Heart disease or disorder	—	—	—	—	—	—	—	—	—	—	—
7. Not rheumatic or cardiac disease ...	—	—	—	—	—	—	—	—	—	—	—
TOTAL Non-rheumatic Cases ...	—	—	—	—	—	—	—	—	—	—	—

CLASSIFICATION BY AGE AND SEX OF INFECTIOUS DISEASES CASES FOR YEAR 1959

Diseases	Under 1 year		1–2 years		2–3 years		3–4 years		4–5 years		5–10 years		10–15 years		15–20 years		20–25 years		25–35 years		35–45 years		45–65 years		65 years and over		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	M	F	Total
Scarlet Fever	2	1	1	7	8	11	12	9	20	9	58	71	5	9	2	–	1	1	–	1	–	–	–	–	–	–	109	119	228
Whooping Cough	10	6	9	7	7	2	3	4	4	7	10	17	9	2	1	1	1	–	–	–	–	–	–	–	–	–	55	46	101
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	95	65	214	249	259	238	287	272	275	233	712	688	7	19	7	6	1	—	—	—	1	—	—	—	—	—	1848	1761	3,690
Acute Pneumonia	2	3	3	1	2	2	3	5	3	3	17	11	5	4	6	—	4	4	4	10	12	5	37	31	32	37	130	115	245
Meningococcal Infection	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2
Paralytic Acute Poliomyeltis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Non-Paralytic Acute Poliomyeltis	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2
Acute Encephalitis Infective	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Encephalitis Post Infectious	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	22	27	39	34	40	38	46	37	48	32	161	135	71	81	11	17	17	30	23	47	25	30	19	25	16	11	538	546	1,084
Ophthalmia Neonatorum	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	7	14
Peruperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	9	—	4	—	2	—	—	—	—	—	17	17
Small Pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Para-Typhoid Fever	—	—	—	—	—	—	—	—	—	—	—	2	—	1	—	—	—	—	—	—	1	—	—	—	—	—	1	3	4
Enteric or Typhoid (Exc. Paratyphoid)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	—	—	1	—	—	—	2	1	—	—	—	1	—	—	3	2	6	3	12	3	5	9	29	38
Malaria – Contracted in this Country	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria – Contracted Abroad	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	—	1	—	—	—	—	—	3	1	4
Malaria – Induced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Food Poisoning	1	2	3	3	—	1	3	1	—	—	6	3	4	3	—	2	2	1	3	3	3	2	3	4	—	2	28	28	56
Tuberculosis—Respiratory	2	—	1	—	2	1	1	1	1	3	1	2	3	4	7	6	4	13	11	28	31	9	46	15	14	5	124	87	211
Meninges	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Others	—	—	—	—	—	—	1	—	—	—	1	1	3	1	—	—	3	2	1	5	1	2	—	5	—	—	10	16	26
Acute Rheumatism	—	—	—	—	—	—	—	—	—	—	2	3	5	5	—	—	—	—	—	—	—	—	—	—	—	—	7	8	15

CASES OF ACUTE INFECTIOUS DISEASES NOTIFIED IN MUNICIPAL WARDS FOR YEAR 1959

Municipal Wards	Scarlet Fever	Whooping Cough	Measles	Acute Poliomyelitis		Diphtheria	Menigococcal Infection	Acute Encephalitis		Dysentery	Ophthalmia Neonatorum	Puerperal Pyrexia	Acute Pneumonia	Para typhoid Fever	Typhoid Fever	Food Poisoning	Erysipelas	Malaria	Tuberculosis			Acute Rheumatism
				Paralytic	Non-Paralytic			Infective	Post Infective										Respiratory	Meninges	Others	
Central	4	1	11	—	—	—	—	—	—	15	—	—	5	—	—	—	1	—	11	—	1	—
South	10	13	192	—	—	—	—	—	—	31	—	—	30	—	—	—	—	2	22	—	1	—
Cathays	10	3	170	—	—	—	—	—	—	48	—	1	10	—	—	4	2	2	11	—	2	—
Adamsdown	9	3	156	—	—	—	—	—	—	103	—	—	12	—	—	1	4	—	5	—	5	—
Riverside	8	2	162	—	—	—	—	—	—	72	—	—	13	—	—	4	—	—	10	—	—	—
Canton	11	5	179	—	—	—	1	—	—	89	1	—	7	—	—	—	2	—	16	—	—	1
Grangetown	15	2	184	—	—	—	—	—	—	92	—	2	13	—	—	1	3	—	7	—	3	—
Roath	29	5	382	—	1	—	1	—	—	76	1	1	30	—	—	2	4	—	30	—	5	—
Plasnewydd	9	3	137	—	—	—	—	—	—	53	—	—	15	—	—	—	2	—	6	—	1	—
Splott	19	7	154	—	1	—	—	—	—	87	1	1	17	—	—	2	6	—	16	—	—	1
Penylan	35	6	402	—	—	—	—	—	—	38	—	1	21	—	—	10	1	—	15	—	2	—
Llandaff	21	1	227	—	—	—	—	—	—	78	—	—	16	1	—	3	5	—	21	—	—	2
Gabalfa	25	5	438	—	—	—	—	—	—	107	1	—	40	3	—	20	4	—	15	—	3	1
Ely	16	30	684	—	—	—	—	—	—	164	1	2	15	—	—	5	4	—	21	—	3	2
Institutions	7	15	71	—	—	—	—	—	—	31	9	9	1	—	—	4	—	—	5	—	—	8
TOTALS	228	101	3609	—	2	—	2	—	—	1084	14	17	245	4	—	56	38	4	211	—	26	15

VI—PREVENTION OF TUBERCULOSIS

A. H. GRIFFITH, M.B., B.S., D.P.H., Senior Medical Officer, Cardiff City Council

Review of the Work Done

The tuberculosis preventative services provided by the Council have, during recent years, become extremely varied and complex. Their contribution to the recent gradual but significant reduction in the annual number of new cases occurring in the City is difficult to assess. This reduction is due primarily to modern therapeutic measures which usually render sources of tuberculosis infection innocuous within a comparatively short period after the diagnosis has been made. Nevertheless, there remains a number of known and unknown sources of infection in the City, each one of which constitutes a menace to the health of other individuals. Every attempt is made to treat successfully the known sources of infection and a great deal of effort is spent on identifying the hitherto undiscovered disseminators of tuberculosis in our midst.

The aims of the tuberculosis services in Cardiff are the early ascertainment and effective treatment of all new cases arising in the City, their supervision afterwards lest relapses should occur, the ascertainment of children infected by tubercle bacilli and the provision of certain susceptible individuals with specific protection against tuberculosis by means of B.C.G.

Ascertainment of New Cases

It will be seen from Table I that various medical services are responsible for the initial action which results in the diagnosis of pulmonary tuberculosis being made at the Chest Clinic.

Sources of Ascertainment of New Cases of Pulmonary Tuberculosis

Table I

Source	1955	1956	1957	1958	1959
General Medical Practitioners	114	93	63	70	42
General Practitioners X-ray Sessions ...	35	93	88	75	53
Hospitals	43	39	35	34	34
Mass Radiography Service	10	34	56	33	36
Examination of Contacts	13	30	31	35	20
Other Sources	4	5	26	19	17
Total	219	294	299	266	202

I am indebted to Dr. S. H. Graham, Consultant Chest Physician, Cardiff, for supplying the data for the above Table.

The general practitioner cases were patients with medical symptoms and signs referred for examination by appointment at the Chest Clinic, whereas the general practitioners x-ray session cases were patients sent by family doctors for x-ray without appointment at the Mass Radiography Unit. The Mass Radiography Unit which is situated centrally in Castle Street, also carried out x-ray surveys of employees of various establishments. Dr. T. Francis Jarman, Director of the Mass Radiography Unit reports that of the 21,233 persons examined at the Unit during 1959, 1,030 had abnormal radiographs. Among these were 77 new cases of pulmonary tuberculosis, 8 cases already known to the Chest Clinic, 205 cases of healed primary and post primary tuberculosis and 55 cases of cancer. Table II which is reproduced from his report analyses the new cases of pulmonary tuberculosis according to age groups, sex and rate per 1,000 examined.

Table II Analysis of New Cases of Pulmonary Tuberculosis discovered by the Mass Radiography Unit

Age Groups	Males		Females		Total	
	Number of Cases of Confirmed Pulmonary Tuberculosis	Rate per 1,000 examined	Number of Cases of Confirmed Pulmonary Tuberculosis	Rate per 1,000 examined	Number of Cases of Confirmed Pulmonary Tuberculosis	Rate per 1,000 examined
Under 15	—	—	2	8·4	2	4·2
15–24	7	1·8	9	2·3	16	2·1
25–34	5	2·3	8	4·0	13	3·1
35–44	11	6·3	3	1·7	14	4·0
45–59	19	9·8	4	2·0	23	5·9
60 and over	8	8·8	1	1·5	9	5·7

The incidence of new cases found among general population volunteers was 3·08 per 1,000 compared with 8·33 per 1,000 among those referred by general practitioners and 1·11 per 1,000 among employees of surveyed establishments. Almost 1% of all males over the age of 45 attending the Unit were found to be suffering from pulmonary tuberculosis.

A letter from the Medical Officer of Health, advising adults to avail themselves of the services of the Mass Radiography Unit, was sent out with all rate demands despatched from the City Treasurer's Office. This was done with the help of the Finance Department and the Mass Radiography Unit's staff and at the Unit's expense.

A third group of cases of pulmonary tuberculosis consisted of those examined at the Chest Clinic because others living in the same house had recently been found to be suffering from tuberculous disease or had been recently infected by tubercle bacilli. Twenty such " contacts " were found to be suffering from pulmonary tuberculosis.

Ascertainment of Recently Infected Children

A scheme involving the offer of annual tuberculin tests to all school and pre-school children was introduced in Cardiff in 1958. This scheme operated smoothly during 1959 and, as a result, it was possible to detect the majority of Cardiff children infected by tubercle bacilli during the year. This enabled steps to be taken to examine these children in order to determine whether or not active disease had resulted from the infection and to search for sources of infection among these childrens' contacts. Table III gives an analysis of those children who had converted from a negative to positive tuberculin state in a period of twelve months.

Table III An Analysis of Tuberculin Converters according to Age and Tuberculin Sensitivity

Age at time of second Test	No. of Unvaccinated Tuberculin Negative Children Tested	Tuberculin Sensitivity Grade (Heaf) at time of Second Test				Total
		I	II	III	IV	
5	2,280	5	–	–	–	5
6	2,825	16	1	7	–	24
7	3,536	12	1	4	2	19
8	2,888	16	3	1	1	21
9	2,914	22	5	3	1	31
10	3,093	22	4	5	2	33
11	3,373	30	2	2	–	34
12	3,131	47	7	2	–	56
13	1,845	37	5	3	–	45
14	395	2	–	–	–	2
15	92	1	–	–	–	1
Total	26,372	210	28	27	6	271

It will be noted that although 271 children were found to have been infected during the year, the resulting degree of tuberculin sensitivity was low in 210 and may be in many cases merely an observer error. Only 61 children showed tuberculin conversion to a Heaf Grade II or more tuberculin sensitivity, and only causing these convertors, their siblings and adult home contacts were cases of progressive pulmonary disease discovered. This means that although Cardiff has above the national average rate of tuberculosis the amount of infection dieseminated in the City during 1959 was extremely small.

The number of children already infected, although high from some aspects, is nevertheless smaller than in 1958 (Table IV). This group of children is an important one in that a high proportion of future tuberculosis cases will be found among this group.

Table IV

Showing the number of Children according to Age and Vaccination State Tuberculin Tested during 1958 and 1959

Age	1958 Number of Children					1959 Number of Children				
	Tested	Already Vaccinated	Unvaccinated		Natural Positive Rate % Total Tested	Tested	Already Vaccinated	Unvaccinated		Natural Positive Rate % Total Tested
			Tuberculin Negative	Tuberculin Positive				Tuberculin Negative	Tuberculin Positive	
1	421	78	340	3	0·7	439	58	381	0	–
2	1,043	93	941	9	0·9	541	57	484	0	–
3	1,026	86	929	11	1·1	666	75	587	4	0·6
4	881	120	749	12	1·4	529	78	443	8	1·5
5	2,782	318	4,162	48	1·7	2,565	248	2,280	37	1·4
6	3,130	319	2,713	98	3·2	3,183	296	2,825	62	1·9
7	3,660	358	3,157	145	4·0	4,046	387	3,536	123	3·0
8	3,628	297	3,152	179	4·9	3,338	317	2,888	133	4·0
9	3,690	330	3,108	252	6·8	3,377	281	2,914	182	5·4
10	3,789	318	3,188	283	7·4	3,663	328	3,093	242	6·6
11	4,473	353	3,694	426	9·5	4,062	333	3,373	356	8·8
12	3,533	249	2,868	416	11·8	3,807	239	3,131	437	11·5
13	2,482	428	1,670	384	15·4	2,994	711	1,845	438	14·6
14	2,051	1,273	471	307	15·0	2,541	1,773	395	373	14·7
15	1,193	840	159	194	15·3	1,355	1,050	92	213	15·7
16	595	449	70	76	12·4	675	521	31	123	18·2
Total	38,377	5,909	29,625	2,843	—	37,781	6,752	28,298	2,731	—

As a result of the investigations and examinations associated with the ascertainment of infected children, 13 parents and 7 children were notified as suffering from pulmonary tuberculosis during the first year. The corresponding numbers during the second year were 7 parents and 9 children.

The tuberculin testing service introduced in Cardiff enabled the Health Department to undertake to notify family doctors concerned, the names of child tuberculin converters, as and when they were discovered, to offer tuberculin tests at clinics without appointment, and to give details on enquiry to general practitioners of any of their child patients' tuberculin sensitivity record.

B.C.G. Vaccination

B.C.G. vaccinations were offered to certain uninfected children as in previous years. Details of those vaccinated at clinics, schools and hospitals are given in Table V, VI, and VII.

Table V

B.C.G. Vaccinations—Cardiff 1950-59

Year	NUMBER OF									
	Contacts (ex Babies)			School Children				Newborn Babies Vaccinated		
	Vaccinated	Tuberculin Positive	Revaccinated	Offered Vaccinated	* Not Tuberculin tested	Tuberculin Positive	Vaccinated	Contacts	Non-Contacts	† Others Vaccinated
1950										
1951	127	—	10	—	—	—	—	—	—	92
1952	283	117	18	—	—	—	—	76	—	19
1953	617	186	45	403	128	9	186	90	—	89
1954	468	159	19	5,010	1,003	1,131	2,876	127	—	105
1955	431	121	11	4,746	1,240	853	2,653	130	—	298
1956	607	138	10	2,910	593	560	1,757	118	—	225
1957	849	139	3	3,490	609	471	2,410	126	—	147
1958	851	118	2	2,378	432	384	1,562	202	843	64
1959	513	20	4	4,455	862	841	2,752	186	809	223

* Includes absentees and scholars whose parents withheld consent.

† Includes medical students, and nurses, and in 1959 118 technical school students.

Table VI

Showing the Proportion of Tuberculin Positive Reactors among 13 year old children only

Year	Number of 13 year old school children		Per centage of 13 year old children Tuberculin Positive
	Tuberculin Tested	Found to be Tuberculin Positive	
1954	1,173	282	24·0
1955	1,885	352	18·7
1956	1,919	360	18·8
1957	2,504	426	17·0
1958	1,872	367	19·5
1959	3,050	460	15·8

Table VII

Showing the Results of Tuberculin Tests carried out during 1954-1959 on Pupils Vaccinated 12 months previously

Year B.C.G. Given	Number Tuberculin Tested 12 months later	Number Tuberculin Positive	% Tuberculin Positive	Number Tuberculin Negative	Number re-vaccinated
1954	223	223	100	—	—
1955	643	639	97·8	4	—
1956	1,233	1,196	97·0	37	4
1957	1,574	1,533	97·0	41	25
1958	2,111	2,025	95·9	61	47

It will be seen from Tables IV and VI that the proportion of children at any particular age found to have been infected by tubercle bacilli has decreased gradually during recent years, suggesting that the risk of infection is therefore diminishing. Vital statistics concerning the incidence of tuberculous disease and deaths from tuberculosis also show this satisfactory trend.

Post graduate courses on B.C.G. Vaccination and Tuberculin Testing were again conducted jointly with the Department of Tuberculosis of the Welsh School of Medicine. These courses as in previous years, were attended by local authority and armed services medical officers.

Investigations into an improved method of administering B.C.G. continued during the year and it is now felt that the multiple puncture technique has so many advantages and is so satisfactory that it can be used for routine vaccinations.

STATISTICAL REVIEW

Deaths

Although there were 25 deaths from pulmonary tuberculosis in Cardiff during 1959 compared with 24 and 20 during the previous years (Table VIII) the death rate remains substantially lower than a few years ago. Once again no person under the age of 25 died of the disease (Table IX) and males over the age of 55 accounted for half the deaths.

Table VIII

Giving Annual Number of Deaths from Pulmonary Tuberculosis in Age Groups

Age Groups	Number of Deaths Annually from Pulmonary Tuberculosis								
	1937	1938	1947	1948	1955	1956	1957	1958	1959
0—14	4	3	1	1	—	—	—	—	—
15—24	40	37	32	23	1	—	—	—	—
25—34	44	50	32	34	12	2	1	1	1 (1)
35—44	33	37	34	41	4	4	3	2	5 (3)
45—54	36	41	29	26	9	5	6	5	6 (3)
55—64	16	19	21	27	8	16	6	5	6 (5)
65 and over	8	4	12	12	12	9	4	11	7 (7)
Total ...	181	191	161	164	46	36	20	24	25(19)

The numbers in brackets refer to the number of male deaths during 1959.

Deaths from non-pulmonary tuberculosis numbered six, as follows :—T.B. Spine 2 (females, aged 43 and 58), renal tuberculosis 2 (male 51 and female 49), miliary tuberculosis 1 (female 50) and tuberculosis meningitis 1 (male 7).

Cases of Tuberculosis

The total number of cases of tuberculosis on the register at the end of 1959 was 3,224 (Table IX) of which 2,886 were cases of tuberculosis of the lungs. The total number of new cases of pulmonary tuberculosis found during the year was the lowest on record (Table X) in spite of the fact that new intensive case finding techniques had been introduced in the City. This fact and the evidence collected from serial tuberculin testing of children indicate that the sources of infection and the number of persons infected in

the City are diminishing rapidly. A costly general mass radiography survey of the population of Cardiff cannot therefore be easily justified in as much as the number of new cases discovered during such a campaign would be exceedingly small in relation to the great deal of extra effort and cost involved. It appears that the progress towards the goal of eliminating tuberculosis would not be substantially accelerated by a mass radiography survey of the City's population.

No case of tuberculous mengingitis occurred in Cardiff during 1959, (Table XIII) this being the first year on record that no one suffered from this severe form of tuberculous disease.

Table IX

Giving the number of cases of Tuberculosis on the Register in Cardiff on the 31st December, 1958 and 1959

	Pulmonary Tuberculosis			Non-Pulmonary Tuberculosis		
	Males	Females	Total	Males	Females	Total
Number of cases on the register 31/12/58	1,535	1,297	2,832	152	195	347
Number removed during 1959 through deaths	30	12	42	2	4	6
Number of cases notified after death and included above ...	—	—	—	—	—	—
Number removed during 1959 through leaving Cardiff to live elsewhere	48	52	100	3	5	8
Number removed during 1959 as "recovery" cases ...	35	31	66	11	13	24
Number of newly notified cases during 1959	124	87	211	10	16	26
Number of known cases who came from outside to live in Cardiff	30	21	51	2	1	3
Number of cases on the register 31/12/59	1,576	1,310	2,886	148	190	338

Table X

Giving number of new cases of tuberculosis notified and number on register during recent years

	1937	1938	1948	1949	1955	1956	1957	1958	1959
Number of new notifications of pulmonary tuberculosis	275	320	325	376	222	294	299	266	211
Number of new notifications of non-pulmonary tuberculosis ...	114	108	46	43	37	31	34	21	26
Number of pulmonary tuberculosis cases on register at end of the year	1,127	1,202	1,850	1,956	2,604	2,653	2,755	2,832	2,886
Number of non-pulmonary tuberculosis cases on register at end of the year	454	480	475	466	430	392	383	348	338

Table XI

Giving the numbers of new cases of Tuberculosis during 1959 by Age and Sex

Age Groups	Pulmonary Tuberculosis			Non-Pulmonary Tuberculosis		
	Males	Females	Total	Males	Females	Total
Under 1	2	—	2	—	—	—
1–4	4	2	6	1	—	1
5–9	2	5	7	1	1	2
10–14	3	4	7	3	1	4
15–19	7	6	13	—	—	—
20–24	4	13	17	3	2	5
25–34	11	28	39	1	5	6
35–44	31	9	40	1	2	3
45–54	25	11	36	—	2	2
55–64	21	4	25	—	3	3
65+	14	5	19	—	—	—
TOTAL	124	87	211	10	16	26

Table XII

Giving the Age and Sex of Transfers into Cardiff during 1959

Age Groups	Pulmonary Tuberculosis			Non-Pulmonary Tuberculosis		
	Males	Females	Total	Males	Females	Total
Under 1	—	—	—	—	—	—
1–4	—	—	—	—	—	—
5–9	—	—	—	—	—	—
10–14	1	—	1	—	—	—
15–19	7	4	11	—	1	1
20–24	10	10	20	—	—	—
25–34	5	3	8	1	—	1
35–44	3	2	5	1	—	1
45–54	3	—	3	—	—	—
55–64	—	2	2	—	—	—
65+	1	—	—	—	—	—
TOTAL	30	21	51	2	1	3

Table XIII

New Cases of Non-Pulmonary Tuberculosis by Sex and Localisation of the Disease

Site of Infection	1935		1945		1955		1956		1957		1958		1959	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Nervous System	5	17	3	1	3	1	3	2	1	1	—	1	—	—
Intestines and Peritoneum	2	7	2	5	1	—	—	3	1	2	—	—	—	—
Vertebral Column	5	6	4	6	4	2	5	—	2	—	1	—	2	—
Bones and Joints	19	2	6	2	6	4	2	1	—	2	1	1	—	—
Cervical Glands	—	—	—	—	3	10	5	6	2	11	3	7	4	7
Kidneys	24	39	24	39	—	3	—	—	—	2	1	1	1	3
Other Organs	—	—	—	—	6	3	3	1	4	5	—	5	3	6

VII——NATIONAL HEALTH SERVICE ACTS, 1946–1957

CARE OF MOTHERS AND YOUNG CHILDREN

Vital Statistics

Live births (registered)	4540
Live birth rate per 1,000 population	17·86
Stillbirths (registered)	110
Stillbirth rate per 1,000 live and stillbirths	23·65
Total live and stillbirths	4,650
Infant deaths	111
Infant mortality rate per 1,000 live births (total) ...	24·45
Infant mortality rate per 1,000 live births—legitimate ...	23·37
Infant mortality rate per 1,000 live births—illegitimate	45·66
Neo-natal mortality rate per 1,000 live births	17·62
Illegitimate live births per cent of total live births ...	4·82
Maternal deaths (including abortion)	1
Maternal mortality rate per 1,000 live and stillbirths ...	0·215

Live-births and Still-births—Sources of Notification

The following statement shows the number of live-births and still-births notified as having occurred in Cardiff during 1959, according to the source of notification :—

Notified by :—	*Live-births*	*Still-births*	*Total*
Municipal Midwives	1,274	6	1,280
*Midwives of the Cardiff District Nursing Association	398	1	399
Private Midwives (Domiciliary)	1	—	1
Private Midwives (Nursing Homes)	484	7	491
Parents or Doctors	—	1	1
Maternity Hospitals :—			
(*a*) Cardiff Maternity Hospital	1,903	71	1,974
(*b*) St. David's Hospital ...	1,470	64	1,534
(*c*) Lansdowne Hospital ...	1	—	1
	5,531	150	5,681

Notifications in respect of children born to residents of other Authorities were as shown :—

Notified by :—	*Live-births*	*Still-births*	*Total*
Municipal Midwives	11	—	11
*Midwives of the Cardiff District Nursing Association	2	—	2
Private Midwives (Domiciliary ...	—	—	—
Private Midwives (Nursing Homes)	193	1	194
Parents	—	—	—
Maternity Hospitals :—			
(*a*) Cardiff Maternity Hospital	488	21	509
(*b*) St. David's Hospital ...	349	25	374
(*c*) Lansdowne Hospital ...	—	—	—
	1,043	47	1,090

* These midwives were incorporated into the Municipal Midwifery Service from 1.6.59. Throughout this report, therefore, figures for the C.D.N.A. midwives refer to the first five months of the year only.

Transferred notifications of Cardiff cases were 56. Thus, after allowing for all transferred notifications, the number of Cardiff births notified was 4,647 and this figure was made up as follows :—

	Live-births	*Still-births*	*Totals*
Domiciliary	1,681	9	1,690
Institutional	2,861	96	2,957
			4,647

Child Welfare and Ante-Natal Clinics

(*a*) **Child Welfare Centres**

The total number of sessions held at Child Welfare Centres was 1,499, the average attendance at each being 41·8, and the total number of attendances was 62,610. The number of children who first attended during the year who at their first attendance were under 1 year of age was 5,974. The total number of children who attended during the year was 7,779.

Deafness

The importance of detecting deafness at the earliest possible age is part of a truly preventive health service. With this end in view, Dr. Taylor, a member of Professor Orr-Ewing's staff at the University of Manchester, visited Cardiff for two periods during 1959 to train health visitors in screening hearing tests for young children from 6 months of age. In all, 48 health visitors were trained. Each main clinic has been provided with the necessary simple apparatus which can be used in the infants' own home, if required. It is hoped that during 1960 all children " at risk " i.e. special groups such as premature infants, those suffering from haemolytic disease, spastics, retarded children etc., will be screened, together with as large a number as possible of all babies born during the year.

Urine testing for phenyl-ketonuria

The routine urine testing for phenyl-ketonuria commenced in 1958 was continued. In order to get a specimen of urine at the vital age of 3 weeks, the health visitor at her first home visit after the birth of the baby gave the mother a suitably labelled bottle containing preservative and asked her to return the bottle containing a specimen of the infant's urine to her nearest clinic as soon as possible after the baby was 3 weeks old. In 1959, 1,283 specimens were tested which represents 27% of the babies born in the year. This figure compares with 1958 when 1,192 specimens were tested which is again 27% of the babies born during the year. One positive case was found and received the appropriate treatment in Llandough Hospital.

In view of the relatively small number of specimens obtained by the above plan, it was supplemented by a new test, known as Phenistix, which became available. This provides for a wet napkin to be tested, if available, should a bottle specimen not be sent in and 2,374 tests were made by this method during the period 1st June to 31st December, 1959. In no case was a specimen found to be positive by whichever means it was tested, but 12 urines gave suspicious reactions which necessitated further investigation. These specimens were sent to Dr. Woolf at the Genetic Research Unit, Oxford, and were found to be due to a condition known as Tyrosyluria which does not affect the brain.

One child referred for examination as mentally retarded was found to give a positive test and was admitted to Llandough Hbspital for the appropriate dietetic treatment. In all, 3,657 babies were tested during 1959 which represents 85% of all live births belonging to Cardiff.

Our aim is to detect and treat, if possible, this type of mental deficiency at the earliest possible age. About 1% of known mental defectives are of this type.

(*b*) Ante-Natal Clinics

The number of sessions held was 1,442, the average attendance at each session being 16·7. The total number of attendances was 24,129. The number of women who attended for the first time was 4,392 and the total number of women who attended during the year was 5,289.

The number of expectant mothers who attended the ante-natal clinics for the first time during the year is shown in relation to the number of notified births (live and still) belonging to Cardiff as follows :—

(i) Total number of notified births belonging to Cardiff, 4,637.

(ii) The number of expectant mothers who attended the ante-natal clinics for the first time, 4,392.

(iii) Percentage of notified births represented by (ii), 94·9

Blood testing for the Wassermann Reaction continued and of 3,450 tests taken, 3,442 proved to be negative. Although 12 were positive results, this number was reduced after further investigation proved them to be non-specific.

(*c*) Care of Expectant Mothers

The integration of the ante-natal services of the Municipal Midwives and the Midwives of the Cardiff District Nursing Association begun in 1957 was continued, particularly through the transfer of the latter staff to the City Council.

The " co-operation " or personal appointment card was fully brought into use. Each patient attending an ante-natal clinic is given one of these cards and all relevant information—arrangements for confinement, results of blood tests etc. are recorded on this card thus assisting liaison between midwife, family doctor and hospital.

At her first visit, each patient has a haemoglobin estimation and a Wassermann Reaction Test, the results of which are entered on the card. All patients with a haemoglobin count level below 85% are referred to their general practitioners for iron therapy.

In August 1958, Mrs. M. Neale, an experienced physiotherapist was appointed. Since that date women having their first babies, who are to be confined at home and any other mother who wishes, may attend a course of ante-natal relaxation exercises, based mainly on the Grantly Dick Read method. Combined with each class, a series of talks is given by health visitors, midwives and a mental health worker and arrangements have been made (to commence from January 1960) for Dr. Barbara Meylor, a Registrar at Whitchurch Hospital to give one lecture during each Mothercraft Course.

Deaths ascribed to Pregancy or Childbirth

There was one death ascribed to pregancy or childbirth in respect of expectant mothers in the City which was the result of haemorrhage and occurred in hospital after operative treatment.

Infectious Diseases

The following cases were notified during the year :—

	Domiciliary Confinements	*Institutional Confinements*
Ophthalmia Neonatorum ...	3	11
Pemphigus Neonatorum ...	—	—
Puerperal Pyrexia	7	10

All the Ophthalmia Neonatorum cases cleared up, with no impairment of vision

Birth Control

The number of cases referred to the Cardiff Mothers' Advisory Clinic on medical grounds, for advice as to further pregancies, was 3.

Nose and Throat Defects

	Children under School Age
Number examined for the first time	443
Received operative treatment in hospital	110
Received other forms of treatment at clinic	66
Total attendances at clinic	655

Visual Defects

Attended clinic for the first time	946
Examined for errors of refraction	565*
Spectacles prescribed	399*

* Including cases first examined in and carried over from 1958.

Maternity Outfits

Maternity outfits are made available in all cases of home confinements, where necessary. The number supplied during the year was 1,883.

Domestic Help

Notes on this service are included in the appropriate section of the report, but it is recorded here that the number of instances in which domestic help was provided for cases of confinement during the year was 104.

Care of Illegitimate Children

The admission to the Salvation Army Home (Northlands), of unmarried expectant mothers was arranged in 10 instances during 1959. The Authority accepted financial responsibility for 9 cases. Arrangements were also made for 1 case to be admitted to the Salvation Army Home at Bristol, these cases being approved transfers from " Northlands " Home in special circumstances.

Care of Premature Infants

Special visits are made in the case of premature babies born at home, 1,999 such visits having been made during the year. The scheme for following up the premature babies on discharge from hospital is described in the reports for 1949 (page 22), and 1953 (page 33).

Statistics relating to prematurity (after correction for transfers) are shown in the following tables :—

Number of Premature Live-births notified :—

(*a*) In hospital	255
(*b*) At home	69
(*c*) In private nursing homes	11
TOTAL ...	325

Number of Premature Still-births Notified :—

(*a*) In hospital	59
(*b*) At home	6
(*c*) In private nursing homes	4
TOTAL ...	69

Weight at birth	PREMATURE LIVE BIRTHS															PREMATURE STILL-BIRTHS		
	Born in hosppital			Born at home and nursed entirely at home			Born at home and transferred to hospital on or before 28th day			Born in nursing home and nursed entirely there			Born in nursing home and transferred to hospital on or before 28th day			Born in hospital	Born at home	Born in nursing home
	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days			
3 lb. 4 oz. or less ...	44	15	15	3	2	1	—	—	—	—	—	—	—	—	—	34	2	1
Over 3 lb. 4 oz. up to and including 4 lb. 6 oz.	48	4	36	2	1	1	1	—	1	1	1	—	—	—	—	12	3	1
Over 4 lb. 6 oz. up to and including 4 lb. 15 oz.	48	—	43	11	—	10	2	—	2	2	—	2	—	—	—	8	—	—
Over 4 lb. 15 oz. up to and including 5 lb. 8 oz.	107	4	100	47	—	47	1	—	1	8	—	8	—	—	—	5	1	2
TOTALS ...	247	23	194	63	3	59	4	—	4	11	1	10	—	—	—	59	6	4

Maternity Homes

At 31st December, 9 Nursing Homes remained on the Register, 3 having accommodation for maternity cases. The number of beds provided for maternity cases was 29.

Other accommodation for maternity cases is provided in two local General Hospitals, viz., the Cardiff Maternity Hospital and St. David's Hospital. St. David's Hospital and Cardiff Maternity Hospital are approved for Part I of the Midwifery Training, and recognised also for the training in gas and air analgesia.

Nurseries and Child Minders' Regulation Act, 1948

Number of premises registered at 31st December, 1959 ...	8
Number of children provided for	219
Number of Registered Daily Minders at 31st December, 1959	4
Number of children provided for	53

Health Visiting

101,577 visits were made by Health Visitors during the year. A detailed analysis of visiting will be found on page 35.

DENTAL TREATMENT, 1959

REPORT OF H. V. NEWCOMBE, L.D.S., R.C.S.

Principal School Dental Officer

The following is a record of all forms of dental treatment carried out during 1959 in connection with maternity and child welfare, i.e., expectant and nursing mothers and young children.

	Expectant Mothers	Nursing Mothers	Pre-School Children	Total
(a) *Numbers provided with dental care :*				
Referred for treatment by M.O.s	520	591	838	1,949
Attended for inspection	382	487	801	1,670
Found to be in need of treatment	370	480	749	1,599
Treated for first time	308	416	671	1,395
Made dentally fit	171	350	651	1,172
Attendances for treatment	769	1,693	910	3,372
(b) *Treatment provided :*				
Teeth filled	265	480	201	946
Teeth extracted	609	1,393	1,181	3,183
Silver Nitrate treatment	—	4	82	86
Dressings	78	114	137	330
Scalings with gum treatment	84	179	16	279
Scalings	33	40	1	74
Extractions under local anaesthetic	97	283	152	532
Administrations of general anaesthetics	150	302	491	943
Crowns and Inlays	—	—	—	—
Mothers supplied with dentures	58	214	—	272
(c) *Dentures supplied :*				
Full upper	31	104	—	135
Partial upper	22	97	—	119
Full lower	14	72	—	86
Partial lower	17	62	—	79

Number of sessions—464 plus 18 sessions re-allocated from School Dental Service.

Radiographs—21.

Dental Referrals

The number of patients referred to the various dental clinics under the heading " Referred for dental treatment by Medical Officers " was in the aggregate 2·7% higher than in the previous year, although the number attending for inspection fell by 6·0%.

From questions asked by patients from time to time it is clear that some of them at least are unaware that dental treatment may be obtained at the clinic free of cost. Patients also, not infrequently, return appointment cards stating that they are having their treatment " with their own dentist." It is important, therefore, that those responsible for dental referrals should acquaint patients of this entitlement and, at the same time, ascertain whether or not they are receiving treatment privately.

The acceptance rates for treatment in the case of expectant mothers, nursing mothers and pre-school children were 83·2%, 86·6% and 90·9% respectively, giving an overall increase over that of last year of 5·3%.

Treatment

The total number of teeth filled exceeded that of the previous year by 4·6%, while the number of teeth extracted was down by 7·3%. Extractions under local anaesthesia showed a gain of 12·1%, but a consideration of certain factors indicates that a sharp reduction in the number of teeth removed in this manner is probable next year.

The filling/extraction rate was 1 : 3·9 compared with 1 : 4·3 in 1958.

An examination of annual dental reports since 1955 shows a falling trend in the number of mothers supplied with dentures, and this has continued into the current year where the number at 272 represents a fall of 12·8%.

A noticeable feature in recent years has been the apparent increase in the proportion of mothers in the younger age group attending the clinics for dental treatment, and it may well be that the trend already noted is due, in part at least, to this reason.

The Dental Air Turbine

On the 10th March a very successful demonstration of the dental air turbine was held at the Wessex Street Clinic which was attended by the Medical Officer of Health, the Deputy Medical Officer of Health, most of the dental officer staff and staff medical officers.

At the end of the demonstration the dental officers present were able to test the apparatus for themselves, using specimen teeth and also to use it clinically with a few specially selected patients.

The conclusion reached was that the apparatus represented a great advance on the conventional type of dental engine, whilst the patients concerned, all of whom had had fillings done at the clinic on previous occasions, expressed a distinct preference for the new method. Apart from its apparently greater efficiency, the extra comfort obtained through the almost complete absence of vibration, would seem to make it particularly suitable in treating the more apprehensive type of mother, and also in the conservative treatment of early caries in the pre-school child.

Fluoridation

Although the relationship of fluoride content of drinking water to dental caries has been known for many years, it was not until 1945 that large scale studies of fluoridation were first carried out. These were in North America. Since then a vast amount of evidence has been accumulated by investigators of fluoride in various parts of the world to support the contention that the introduction of fluoride into the domestic water supplies in the proportion of one part per million provides safe and effective means of reducing dental caries. In 1957 an Expert Committee on Fluoridation sponsored by the World Health Organisation states its opinion that " the effectiveness, safety and practicability of fluoridation as a means of preventing dental caries, one of the most prevalent and widespread diseases in the world, is now established." Fluoridation, like many other new health measures, has elicited opposition and even hostility in various quarters, so it is important, therefore, that the lay public should be kept fully informed and up-to-date on all relevant aspects of this vital issue.

At the first plenary session of the 12th World Health Assembly, one of the points stressed was that the success of many public health programmes depended on health education of the public and that " while the value of fluoridising water supplies is well known and that the process presents no technical difficulties, lack of effective health education deprives many people of the benefits of this measure."

In his report (Fluoridation around the World, 1959) the Secretary-General of the International Dental Federation gives a survey of the position of fluoridation in the world to-day. In the United States of America, for example, it is stated that 37-38 million people (i.e. one in four of the total population) are receiving its benefits and that out of this total only four million are drinking naturally fluoridated water. In Canada one in seventeen is drinking " enriched water " whilst in New Zealand a pilot scheme has been in operation for some years and a Commission of Enquiry which was held in the city of Hastings to argue the pros and cons of the issue has described the improvement of the childrens teeth as " dramatic." In Great Britain three schemes are in progress under the auspices of the Ministry of Health. These projects are at Watford, Anglesey and Kilmarnock, with corresponding control areas. Apart from these Government sponsored schemes, the Society of Medical Officers of Health have formed a Fluoridation Study Group to collect, collate and spread information on all aspects of fluoridation. The Group also plans to provide suitable material on the subject to enable talks to be given to lay and professional audiences. The main object appears to be " to spread knowledge of the true facts of fluoridation in order that when, in a few years time, it does become a very live issue—when the present study areas begin to show positive results—a favourable climate of opinion for its wider application will have developed."

DISTRICT MIDWIFERY AND HOME NURSING SERVICES

Under an agency agreement, the Cardiff District Nursing Association had provided a partial domiciliary midwifery service and the home nursing service from the inception of the National Health Service until 31st May 1959. The agency was allowed to lapse on that date and the staff was transferred to the Corporation which acceped them on the same terms as they were employed by the Association. The Health Committee, with the approval of the City Council, invited all the members of the Executive Committee of the Association to become co-opted members of the new Midwifery and Home Nursing Services Sub-Committee, which was set up to administer the home nursing service and the unified district midwifery service. The Chairman of the Association, Professor G. I. Strachan, was elected the first Chairman of this new sub-committee which comprises the members of the Health Committee and eleven co-opted members who previously were members of the Executive Committee of the Association. One of the first decisions of the new sub-committee was to apply for membership of the Queen's Institute of District Nursing and representatives were appointed to this body and to the Welsh Federation.

The investments of the Association were handed over to the Corporation which agreed to set up Trustees to administer the fund now described as the " Cardiff District Nursing Fund."

The Trust named " The Marchioness of Bute Fund " continues in existence and has been responsible for providing a chiropody service for home bound patients and for providing special lifting apparatus which is particularly useful for nursing patients at home.

The Secretary of the Association, Miss Violet M. Hughes, has been transferred as an administrative assistant for duties in the same sphere in which she had given devoted service to the Association previously.

An important decision taken during the year was the acceptance of the need to provide a new headquarters for both services, together with suitable residential accommodation and it is hoped that this proposal will become a reality in the course of a few years.

The statistics of the work of the services appear separately in this report and details of the work performed under the aegis of the Association are shown separately for that part of the year during which the Association functioned.

HOME NURSING

The district nursing staff on 31st December, 1959, consisted of 30 whole-time and 3 half-time State Registered Nurses (including 1 male). In addition there were two student district nurses, one State Enrolled Assistant nurse and one night relief nurse, making a total whole-time equivalent of 36·8. Eleven student district nurses completed training during the year. An increasing demand on the service has resulted in the expansion of the establishment by the addition, in terms of full-time staff, of two district nurses and two night nurses.

The usual facilities for observing the work of the domiciliary nursing service were afforded to 17 students undertaking the health visitors' course at the Welsh National School of Medicine, and to 54 student nurses from the Cardiff Royal Infirmary.

Laundry Service for Incontinent Patients

This new service, mentioned as pending in the 1958 report, was commenced early in the year to provide single sheets and draw-sheets for incontinent patients being nursed at home. One of the department's vans collects soiled linen twice weekly and at each home a fresh supply is delivered by the van driver. The family of each patient is provided with a polythene bucket and the soiled linen is sluiced before being placed in disinfectant in the bucket to await collection.

The Cardiff Hospital Management Committee agreed to accept such linen for laundry at the Lansdowne Hospital and charges are made by the Committee at actual cost. The volume of laundry has developed during the year as extra patients have been recommended for the service and at any one time nearly 40 patients are included in the scheme. During the year 127 patients received this service and a very considerable number of sheets were laundered at the hospital laundry. The Health Committee has expressed its appreciation of the excellent co-operation of the hospital in relieving many homes of this burden which very frequently becomes the reason for the admission of a patient to hospital.

Night Relief Nurses

Provision was made in the establishment of the Service for the employment of nurses or sitters in to relieve for two or three nights at a time relatives who had become exhausted through the continual nursing of a patient by day and night. A scheme was put into operation just before the year ended and one patient was provided with a relief night nurse. There is no doubt that this service will be developed during the coming year.

Chiropody Service

Treatment through this service, which is sponsored by the Marchioness of Bute Fund, is received by patients who are bed-ridden or house-bound. The first full year's working shows an increase in the number of patients treated, being 80 during 1959 against 27 for six months of 1958.

The statistics relating to the work of the service will be found in the Summary of new cases, visits, etc. during 1959, as follows :—

No. of newcases	3,701
Cases carried over from 1958	816
TOTAL ...	4,517

Classification of cases and visits :—

Medical	3,536	99,024
Surgical	657	17,980
Tuberculosis	172	13,990
Maternal complications	3	23
Others	149	1,163
	4,517	132,180

Sources from which cases were referred :—

General Practitioners	3,494
Hospitals	59
Public Health Department ...	36
Miscellaneous	112
Brought forward—January, 1958	816
	4,517

DISTRICT MIDWIFERY SERVICE

The transfer of the staff of the Cardiff District Nursing Association (previously mentioned in this report) resulted in the " Queen's " and " Municipal " Midwives becoming one staff and obviously the creation of a unified district midwifery service is a highly desirable development. The recruitment of suitably experienced midwives continues to present difficulty and two posts were vacant at the end of the year.

The Health Committee has given special attention to the proportion of hospital confinements to home confinements in the City and has drawn the attention of the Minister of Health to the unsatisfactory position prevailing. The report of the Maternity Services Committee on this subject was published during the year and all the recommendations made, with this exception, were already in operation in the department's services. As a result of informal discussions with the Chairman and members of the Welsh Board of Health it is anticipated that an improvement will be possible in the near future.

At the end of the year the midwives practising in the area were as shown :—

(*a*) **Institutional**

(i) Midwives employed by Hospital Management Committees or Boards of Governors under the National Health Service Act, 1946	73
(ii) Midwives employed in Nursing Homes	7

(*b*) **Domiciliary**

(i) Midwives employed by the Authority :	
(*a*) Headquarters Midwives	6
(*b*) District Midwives	15
(ii) Midwives in private practice	1

Medical Aid under Section 14 (1) of the Midwives Act, 1951

The number of cases in which medical aid was summoned during the year under Section 14 (1) of the Midwives Act, 1951, by a midwife :—

(*a*) **For Domiciliary cases**

(i) Where the medical practitioner had arranged to provide the patient with maternity medical services under the National Health Service ...	177
(ii) Others	3

(*b*) **For cases in Institutions** ... ... —

Deliveries attended by midwives during the year were as follows :—

	Domiciliary Cases					Cases in institutions
	Doctor not booked		Doctor booked			
	Doctor present at time of delivery of child	Doctor not present at time of delivery of child	Doctor present at time of delivery of child (either the booked Doctor or another)	Doctor not present at time of delivery of child	Totals	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(*a*) **Midwives employed by the Authority**	7	48	83	1,139	1,277	—
(*b*) **Midwives employed by Voluntary Organisations** :— (i) Under arrangements with the Local Health Authority in pursuance of Section 23 of the National Health Service Act, 1946	2	3	57	337	399	—
(ii) Otherwise (including Hospitals not transferred to the Minister under the National Health Service Act)	—	—	—	—	—	—
(*c*) **Midwives employed by Hospital Management Committees or Boards of Governors under the National Health Service Act** ...	—	—	—	—	—	3,442
(*d*) **Midwives in Private Practice (including Midwives employed in Nursing Homes)**	—	—	1	—	1	490
TOTALS ...	9	51	141	1,476	1,677	3,932

(This table relates to women delivered, not, in the case of multiple births, to infants)

Administration of Gas and Air Analgesia by Domiciliary Midwives

This section of the report relates only to those midwives employed directly by the Local Health Authority (referred to as municipal midwives), and those midwives who were employed in the public midwifery service under Section 23 by voluntary organisations as agents of the Local Health Authority (referred to as midwives of the Cardiff District Nursing Association), until the 31st May, 1959.

(*a*) *Midwives qualified to administer analgesia*

At 31st December, 1959, all municipal midwives were qualified in the administration of gas and air analgesia.

(*b*) *Possession of apparatus*

At the end of 1959 the municipal midwives possessed 29 sets of the necessary apparatus for the administration of analgesia.

(*c*) *Administration during the year*

The total administrations, total confinements and resulting percentages of administrations to confinements were as follows :—

	Total Administrations	*Total Confinements*	*Percentage*
Municipal Midwives	826	1,280	64·53
Midwives of the Cardiff District Nursing Association	275	399	68·92
Combined Total ...	1,101	1,679	65·57

(*d*) *Development of gas and air analgesia since* 1947.

Year	*Total Administrations*	*Total Confinements*	*Percentage*
1947*	395	2,197	13·43
1948	1,085	2,113	51·35
1949	1,294	2,111	61·29
1950	1,314	1,996	65·83
1951	1,324	1,903	69·57
1952	1,404	1,951	71·96
1953	1,449	1,986	72·96
1954	1,628	2,148	75·79
1955	1,424	1,878	75·83
1956	1,351	1,914	70·59
1957	1,401	1,902	73·66
1958	1,311	1,829	72·23
1959	1,101	1,680	65·54

*Commenced in June.

Institutional Midwives qualified to administer gas and air analgesia

The number of institutional midwives in practice at the end of the year qualified to administer inhalational analgesia in accordance with the requirements of the Central Midwives' Board :—

(*a*) Employed in hospitals in the National Health Service ... 73
(*b*) Employed in private nursing homes 6

Pethidine

The number of cases in which pethidine was administered by midwives in domiciliary practice during the year, was as follows :—

	When doctor was not present at time of delivery of child	*When doctor was present at time of delivery of child*	*Total*
Municipal Midwives ...	580	51	631
Midwives of the Cardiff District Nursing Association ...	149	15	164
TOTAL ...	729	66	795

Trilene

The number of cases in which trilene was administered by midwives in domiciliary practice during the year was as follows :—

	When doctor was not present at time of delivery of child	*When doctor was present at time of delivery of child*	*Total*
Municipal Midwives	194	18	212
C.D.N.A. Midwives	54	8	62
TOTAL ...	248	26	274

Transport

At the end of the year motor car allowances were being paid to 15 midwives using their cars in connection with the service.

Supervision

Officers of the Department made 189 visits of inspection of midwives.

HEALTH VISITING

At the end of the year the staff consisted of the Superintendent, Deputy Superintendent and 53 health visitors (one half-time), there being one vacancy. The equivalent time of 39 health visitors was devoted to the full range of duties which includes general health visiting, school nursing, tuberculosis visiting, mental deficiency routine visiting and care of the aged. The remainder were undertaking particular duties which had been assigned to them and which include the hospital follow-up schemes, care of premature infants, liaison with the Chest Clinic, B.C.G. vaccination, immunisation and mental health work.

To relieve health visitors, four State Registered Nurses are employed on duties at clinics, centres and schools.

Home Visiting

A summary of the work carried out by Health Visitors is as follows :—

Births—First Visits		4,201
Births and Infant Deaths—combined visits		30
Still-birth investigations		108
Infant death investigations		77
Routine re-visits of children—Under 1 year		14,854
	Over 1 and under 2 years	9,410
	Over 2 but under 5 years	26,605
Ante-natal	First visits	1,266
	re-visits	657
Post-natal	First visits	3,694
	re-visits	429
Ophthalmia Neonatorum	First visits	14
	re-visits	22
Immunisation	First visits	615
	re-visits	163
Vaccination	First visits	741
	re-visits	159
B.C.G.	First visits	780
	re-visits	336
Whooping Cough	First visits	472
	re-visits	108
Cardiac visits	First visits	169
	re-visits	816
Premature infants	First visits	180
	re-visits	1,819
Nutritional	First visits	114
	re-visits	207
Paediatric	First visits	716
	re-visits	841
Diabetic	First visits	160
	re-visits	461
Gastric	First visits	14
	re-visits	41
Tuberculosis	First visits	323
	re-visits	5,376
Asthma	First visits	172
	re-visits	104
Special V.D.	First visits	8
	re-visits	8
Mental Deficiency	First visits	85
	re-visits	1,980
Mental Health	First visits	102
	re-visits	597
Geriatric	First visits	1,265
	re-visits	3,052
Home Help Cases		341
Problem Families	First visits	57
	re-visits	881
Clinic visits		509
Ineffectual visits		12,890
Other unclassified visits		3,505
		101,577

The work of health visitors can be further classified as follows :—

1.	Number of individual children under 5 years of age visited	22,779
2.	Visits to expectant mothers	1,923
3.	Visits to children under 1 year of age	23,899
4.	Visits to children aged 1 year and under 2 years	10,069
5.	Visits to children aged 2 years and under 5 years ...	27,654
6.	Visits to tuberculous households	5,699
7.	Other visits	19,443
8.	Number of separate families or households visited ...	20,626

DOMESTIC HELP SERVICE

The demand for this service continued to increase during the year and it was necessary to seek a supplementary estimate to employ additional home helps during the winter months. The employment of the equivalent of 10 full-time home helps was granted, increasing the average number of hours authorised each week to 3,610.

An analysis of the cases in which help was provided shows that in the categories of maternity, tuberculosis, blind, mentally ill and acute sick, there is no increase in demand, the totals being 240 against 245 for the previous year. The increase of 104 cases over the year relates to the categories of aged and infirm and chronically sick.

As a result of intensive investigations, efforts were made to introduce a pilot scheme whereby short sessions of one hour's duration are provided for old persons living together or alone. It is intended that the domestic help does not attempt a thorough " cleaning up " on these occasions but attends to such duties as providing breakfasts, lighting fires, etc., which are difficult for aged patients to perform. Such arrangements are obviously necessary to obviate real hardship, but many old people resist change even though obviously in their own interest and the organisation of staff presents problems which require further thought.

Details of the service provided during the year are as follows :—

Number of Home Helps employed at the end of the year :—

Whole-time	28
Part-time	139
	167

Cases in which help was provided :

Maternity	104
Tuberculosis	51
Chronic Sick	136
Aged and Infirm	730
Mental	1
Blind	35
Acute Sick	49
Miscellaneous	53
	1,159

Charges—cases in which :

Whole fee charged	7
Part fee charged	1,152
Service provided free	—
	1,159

VACCINATION AND IMMUNISATION

Vaccination against Smallpox

It is very pleasing to report that the total number vaccinated, 3,201, is once again an increase over the previous year and is the highest number vaccinated since 1945 when vaccination was compulsory.

Of particular interest is the exceptionally large increase in the number of children under one year who were vaccinated, a total of 2,364 compared with 2,078 in 1958. The increase has occurred during a year when the number of births has shown a small decrease and at a time when no special stimulus to the normal methods of propaganda took place. It must be remembered that although all reasonable efforts are made to hold vaccination sessions at as many clinics as possible, mothers must often bring their children quite some distance in order for them to be vaccinated, whereas more than 20% of infants who are immunised against diphtheria and whooping cough are immunised at home by means of the Mobile Unit.

In the following table vaccinations and re-vaccinations are shown in separate age groups and the work done by general practitioners is also indicated separately :—

Primary Vaccination	*By Public Health Dept.*	*By Private Practitioners*	*Total*
Under 1 year	1,878	486	2,364
1 to 2 years	33	38	71
2 to 4 years	14	19	33
5 to 14 years	4	44	48
15 years and over	27	133	160
Totals ...	1,956	720	2,676
Insusceptible	35	8	43

Re-Vaccinations	*By Public Health Dept.*	*By Private Practitioners*	*Total*
Under 1 year	—	—	—
1 to 2 years	—	—	—
2 to 4 years	4	7	11
5 to 14 years	9	36	45
15 years and over	74	395	469
Totals ...	87	438	525

No case of post-vaccinal encephalitis was reported during the year.

For comparison with previous years the following table gives details of primary and re-vaccinations since 1950. A separate column shows the primary vaccination of infants under one year and this figure expressed as a percentage of the births each year is the most satisfactory method of indicating the scale of vaccination each year. From this table it can be seen that the steady increase in the percentage of children under one year vaccinated has been maintained.

Vaccination against Smallpox

Year	Primary Vaccination		Re-vaccinations	Births	Percentage of Vaccinations under 1 year (Col. 1) to Births (Co.l 4)
	Under 1 year (1)	All Ages (2)	All Ages (3)	(4)	(5)
1950 ...	1,684	1,936	414	4,402	38·3
1951 ...	1,767	2,156	911	4,234	41·7
1952 ...	1,819	2,133	435	4,351	41·8
1953 ...	1,752	2,024	291	4,421	39·6
1954 ...	1,709	2,016	367	4,320	39·6
1955 ...	1,745	1,957	341	4,187	41·7
1956 ...	1,918	2,166	390	4,467	42·9
1957 ...	1,980	2,360	521	4,595	43·1
1958 ...	2,078	2,390	531	4,577	45·4
1959 ...	2,364	2,676	525	4,481	52·8

It is interesting to note that since 1948 when vaccination ceased to be compulsory the percentage of infants under one year vaccinated has increased considerably. In 1947, the last complete year when vaccination was compulsory, 41% of infants were vaccinated and even in 1923 when 13 cases of smallpox were notified in Cardiff, only 64% of infants were vaccinated.

The figures issued by the Welsh Board of Health for 1959 show that only Anglesey and Caernarvonshire exceeded Cardiff in the percentage of children under one year vaccinated, the figures being 51·4 and 55·7 respectively. However, the figure for Wales as a whole was only 34·0 per cent and for England and Wales 45·0 per cent.

Diphtheria Immunisation

This was another very good year for diphtheria immunisation, particularly of children under five years of age. The total of 4,220 children under 5 years of age who received a course of either combined diphtheria and whooping cough antigen or diphtheria antigen only is the highest since 1950. At the 31st December, 1959, 83·1% of children between the ages of one and five years had been immunised against diphtheria.

Probably the main reason for the continued success of the immunisation campaign is the constant propaganda which is directed at parents urging them to have their children immunised, coupled with the fact that diphtheria and whooping cough immunisation is given in the form of a combined antigen. Parents are continually reminded of the necessity for immunisation and it is often found that many children are only immunised as a result of the persistence of the health visiting and clerical staff. Nevertheless, it is most gratifying to report that the steady reduction in the numbers of children immunised by means of the Mobile Unit has continued, indicating that more children are attending for immunisation at clinics.

During the year 4,403 children received primary immunisation against diphtheria. The number immunised by general practitioners was 525, which was 12·4% of the total number immunised. There were 156 definite refusals and 62 children whose parents refused to complete the treatment after only one injection.

Following are the details of where and by whom children were given primary immunisation against diphtheria or against diphtheria and whooping cough combined :—

	Diphtheria and Whooping Cough combined	*Diphtheria only*
Special Clinics	1,485	39
Infant Welfare Clinics	1,235	68
Mobile Unit	858	25
Schools	—	168
Private Practitioners	495	30
Total ...	4,073	330

Apart from primary immunisation the following were given booster doses against diphtheria only :—

Number given booster doses :—

1 to 4 years	16
5 to 14 years	1,634

The following table gives details of where and by whom children under five years of age were immunised each year since 1950. The figures show a further increase in the number of children being immunised at the departmental clinics and a corresponding decline in the number immunised by means of the Mobile Unit.

Details of where and by whom children under five years received Primary Immunisation 1950-59

Year	Infant Welfare and Special Clinics		Mobile Unit		Gen. Practitioners		Total
	Number	%	Number	%	Number	%	
1950	2,228	51·9	1,759	41·0	303	7·1	4,290
1951	1,806	45·5	1,857	46·7	313	7·8	3,970
1952	1,681	44·5	1,828	48·4	266	7·1	3,775
1953	1,778	46·8	1,741	45·8	282	7·4	3,801
1954	2,866	68·3	1,012	24·2	316	7·5	4,194
1955	2,277	61·2	1,032	27·8	408	11·0	3,717
1956	2,512	61·9	1,146	28·3	400	9·8	4,058
1957	2,295	63·6	891	24·6	427	11·8	3,613
1958	2,492	60·9	1,085	26·5	524	12·6	4,101
1959	2,772	65·7	924	21·9	525	12·4	4,221

The return now required by the Ministry of Health follows. In this return no child is shown as being immunised unless he has received a primary course of immunisation or a booster dose within five years.

Number of children at 31st December, 1959 who had completed a course of Immunisation before that date (i.e., at any time since 1st January, 1945)

	Age on 31st December, 1959 i.e., born in year	Under 1 year 1959	1–4 1958–1955	5–9 1954–1950	10–14 1949–1945	Total under 15 years
A	Last complete course of injections (whether primary or booster) 1955–1959	1,181	14,081	11,448	11,475	38,185
B	1954 or earlier	—	—	8,518	9,813	18,331
C	Estimated mid-year child population	4,550	16,950	41,100		62,600
	Immunity Index 100 A/C. ...	26·0%	83·1%	55·8%		61·0%

The Immunity Index of 61% for all children under 15 years of age shows a decrease of 4% from the figure for 1958, the main reason for this being the decrease in the index for children between 5 and 14 years of age. However, the following details of Schick testing carried out on children between the age of 8 and 14 years of age give rather a more encouraging picture of the immunity of that particular group. It must also be noted that 97% of children over 1 year and under 15 years of age have received either primary or booster immunisation at some time or other.

All the children who were Schick tested were given a test and a control, and tests generally were read after four days, although in some cases after six days. Definite positives were given a course of three injections of T.A.F. Slight and doubtful positives were given one injection of T.A.F. The average consent rate for this series of Schick testing was 82·7%.

Table I. Details of children who were definite positives

Schools	Number Tested	Number Positive	Percentage Positive
Juniors 8–11 years ...	492	9	1·8%
Secondary Modern 11–14 years ...	1,088	73	6·7%

Table II. Definite and Slight Positives grouped under one heading "Positive"

Schools	Number Tested	Number Positive	Percentage Positive
Juniors 8–11 years ...	492	47	9·6%
Secondary Modern 11–14 years ...	1,088	112	10·3%

Using the Schick test as a measure of immunity the above figures give an immunity index as follows :—

8—11 years of age ... ... 90·4%
11—14 years of age ... ... 89·7%

Even if all the refusals are included as positives the immunity index is as follows :—

8—11 years of age ... ... 74·8%
11—14 years of age ... ... 73·3%

The immunity index for these age groups as calculated for the Ministry of Health which considers a child immune only if given a booster or primary injection within five years is as follows :—

8—11 years of age ... ... 63·8%
11—14 years of age ... ... 57·6%

The following table illustrates the present trend in Cardiff and England and Wales with regard to diphtheria immunisation :—

Immunisation Index for England, Wales and Cardiff 1954-1959

	1954	1955	1956	1957	1958	1959
England ...	49·2	49·7	49·2	48·2	47·0	45·9
Wales ...	43·5	44·6	44·5	43·9	42·2	40·3
Cardiff ...	67·3	68·0	70·5	69·1	64·9	61·0

PROTECTION AGAINST WHOOPING COUGH

There were 101 notifications of whooping cough, four less than in the previous year which was then the lowest number since the disease was made notifiable in October, 1939. There were no deaths from whooping cough during the year.

Notifications of Whooping Cough by age and sex, 1948-1959

Year	Under 1 year		1–2 years		2–3 years		3–4 years		4–5 years		5–10 years		10–15 years		15 yrs. and over		Total Sexes		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1948	47	28	38	47	36	40	23	59	32	63	41	67	–	3	3	4	220	311	531
1949	51	43	50	66	68	87	64	66	52	53	111	90	4	7	1	3	401	415	816
1950	59	52	57	51	64	73	70	87	60	98	83	108	2	3	4	6	399	478	877
1951	79	65	90	86	105	92	106	123	118	99	127	138	3	7	6	23	634	633	1,267
1952	25	30	21	25	36	35	36	25	28	29	58	54	1	2	1	2	206	202	408
1953	72	45	68	54	73	67	63	71	79	99	160	206	1	4	1	7	517	553	1,070
1954	25	33	25	19	34	38	22	36	31	36	77	85	1	2	–	3	215	252	467
1955	6	13	3	6	9	12	6	11	5	10	13	16	1	–	–	1	43	69	112
1956	30	41	16	15	30	28	33	35	41	40	122	121	6	9	–	3	278	292	570
1957	34	44	19	29	25	33	33	31	36	40	123	111	8	10	1	10	279	308	587
1958	10	9	6	9	2	10	6	7	9	5	10	20	1	–	–	1	44	61	105
1959	10	6	9	7	7	2	3	4	4	7	10	17	9	2	3	1	55	46	101

The percentages of the total cases in the various age groups illustrate that the highest incidence is in children under two years. The figures in the last column (5—10 years) are not separable into individual ages for the whole period and are therefore shown as one group.

Percentage of total cases shown in Age Groups, 1948-1959

Year	Under 1 year	1–2 years	2–3 years	3–4 years	4–5 years	5–10 years
	%	%	%	%	%	%
1948	14·1	16·0	14·3	15·4	18·3	20·3
1949	11·4	14·2	19·0	16·0	12·8	24·6
1950	12·6	12·3	15·6	17·9	18·0	12·2
1951	11·3	13·1	15·5	18·0	17·3	20·9
1952	13·5	11·3	17·4	14·9	14·0	27·4
1953	10·9	11·4	13·9	12·5	16·6	34·2
1954	12·4	9·4	15·5	12·4	14·3	35·3
1955	16·9	8·0	18·8	15·2	13·4	25·9
1956	10·7	5·4	10·2	12·0	14·2	42·6
1957	13·3	8·2	10·0	10·9	13·0	39·9
1958	18·1	14·3	11·4	12·4	13·3	28·6
1959	15·8	15·8	8·9	6·9	10·9	26·7

In the following tables are given the births for the years 1951-59, the number of children in age groups who have received protective treatment against whooping cough and the percentage of children in the different age groups who have been protected. The figures for the different age groups of those treated in 1951, and 1952 are not available. Treatment at that time was carried out by the Medical Research Council and these details were not kept.

Children Protected against Whooping Cough

Year	No. of Births	Number Protected					Total
		Under 1 year	1–2 years	2–3 years	3–4 years	4–5 years	
1951	4,327	—	—	—	—	—	2,000
1952	4,351	—	—	—	—	—	2,000
1953	4,421	1,377	437	111	48	19	1,992
1954	4,492	2,425	766	138	68	16	3,413
1955	4,187	2,483	921	49	20	11	3,483
1956	4,467	2,987	763	48	23	16	3,837
1957	4,595	2,699	633	42	12	6	3,392
1958	4,577	3,051	824	59	17	12	3,963
1959	4,481	3,339	660	38	17	11	4,065

Percentage of Children of the different age groups protected against Whooping Cough

Year	Under 1 year	1–2 years	2–3 years	3–4 years	4–5* years
	%	%	%	%	%
1953	31·1	10·0	2·6	*	*
1954	54·6	48·5	10·9	4·1	*
1955	59·3	74·5	49·6	13·7	*
1956	66·8	75·1	75·6	50·1	*
1957	58·8	81·0	78·5	75·8	50·2
1958	65·6	76·7	82·1	79·0	76·0
1959	74·5	81·1	77·4	82·7	79·2

* Figures not available.

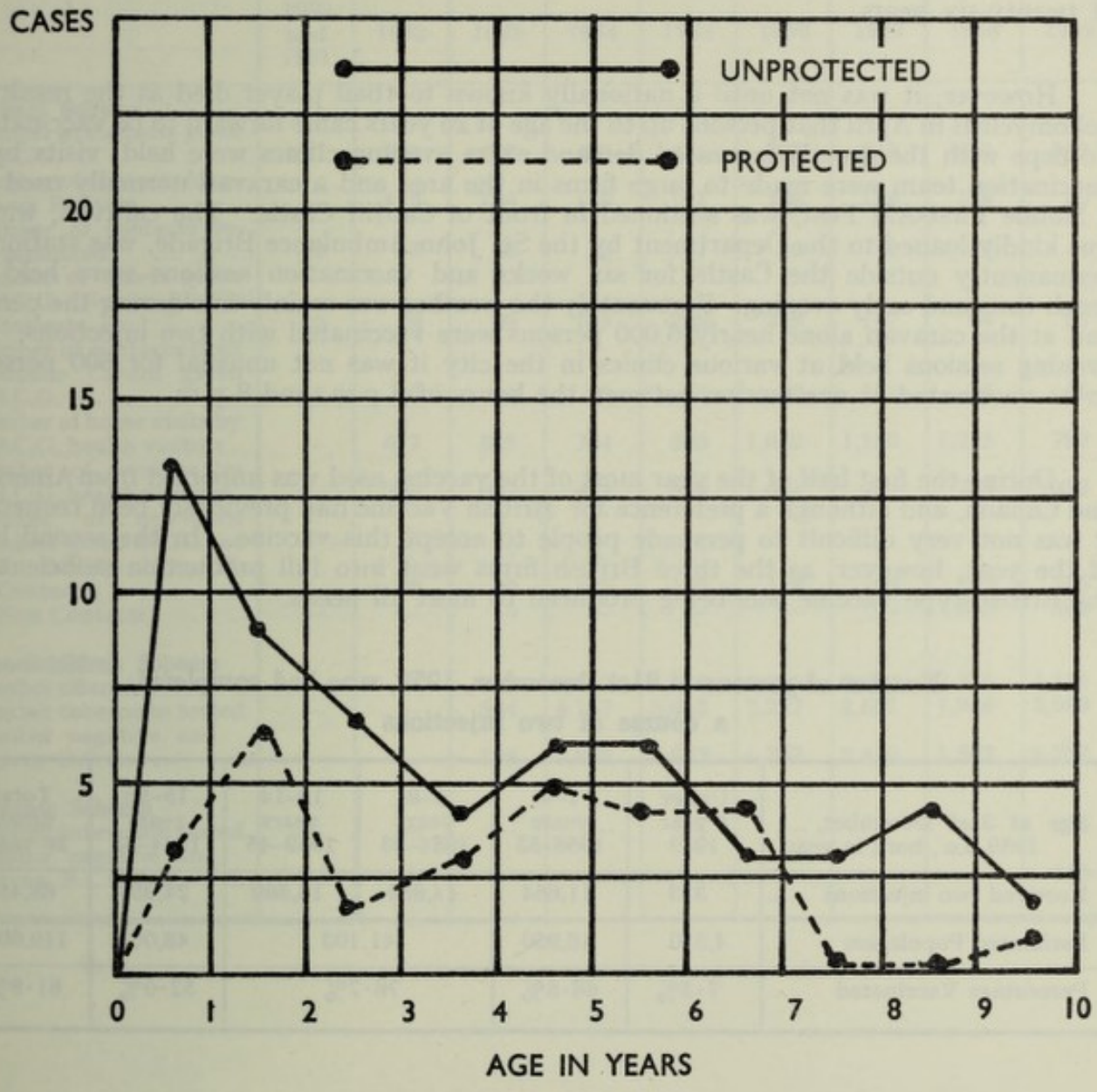
Whooping cough morbidity in the protected and unprotected groups shows little general change from the previous year although there was a reduction in the number of protected children who developed whooping cough. The three children under one year who had received a course of combined diphtheria and whooping cough injections were notified as suffering from whooping cough in the short period of three to four months after the third injection had been given.

Ages of cases of Whooping Cough which occurred in the Protected Group in 1959

Year whooping cough vaccine was given	Under 1 year	1–2 years	2–3 years	3–4 years	4–5 years	5–6 years	6–7 years	7–8 years	9–9 years	9–10 years	Total
1959	3	2	—	—	—	—	—	—	—	—	5
1958	—	4	1	—	—	—	—	—	—	—	5
1957	—	1	1	1	—	—	—	—	—	—	3
1956	—	—	—	2	—	2	—	—	—	—	4
1955	—	—	—	—	5	1	—	—	—	—	6
1954	—	—	—	—	—	1	2	—	—	—	3
1953	—	—	—	—	—	—	2	—	—	1	3
Total ...	3	7	2	3	5	4	4	—	—	1	29

The following graph indicates the relative incidence of whooping cough in the protected and unprotected children up to the age of ten years. Immunisation against whooping cough only began on a large scale in 1951.

RELATIVE INCIDENCE OF WHOOPING COUGH IN PROTECTED AND UNPROTECTED CHILDREN



POLIOMYELITIS VACCINATION

At the beginning of the year all children over the age of six months had been given the opportunity of being vaccinated against poliomyelitis with at least two injections. The programme for giving the third booster injection to all children was in full swing and further opportunity for vaccination was being given to all persons up to the age of twenty-six years.

However, it was not until a nationally known football player died as the result of poliomyelitis in April that persons up to the age of 26 years came forward to be vaccinated. To cope with the greatly increased demand extra evening clinics were held, visits by a vaccination team were made to large firms in the area and a caravan normally used as a Mobile First-Aid Post, was stationed in front of Cardiff Castle. The caravan, which was kindly loaned to the Department by the St. John Ambulance Brigade, was stationed permanently outside the Castle for six weeks and vaccination sessions were held at lunch-time and early evening. Fortunately the weather was mainly fine during the period and at the caravan alone nearly 6,000 persons were vaccinated with two injections. At evening sessions held at various clinics in the city it was not unusual for 500 persons to be vaccinated at one session between the hours of 6 p.m. and 8 p.m.

During the first half of the year most of the vaccine used was imported from America, and Canada, and although a preference for British Vaccine had previously been requested it was not very difficult to persuade people to accept this vaccine. In the second half of the year, however, as the three British firms went into full production sufficient of the British-type vaccine was being produced to meet all needs.

Number of persons at 31st December, 1959, who had completed a course of two injections

Age at 31st December, 1959, i.e., born in year	Under 1 year 1959	1–4 years 1958–55	5–9 years 1954–50	10–14 years 1949–45	15–26 years 1944–33	Total under 26 years
Received two injections ...	333	11,654	14,850	16,669	24,956	68,457
Estimated Population ...	4,550	16,950	41,100		48,000	110,600
Percentage Vaccinated ...	7·3%	68·8%	76·7%		52·0%	61·9%

In addition to the above age groups the following special groups were also given two injections :—

Expectant Mothers	446
General Practitioners and their families	29
Hospital staff and their families	1,303

Total number in all groups given third booster dose—36,738.

Since it was decided to give the third booster dose seven months after the second injection, 43,026 persons in all groups have received this injection.

B.C.G. VACCINATION

The following tables give details of B.C.G. vaccination in 1959 of child contacts of tuberculosis and schoolchildren over the age of 13 years :—

Table I. **B.C.G. Vaccination Work 1950 to 1959**

	1950 and 1951	1952	1953	1954	1955	1956	1957	1958	1959
Contact Scheme									
Number of contacts given B.C.G.	127	283	617	468	431	607	849	851	563
Number of contacts Mantoux Positive	—	117	186	159	121	138	139	118	20
Number of contacts re-vaccinated	10	18	45	19	11	10	3	2	4
Number of others given B.C.G. (Nurses, Medical Students, etc.) ...	92	19	89	105	298	225	147	64	95
Number of contacts from outside Cardiff given B.C.G.	8	16	19	32	44	36	51	85	65
Number of home visits by B.C.G. health visitors ...	—	617	825	764	693	1,082	1,156	1,225	780
Number of re-visits by B.C.G. health visitors ...	—	293	667	871	932	1,001	997	785	336
Number of new-born babies given B.C.G. at St. David's Hospital. (Contacts)	—	76	90	127	130	118	126	202	186
(Non Contacts) ...	—	—	—	—	—	—	—	843	809
Schoolchildren Scheme									
Number offered B.C.G. ...	—	—	403	5,010	4,746	2,910	3,490	2,378	4,455
Number tuberculin tested	—	—	364	4,147	3,643	2,247	2,881	1,946	3,593
Number negative and given B.C.G.	—	—	186	2,876	2,653	1,757	2,410	1,562	2,752
Students Scheme									
Number tuberculin tested	—	—	—	—	—	—	—	—	305
Number negative and given B.C.G.	—	—	—	—	—	—	—	—	118

Table II. **The proportion of Tuberculin Positive Reactors among 13-year-olds between 1954 and 1959**

Year	13-year-old Children		Percentage found Positive
	Tested	Positive	
1954 ...	1,173	282	24
1955 ...	1,885	352	24
1956 ...	1,919	360	22
1957 ...	2,504	426	18
1958 ...	1,872	367	19
1959 ...	3,050	460	16

Table III. Details of Post B.C.G. Tuberculin Tests carried out during 1959

Year B.C.G. given	Tuberculin Tested 1959	Definitely Positive	Per cent Positive	Doubtful Positive	Tuberculin Negative	Number Revaccinated
1954	223	223	100·0	—	—	—
1955	643	639	97·8	4	—	—
1956	1,233	1,196	97·0	27	10	4
1957	1,574	1,533	97·0	12	29	25
1958	2,111	2,025	95·9	25	61	47

This was the first full year for annual tuberculin testing of all children, details of which are given elsewhere in the Report. As the work has been carried out by this section of the Department, a summary is given herewith.

Summary of Annual Skin Testing of all children during 1959

Total Tested	Previously Vaccinated	Unvaccinated Children		
		Tested	Negative	Positive
37,781	6,752	31,029	28,298	2,731

AMBULANCE SERVICE

Analysis of Journeys, 1st January — 31st December, 1959

	Journeys	*Patients*	*Mileage*
(*a*) **Patient-Carrying** :			
Emergency	5,287	5,459	41,900
Accident	1,614	1,766	8,199
Outpatient	16,767	47,872	128,249
Other	8,653	10,954	69,234
(*b*) **Occupation and Training Centre** :	201	2,585	2,365
	32,522	68,636	249,947
(*c*) Abortive and service journeys	1,210		6,691
(*d*) Transporting of Midwives, apparatus, etc. ...	1,103		7,235
TOTALS ...	34,835	68,636	263,873
Totals for the year 1958	(34,276)	(63,234)	(258,279)
Stretcher cases included in above		16,154	90,493
Sitting cases included in above		52,482	159,454
		68,636	249,947

Average mileage per journey	7·57
Average mileage per patient	3·74

From 1st July 1959 the Occupation and Training Centre service has been undertaken by the Transport Department.

CARE AND AFTER-CARE

PROBLEM FAMILIES

Report on the social case worker during the year 1959.

The appointment of social case worker was made in October, 1958, for intensive work " with problem families," in conjunction with the Co-ordinating Committee, and she started her duties on 1st December, 1958.

The social worker attended the Co-ordinating Committee meetings in October and November, 1958, and 12 families were selected as an initial caseload. Seven of these families were considered " hard core " problems, the remaining five presenting a more hopeful outlook. Another case was added in June, and one was closed in July.

In October, two cases were referred from the Family Rehabilitation Committee.

In addition, at the request of the Medical Officer of Health, Birmingham, follow-up visits were made to two mothers who had completed prison sentences for child neglect, during which they received a course of training at Winson Green Prison ; these were begun in April and July respectively.

No. of visits paid :—

Case No.	*No. of home visits*	(Out)	*No. of visits to agencies*	
1	110	1	38	
2	96	21	40	
3	65	2	9	
4	66	10	6	
5	88	4	34	
6	66	4	16	
7	52	6	13	
8	88	20	28	
9	68	9	20	
10	74	10	21	
11	86	—	26	
12	14	—	5	(Case closed 27.7.59)
13	50	5	20	(Case opened 30.6.59)
	923		276	
(Family Rehabilitation Committee)				
14	15	2	6	(Case opened 1.10.59)
15	6	—	2	(Case opened 1.10.59)
	944		284	
(Ex Winson Green)				
16	15	1	2	(Case opened 20.4.59)
17	6	1	1	(Case opened 1.8.59)
	965		287	

Data :

No. of children in first 15 cases :—

Age under 5 years	...	32
Age 5—15 years ...	...	53
Age 15—21 years	...	11
TOTAL	...	96

Of these, the following numbers were away from home at end of year :

Age under 5 years	...	1
Age 5—15 years ...	...	5
Age 15—21 years	...	6
TOTAL	...	12

Total No. of children born to the parents :—

Both parents	... ...	90
Mother before marriage		15
Father's previous marriage		5
Mother's previous marriage		2
		112

(Average of 7·4 per family ; disregarding cases 14 and 15, average is 8 per family)

Of these 112 children—

6 are deceased	
3 are adopted	
5 are married	
2 are in care of grandparents	16
	96

No. of children attending Nursery School	1
No. of children attending E.S.N. School	6
No. of children attending Open Air School	3
No. of children referred to Child Guidance Clinic	5
No. of children in Children's Homes	2
No. of children in Approved Schools or Remand Homes	6
No. of enuretic children (over 2 years of age)	10

General Remarks

Agencies.—The majority of the co-ordinating visits were made to the Housing Dept., Clinics, N.A.B., and W.V.S. Others were made to the County Court Office, Probation Office, Solicitors, Ministries of Labour and Pensions and National Insurance, Schools, Education Welfare Office, Youth Employment Office, Hospitals and Almoners, Family Welfare Association, H.M. Prison, Discharged Prisoners' Aid Society, etc. In every case co-operation and help have been readily given.

Material help.—Material assistance has been obtained for families where the need appeared great, and where it contributed to an improvement in standards. This was mostly children's clothing, but also mattresses, beds, and second hand replacement furniture ; this has been possible with the help of the W.V.S. and Salvation Army, and the co-operation of the Public Health Transport section. The social worker found a great need for rubber sheeting for enuretic children and babies, a supply was provided and distributed on loan, and inspection is made to ensure the proper use of these rubber sheets.

General progress.—On the whole this has been satisfactory, bearing in mind the vulnerability of problem families to breakdown at times of crises and stresses. In only three cases has there been no progress with the basic core of the problem—the attitude of the parents ; and varying degrees of improvement have been shown in the others. No all-round improvements of a spectacular nature have been obtained, and it is unlikely that there will be. There is an inherent weakness in parents which has caused them to become problem families, with their varying characteristics as psychopaths, neurotics, immature personalities, and low mentalities, and inability to form satisfactory relationships with others. It is to be expected that they will break down under the stress of maintaining

and looking after their usually large families, and the role of the social worker is necessarily a supportive one. In the improved standards of hygiene and affluence in modern life they are subject to criticism and pressure which they are unable to stand.

The two cases from the Family Rehabilitation Committee showed a contrast with the Problem families by the way in which they were able to respond to help, withstand criticism, and improve their position.

Debts.—This is one of the difficulties which it is felt should be specially mentioned, as it is one of the more recent problems which the families face and has reached a high proportion with the widespread use of hire purchase. Clothing clubs have long been the means by which poorer families clothed themselves, and with the general increase in material standards, television and washing machines have become accepted items in the home. High pressure salesmanship and persuasive advertising have brought such items into homes where they can be ill afforded, and removal of credit restrictions in 1958 further increased these sales. Problem families have not been immune from such pressure, and they have also bought such unsuitable items as encyclopedia, with the idea of " educating " their children. Few or no payments have been made, and Court orders and Committal orders have followed ; it has been a major task for the social worker to sort these out and get some regular payments made, and prevent these families from incurring further debt. In many unreliable cases it has been necessary to collect such payments and pay them into Court, to prevent accumulation and final demands through the Bailiff, which when met left no money for the rent, generally the first weekly expense to suffer.

Nursery Schools.—There were 32 children under 5 years of age in these families, and arrangements have been made for only one to attend a Nursery School. Many other children would benefit, but the difficulties have been the long waiting lists, distance from home, unreliability of the mother to ensure regular attendance, and the contrast between the standards expected at the Nursery schools and those existing at home, of which the mothers themselves are often fully conscious. It is hoped that the position will be improved when the Play Centre to be run by a voluntary organisation will be opened next year in Ely, but need is felt for more facilities in Splott and Llanrumney.

MENTAL HEALTH SERVICES

During the year the Mental Health Act, 1959, received the Royal assent, and the Minister of Health directed local health authorities to make arrangements under Section 28 of the National Health Service Act, 1946, for the prevention of and the care and after-care of persons suffering from mental disorder, and in accordance with Section 20 of the Act to submit to his Ministry new proposals for the making of these arrangements not later than the 1st April, 1960.

The first order to be issued under the new Act came into operation on the 6th October, 1959, and it permitted the admission to hospital of mentally ill persons on an informal basis in the same way as any other sick person is admitted. The Order was put into effect immediately and has been used extensively since.

Towards the end of the year the plans for the new Nursery and Special Care Units at the Preswylfa Occupation Centre were approved and it is anticipated that the wings will be ready for use towards the end of 1960.

There were no major developments in the existing service during 1959 which was described in detail in my 1955 Report.

Mental Illness

Table I gives details of the cases dealt with by the Duly Authorised Officers and it will be observed on reference to Table II that 653 cases were dealt with during 1959 as compared with 662 during the previous year.

Dr. T. J. Hennelly, Physician Superintendent, Whitchurch Hospital, resigned his post early in 1960 to take up an appointment in Canada. His Deputy, Dr. J. P. Spillane succeeds him and will also undertake Dr. Hennelly's duties as Honorary Consultant Psychiatrist to the Cardiff Health Authority together with the direction of the Care and After-care of the mentally ill.

I wish to express my sincere appreciation of the excellent work performed by Dr. Hennelly in the field of mental health generally and wish him every success in his new appointment.

The shortage of hospital beds is probably the most serious problem to be solved and the answer was not found during 1959. However, the Regional Hospital Board are acutely aware of the position and their continued efforts in increasing the number of beds for geriatric cases should show some results in easing the shortage of beds for the mentally ill during 1960. Also on a long term view the provision of Hostels will reduce the numbers occupying hospital beds and thus help to ease the bed shortage.

Subnormality

Statistical Tables including those conforming to the requirements of the Ministry of Health are submitted. The terms used are those laid down in the Mental Deficiency Acts so as to permit continuity until the new Act comes into operation.

With the opening of new wards in some of the mental deficiency hospitals in Wales, the bed shortage was eased considerably, especially as regards low grade children, and it is understood that 1960 will remove the acute shortage for other types of cases.

A short-stay home was run at Preswylfa Occupation Centre during August by the Parents Association. A total of 25 subnormals of all ages were catered for and the home was most successful. It was greatly appreciated by the parents who availed themselves of the opportunity of placing their children in the home.

TABLE I Lunacy and Mental Treatment Acts. Work of the Duly Authorised Officers during 1959.

	Cardiff			Other Authorities			Total		
	M.	F.	Total	M.	F.	Total	M.	F.	Total
(1) Number of Cases dealt with during 1959									
The Cases were dealt with as follows :—									
(i) Admitted to Mental Hospitals:									
(a) Whitchurch Hospital—									
Informal	28	60	88	1	2	3	29	62	91
Certified	1	—	1	—	—	—	1	—	1
Voluntary	98	162	260	4	11	15	102	173	275
Temporary	3	1	4	—	—	—	3	1	4
Neurosis Unit	4	—	4	—	—	—	4	—	4
Absconded Cases returned	9	16	25	—	—	—	9	16	25
(b) Ely Hospital—									
Informal	11	5	16	—	2	2	11	7	18
Voluntary	6	35	41	—	1	1	6	36	42
Absconded Cases returned	—	—	—	—	—	—	—	—	—
(c) Other Hospitals—									
Informal	—	—	—	—	1	1	—	1	1
Voluntary	1	1	2	2	—	2	3	1	4
Temporary	—	—	—	—	—	—	—	—	—
Absconded Cases returned	—	1	1	—	1	1	—	2	2
(ii) Transferred to St. David's (Sick Wards)	13	12	25	—	1	1	13	13	26
(iii) Admitted direct to St. David's Hospital (Sick Wards) ...	23	34	57	5	5	10	28	39	67
(iv) Discharged home or to Welfare Authorities	38	43	81	1	7	8	39	50	89
(v) Placed in care of Police, Military Authorities, etc....	3	—	3	—	—	—	3	—	3
(vi) Died before certification ...	—	—	—	—	—	—	—	—	—
(vii) Other discharges	—	—	—	—	—	—	—	—	—
(viii) Transferred to Sick Wards, other Hospitals	1	1	2	—	—	—	1	1	2
(ix) Cases still under observation	—	—	—	—	—	—	—	—	—
TOTAL ...	239	371	610	13	31	44	252	402	654
(2) Number of Cases seen by Psychiatrist in St. David's Hospital Sick Wards during 1959 :									
No action taken	59	84	143	—	—	—	59	84	143

TABLE II Summary of the Work of the Duly Authorised Officers 1950–1959.

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Admitted to Mental Hospitals	305	267	291	347	348	364	419	455	448	440
Returned to Mental Hospitals	4	—	—	12	14	12	13	24	13	27
Transferred to Sick Wards ...	106	121	98	102	111	99	93	116	88	28
Admitted direct to Sick Wards	11	8	7	4	13	15	10	15	21	67
Discharged home or to Welfare Authorities	63	77	101	72	101	98	81	77	76	89
Placed in care of Police, Military Authorities, etc.	4	—	—	11	4	5	4	5	7	3
Died in Observation Wards	—	—	2	1	—	—	—	1	1	—
Other Discharges	1	2	—	2	—	2	1	1	1	—
Cases still under Observation	1	3	1	10	7	4	2	7	7	—
TOTAL ...	495	478	500	561	598	599	623	701	662	654
Seen by Psychiatrist in Sick Wards—No action taken	271	275	232	180	139	66	58	90	100	143

TABLE III Mental Deficiency Acts. Particulars of Cases reported during 1959.

	Under 16 yrs.			Over 16 yrs.			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. PARTICULARS OF CASES REPORTED DURING 1959 :—									
(*a*) Cases ascertained to be defectives " subject to be dealt with." Action taken on reports by :—									
(i) Local Education Authorities on children									
(1) While at school or liable to attend school	4	6	10	—	—	—	4	6	10
(2) On leaving Special Schools ...	5	9	14	—	—	—	5	9	14
(3) On leaving Ordinary Schools ...	—	—	—	—	—	—	—	—	—
(ii) Police or by Courts	—	—	—	—	—	—	—	—	—
(iii) Other Sources	—	1	1	5	3	8	6	4	9
TOTAL of 1 (*a*)	9	16	25	5	3	8	14	19	33
(*b*) Cases reported who were found to be defectives but were not regarded as " subject to be dealt with " on any ground	1	6	7	3	7	10	4	13	17
(*c*) Cases reported who were not regarded as defectives and are thus excluded from (*a*) or (*b*)	14	6	20	—	1	1	14	7	21
(*d*) Cases reported in which action was incomplete at 31st December, 1959, and are thus excluded from (*a*) or (*b*)	—	—	—	—	—	—	—	—	—
TOTAL of 1(*a*)–(*d*) inc. ...	24	28	52	8	11	19	32	39	71
2. DISPOSAL OF CASES REPORTED DURING 1959 :—									
(*a*) Of the cases ascertained to be defective " subject to be dealt with," number :—									
(i) Placed under Statutory Supervision ...	9	16	25	3	3	6	12	19	31
(ii) Placed under Guardianship	—	—	—	—	—	—	—	—	—
(iii) Taken to " places of safety "	—	—	—	—	—	—	—	—	—
(iv) Admitted to Institutions	—	—	—	2	—	2	2	—	2
(v) Action not yet taken	—	—	—	—	—	—	—	—	—
(vi) Left Cardiff or Deceased	—	—	—	—	—	—	—	—	—
(*b*) Of the cases not ascertained to be defectives " subject to be dealt with," number :—									
(i) Placed under voluntary supervision ...	1	6	7	3	7	10	4	13	17
(ii) Action unnecessary	14	6	20	—	1	1	14	7	21
(iii) Left Cardiff or Deceased	—	—	—	—	—	—	—	—	—
TOTAL of Item 2	24	28	52	8	11	19	32	39	71

TABLE IV

Number of Mental Defectives for whom care was arranged by the Local Health Authority under Circular 5/52 during 1959, and admitted to :—

	Under 16 yrs.			Over 16 yrs.			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
(*a*) National Health Service Hospitals	3	3	6	1	—	1	4	3	7
(*b*) Elsewhere*	—	—	—	—	—	—	—	—	—
TOTAL ...	3	3	6	1	—	1	4	3	7

* The Cardiff Branch of the National Soicety for Mentally Handicapped Children provided care for 25 patients at the Preswylfa Occupation Centre in Cardiff during August, 1959.

TABLE V.

Number of Mental Defectives who were in Institutions, under Community Care (including Voluntary Supervision) or in " Places of Safety " on 1st January, 1959, who ceased to be under any of these forms of care during 1959.

	Under 16 years			Over 16 years			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
(*a*) Ceased to be under Care :—									
(i) Transferred to Local Education Authority ·									
(*a*) On reaching School Age	1	—	1	—	—	—	1	—	1
(*b*) Under Education (Miscellaneous Provisions), Act	2	—	2	—	—	—	2	—	2
(ii) No longer in need of									
(*a*) Statutory Supervision	—	—	—	15	6	21	15	6	21
(*b*) Voluntary Supervision	—	1	1	4	—	4	4	1	5
(iii) Admitted to Mental Hospital									
(*a*) From Statutory Supervision	—	—	—	—	—	—	—	—	—
(*b*) From Voluntary Supervision	—	—	—	—	—	—	—	—	—
(*c*) From Hospitals ...	—	—	—	—	—	—	—	—	—
(*b*) Died, Removed from Area, or Lost Sight of :—									
(i) Died under Statutory Supervision	—	—	—	1	3	4	1	3	4
(ii) Died under Voluntary Supervision	—	—	—	—	—	—	—	—	—
(iii) Died in " Places of Safety "	—	—	—	—	—	—	—	—	—
(iv) Died whilst in Hospital ...	1	—	1	3	2	5	4	2	6
(v) Left Cardiff :									
(*a*) Statutory Supervision	—	1	1	—	3	3	—	4	4
(*b*) Voluntary Supervision	—	—	—	—	4	4	—	4	4
(vi) Lost Sight of									
(*a*) Statutory Supervision	—	—	—	—	—	—	—	—	—
(*b*) Voluntary Supervision	—	—	—	—	—	—	—	—	—
	4	2	6	23	18	41	27	20	47

TABLE VI

Disposal of Cases not included in Tables III(2) and V.

	Under 16 years			Over 16 years			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Admitted to Hospitals—									
(i) Under Order	—	—	—	—	1	1	—	1	1
(ii) Informally	5	2	7	5	5	10	10	7	17
Discharged from Order and detained on Informal Basis—									
(*a*) In Hospital	1	—	1	2	1	3	3	1	4
(*b*) Under Guardianship ...	—	—	—	—	—	—	—	—	—
Informal Cases left Hospital ...	—	—	—	—	3	3	—	3	3
Placed under Guardianship ...	—	—	—	—	—	—	—	—	—
Admitted to Places of Safety ...	—	—	—	1	—	1	1	—	1
Granted Licence	—	—	—	1	1	2	1	1	2
Licence revoked	—	—	—	—	—	—	—	—	—
Transferred from one Hospital to another	1	—	1	3	2	5	4	2	6
Transferred from Licence to Guardianship	—	—	—	1	—	1	1	—	1
Transferred from " Places of Safety" to Hospital	—	—	—	—	—	—	—	—	—
Discharged from " Places of Safety"	—	—	—	—	—	—	—	—	—
Admitted to Mental Hospitals ...	—	—	—	—	—	—	—	—	—
Discharged from Mental Hospitals	—	—	—	1	—	1	1	—	1
Absconded from Hospital	—	—	—	—	1	1	—	1	1
Discharged from Order :									
Licence	—	—	—	1	1	2	1	1	2
Hospital	—	—	—	3	2	5	3	2	5
Guardianship	—	—	—	1	—	1	1	—	1
Died in Mental Hospitals	—	—	—	—	—	—	—	—	—
Provided with Temporary Accommodation	3	2	5	1	1	2	4	3	7
Placed under Statutory Supervision	—	—	—	—	1	1	—	1	1
Placed under Voluntary Supervision	—	—	—	1	5	6	1	5	6
	10	4	14	21	24	45	31	28	59

TABLE VII

Mental Deficiency Acts. Statistical Return.

Total cases on registers at 31st December, 1959—

	Under 16 yrs.			Over 16 yrs.			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
(*a*) Cases " Subject to be dealt with " :—									
(i) Under Statutory Supervision	58	59	117	201	220	421	259	279	538
(ii) Under Guardianship	—	—	—	1	4	5	1	4	5
(iii) In " Places of Safety "	—	—	—	—	—	—	—	—	—
(iv) In Hospitals	28	14	42	149	114	263	177	128	305
(v) In State Hospitals	—	—	—	7	2	9	7	2	9
(vi) On Licence from Institutions	2	—	2	4	5	9	6	5	11
(vii) Absconded from Institutions	—	—	—	—	—	—	—	—	—
(viii) Action not yet taken	—	—	—	—	—	—	—	—	—
(*b*) Cases not at present " Subject to be dealt with ":—									
(i) Under Voluntary Supervision	5	12	19	80	103	183	85	115	200
(ii) Action not yet taken	—	—	—	—	—	—	—	—	—
TOTAL	93	85	178	442	448	890	535	533	1068

TABLE VIII

Mental Deficiency Acts. Number of Cases receiving training at the Nursery, Occupation and Training Centres, on 31st December, 1959.

		Under 16 yrs.			Over 16 yrs.			Total		
		M.	F.	T.	M.	F.	T.	M.	F.	T.
(A) Pengam Road Centre										
(*a*) Nursery (Class A)	Under Supervision ...	7	7	14	—	—	—	7	7	14
	From Other Authorities	—	—	—	—	—	—	—	—	—
(*b*) Nursery (Class B)	Under Supervision ...	11	5	16	—	—	—	11	5	16
	From Other Authorities	—	—	—	—	—	—	—	—	—
(*c*) Occupation Centre	Under Supervision ...	3	1	4	6	5	11	9	6	15
	From Other Authorities	—	1	1	5	—	5	5	1	6
(*d*) Training Centre	Under Supervision ...	—	—	—	29	17	47	29	18	47
	From Other Authorities	—	—	—	8	13	21	8	13	21
	Total ...	21	14	35	48	36	84	69	50	119
(B) "Preswylfa," Clive Road Centre										
(*a*) Nursery (Class A)	Under Supervision ...	11	9	20	—	—	—	11	9	20
	From Other Authorities	1	—	1	—	—	—	1	—	1
(*b*) Nursery (Class B)	Under Supervision ...	6	6	12	—	—	—	6	6	12
	From Other Authorities	3	5	8	—	—	—	3	5	8
(*c*) Nursery (Class C)	Under Supervision ...	8	6	14	—	—	—	8	6	14
	From Other Authorities	3	3	6	—	—	—	3	3	6
(*d*) Junior Group	Under Supervision ...	10	5	15	—	—	—	10	5	15
	From Other Authorities	2	4	6	—	—	—	2	4	6
	Total ...	44	38	82	—	—	—	44	38	82
	Total (A) & (B) ...	65	52	117	48	36	84	113	88	201

TABLE IX

Classification of Mental Defectives in the Community on 31st December, 1959 (according to need on that date).

	Under 16 yrs.			Over 16 yrs.			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
(*a*) Cases included in Table VII (*a*) (i)–(iii) and (*b*) (i) in need of Hospital care and reported accordingly to the Hospital Authority :—									
(1) In urgent need of Hospital care :—									
(i) " Cot and Chair " cases	1	4	5	—	—	—	1	4	5
(ii) Ambulant low grade cases	1	4	5	1	1	2	2	5	7
(iii) Medium grade cases	—	2	2	2	1	3	2	3	5
(iv) High grade cases	—	—	—	—	—	—	—	—	—
TOTAL Urgent Cases	2	10	12	3	2	5	5	12	17
(2) Not in urgent need of Hospital care :—									
(i) " Cot and Chair " cases	2	—	2	—	1	1	2	1	3
(ii) Ambulant low grade cases	2	2	4	—	1	1	2	3	5
(iii) Medium grade cases	—	—	—	—	—	—	—	—	—
(iv) High grade cases	—	—	—	3	1	4	3	1	4
TOTAL Non-urgent cases	4	2	6	3	3	6	7	5	12
TOTAL ...	6	12	18	6	5	11	12	17	29
(*b*) Of the cases included in Table VII (*a*), (i), (ii) (vi) and (*b*) (i) number considered suitable for :—									
(i) Nursery and Occupation Centre ...	58	65	123	16	28	34	74	93	167
(ii) Training Centre	—	—	—	40	37	77	40	37	77
(iii) Home Training	—	2	2	—	3	3	—	5	5
TOTAL ...	58	67	125	56	68	124	114	135	249
(*c*) Of the cases included in (*b*), number receiving training :—									
(i) In Nursery and Occupation Centre ...	56	39	95	6	5	11	62	44	106
(ii) In Training Centre	—	—	—	29	18	47	29	18	47
(iii) At Home	—	—	—	—	—	—	—	—	—
TOTAL ...	56	39	95	35	23	58	91	62	153

TABLE X

Age and classification of Cases reported during 1959

Age	Idiots		Imbeciles		Feeble-minded		Moral Defectives		Classification Deferred		Not Mentally Defective		Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1	—	—	—	2	—	—	—	—	—	1	1	—	4
2	1	—	—	1	—	—	—	—	—	1	2	—	5
3	—	—	—	—	—	—	—	—	—	—	3	1	4
4	1	—	—	—	—	—	—	—	—	—	4	1	6
5	—	—	1	1	—	—	—	—	—	—	—	—	2
6	—	—	1	—	1	2	—	—	—	—	1	—	5
7	—	—	—	—	—	—	—	—	—	—	—	—	—
8	—	—	—	—	—	1	—	—	—	—	—	—	1
9	—	—	—	—	—	—	—	—	—	—	—	—	—
10	—	—	—	1	—	1	—	—	—	—	—	—	2
11	—	—	—	—	—	1	—	—	—	—	—	—	1
14	—	—	—	—	—	—	—	—	—	—	—	1	1
15	—	—	—	—	5	10	—	—	—	—	3	3	21
16	—	—	—	—	—	—	—	—	—	—	—	—	—
17	—	—	—	—	2	—	—	—	—	—	—	1	3
18	—	—	—	—	1	1	—	—	—	—	—	—	2
19	—	—	—	—	1	—	—	—	—	—	—	—	1
Over 21	—	—	—	—	4	8	—	—	—	1	—	—	13
TOTAL	2	—	2	5	14	24	—	—	—	3	14	7	71

TABLE XI

Classification of Cases reported during 1950–1959

Classification	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Idiots	3	2	7	3	1	3	6	2	4	2
Imbeciles	5	11	8	11	13	8	12	15	9	7
Feebleminded	34	31	34	35	53	42	43	34	44	38
Moral Defectives	—	—	—	—	—	—	—	—	—	—
Classification Deferred ...	17	3	3	3	3	2	13	3	5	3
	59	47	52	52	70	55	74	54	62	50
Not Mentally Defective ...	8	13	8	17	5	10	22	13	10	21
TOTAL ...	67	60	60	69	75	65	96	67	72	71

TABLE XII

Summary of ascertained Cases

	Position at 31st December 1958	Additions during 1959	Deletions during 1959	Position at 31st December 1959
Under Statutory Supervision ...	551	33	46	538
Under Guardianship	6	—	1	5
In Places of Safety	—	1	1	—
In Hospitals and on Licence ...	321	21	17	325
" Subject to be dealt with " Action not yet taken	—	—	—	—
Under Voluntary Supervision ...	186	27	13	200
TOTAL ...	1,064	82	78	1,068

TABLE XIII

Summary of ascertained Cases, 1950–1959

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
1. Cases " Subject to be dealt with "										
Under Statutory Supervision	462	475	477	473	510	543	518	525	551	538
Under Guardianship ...	2	2	2	3	5	5	6	6	6	5
In Places of Safety ...	2	2	—	2	2	2	1	2	—	—
In Hospitals	262	270	278	293	301	311	298	287	302	305
In State Hospitals ...	13	12	11	7	9	10	10	10	9	9
On Licence from Hospitals	34	31	25	19	17	12	13	14	9	11
Absconded from Hospitals	1	—	—	—	—	—	1	—	1	—
Action not yet taken ...	8	2	4	5	11	—	16	7	—	—
2. Cases not at present "Subject to be dealt with "										
Under Voluntary Supervision	139	136	140	154	151	167	180	175	186	200
Action not yet taken ...	—	—	—	—	—	—	—	—	—	—
TOTAL ...	923	930	937	956	1,006	1,050	1,043	1,026	1,064	1,068
3. Attending Occupation & Training Centres ...	84	87	76	95	122	129	137	141	152	153

VIII.—REPORT FOR 1959

Of Mr. W. BATE, M.A., D.P.A., F.R.S.H., M.A.P.H.I.

Chief Public Health Inspector

This is the second Annual Report which I have submitted since my arrival in Cardiff. It records a year of few spectacular achievements but of quiet progress in work which has always proved to be of absorbing interest. It is during this year that the Bute Street Compulsory Purchase Order was confirmed ; that a Slum Clearance Survey was completed ; we have seen a start on the Central Area Clearance Areas ; a continuance of the important work under the Rent Acts ; a considerable amount of effort put into the difficult problem of atmospheric pollution in Splott. Alongside this, there has been continued the solid routine work under the many and varied acts of Parliament administered by the Public Health Inspector which make the framework of the standards of environmental hygiene.

The work would not have been so successful, and could not have proceeded so smoothly had it not been for the unstinting efforts of the inspectorial staff and the clerical staff.

Shortly after the publication of this Report it is expected that Mr. E. J. Griffiths who has been Deputy Chief Public Health Inspector to the City for 8 years and has given a total period of service to the Corporation of 36 years, will retire. His record has been one of undivided loyalty to the Department and to the Council, and I personally have been grateful for all the help I have received from him.

The whole Section has received the amiable and helpful co-operation of the Medical Officer of Health and the City Analyst and we are grateful for the consideration shown to me and the Staff by the Chairman and Members of the Health Committee.

FOOD AND DRUGS CONTROL

This is at least as important a sector of the work of the public health inspector as any of the other sectors, embracing as it does the inspection of meat and other foods for soundness and absence of disease ; the supervision of hygiene in premises where food is stored, prepared, manufactured or sold ; the routine checking of all articles of food, drink and drugs to see that they satisfy standards of nature, substance and quality and that labels and advertisements are not false or misleading to the prejudice of the public. This work he does by exercising a constant awareness and vigilance, by carrying out unsolicited search and inspection and by investigating complaints made to him by members of the public. The full details of the work are not reproduced in this part of the Report ; for the avoidance of duplication, some of the information has been left to be given in the report of the City Analyst commencing on page 107.

Meat Inspection and Slaughterhouses

There is only one private slaughterhouse in the city which operates in conjunction with a bacon factory and at which only pigs are slaughtered. All other slaughtering is carried out at the public abattoir under the supervision of the Veterinary Officer and is separately reported upon by this officer.

Meat inspection at the private slaughterhouse is carried out by the public health inspector for the district in which it lies. All pigs slaughtered during the year were inspected and details are given in the following tables :

CARCASES AND OFFAL INSPECTED AND CONDMENED IN WHOLE OR IN PART
(Revised Form as set out by the Ministry of Health)

	PIGS
Number killed	3,077
Number inspected	3,077
ALL DISEASES EXCEPT TUBERCULOSIS :—	
Whole carcases condemned	4
Carcases of which some part or organ was condemned	165
Percentage of the number inspected affected with disease other than tuberculosis	5·5
TUBERCULOSIS ONLY	
Whole carcases condemned	2
Carcases of which some part or organ was condemned	27
Percentage of the number inspected affected with tuberculosis	0·94

ANIMALS SLAUGHTERED—COMPARATIVE TABLE

	YEAR				
	1959	1958	1957	1956	1955
Pigs	3,077	2,954	4,530	5,080	6,558

WEIGHT OF MEAT AND OFFAL REJECTED FROM ANIMALS SLAUGHTERED

	Tons	Cwts.	Qrs.	Lbs.
6 Carcases Pork	—	7	—	6
Part Carcases of Pork ...	—	2	—	4
Pigs Offal	—	8	3	18
TOTAL ...	—	18	—	—

Other Food Inspection

Each district public health inspector is responsible for food inspection and condemnation at all shops, warehouses, etc., on his district. A total number of 3,519 visits were made for this purpose during the year and the approximate weight of diseased or unsound food and meat surrendered as unfit for human consumption was 48 tons, 2 cwts., 2 qrs., 9 lbs.

Most of these inspections were made at the request of the retailer or wholesaler; in some cases the fitness or otherwise of the particular food was in doubt and a decision required the expertise of a qualified public health inspector. In the vast majority of cases the unfitness of the food could not possibly have been in doubt and the request for inspection by a public health inspector is actuated by a commercial motive : the possession of a condemnation certificate has become an essential ingredient of the retailer's method of " balancing his books " and is looked upon in the trade as the supporting certificate essential for claims on wholesaler, importer or other supplier. This leads to requests for multiple condemnation certificates for separate brands or for groups of foods from different suppliers' by no means a function of public health significance, but which a public health inspector is reluctant to refuse to undertake. At least, it ensures that the local authority is able to see that the unsound food is properly disposed of, and does not find it's way back to the public. Even so, there is a lot of merit in the notion that the local authority should be given power to charge for " multiple " certificates.

Food Hygiene

A total of 11,028 visits was made to food premises during the year. The number of visits is slightly higher than for previous years and would, no doubt, have been better but for the occasional shortage of staff.

Details of the visits made, together with the totals of each type of premises, are as follows :

	Premises	*Visits*
Cafes, etc.	197	967
School canteens	39	45
Other canteens	50	50
Clubs, Hotels, Public houses	213	58
Butchers and Meat Preparing Premises	241	1,079
Bakehouses	35	148
Confectioners (Sugar and Flour)	223	246
Fried Fish Shops	53	138
Wet Fish Shops	25	83
General Shops	671	2,832
Wholesale Depots	32	603
Ice Cream Premises	649	1,070
Markets	2	35
Vehicles	—	59
Other Food Premises	112	96
	2,542	7,509
Food Inspection — Condemnation Visits		980
Routine Visits		2,539
		3,519

362 informal Notices were served on occupiers of food premises for contraventions of the Food Hygiene Regulations. Details of the contraventions are as follows :—

Food Premises

Food to be protected from dust, flies, etc.	79
Food to be protected from customers, etc.	32
Food to be protected from risk of contamination by animals ...	18
Clean overalls to be provided	33
Smoking to be discontinued	25
Use of unclean wrapping to cease	24
Sanitary conditions to be modified, cleansed, repaired	106
Wash-hand notices to be provided	213
Provision of water supply (cold)	60
Provision of wash-hand basins	295
Provision of hot water for wash-hand basins	219
Provision of soap, towel, nailbrush, etc.	127
Provision of sinks for food or equipment	186
Provision of hot water for sinks	157
Provision of First-aid equipment	155
Provision of clothing accommodation	50
Lighting of food rooms to be improved	7
Ventilation of food rooms to be improved	10
Food rooms to be cleaned/repaired	51
Refuse to be removed	15
Cold storage for special foods	—
Hot storage for special foods	3

Foodstalls, Vehicles, etc.

Name, address to be exhibited	1
Screening to be provided	1
Water supply, washing facilities to be provided	2
Soap, towels, nailbrush, etc., to be provided	3

Meat Transport

Clean clothing to be provided	1

It will be observed that the majority of contraventions consisted of the failure to provide adequate washing facilities for personnel and equipment. Where difficulties arise, usually in congested premises and ' lock-up ' shops, the district inspectors endeavour to give advice on the most practical and economical method of providing these facilities.

Legal proceedings were taken against two shopkeepers and the proprietor of a mobile shop for offences against the Food Hygiene Regulations. The gravity with which the court treated the offence can be judged by the penalties imposed, the fines and costs imposed being :—

Shop 1	Total fines	£30	0	0	Total costs	£35	0	0
Shop 2	,, ,,	£30	0	0	,, ,,	£15	15	0
Mobile Shop	,, ,,	£41	1	0	,, ,,	£5	5	0
		£101	1	0		£560	0	0

Details of these offences are given in the summary of legal proceedings taken under the Food and Drugs Act.

Details of those food premises which are subject to registration or licenced under various enactments are :—

Ice Cream Manufacturers	18
Ice Cream Vendors	637
Manufacturers of meat products	97
Fried fish shops	53

Bacteriological Investigation of Foodstuffs

Liquid Egg

Observation continues to be kept on consignments of frozen eggs passing through city wholesalers. The amount of egg handled was considerably reduced in relation to previous years and there were no importations through the port. Consequently few samples had to be taken.

Six samples were taken of Chinese liquid egg and six samples of liquid egg produced at a local egg packing station. All samples were negative.

Slaughterhouses

The investigation commenced in 1958 into the incidence of pathogenic organisms in slaughterhouses continued during the year. Swabs have been laid at regular intervals at three points in the drainage system at the public abattoir. Eighty-three swabs were laid ; of these 35 proved negative, salmonella organisms being found in the remaining 48. Details are given in the following table :

Food Hygiene Exhibition, September, 1959

Food Hygiene Exhibition

The first National Food Exhibition for Wales was held at the Sophia Gardens Pavilion from 5th to 9th September. Exhibitors included well known national concerns together with prominent local food manufacturers and retailers. At a late hour the Department was invited to include an exhibit. In spite of the shortage of time an exhibition stand was manufactured consisting of three large panels. The exhibit included a series of models explaining the type of equipment required in food premises, a display of food hygiene posters and a panel on which was mounted a series of bacteriological specimens devised with the co-operation of the Public Health Laboratory Service showing the risk of contamination from dirty hands, equipment, falling hair, etc.

The stand was manned by public health inspectors during the period of the exhibition and a considerable amount of interest was shown by visitors. Suitable food hygiene leaflets were distributed and many enquiries received for information and advice. The number of visitors to the exhibition was 76,000.

Salmonella typhimurium in milk

In September of this year a report was received from the Divisional Veterinary Inspectorate of the Ministry of Agriculture, Fisheries and Food, stating that Salmonella typhimurium had been isolated from the faeces of a milch cow at a dairy farm within the City boundary.

On visiting the farm it was found that the cow had been treated by the farmer's veterinarian and that the clinical symptoms had been cleared.

Some fifteen samples of milk were taken and submitted for examination at the Public Health Laboratory. Salmonella typhimurium was isolated from one of these samples.

The samples were collected after the milk had been cooled and prior to dispatch for pasteurisation. Having regard to the fact that it was the usual practice to submit all milk produced at the farm for pasteurisation, no risk to the consuming public was involved. Investigations at the farm premises were undertaken when faecal swabs from all persons, resident and employed, at the farm were submitted for examination. Positive Salmonella typhimurium swabs were obtained from two persons, one of whom had been engaged in milk production. Arrangements were made for milking and other dairying duties to be carried out exclusively by healthy personnel and for the patients to report to their medical adviser.

Faecal swabs from all milch cows, farm poultry, together with samples of material from reens at the farm and poultry feeding stuffs were submitted for examination. No positive results were obtained from these sources. The patients underwent a course of treatment by their doctor. Subsequent swabs proved negative.

The co-operation of the officers of the Ministry of Agriculture, Fisheries and Food in notifying this department is appreciated, in that it assists in ensuring a milk supply which will not endanger public health.

Shellfish

A bacteriological standard for shrimps and prawns has now been agreed by the Hygiene Committee of the Ministry of Health. It relates to cooked shrimps and prawns which have been peeled ; the product may be frozen or unfrozen.

The provisional standard is a maximum plate count of 250,000 organisms and no salmonellae in 50 grams. In order to see how peeled, cooked shrimps or prawns on sale in Cardiff measured up to this standard, 36 samples of shell fish were taken over a period of several months. The results are given in the following table. It will be seen that in only three cases samples contained organisms in excess of the provisional standard.

Ice Cream and Ice Cream Premises

There are eighteen firms or persons registered for the manufacture of ice cream. Only twelve of these actually manufactured ice cream during the year, four producing a hot mix and the remainder a cold mix. 637 retailers are registered for the sale of ice cream.

During the year 1,070 visits were made to premises at which ice cream was manufactured or sold. Fifty-six samples were taken for bacteriological examination and details are given in the tables on page 64.

The results of the bacteriological examinations (only three unsatisfactory samples out of fifty-six) are in keeping with the progress that has been maintained by this branch of the food trade since 1947, when regulations led to a reorganisation of standards of hygiene and production. The ice cream manufacturing industry can claim to rank with the milk industry as leaders in the food trades so far as hygienic methods of production are concerned.

Public Abattoir — Incidence of Pathogenic Organisms

Sample taken from :	Negative Salmonella	SALMONELLA									
		dublin	meleagradis	enteritidus	thompson	kentuky	anatum	weltureden	seftenberg	typhimurium	Total
Main Cattle Market ...	11		3	1						12	16
Gut Scraping ...	11	1	1		1		4			11	18
Piggery	13					2		1	1	10	14
TOTALS ...	35	1	4	1	1	2	4	1	1	33	48

Samples of Ice Cream and Ice Lollies submitted for Bacteriological Examination

Total numbers of samples submitted for examination	ORIGIN OF SAMPLES					RESULTS OF EXAMINATION							
	Local Manufacturers			National Concerns		Satisfactory				Unsatisfactory			
	Ice Cream		Ice Lollies	Ice Cream	Ice Lollies	Grade 1		Grade 2		Grade 3		Grade 4	
	Hot Mix	Cold Mix				Ice Cream	Ice Lollies	Ice Cream	Ice Lollies	Ice Cream	Ice Lollies	Ice Cream	Ice Lollies
56	10	9	Nil	33	4	50	3	—	—	2	1	—	—

The samples were taken at retail shops, manufacturers premises and depots, ensuring coverage of all types of plants and manufacturing process. Investigations and advice in the cases where samples were reported as unsatisfactory ensured that subsequent samples were satisfactory.

Country of Origin	No. of Samples	Organisms per grammes	Salmonellae		Faecal Coliforms		Staphylococcus Aureus	
			Present	Absent	Present	Absent	Present	Absent
England	1	10,400	—	1	—	1	—	1
Norway	8	0—500	—	8	—	8	—	8
	5	501—2,000	—	5	—	5	—	5
	9	2,001—12,000	—	9	—	9	—	9
	3	12,001—20,000	—	3	—	3	2	1
	4	20,001—45,000	—	4	—	4	2	2
	1	69,000	—	1	—	1	—	1
	2	150,000 approx.	—	2	—	2	—	2
	2	1,500,00 approx.	—	2	—	2	—	2
	1	22,700,000	—	1	—	1	1	—
TOTAL ...	36	—	—	36	—	36	5	31

Sampling of Food and Drugs

Routine samples of food, drink and drugs are taken day-by-day with the object primarily of ascertaining that they are of the correct " nature, substance and quality." In addition, scrutiny is made of all labels and advertisements to check that claims are not false or misleading, whether they be made on labels, newspapers, accompanying circulars or in introductory jingles on television. During the year one inspector was transferred from general duties to devote the whole of his time to the work, and his efforts are augmented by auxiliary sampling by the rest of the inspectorate as the situation demands. The work is absorbing and demanding ; in the case of many foods, there are statutory standards against which the food may be measured ; in the case of many other foods, there is no standard of composition or quality and the approach is necessarily more complex and subjective.

It falls to the public health inspector as enforcement officer to interpret the law and the analyst's reports and to take whatever action appears to be appropriate. Action might take the form of legal proceedings, but more commonly it involves discussions with food manufacturers ; invesitgations of production methods ; a search for causes and cures ; the persuasion of interested parties to a certain point of view ; or even representations to a government department that prescribed standards are needed or that the government of another country should consider the composition of a food imported into this country. This work could not progress smoothly or effectively without the close co-operation of public health inspector and public analyst ; I am happy to record all the advice and assistance rendered to me personally by Mr. Dixon, Cardiff's City Analyst.

The sampling of food and drugs within a given period may appear, in retrospect, to have been haphazard. This can be disturbing since it is obvious that a planned sampling programme is necessary for the best reults. But the field is ever extending ; new prepared and packaged foods and drugs appear on the market every day ; food becomes more complex ; there are new ingredients, intricate additives and new methods of treating and processing ; more packaging means more labels and more advertising. In the early days of the control of composition of food, adulteration was frequent and gross and milk was one of the foods most commonly adulterated. These two features were reflected in the pattern of sampling by food and drugs authorities. Today, the position is different ; adulteration is seldom blatant and deliberate, whilst milk has ceased to be the dominant culprit. Yet the sampling programmes of food and drugs authorities show that it is still the common practice for samples of milk to exceed the total of samples of all other foods. In 1958, in Cardiff, for example, 1,035 samples of milk were submitted for analysis, compared with 353 samples of other foods and drugs. Milk is such a ubiquitous, essential and staple source of food supply that it must continue to feature prominently in any sampling programme. Yet, one is prompted to enquire whether some thought should not be given to a shift of emphasis in the light of circumstances today.

During 1959, a tentative approach was made in this direction ; a reduction of milk samples to 682 made it possible to increase the samples of other foods and drugs to 466. Clearly, there is no arithmetical equality between the two classes of samples. Analysis of the vast range of ' other foods ' is a different matter from routine analysis of milk and an increase of samples of other foods and drugs can create more intricate and complicated work for the public analyst. The change in practice during 1959 has only been possible because the City Analyst has been prepared to meet difficulties in unfavourable circumstances.

Some indication of the range of foods which have been scrutinised during 1959 and of the action taken will be apparent from the following summary of selected incidents. A complete identification of all the samples submitted is continued in the City Analyst's section of this report.

Routine Sampling : Irregularities of Composition

Milk

The department's policy of sampling milk at Dairies before and after processing at schools, hospitals, school canteens and from milk roundsmen was continued. Sampling was also done at milk vending machines which are appearing in increasing numbers in the city.

A total of 682 samples of milk were submitted for analysis. Of these, 630 samples were reported by the City Analyst to be genuine. The ' abnormal samples ' were accounted for as follows :—

(*a*) 25 samples taken from 19 consignments of churned milks were below standard. But each group of churns considered as one consignment satisfied the statutory standard. The results of milk samples re-emphasises the need for bottlers to ensure the mixing of morning and evening milk to obtain a properly balanced milk supply. Failure to do this can be and is frequently the cause of a particular consignment failing to comply with the statutory standard for fat.

(*b*) 2 samples showed added water to the extent of 3 per cent. This was due to backfall on a bottling pipe-line which was rectified.

(*c*) Two informal samples followed by a formal sample showed fat deficiences of the order of 13 per cent. Legal proceedings were instituted and the dairyman fined £20 and £3 3s. 0d. costs.

(*d*) Two samples of milk found to contain hypochlorite were, on investigation, obtained from the first churn at successive milkings—the hypochlorite being the residue of the solution used to cleanse the milking machines at the farm. The milk producer was advised and further samples were satisfactory.

(*e*) One sample was deficient of 3 per cent. non-fatty solids and contained 2 per cent. added water by the freezing point test. Subsequent samples genuine after checking draining of churns.

(*f*) Two informal samples showed fat deficiencies. Follow up formal samples in these instances were genuine milk.

(*g*) Seven samples of Channel Island milk taken from three consignments were below the standard for Channel Island milks. Considering each group of churns as a whole consignment the samples satisfied the statutory standard.

(*h*) Six samples indicated that morning and evening milks were not properly mixed and a balanced supply was, therefore, not obtained. The producers and dairymen were advised and the necessary adjustments in production methods enforced. Subsequent samples were satisfactory.

(*i*) Three samples taken from one producer were below the statutory standard—difficulty was experienced in balancing the daily yield at the farm. The producer undertook to discontinue the use of the designation Channel Island in respect of milk produced at his farm. This undertaking was accepted and is being observed.

(*j*) One sample reported as containing 4 per cent. added water ; follow up formal samples were genuine.

Butter and Margarine

Samples, one of butter and one of margarine, reported as containing 16·1 per cent. water, compared with a legal maximum of 16·0 per cent. Further sampling of the product indicated that these were isolated incidents.

Apples

Apples with an excess of Arsenic and Lead above that permitted.

A consignment of imported apples was found to be contaminated with Arsenic and Lead in excess of the acceptable limit. The apples formed part of a larger consignment received from the Lebanon and distributed over a wide area of the country. The apples distributed throughout South Wales (405 boxes) were recalled to Cardiff where the wholesalers commenced to treat the apples under departmental supervision. Tests on the treated apples (30 boxes) indicated that the treatment was entirely successful. The treated apples were fit for human consumption but in the meantime the importers withdrew all the apples for re-export to the continent. One interesting feature of the washing operation was that success was obtained by using a solution of pure hydrochloric acid and " Stergene " in water, in the proportions of two pints, three-quarters of a pint and nineteen gallons, whereas treatment in another town of the same apples in the same solution, but omitting the " Stergene," was unsuccessful. In the Cardiff treatment, apples originally containing eleven and four parts per million of lead and arsenic were cleansed to a level of between less than 0·05 and 0·3 parts per million of arsenic and between less than 0·2 and 1·8 p.p.m. of lead—all negligible quantities.

Aspirins

The analyst's report in respect of a sample of aspirins indicated the presence of free salicylic acid in excess of the limit prescribed by the British Pharmacopoeia 1958. The matter was referred to the manufacturers of the product who undertook to recall the stock of the vendor for examination.

Further sampling has been arranged and additional research is under way, in view of the contention of the manufacturers that the product satisfied the prescribed tests.

Christmas Pudding affected with Mould

A Christmas pudding purchased as an informal sample was found to be affected with mould. All branches of the vendors premises were visited and the Christmas puddings inspected. Affected puddings were surrendered voluntarily and destroyed. The matter was taken up with the manufacturer who instituted inquiries at the factory. The development of the mould was attributed to failure to ensure proper cooling of the product prior to wrapping during the Christmas rush and to subsequent faulty storage.

Tinned Chicken

A large variety of tinned chicken and portions of chicken is being imported and prepared in this country. On considering the labelling of these products, one is disposed to the view that some standard of code of practice should be introduced to regularise the description and type of product sold under the various trade descriptions. A commodity described as " Boned Chicken " did in fact contain a quantity of stock. Other products are described as " packed in natural juices "—chicken fillets, etc. In the absence of a standard of any sort individual Food and Drug Authorities are expected to apply what they consider to be a satisfactory minimum standard. This practice presents difficulties and could well be avoided by the adoption of a standard or code of practice sponsored by the appropriate authorities. Pending some action in this connection, further research in this field is being carried out.

Extract of Malt and Cod Liver Oil

The description of this preparation included the word " butter " as part of its trade name—thereby indicating that butter fat should be included as an ingredient. The analyst's findings indicate that there was no evidence of butter fat in the sample submitted.

The label and description was, therefore, held to mislead as to the substance of the product.

This was pointed out to the manufacturer of the food who undertook to redraft the labels.

Luncheon Meats

Seven samples of luncheon meat, of which six were imported and one of local manufacture, were submitted for analysis.

Meat content of the imported products (expressed as raw meat) varied from 69 per cent. to 86 per cent. These samples were purchased prior to the introduction of the agreement between the Food Manufacturers Federation and the Association of Public Analysts and, therefore, no action was possible. However, it should be recorded that the sample purchased after the coming into force of the Agreement complied with the requirements in all respects ; the meat content being in excess of 80 per cent.

" Welsh " Butter

Several instances were encountered where the labels did not comply in all respects with the Merchandise Marks Act 1887 as amended by Section 1 (2) of the Merchandise Marks Act 1953.

Labels carried pictures of people in Welsh costume—places purporting to be Welsh and with descriptions in the Welsh language, the butter itself being wholly or partly of imported origin.

The packers agreed to withdraw, overprint or amend their labels as appropriate—accordingly no action was taken.

Bacon

Instances were encountered of bacon other than Danish bacon being displayed or labelled as Danish bacon. Advice and warnings were given in all cases. In one instance a full report was made to the Health Committee, the Committee resolving that a warning should be given to the trader.

Apples

From time to time complaints have been received that traders—principally " barrow-boys "—offer for sale many different varieties of apples, falsely describing them as Cox's pippins. This practice is apparently at its height during the hurly-burly of Christmas shopping. Complaints were investigated during 1959 and prima facie contraventions detected. Difficulty was experienced, however, in obtaining the services of a pomologist, considered to be necessary to give the technical evidence vital for a successful prosecution. Negotiations with the responsible Ministry were somewhat protracted and the opportunity to institute legal proceedings was lost. However, the identity of the expert whose services will be available is now known and may prove useful in the future.

Routine Sampling : Labelling Irregularities

Canned Fruit.—Failure to include either the name of the packer or labeller of the food or the words " Registered Trade Mark," as required by the Labelling of Food Order.

The manufacturers of the product were required and undertook to redraft the label to comply with the Order.

Christmas Puddings.—Labels were found not to comply in all respects with the Labelling of Food Order. The manufacturer's attention was drawn to the irregularities and undertakings were given to amend future labels to comply with the Labelling of Food Orders.

Milk Drinks.—(1) A cartoned milk sold from vending machines. It was found that the statement of ingredients indicated that the product was primarily separated milk. In fact, the basic ingredient proved to be whole milk quite rich in milk fat.

Though the article was superior in quality to separated milk, a particular person might be prejudicially misled if that person were subject to a special diet. The packer agreed to amend the label to comply with the regulations.

(2) A declaration of ingredients applied to a second milk drink was found not to be in descending order of proportion, required by regulations.

The manufacturers reviewed their formulation of the product and new, correctly labelled containers are to be introduced.

Blackcurrant Health Drinks.—One case was detected of failure to state the name and address or apply the words " Registered Trade Mark " to the container, this was rectified by the manufacturer.

One case was discovered of failure to state the minimum net contents of the bottle ; this was referred to the Weights and Measures Inspector.

Milk Loaf

Loaf of bread labelled as containing more than 4 per cent. skimmed milk, non-fat milk solids.

The analyst indicated that the loaf did, in fact, contain slightly more non-fatty solids than declared on the label. However, it was his considered opinion that the term " milk " implied whole milk.

No administrative action was taken since the commodity and label were in accordance with the requirements of the Food Standards Committee relating to milk bread.

Slimming Preparations

Slimming Preparations with their multiplicity of claims must, by their widespread approval and use, be regarded as not unimportant during food and drug sampling.

Samples of this kind of preparation, manufactured by one firm, were examined during the year. Objections were raised against a series of claims made in accompanying literature and on labels attached to the package. At the time of writing, discussions with the manufacturers were still in progress.

Tomato Products

The data provided on analysis of samples of tomato products indicates that there is at least one product on the market which is similar to, but inferior in quality to, those referred to as Ketchup, Catsup or Sauces.

During the year, one product described as ' Tomato piquant ' was found to contain less than 3 per cent. of tomato solids (compared with the 6 per cent. standard for sauce, relish, catsup or ketchup). The status of this product is to be pursued with the Ministry of Agriculture, Fisheries and Food.

Consumers' Complaints of Food Abnormalities

Sixty-six complaints regarding various foods purchased by the general public were received and investigated during the year. This total is more than twice the number of complaints investigated during 1958 but probably merely reflects the increased readiness of members of the public to report complaints to the department.

The following summary of selected incidents will indicate the wide variety of foods which were included in the year's work, in this field :—

Wood in Bread Roll

Splinters of wood embedded in a bread roll were found to be from plywood table surfaces at a bakery outside the City. New and more suitable working surfaces were provided under the supervision and to the satisfaction of the Chief Public Health Inspector of the district concerned.

Glass in Sliced Bread

A piece of glass embedded in a slice of bread was served in a factory canteen, the bread having been supplied from a bakery within the City. The firm operating the canteen was summoned, they in turn brought into the proceedings the manufacturer of the bread who was fined £25 with £14 costs.

Mould in Bread

Four cases of mould in bread were investigated. Production methods, with special attention to cooling of bread prior to wrapping, were investigated. Advice was given on the shelf life of the product and the inadvisability of overstocking at retail premises.

Wire in Pig Caul Fat

A complaint was received from another town of wire embedded in a pig's caul, said to have been one of a series of similar incidents. The pigs were bred in Cardiff ; investigation disclosed the origin to be wire brushes used to cleanse ovens in which biscuits were cooked to convert into pig meal.

Splinters of Hardwood in a Loaf of Bread

Four splinters of hardwood were found embedded in the centre of a loaf of bread. As an exercise to ascertain the point at which the wood entered the bread the bakers concerned prepared a loaf of bread under departmental supervision, inserting splinters of similar wood in the centre of the loaf.

Exhaustive investigations at the bakery failed to produce a conclusive result—the wood from the " bakery peel " was suggested as the origin of the wood splinters.

Conveyor Belting in Corned Beef

A tin of corned beef was found to contain a portion of canvas material of the type used in the manufacture of conveyor belting. The manufacturer's representatives were interviewed and a sample of the material sent to the packing station overseas for further investigation. The firm concerned expressed regret at the occurrence but were unable to establish the origin of the material. The incident was treated as an isolated case and no further action was undertaken.

Maggotts in Piccalilli

The presence of an unidentified grub was confirmed. The stock at the shop premises was surrendered. The department was also informed that all stocks of this article held by the Company concerned were to be withdrawn from all their branches.

Chocolate

The presence of grubs in fruit and nut chocolate was confirmed in three instances and stocks at the retailers premises were examined and on one occasion a second bar of chocolate was found to be infested. This is not an uncommon occurrence in chocolate of this kind if it is kept in stock too long through a warm summer. However, stock rotation at these premises appeared to be generally well conducted but the chocolate affected was of a variety not in great demand at these premises.

The manufacturers were advised of the details of each case and the retailers were instructed to ensure that stock rotation was strictly carried out.

Teacake containing a Nail

A teacake manufactured and sold within the City was found to contain a nail. Legal proceedings were instituted in this case. A fine of £20 was imposed and £3 3s. 0d. costs granted. It was contended by the firm that everything possible was being done to ensure a satisfactory product and that the nail was probably packed along with the fruit.

Battenburg Cake—Abnormal Taste

On examination it was found that the oil in the marzipan covering the cake was rancid and the cake had a musty taste. All stocks were withdrawn and surrendered for destruction.

Portion of Fish Skin in Scone

A portion of fish skin on which the typical scales were identifiable had been baked embedded in the scone. Since fish was not used at the premises the incident appeared to be shrouded in mystery. The matter was, therefore, regarded as an isolated incident and no legal action was taken.

Green Dye on Bacon Rind

The surface of the bacon had been accidentally smeared with a green dye in transit. The depth of penetration of the colour was such that the removal of a thin layer of rind and subcutaneous tissue left the bacon fit for human consumption and suitable for manufacturing purposes.

Baby Food—failure to reconstitute

Reported as having an abnormal taste in one case and of failing to reconstitute satisfactorily in two instances. All were found to be of normal taste and reconstituted satisfactorily if the packers directions were followed.

Mineral Water—Abnormal Taste

The cap washer was found to be contaminated with a phenolic substance. The factory manager was interviewed and production methods investigated. Further care at the bottle sorting point was advised and the use of an alternative type cap suggested. This kind of complaint will always be a possibility so long as screw stoppers are used and rubber washers re-used for successive bottlings.

Tinned Tomatoes containing a Fly

This being an imported product it was not possible to investigate the case fully. However, the vendors agreed to replace the offending tin and details of the complaint were forwarded to the packers for investigation.

Sugar—Abnormal Taste

The sugar described as having a " bitter taste " was examined at the departmental office and submitted for chemical examination to the City Analyst's laboratory. No evidence was found of an abnormal taste.

Metal Wire in Chewing Gum

A variety of chewing gum commonly referred to as " bubble gum " was found to contain portions of metal. The retailers premises were visited and the stock examined. The manufacturers investigated the origin of the metal which was probably portions of a metal strip used to secure the cartons in which the articles were packed. Alternative means of securing the cartons was introduced. On receiving this assurance no further action was taken.

Meat Pasties and Meat Pies

Eight complaints regarding these products were received. The presence of mould was confirmed in six cases and decomposition of the pies in one case. The manufacturers and retailers were interviewed and advised as to the relatively short life of these products and the care necessary in their preparation and storage. One incident involving decomposed pies was reported to the Health Committee, which decided that, in the circumstances, legal proceedings should not be instituted.

Flour Moth in Breakfast Cereal

Containing larvae of flour moth. The internal surfaces of the cardboard container was curtained with webbing of the flour moth. The retailers premises were visited and the stock examined. Stock rotation seemed to be well organised and the management maintaining a good standard of general hygiene at the premises.

Drug room beetle in Sugar Confectionery

Sweets infested with larvae of the drug room beetle. Found to be stock considered out of condition, being sold by an itinerant vendor in the public bar of an hotel. After considering the facts associated with this case, no legal action was taken.

Improperly Cleansed Milk Bottles

Seven complaints of failure to ensure that milk bottles were properly cleansed, prior to being used to contain milk, were lodged during the year.

One case where the milk was processed and purchased outside the City by a County resident was referred to the appropriate County Authority for investigation and necessary action.

In a further four cases the material remaining in the bottle after cleansing was not readily visible and no legal action was taken. Retailers and processors were, however, requested to ensure that their staff, at all points in the production and distribution of milk, were alive to the need for increased vigilance.

Legal proceedings were undertaken in one case when a fine of £5 was imposed and two guineas costs granted. The circumstances of the case were that a considerable quantity of oxide of iron was adhering to the sides of the bottle and should have been detected at some point along the cleansing-bottling line, before delivery to the customer.

The remaining case was found to be one where the bottle itself was clean but the external surface had been badly scratched due to constant use and carriage in a metal crate.

Foreign Bodies in Bottles of Milk

Three cases of foreign bodies in bottles of milk were notified during the year.

Two cases concerned milk purchased in the City, one of the bottles of milk being processed and bottled outside the City. The management at both premises was interviewed and the companies expressed their regret at the occurrences, undertaking to exert greater efforts to obviate any recurrence. In the case where the milk was purchased and processed outside the City by a resident of a County area, the details were referred to the appropriate County Authority for investigation and necessary action.

The Milk (Special Designation) (Raw Milk) Regulations, 1949

The Milk (Special Designation) (Pasteurised and Sterilised) Regulations, 1949

There are five pasteurising plants in the City ; of these two are using the Holder process and three the H.T.S.T. process. In addition milk is brought in from two pasteurising plants situated outside the city boundary. One firm is producing sterilised milk.

Samples of raw and heat treated milks were submitted for examination at the Pulbic Health Laboratory. Samples were collected from milk processing plants, wholesale and retail dairies, schools, canteens and hospitals. Details of the number of the various samples and the laboratory reports are tabulated in the following table.

Colouring Matter in Foods

Samples submitted for examination under these regulations included custard and blyncmange powders, cocktail cherries, soft drink from crystals, a variety of cake decorations and prepared icing mixtures. All were found to contain permitted colouring matter.

Milk submitted for Laboratory Examination during 1959.

Designation	Number of samples submitted for examination	Phosphatase Test		Methylene Blue Test			Turbidity Test		Biological Examination		
		Results of examination		Results of examination			Results of examination		No. of samples submitted	Results of examination	
		Sat.	Unsat.	Sat.	Unsat.	Test Void temp. more than 65 °F.	Sat.	Unsat.	Submitted	Turbercle bacilli PRESENT	Turbercle bacilli ABSENT
Pasteurised	377	375	2	369	4	4	—	—	—	—	—
T.T. Past.	231	230	1	227	1	3	—	—	—	—	—
Channel Island Past.	30	30	—	29	—	1	—	—	—	—	—
C.I.T.T. Past. ...	61	60	1	59	—	2	—	—	—	—	—
Sterilised	62	—	—	—	—	—	62	—	—	—	—
T.T. Raw	28*	—	—	24	3	—	—	—	31†	—	27†
C.I.T.T. Raw ...	13	—	—	13	—	—	—	—	17	—	17

Where samples were reported as unsatisfactory investigations were instituted, premises visited and a comprehensive survey of plant and production methods carried out. The findings being communicated to the management concerned. Satisfactory reports were received in respect of subsequent samples.

*1 laboratory rejection

†1 laboratory rejection
3 Guinea Pig deaths.

Legal proceedings were taken against six persons for offences against the Food and Drugs Act 1955 and Food Hygiene Regulations 1955. Details are as follows :—

Defendant No.	Offence against Food Hygiene Regulations, 1955	Fines	Costs	Total Penalties
		£ s. d.	£ s. d.	£ s. d.
1	Insanitary conditions of shop contrary to Regs. 5, 32 (1) and 33, Food Hygiene Regulations	10 0 0	5 5 0	15 5 0
	Failed to provide wash-hand basins for persons engaged contrary to Regs. 16, 32 (2) and 33 of the Food Hygiene Regulations	5 0 0	—	5 0 0
	Failed to provide equipment for persons engaged contrary to Regs. 17, 32 (2) and 33, Food Hygiene Regulations	5 0 0	—	5 0 0
	Failed to provide cupboard or locker accommodation for persons engaged contrary to Regs. 18, 32 (1) and 33, Food Hygiene Regulations	5 0 0	—	5 0 0
	Failed to provide adequate supplies of soap, clean towels, etc., for persons engaged contrary to Regs. 16, 32 (2), Food Hygiene Regulations	5 0 0	—	5 0 0
5	Mobile van failed to bear name and address of owner contrary to Regs. 26 (1), (a), Food Hygiene Regulations ...	1 1 0	1 1 0	2 2 0
	Failed to keep mobile shop clean contrary to Regulations 26 (1) (b), Food Hygiene Regulations	20 0 0	2 2 0	22 2 0
	Expose unfit food contrary to Sec. 8 (1) Food and Drugs Act 1955	20 0 0	2 2 0	22 2 0
9	Sold certain food (buttered bread) which contained a piece of glass contrary to Sec. 2 of the Food and Drugs Act 1955	25 0 0	14 0 0	39 0 0
10	Sold milk deficient of at least 13% of milk fat contrary to Sec. 2 of the Food and Drugs Act 1955	20 0 0	3 3 0	23 3 0
11	Sold a teacake not of the substance demanded contrary to Sec. 2 of the Food and Drugs Act 1955	20 0 0	3 3 0	23 3 0
12	Had in possession certain articles of food unfit for human consumption contrary to Sec. 2 of the Food and Drugs Act, 1955	Dismissed.		
	Sold shelled walnuts unfit for human consumption contary to Sec. 8 (1), Food and Drugs Act, 1955	10 0 0	5 5 0	15 5 0
	Insanitary premises contary to Regs. 5, 32 (3) and 33, Food Hygiene Regulations	20 0 0	10 10 0	30 10 0
	TOTAL ...	£166 1 0	£46 11 0	£212 12 0

HOUSING

Slum Clearance Survey

A preliminary survey of the City was undertaken with a view to ascertaining whether the slum clearance proposals should be modified. The survey involved inspections of blocks of property in 538 streets and visits into the interior of 2,040 houses. Arising out of the survey it was estimated that 2,162 houses would prove, on detailed examination, to be unfit for human habitation and appropriate for clearance.

The houses were roughly classified into anticipated groups of priority as follows :—

Group	1 (Highest priority)	435	houses
,,	2	479	,,
,,	3	239	,,
,,	4	430	,,
,,	5 (Lowest priority)	579	,,
	TOTAL ...	2,162	,,

Clearance Areas

Butetown (No. 1) C.P.O. 1957

The Public Local Inquiry was held in March. The Minister of Housing and Local Government Inspector's report and recommendations were subsequently received. The Compulsory Purchase Order was confirmed with certain modifications. No land or buildings were excluded from the Order but 54 houses were classified as fit for human habitation ; well-maintained house payments were awarded in respect of 11 houses. Subsequent inspection of the houses revealed no consistent information as would reconcile the judgement on these houses with the department's original findings.

The alternative accommodation in Hodges Square is nearing completion but as yet rehousing has not commenced.

The area affected by the compulsory purchase order contains, inter alia, 236 houses which are included on the grounds that they are unfit for human habitation. One unfit house has been purchased by the Corporation with a view to eventual demolition. Of the 236 houses, 27 have been closed previously as unfit for human habitation and three others are vacant and disused.

All the 206 houses except one are used for human habitation ; 22 of them are partly used for other purposes or have a special use :

1 house is used solely as a shop.
12 houses are partly used as shops.
1 house is partly used as a mosque.
1 house is partly used as a cafe.
7 houses are used as seamen's lodging houses.

When the Clearance Area and the land shewn coloured grey on the map referred to in the compulsory purchase order is cleared, it will result in the displacement of 402 families and 113 lodgers, amounting in all to 1,203 persons.

The houses are about 100 years old. They are arranged in terraces and except in the case of the East Side of Loudoun Square have front doors opening on to pavements. Houses on the North and East sides of Loudoun Square are larger than the remainder ; they have three storeys above ground. Those on the East side also have basements, twelve of which have been closed as unfit for human habitation. The remainder of the houses in the Clearance Area have two storeys and in general have three living rooms, three or four bedrooms and a scullery. Nearly all the houses have rear annexes which project into the yards at right angles to the line of each terrace. The yard space behind the houses is substantial in all but eight houses but the yards of parallel and intersecting streets are joined without any intervening passage or lane. This results in 176 houses (85%) having no secondary means of access ; coal and dustbins have to be carried through the houses.

Of the 206 properties still in use, 107 (52%) are found to be in a state of disrepair typical of 100-year old houses ; 85 (41%) are in a more neglected condition and are classified as being in a state of advanced disrepair ; 14 houses (7%) are in a good state of repair, having regard to the age of the houses.

Dampness is prevalent in the houses in the area. Appreciable rising dampness is evident in habitable rooms in 174 houses (86%) ; stone-flag floors still exist in the passages and rear rooms of many of the houses and these are invariably damp. In addition to the rising dampness, dampness is penetrating the external walls of 164 houses (81%) ; in many cases the penetrating dampness is particularly bad in the rear annexes, some of which have walls of 4½" brickwork.

Natural lighting to the front rooms of the houses is reasonably satisfactory for the age and type of the property. But at the rear of the houses, the projecting annexes or other buildings obstruct the natural light to the rear living rooms, middle living rooms or sculleries of 111 houses (54%). In 173 houses (85%) the lighting to one or more rooms is inadequate. Natural lighting to the majority of the ground floor passages in the houses is limited to a small fanlight over the front door ; this provides insufficient natural light to the passage and stairs which lead from it. The landings on the first floor are generally provided with no natural light and are very dark. This arrangement of passage, stairs and landing results in inadequate lighting in 172 houses (84%).

In most of the houses the arrangements for water supply consist of a cold water tap in the scullery. But at 33 houses (16%) there is no internal water supply, the tap being either in the yard or in an outhouse in the yard. At a further 23 houses (11%), three or more families have to share one water tap.

The sanitary conveniences at the houses are chiefly pedestal or short hopper water-closets in brick apartments in the yard. Many of the structures of the w.c. apartments are in a poor state of repair. At 23 houses (11%) the single water-closet is shared by three or more families.

Nearly all the houses have some form of scullery for the preparation and cooking of food. It is usually the rear room of the rear annexe, which in most cases is overshadowed and damp.

At 36 houses (17%) there is no sink in the interior of the house. In 23 houses (11%) which are occupied by three familes or more, the use of one sink is shared by the different families.

Most of the houses have satisfactory cooking facilities in the form of a gas or electric cooker. But at 26 houses (12%), only one satisfactory cooking stove is provided, though the houses are occupied by three, four, or even more families. In these houses, a substantial amount of cooking is undertaken on open register-type grates or on paraffin stoves in rooms used for living and sleeping.

193 (92%) of the houses are not provided with facilities for the proper storage of food ; at these houses, food is stored in various closed cupboards, sideboards, cabinets and on open shelves and tables. In the houses which are occupied by three or more families, food is stored unsatisfactorily in rooms used for both living and sleeping purposes.

Objections which purported to be on the grounds that the houses are not unfit for human habitation were lodged in respect of 137 houses (66% of the total). Only 17 (34%) of the 50 owner-occupiers objected to the Order on these grounds. This group of properties showed the following features :—

Houses in a state of repair typical of the age of the property	75 (55%)
Houses in a poor state of repair	44 (32%)
Houses in a good state of repair	9 (6%)
Houses which have been closed under Housing Acts 1936/57	9 (6%)
Houses affected by rising dampness	117 (85%)
Houses affected by penetrating dampness	119 (87%)
Houses in which the stairs and landing are inadequately lighted ...	110 (80%)
Houses in which there are rooms which are inadequately lighted ...	122 (89%)
Houses affected by overshadowing	73 (53%)
Houses which have no internal water supply	23 (17%)
Houses in which inadequate water supply facilities are shared by a number of families	16 (12%)
Houses in which inadequate sanitary accommodation is shared by a number of families	13 (9%)
Houses not provided with proper food-storage facilities	120 (88%)

Houses not provided with adequate cooking facilities having regard to the number of families in occupation 19 (14%)
Houses having no sink in the house 26 (19%)
Houses having no secondary means of access 112 (82%)

Central Areas Nos. 1, 2, 3, 4, 5, 6, 7

Seven clearance areas involving 125 houses in the Central Area were officially represented, which would involve the displacement of 152 persons. These clearance areas were subsequently incorporated into Compulsory Purchase Orders. Many of these houses had been the subject of Closing Orders and during the past years have fallen into a state of dereliction and have been the cause of complaints from the remaining residents. The Local Public Enquiries concerning these Orders were not held in the period covered by this report.

Individual Unfit Houses

Demolition Orders

Twenty-five Demolition Orders were made during the year :—
Nos. 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 16, 17, 18, 19, 20 and 21 Duffryn Street.
Nos. 13, 14, 15, 16, 17, 18, 19 and 20 Garth Street.
21 Peel Street.

Undertaking to Demolish

Two voluntary undertakings to demolish were accepted during the year :—
1 and 2 Havelock Place.

Closing Orders

Three Orders were made during the year :—
5 Blosse Road
47 Swansea Street
3 Catherine Street.

Certificates of Unfitness

Forty-seven houses owned by the Corporation were represented as unfit for habitation and made the subject of Certificates of Unfitness :—
Nos. 1-21 (inclusive) Lewis Street (13 houses).
Llanrumney Farm.
Nos 1-10 Summerfield Place (10 houses)
230 Bute Street
80 Union Street.

Undertakings not to be used for Human Habitation

2 Church Road, Caerau.
2, 4, 13 Ruperra Street, 15 and 22 Bute Terrace (these houses are also included in No. 1 Central Area, Compulsory Purchase Order).

Details of action taken during the year in relation to individual unfit houses not in Clearance Areas is as follows :—

Housing Act, 1957	Houses	Displaced during year	
		Persons	Families
(*a*) Houses demolished as a result of formal or informal procedure under Section 17(1)	9	42	34
(*b*) Local Authority owned houses subject to Certificates of Unfitness	1	27	11
(*c*) Unfit houses closed under Sections 16(4), 17(1), and 35(1)	22	84	26

Council Housing Estates and Housing applications

During the year the following visits were made in connection with Council housing estates :—

Vacant houses inspected 584
Number found verminous 48
Number requiring redecoration prior to reletting ... 385
Visits to occupied houses regarding vermin 34

Visits regarding transfers	419
Visits to Council house applicants	485
Miscellaneous visits	324
Number of interviews at office	254

The percentage of houses found to be verminous when vacated rose from 3% in 1958 to 8·2% in 1959. In many of these houses the infestation was slight. In all cases disinfestation by spraying with an insecticide was carried out.

Consideration was given to 1,693 applications on medical grounds for transfer and for rehousing to Council property. Of these, 1,054 were considered for the first time, the remainder being cases which were reviewed.

Of the 348 requests for transfer on medical grounds, 119 were recommended.

The 1,345 applications for Council houses supported by medical evidence were dealt with as follows :—

Recommended immediate rehousing	33
Awarded medical points	276
Transferred to the priority group	49
Given special priority on account of tuberculosis in applicant's family	37
Given special priority on account of contact with tuberculosis in another family	25
No special priority recommended	925

The medical grounds considered fall into broad categories. Chest ailments account for the largest number.

Pulmonary Tuberculosis	185
Asthma, bronchitis and other chest complaints	480
	665

Other ailments were :—

Non-pulmonary tuberculosis	20
Nervous complaints and mental illness	281
Heart conditions	111
Rheumatism and allied conditions	69
Skin conditions	27
Other Illnesses	520
	1,028

The large number of cases of nervous complaints and mental illness dealt with can be accounted for by the difficult housing conditions under which many applicants live. It frequently occurs when two families occupy one house which is suitable for only one family ; invariably it is the applicants' wives who are affected. Conditions are usually worse when the families are related and only the rehousing of one family can ease the tension.

The most difficult cases to assess continue to be old age pensioners, all of whom are almost equally necessitous. Until more pensioner accommodation becomes available, it is impossible to equate medical recommendations with the needs of the ageing community. At present, only in those cases where the circumstances are unusually distressing can special consideration be given. It is noteworthy that of the 33 recommendations made for immediate rehousing, 18 were in respect of pensioners.

Improvement Grants

One hundred applications for Improvement Grants were referred to the Department for observation. The properties concerned were inspected and as a result in seven instances modifications were suggested and it was recommended that 26 of the applications should be refused.

Rent Act, 1957

The operation of the provisions of this Act continues to throw a heavy burden on the department. In addition to the number of personal callers who require advice and information, a total of 961 visits to houses had to be made by the district Public Health Inspectors.

The following information regarding action taken under this Act during the period 1st January, 1959—31st December, 1959 is given in the form prescribed in Circular 32/57. For comparative purposes the totals for 1958 are also given.

PART I.—APPLICATIONS FOR CERTIFICATES OF DISREPAIR

	1959	1958
(1) Number of applications for certificates	130	426
(2) Number of decisions not to issue certificates	8	12
(3) Number of decisions to issue certificates	124	415
(*a*) in respect of some but not all defects	87	266
(*b*) in respect of all defects	37	149
(4) Number of undertakings given by landlords under paragraph 5 of the First Schedule	34	284
(5) Number of undertakings refused by Local Authority under proviso to paragraph 5 of the First Schedule	16	Nil
(6) Number of certificates issued	81	172

PART II.—APPLICATIONS FOR CANCELLATION OF CERTIFICATES

(7) Applications by landlords to Local Authority for cancellation of certificates	62	98
(8) Objections by tenants to cancellation of certificates	18	27
(9) Decisions by Local Authority to cancel in spite of tenant's objection	6	1
(10) Certificates cancelled by Local Authority	43	73

It will be seen that the number of applications for certificates of disrepair fell to about one-third of the corresponding figures for 1958. The number of applications for cancellation of certificates is surprisingly low and one can only assume that, in many cases, repairs have been carried out and an increased rental paid without the formalities of the Act being followed.

In sixteen cases the Council exercised their right to refuse undertakings from landlords under the provisions of paragraph 5 of the First Schedule and in all these cases a Certificate of Disrepair was issued.

AIR POLLUTION

Measurement of Atmospheric Pollution

This was the first full year of the operation of the four atmospheric pollution stations, established by the Corporation. The stations are the most up-to-date of their kind and measure deposits of solid matter and sulphur dioxide on a monthly basis and smoke and sulphur dioxide on a daily basis. The full details are given in subsequent tabulations and are illustrated by graphs. In selecting the stations an attempt was made to produce a picture of the order of pollution in different kinds of district in the city.

Station 1. The City Hall was chosen as typical of a city centre adjoining the relatively smoke free area of Cathays Park and the castle grounds.

Station 9. Curran Road is typical of an area of the city anticipated to have a moderately high degree of pollution relative to the city as a whole.

Station 10. Moorland Road is sited near to a steel works in an area obviously experiencing the greatest degree of pollution in the city. The evidence of this pollution is visible with the naked eye.

Station 11. Llanishen Reservoir is typical of an outer suburban district ; it adjoins a reservoir and is in quite a good class residential area. Though the area is believed to be clean, it is in line with the prevailing winds after they have passed over the city.

It is possible to compare the results of the first year's measurements at these stations with national averages and an attempt has been made to do this in the table on page 84. Unfortunately, however, the most recent national figures which are available are in respect of the year ending March 1957. These figures have been used for the purpose of comparison.

The salient features of these comparisons are :—

(*a*) **Smoke**

All the four Cardiff stations are considerably below the national average. The Llanishen station compares favourably with the cleanest stations ; even Curran Road and Moorland Road show a degree of smoke which is less than one half of the national average.

(*b*) **Deposited Matter**

The deposited matter at Llanishen Reservoir is approximately half of the average of the results recorded at all stations in England and Wales. Curran Road, which probably represents pollution higher than is experienced over the greater part of the city, shows a record almost identical to the national average, whereas the centre of the city is considerably cleaner.

(*c*) **Sulphur**

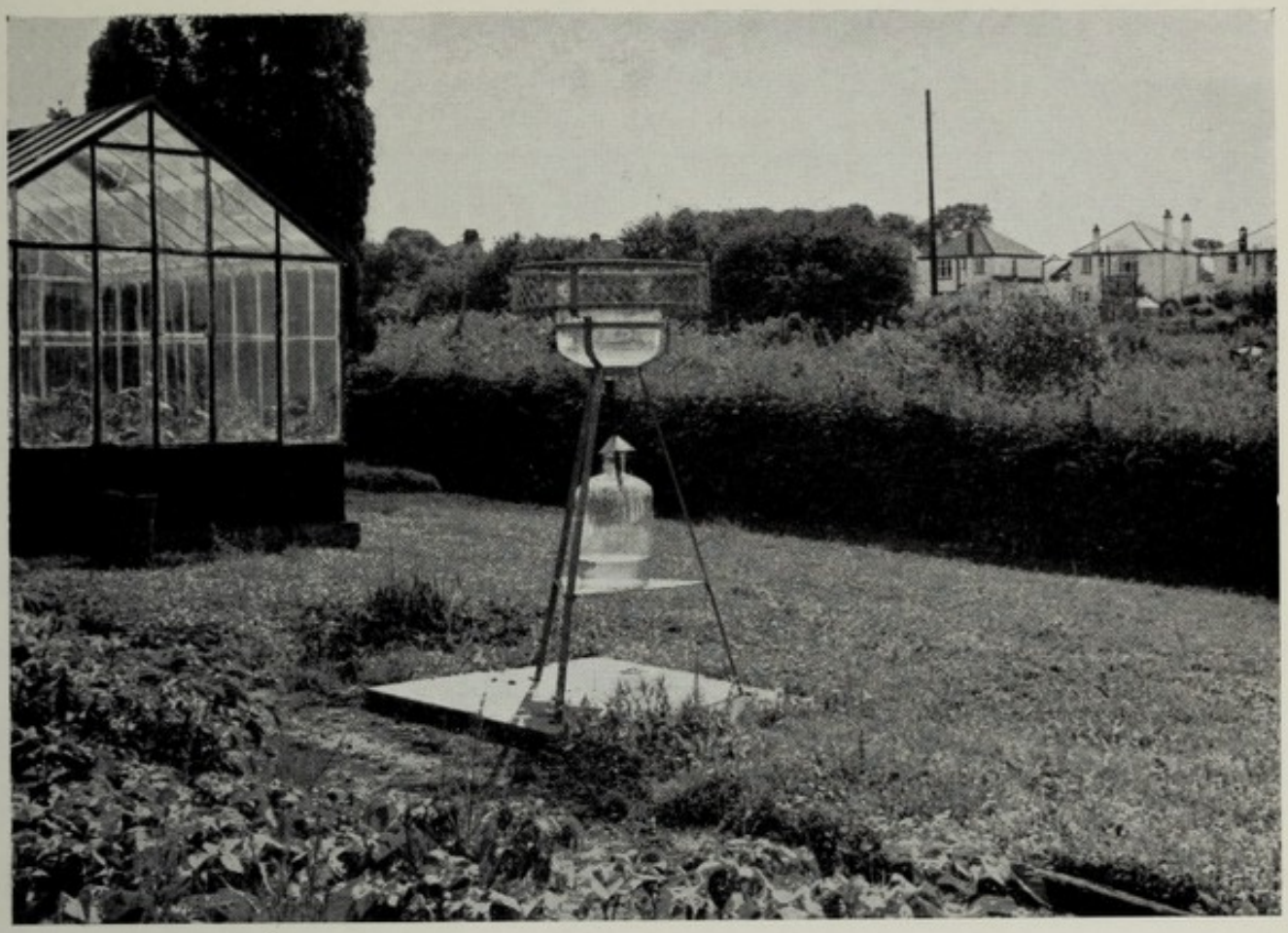
This is measured in two ways. By the most reliable method all the four Cardiff stations bid to be included among the ' cleanest ' measuring stations in England and Wales. By the less reliable method the Moorland Road station is approximately the same as the national average ; the other three stations show results which are equal to less than one half of the average pollution recorded at all the stations in the country.

All this conveys a general picture that Cardiff, considered as a city area, suffers atmospheric pollution of an order which is considerably less than most cities of a comparable size. Naturally, there are variations within the city but in no place does the atmospheric pollution approximate to anything like what is experienced in other heavy industrial areas. Much discussion has taken place as to what constitutes a " black area." Recently, the Department of Scientific and Industrial Research has elected to produce a map of black areas and has adopted a standard of a smoke concentration of 10 milligrammes per hundred cubic metres of air. This is probably the most rigorous approach to a definition of a black area that has yet been made. It is interesting to compare the corresponding measurements at the four Cardiff stations. They are 4, 6, 9 and 9 milligrammes per hundred cubic metres at Llanishen, City Hall, Curran Road and Moorland Road respectively. To carry the comparison a little further : in the vast majority of towns, ranging in size from five thousand to a million inhabitants, the smoke concentration is anything between ten and thirty milligrammes per hundred cubic metres.

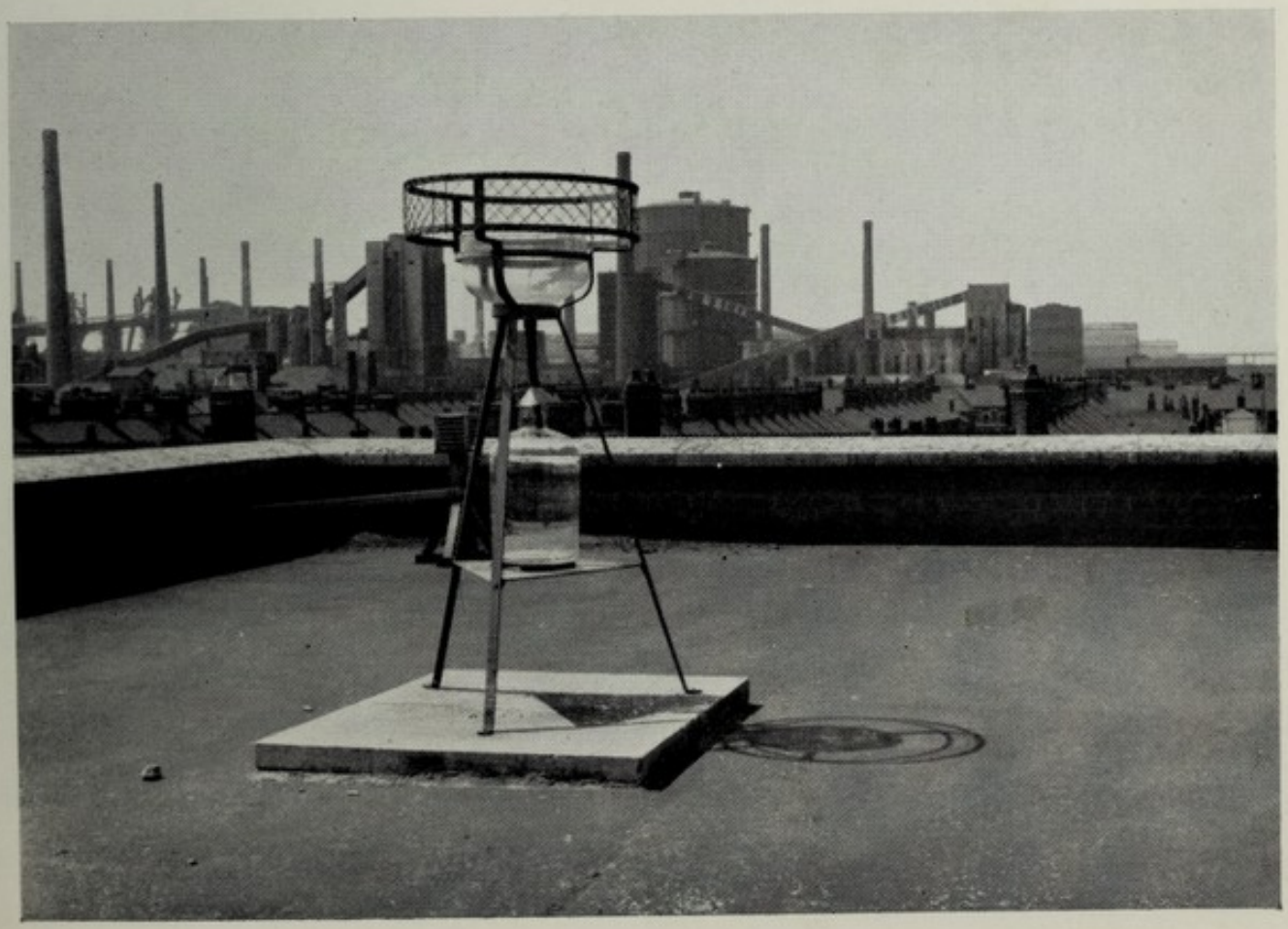
This apparently favourable picture of the situation is, no doubt, due to the fact that, unlike the " black areas," Cardiff relies on low volatile steam coal for its principal fuel supply. Details of the annual consumption of fuel in the city is reproduced in the table on page 85.

Smoke Control Areas

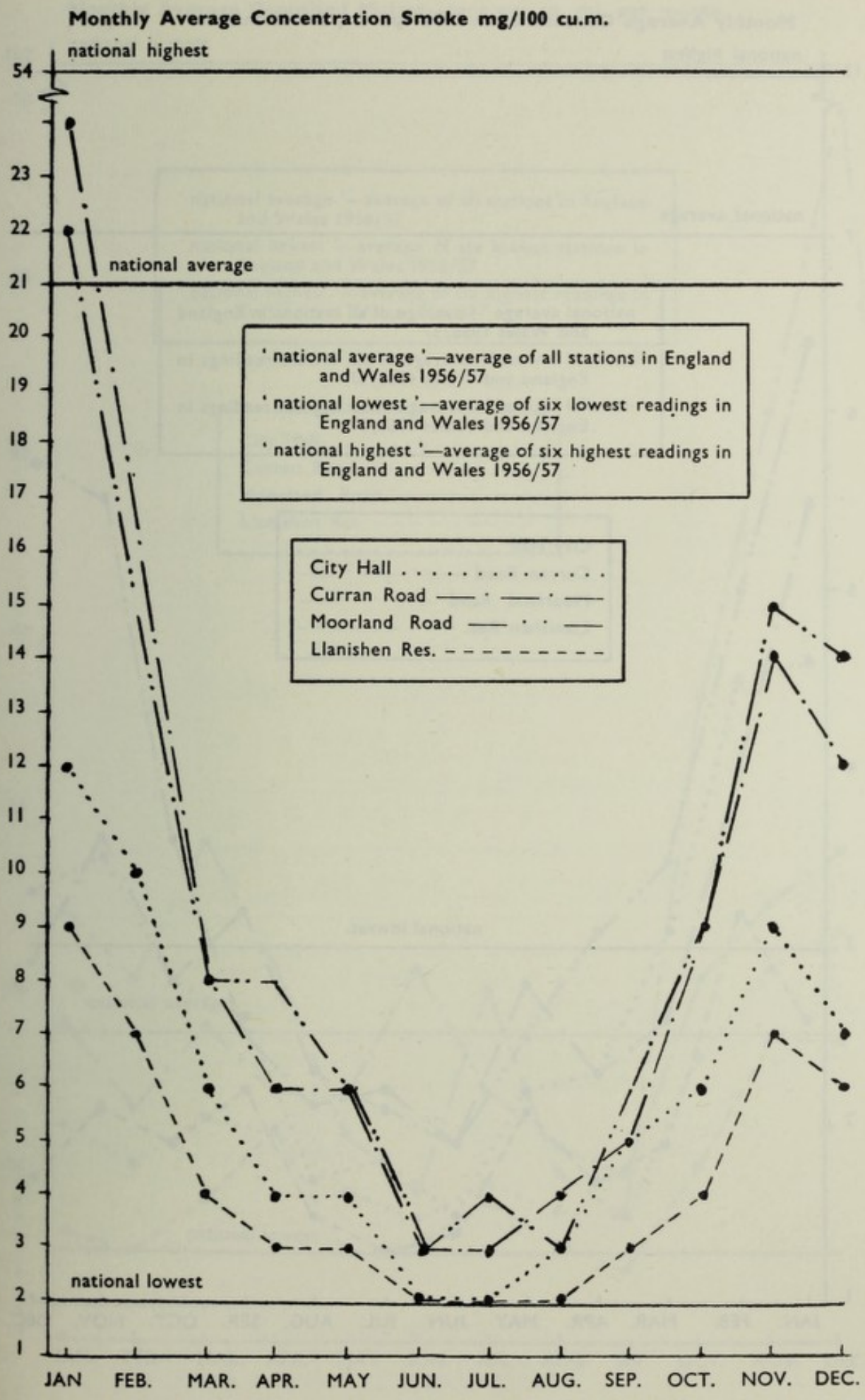
No action has been taken by the Corporation during the year to promote the making of smoke control areas which has the effect, with certain exceptions, of prohibiting the use of other than authorised fuels within the area to which the order relates. It would be wrong to asume that the Council is complacent in the matter. The analysis of the fuel consumed in Cardiff shows that already approximately 82 per cent. of the solid fuel burnt in Cardiff has a volatile content below 20 per cent., which has hitherto been regarded as the standard for fuels authorised to be burnt in smoke control areas. The bulk of this fuel, at the present time, is not being burnt in efficient approved appliances. Thus the making of smoke control orders in Cardiff is beset with peculiar problems which may be unique for a city of Cardiff's size. These questions are under discussion with the Ministry of Housing and Local Government and it may be possible to make some detailed reference in the annual report for 1960.

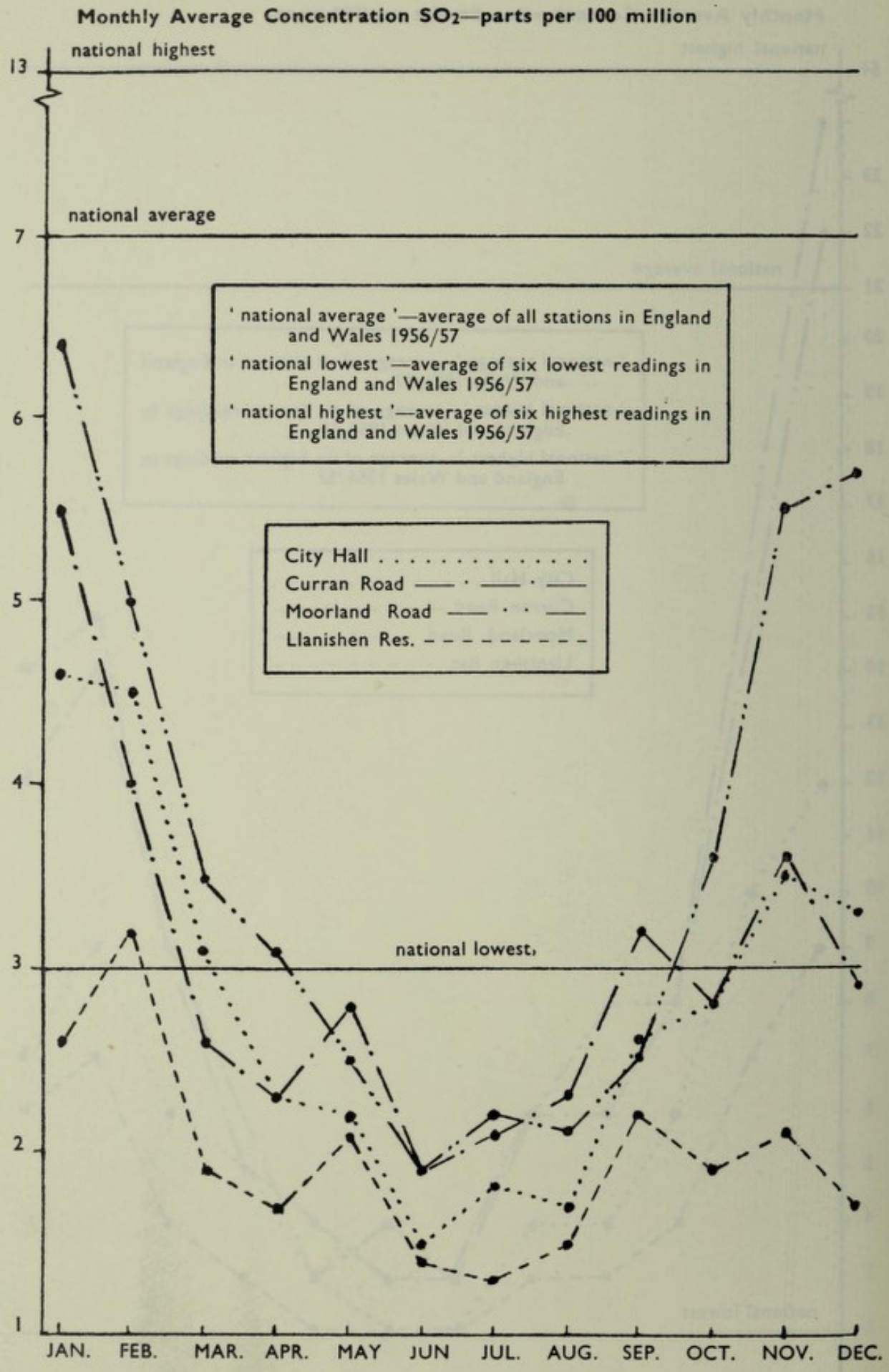


Llanishen Reservoir—deposit gauge

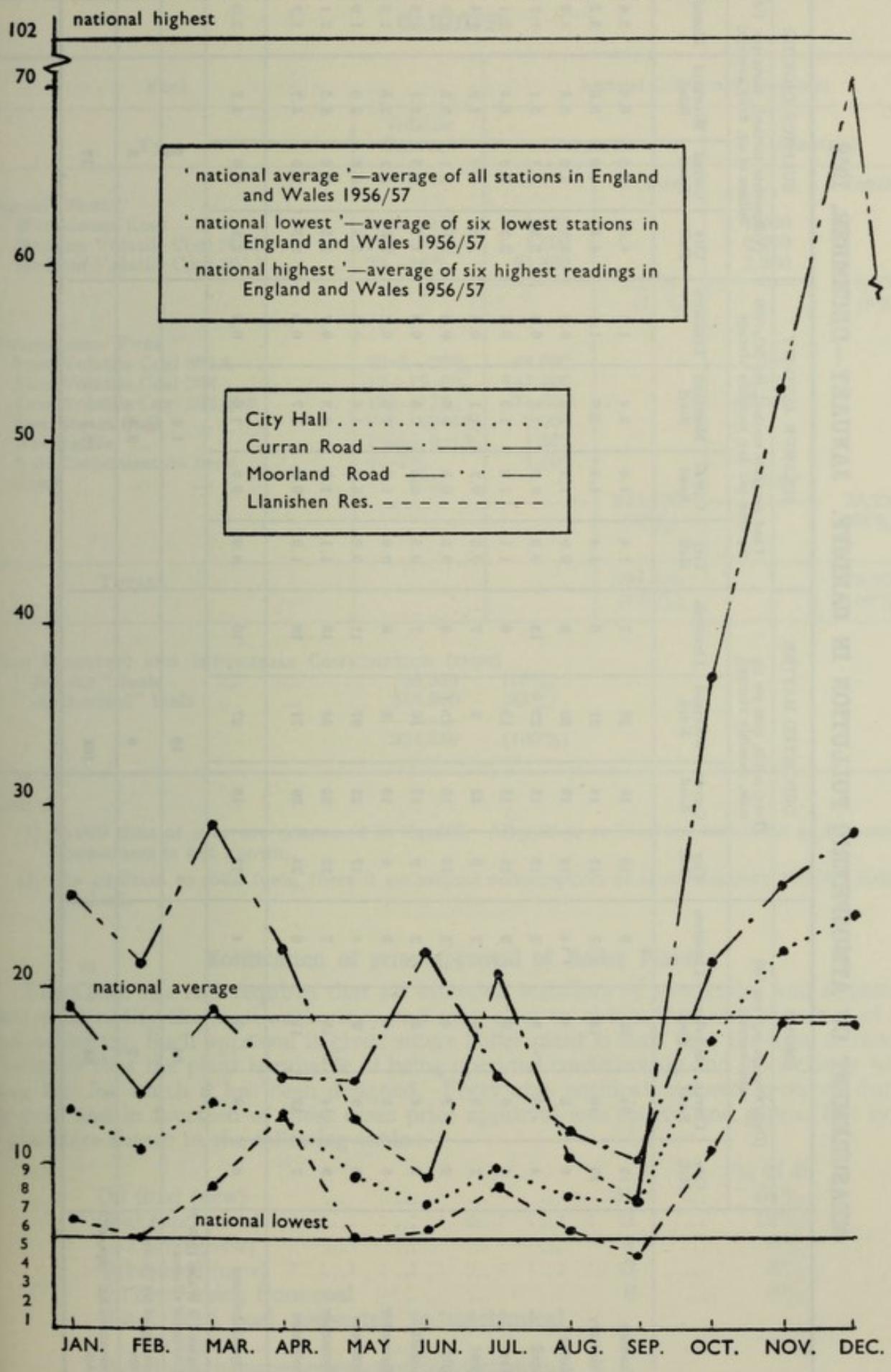


Moorland Road—deposit gauge


Monthly Average Concentration Smoke mg/100 cu.m.
national highest
54
23
22
national average
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
national lowest
2
1
JAN
FEB.
MAR.
APR.
MAY
JUN.
JUL.
AUG.
SEP.
OCT.
NOV.
DEC.
' national average '—average of all stations in England and Wales 1956/57
' national lowest '—average of six lowest readings in England and Wales 1956/57
' national highest '—average of six highest readings in England and Wales 1956/57
City Hall
Curran Road
Moorland Road
Llanishen Res.


Monthly Average Concentration SO_2—parts per 100 million
national highest
13
national average
7
' national average '—average of all stations in England and Wales 1956/57
' national lowest '—average of six lowest readings in England and Wales 1956/57
' national highest '—average of six highest readings in England and Wales 1956/57
City Hall
Curran Road
Moorland Road
Llanishen Res.
6
5
4
national lowest.
3
2
1
JAN.
FEB.
MAR.
APR.
MAY
JUN
JUL.
AUG.
SEP.
OCT.
NOV.
DEC.

Monthly Average Deposited Matter—tons per sq. ml. per month.



MEASUREMENT OF ATMOSPHERIC POLLUTION IN CARDIFF. JANUARY—DECEMBER, 1959

	SMOKE (Daily Average mg. per 100 cubic metres)				DEPOSITED MATTER (Total solids, tons per sq. mile, monthly average)				SULPHUR ACTIVITY Lead peroxide method, mg/SO_3/100 sq. cms. per day, monthly average				SULPHUR DIOXIDE (Volumetric method, parts per 100 million of air, daily average)			
	City Hall	Curran Road	Moorland Road	Llanishen	City Hall	Curran Road	Moorland Road	Llanishen	City Hall	Curran Road	Moorland Road	Llanishen	City Hall	Curran Road	Moorland Road	Llanishen
January	12	24	22	9	13	19	26	7	1.4	1.6	2.4	1.0	4.6	5.5	6.4	2.6
February	10	16	15	7	11	14	21	6	1.4	1.1	2.0	1.1	4.5	4.0	5.0	3.2
March	6	8	3	4	14	19	30	9	0.9	1.2	1.5	0.6	3.1	2.6	3.5	1.9
April	4	6	8	3	13	15	22	13	0.8	0.7	1.1	0.4	2.3	2.3	3.1	1.7
May	4	6	6	3	10	15	13	6	1.1	1.2	1.3	0.2	2.2	2.8	2.5	2.1
June	2	3	3	2	8	22	9	7	0.5	0.7	1.1	0.4	1.5	1.9	1.9	1.4
July	2	3	4	2	10	15	21	8	0.5	0.5	0.9	0.4	1.8	2.1	2.2	1.3
August	3	4	3	2	9	12	10	7	0.5	0.5	0.8	0.3	1.7	2.3	2.1	1.5
September	5	5	6	3	8	10	8	6	0.9	1.0	1.0	0.7	2.6	3.2	2.5	2.2
October	6	9	9	4	17	22	37	11	0.5	0.6	1.6	0.5	2.8	2.8	3.6	1.9
November	9	14	15	7	22	26	53	18	1.1	1.0	2.3	0.7	3.5	3.6	5.5	2.1
December	7	12	14	6	24	29	71	18	1.0	0.9	2.7	0.6	3.3	2.9	5.7	1.7
Annual Average ..	6	9	9	4	13	18	27	10	0.9	0.9	1.6	0.6	2.8	3.0	3.7	2.0
England & Wales 1956 Average of all sites ..	7				18				1.8				7			
Average of six "lowest" sites	2				6				0.3				3			
Average of six "highest" sites	54				102				10.7				13			

APPROXIMATE ANNUAL CONSUMPTION OF SOLID FUELS IN THE CITY OF CARDIFF

Fuel		Annual Consumption (tons)			
Type	Volatile Content	Domestic	Totals	Industrial	Totals
"Smoky Fuel"					
Bituminous Coal	Over 32%	5,850		1,600	
Medium Volatile Coal 301B ...	27½—30%	1,500		2,200	
Medium Volatile Coal 301A ...	20—25%	55,400		2,800	
			62,750 (21%)		6,600 (8%)
"Authorised Fuel"					
Low Volatile Coal 301A	19·5—20%	64,000		2,100	
Low Volatile Coal 204	17—19·5%	141,400		2,100	
Low Volatile Coal 202/203 ...	13½—17%	31,500		69,000	
Dry Steam Coal	9·1—19·5%	2,000			
Anthracite	Under 9·1%	1,300			
Low Carbonisation fuels	4—7%	1,400			
Coke	3%	—		5,000*	
			242,100 (79%)		73,200 (92%)
Totals			304,850 (100%)		79,800 (100%)

Total Domestic and Industrial Consumption (tons)

"Smoky" fuels	69,350	(18%)
"Authorised" fuels	315,300	(82%)
	384,650	(100%)

Notes:

(1) *5,000 tons of coke are consumed in Cardiff. Allocation as between industrial and domestic consumers is not known.

(2) In addition to solid fuels, there is an annual consumption of approximately 100,000 tons of fuel oil.

Notification of prior approval of Boiler Plant

The Clean Air Act requires that all intended installers of new boiler and industrial plant shall notify the local authorities and may elect to obtain the prior approval of the local authority. Such approval is given where boiler plant is such that the local authority is satisfied that the plant is capable of being operated continuously and smokelessly when using fuel for which it has been designed. Forty-nine notifications were received during the year and in fourteen of these cases prior approval was sought and given. The types of plant are shown in the following table:—

		% of 49
Oil fired (new)	31 ...	64%
Coal fired (new)	3 ...	12%
Gas fired (new)	4 ...	6%
Coke fired (new)	3 ...	8%
Oil conversion from coal	6 ...	6%
Hand fired coal converted to mechanical stokers	1 ...	2%
Wood waste burner conversion to mechanical stokers	1 ...	2%

It is apparent that the requirements of the Act relating to notification are not universally known. Most of the cases dealt with during the year were the result of representation being made by the department to the firms concerned, information having been gleaned from deposited building plans. It is suspected that a considerable number of conversions of existing plant are being undertaken without prior notification to the local authorities.

Control of Chimney Heights

The City Surveyor administers Section 10 of the Clean Air Act, which deals with this matter. This arrangement was made because the construction of new chimneys or the alteration of existing chimneys are subject to plans submitted for Town and Country Planning approval. It has been found essential, however, that the closest possible liason needs to be maintained between this department and the City Surveyor's department. Such liason and collaboration has been achieved smoothly and with the greatest possible co-operation from the City Surveyor.

Frequently cases arise where architectural and planning considerations compete with clean air requirements. In no single instance during the year have aesthetic considerations been allowed to prevail over the need to disperse smoke and gases at such a height as not to cause a nuisance to the inhabitants of the neighbourhood.

Alkali Works

There are eight alkali works within the city area comprising Ceramics (2) Copper (1), Gas and Coke (2), Electricity works (1), Iron and Steel works (2). A close, effective and amiable relationship has been established with the Alkali Works Inspector, with whom consultations have been held on frequent occasions during the year. By far the greatest trouble which has been experienced has arisen out of one of the Iron and Steel works. Indeed this constitutes the biggest air pollution problem affecting the city. In the relevant table it will be seen that the pollution measuring station in Moorland Road reached a figure of 71 tons per square mile during the month of December, which is approximately equal to half the solids which fall on the City Hall in a year. The many sources of pollution have been under constant investigation by the department and by the Alkali Works Inspector during the year. The problem is complex but the amount of pollution from this source has certainly not been lessened by experiments which have been conducted in connection with the use of bulk oxygen at open hearth furnaces. Assurances have been received from the Ministry of Housing and Local Government which justify hopes of an improvement. Experiments are being conducted at the works and plans are in hand for the installation of electrostatic dust precipitators.

[Routine Observations and Investigations

One Air Pollution Inspector is employed full time on this work and each of the thirteen district public health inspectors augments his efforts. A total of 607 visits to different premises have been made during the year though, in addition, 1,220 visits have been made to the measuring stations. The bulk of the visits to premises have been to industrial premises, as may be expected. Co-operation from plant users is good and improvements are usually carried out promptly.

Listed below are some of the typical nuisances, their causes and the remedial measures which were taken :—

Premises	*Nuisance*	*Remedy*
Factory Premises ...	Smoke and grit from hand fired boiler	Conversion to fully automatic oil firing.
Laundry	Smoke from hand fired boiler ...	Larger boiler oil fired.
Brewery	Smoke from hand fired boiler, Lancs. ...	Instruments, advice to stokers.
Joinery	Smuts from sawdust	Mechanical stoker (special design) fitted.

Premises	*Nuisance*	*Remedy*
Factory	Smoke from Annealing Furnace ...	Grade of Coal altered.
Office Block ...	Oily smuts	Obstruction in flue removed.
Office Block ...	Smuts from paper burning	Practice stopped.
Factory	Smuts from sawdust	Baffle built.
Factory	Smoke and dust	Maintenance on grit arresters.
Factory	Smoke	Advice on operation.
Laundry	Smoke	Advice on operation.
Factory	Smut from incinerator	Baffle to be fitted.

At the present time a survey of heating and processing plants is being carried out to establish the nature of the plants and their efficiency. Already it is becoming apparent that in the small plants there is plenty of room for improvement in methods of firing and operation.

Visits :	Industrial premises	458
	Commercial, public buildings	35
	Domestic premises	66
	Locomotives, ships, etc.	—
	Re prior approval	48
	Re smoke control areas	—
	Measuring stations	1,220
Observations :	Formal	31
	Casual	465
Visits arising out of complaints		200
Notices served		5

WATER SUPPLY

Ten samples of water were taken for Chemical analysis and nine for bacteriologica examination :—

Premises	Source of Supply	Number of samples		Water used for	Results
		Chemical	Bacteriological		
Three milk processing plants	Well	5	4	Cooling Milk	Bacteriologically 1 satisfactory Bacteriologically 3 unsatisfactory Chemically 2 satisfactory. Three suitable for cooling purpose and general washing down only.
Domestic Premises	Wells	1	1	Domestic use	Unsatisfactory bacteriologically and chemically. Boiling advised.
Domestic Premises	Mains	2	2	Domestic use	Bacteriologically and chemically satisfactory.
Flour Milling	Well	1	1	Washing Wheat	Chemically suitable for this purpose. Bacteriologically satisfactory.
Dairy Farm	Well	1	1	Prior to sampling general dairy use.	Chemically unsuitable for dairy use. Bacteriologically satisfactory. Use discontinued except for washing down premises.

SWIMMING BATHS

There are six swimming baths in the City. Four of these are owned by the Local Authority and consist of the Guildford Crescent Baths (one ladies' bath, one men's bath and one mixed bath), the new Empire Pool (one mixed bath), and two open-air mixed baths, one at Llandaff Fields and the other at Splott.

The two privately owned baths are both open-air baths, one belonging to a local factory and the other to a private school for girls.

All swimming baths are visited frequently by the district inspectors, particularly during the summer months. During the year 174 visits were made and during the course of the inspection, a chlorine test is made of the water using a Lovibond Comparator. Two hundred and twelve of these tests were made. In addition, 157 samples were taken for bacteriological examination and ten for chemical examination. A description of each bath and the results of the samples taken is given in the following tables :—

Address	Description	Source of Water used for filling	Method of Treatment	Frequency of water changing
Guildford Crescent Mixed	75′ x 27′ x 6′ (3′) 60,000 gallons	Mains Water	Filtration and continuous Chlorination.	Four hourly circulation.
Male	60′ x 22′ x 6′ (2′9″) 30,000 gallons			
Female	50′ x 22′ x 6′ (2′9″) 30,000 gallons			
Empire Pool (mixed)	165′ x 60′ x 16′ (3′) 636,000 gallons	Mains Water	Filtration and continuous Chlorination	Four hourly circulation
Llandaff Fields (open-air, mixed)	150′ x 90′ x 6′10″ (1′8″) 500,000 gallons	Mains Water	Filtration and continuous Chlorination	Ten hourly circulation
Splott (open-air mixed)	100′ x 30′ x 6′ (2′) 100,000 gallons	Mains Water	Filtration and continuous Chlorination	Four hourly circulation
Factory (open-air mixed)	80′ x 25′ x 6′ (4′) 62,500 gallons	Mains Water	Chlorinated by hand daily (Liquid)	Emptied and refilled weekly
Private School (Girls) (open-air)	70′ x 30′ x 8′ (2′6″) 65,000 gallons	Mains Water	Filtration and continuous Chlorination	Eight hourly circulation

Guildford Crescent (three Baths—Ladies, Men's, Mixed)

No. of Organisms	No. of Samples	
	Coliform bacilli per 100 ml.	Faecal coli per 100 ml.
0	32	32
2	1	1
	33	33

3 Chemical samples were taken

Empire Pool

No. of Organisms	No. of Samples	
	Coliform bacilli per 100 ml.	Faecal coli per 100 ml.
0	47	48
2	1	—
	48	48

2 Chemical samples were taken

Llandaff Fields (Open-air)

No. of Organisms	No. of Samples	
	Coliform bacilli per 100 ml.	Faecal coli per 100 ml.
0	27	29
1	1	—
2	1	—
	29	29

No chemical samples were taken

Splott (Open-air)

No. of Organisms	No. of Samples	
	Coliform bacilli per 100 ml.	Faecal coli per 100 ml.
0	26	26
	26	26

4 Chemical samples were taken

Private School (Open-air)

No. of Organisms	No. of Samples	
	Coliform bacilli per 100 ml.	Faecal coli per 100 ml.
0	13	13
	13	13

No Chemical samples were taken

Factory Baths (Open-air)

No. of Organisms	No. of Samples	
	Coliform bacilli per 100 ml.	Faecal coli per 100 ml.
0	7	8
3	1	—
	8	8

1 Chemical sample was taken

A request was received for advice regarding an abnormal colour to the water in this bath. The chemical sample taken of the water had a marked brown colour which, seen against the blue bottom of the bath, made the water appear to be an olive-green colour. This brown discolouration was due to a chemical reaction between an excess of manganese present in the Cardiff water supply at that time (a time of drought) and the hypochlorite used for chlorination.

RODENT CONTROL

During the year some reorganisation of this section of the department took place, since when seven operatives instead of eight have been employed on the work. So far, they have been sufficient for maintaining regular treatments of the sewers, local authority premises and fulfilling commitments to business premises and private dwellings.

Sewer Maintenance Treatments

The whole of the system of sewers within the City has been dealt with during the year. Two thousand, four hundred and thirty-one manholes in thirty-five districts and covering some one hundred and seventy-five miles of sewers, previously found to be infested, were dealt with twice during the year. Ten per cent. of the remaining 2,579 manholes, which belong to another thirty-five districts with approximately the same mileage of sewerage as above, previously free from infestation, were test baited. The test bait revealed that two manholes only were infested ; they, with the immediate surrounding manholes, were dealt with. Districts treated during August to December showed a marked increase in the number of takes, no doubt due to the exceptionally dry summer which favoured multiplication of sewer rats.

Medium treatment with five per cent. of No. 1 Warfarin poison and Paranitrophenol was used as bait throughout with baiting on the 1st, 4th and 8th days. Four ounces were placed at each point for the first baiting, then built up where necessary to sixteen ounces or the maximum of twenty-four ounces. A tabulation of the results of the treatments is appended below :

Treatment No.	Date Completed	No. of Districts	Total No. of Manholes	Total No. of Takes	No. of complete takes				Part Takes	No Takes	Bodies Found
					24oz.	16oz.	8oz.	4oz.			
1st Sewer Maintenance Treatment 1959 ...	31.7.59	35	2,414	479	—	9	160	41	269	1,935	22
2nd Sewer Maintenance Treatment 1959 ...	4.2.60	32	2,183	662	3	54	147	300	158	1,521	16

SUMMARY OF TEST BAITING

No. of Districts	Total No. of Manholes	No. of Manholes Tested	No. of Complete Takes				Part Takes	No Takes
			24oz.	16oz.	8oz.	4oz.		
35	2,579	274	—	—	—	2	—	272

Local Authority Premises

These include public works, yards, stores, workshops, depots, garage, Roath abattoir, parks, baths and all the refuse tips within the city. At least two treatments (in some cases four) have been carried out during the year at these premises.

Maintenance Treatments for Business Premises

During the year the Corporation undertook to maintain treatments at various intervals for 287 business premises which included cafes, food stores, shops, warehouses, cinemas, offices, bakehouses, cold stores, a hospital, breweries, malthouses, hotels, garages and bus depots. This is an increase over last year of twenty-four premises.

Contracts ranged in value from £2 10s. 0d. to £63 and the total amounted to £2,510, which is approximately £73 more than last year. Single treatments were also carried out for a total sum of £186. Total income was, therefore, £2,690, an increase of £269 over last year. Much of the credit for this satisfactory outcome of the year's work is due to the Rodent Officer in charge and the industry of the staff of rodent operatives employed.

Private Dwellings

A free service is given to domestic premises and during the year some 789 complaints were dealt with ; 498 for rats, 3 for rats and mice, and 68 for mice only. Investigation of the remaining 220 complaints and test-baiting failed to establish the existence of any infestation.

Medium oatmeal with five per cent. of No. 5 Warfarin was used throughout the year as bait. The bodies of 138 brown rats and 7 mice were recovered following treatments.

Farms

Although the Ministry of Agriculture and Fisheries, for the past eighteen months has discontinued its rodent control services to farmers, this department has not received a single complaint during the year, regarding rats or mice on any of the farms.

All the farms within the city have been inspected during the year ; five were found to have light infestations ; seventeen were free from infestation.

The five infested farms made their own arrangements for dealing with the matter, Warfarin being selected as the poison to be used in all cases.

An analysis of all the surface treatments for the nine months ended 31st December, 1959 as required by the Ministry of Agriculture, Fisheries and Food is reproduced hereunder :—

	Type of Property				
	Non-Agricultural				
	(1) Local Authority	(2) Dwelling Houses (inc. Council Houses)	(3) All Other (including Business Premises)	(4) Total of Cols. (1) (2) & (3)	(5) Agricultural
I. Number of properties in Local Authority's District ... ... (Notes 1 and 2)	266	66,963	10,416	77,645	183
II. Number of *properties inspected* as a result of :					
(*a*) Notifications	51	569	75	695	Nil
(*b*) Survey under the Act...	21	142	280	443	22
(*c*) Otherwise (e.g., when visited primarily for some other purpose) ...	211	4,614	4,556	9,381	Nil
III. Total inspections carried out– including re-inspections ... (To be completed only if figures are readily available)	315	5,325	7,188	12,828	22
IV. Number of *properties* inspected (in Sect. II) which were found to be *infested* by :					
(*a*) Rats — Major ...	Nil	Nil	Nil	Nil	Nil
(*a*) Rats — Minor ...	45	385	219	649	1
(*b*) Mice — Major ...	Nil	Nil	Nil	Nil	Nil
(*b*) Mice — Minor ...	23	40	51	114	Nil
V. Number of *infested properties* (in Sect. IV) treated by the L.A. ... ... (Figures should NOT exceed those given at Sect. IV)	68	425	270	763	1
VI. Total treatments carried out– including re-treatments ... (To be completed only if figures are readily available)	104	569	984	1,657	3
VII. Number of notices served under Section 4 of the Act :					
(*a*) Treatment	Nil	Nil	Nil	Nil	Nil
(*b*) Structural Work ... (i.e., Proofing)	Nil	Nil	Nil	Nil	Nil
VIII. Number of cases in which default action was taken following the issue of a notice under Sect. 4 of the Act ...	Nil	Nil	Nil	Nil	Nil
IX. Legal Proceedings (see overleaf)	Nil	Nil	Nil	Nil	Nil
X. Number of " Block " control schemes carried out	Nil				

INSPECTION OF FACTORIES

The number of factories on the register at the year's end was 1,128. This year, again, priority had to be given to food hygiene and the time spent on factory inspection was reduced to a minimum. Details of the results of these inspections is given in the form required by the Ministry of Labour and National Service :—

Part I of the Act

1.—Inspections for Purposes of Provisions as to Health

Premises (1)	Number on Register (3)	Number of Inspections (4)	Number of Written Notices (5)	Number of Occupiers Prosecuted (6)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	68	30	5	—
(ii) Factories not included in (1) in which Section 7 is enforced by the Local Authority	1,017	421	33	—
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises) ...	43	2	—	—
Total ...	1,128	453	38	—

2.—Cases in which Defects were Found

Particulars (1)	Number of cases in which defects were found: Found (3)	Remedied (4)	Referred to H.M. Inspector (5)	Referred by H.M. Inspector (6)	Number of cases in which prosecutions were instituted (7)
Want of cleanliness (S.1)	8	7	—	—	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3) ...	—	—	1	—	—
Inadequate ventilation (S.4) ...	—	—	—	—	—
Ineffective drainage of floors (S.6) ...	—	—	—	—	—
Sanitary Conveniences (S.7) :—					
(*a*) Insufficient	9	8	—	—	—
(*b*) Unsuitable or defective ...	9	9	—	17	—
(*c*) Not separate for sexes ...	2	1	—	—	—
Other offences against the Act (not including offences relating to Out-work)	2	1	—	—	—
Total ...	30	26	1	17	—

Part VIII of the Act

OUTWORK

	Section 110			Section 111		
	No. of out-workers in August list required by Section 110 (1) (*c*) (3)	No. of cases of default in sending lists to the Council (4)	No. of prosecutions for failure to supply lists (5)	No. of instances of work in unwholesome premises (6)	Notices served (7)	Prosecutions (8)
Wearing Apparel—Making, etc. ...	5	—	—	—	—	—
Textile Weaving ...	7	—	—	—	—	—
Curtains & Furniture Hangings ...	2	—	—	—	—	—

SHOPS ACT, 1950

During the year 120 visits were made by the Inspectors in connection with the provisions of this Act. Informal notices were given to shopkeepers in relation to the following contraventions :—

Proper temperature to be maintained	2
Sanitary accommodation to be provided	10
Sanitary accommodation to be cleansed/repaired ...	2
Lighting to be provided/improved	2
Washing facilities to be provided	9
Records to be provided	2
Notices to be exhibited	8
Sanitary defects to be remedied	2

As a result of complaints received and for the enforcement of Closing and Half Holiday Orders observations were kept on 149 occasions and warnings or advice given where necessary. No legal proceedings were taken during the year.

On three occasions applications were received for the extension of closing hours for the purpose of exhibitions to be held at the Sophia Gardens Pavilion.

The exhibitions were as follows :—

Welsh Ideal Home Exhibition	... 6th—23rd May, 1959
The First National Food Exhibition for Wales	... 5th—19th September, 1959
The First Welsh Practical Homemaking Exhibition	14th—24th October, 1959

Although the applications were granted it is felt that the situation will need watching in view of the extent of retail trade which is being carried on at these exhibitions.

GENERAL ENVIRONMENTAL HYGIENE

Complaints received and routine inspections

Complaints received in the office by letter, telephone or personal calls totalled 5,679 compared with 4,976 in 1958. In addition, 3,090 complaints were made to Inspectors while on their district.

All these complaints were investigated and re-inspections made where necessary. In all, a total of 8,713 re-inspections had to be made.

Other visits and interviews in the course of the inspectors' routine duties totalled 15,891. Details of these will be given in the sections of the report to which they relate.

Housing

House Repairs.

The total number of notices served under all acts was 538 preliminary notices and 188 statutory notices. The following summary gives details of the contents of these notices :—

External	
Roofs to be repaired or reslated	265
Gutters and rainwater pipes to be repaired, etc.	176
Walls and chimneys to be repointed/repaired	103
Yards/paths to be repaired or resurfaced	11
Soil pipes to be repaired/renewed	26
Drains to be cleared/repaired	56
Internal—Structure	
Dampness to be cured	93
Interior walls and ceilings to be repaired	136
Floors to be repaired	81
Staircases, etc., to be repaired	19
Fireplaces and flues to be repaired	57
Verminous/filthy premises to be cleansed	21
Fixtures and Fittings	
Doors to be repaired/renewed	59
Windows to be repaired/renewed	90
Sinks, lavatory basins to be renewed	27
Waste pipes/drainer boards to be repaired	15
Burst water pipes to be renewed	8
Water to be improved or reinstated	43
W.C. structures to be repaired	37
W.C. fittings to be repaired/renewed	36
W.C.'s to be cleansed	15
Other Defects	
Internal defects to be remedied	10
External defects to be remedied	13

Legal proceedings had to be taken in seven cases for failure to comply with statutory notices served under the Public Health Act and details are given in the following table :—

LEGAL PROCEEDINGS—PUBLIC HEALTH ACT

Offence	Decision of Court	Fines	Cost	Total
		£ s. d.	£ s. d.	£ s. d.
Non-compliance with Nuisance Order	—	2 0 0	1 1 0	3 1 0
Failed to comply with Notice served under Section 93 of the Public Health Act	Nuisance Order made.	—	1 1 0	1 1 0
Failed to comply with Notice served under Section 93 of the Public Health Act	Nusiance Order made	—	3 3 0	3 3 0
Non-compliance with Nuisance Order	—	20 0 0	10 10 0	30 10 0
Failed to comply with Notice served under Section 92 of the Public Health Act	—	Dismissed	—	—
Non-compliance with Nisiance Order	—	20 0 0	—	20 0 0
Failed to comply with Notice served under Section 92 of the Public Health Act	Nuisance Order made.	—	2 2 0	2 2 0
	Total	£42 0 0	£17 17 0	£59 17 0

Drains and Sewers

Total visits by public health inspectors in connection with drainage ...	5,300
Drains cleared by owners or occupiers	553
Drains cleared by the Council	874
Drains reconstructed—partial	209
—in entirety	7
Drain tests—by colour	840
—by smoke	246
—by other means	61

Refuse Disposal—Dustbins

There is no doubt that in this elementary matter of sanitation Cardiff falls behind most comparable cities in this country. The motley collection of oildrums, boxes, baths and other containers which are used extensively for the disposal of refuse has aroused adverse comment from the public, members of the Council and the local press. In a report to the Health Committee I estimated that refuse is being stored in unsatisfactory receptacles at approximately 45,000 houses in the city. The Committee recommended the introduction of a municipal-bin-supply scheme. However, after further consideration and discussions between chief officials, the Council decided, as a preliminary step, to issue a public notice appealing to householders to provide suitable dustbins in order to ensure a more efficient and speedier collection of refuse. There the matter rested at the end of the year and further information on progress will be given in the next Annual Report.

Knackers Yard and Offensive Trades

There is one Knackers Yard in the city which is subject to an annual licence issued under Section 62 of the Food and Drugs Act, 1955.

Horses—Slaughtered	37
Horses—Carcases received	64

Offensive trades are carried out at ten premises. The trades involved comprise :—

Tripe Boiling	3
Rag dealers	4
Gut scrapers	2
Fat melters	1

Forty-seven visits were made to these premises and nine informal notices given to improve sanitary conditions. All these notices were abated.

Keeping of Animals and Pet Shops

Thirteen applications were received during the year for licences to keep pet animal shops. All the premises concerned were inspected and in each case a licence was granted. Visits made in connection with the keeping of animals were as follows :—

Pet Shops	26
Piggeries, Stables	15
Others	17

In five instances informal notices were served

Stables, piggeries, nuisances to be abated	1
Other animal nuisances to be abated	4

Tents, Vans and Sheds

Authorised Sites

The Parks Department of the Council established a holiday caravan site at Pontcanna Fields in April. The site was in operation from 1st April to 30th September and during this time 28 caravans were accommodated on the site for varying periods of from one to eleven days. The total number of caravan-days amounted to one hundred. Twenty-seven visits were made to the site by the district Inspector, conditions on each occasion being found to be satisfactory.

Unauthorised Sites

During the early months of 1959 there was a marked increase in the number of caravan dwellers in the Leckwith Area. The Common itself remained clear but the land adjacent was occupied by increasing numbers of caravan dwellers.

From 18th March until the 21st October, 16 injunctions were granted against the caravan dwellers ; 13 for land adjoining Leckwith Common ; 1 for an adjoining Car Park ; 2 for Leckwith Common. Five orders for attachment were made and warrants issued in respect of three of the orders.

At the beginning of November the caravan dwellers started to leave the area until by the end of December, 1959 there were only four caravans left, and these were newcomers to Cardiff.

Seamen's Lodging Houses and Common Lodging Houses

Thirty-three applications were received from the keepers of Seamen's Lodging Houses for the renewal of their licences. One application could not be recommended and a licence was refused. The remainder were granted licences but in the case of nine applicants whose lodging houses were in the Butetown Compulsory Purchase Order area, temporary licences were issued.

The licences for the two common lodging houses in the city were renewed.

All lodging houses are kept under close supervision to ensure that a reasonable standard is maintained. The number of visits made was 192.

Pharmacy and Poisons Act 1933

Licences were renewed in respect of 204 premises and 6 licences were issued to new applicants.

The Fertiliser and Feeding Stuffs Act, 1926

Number of Samples submitted for Analysis		Results of Analysis	
		Satisfactory	Unsatisfactory
Fertilisers	13	12	1
Feeding Stuff ...	8	7	1

The following samples, indicated as unsatisfactory in the Table, were reported as irregular for the following reasons :—

Fertiliser

A deficiency of nitrogen beyond the limit of variation permitted by the Regulations.

The manufacturers were notified and the statutory statement, in respect of the product, was amended to agree with the ingredients as packed.

Feeding Stuff

The sample contained 1·75 per cent. of protein in excess of the amount stated, exceeding the limit of variation permitted by Regulations.

The manufacturers were advised of the excess protein, extensive investigations were carried out at the plant. The excess was attributed to the fluctuation of the analysis of raw materials. Having regard to the fact that the article was not to the prejudice of the purchaser, further administrative action was unnecessary.

Rag Flock and other Filling Materials Act, 1951

Five samples were taken during the year. All complied with the standard laid down by the regulations.

STAFF

During the year the Health (Air Pollution) Inspector was appointed. In view of the increased Slum Clearance programme the Council agreed to the appointment of two specialist Housing Inspectors and a clerk for this work. The posts of Housing Inspectors were filled by promoting two district Public Health Inspectors. Difficulties arose in filling the two vacant posts created. Whereas in the past advertisements have produced numerous applications, nowadays great difficulty is experienced in obtaining suitable applicants and on occasions no applications are received.

In view of these difficulties a reorganisation of staff was agreed by the Council. The number of districts was reduced from sixteen to thirteen and one district inspector was transferred to duties as a Specialist Food and Drugs Inspector. This was made possible by an increase in the number of car allowances which enabled a number of the district inspectors to cover a greater area.

A further vacancy for a district inspector was created later in the year due to the resignation of one member of the staff. This post was filled by the appointment of a student inspector who had recently qualified.

Other examination successes included two public health inspectors who passed the Royal Society of Health Examination for Smoke Inspectors.

A new appointment was that of Van Driver/Disinfector. In the past the necessary labour and vehicles for collecting unsound food, carrying out smoke tests and disinfestation of premises had been supplied by the City Surveyor. The van driver now carries out all these functions and it has already been found that there is not only a considerable saving in expense but it has been possible to expand his duties to include the disinfestation of premises on repayment.

IX—Report for 1959 of

J. H. M. HUGHES, M.R.C.V.S., D.V.S.M., F.R.S.H.

Veterinary Officer, Chief Meat Inspector and Abattoir Manager

The Veterinary and Abattoir Section of the Department involves :—

(1) The general administration of the Diseases of Animals Act, 1950 and all statutory Orders made thereunder in so far as they relate to the City of Cardiff.

(2) The antemortem inspection of livestock and postmortem inspection of meat and offals at Roath Abattoir.

(3) The granting of veterinary health certificates for meat products intended for export.

(4) Veterinary attention to livestock at Whitchurch Hospital Farm.

(5) Veterinary services to Cardiff City Police in connection with the Protection of Animals Acts 1911-1927.

(6) The management and general administration of Roath Abattoir and Wholesale Meat Market.

DISEASES OF ANIMALS ACT AND ORDERS

The Act enables the Ministry of Agriculture, Fisheries and Food to make Orders and Regulations for the control or eradication of certain infectious diseases which are, or may be, the causes of serious losses to agriculture or a danger to public health. The diseases now scheduled or notifiable under the Act are Anthrax, Foot and Mouth Disease, Swine Fever, Fowl Pest, certain forms of Bovine Tuberculosis, Atrophic Rhinitis, Sheep Scab, Parasitic Mange in Horses, Asses and Mules, Sheep Pox, Cattle Plague, Contagious Bovine Pleuro-pneumonia, Glanders, Epizootic Lymphangitis, Psittacosis and Virus Hepatitis in poultry. The Act further provides for the total control of Brucellosis (Abortus and Melitensis), Warble Fly Infestation and the complete eradication of bovine tuberculosis and the care and comfort of animals in transit by rail, sea, air and road.

Swine Fever Order, 1938.—Three cases of Swine Fever were detected in the City and confirmed by the Ministry of Agriculture, Fisheries and Food. No spread of the disease from the Infected Places was observed but, as a precaution, three adjoining pig premises were placed under Form " B " restrictions. During the year nine further cases were investigated and found negative. No premises remained under restrictions at the end of the year.

The Regulation of Movement of Swine Orders, 1954 and 1955 :—
The Regulation of Movement of Swine Order, 1959 :—

The last named Order consolidates, with amendments, the Regulation of Movement of Swine Order, 1954 and the Regulation of Movement of Swine (Amendment) Order, 1955 and came into operation on the 2nd August, 1959.

At the weekly sales of swine at Ely Livestock Market, up to the date of closure on the 28th October, 46 licences were granted for the movement of 120 fat pigs to Roath Abattoir and 7 licences for the movement of 13 pigs to premises outside the City. In addition 563 licences were received authorising the movement of 11,497 pigs to Roath Abattoir and City piggeries from markets outside the City. Investigation revealed two instances where store pigs were moved from Newport Market to City piggeries without licences demanded by the Order. As the offences originated in Newport information was passed through the City Police to Newport Police. The latter force instituted proceedings at Newport and each defendant was fined £5 for the offences. The assistance of the City Police was welcomed in visiting premises, to which pigs were licensed, during the subsequent 28 days detention.

The Swine Fever (Infected Areas Restrictions) Orders, 1956 and 1958 :—

The Infected Area in Norfolk declared at the end of 1958 was released from movement restrictions by Special Order No. 1. As a result of a series of outbreaks of the disease Special Orders Nos. 2, 3, 4 and 5 were made imposing movement restrictions in these areas. Orders Nos. 2, 3 and 4 were revoked leaving one area in Somerset under restrictions at the end of the year.

The Swine Fever (Amendment) Order, 1959 :—

The Order amends the Swine Fever Order, 1938 and redefines the term " pig dealer."

The Prohibition of Landing Swine from the Isle of Man (Revocation) Order, 1959 :—

The ban imposed on importing live pigs from the Isle of Man was removed as a result of an improvement in the Swine Fever situation in the Island.

Anthrax Order, 1938 :—

Special bacteriological examinations for anthrax were made of 1 calf, 2 cattle, 17 sheep and 5 pigs which died in lairage or arrived dead at the abattoir. All cases proved negative to anthrax.

Rabies Order, 1938 :—

During the year 29 dogs reported by the City Police as having bitten persons were examined and found free from communicable disease. Although the last recorded case of the disease in Great Britain occurred in 1922 its reintroduction by illegally imported dogs is still a matter of some concern in a port town.

The Importation of Hay and Straw (Amendment) Order, 1959 :—

The Order amends the Importation of Hay and Straw Orders of 1955 and 1958 and permits the importation of hay and straw from the Netherlands. It further redefines Denmark to include the Faroe Islands and Greenland for the purposes of these Orders.

Diseases of Animals (Waste Foods) Order, 1957 :—125 visits were paid to poultry and pig keepers' premises licensed under the Order. Three licences were granted for operating boiling plant and equipment and 34 licences were revoked through termination of tenancies of pig keepers' premises.

The Fowl Pest (Essex Infected Area) Order, 1959 :—
The Fowl Pest (Essex Infected Area) (Amendment) Order, 1959 :—
The Fowl Pest (Essex Infected Area) (Revocation) Order, 1959 :—
The Fowl Pest (Mid Essex Infected Area) Order, 1959 :—
The Fowl Pest (Mid Essex Infected Area) (Amendment) Order, 1959 :—
The Fowl Pest (Mid Essex Infected Area) (Revocation) Order, 1959 :—
The Fowl Pest (S.W. Lancashire Infected Area) Order, 1959 :—
The Fowl Pest (S.W. Lancashire Infected Area) (Revocation) Order, 1959 :—
The Fowl Pest (East Norfolk Infected Area) Order, 1959 :—
The Fowl Pest (Lincolnshire and Kesteven Infected Area) Order, 1959 :—
The Fowl Pest (Cambridgeshire, Huntingdon and Isle of Ely Infected Area) Order, 1959 :—
The Fowl Pest (N. Midlands Infected Area) Order, 1959 :—
The Fowl Pest (Stratford on Avon, Shipston and Evesham Infected Area) Order, 1959 :—
The Fowl Pest (Stratford on Avon, Shipston and Evesham Infected Area) (Amendment) Order, 1959 :—
The Fowl Pest (Stratford on Avon, Shipston and Evesham Infected Area) (Extension) Order, 1959 :—
The Fowl Pest (East Anglia Infected Area) Order, 1959 :—
The Fowl Pest (N.E. Midlands Infected Area) Order, 1959 :—
The Fowl Pest (N.E. Midlands Infected Area) (Amendment) Order, 1959 :—

All the above Infected Areas were declared as the result of a serious spread of Fowl Pest in the districts concerned. The Orders impose severe restrictions on the movement and marketing of live poultry in the areas. The areas described in the last six orders were still under restrictions at the end of the year.

The Live Poultry (Restrictions) Orders 1957 and 1959 :—
One licence was granted by the City Council for the holding of an exhibition of live poultry in the City. The exhibition was visited and records found in order.

The Live Poultry (Restrictions) Amendment No. 2 Order, 1959 :—
The Order extends the period during which sales of store poultry are prohibited to include January, February and March, 1960.

The Poultry Carcases (Landing) Amendment Order, 1959 :—
The Order amends the Poultry Carcases (Landing) Order, 1955 and confines the landing of poultry carcases from the Channel Islands to the Islands of Jersey and Guernsey.

The Poultry and Hatching Eggs (Importation) Amendment Order, 1959 :—
The Order prohibits the importation of poultry and hatching eggs from the Channel Islands other than Jersey and Guernsey.

The Poultry Premises and Vehicles (Disinfection) Order, 1956 :—
Twenty-four visits were made to premises where poultry are slaughtered and monthly returns made to the Ministry of Agriculture, Fisheries and Food. In one case a statutory notice under the Order was served on the occupier to cleanse and disinfect the premises.

Foot and Mouth Disease Order, 1928 :—
During the year 45 outbreaks were recorded in this country involving the slaughter of 7,689 animals. An outbreak of the disease occurred at Roath Abattoir having been introduced by pigs received from a farm at Micheldean, Gloucester. The provisions of the Order were implemented and no further cases of the disease were observed as a result of the outbreak. During the period of restrictions on movement of livestock in Cardiff licences were granted for the movement of 365 cattle, 2,299 sheep, 252 calves and 1,865 pigs to Roath Abattoir.

Foot and Mouth Disease (Infected Areas Restrictions) Order, 1938 :—
During the year 15 Infected Areas were declared as results of outbreaks of the disease. Restrictions in respect of 10 of these were removed before the 31st December.

Cardiff Sheep Dipping Regulations, 1953 :—
During the prescribed period which ended 15th September the dipping of 81 ewes, 2 rams and 61 lambs on a farm within the City was witnessed.

Transit of Animals Orders, 1927 and 1947 :—
Cardiff cattle sidings were regularly visited. Considerable improvement was noted in the type and construction of livestock road vehicles which made frequent use of washing facilities provided at Roath Market.

The exportation of Horses (Amendment) Order, 1959 :—
The Order merely varies the charge for veterinary examination of horses for export from 5 shillings to one pound.

Diseases of Animals (Ascertainment of Compensation) Order, 1959 :—
The Order amends a previous procedure for ascertaining the value of animals liable to be slaughtered under the Diseases of Animals Act.

Importation of Carcases and Animal Products (Amendment) Order, 1959 :—
The Order amends the Importation of Carcases and Animal Products Order, 1954 in demanding certificates from the Governments of Argentina, Brazil, Chile, and Uruguay that consignments of meat originate from frigorificos recognized by the United Kingdom Government.

Animals (Landing from the Channel Islands, N. Ireland and the Republic of Ireland) Order, 1955 :—
During the year 36 licences were received authorising the movement of 458 fat cattle to Roath Abattoir from the ports of Birkenhead and Fishguard.

The approval of part of Cardiff Docks for the landing of Irish and Canadian cattle was revoked by the Ministry of Agriculture, Fisheries and Food consequent to a cessation of this trade over a number of years.

Markets, Fairs and Lairs Orders, 1925-1927 :—

Weekly visits were paid to the livestock sales at Ely Market up to the 28th October when the market ceased to exist.

The Tuberculosis (West and South Midlands and Eastern Counties Eradication Area) Order, 1959 :—

The Tuberculosis (Durham and Yorkshire Eradication Area) Order, 1959 :—

The Tuberculosis (Cornwall and West Devon Eradication Area) Order, 1959 :—

The Tuberculosis (N. East and S. East Wales and Monmouthshire Eradication Area) Order, 1959 :—

The Tuberculosis (N. East Scotland Eradication Area) Order, 1959 :—

The above Orders were made under the Attested Herds Scheme, 1958 and provide for the compulsory tuberculin testing of all untested cattle in the areas mentioned and for the removal of the reactors to the test under the Tuberculosis (Slaughter of Reactors) Order, 1950. A total of 1,128 reactor cattle received from Glamorgan and Monmouthshire were slaughtered at Roath Abattoir by the 31st December.

The Tuberculosis (Wales and Southern England Attested Area) Order, 1959 :—

The Tuberculosis (Northern England Attested Area) Order, 1959 :—

The Tuberculosis (Scotland Attested Area) Order, 1959 :—

The areas mentioned in the Schedule to the above Orders, being, for all practical purposes free from bovine tuberculosis, were declared Attested from the 1st October, 1959. Special conditions apply to the movement of bovine animals into and within the areas.

The Tuberculosis (Slaughter of Reactors) (Amendment) Order, 1959 :—

The Tuberculosis (Compensation) Amendment Order, 1959 :—

The Orders limit the compensation payable for an animal reacting to the tuberculin test to 75% of the value of a comparable attested animal.

The Tuberculosis (Attested Herds) Schemes 1950 and 1958

The figures below show the number of cattle herds from which bovine tuberculosis has been eliminated at 31st December, 1959 as compared with the corresponding herds at the 31st December, 1950.

	England	Wales	Scotland	Total
31st December, 1959 ...	153,769	38,284	43,990	236,043
31st December, 1950 ...	25,814	15,543	13,688	55,045

SUMMARY OF OUTBREAKS OF SCHEDULED DISEASES FOR THE YEARS 1956-1959

	1959	1958	1957	1956
Anthrax	263	167	318	1,245
Foot and Mouth Disease ...	45	116	184	162
Fowl Pest	2,062	759	1,034	956
Swine Fever	1,321	1,263	960	741
Atrophic Rhinitis	2	5	9	11

Protection of Animals Acts 1911-1927

All work under these Acts was carried out at the request of the City Police. During the year 27 animals, victims of street accidents, were attended. Of these, 12 dogs and 1 pig were treated for injuries and 10 dogs, 3 cats and 1 horse were destroyed.

Riding Establishments Act, 1939

The horses used for hire at 2 riding schools were examined and all found in good condition and fit for the work involved.

Slaughter of Animals Act, 1958

During the year 3 licences and 58 renewals of licences were granted by the City Council to persons authorising them to stun and slaughter animals in slaughterhouses and knacker yards.

Veterinary Services to Other Departments

City Police Department.—Seventy-two visits were made to examine animals at the request of the City Police.

Whitchurch Mental Hospital Management Committee.—By virtue of a financial arrangement veterinary attention is given to all livestock owned by this Committee. During the year 29 visits were paid to the Whitchurch Hospital farm.

MEAT INSPECTION SERVICE

The service entails the employment of four full-time Meat Inspectors with the Veterinary Officer acting as Chief Meat Inspector. Roath Abattoir caters for the slaughter of all animals intended for human consumption in the City, with the exception of a bacon factory where only pigs are slaughtered. Meat Inspectors are on duty at all authorised hours of slaughter.

Animals arriving for slaughter are subjected to veterinary antemortem inspection. The service is important for early detection of diseases scheduled under the Diseases of Animals Act and aids the portmortem diagnosis of various diseases which adversely affect meat.

The Slaughterhouses (Meat Inspection Grant) Regulations, 1958.—The Regulations provide for Exchequer grants to local authorities towards the cost of meat inspection in districts where the number of animals slaughtered and inspected by authorised officers exceeds local demand. For the year ended the 31st March the number of inspection units calculated for the various species of animals slaughtered in Cardiff fell short of the number of units required for local consumption and the authority was therefore not eligible for a grant for that year.

MEAT INSPECTION STATISTICS

Carcases and Offals Inspected and Condemned in Whole or in part
(Revised Form as set out by Ministry of Health)

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs	Horses
Number killed	5,683	3,217	6,626	88,932	25,159	Nil
Number inspected	5,683	3,217	6,626	88,932	25,159	Nil
All Diseases except Tuberculosis and Cysticercosis:						
Whole Carcases Condemned	21	68	31	233	41	—
Carcases of which some part or organ was condemned	218	217	138	7,939	1,074	—
Percentage of the number inspected affected with disease other than Tuberculosis and Cysticercosis ...	3·83	6·74	2·08	8·92	4·26	—
Tuberculosis Only:						
Whole Carcases Condemned	21	178	3	Nil	2	—
Carcases of which some part or organ was condemned	278	724	5	Nil	205	—
Percentage of the number inspected affected with Tuberculosis	4·89	22·50	0·07	Nil	0·81	—
Cysticercosis Only:						
Carcases of which some part or organ was condemned	11	3	Nil	Nil	Nil	—
Carcases submitted to treatment by refrigeration	11	3	Nil	Nil	Nil	—
Generalized and totally condemned ...	Nil	Nil	Nil	Nil	Nil	—
Percentage of the number inspected affected with Cysticercosis	0·19	0·09	—	—	—	—

Animals Slaughtered—Comparative Table

	Year					
	1959	1958	1957	1956	1955	1939
Cattle ...	8,900	12,271	13,132	10,893	8,210	6,693
Calves ...	6,626	8,942	10,630	10,463	9,238	7,788
Sheep	88,932	59,423	60,154	61,344	59,325	53,632
Pigs	25,159	31,007	27,383	24,983	29,749	25,257
Total ...	129,617	111,643	111,299	107,683	106,522	93,370

Incidence of Tuberculosis in Organs

Animals Slaughtered		Organs affected with Tuberculosis	Percentage	Percentage for 1958
Cattle — Bulls	41	5	12·19	2·62
Cattle — Cows	3,217	724	22·50	14·26
Cattle — Heifers/Steers ...	5,642	273	4·83	3·36
Calves	6,626	5	0·07	0·04
Sheep	88,932	Nil	—	Nil
Pigs	25,159	205	0·81	1·05

Incidence of Cysticercosis

Number of Cattle slaughtered	Number of Cases of Cysticercus Bovis	Percentage of Infestation	Total Percentage	Percentage for 1958
Cows 3,217	3	0·09	0·15	0·11 | 0·14
Other Cattle ... 5,683	11	0·19		0·16

Condemnation Certificates.—593 certificates were granted in respect of condemned carcases, part carcases and offals at Roath Abattoir during the year 1959.

Table Shewing Causes of Rejection of Carcases and Part Carcases

	Cattle		Calves		Sheep		Pigs	
	Total	Part	Total	Part	Total	Part	Total	Part
Tuberculosis	197	17	3	—	—	—	2	184
Trautmatism	—	15	—	3	6	2	—	11
Oedema and/or Emaciation	86	—	4	—	155	—	6	—
Septic Conditions ...	—	4	2	—	7	12	13	23
Moribund, Fevered, Illbled	2	—	8	—	18	—	5	—
Pyaemia	—	—	4	—	—	—	—	—
Arthritis	—	—	—	—	—	2	—	19
Lipomatous Atrophy ...	—	2	—	—	—	—	—	—
Immaturity	—	—	11	—	—	—	—	—
Peritonitis, Acute Septic	—	—	—	—	—	—	5	—
Pneumonia, Acute Septic	—	—	—	—	1	—	3	—
Pleurisy, Acute Septic ...	—	—	1	—	4	—	1	—
Blood Splashing	—	—	—	—	—	—	—	1
Decomposition	2	39	1	3	38	83	4	25
Erysipelas	—	—	—	—	—	—	—	1
Jaundice	—	—	—	—	—	—	2	—
Bone Taint	—	79	—	—	—	4	—	—
Urticaria	—	—	—	—	—	—	—	1
Uraemia	—	—	—	—	—	—	1	—
Gangrene	—	—	—	—	2	—	1	—
Anaemia	—	—	—	—	1	—	—	—
Leukaemia	—	—	—	—	1	—	—	—
Mastitis, Acute Septic ...	1	—	—	—	—	—	—	—
Total	288	156	34	6	233	103	43	265

Weight of Meat and Offals Rejected from Animals Slaughtered at Roath Abattoir

	Tons	Cwts.	Qrs.	Lbs.
288 Carcases Beef	44	16	2	1
34 Carcases Veal	—	11	1	25
233 Carcases Mutton	3	6	1	20
43 Carcases Pork	2	3	1	13
156 Part Carcases Beef ...	5	2	2	6
6 Part Carcases Veal ...	—	—	3	21
103 Part Carcases Mutton ...	—	14	—	12
265 Part Carcases Pork ...	1	8	—	5
Beef Offal	17	3	—	12
Calf Offal	—	4	1	21
Sheep Offal	19	15	3	21
Pig Offal	1	1	1	5
Total ...	96	8	—	22

Weight of Meat and Offal Rejected ex Other Slaughterhouses

	Tons	Cwts.	Qrs.	Lbs.
Part Carcases Beef ...	1	13	2	16
Part Carcases Mutton ...	6	12	2	24
Part Carcases Pork ...	—	5	2	26
Beef Offal	1	17	1	10
Calf Offal	—	1	3	20
Sheep Offal	—	15	—	—
Pig Offal	—	12	2	22
Total ...	11	19	—	6

Total Meat and Offal Rejected During 1959

108 Tons 7 Cwts. 1 Qrs. 0 Lbs.

Number of Organs Rejected

	Cattle	Calves	Sheep	Pigs
Heads :—				
Tuberculosis	—	—	—	—
Other Conditions	25	—	—	—
Heads (including tongues) :—				
Tuberculosis	536	3	—	185
Other Conditions	131	30	207	3
Lungs :—				
Tuberculosis	820	—	—	—
Other Conditions	256	—	—	—
Hearts :—				
Tuberculosis	814	—	—	—
Other Conditions	231	—	—	—
Skirts :—				
Tuberculosis	257	—	—	—
Other Conditions	185	—	—	—
Livers :—				
Tuberculosis	73	—	—	—
Other Conditions	2,646	46	6,261	446
Plucks :—				
Tuberculosis	—	5	—	36
Other Conditions	—	97	1,619	497
Tripes :—				
Tuberculosis	142	—	—	—
Other Conditions	237	—	—	—
Tails :—				
Tuberculosis	197	—	—	—
Other Conditions	96	—	—	—

ROATH MARKET ADMINISTRATION

The numbers and species of animals slaughtered at the Municipal Abattoir are given in the Meat Inspection section of the Report which show a decrease of 3,371 cattle, 2,316 calves and 5,848 pigs with an increase of 29,509 sheep on the 1958 figures, giving a net increase of 17,974 animals slaughtered. The large increase in the numbers of sheep slaughtered was due to the glut of lambs in the late summer and the attractive price at which they were marketed. Beef cattle were in relatively short supply and prices were high throughout the year and the prevailing calf subsidies has encouraged the rearing of more calves for the beef market.

As a result of current Council policy towards the abattoir repairs and improvements were kept to a minimum during the year. The hay lofts were declared dangerous by the City Surveyor and were reconstructed as a special item of expenditure. The hide and skin platform was provided with roof cover and side cladding to protect operators from inclement weather and to screen it from overlooking dwelling houses. A further section of the obsolete hanging rails in the general carcase market was renewed and a self indicating platform scale was installed.

The Slaughterhouse (Reports) Direction, 1959, made under the Slaughterhouses Act, 1958 requires each local authority to submit a report to the Minister of Agriculture, Fisheries and Food on the existing and probable future slaughterhouse requirements in their district within the period of the 2nd November 1959 and the 2nd November, 1960. The uncertain policy towards the abattoir has held up the Report and no progress was made at the end of the year. In the event of the Council deciding to build a new abattoir the report will contain an outline plan and a description of the proposed new scheme with a date when the scheme would be completed. If a decision is made to retain and modernise the existing premises the report will contain details of all points where the existing premises do not comply with the Slaughterhouses (Hygiene) Regulations, 1958 and the Slaughter of Animals (Prevention of Cruelty) Regulations, 1958 together with a date when the necessary alterations would be completed.

A firm of abattoir consultants was commissioned to assess the cost of modernising the existing abattoir and the cost of a new scheme of similar capacity. Inspections were made by the firm but their report was not to hand at the end of the year.

X—Report for 1959 of
Mr. STANLEY DIXON, M.Sc., F.R.I.C., Public Analyst

The total number of samples examined during the year was 5,101, which is the highest number yet recorded for the laboratory. These samples may be classified under the following headings :—

Under the Food and Drugs Act	1,538
Under the Fertilisers and Feedings Stuffs Act	42
Atmospheric Pollution Investigations :—	
Deposit Gauge Analyses	162
Lead Peroxide Cylinders	81
Sulphur Dioxide Determinations	1,187
Smoke Measurements	1,186
Waters	721
Miscellaneous	184
TOTAL ...	5,101

This is an appreciable increase over the figure of 3,132 for the year 1958 which was the previous highest total, and it is due to work arising from the setting up in Cardiff of three new stations for the investigation of atmospheric pollution in addition to the existing one at the City Hall, and to the installation at all four stations of apparatus for making daily smoke measurements and sulphur dioxide determinations.

The laboratory continues to carry out analytical work required by the Swansea County Borough Council, and the following tables show the numbers of samples examined for both the Cardiff and Swansea Authorities and the headings under which they were classified :—

For the City of Cardiff :—

Under the Food and Drugs Act	1,148	
Under the Milk (Special Designation) Regulations ...	63	
For the Port Health Authority	35	
Under the Fertilisers and Feeding Stuffs Act	21	
For the Public Health Department :—		
Deposit Gauge Analyses	90	
Lead Peroxide Cylinders	45	
Sulphur Dioxide Determinations	1,187	
Smoke Measurements	1,183	
Foods	48	
Waters	47	
Other articles	12	
For the Waterworks Department	520	
From other sources	16	
		4,418

For the County Borough of Swansea :—

Under the Food and Drugs Act	390	
For the Public Health Department :—		
Deposit Gauge Analyses	72	
Lead Peroxide Cylinders	36	
Waters	33	
For the Weights and Measures Department—		
Under the Fertilisers and Feedings Stuffs Act ...	21	
For the Waterworks Department	128	
For the Port Health Authority	3	
	——	683
TOTAL ...		5,101

A separate report on the work carried out for the County Borough of Swansea is made to the Swansea Health Committee.

FOOD AND DRUGS LEGISLATION

Legislation relating to the composition and labelling of food and drugs, the wholesomeness of food and food hygiene is contained in the Food and Drugs Act, 1955, and in Regulations, Statutory Instruments and Statutory Rules and Orders made under or kept in force by this Act.

During the year under review entirely new regulations laying down statutory limits for the arsenic content of foods were made and brought into operation, the Milk and Dairies Regulations, 1949 to 1954 and the Public Health (Condensed Milk) Regulations, 1923 to 1953 have been amended and re-enacted in consolidated form, and the Orders and Regulations relating to fluorine in food and the composition, labelling and heat-treatment of ice-cream have been revised and re-enacted.

Arsenic in Food.—The Arsenic in Food Regulations, 1959 lay down statutory limits for the arsenic content of food and beverages intended for human consumption. With certain specified exceptions, the limits are as follows :—

Description of food	*Maximum arsenic content in parts per million*
Non-alcoholic ready-to-drink beverages	0·1
Alcoholic beverages	0·2
Ice-cream	0·5
Other foods (in general)	1·0

Higher limits—up to 5 parts per million—are provided for a few articles, mainly concentrated foods and food adjuncts which are used only in small amounts, and the Regulations do not apply in the case of fish (including crustacea and molluscs) or edible seaweed for which a natural arsenic content in excess of 1 part per million has been established ; such arsenic, which has been found in mussels up to 120 parts per million and in prawns up to 170 parts per million, exists entirely in organic combination and it appears to be in a comparatively non-toxic condition.

Condensed Milk.—The Condensed Milk Regulations, 1959 introduced a ' half-cream ' grade of condensed milk, which may be either sweetened or unsweetened, in addition to the familiar ' full-cream ' and ' skimmed ' varieties. The new product must be labelled " should not be used for babies except under medical advice," and it is required to contain not less than 4·5% of fat and 26·5% of total milk solids.

Fluorine in Food.—The Fluorine in Food Regulations, 1959 replaced the Fluorine in Food Order, 1947 on the 14th March, 1960. They reduce the maximum limit of fluorine in acidic phosphates intended for use in food from 300 to 30 parts per million and make corresponding reductions for articles of food containing acid phosphates, the maximum limit prescribed for baking powder and golden raising powder being 15 parts per million of fluorine and for self-raising flour 3 parts per million.

Ice-cream.—The Food Standards (Ice-cream) Regulations, 1959, prescribe amended standards of composition for ice-cream. Ice-cream *simpliciter* is still required to contain at least 5% of fat (which need not be milk-fat) and 7·5% of milk solids-not-fat, but two new types of ice-cream have been recognised, viz : ' Milk Ice ' and ' Dairy Ice-Cream.' Milk Ice must contain at least 2·5% of milk-fat and 7% of milk solids-not-fat, while Dairy Ice-Cream (or ' Dairy Cream Ice ') must contain not less than 5% of milk-fat and 7·5% of milk solids-not-fat. These new varieties must not contain fat other than milk-fat except any derived from egg or flavouring used as an ingredient. The requirement in the 1953 Order that ice-cream should contain not less than 10% of sugar is replaced by a provision that no type of ice-cream shall contain any artificial sweetening agent.

The Labelling of Food Order has been amended by the insertion of provisions to prohibit the labelling of ice-cream in a manner suggestive of the presence of butter, cream, milk or anything connected with the dairy interest, other than a statement to the effect that the ice-cream contains skim-milk solids, unless the ice-cream contains no fat other than milk-fat (except any derived from egg or flavouring used as an ingredient), and to provide that after the 30th November, 1959, pre-packed ice-cream containing fat other than milk-fat shall bear a declaration " Contains non-milk fat " or, if appropriate " Contains vegetable fat."

The ingredients used in the manufacture of ice-cream must be heat-treated by one of the processes prescribed in the Ice-Cream (Heat Treatment, etc.) Regulations. The Heat Treatment Regulations of 1959 extend the provisions relating to heat-treatment to permit a sterilisation process as a method of heat treatment alternative to pasteurisation. The repealed Regulations provided only for the pasteurisation of the ingredients by one of the following temperature-time combinations.

Conditions for the Pasteurisation of Ice-Cream

Method I — at not less than 150°F. for at least 30 minutes.
Method II — at not less than 160°F. for at least 10 minutes.
Method III — at not less than 175°F. for at least 15 seconds.

For the alternative process of sterilisation of the ingredients, the Ice-Cream (Heat Treatment, etc.) Regulations, 1959, lay down the following requirements :—

Conditions for the Sterilisation of Ice-Cream

" The mixture shall be raised to and kept at a temperature of not less than 300°F. for at least 2 seconds."

Water ices and ice-lollies that are mixed before freezing and have a pH value of 4·5 or less have been exempted from the heat-treatment provisions since there is little danger that pathogenic organisms will multiply in mixtures as acid as this.

The Milk and Dairies (General) Regulations, 1959.—These new Regulations re-enact with amendments the Milk and Dairies Regulations, 1949 to 1954, and the changes effected are mainly matters for the Medical Officer of Health and the Public Health Inspectorate, but the following new requirements are of general interest. Persons engaged in the milking of cows or otherwise having access to milk in open containers must wear clean and washable head covering and overalls. Open cuts must be kept covered with a waterproof dressing and spitting and the use of tobacco is prohibited. Occupiers of dairies and dairy-farms must provide first-aid equipment.

Reports of the Food Standards Committee.—During the year the Food Standards Committee of the Ministry of Agriculture, Fisheries and Food issued reports on Soft Drinks, Milk Bread, the Use of Starch Syrup in Table Jellies and on Preservatives in Food, and some important changes in the legislation have been proposed, particularly in respect of the use of chemical preservatives.

In their Report on Preservatives in Food the Committee review the changes that have taken place in the food industry since the existing regulations were framed in 1925, and conclude that some extension of the range of foods permitted to contain preservative is justified under modern conditions. They also consider that several substances in addition

to those at present permitted might be allowed. The more important suggested additions to the list of foods permitted to contain preservatives are for bread to contain propionic acid ; for flour confectionery, cheese and certain food adjuncts to contain sorbic acid ; and for various canned foods and cheese to contain the antibiotic, nisin.

The recommendations of the Committee in respect of milk-bread would permit use of the term " milk-bread " for bread containing 4·2 per cent of skim milk solids. Public Analysts generally are strongly opposed to the use of the description " milk " unless the article contains either whole milk or whole milk solids.

SAMPLES SUBMITTED UNDER THE FOOD AND DRUGS ACT, 1955

The total number of samples of food and drugs examined during the year for the City of Cardiff was 1,148. The fact that a sample is obtained under the provisions of the Food and Drugs Act does not prevent action being taken by appropriate Authorities under other legal enactments, and therefore, when the samples were examined and reported upon, consideration was given to all relevant legislation.

The nature of the various articles submitted, the number of each kind and the numbers that were adulterated or otherwise unsatisfactory are shown in the following table :—

Samples examined under the Food and Drugs Act during 1959

Nature of Sample	Number examined	Number unsatisfactory
Apples	1	1
Arrowroot	1	—
Baking powder	2	—
Barley, Pearl	2	—
Beer/Stout	5	—
Beetroot, Pickled	2	—
Biscuits	3	—
Blancmange powder	5	—
Bread	4	1
Breakfast cereals	3	1
Butter	20	1
Cake	2	1
Cake decorations	4	—
Caraway seeds	1	—
Cheese food	1	—
Cherries, Cocktail	3	—
Cherries, Glace	3	—
Chicory	1	—
Cinnamon, Ground	1	—
Coconut, Desiccated	2	—
Coffee	1	—
Coffee and chicory essence	4	—
Coffee and chicory extract, Dry	1	—
Coffee extract, Dry	1	—
Cooking fat	4	—
Cream	6	—
Currants	1	—
Curry powder	2	—
Custard powder	3	—
Dandelion coffee	1	—
Dripping	2	—
Drugs and Medicinal Preparations :—		
Aspirin Tablets	5	1
Bactericidal Cream	1	—
Balsam of Horehound, Compound	1	—
Carminative Mixtures	2	—
Extract of Malt and Cod Liver Oil Preparation	1	1
Garlic Oil Capsules	1	—
Glucose	4	—
Hair Cream, Medicated	1	—

Samples examined under the Food and Drugs Act during 1959—continued

Nature of Sample	Number examined	Number unsatisfactory
Infants' Powders	1	—
Iodine, Tincture of	2	—
Rose Hip Tablets/Syrup	2	—
Saccharin Tablets	2	—
Syrup of Figs	1	—
Tartaric Acid	1	—
Teething Jelly	1	—
Vitamin C Cough Drops	1	—
Vitamin C Fruit Drinks	11	3
Wheat Germ Capsules	1	—
Zinc and Castor Oil Cream	1	—
Extraneous matters from foods	2	2
Extraneous matter in milk bottle	1	1
Fish and Fish Products	12	2
Flavouring essences	4	—
Flour/Self-raising flour	5	—
Food colourings	2	—
Fruit, Canned	17	2
Fruit juice, Canned	4	—
Fruit salad, Dried	2	—
Ginger, Ground	1	—
Golden raising powder	1	—
Gravy browning	3	—
Ice-cream	32	—
Ice-cream powder	1	—
Ice lollies	11	—
Icing preparation	1	—
Jam	7	—
Lard	4	—
Lemon curd	2	—
Margarine	12	1
Marmalade	2	—
Marzipan	4	—
Meat and Meat Products	44	9
Milk	596	35
Milk, Channel Islands	86	17
Milk, Condensed	2	—
Milk food, Dried	2	—
Milk drinks, Flavoured	2	2
Mincemeat	7	—
Mint sauce preparations	8	—
Non-brewed condiment	2	—
Potatoes	1	—
Puddings	15	3
Puff pastry	4	—
Raisins/Sultanas	4	—
Rice	1	—
Salad dressing	3	—
Sauces, Fruit	12	2
Scone	1	1
Slimming aid preparations	4	3
Soft drinks	10	1
Soft drink powder	1	—
Soups, Canned	5	1
Spaghetti in sauce	4	—
Spirits	7	—
Stuffing	2	—
Suet, Shredded	7	—
Sugar	3	—
Sweets	14	1
Table creams/Table jellies	13	—
Tea	3	—

Samples examined under the Food and Drugs Act during 1959—continued

Nature of Sample	Number examined	Number unsatisfactory
Vegetable juice, Canned...	1	—
Vegetables, Canned	14	1
Vegetables, Dried	1	—
Vinegar	6	—
Welsh rarebit spread	1	—
TOTAL	1,148	94

Of the total of 1,148 samples submitted under the Food and Drugs Act, 94 or 8·1 per cent were reported upon adversely. In 1958 the proportion of unsatisfactory samples was 6·6 per cent, while in 1957 it was 6·1 per cent.

Milk

The essence of British law governing the sale of milk is that it must be genuine, that is, " as it comes from the cow ", and no absolute standard of composition has been prescribed. In order to assist those concerned with the administration of this law, the Board of Agriculture, after an extended enquiry into the composition of milk, framed the Sale of Milk Regulations, 1901, which enacted that where a sample of milk contained less than 3·0 per cent. of milk-fat or 8·5 per cent. of milk solids not fat, that milk shall be presumed to be adulterated until the contrary is proved.

These figures—3 per cent. of milk-fat and 8·5 per cent. of milk solids other than fat—were reproduced in the Sale of Milk Regulations, 1939, which are in force today under the Food and Drugs Act, 1955. Where milk contains less than these percentages, it is presumed that the milk is not genuine by reason of the removal of fat or other milk solids, or by the addition of water, but it is a defence where milk falls below these presumptive limits to prove that it is as produced by the cows. In order to provide information on this matter, a sample taken after careful supervision of a corresponding milking of the same cows (known as an " appeal-to-cow " sample) is generally obtained for comparison purposes. During the nineteen-twenties the freezing-point test for the detection and determination of added water in milk was developed so that it could be used for the routine examination of milk, and this test, which is now invariably accepted by the Courts, has been used in Cardiff since 1930. It serves to distinguish between milk which is naturally poor and milk which has been rendered poor by the addition of water.

The total number of milk samples submitted under the Food and Drugs Act during the year was 682. Of these, 596 were samples of ordinary milk and 86 were Channel Islands milk. They were taken in the usual way by the Sampling Officers from roundsmen, at dairies, schools, hospitals and catering establishments, while some were procured from slot machines in the street. No "appeal-to-cow" samples were taken during the year.

Ordinary Milk.—The adulterated and otherwise unsatisfactory samples are classified below :—

Number containing less than 3% of fat	31	=	5·2%
Number containing added water	3	=	0·5%
Number containing preservative (hypochlorite solution)	2	=	0·3%
Number containing added colouring matter ...	0		
Number containing less than 8·5% of non-fatty solids but which showed no evidence of the presence of added water by the freezing-point test (i.e. they were naturally of poor quality) ...	175	=	29·3%

The sample with the lowest fat content during the year was a pasteurised milk. It contained only 1·80 per cent. of fat and it was therefore deficient in this constituent to the extent of 40% when compared with the presumptive minimum limit of the Sale of Milk Regulations. There can be no doubt that this large deficiency occurring in bulked milk was due to failure to ensure that the milk was properly mixed after it had been standing overnight at the dairy. Many further samples from this source have proved to be satisfactory.

Legal proceedings were taken by the Department against one vendor. Several informal samples taken from this vendor over a period showed deficiencies in fat. It was noticed by the Sampling Officer that these deficiencies occurred every time samples were taken from half-pint bottles, but they did not occur in samples from one-pint bottles. A formal sample was taken from two half-pint bottles and this also proved to be low in fat, the deficiency amounting to 13 per cent. Further investigations showed that the supplies delivered to this dairy by producers were always satisfactory. The vendor was fined £20 with £3 3s. 0d. costs.

Most of the samples that contained less than 3 per cent. of fat, however, were from supplies of raw milk delivered to dairies in the city and were described on the labels attached to the churns as morning milk. In many cases they were accompanied by samples of afternoon milk from the same cows and invariably these were rich in fat so that the fat content of the whole consignment averaged more than 3·0 per cent.

When there is a considerably longer interval between the afternoon milking and the next morning milking than there is between the morning and afternoon milkings of the same cows, it is generally found that the afternoon milk is small in quantity and rich in fat, while the morning milk is large in quantity but of low fat content. This is the most common cause of the fat content of genuine milk falling below 3 per cent. and it is particularly liable to occur in the Spring months of the year when the average fat content of milk is at its lowest.

One hundred and eighty samples of ordinary milk contained less than the presumptive minimum of 8·5 per cent. of non-fatty solids, but the Hortvet freezing-point test showed that only three of these contained added water, two had abnormal freezing-points and they were found to contain hypochlorite solution, while the remaining 175 samples were naturally low in non-fatty solids. This number represents 29·3% of the samples of ordinary milk submitted for examination which is the highest proportion of sub-standard milks yet recorded, and further comment on this matter is made below under the heading " Average Composition of Milk."

The amounts of added water found were very small—about 2% in one sample and 3% in each of the other two — and they suggested carelessness rather than deliberate adulteration.

The presence of hypochlorite in two samples from the same source was investigated by the Department and this was found to be due to the use of a solution of this substance for sterilising the milking machine. Hypochlorites are powerful oxidising agents and their presence in milk is prohibited by the Preservatives in Food Regulations and by the Milk and Dairies Regulations.

Channel Islands Milk.—Milk for human consumption sold under the special designations " Jersey Milk," " Guernsey Milk," and " Channel Islands Milk " must be produced from cows of the Channel Islands breeds and must contain not less than 4·0 per cent. of fat. An extra charge may be made for such milk and in addition to being rich in fat, almost invariably it contains a high proportion of non-fatty solids, these averaging 9 per cent. or more.

During the year, 86 samples of Channel Islands Milk were examined, sixteen of which were found to contain less than 4 per cent. of fat (3·24—3·92 per cent.). In the case of one producer where the milk contained only 3·24% and 3·56% of fat, use of the special designation ' Channel Islands Milk ' has been discontinued. One sample of pasteurised

Channel Islands Milk contained only 8·37 per cent. of non-fatty solids and its freezing point indicated the presence of at least 4 per cent. of added water, but further samples from this source have been genuine.

Average Composition of Milk Samples.—The average composition of all the milk samples submitted during the year is given in the table below. The average composition of the Channel Islands Milk and of the ordinary " milk samples (i.e. all samples other than Channel Islands Milk) is also shown.

Average Composition of Milk Samples, 1959

Variety	Number of Samples	Fat per cent.	Non-fatty solids per cent.	Total Solids per cent.
Channel Islands Milk ...	86	4·48	8·94	13·42
Other Milk Samples ...	596	3·53	8·55	12·08
All Milk Samples	682	3·65	8·60	12·25

It will be observed that the average composition of Channel Islands Milk is much superior to that of " ordinary milk " in respect of both fat and non-fatty solids.

The monthly variations in the composition of all the milk samples other than those of Channel Islands Milk are given in the following table :—

Milk Samples other than Channel Islands Milk
Monthly Variations, 1959

Month	Number of Samples	Fat per cent.	Non-fatty Solids per cent.	Total Solids per cent.
January	53	3·72	8·50	12·22
February	43	3·54	8·41	11·95
March	13	3·48	8·34	11·82
April	76	3·38	8·40	11·78
May	52	3·29	8·69	11·98
June	53	3·36	8·60	11·96
July	65	3·47	8·55	12·02
August	20	3·32	8·60	11·92
September	52	3·54	8·61	12·15
October	71	3·67	8·57	12·24
November	75	3·71	8·57	12·28
December	23	3·84	8·71	12·55
Whole year	596	3·53	8·55	12·08

For many years it has been observed that on the average the fat content of milk is lowest in the spring and highest in the autumn, while the non-fatty solids are generally at their highest in October or November. In recent years the non-fatty solids have fallen sharply towards the end of the winter, i.e. during the early months of the year—doubtless the result of poor and/or unbalanced feeding of the cows at this season. During 1959 the monthly averages for fat followed the general trend apart from a slight drop in August, while the non-fatty solids were highest in December. It will be noted that during the months of February, March and April the average non-fatty solids did not reach the presumptive minimum limit of 8·5% fixed by the Sale of Milk Regulations.

In the next table the average composition of the " ordinary milk " samples for 1959 is compared with the figures for the years 1935-1959.

Average Composition of Milk Samples (excluding Channel Islands Milk) 1935-1959

Year	Fat per cent.	Non-fatty Solids per cent.	Total Solids per cent.
1935	3·81	8·83	12·64
1936	3·77	8·74	12·51
1937	3·81	8·75	12·56
1938	3·67	8·74	12·41
1939	3·66	8·78	12·44
1940	3·68	8·64	12·32
1941	3·61	8·67	12·28
1942	3·64	8·67	12·31
1943	3·62	8·76	12·38
1944	3·65	8·74	12·39
1945	3·59	8·64	12·23
1946	3·65	8·67	12·32
1947	3·59	8·73	12·32
1948	3·55	8·70	12·25
1949	3·57	8·67	12·24
1950	3·55	8·74	12·29
1951	3·55	8·67	12·22
1952	3·51	8·69	12·20
1953	3·48	8·69	12·17
1954	3·52	8·67	12·19
1955	3·48	8·64	12·12
1956	3·50	8·64	12·14
1957	3·61	8·65	12·26
1958	3·57	8·58	12·15
1959	3·53	8·55	12·08

For some considerable time attention has been drawn in these annual reports to the steady decline in the average compositional quality of the samples of ordinary milk taken in Cardiff since the year 1935. In spite of the operation since 1st October, 1956 of the scheme of the Joint Milk Quality Control Committee which was devised for the purpose of improving the general compositional quality of milk, and since the 1st October, 1957 of the Milk Marketing Board's " Butter-Fat Scheme," the downward trend in composition continues, and, as will be seen in the above table, in 1959 the figures for the average non-fatty solids and total solids contents reached a new low level.

In view of this new low level figure of 8·55 per cent. for the average non-fatty solids content of practically 600 samples of milk, it is perhaps not surprising that there was again a large increase in the proportion of samples naturally poor in solids-not-fat (i.e. containing less than 8·5 per cent. of non-fatty solids but giving no evidence of the presence of extraneous water by the freezing-point test)—from 22·1% in 1958 to 29·3% in 1959. The proportion of such naturally sub-standard samples since 1953 has been as follows :—

Year ...	1953	1954	1955	1956	1957	1958	1959
Percentage	8·4	9·7	11·1	13·0	15·6	22·1	29·3

These figures are not peculiar to Cardiff, where most of the milk comes from Glamorgan and Monmouthshire, for similar results have been obtained for the samples analysed for Swansea, where most of the milk comes from Carmarthenshire. In 1959, when 267 samples of ordinary milk were examined for Swansea the proportion of genuine samples containing less than 8·5% of non-fatty solids was 29·5% ; in 1958 the proportion was 19·3%.

The Sale of Milk Regulations.—It is nearly 60 years since the present presumptive standards for milk were enacted. In the intervening years the composition of milk has undergone considerable alteration and the Hortvet freezing-point test is now invariably relied upon for the detection and determination of the presence of extraneous water. In view of these changes, a Committee under the chairmanship of Professor J. W. Cook, D.Sc., F.R.I.C., F.R.S., was set up by the Government in 1958 with the following terms of reference :—

> " To consider the composition of milk sold off farms in the United Kingdom from the standpoint both of human nutrition and animal husbandry, and to recommend any legislative or other changes that may be desirable."

The Committee held its first meeting in June, 1958. Early in 1959, I was privileged to give evidence before it as one of the representatives of the Association of Public Analysts, and it hopes to have its report ready before the end of the present year.

Articles other than Milk

Four hundred and sixty-six samples other than milk were submitted during the year. They covered a wide range of articles and particulars of the forty-two samples (9·0 per cent.) that were reported upon adversely are tabulated below.

Unsatisfactory Samples of Articles other than Milk

Article	Nature of Adulteration or Irregularity
Apples	Contained 3·5 parts per million of Arsenic (As) and 11 parts per million of lead.
Aspirin Tablets, B.P.	Contained a small excess of free salicylic acid.
Bacon	The rind was stained with a dye which was not a permitted colour.
Blackcurrent Vitamin C Drink ...	Labelling irregularity—Name and address of packer (or the words ' Registered Trade Mark ') not given on the label.
Blackcurrant Vitamin C Health Drink	Labelling irregularity. Label did not state the minimum net quantity in the bottle.
Bread (" Milk Loaf ")	Contained approximately 4% of non-fatty milk solids but no milk-fat. Should contain whole-milk solids to justify the description " Milk Loaf."
Breakfast Oats	Contaminated with moth webbing.
Butter	Contained 16·1% of water. (Maximum permitted 16·0%).
Cake	The oil in the marzipan coating was rancid and the cake portion was musty.
Canned Baked Beans	Unfit for use on account of corrosion of the tin.
Canned Boned Chicken	Should have been labelled " Boned Chicken with Stock."
Canned Fruit Salad in Syrup	Same brand, but this was not declared as a " Registered Trade Mark " or, alternatively, the name and address of the packer was not stated on the label.
Canned Peaches in Syrup	
Canned Oxtail Soup	The cans were very rusty and the corrosion had penetrated to the interior in places, particularly near the seams of the cans. Unfit for use.
Canned Spiney Lobster (2 samples)	
Chocolate Flavoured Drink ...	Labelling irregularity. " Separated Milk " should have been given first in the list of ingredients and not " Milk."
Christmas Puddings (2 samples) ...	Labelling irregularities.—The description " fruit " used in the list of ingredients is a generic term and not a specific name as required by the Labelling of Food Order.
Christmas Pudding	(*a*) The pudding was mouldy. (*b*) Labelling irregularity.—The name and address of the packer or labeller (or a registered trade mark) was not given on the label.
Butterscotch Extract of Malt and Cod Liver Oil	Contained no butter-fat and therefore the use of the word " Butterscotch " in the description of this article was considered to be misleading.
Limeade	Contaminated with a small amount of phenolic disinfectant.
Margarine	Contained 16·1% of water. (Maximum permitted 16·0%).
Meat Loaf	Of inferior quality, the meat content being only 74% whereas 80% is considered a reasonable minimum.
Milk Crush	Labelling irregularity.—The ingredients were declared as "Separated Milk and Fruit Essence" whereas the sample contained 4·2% of milk-fat.
Orange Juice, Concentrated ...	Contained 50 parts per million of sulphur dioxide in excess of the maximum of 350 parts per million fixed by the Preservatives in Food Regulations.
Pork Luncheon Meat (3 samples)	Of inferior quality, containing 69%, 73% and 75% of meat respectively whereas 80% is considered a reasonable minimum.
Pork and Beef Luncheon Meat ...	Of inferior quality, containing only 75% of meat whereas 80% is considered a reasonable minimum.
Scone	A piece of fish skin was embedded in the scone.
Slimming Aid — Swedish Milk Diet Supplement	(*a*) Discrepancy in composition, the calcium content being 55% in excess of the minimum amount declared — an unreasonably large difference. (*b*) Labelling and advertising irregularities.

Unsatisfactory Samples of Articles other than Milk—(continued)

Article	Nature of Adulturation or Irregularity
Slimming Aid — Swedish Milk Diet Supplement with Coffee	Labelling and advertising irregularities.
Slimming Aid — " 21 day diet "	Labelling irregularity.
Sweets (Sugar Confectionery) ...	Infested with the ' drug room ' beetle.
Tomato Piquant (2 samples) ...	Deficient of at least 50% of the minimum tomato solids content prescribed for tomato sauce or relish.
Turkey in Jelly, Minced ... ... (2 samples)	Meat content only 63% instead of at least 70%.
Extraneous matter in Bread ...	Consisted of several large splinters of wood.
Extraneous matter in Corned Beef	Consisted of a piece of woven cotton webbing.
Extraneous matter in Milk Bottle	Consisted essentially of dark brown oxide of iron, most of which was readily detachable from the side of the bottle.

Legal proceedings were taken in respect of only one of these articles, viz. a dirty milk bottle which had a considerable amount of fairly readily detachable brown matter adhering to the side of the bottle. This consisted essentially of magnetic oxide of iron. Alternative action was taken by the Department in other cases where this was deemed necessary. Some of the unsatisfactory samples are discussed briefly below.

Apples.—In 1958, several samples of Lebanese apples that were examined in the laboratory were found to contain excessive amounts of arsenic and lead through the use of insecticidal spray. In November, 1959, a sample of apples from the Lebanon obtained in Cardiff was submitted for analysis. It contained 3·5 parts per million of arsenic (As), and 11 parts per million of lead. The Arsenic in Food Regulations require apples to conform to the general maximum limit of 1 part per million of arsenic [expressed as elementary arsenic, (As)] while the Food Standards Committee has recommended a general limit for lead in food of 2 parts per million. These apples and others from the same consigment were eventually washed by the wholesalers under the supervision of the Chief Public Health Inspector to remove these excessive spray residues, and samples of the apples submitted after treatment showed that only negligible traces remained.

Meat Products.—There are no legal standards of composition for meat products, but during the year under review two agreements between the Food Manufacturers' Federation Incorporated and the Association of Public Analysts became operative. The first of these, which came into effect on the 1st July, 1959 concerns Chopped or Flaked Poultry and Meat Lines, and the other, which came into operation on the 1st October, 1959 relates to Luncheon Meat. The main provisions of these agreements are set out below.

Chopped, Minced or Flaked Poultry and/or Meat Lines

1. Products sold under an unqualified description, e.g. " Minced Chicken," " Chopped Ham," etc., shall contain not less than 95% of the designated meat(s).
2. Products sold under a qualified description, e.g. " Minced Turkey in Jelly," " Chopped Chicken in Chicken Stock," etc., shall contain not less than 70% of the designated meat(s).
3. The description " in natural juices " or " in natural stock " is inappropriate where any added water is present.

Luncheon Meat

1. Products sold under any description which includes the words " luncheon meat " or implies that the product is being sold as luncheon meat, shall have a meat content of not less than 80%.
2. " Meat " includes pork, bacon, ham, beef, mutton and veal but does not include ' prohibited offals ' as defined by the Offals in Meat Products Order, 1953.

Although the agreements refer only to home-manufactured products, overseas suppliers have largely agreed to conform to these requirements, but time must be given for clearance of stocks manufactured before the agreements were ratified and became known.

Six samples of Minced Chicken in Jelly and seven of Minced Turkey in Jelly were examined during the year, all of which were home-manufactured. All the minced chicken products and five of the minced turkey preparations were in accordance with the agreement relating to them, their meat contents ranging from 71·5% to 90%, but two samples of the same brand of Minced Turkey in Jelly, one of which was purchased in October and the other in December, 1959, each contained only 63% of meat. It seems likely that they were manufactured before the agreement came into operation.

Seven samples of Luncheon Meat also were examined, all but one of which were imported products and particulars of these are tabulated below.

Description	Origin	Meat Content per cent.
Pork Luncheon Meat	Yugoslavia	86
Beef and Veal Luncheon Meat	Cardiff, Wales	82
Pork Luncheon Meat	Denmark	81
Pork Luncheon Meat	Denmark	75
Pork and Beef Luncheon Meat	Denmark	75
Pork Luncheon Meat	Holland	73
Pork Luncheon Meat	Holland	69

It will be observed that four of the samples contained less than the agreed minimum for home-manufactured products of 80% of meat, but only the one manufactured in Cardiff was obtained after the agreement came into force.

Other meat products that were criticised were canned Boned Chicken which contained 14% of added water and should, in my opinion, have been described as Boned Chicken in Stock, and Corned Beef Loaf which contained only 74% of meat. In 1952 the Ministry of Food regarded 80% as a reasonable minimum meat content for corned beef loaf, and I know no reason why its quality should be any lower today.

Milk Bread.—In May, 1959 the Food Standards Committee of the Ministry of Agriculture, Fisheries and Food reported on Milk Bread and made the following recommendations :—

1. " Milk Bread " should be required to contain not less than 4·2% by weight of whole milk solids or skim milk solids, calculated on the weight of the loaf.
2. Labels and advertisements for milk bread should be required to bear a declaration in prescribed form " contains whole milk solids " or " contains milk solids not fat " as the case may be, and where milk bread is sold unwrapped a notice should be conspicuously displayed in the shop to the same effect.
3. Statements in labels and advertisements that milk bread is rich in any of the nutrients contained in milk, and words or pictorial devices suggesting that milk bread containing skim milk solids had been made with or contains the constituents of whole milk should be prohibited.

Public Analysts generally and Local Authority associations consider that the term " milk " implies whole milk and that the description " milk bread " unqualified should be applied only to a product which contains the constituents of whole milk. The principle of exact description of foods is most important in itself and particularly so where milk is concerned. Approval of the use of the word " milk " to describe any substance other than whole milk would undoubtedly increase the difficulties experienced by Food and

Drugs Authorities when dealing with other foods bearing names which include the word " milk." Moreover, the housewife is likely to be misled by the use of the description " milk bread " for the skim milk product ; when buying " milk bread " it would be quite natural for her to assume that she was obtaining bread made with whole milk.

The results of analysis of a sample described as " Milk Loaf " and bearing the statement " contains more than 4% skimmed milk non-fat milk solids " were consistent with the bread containing between 4 and 4·5 per cent. of skim milk solids, but in my opinion there is no justification for misdescribing such bread and then qualifying the description by the words " contains . . . skimmed milk non-fat milk solids " and I reported upon this article in these terms. I cannot subscribe to the bare majority decision of the Food Standards Committee that such an article should be called a milk loaf. I consider that this description is " calculated to mislead " and the Food and Drugs Act specificially provides that an accurate statement of the composition of a food on a label or advertisement shall not preclude a Court from finding that a description is false or misleading.

Deteriorated Foods.—Two of the unsatisfactory samples were infested—breakfast oats with moth webbing and sugar sweets with the "drug room" beetle, *Stegobium paniceum*. Six other samples had deteriorated during storage—a cake submitted by a private purchaser was musty and its marzipan coating was rancid, a Christmas pudding was moudly, and four tins containing various foods were badly corroded and the contents were unfit to eat.

Extraneous Matters.—Bread contained several large splinters of wood, corned beef contained a piece of woven webbing, limeade was contaminated with traces of a phenolic disinfectant, and an emptied milk bottle contained matter consisting largely of brown oxide of iron. Legal proceedings were instituted against the dairy company which supplied the bottle and they were fined £5 with £2 2s. 0d. costs.

Labelling of Food.—The Labelling of Food Order requires labels on pre-packed foods to bear the name and address of the packer or labeller. These may be omitted only if the label bears a trade mark which is entered in the Trades Mark Register and is accompanied by the words " Registered Trade Mark." The label must also state the common or usual name of the food, and if it contains two or more ingredients they must be declared (using appropriate designations which must be specific and not generic) in descending order of the proportions in which they were used. These statements must appear " conspicuously and in a prominent position " on the label.

Several infringements of one or more of these requirements were found during the year, chief among which concerned the labels and advertisements given with three so-called slimming aids prepared and marketed by one firm. When reporting on these products attention was drawn to the following points :—

"———" **Swedish Milk Diet Supplement**

(*a*) The calcium content was 55% in excess of the minimum amount stated—an unreasonably large difference.

(*b*) The word " Supplement " (an essential part of the name of the article) did not appear *conspicuously* on the label.

(*c*) The statement in the booklet supplied with the article complaining that the product was " *completely soluble* " was not true as it was largely insoluble in both water and milk.

(*d*) The description "——— Swedish Milk Diet " given to this article in the booklet supplied with it was false and misleading as this preparation is not a diet in itself but merely a dietary supplement.

"———" **with Coffee**

This article did not contain " real coffee " as stated in the booklet supplied with it. The product referred to in this way was dry coffee extract and it should have been described as such.

"———" **21 Day Diet**

This preparation was not a diet in itself. It should have been described as a dietary supplement.

I have been informed by the Chief Public Health Inspector that the manufacturers have agreed to amend all future labels and literature to meet these critisisms.

Of the other labelling irregularities mention may be made of a chocolate flavoured drink claiming to be made from milk and separated milk with sugar and flavouring, but it contained much more separated milk than whole milk. " Separated milk " should therefore have been given first in the list of ingredients and not " Milk."

ATMOSPHERIC POLLUTION

Monthly measurements of atmospheric pollution involving the use of a Standard Deposit Gauge situated on the roof of the City Hall, Cardiff, have been made since the year 1928. Since 1932, a lead peroxide candle for the monthly measurement of the activity of the sulphur gases in the air has also been exposed at this site. Towards the close of the year 1958, additional apparatus was installed at the City Hall for the daily measurement of suspended matter (smoke) and the concentration of acid sulphur gases, and three new stations—situated at Llanishen Reservoir, the Disinfecting Station, Curran Road, Grangetown and Moorland Road School, Splott—were similarly equipped, so that since 1st January, 1959, measurements of the amount of dirt settling from the air, the amount remaining in the air and the gaseous impurities which have corrosive effects have been made in these four areas of the City. Without these quantitative measurements it would not be possible to assess any improvement in atmospheric pollution resulting from the implementation of the Clean Air Act, 1956.

The deposit gauge is used to measure the rate at which atmospheric pollution is deposited, and, by inference, the rate at which it is emitted into the air. It consists essentially of a glass bowl approximately 12 inches in diameter and of accurately known area, which drains the rainfall into a bottle of about 10 litres capacity, and after it has been exposed on the site for one calendar month, the extent of pollution by deposited matter is determined by analysis of both the rain water and the insoluble matter collected. The full examination of the deposit includes the determination of the volume of liquid (rain) collected, its pH value, and its content of calcium, chloride and sulphate ions and of total dissolved matter ; the undissolved matter is weighed and analysed for mineral matter (ash), tar and other combustible matter. The results are expressed in tons per square mile per month.

One of the most deleterious products of the combustion of fuels is sulphur present in the form of its oxides, mainly sulphur dioxide. Sulphur gases are discharged into the atmosphere with the chimney gases wherever fuel in the form of coal, coke, fuel oil or unpurified gases is burnt, and it is these invisible gases which cause such damage to man, property and vegetation. Their " activity of attack " is measured by a standard procedure involving the use of lead peroxide, while the mean daily concentration of sulphur dioxide is determined by a volumetric method.

In the lead peroxide method a small porcelain cylinder or " candle " is coated with a lead peroxide paste which is allowed to dry. It is then exposed to the air for one month, after which it is analysed for sulphates since the sulphur dioxide taken up from the air is oxidised by the lead peroxide to sulphate. To protect the candle from rain and external damage during exposure it is housed in a louvered box. The results are expressed in empirical units, viz. : milligrams of sulphur trioxide per day per 100 square centimetres of standard lead peroxide exposed in the standard apparatus ; they thus provide comparative data only, but they afford a means of comparing the intensity of pollution of the air by sulphur gases at different places and times, and they give a useful indication of the relative effects of polluted atmosphere upon buildings, stonework, metals and paints.

The determination of the concentration of sulphur dioxide is combined with the daily measurement of the amount of suspended matter (smoke) in the air. The method used is to draw a measured volume of air through a white filter paper which collects the smoke and then through a bubbler containing a dilute neutral hydrogen peroxide solution which oxidises the sulphur dioxide to sulphuric acid. The acidity of the solution in the bubbler is determined each day by titration with standard alkali solution and this is used to calculate the equivalent sulphur dioxide concentration in the air.

The filter paper collects the suspended impurity in the air consisting of particles almost all of which are smaller than 20 microns (0·002 cm.) diameter which seldom, if ever settle as deposit and are often visible as ' haze.' This appears on the paper as a uniform circular grey stain, the intensity of which is measured photometrically using a standardised reflectometer, and from the reading obtained the concentration of smoke in the air is calculated. The results are expressed as milligrams of smoke per 100 cubic metres of air.

Every month the Department sends the results obtained to the Warren Spring Laboratory of the Department of Scientific and Industrial Research where they are collated and eventually published along with the results obtained by other Co-operating Bodies. They are therefore not only of local value and interest but they contribute to the national survey of atmospheric pollution undertaken by the D.S.I.R.

The following table summarises the results obtained during the year.

Summary of Atmospheric Pollution Results, 1959

Site	Llanishen Reservoir	City Hall	Curran Rd. Grange-town	Moorland Rd. Splott	
Total deposited matter ...	117	157	217	321	tons per square mile per year
Insoluble mineral matter (ash)	27	46	80	148	
Smoke concentration :					
Daily average	4	6	9	9	milligrams per 100 cubic metres
Highest daily value ...	23	29	58	55	
Sulphur Dioxide concentration :					
Daily average	2	3	3	4	parts per 100 million by volume
Highest daily value ...	10	12	15	14	
Sulphur Dioxide " activity " ...	0·58	0·87	0·92	1·55	milligrams SO_3 per 100 sq. cms. of lead peroxide per day
Rainfall	39·6	38·8	38·2	37·8	inches

It will be observed that the pollution increases in the order of the districts as set out in the table. Taking the amount of the deposit at Llanishen Reservoir as a basis, the amount deposited at the City Hall was approximately 1½ times as much, at Curran Road nearly twice as much and at Moorland Road it was nearly three times as much. The corrosive properties of the atmosphere increase in the same order.

The most significant of the Deposit Gauge results were the high figures obtained at the Moorland Road site during the last three months of the year. The average monthly deposit over the whole year was 26 tons per square mile, but in October it was 37 tons per square mile, in November 53 tons per square mile and in December over 70 tons per square mile.

The next table summarises the results obtained at the City Hall since 1939.

Atmospheric Pollution — City Hall Site, 1939-1959

Period	Total Deposited Matter tons per square mile per year	Sulphur Gases Average SO_3 in milligrams per 100 sq. cms. per day
1939–44	141	0·96
1944–49	129	0·95
1949–54	135	0·91
1955–59	162	0·87

These results show that while the figures for active sulphur gases as measured by the lead peroxide method show a continuous though slight decrease over the whole period, there has been some increase in the quantity of deposit in this neighbourhood during the past ten years.

MISCELLANEOUS SAMPLES

Sterilised Milk.—The Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949, require sterilised milk to be filtered or clarified, homogenised and heated in bottles to a temperature not below 212°F. for such a period as to ensure that it will satisfy a prescribed test designated the Turbidity Test. This test is based upon the fact that heating to not less than 212°F. for a period sufficient for effective sterilisation will also completely denature all the soluble protein of the milk. Samples that show the presence of soluble protein under the conditions of the test are insufficiently heated or contain raw milk.

During the year, 63 samples of sterilised milk were submitted under the Regulations and all of them satisfied the turbidity test.

Imported Foods.—Thirty-four samples of imported foodstuffs and a food preservative were examined for the Cardiff Port Health Authority. The foodstuffs comprised the following articles :—

Apples	1	Lard	2
Bacon	1	Meat, Canned	7
Eggs	1	Oranges	5
Grapes	1	Salmon, Canned ...	2
Fruit, Canned	13	Tomato paste	1

A sample of Italian canned peeled tomatoes was condemned because the contents were unsound, and two of three samples of canned strawberries in syrup from Holland were reported upon adversely on account of the presence of a small quantity of sand. The Chief Port Health Inspector (Mr. T. G. Newby) informed the importers accordingly.

The bacon had been contaminated with an alkaline chlorine bleaching solution but examination showed that only the rind had been affected ; there was no evidence that the solution had penetrated to the underlying meat, and it was recommended that the rind should be cut off in the area where the contamination had occurred. There was no evidence that the eggs had been contaminated with this bleach.

The two samples of lard were genuine and showed no evidence of the development of rancidity. One of them contained an added antioxidant, viz. : n-octyl gallate in the proportion of 70 parts per million. The container was labelled in accordance with the requirements of the Antioxidant in Food Regulations.

The rest of these samples also were satisfactory.

Fertilisers and Feeding Stuffs.—Thirteen samples of fertilisers and eight of feeding stuffs were submitted under the provisions of the Fertilisers and Feeding Stuffs Act. They consisted of the following articles :—

Fertilisers		**Feeding Stuffs**	
Bone Meal	3	Barley Meal	1
Compound Fertilisers ...	6	Pig Foods	2
Soluble Blood	1	Horse and Pony Cubes...	1
Sulphate of Amonia ...	1	Maize Meal	1
Sulphate of Potash ...	2	Poultry Mashes	3
TOTAL	13	TOTAL	8

The Act requires " Statutory Statements " of composition to be given with these articles, and Regulations made under the Act prescribe the limits of the variation allowed between these statements and the actual composition of the article.

With the exception of the sample of Soluble Blood, the fertilisers agreed, within the limits of variation allowed, with the particulars given in the statutory statements supplied with the articles. In the case of soluble blood its nitrogen content must be declared and the variation from the amount stated must not exceed 0·5 per cent. The amount of nitrogen guaranteed in the sample submitted was 13·5 per cent. and the amount present should have been within the range 13·0—14·0 per cent., whereas the actual nitrogen content proved to be only 12·5 per cent., i.e. it was 1·0 per cent. below the amount guaranteed and beyond the limit of variation permitted. Obviously, the deficiency was to the prejudice of the purchaser.

One of the samples of feeding stuffs showed a variation in one of the declared constituents outside the limit of variation allowed. This was a sample of Baconers Meal with a guarantee of 13·5% of protein. The variation allowed from this figure is 10%, i.e. the actual protein content should have been between 12·15 and 14·85 per cent. whereas it was 15·25 per cent. This variation, though in excess of the permitted maximum, was not to the prejudice of the purchaser, but the Ministry of Agriculture, Fisheries and Food require samples showing such irregularities to be classed as unsatisfactory because it is felt that the purchaser should be accurately informed.

The rest of the samples of feeding stuffs agreed, within the limits of variation allowed, with the particulars given in the statutory statements or warranties given in respect of them.

Public Health Department.—In addition to the samples examined in connection with atmospheric pollution, 107 samples were submitted by or through the Public Health Department or were examined in connection with laboratory investigations. They consisted of :—

Apples	21
Canned foods	13
Other foods	14
Waters (from Wells, Basements, etc.)	16
Swimming Bath Waters	31
Miscellaneous articles	12
TOTAL ...	107

The samples of apples were from part of a large consignment shipped from the Lebanon which had been found to contain excessive amounts of lead and arsenic, and they were submitted after they had been washed in a dilute hydrochloric acid solution containing a small amount of detergent to ensure thorough wetting of the skin, well hosed with clean water and then dried with a clean cloth. This procedure proved to be very effective for in every case only negligible amounts of lead and arsenic remained on the fruit.

Waterworks Department.—Five hundred and sixteen samples of water, one of scum and three of sand were examined for the Waterworks Department.

In addition to the samples taken regularly in connection with the treatment and distribution of the piped supply, the work included examination of samples from the Sôr Brook and River Usk taken in connection with the Llandegfedd reservoir scheme, from the Ely Wells which were put into service towards the end of the summer, and from disused mines and other potential sources of supply. Other samples were submitted to ascertain whether there was leakage from the mains and for the investigation of consumers' complaints.

Other Samples.—Sixteen samples from other sources consisted of Milk (4), Beer (4), Shredded Coconut, Ointment, Water (2) and Trade Effluents (4).

STAFF, ETC.

This review of the work carried out in the City Laboratory provides an opportunity for me to acknowledge the able assistance I have received throughout the year from my deputy, Dr. L. E. Coles, and the other members of my staff, both technical and clerical. Mrs. E. J. Keyser, B.Sc. (née Hall) left on the 15th May, 1959 after four years of good service, but we were unable to fill the vacancy until the 14th September, 1959 when Miss E. H. M. Davies, B.Sc. joined the staff.

At the present time there is increasing concern over the use of food additives and pesticides and the World Health Organisation has advocated the use of " permitted " lists of tested substances that may be safely used. *The Antioxident in Food Regulations* which came into force in the autumn of 1958 are in accordance with this recommendation and contain a list of five chemicals which may be used in limited quantity, either singly or in combination, to delay the onset of oxidative rancidity in fats and oils used for food or as ingredients of food. As no satisfactory means of analysis were available for such small amounts, the Association of Public Analysts set up a Committee to investigate methods for the detection, separation and determination of these specified substances and also other antioxidants which might conceivably be added to fatty foods. On my recommendation Dr. Coles was appointed a member of this Committee in December, 1958 and during the year 1959 he carried out (mainly in his own time) much useful work on this complicated problem. Dr. Coles has been largely responsible for one of the two reliable chromatographic methods now in general use for the detection of these substances. The quantitative aspect of this work is now receiving his attention.

In May a party of twelve senior students from the Training College of Domestic Arts for South Wales and Monmouthshire visited the laboratory, following which an appreciative letter of thanks was received from Miss C. Sutherland, Deputy Principal of the College, and in June I read a paper on " Codes of Practice as adjuncts to Legislation for the Protection of the Food Consumer " at the Annual Conference of the Institute of Weights and Measures Administration which provoked a useful discussion and has had a wide circulation.

XI—METEOROLOGICAL OBSERVATIONS

1959

The geographical position of the Meteorological Station, which is situated at Penylan, Cardiff, is Latitude 51° 30′N., Longitude 3° 10′W., and the height of the Station above mean sea level is 203 feet. Observations were made daily at 9.0 a.m. (G.M.T.) Summaries of the observations made during 1959 are given in the following tables :—

Barometic 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 ...	38	29·691	29·913	36·6	35·6	94
February ...	44	29·305	29·508	39·4	38·6	93
March ...	45	29·691	29·890	45·6	43·7	84
April ...	50	29·630	29·814	50·9	45·8	65
May ...	55	29·945	30·114	56·5	51·8	71
June ...	60	29·945	30·097	61·1	55·9	71
July ...	64	29·908	30·049	64·6	59·2	76
August ...	64	29·973	30·114	64·1	59·7	70
September ...	61	30·041	30·192	60·5	55·2	81
October ...	55	29·791	29·959	54·8	52·0	89
November ...	47	29·573	29·767	45·9	44·5	90
December ...	44	29·305	29·507	43·6	42·4	90
	52	29·733	29·910	52·0	48·7	80

Temperature

Month	Absolute Maximum °F.	Absolute Minimum °F.	Mean of Maximum °F.	Mean of Minimum °F.	Mean Temperature °F.	Difference from Average (70 years) °F.
January ...	50	24	42·6	32·7	37·7	—2·3
February ...	60	29	44·4	35·7	40·3	Nil.
March ...	58	32	51·2	40·6	45·9	+2·8
April ...	65	35	56·6	43·7	50·2	+3·1
May ...	75	38	64·5	47·5	56·0	+3·1
June ...	76	45	67·7	52·3	60·1	+2·2
July ...	82	49	71·5	55·3	63·4	+2·5
August ...	81	48	71·3	56·0	63·7	+2·9
September ...	81	38	70·0	51·2	60·7	+3·8
October ...	77	36	62·8	48·4	55·7	+4·9
November ...	61	30	51·2	41·6	46·4	+1·6
December ...	53	33	48·1	39·7	43·9	+2·6
	82	24	58·5	45·4	52·0	+2·3

Underground Temperature and Sunshine

Month	Underground Temperature (Mean)		Bright Sunshine	
	1 ft.	4 ft.	Total Duration	Difference from Average (51 years)
	°F.	°F.	Hours	Hours
January	39·9	45·4	80·1	+27·8
February	40·1	43·1	64·7	—10·5
March	45·7	45·7	76·5	—24·5
April	51·0	47·9	142·7	—26·3
May	57·1	52·3	209·1	+ 6·0
June	62·5	56·9	214·4	— 0·4
July	65·8	60·6	220·5	+22·9
August	66·2	62·3	197·3	+12·4
September ...	62·3	61·9	240·0	+97·1
October	56·9	59·1	139·5	+34·9
November ...	49·1	53·7	58·4	— 5·1
December ...	45·1	49·7	37·0	—10·6
	53·5	53·2	1,700·2*	+123·7

* = 37·9% of possible duration and a daily average of 4·93 hours.

Rainfall

Month	Total	Difference from Average (70 years)	Greatest Fall in 24 hours*		Number of Rain-days (0·01 inch or more)
			Amount	Day	
	Inches	Inches	Inches		
January ...	4·78	+0·70	0·79	21st	21
February ...	0·45	—2·49	0·27	7th	7
March ...	3·28	+0·45	0·76	29th	22
April ...	3·19	+0·62	0·54	11th	19
May ...	1·20	—1·54	0·25	9th	11
June ...	1·97	—0·59	0·40	29th	16
July ...	3·95	+0·87	1·00	16th	12
August ...	2·75	—1·33	1·44	10th	11
September ...	0·25	—3·19	0·23	21st	2
October ...	5·54	+0·93	1·46	26th	15
November ...	4·94	+0·87	1·16	25th	12
December ...	8·99	+4·58	0·97	19th	27
	41·29	—0·12	1·46 on 26th Oct.		175

* 24 hours ended 9.0 a.m. (G.M.T.) next day

PORT HEALTH SERVICE

REPORT FOR 1959 OF Mr. T. G. NEWBY, Chief Port Health Inspector

The Cardiff Port Health Authority was constituted by Provisional Order in 1882, becoming permanently constituted with extended limits of jurisdiction in 1894. The limits of the Port Health District extend from Sully Island to the Rhymney River, the Authority having jurisdiction over all waters, docks, harbours and vessels within the said limits.

The Port Health Authority is invested with all the functions, rights and liabilities of an Urban Sanitary Authority under certain sections of the Public Health Acts, so far as they are applicable to waters, vessels, persons, goods or things on, or landed from, any vessel within the said jurisdiction.

In accordance with the instructions of the Ministry of Health, Sections I, V, VI, VIII, XIV, XV and XVI of the report are not repeated in full.

SECTION I—STAFF

TABLE A

Change in Inspectorial Staff during the year 1959 :—

G. Lewis, Appointed Senior Assistant Port Health Inspector in place of W. J. Davies who retired 31st May, 1959.

SECTION II

AMOUNT OF SHIPPING ENTERING THE DISTRICT DURING THE YEAR

The number and tonnage of vessels entering the port (which includes Penarth) inspected by officers of the Port Health Authority during 1959 are set out below :—

TABLE B

Ships from	Number	Tonnage	Number Inspected by the		Number of Ships reported as having, or having had during the voyage, infectious disease on board
			Medical Officer of Health	Port Health Inspector	
Foreign Ports ...	339	667,054	73	273	3
Coastwise ...	2,038	1,143,500	—	705	1
TOTAL ...	2,377	1,810,554	73	976	4

The following table shows the number of vessels entering the port which were dealt with by the department each month during 1959 :—

Month	From Foreign Ports	Coastwise	Total
January	36	213	249
February ...	22	184	206
March	25	147	172
April	31	188	219
May	31	206	237
June	38	172	210
July	24	167	191
August	35	138	173
September ...	30	161	191
October	22	152	174
November ...	26	174	200
December ...	19	136	155
TOTAL ...	339	2,038	2,377

The nationalities of the several types of vessels entering the port which were dealt with by the department during 1959 are shown in the following table :—

Nationality	Steam	Motor	Sailing	Total
American ...	1	—	—	1
Belgian	—	1	—	1
British	572	1,108	60	1,740
Danish	3	20	—	23
Dutch	3	341	—	344
Finnish	5	2	—	7
French	1	3	—	4
German	—	69	—	69
Greek	2	4	—	6
Indian	2	1	—	3
Irish	—	18	—	18
Israeli	—	1	—	1
Italian	3	2	—	5
Lebanese ...	1	—	—	1
Liberian	12	1	—	13
Norwegian ...	3	42	—	45
Panamanian ...	4	3	—	7
Polish	2	2	—	4
Portuguese ...	1	7	—	8
Russian	7	5	—	12
Spanish	—	4	—	4
Swedish	26	34	—	60
Yugoslav ...	—	1	—	1
TOTAL ...	648	1,669	60	2,377

SECTION III

CHARACTER OF SHIPPING AND TRADE DURING THE YEAR

TABLE C

Passenger Traffic
- Number of passengers INWARDS 153
- Number of passengers OUTWARDS 127

Cargo Traffic
- IMPORTS—Iron ore, timber, pitwood, bones, grain, fruit and general.
- EXPORTS—Coal, coke, patent fuel, motor vehicles, heavy iron and steel goods, and general merchandise.

Principal Countries from which ships arrive.—Brazil, Canada, Finland, France, Germany, Holland, India, Italy, Norway, North and West Africa, Portugal, Russia, Spain, Sweden and the United States of America.

SECTION IV

INLAND BARGE TRAFFIC

Numbers and Tonnage using the District and places served by the Traffic

NONE

SECTION V

WATER SUPPLY

NO CHANGE

Reports and tests for contamination.—During the year 15 samples of drinking water from ships were submitted to the public Health Laboratory for bacteriological examination, the results being as follows :—

Satisfactory	...	...	13
Contaminated	...	...	2
TOTAL	...	...	15

Notices were served on the masters of the vessels having contaminated water on board and in each instance the tanks were emptied, cleansed and refilled at this port.

Also one sample of drinking water taken from the tap at the Low Water Pier Signal Station was submitted to the Public Health Laboratory for bacteriological examination and proved to be satisfactory.

SECTION VI

PUBLIC HEALTH (SHIPS) REGULATIONS, 1952-1958

NO CHANGE

Cleansing and Disinfestation.—During the year nine vessels were found to be slightly infested with cockroaches and two vessels with bed-bugs, and notices were served upon the masters requiring them to take all necessary steps to eradicate the insects, the beds infested with bed-bugs being subsequently destroyed. Eight seamen discovered to be suffering from scabies were treated at the Seamen's Baths belonging to the Cardiff Corporation.

SECTION VII

SMALLPOX

Name of Isolation Hospital to which Smallpox cases are sent from the district.

From Lansdowne Hospital to Penrhys Hospital, Pentre, Rhondda.

Arrangements for transport of such cases to that hospital by ambulance, giving the name of the Authority responsible for the ambulance and the vaccinal state of the ambulance crews.

Arrangements are made at the Lansdowne Hospital, the Cardiff City Council being responsible for the ambulance service.

Ambulance crews are vaccinated.

Names of Smallpox consultants available.

G. Emrys Harries, M.B., B.S., D.P.H.,
Medical Superintendent,
Lansdowne Hospital, Cardiff.

G. F. J. Thomas, M.R.C.S., L.R.C.P., D.P.H.,
Medical Superintendent,
St. David's Hospital, Cardiff.

Facilities for laboratory diagnosis of smallpox.

Facilities are provided by the Public Health Laboratory Service, Institute of Pathology, Cardiff Royal Infirmary.

SECTION VIII

VENEREAL DISEASE

NO CHANGE

The Treatment Centre for the diagnosis and treatment of venereal disease for seamen is at the Royal Hamadryad General and Seamen's Hospital near the docks. The numbers of cases of venereal disease dealt with at the treatment centre during the year were as follows :—

Persons attending at the Centre for the First Time					Total Attendances
Year	Syphilis	Gonorrhoea	Non-Venereal and Other Conditions	Total	
1959	48	194	215	457	2,232

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

SECTION IX

CASES OF NOTIFIABLE AND OTHER INFECTIOUS DISEASES ON SHIPS

The following table shows the number of cases of infectious disease that occurred on vessels which arrived at the port during the year :—

TABLE D

Category	Disease	Number of cases during the year		Number of Ships concerned
		Passengers	Crew	
Cases landed from ships from foreign ports	Lobar Pneumonia	—	1	1
	Malaria	—	1	1
Cases which have occurred on ships from foreign ports but have been disposed of before arrival	Malaria	—	1	1
Cases landed from other ships	Influenza	—	2	1

The cases referred to in the first and third categories of the foregoing table were dealt with as follows :—The case of Lobar Pneumonia was removed to the Royal Hamadryad General and Seamen's Hospital and the case of Malaria was removed to the Lansdowne Hospital, the two cases of Influenza were treated on board.

SECTION X

OBSERVATIONS ON THE OCCURRENCE OF MALARIA IN SHIPS

Two cases of malaria were reported to have occurred on vessels which arrived at the port during the year. One case occurred while the vessel was in port, and the other occurred on a vessel during the voyage but was disposed of before arrival.

SECTION XI

MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED FOR PLAGUE

No case, or suspected case, of plague was reported to have occurred on vessels which arrived at the port during the year. Vessels arriving from plague-infected or suspected areas are visited on arrival, or as soon afterwards as possible, by the Port Medical Officer and Port Health Inspector on rota duty. All vessels arriving from these areas are thoroughly searched for rat evidence by the Authority's rodent operative, trapping is carried out and any rats caught or found dead are submitted to the Public Health Laboratory for bacteriological examination.

MEASURES OF RAT DESTRUCTION ON VESSELS FROM PLAGUE "INFECTED" OR "SUSPECTED" AREAS

Total number of such vessels arriving	Number of such vessels fumigated by HCN	Number of rats killed	Number of such vessels on which trapping, poisoning, etc. were employed	Number of rats killed	Number of such vessels on which measures of rat destruction were not carried out
47	—	—	2	—	45

SECTION XII

MEASURES AGAINST RODENTS IN SHIPS FROM FOREIGN PORTS

Procedure for inspection of ships for rats.

Certificates of deratting or deratting exemption are checked for validity and enquiries made to members of crews as to whether rats have been seen or are known to be on board. Trapping is carried out on vessels where rat indications are found and, as a precautionary measure, instructions are given to place rat guards on mooring ropes. Masters of vessels producing invalid certificates, and on which vessels the rat population cannot be classed as negative, are instructed to have the vessels fumigated.

Arrangements for the bacteriological or pathological examination of rodents, with special reference to rodent plague, including the number of rodents sent for examination during the year.

A proportion of all rats trapped or found dead after fumigation is submitted to the Public Health Laboratory for examination for the detection of plague. No vessels were fumigated during the year, and no rats were caught by traps. One vessel was deratted by sodium fluoroacetate and, as a result, four rats were found dead. No rats were submitted for examination for the detection of plague.

Arrangements in the district for deratting ships, the methods used, and, if done by a commercial contractor, the name of the contractor.

Deratting of ships by hydrogen cyanide is carried out in strict accordance with the Hydrogen Cyanide (Fumigation of Ships) Regulations, 1951, which became operative on the 1st February, 1952. Whenever deratting of a vessel is arranged, the department is notified in advance by the contractor, and an officer of the Port Health Authority attends during the operation. Deratting is carried out by private contractors, the undermentioned operate in the district :—

The Associated Fumigators Limited, London.
The Fumigation Services Ltd., Barking, Essex.
Scientex Limited, Cardiff.
Messrs. David Thomas and Son, Ltd., Cardiff.
The Western Scaling and Painting Co., Cardiff.
Disinfestation Limited, Cardiff.

Progress in the rat-proofing of ships.

The incorporation of rat-proofing principles now observed in modern ship construction has had the desired effect of reducing rodent infestation to a minimum.

TABLE E

RODENTS DESTROYED DURING THE YEAR IN SHIPS FROM FOREIGN PORTS

Category	Number
Black rats	4
Brown rats	—
Species not known	—
Sent for examination	—
Infected with plague	—

TABLE F

DERATTING CERTIFICATES AND DERATTING EXEMPTION CERTIFICATES ISSUED DURING THE YEAR FOR SHIPS FROM FOREIGN PORTS

Number of Deratting Certificates issued					Number of Deratting Exemption Certificates issued	Total Certificates issued
After fumigation with		After trapping	After poisoning	Total		
HCN	Other fumigant (state method)					
1	2	3	4	5	6	7
—	—	—	—	—	116	116

The fees received by the Port Health Authority in respect of these certificates amounted to £321 2s. 0d.

The following table shows the numbers of deratting and deratting exemption certificates issued in each of the past ten years :—

Year	Deratting Certificates		Deratting Exemption Certificates		Total
	Number	Percentage	Number	Percentage	
1950	20	15	113	85	133
1951	15	11	123	89	138
1952	12	8	138	92	150
1953	3	3	116	97	119
1954	7	6	119	94	126
1955	5	4	119	96	124
1956	3	2	120	98	123
1957	2	2	135	98	137
1958	—	—	126	100	126
1959	—	—	116	100	116

The number of vessels deratted, the total number of dead rats found after deratting, and the average number of dead rats found per vessel during each of the years 1950–1959 are set out below :—

Year	Number of Vessels Deratted	Total Number of rats found dead after Deratting	Average Number of dead rats found per Vessel
1950	20	75	3·75
1951	15	174	11·60
1952	12	63	5·25
1953	3	7	2·33
1954	7	50	7·14
1955	5	46	9·20
1956	3	35	11·67
1957	4	10	2·50
1958	*2	3	1·50
1959	*1	4	4·00

* Deratting Certificates were not issued in respect of these vessels.

SECTION XIII

INSPECTION OF SHIPS FOR NUISANCES

TABLE G

INSPECTIONS AND NOTICES

Category of Nuisance and number of Inspections		Notices served		Result of serving Notices
		Statutory Notices	Other Notices	
Defects of Original Construction	976	—	—	—
Structural Defects through Wear and Tear ...		—	46	Ships on which defects were remedied 44
Dirt, Vermin and other Conditions prejudicial to health		—	23	Ships on which nuisances were remedied 23
TOTAL ...	976	—	69	67

The number of re-visits made to vessels in connection with health survey and the remedy of sanitary defects and nuisances totalled 3,727.

Defects and nuisances dealt with during 1959 were as follows :—

Defective ventilators	2
,, steam heaters, stoves, stove-pipes, etc.	12
,, sanitary conveniences, flushes, etc.	56
,, side-ports, deck-prisms, etc.	28
,, bulkhead	1
,, floors	15
,, food-lockers	3
,, baths, wash-hand basins and waste pipes ...	70
,, scuppers	25
Leaking deck	1
Verminous crew quarters	21
Dirty crew quarters	4
,, bathroom	1
,, fresh-water tanks	16
Weevil-infested storerooms, pantries and galley	5
Weevil-infested hold	1
TOTAL ...	261

THE CLEAN AIR ACT, 1956

SECTION 20 — APPLICATION TO VESSELS

The Dark Smoke (Permitted Periods) (Vessels) Regulations, 1958

Smoke Emissions.—During the year 89 vessels (British 69, Foreign 20) were observed emitting dark smoke and the masters or persons in charge were advised of the above Regulations and appropriate action was taken to reduce the emissions. The number of visits made to these vessels was one hundred and thirty-three. Seven visits were also made to premises on the docks and the persons in charge were informed of the emission of dark smoke and steps were taken to reduce the emissions.

SECTION XIV

PUBLIC HEALTH (SHELL-FISH) REGULATIONS, 1934 AND 1948

NO CHANGE

SECTION XV

MEDICAL EXAMINATIONS OF ALIENS

(Applicable only to Ports approved for the landing of Aliens)

List of Medical Inspectors of Aliens holding Warrants of Appointment.

NO CHANGE

List of other Staff engaged on this work.

T. G. Newby, Chief Port Health Inspector.
G. Lewis, Senior Assistant Port Health Inspector.
W. J. Davies, late Senior Assistant Port Health Inspector, retired 31st May, 1959.

Organisation of work.

NO CHANGE

Accommodation for medical inspection and examination.

NO CHANGE

Nature and amount of aliens traffic.

Passenger traffic at the port is relatively small and casual. Twenty-four ships arrived during the year with 40 alien passengers on board and 13 of these were subjected to detailed medical examination.

SECTION XVI

MISCELLANEOUS

NO CHANGE

The Dangerous Drugs Regulations, 1953, No. 499, Section 13 (2) (a).—One certificate was issued authorising the master of a foreign vessel to purchase dangerous drugs.

Certificates of Health.—During the year no certificates in respect of the health of the port were issued to Shipping Companies.

THE PREVENTION OF DAMAGE BY PESTS (APPLICATION TO SHIPPING) ORDER, 1951

The Prevention of Damage by Pests (Application to Shipping) Order, 1951, made under Section 23 of the Prevention of Damage by Pests Act, 1949, applying the provisions of the Act, with appropriate modifications to shipping, has been strictly enforced.

Under the provisions of the above Order, periodical inspection of coastal vessels, etc., is carried out by officers of the department, and 10 Rodent Control Certificates were issued to masters of vessels during the year. The fees received by the Port Health Authority in respect of these certificates amounted to £11 0s. 0d.

Diseases of Animals Acts, etc.—Forty-seven dogs and 39 cats were brought to the port on vessels. All the vessels were visited regularly during their stay in port to ensure that the requirements were observed.

FOOD INSPECTION

The principal food imports during the year were from Australia and New Zealand, and consisted of beef, mutton, lamb, offal, butter and cheese. From Canada and the United States of America, wheat, flour, cereals, lard, canned fish and fruit were imported, and from European countries, fresh fruits, canned meats and vegetables. In addition to these direct imports, large quantities of foodstuffs, transhipped at other ports in the British Isles arrived by coastwise traffic.

Examination of imported food is carried out by the food inspectors in the dockside warehouses and occasionally on board ship. 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 disposed of under the supervision of the food inspectors. When necessary, samples of foodstuffs are submitted for bacteriological examination.

Examination of imported meat is carried out in the transit sheds on the dock sides and in the local cold stores. The glandular examination of mutton and lamb carcases weighing over 42 lb. was continued but no 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	*Quantity*	*Description*	*Quantity*
Bacon (Bales)	3,220	Maize (Tons)	400
Barley (Tons)	788	Margarine (Cases)	12
Beer, Canned (Cartons)	350	Marrow Fat (Bags)	217
Biscuits (Cartons)	183	Meat, Canned (Cartons)	106,052
Butter (Cartons)	393,921	Meat, Canned (Cases)	7,549
Butter (Boxes)	100,123	Milk, Canned (Cartons)	8,065
Butter (Casks)	13	Milk, Canned (Boxes)	7,550
Casein (Bags)	160	Milk Powder (Bags)	6,618
Cauliflower, Pickled (Casks)	57	Milk Powder (Cases)	224
Cheese (Cartons)	13,070	Millet Seed (Bags)	400
Cheese (Crates)	32,460	Mushrooms (Cartons)	40
Chicken, Canned (Cartons)	1,162	Mussels (Cartons)	5
Cherry Brandy (Cartons)	200	Olive Oil (Drums)	15
Cockles (Tins)	20	Olive Oil, Canned (Cases)	176
Cocoa Butter (Bags)	150	Peppers, Canned (Cartons)	31
Coffee (Bags)	107	Pimento (Bags)	20
Confectionery (Cartons)	164	Potatoes (Bags)	298,444
Cooked Ham (Boxes)	250	Potatoes (Baskets)	124
Cornflour (Cases)	17	Potatoes (Tons)	339
Cream, Canned (Cartons)	1,550	Rabbits (Crates)	500
Edible Fat (Cartons)	125	Rice (Bags)	1,480
Farina (Bags)	1,567	Risotto (Cartons)	90
Farinoca (Bags)	50	Rusks (Cartons)	51,425
Filberts (Bags)	1,800	Salami (Cartons)	179
Fish, Canned (Cases)	2,443	Sauerkraut, Canned (Cartons)	80
Fish, Canned (Cartons)	22,776	Sausage, Canned (Cartons)	751
Flour (Bags)	98,607	Shrimps, Canned (Cases)	62
Fruit, Canned (Cases)	1,500	Soup, Canned (Cases)	5
Fruit, Canned (Cartons)	69,187	Spaghetti (Cartons)	115
Fruit, Dried (Cartons)	645	Sweets (Cartons)	33
Fruit, Fresh (Barrels)	8,903	Tomato Juice, Canned (Cartons)	1,450
Fruit, Fresh (Cases)	346,664	Tomato Paste, Canned (Cartons)	560
Fruit, Fresh (Cartons)	3,865	Tomato Puree, Canned (Cartons)	500
Fruit, Fresh (Trays)	39,253	Tomato Sauce, Canned (Cartons)	280
Fruit Juice (Barrels)	99	Vegetables, Canned (Cartons)	66,910
Fruit Juice, Canned (Cartons)	1,150	Vegetables, Canned (Cases)	41,055
Fruit Peel, Dried (Cartons)	200	Vegetables, Dried (Bags)	7,634
Fruit Pulp (Casks)	58	Vegetables, Fresh (Bags)	7,671
Fruit Pulp, Canned (Cases)	3,246	Vegetables, Fresh (Cases)	21,671
Garlic (Crates)	44	Vegetables, Pickled (Casks)	126
Gelatine (Cases)	20	Walnuts (Bags)	4,150
Jam, Canned (Cases)	4	Walnuts, Pickled (Casks)	8
Lard (Cases)	32,520	Wheat (Tons)	87,588
Lard (Cartons)	69,664	Wine (Cases)	319
Macaroni (Cases)	7,380	Wine (Pipes)	2
Macaroni (Cartons)	1,084		

Oversea Meat.—In addition to the foodstuffs already referred to, fifteen vessels arrived with the following quantities of oversea meat :—

Description	*Quantity*	*Description*	*Quantity*
Carcases of lamb	210,219	Beef kidneys (Cartons)	95
Carcases of mutton	8,521	Beef tongues (Bags)	21
Carcases of beef	790	Beef tails (Cartons)	18
Hinds of beef (Tons)	39	Hearts and livers (Bags)	76
Boneless meat (Tons)	10	Offal (Cartons)	159
Lamb livers (Cartons)	50	Sundries (Bags)	2,820
Sheep kidneys (Cartons)	10	Sundries (Cartons)	1,303

The quantities of various kinds of foodstuffs withheld from human consumption during the year are shown below :—

	Tons	cwts.	lb.
Biscuits	—	—	70¼
Butter, Frozen	—	—	57
Cereals	—	—	81
Chicken, Frozen	—	—	51¾
Cockles	—	—	49
Cream, Canned	—	—	1¼
Fish, Canned	—	—	33¼
Flour	1	0	94
Fruit, Canned	—	13	93
Fruit, Dried	—	—	43
Fruit, Fresh	1	16	58
Fruit, Pulp Canned	—	9	59¾
Hams, Frozen	—	—	89
Hearts, Frozen	—	5	13
Kidneys, Frozen	—	—	23
Lard	—	1	107
Livers, Frozen	—	19	104
Meat, Canned	—	1	38¾
Meat, Frozen	7	8	60
Milk, Canned	—	—	46¼
Oats	—	—	4¼
Potatoes	1	18	0
Rice	—	1	86
Rusks	—	—	3
Sauce, Bottled	—	—	2
Stew, Canned	—	—	7
Tomato Juice, Canned	—	1	52
Tomato Paste, Canned	—	—	100
Tomato Puree, Canned	—	—	92¾
Vegetables, Canned	4	3	77½
Vegetables, Dried	—	1	30
Vegetables, Fresh	—	5	45
Wheat	6	4	67
Yeast	—	—	16
TOTAL	26	0	74¾

The Public Health (Imported Food) Regulations, 1937-1948, the Public Health (Preservatives, etc., in Food) Regulations, 1925-1958, and the Food and Drugs Act, 1938 (Section 39).—Thirty-six samples of imported food were submitted to the Public Analyst for analysis. The nature, country of origin, and the number of samples are shown in the following table :—

Description	Country of Origin	Number of Samples
Apples	Nova Scotia	1
Bacon	N. Ireland	1
Cherries, Canned	Italy	1
Eggs	N. Ireland	1
Fruit Salad, Canned	Australia	1
Grapes	Spain	1
Ham and Tongue, Canned	Holland	1
Lard	France	2
Lard	Holland	1
Minced Beef Loaf, Canned	Australia	2
Oranges	Spain	2
Oranges	Palestine	3
Peaches, Canned	Australia	3
Pears, Canned	Italy	1
Pork Luncheon Meat, Canned	Holland	4
Salmon, Canned	Canada	2
Sausage Preservative	Canada	1
Strawberries, Canned	Holland	2
Strawberries, Canned	Italy	1
Tomatoes, Canned	Italy	4
Tomato Paste, Canned	Italy	1

One sample of canned tomatoes from Italy was found to be unsound and 7,104 tin from this consignment were destroyed under the supervision of H.M. Customs and officers of the department. The two samples of canned strawberries from Holland were reported to contain a small quantity of sand and the Importers were informed accordingly. Each of the remaining samples was reported to be genuine or to contain preservatives within the limits prescribed in the Public Health (Preservatives, etc., in Food) Regulations.

Bacteriological Examinations.—Six samples of imported food were submitted to the Public Health Laboratory Service for bacteriological examination as follows :—

Description	Country of Origin	Number of Samples
Frozen Kidneys	New Zealand	3
Frozen Pig Liver ...	New Zealand	1
Tomatoes, Canned ...	Italy	2

The results of the examination showed each of the samples to be genuine.

The Public Health (Imported Milk) Regulations, 1926. No fresh milk was imported during the year.

CITY OF CARDIFF EDUCATION COMMITTEE

SCHOOL HEALTH SERVICE

1959

I—STAFF

Principal School Medical Officer

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

Deputy Principal School Medical Officer

Cecil W. Anderson, M.B., CH.B., D.P.H., T.D.D.

Senior School Medical Officers

Nancy K. Gibbs, M.R.C.S., L.R.C.P., D.P.H.
Arlwyn H. Griffith, M.B., B.S., D.P.H.

School Medical Officers

Jean W. Smellie, M.B., CH.B., D.P.H.
G. Edward Phillips, M.R.C.S., L.R.C.P., D.P.H.
N. Frank, M.B., CH.B., B.HY., D.T.M.
Anne Guy, B.SC., M.B., B.CH., D.P.H., D.C.H.
Enid Curran, M.B., B.CH., D.C.H.
Douglas Harrett, M.B., B.CH., D.P.H.
Geoffrey Ireland, M.B., B.CH., D.P.H.

School Medical Officers (Part-time)

Joyce Grant, M.R.C.S., L.R.C.P.
Edith M. Davies, M.B., B.CH., D.P.H.
Olwen J. Cummin, M.B., CH.B.
Donald C. Dymond, B.SC., M.B., B.CH., D. (Obst.), R.C.O.G.
Peter Lavis, M.B., CH.B.
Donald J. W. Anderson, M.B., B.CH.
Frances Marie Richards, B.SC., M.B., B.CH., D.R.C.O.G., D.C.H.
(Joint appointment with Welsh National School of Medicine)

N.B.—All school medical officers undertake duties for the Local Health Authority and the Education Committee. The time devoted by them to the School Health Service is equivalent to six and a half whole-time medical officers.

Visiting Specialist Medical Officers

(Under arrangements made with the Welsh Regional Hospital Board)

Rupert Parry, M.D., B.S., F.R.C.S., Ophthalmic Surgeon
Hector A. Thomas, F.R.C.S., Aural Surgeon
Professor A. G. Watkins, M.D., F.R.C.P., Professor of Child Health

School Dental Service

Principal School Dental Officer—H. V. Newcombe, L.D.S.

School Dental Officers

D. W. Elliot, L.D.S.
C. N. Howitt, L.D.S.
J. W. Lewis, L.D.S.
J. McFarlane, L.D.S., L.R.C.P. & S., F.D.S. (HON.) (Resigned Sept. 1959)
D. J. Andrews, L.D.S.
A. Jeffries (half-time) (Deceased March 1959)
T. Bassett-James, L.D.S. (part-time)
Miss E. M. Merrifield (half-time)
D. J. Harries, M.A., B.D.S. (part-time)
Mrs. J. Bassett-James, B.D.S. (part-time).

(All dental officers also undertake services for expectant and nursing mothers and young children. The time devoted to the School Dental Service is equivalent to 7·3 whole-time dental officers).

Orthodontist

Anthony S. Lewis, B.D.S.

Nine Dental Clerk/Attendants

(Time devoted to School Dental Service is equivalent to 7·0 dental clerk/attendants)

Nursing Staff

Superintendent Health Visitor—Miss N. M. Osmond, S.R.N., S.C.M., H.V.CERT.
(One-third time devoted to School Health Service)

Deputy Superintendent Health Visitor.—Miss M. J. Price, S.R.N., S.C.M., H.V.CERT.
(One-sixth time devoted to School Health Service)

Fifty-two Health Visitors.—Time devoted to School Nursing duties equivalent to 12½ nurses.

Two State Registered Nurses.—(One for duty at Spastic Unit)

Four Clinic Helpers.—Time devoted to School Health Service is equivalent to 2 clinic helpers.

Speech Therapy

Head Speech Therapist.—Miss B. M. R. Morris, L.C.S.T.

Speech Therapists.—Mrs. Margaret I. Grenville (part-time) (resigned April 1959), Mrs. T. G. Meade (part-time) (resigned September 1959), Mrs C. Jennifer Matharu, Mrs. M. Clark, Miss E. Lloyd, Mrs. M. Louise Clarke (commenced October 1959).

Orthoptic Clinic

Orthoptists.—Miss Joyce Pinnick, Central Clinic.
Miss Jennifer Burston (resigned September 1959).
(85% of time of Clinic is devoted to schoolchildren).

Physiotherapist.—Mrs. E. L. Roberts, M.C.S.P.

Child Guidance Clinic

Psychiatrist.—Dr. Gaynor Lacey, M.B., B.S., D.P.M.

Psychologist.—Robert Robertson, M.A., B.ED.

Psychiatric Social Worker.—Mrs. M. R. Thomas, B.A.

Secretary.—Miss C. J. Sergeant.

Peripatetic Teacher of the Deaf

Mrs. M. E. Aanensen, B.A.

Administration

Principal Administrative Assistant.—A. E. Brain (Part-time).

Administrative Officer.—P. H. Williams, F.C.C.S. (Part-time)

Administrative Assistants.—A. K. Jenkins (Full-time).
Ronald Liddiard, D.M.A. (Part-time).

Clerical Assistants.—14.

II—MEDICAL INSPECTION

The average numbers of schoolchildren and the average attendance for the year ended March, 1959, were as follows :—

	Average Number on Registers	Average Attendance
Grammar Schools	5,605	5,254
Secondary Modern Schools	9,378	8,400
Other Secondary Schools	457	425
Primary and All Age Schools ...	27,314	24,297
Special Schools	329	276
Severn Road Nursery School ...	100	83
TOTAL	43,183	38,735

The numbers of schoolchildren inspected at periodic medical inspections at schools during 1959, were as follows :—

Age Group (by year of birth)	Boys	Girls	Total
1955 and later	201	198	399
1954	21	14	35
1953	1,722	1,609	3,331
1952	950	898	1,848
1951	28	35	63
1950	11	10	21
1949	26	12	38
1948	294	151	445
1947	58	30	88
1946	19	10	29
1945	1,111	1,019	2,130
1944 and earlier	650	480	1,130
Total	5,091	4,466	9,557

The number of schoolchildren specially inspected and the number of re-inspections undertaken were as follows :—

		Boys	Girls	Total
Special Inspections	At School	136	58	194
	At School Clinic	1,033	1,059	2,092
	Total	1,169	1,117	2,286
Re-inspections	At School	191	162	353
	At School Clinic	883	774	1,657
	Total	1,074	936	2,010

III—FINDINGS OF MEDICAL INSPECTION

The following table shows the number of individual children found at periodic medical inspection to require treatment (excluding defects of nutrition, uncleanliness and dental disease) :—

Age Groups Inspected (by year of birth)	Found to require treatment for		Total Individual Pupils	Percentage
	Defective Vision	Other Conditions		
1955 and later	7	17	24	6·0
1954	1	3	4	11·4
1953	169	524	652	19·6
1952	86	294	365	19·8
1951	2	9	11	17·5
1950	2	—	2	9·5
1949	5	1	3	7·9
1948	50	40	81	18·2
1947	10	12	22	25·0
1946	1	—	1	3·5
1945	175	221	377	17·7
1944 and earlier	60	64	121	10·7
Total	568	1,185	1,663	17·4

The percentage of children found to require treatment showed a decrease in many age-groups. Defective vision, squint and other eye defects formed a third of the total defects requiring treatment.

The defects found by the medical inspection of 9,557 children at the periodic medical inspections were as follows :—

Code No.	Disease or Defect	PERIODIC INSPECTIONS					
		Entrants		Leavers		Total —All Groups	
		Requiring Treatment	Requiring Observation	Requiring Treatment	Requiring Observation	Requiring Treatment	Requiring Observation
4	Skin	45	175	46	65	96	259
5	Eyes :—						
	Vision	234	381	257	182	568	626
	Squint	36	97	8	18	50	131
	Other	10	14	1	5	12	24
6	Ears :—						
	Hearing	61	72	13	12	84	86
	Otitis Media	41	63	13	15	59	82
	Other	5	33	1	—	7	35
7	Nose or Throat	171	225	33	29	219	267
8	Speech	45	66	2	12	52	135
9	Lymphatic Glands ...	25	184	1	6	27	193
10	Heart & Circulation ...	19	96	6	18	26	133
11	Lungs	33	108	4	22	38	172
12	Developmental :—						
	Hernia	5	47	1	—	6	48
	Other	8	75	16	22	25	107
13	Orthopaedic :—						
	Posture	23	77	22	24	48	116
	Flat Foot	124	187	52	39	181	252
	Other	84	191	70	42	169	270
14	Nervous System :—						
	Epilepsy	—	18	2	4	2	29
	Other	48	47	2	10	52	59
15	Psychological :—						
	Development	4	28	2	11	7	42
	Stability	5	67	2	5	7	76
16	Abdomen	3	10	—	2	3	12
17	Other Defects & Diseases	40	28	13	7	58	49

The defects found by the medical inspection of 4,296 children at special inspections and re-inspections were as follows :—

Defect Code No. (1)	Defect or Disease (2)	Special Inspections	
		Requiring Treatment (3)	Requiring Observation (4)
4	Skin :—		
	Ringworm—Scalp ...	—	—
	Body ...	—	—
	Scabies	—	—
	Impetigo	—	—
	Other	827	58
5	Eyes :—		
	(*a*) Vision	37	24
	(*b*) Sqiunt	—	3
	(*c*) Other	15	22
6	Ears :—		
	(*a*) Hearing	17	9
	(*b*) Otitis Media ...	9	2
	(*c*) Other	18	14
7	Nose and Throat ...	129	202
8	Speech	14	9
9	Lymphatic Glands ...	3	15
10	Heart	7	23
11	Lungs	17	63
12	Developmental :—		
	(*a*) Hernia	4	1
	(*b*) Other	7	20
13	Orthopaedic :—		
	(*a*) Posture	16	17
	(*b*) Feet	65	57
	(*c*) Other	19	28
14	Nervous System :—		
	(*a*) Epilepsy	—	5
	(*b*) Other	2	8
15	Psychological :—		
	(*a*) Development ...	1	10
	(*b*) Stability	12	3
16	Abdomen	1	12
17	Other	185	268

Physical Condition.—The following is a classification of the general condition of children medically inspected :—

AGE GROUPS (By year of birth)	Number of Children Inspected	Satisfactory		Unsatisfactory	
		Number	Per-centage	Number	Per-centage
1955 and later	399	350	87·7	49	12·3
1954	35	35	100·0	—	—
1953	3,331	3,266	98·0	65	2·0
1952	1,848	1,822	98·5	26	1·5
1951	63	63	100·0	—	—
1950	21	21	100·0	—	—
1949	38	38	100·0	—	—
1948	445	444	99·8	1	0·2
1947	88	88	100·0	—	—
1946	29	29	100·0	—	—
1945	2,130	2,120	99·5	10	0·5
1944 and earlier	1,130	1,120	99·3	8	0·7
Total	9,557	9,398	98·3	159	1·7

IV—"FOLLOWING-UP" AND THE WORK OF HEALTH VISITORS

A summary of the work of the health visitors in connection with home visiting is given in the following table :—

Visits for	Total
Defects of Vision	686
Defects of teeth	108
Defects of ear, nose and throat ...	206
Other defects and diseases ...	1,060
Scabies	36
Nursery School Pupils	558
TOTAL ...	2,654

The following is a summary of work done by the visitors in connection with uncleanliness during the year :—

Number of :—

Examinations of children for uncleanliness	102,719
Children found with vermin and/or nits	3,236
Children found to be free from vermin and nits on re-examination	1,542
Children for whom cleansing notices issued	2,916
Children for whom cleansing orders issued	165

Health Visitors paid 652 routine and 370 special visits to schools to inspect and follow up children reported to require treatment.

Health Visitors Survey of the Intermediate Group.—In addition to periodic medical inspection, pupils in primary schools are inspected at the age of eight years by Health Visitors. The number of pupils inspected and re-inspected by Nurses during the year was 4,076 (2,090 boys and 1,986 girls), 493 of these children were found to have defects requiring treatment of which 310 were vision, and 207 other defects, 101 pupils were reported to be infested and 57 were bodily unclean.

Silver Jubilee Camp School, Porthcawl.—Each child is inspected by a Health Visitor before travelling to the Camp, mainly to reduce the risk of infection and the spread of verminous conditions, but also to prevent any child attending who may have become unfit since selection. 52 visits were paid to schools during the year to undertake such inspections.

V—TREATMENT

Particulars of the treatment of minor ailments, defective vision and squint, external eye diseases, defects of ear, nose and throat, of orthopaedic and postural defects, dental defects, etc., are given in the following tables :—

(a) Minor Ailments

DISEASE OR DEFECT	Number of Defects treated or under treatment during the year under the Authority's Scheme	Total number of attendances at Clinics
SKIN :—		
Ringworm—Scalp	1	
Body	10	
Scabies	64	
Impetigo	90	
Other Skin Diseases	943	
MINOR EYE DEFECTS	21	
MINOR EAR DEFECTS	142	
MISCELLANEOUS (*e.g.*, minor injuries, bruises, sores, chilblains, etc.)	632	
TOTAL	1,903	—

(b) Defective Vision and Squint

Particulars of the work of the Ophthalmic Clinics during the year are given below :—

Number of children examined	5,867
Errors of Refraction	4,019
† Spectacles prescribed	3,010
Other defects or diseases treated ...	254
Referred to Orthoptic Clinic	443
Attendances at Clinics	10,927

† *There was no change in the prescription in* 578 *refractions.*

Spectacles are supplied through the Supplementary Ophthalmic Service of the National Health Service. The total number of spectacles provided by this Service for school children during the year was 2,273 which is a further reduction as compared with the previous year, which is no doubt due to parents purchasing other types of spectacles at their own cost.

Orthoptic Clinic

The Orthoptic Report for 1959 is for the Central Clinic only. The number of new patients referred is approximately the same as in previous years, as are the discharges.

Fewer operations were performed in 1959 (i.e. 76) and the waiting list at year's end was 32, less children being put on during the year than usual.

The number of appointments not kept during the year was 17% or an average of 3 per day out of 17 appointments given.

As almost all Cardiff school children having squints or allied conditions are treated at the Public Health Orthoptic Clinics, an average adjusted birthrate of 4,228 children over the 12 years 1947 to 1958 inclusive (and 5% deducted as not clinic attenders) shows the average number of new patients referred annually as 245. The percentage of children who attend is 5·8%. Allowing for those who are referred in need of treatment but do not attend, approximately 1/5th of the total, it appears 7·5% of school children in Cardiff have squints.

During the past 11 years 1,050 patients have been discharged from the Orthoptic Clinic in the three categories " Binocular Single Vision," " Cosmetically Straight " and " Improved." Of these 573 have been discharged with Orthoptic treatment only and 472 have needed operation as well.

New patients accepted for treatment		194
Patients discharged—		
With Single Binocular vision (42 without operation)		47
Cosmetically straight (3 without operation)		17
Improved (10 without operation)		23
		87
No co-operation		6
Refused treatment (occlusion, operation, etc.) ...		5
Failed to attend for treatment		41
Left Cardiff		6
Intractable Amblyopia		10
Referred to Cardiff Royal Infirmary		2
		70
TOTAL DISCHARGED		157

Patients under treatment at end of 1959 :—

Regular weekly or bi-weekly treatment	23
Having monthly occlusion	45
Under Supervision awaiting operation	32
Reporting two to six monthly until old enough for treatment	25
Under supervision between courses of treatment ...	478
TOTAL	603
Operations performed (*Llandough Hospital*—36) (*Children's E.N.T. Hospital*—40)	76
Number of appointments not kept	683
Number of Attendances	3,410

(*c*) *Defects of Ear, Nose and Throat*

	Ear	Nose and Throat	
		Tonsils and Adenoids	Other Defects
Received Operative Treatment ...	28	755	40
Received Treatment in Hospital ...	72	—	
Received other forms of treatment	286	203	
Total number of children examined	596	1,575	
Attendances at Clinics	1,058	2,664	

Waiting list for Operative Treatment at 31*st December*, 1959

Tonsils and Adenoids—Urgent	457	
Ordinary	21	
	—	478
Other ear, nose and throat conditions		16
TOTAL ...		494

Hearing aids were provided for 6 children during 1959 and 39 children previously equipped, were also using aids.

(*d*) *Orthopaedic and Postural Defects*

Children requiring treatment for Orthopaedic and postural defects are referred to the Orthopaedic Clinic which is now maintained by the Cardiff Hospital Management Committee at specially adapted premises in an annexe to the Children's E.N.T. Hospital at Ely.

Details of the treatment provided were included in previous reports when this Clinic was part of the administration of the School Health Service. It can be reported, however, that 1,177 pupils were examined and treated at the Clinic during the year.

(e) *Heart Disease and Rheumatism*

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

Cases remaining under supervision at beginning of year ...	154
New cases attending	26
Cases discharged from supervision on leaving school ...	29
Other cases who ceased to be supervised :—	
Left Cardiff	—
Died	—
Discharged not suffering from Rheumatism	16
Transferred to Private Practitioners and to other clinics	6
Ceased to attend	13
Cases remaining under supervision at end of the year ...	116
Total attendances at routine Rheumatism Clinics ...	214
Routine Clinic Sessions	17
Average attendance at routine clinic sessions	12·6
Average number of new cases at routine clinic sessions ...	0·76

The following table shows the condition of the heart in the 29 cases that ceased to remain under supervision on leaving school :—

	On Ascertainment	*On Discharge*
Normal	4	14
Minor Heart Manifestations	17	6
Major Heart Manifestations	8	9

The types of heart diseases present in the 9 cases having major heart manifestations on discharge were as follows :—

Aortic	3
Mitral Incompetence	1
Congenital :—	
A.S.D.	3
Septal Defect	1
Aortic Lesion	1

One child (A.S.D.) had an operation for closure of ostium secundum defect. A satisfactory result was reported.

Hospital treatment of this disease is provided through arrangements with the United Cardiff Hospitals, and a close link is maintained with the School Health Service. Professor A. G. Watkins of the Department of Child Health holds a Rheumatism Clinic for school-children at the Cardiff Royal Infirmary.

(f) *Radiography*

The children referred for radiography were X-rayed at the Orthopaedic Clinic which is now administered by the Cardiff Hospital Management Committee.

(g) *Special Clinic for girls at Puberty*

Dr. E. M. Davies has undertaken special clinics for girls sent to her from schools and clinics for advice and treatment on complaints of special significance at this age period.

(*h*) *Cleansing*

(*a*) *Cleansing of children with unclean heads.*—It will be noted that the report of the work of the Health Visitors refers to the cleansing inspections which are undertaken each term in schools. Continual infestation of certain pupils is common in a number of families and it is also noted that certain schools show a considerably higher incidence than others. Every effort is made to ensure that children whose heads are unclean are cleansed at home by the parents. A small proportion for various reasons remain unclean in spite of advice given to parents and such children are sent for cleansing at the Treatment Centre. If this opportunity is not taken by the parents the Authority may proceed against them in the Court under the provisions of the Education Act of 1944. During the year 165 children attended the school clinic or centre for such cleansing, but it was not necessary to seek any further powers to secure the cleansing of any child.

(*b*) *Treatment of Scabies.*—Whilst scabies is no longer a problem of the same dimensions as was encountered during the war years, measures are necessary to secure effective treatment of the smaller number of persons who become infected. The Department's Treatment Centre, which is staffed as required by clinic helpers, is available for the treatment of adults and children.

A summary of the work of the centre during the year is as follows :—

Numbers of cases treated :—	
Vermin and nits in head	161
Impetigo of head, face and hands ...	36
Cleansing Baths only	165
Scabies Baths	250
	612
Attendances for Scabies :—	
Schoolchildren	119
Children under school age ...	65
Adults	66
TOTAL ...	250

VI—SCHOOL DENTAL SERVICE

Report for the year 1959 of

H. V. NEWCOMBE, L.D.S., R.C.S., Principal School Dental Officer

Dental Officer Staff.—Notable among the events of the year under review were the number of staff changes which occurred in contrast to the preceding year, when there were none to record. Early in the second quarter of the year one dental officer relinquished his post (part-time) on the occasion of his marriage, but subsequently applied to return to duty and was re-appointed later in the year. About the same time we were also fortunate in obtaining the services of his wife—also a dental surgeon—in a part-time capacity, each working seven and four sessions per week respectively.

In the second quarter, too, a member of the staff engaged on a half-time basis, offered to extend his duties to full-time and this was accepted. Unfortunately the position was more than offset a few months later when another full-time member retired after having served in the department for some six years. However, I am pleased to report that we were able to fill the vacancy soon afterwards when a permanent full-time officer was appointed.

Despite these " upsets," the position at the end of the year showed, on balance, an improvement of almost the equivalent of one full-time officer over that obtaining a year earlier, as shown in the table below :—

	As at 31*st December*, 1959	*As at* 31*st December*, 1958
Full-time permanent officers ...	6	4
Full-time temporary officers ...	1	2
Half-time temporary officers ...	1	2
Part-time temporary officers ...	3	2
Actual strength in terms of full-time officers ...	8·6/11ths	7·7/11ths

On the latest available figures for the school population of Cardiff, the number of pupils per full-time dental officer works out at over 5,000, which is considerably in excess of the number, 3,000, which the Ministry say a dental officer working full-time can reasonably be expected to cope. The present authorised establishment is 9 full-time officers—or equivalent—and has remained at this level since 1951. Loss of working time through sickness was again a disturbing feature, but was substantially lower than last year when approximately 31 weeks were lost on this account.

School Inspection.—Of the total number of children examined during the year—as recorded under the heading " Periodic Inspection "—it was estimated that 62% required dental treatment compared with 67% in the previous one.

The total number of " Specials " attending the school dental clinics for examination fell by 10·7%. This may be regarded as an encouraging sign, but it should be borne in mind that a contributory factor to this improvement was the increasing number of children known to be receiving their treatment privately. This same factor could also account, to some extent, for the decline of 2·4% in the attendance rate.

Treatment.—The total volume of treatment performed by dental officers increased by 4·5% over that of last year, whilst among the various items of treatment making up this total, that relating to the number of teeth filled, showed a significant rise of 13·3%. Against this, the total number of teeth extracted remained at about the same level as before ; thus the slow trend towards parity between teeth filled and teeth extracted continued, the ratio being now 1 : 1·15.

A breakdown of the total extraction figures shows a sharp rise of 35·6% in the number of teeth removed for orthodontic purposes. The judicious extraction of certain teeth at the appropriate time does, in many instances, do much to reduce the incidence of irregularities arising later on and, as a preventive measure, has much to commend it.

In the section devoted to orthodontic treatment, statistical changes were even more marked. The number of cases commenced and the co-related number of appliances fitted, for example, fell by as much as 50·6%, and 43·3% respectively. This may have been due partly in response to the view expressed in my report of last year when I emphasized the need for dental officers to preserve a proper balance between orthodontics and other more vital forms of dental treatment, the connection with the figure relating to orthodontic extractions, as already mentioned, is also no doubt significant.

Dental X-Rays.—Radiography as an aid in the diagnosis of dental disease has long been established, but of late years its use for orthodontic purposes has grown in importance, so much so, that it has become standard practice to obtain X-ray films of the mouth in nearly every case, prior to the actual commencement of treatment. Because of the increase in X-ray requirements from the various dental clinics in recent years—last year, for instance, the figure for the number of dental films taken was up by 71·4%—and the somewhat inadequate facilities prevailing at Central Dental Clinic, the provision of a second X-ray apparatus, say at Ely 2 Clinic, at present unoccupied, would seem desirable.

New Teaching Centre.—The announcement during the year of an open architectural competition sponsored by the Board of Governors of the United Cardiff Hospitals and the Council of the Welsh National School of Medicine, for the new medical and dental teaching centre brings this important project once more to the forefront. The centre will be erected on a site covering 53 acres, situated in the Heath area of Cardiff, and will contain, *inter alia*, a dental hospital and school—the first to be built in Wales. A unique feature of the scheme will be the integration of both medical and dental schools " under one roof." It has been estimated that it will be " three years, at least " before the commencement of building, so that it will probably be another decade before the first group of dental graduates will emerge. When this time arrives, we shall no doubt be much better placed as regards recruitment to the School Dental Service in Cardiff. It is to be hoped also that by then conditions in the Service generally will have so improved that prospective candidates will find greater inducement to take up school dental work as a full-time career.

Staff Meetings.—On the 5th December, 1959 the first of a series of dental staff meetings was held, the object of such meetings being to afford the opportunity to discuss and debate topics of special interest to school dental officers and general problems which arise from time to time in the course of the work done in the department. The meeting in question proved a success and it is hoped to hold others in the future at quarterly intervals.

Dental Education.—In October 1956, the McNair Report was published and one of the most important recommendations of the McNair Committee was the setting up of Standing Committees on Dental Health Education, for England and Wales and for Scotland Except in the case of Scotland, these recommendations have now been implemented, the Committees acting as " Advisory Co-ordinating Bodies " and " representative of the main interest concerned, like the Central Council for Health Education, the General Dental Council, the British Dental Association, Government Departments and Local Authorities." Much attention is being focussed nowadays on the subject of dental education, and the tempo of dental propaganda increased ; but what is the impact on those who it is meant to influence ? Some light is shed on the question by an experiment which was recently carried out on schoolchildren at Braintree in Essex. Preliminary investigations indicated that whereas the dental knowledge of the children increased with age, their oral hygiene standard fell. Written surveys showed that the attitude of most of the children towards dental inspection and treatment was overshadowed by fear and apprehension, and that this, when removed, made it possible to change their eating habits and effect a marked improvement in their oral hygiene. It was particularly significant to note that the sale of biscuits and sweets at the School Tuck Shop had fallen considerably in the months following the project, and that demands made by the children to their parents for apples and carrot sticks had increased. The conclusion reached was that the usual teaching methods and techniques used do not change the attitudes or influence the practices of the individual.

New Clinics.—The new Clinic at Llanishen, referred to in my last annual report, and then under construction, was completed and came into operation on the 28th September, 1959. At present the dental side of the clinic is being worked on a part-time basis of seven sessions per week. Its location is eminently suitable to serve the new Council housing estate and is also better placed in relation to the schools in the area which were previously linked with Gabalfa Clinic for dental treatment purposes. As regards dental equipment at the Clinic, this is entirely new and includes among its major items a Sterling Junior Unit incorporating the latest " Solarite " Operating Lamp and Sterling Sapphire Dental Chair with child's seat and Murray Stool, and a Walton 4 General Anaesthetic apparatus.

At Grangetown, structural alterations to the dental clinic were effected during the year resulting in a number of improvements, chief among which was the conversion of the existing Recovery Room into an up-to-date Dental Surgery. Here the natural lighting of the room coming from two windows, each set in adjacent walls—the old Surgery had but one window only—was further enhanced by the replacement of one by a modern 6 ft. steel framed window similar to that fitted at Canton Dental Clinic in 1957. Good use of reflected light in the Surgery was also made by lining the walls—to approximately half-height—with Wearite panels in natural oak shade. New items of equipment fitted in the Surgery—A Dental Chair and Unit—are identical to those installed at Llanishen Dental Clinic.

Future Planning.—A new clinic to replace the existing one at Splott is proposed and will be sited at Splott Park where building is unlikely to commence before late 1960.

In conclusion I would like to convey to all members of the dental staff my whole-hearted thanks for their valued co-operation throughout the year.

The full statistical table of the school dental work carried out during 1959 is as follows:

(1) Number of Children inspected by the Dentists :—			
(*a*) Periodic Age-groups	13,457		
(*b*) Specials	5,664		
TOTAL ...	19,121		
(2) Requiring Treatment			14,015
(3) Offered treatment			12,106
(4) Actually treated			9,340
(5) Attendances made by children for treatment			22,375
(6) Half-days devoted to :—			
Inspection	76		
Treatment	3,146†		
TOTAL ...	———		3,222

† Includes the equivalent of 18 sessions which should be re-allocated to dental service for mothers and young children and 95 sessions by Consultant Orthodontist.

(7) Fillings :		
Permanent Teeth	13,756	
Temporary Teeth	855	
TOTAL ...	———	14,611
(8) Teeth Filled :		
Permanent Teeth	12,768	
Temporary Teeth	802	
TOTAL ...	———	13,570

(9) Extractions :

Permanent Teeth	4,064	
Temporary Teeth	10,573	
For Regulation purposes (permanent)	552	
For Regulation purposes (temporary)	488	
TOTAL ...	———	15,677

(10) Administrations of general anaesthetics for extractions ... 7,327

(11) Other operations—Permanent Teeth :—

(*a*) Scalings	673	
(*b*) Cleanings	962	
(*c*) Dressings	1,116	
(*d*) Root Fillings	19	
(*e*) X-rays	403	
(*f*) Crowns	19	
(*g*) Gum Treatments	499	
TOTAL ...	———	3,691
Temporary Teeth		332

(12) Number of pupils supplied with artificial dentures ... 163

(13) Orthodontics :—

		By Consultant Orthodontist	*By Dental Officers*
(*a*)	Cases commenced during the year ...	50	77
(*b*)	Cases carried forward from previous year ...	82	84
(*c*)	Cases completed during the year	24	64
(*d*)	Cases discontinued during the year ...	* 15	* 47
(*e*)	Pupils treated with appliances	132	161
(*f*)	Removable appliances fitted	115	106
(*g*)	Fixed appliances fitted	—	—
(*h*)	Total attendances	649	1,291
(*i*)	Referred back to Dental Officer with advice	2	—
(*j*)	Referred for X-ray	51	—
(*k*)	Under observation only	21	—
(*l*)	Partly treated and referred back to Dental Officer	—	—
(*m*)	Awaiting Inspection	56	—

* In addition 16 patients of the Consultant Orthodontist and 27 patients of Dental Officers were not recorded as discontinued in 1958.

VII—HANDICAPPED PUPILS

The numbers of handicapped pupils known to the department at 31st December, 1959 are shown in the following table.

Blind Children		
At Residential Special Schools	3	
At Independent School	1	
Total ...		4
Partially Sighted Children		
At Special Classes for the Partially Sighted	10	
At Residential Schools	2	
Total ...		12
Deaf Children		
At Residential Schools	14	
At Independent Schools	3	
Total ...		17
Partially Deaf Children		
At Residential Schools	2	
At Independent School (Residential) ...	2	
At Maintained Schools (day)	32	
*At no School	1	
Total ...		37
Children Suffering from Epilepsy		
At Maintained Schools	—	
At Residential Schools	1	
*At no School	1	
Total ...		2

* Receiving Home Tuition.

Children Suffering from Pulmonary Tuberculosis		
At Special Schools	18	
At Maintained Schools	109	
At other Institutions	1	
At no School or Institution	10	
Total ...		138
Children Suffering from Non-Pulmonary Tuberculosis		
At Special Schools	—	
At Maintained Schools	43	
At other Institutions	—	
At no School or Institution	2	
Total ...		45

DELICATE CHILDREN (Children who by reason of impaired physical condition cannot without risk to their health be educated under the normal regime of an ordinary school)		
At Special Day Schools	82	
At Independent School	1	
At no School	2*	
TOTAL ...		85

* Both receive home tuition

PHYSICALLY HANDICAPPED CHILDREN		
At Residential Special Schools	5	
At Special Day Schools	12	
At no School	2*	
At Independent Schools	3	
TOTAL ...		22

* Both receive home tuition.

EDUCATIONALLY SUB-NORMAL CHILDREN		
At Special Day Schools	295	
At Special Residential Schools	2	
At Maintained Schools	312	
At no School or Institution	2*	
TOTAL ...		611

* Both receive home tuition.

MALADJUSTED CHILDREN		
At Independent Schools	3	
At Maintained Schools—in Residential Hostels	8	
At Maintained Schools awaiting admission to Hostels or Special Schools	2	
TOTAL ...		13

During the year 205 children, who had been reported as being handicapped pupils were specially medically examined, with the following results :—

Educationally sub-normal and suitable for education in a special school (day)	99
Educationally sub-normal and suitable for education in a residential special school	6
Educationally sub-normal—to have special educational treatment in an ordinary school	41*
Children for whom a decision regarding their capabilities has been deferred	5
Educationally sub-normal but do not require supervision after leaving school	6
Pupils of Gabalfa Special School for educationally sub-normal children :	
(*a*) Granted permission to leave before attaining the age of 16 years	3
(*b*) Recommended to return to ordinary school	3

* 19 of these children were examined and recommended for special educational treatment in ordinary school by Educational Psychologist. Special Medical Examination was not considered necessary in these cases.

Pupils of Woodlands Special School for educationally sub-normal children	
(*a*) Granted permission to leave before attaining the age of 16 years	1
(*b*) Recommended to return to ordinary school	—
Pupils at Llanishen Court Special School for educationally sub-normal children recommended to return to ordinary school...	5
Children transferred to the care of the Local Health Authority ...	24
Children transferred from care of Local Health Authority for special educational treatment at Special School	2
Children transferred from care of Local Health Authority and recommended for teaching in own home	—
Blind—for admission to a residential special school	1
Partially sighted—for special school or class	1
Deaf—for admission to a residential special school	1
Partially Deaf—for admission to a residential school	1
Physically handicapped—for admission to a special day school... ...	1
Physically handicapped—recommended for Course of Training ...	—
Maladjusted—for admission to a residential Hostel or Special School ...	5
Epileptic—for admission to a residential special school	1
Recommended for Home Teaching	—

Twenty-six children were notified to the Local Authority during 1959 in accordance with Section 57 of the Education Act, 1944, two appeals being received.

Greenhill Open-air School.—In addition to the above examinations, 31 children were found to be delicate pupils and recommended for admission to the Greenhill Open-air School. The average number of delicate children on the register during the year was 102, and the average attendance during the year was 86. Thirty-three children were admitted to the school, and 21 were discharged.

Cerebral Palsy Unit

Physiotherapists administered a total of 3,552 treatments during the year, of which 1,889 were treatments at the Cerebral Palsy Unit.

The number of children treated for various defects during the year was 192 : spastics 18, posture 22, asthma 21, foot exercises 9, plasters 21, and miscellaneous 101.

Spastics are treated daily at the Unit. Open Air School pupils receive twice weekly treatments for postural defects, three times weekly for asthma cases and once weekly for foot exercises. Other treatments are administered as required.

The following table shows the number of physiotherapy treatments administered during the year :—

Month	Cerebral Palsy Unit	Greenhill Open Air School				
	Spastics	Posture	Asthma	Foot Ex.	Plasters	Misc.
January ...	180	83	71	24	8	19
February ...	182	87	62	21	5	17
March	221	105	63	25	4	15
April	14	10	1	8	—	1
May	157	67	45	19	—	5
June	125	53	41	13	—	13
July	170	40	54	19	—	15
August	76	—	—	—	—	—
September ...	213	74	63	18	—	7
October	245	94	82	32	—	7
November ...	153	66	65	21	2	2
December ...	153	44	56	15	2	—
Total ...	1,889	723	603	215	21	101

Total treatments administered : 3,463

Speech Therapy

At the commencement of the current year the staff of Speech Therapists was four full-time and two part-time therapists. By the end of the year the staff was five full-time therapists who did a total of 54 sessions per week at clinics and schools : the equivalent to 5 sessions weekly are taken up with visiting and administrative duties. The extension of the work to children who have been reported to the Local Health Authority as ineducable and, consequently, in attendance at the Occupation Centres which was reported last year, has been continued with encouraging results.

The waiting list for appointments at the end of the year at 204 is an increase over the previous year of 63 pupils and care has to be exercised to decide the most profitable allocation of staff to the various types of cases.

The statistics relating to the work for the year show that the total number of children treated was 484. New cases admitted during the year were 206, and those discharged 204. In addition, 76 children were being kept under observation, and 204 were awaiting appointments at the end of the year. The Speech therapists made 152 visits to schools and to the homes of children during the year.

The clinical conditions treated and the results at the time of discharge are shown on the accompanying table :—

DISCHARGES, 1959

	Speech normal	Much improved	Left district	In hospital	Unlikely to benefit	Left School	Failed to attend	Total
Stammer	2	13	—	—	1	1	24	41
Dyslalia	23	38	—	—	6	1	29	97
Dysphonia	—	—	—	—	—	—	—	—
Spastic	—	—	—	—	—	—	—	—
Nasal Sigmatism ...	18	27	—	—	—	1	5	51
Cleft Palate	—	2	—	—	—	—	2	4
Rhotacism	—	—	—	—	—	—	—	—
Partial Deafness ...	—	—	—	—	—	1	—	1
Other Complaints ...	—	1	—	—	1	—	—	2
Totals	43	81	—	—	8	4	60	196

CHILD GUIDANCE CLINIC

REPORT FOR 1959 OF

Mr. ROBERT ROBERTSON, M.A., B.Ed., Educational Psychologist in Charge

In these annual reports different facets of child guidance are illustrated, and over a period of years these lengthier, more meaningful accounts may be regarded as interesting supplements to the periodic statistical analyses which are supplied monthly and quarterly from the Clinic to the Education and Health Departments. This year, at the end of my report some comments are made by Dr. Lacey, Psychiatrist, on foster homes and by Mrs. Thomas, Psychiatric Social Worker on deprivation in children.

Work of the Clinic

The clinic functions on three half-days each week: on Tuesday and Thursday afternoons for seeing children and parents; and on Friday mornings for weekly case conferences.

In general two new cases are seen each Tuesday and Thursday afternoon; in addition, four old cases are reviewed.

Number of Cases

The number of cases dealt with in the period 1/1/59—1/12/59 is shown :—

	Boys	Girls	Total
Number of new cases referred during 1959	99	71	170
Number of old cases carried forward	64	30	94
Number of cases on waiting list at 31/12/59	15	8	23

It is clear this year again that significantly more boys than girls have been referred to the Child Guidance Clinic. 62% boys, and 38% girls. This is not uncommon, since boys tend to present more behaviour difficulties and problems than girls in their upbringing and schooling.

Sources of referral of cases dealt with for the first time in the clinic are shown as follows :—

Parents or guardians	17
Probation Officers	6
Social Agencies	7
Schools	50
School Health Service	43
General Practitioners	17
Other sources	16
TOTAL	156

Of these, 32% of the referrals are from head teachers and 24% are from the School Health Service. It is not always easy to classify accurately, however, for cases are sometimes referred by parents and head teachers to health visitors and school nurses for onward transmission via the School Health Service to the Child Guidance Clinic.

Reasons for referral

Classification of reasons for referral is not always straightforward, it is often arbitrary; sometimes it oversimplifies, glosses over complexity. Seldom is causation simple ; most frequently several factors operate at the same time with varying intensity. However, the following gives as accurate an analysis of the various reasons for referral as is practicable:—

Nervous Disorders

Fears	15
Seclusiveness	7
Depression	6
Excitability	3
Apathy	1
Obsessions	2
	34

Habit Disorders and Physical Symptoms

Speech disorders	11
Sleep	7
Movement	7
Feeding	7
Excretory...	21
Nervous pains	7
Fits	4
	64

Behaviour Disorders

Unmanageable	37
Temper	16
Aggression	16
Jealousy	3
Demanding Attention	1
Stealing	30
Lying and romancing	4
Truancy	25
Sex difficulties	5
	137

Education and Vocational Difficulties

Backwardness	11
Inability to concentrate	6
Special disabilities	1
	18

For Special Examination

Educational advice	2
Admission to residential special (not M.D.) schools, etc.	2
	4
TOTAL	257

The referrals that bulked largest were the behaviour disorders (53·3%) ; next were the habit disorders (24·9%) ; next were the nervous disorders (13·2%) ; and next were the educational difficulties (7%). This appears to be the pattern that is common in the reports of the last few years. It is not surprising that the number of cases relating to specifically educational difficulties, is low for most of such cases are dealt with in the School Psychological Service.

The commonest difficulties in the children referred were :—

Unmanageable	(37)
Stealing	(30)
Truancy	(25)
Excretory	(21)
Temper	(16)
Aggression	(16)
Fears	(15)
Speech disorders	(11)
Backwardness	(11)

This follows very closely the pattern reported on in 1958.

The ages of the children examined for the first time at the clinic are shown as follows:—

Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
Boys ...	—	1	3	1	6	15	9	10	6	8	5	12	4	6	—	2	88
Girls ...	—	—	5	1	3	8	7	10	5	4	5	4	3	7	3	3	68
Total ...	—	1	8	2	9	23	16	20	11	12	10	16	7	13	3	5	156

Of these 156 children, 11 were pre-school ; about 48 were infants ; about 53 were juniors ; and about 44 were post-primary pupils.

The greatest number were of junior school age, but all ages are represented in considerable numbers from 3 to 16.

Treatment and Disposal of Cases Discharged

Adjusted	34
Partially adjusted	25
Unadjusted	—
Advisory	24
Transferred to S.H.S. (7)	—
Others (2)	9
Failed to co-operate	34
Withdrawn	15
Left Cardiff	9
Recommended for admission to Institutions	6
Admitted to Institutions	4
TOTAL	160

Of these, 24 cases were closed as advisory after advice had been given to parents, doctors, or head teachers, generally where further supportive interviews were not considered necessary. 59 cases were closed as adjusted or as partially adjusted : a good record in such cases as were considered likely to respond to fairly rapid treatment.

As many as 34 cases were closed where failure to co-operate on the part of parents stultified the efforts of the clinic staff. This appreciable decline from the figure of 53 in 1958 reflects the lively encouragement to clinic attendance given by the Psychiatric Social Worker, Mrs. Thomas, and the added responsiveness of parents generally to her warm re-assurance and support. Throughout the whole year, her reports too have maintained a very high standard; invariably thorough, stimulating, cogent and insightful; a remarkable record of elucidation of the innumerable complexities involved in a heavy case load.

Work of the Sections

	Exam.	Treatment	Parents	Others	School	Home	Total
Psychologist ...	124	155	239	23	119	—	660
Psychiatrist ...	110	179	164	15	—	—	468
Psychiatric Social Worker ...	—	325	—	38	8	297	748

Conferences

There have been 46 staff conferences in the period covered by this report, and 780 cases discussed.

Miscellaneous

There have been 33 visitors to the Clinic.

Additional Survey

As for previous reports, the clinic secretary, Miss Sergeant, has noted certain features of case-histories, e.g., intelligence, housing, medical record, etc. It was considered that interesting conclusions might result from a survey over a period of one year. Some comments are made in the following sections:—

Sex

Of the 122 children in this survey, 71 were boys and 51 were girls; i.e., 58% were boys and 42% were girls. Clearly boys outnumber girls in the work of the clinic: boys apparently more frequently present behaviour difficulties than girls in their upbringing, development and schooling.

Intelligence

The distribution of intelligence quotients for these children is shown.

I.Q. Group	Boys	Girls	Total
125–9 ...	1	2	3
120–4 ...	2	1	3
115–9 ...	2	2	4
110–4	4	1	5
105–9 ...	4	4	8
100–4 ...	5	5	10
95–9 ...	9	5	14
90–4 ...	8	5	13
85–9 ...	6	2	8
82–4 .	7	5	12
75–9 ...	4	6	10
70–4 ...	4	6	10
65–9 ...	1	5	6
60–4 ...	1	1	2
55–9 ...	1	—	1
50–4 ...	1	—	1
45–9 ...	1	—	1
Total ...	61	50	111
Average I.Q. ...	91·4	89·6	90·6

From this it is seen that there is a good distribution of intelligence throughout the group of boys and girls, with a definite ' tail ' below 70 : that the average of the whole group is below the normal ; and that the average for boys is very slightly higher than the average for girls. Maladjustment may occur at all levels of ability, but is likely to affect more frequently those children who by dullness are less able to cope with the environment.

Medical Record

Important details of the children's medical records are as follows :—

Spastic	1
Asthma...	1
Migraine	1
Gastroenteritis	1
Epilepsy	1
Chronic illness	1
	6

The number of children affected by serious illness is quite small : their failure to adjust is not usually to be found in their physical condition.

Place in Family

Only child ...	7 boys 12 girls	19
Two children	(1) 21 (2) 19	40
Three ,,	(1) 10 (2) 6 (3) 6	22
Four ,,	(1) 6 (2) 7 (3) 7 (4) 1	21
Five ,,	(1) 4 (2) 1 (3) 1 (4) 1 (5) —	7
Six ,,	(1) 2 (2) — (3) 1 (4) 2 (5) 2 (6) —	7
Seven ,,	(1) 1 (2) — (3) — (4) 1 (5) 2 (6) — (7) —	4
Eight ,,	(1) — (2) 1 (3) — (4) — (5) — (6) — (7) — (8) —	1
Nine ,,	(1) — (2) — (3) — (4) — (5) — (6) — (7) — (8) — (9) —	—
Ten ,,	(1) — (2) — (3) — (4) — (5) 1 (6) — (7) — (8) — (9) — (10) —	1
		122

Though there are more boys than girls in this group, there are more female only children.

Comparatively small families predominate in this group, though it must be kept in mind that these families are not necessarily completed families.

It does not appear that place in family is particularly significant in maladjustment, any more than it was in 1957 ; it did seem to be significant, however, in 1958.

Though there are fewer large families, it does seem that maladjustment occurs oftenest in smaller families ; the families of two children are rather more affected by maladjustment ; that maladjustment affects families equally where there are 1, 3 and 4 children ; and that only where there are 3 children are first-borns more likely to be affected than others by maladjustment. In families where there are 7, 8 and 10 children, chance (or of course factors other than place in family) permits any to be affected.

Where the difficulties occur

Home	65
School	19
Both home and school	38
	122

It is clear that most of the difficulties occur in the home. Nor is this surprising, for high standards of personal and social behaviour are expected and secured in the school with its friendly discipline and its more uniform degree of stability.

Accommodation

Council House	56
Council flat	1
Old house	16
Own house	23
Terrace type house	9
Villa type house	1
Maisonette	1
Bungalow	2
Flat	1
Flat over shop	1
Cottage	1
Prefab	1
Rooms	3
Rooms with P.G.M.	2
Rooms with M.G.M.	2
Children's Homes	2
	122

Accommodation by itself does not appear to be generally a cause of serious difficulty. All types of accommodation, from favourable to very unfavourable, are represented. In a few cases, however, it is an important contributory factor : living with relatives, lack of facilities and amenities, and rather more rarely squalid conditions, create complications particularly where maladjustment is likely to occur anyway.

Broken Homes

More significant is the number of broken homes :

Father dead	5
Father dead, Mother remarried	1
Mother dead, Father abroad, children with Grandparents	1
Both parents dead	1
Parents divorced	2
Parents divorced, both remarried	1
Father deserted, Mother remarried	1
Parents separated, Mother remarried	1
Parents separated	6
Father left Mother (not married)	1
Mother deserted	1
Adopted (nothing known of parents)	1
Fostered (nothing known of parents)	1
	23

A fifth of these 122 cases represents homes that have been broken ; a considerable proportion of homes which differ significantly from the normally constituted home wherein both parents may play a part in shaping the lives of their offspring.

PARENTS

Parental Disharmony

It is not easy to say exactly what constitutes parental disharmony, nor to be sure when it exists : but that it clearly does exist is noted in 15 cases, i.e., to such a degree as to constitute a serious contributory factor in maladjustment. This too, is in addition to the broken homes already listed.

Both parents work

This is noted in 18 cases : in a seventh of the total.

Father's Occupation

The occupations noted cover a very wide range from the skilled to the unskilled. Whilst in individual cases it is important and sometimes significant to know what job the father has (e.g., long distance lorry-driver, seaman, shift-worker, etc.) no generalisation can be made in relation to maladjustment other than that any category of occupation may be involved.

Parents neurotic or psychotic

It is not easy to establish a criterion as to the mental condition of parents that is not determined simply by personal assessment. Yet so many parents were found to have had nervous breakdowns, to have been in- or out-patients of mental hospitals, that a note was made of cases wherein fairly serious disturbance existed in parents. A general and guarded indication of these follows :—

Both parents neurotic	10
Father neurotic	1
Mother neurotic	1
Mother M.D.	1
Both parents psychotic	1
	14

This represents an appreciable proportion of the 122 cases considered. It is not surprising that the children concerned should have become maladjusted and have been referred for investigation and guidance.

Additional Remarks

In an additional remarks column, there are more than 37 cases represented. Apart from illegitimacy (16), problem families (3), fostering and adoption (2), there are 9 cases of serious ill-health :—Mother with T.B. ; Mother with diabetes.

Comments

A few comments may be made about these 122 children as a group :

(1) As a group they are below average in intelligence, and all but the highest levels of intelligence are represented.

(2) There are appreciably more boys than girls in the group.

(3) The group has not been affected greatly by serious ill-health.

(4) Small families predominate in the group. No great significance can be attached to place in family.

(5) The difficulties relate more to home than to school.

(6) In individual cases accommodation difficulties often exist; but in general little of significance emerges in this connection.

(7) In the group the number of broken homes is considerable (a fifth).

(8) Parental disharmony (in at least 15 cases) is another appreciable and significant factor.

(9) Yet another is that in 18 cases both parents work.

(10) Father's occupation cannot be said generally to be significant, though it often is in individual cases.

(11) Another significant factor is that in at least 14 cases one or other or both parents are themselves more or less seriously unstable and maladjusted.

(12) These important factors clearly emerge from the survey of this group :—boys and small families predominate; broken homes; parental disharmony with divided discipline; both parents working; fairly serious instability in parents.

PSYCHIATRIC SECTION

Dr. GAYNOR LACEY, M.B., B.S., D.P.M., Psychiatrist

The problem of finding suitable foster-homes for children who, for one reason or another, are not brought up by their own parents, is one with which the Children's Department is constantly faced and which frequently comes to the notice of the Child Guidance Clinic. It is acknowledged that, ideally, foster-homes placement is better for most children than being placed in an ordinary Children's Home. However, finding suitable foster parents is by no means an easy job. Firstly, there are not many people who are anxious to accept foster-children. There is a great demand for new-born babies for adoption but older children, who may have already had several changes of environment and who may not be available for adoption, are not so much sought-after. Secondly, by no means all the people who volunteer to become foster-parents are suited to the role. It is in the assessment and judgement of the suitability of such people that difficulties are encountered. Much skill and experience are needed and it is extremely easy to make mistakes. In many cases it is realised before-hand that placing a child in a certain home is by no means ideal and difficulties are to be expected but, at the time, a more suitable home may not be available, so that it is felt that it is worth trying the placement. A certain number of these children are referred to the Child Guidance Clinic, by one agency or another. It may be the Children's Department, who refer the child or it may be the foster-parents, the school, the family doctor or the Health Visitor. The referral may not only be because the child himself is showing difficulties but also, perhaps, because the foster-parent realises that she is having to deal with more problems than an ordinary parent under ordinary circumstances would meet, and needs to discuss them with someone who has come across such problems before. Though it is not always possible to help much and some children sooner or later have to return to a Children's Home after a doubtful foster home-placement, in other cases the foster-parents seem to be able to settle down and deal with their difficulties more satisfactorily.

PSYCHIATRIC SOCIAL WORK SECTION

Mrs. M. R. THOMAS, B.A.

" Deprivation in Children : a changing aspect "

The " Welfare State " has been a beneficient parent. When the citizen looks around him, now that more than a decade has passed since the State embarked upon its quasi-parental role, he can see that on the whole, prosperity has ousted poverty. It is true that a few gaps have been left, due to economic pressures and some minority groups (notably a section of old people, or widows with young children) are often somewhat cut off by a gulf in income levels, from the main community. But by and large, the social aspect of Great Britain has undergone considerable change, and living-standards for hundreds of thousands have soared : material advantages have never been better or more apparent to the observer. And (despite the fact that this year the N.S.P.C.C. reports a slight increase in the number of prosecutions for child-neglect), the citizen who looks around at this prosperous nation's children sees evidence that poverty, hunger and filth are no longer rife. " Deprived children," in the old Dickensian sense of ragged, gaunt, hungry, uncared for, and perhaps begging are no longer common phenomena on the streets of our cities, as they were within the memory of many people alive today. Nevertheless, many children referred to a Child Guidance Clinic, well-cared for physically or even indulged as they may be, show signs of " deprivation " in another sense : in the emotional rather than the material aspects of their lives.

It is true, of course, that some physical squalor still remains, and also that some children are unavoidably deprived by the death or illness of a parent. But modern medicine and science and education have made big strides in combating these risks, and maladjustment frequently occurs in homes where conditions are apparently normal and material factors excellent. One hears statistics quoted such as " in a certain rural area of Wales, 54% of delinquents came from homes that were good. Only 17% came from (so-called) ' Problem Families '." Yet on closer examination, one finds that by a " good home " is meant one where the child is well-fed and clothed and has adequate sleeping-space, and (while no one would wish to minimise the value of these physical aspects) that no attention has been paid to his emotional background. Frequently one does find that such children have been " deprived," deprived of affection or interest or a normal life within a family setting. Such deprivation which can be just as injurious as the more florid, material kind is of course much harder for the teacher, doctor, nurse or social worker to " spot," particularly if it occurs in a middle-class home, where recourse to a public agency is often a " last-ditch " occurrence.

So it seems that while this latter half of the 20th century has seen the alleviation of harmful and often wretched living conditions, other and less tangible problems have arisen in their wake. It may be that many of today's emotional problems existed previously, but were over-looked in what was often a struggle for existence. Or it may be (and this seems probable) that many of them are specific problems, related to our changed way of life.

For any time of change and flux (such as that through which we have been passing) cannot avoid giving rise to anxieties. A " dynamic " or changing society gives its citizens new opportunities, but at the same time makes life more difficult than a " static " community ; for in a static community, the citizen receives his status at birth, and his boundaries, opportunities, achievements and code of behaviour are clearly demarcated by his father's status and position—and his life is mapped out for him. Such clearly mapped-out routes were not for the citizen of our Brave, New, but rather anxiety-making World which took such vast strides in the years following World War II. Full-employment, high wages, social securtiy and much wider opportunity opened new doors for him, and he was often faced with anxiety-making choice, whereas previously necessity may have

dictated his path. Ideals changed, every family-unit wanted a home for its own and probably its own car or cars. The ubiquitous " Joneses " had to be kept up with, and often tempting but stifling H.P. (which has become such a part of our scene was the means to this end. The beginnings of comprehensive education are a spur to ambition and one sees it reflected in the recognition of the " kudos " of 11 plus, or even in the trend for grammar-school type uniforms in all schools. Added to this, the aftermath of War II itself contributed to the teething problems of our Welfare State, with its legacy of broken homes, unsettled families and women encouraged to work and enjoying the fruits of their own earnings. Then, too, parents today (and children as well) are subjected to a constant barrage of advertisement which suggests to them that unless they purchase " Wangle Wonder-Product," they and their families can never enjoy social success. Magazines and newspapers are packed with information about child-care and development, with psychological angles, obviously enlightened and informative, but in a Child Guidance Clinic, one not infrequently meets with consequent needless anxiety about " norms " and " normal."

One weighs in the balance the credit of material assets and advantages such as have never been so widely enjoyed in this country, against the problems set up by such a society, and one finds that the most obvious outcome and cause for emotional deprivation in today's generation of children has been the weakening of family ties. (1) Some isolation of young parents from the support of their old family neighbourhoods. (2) Father working all hours to keep up payments necessary for high standards. (3) Many mothers also working and using the week-ends (with father's help) to catch up with household chores and too busy to enjoy their families, though their homes are excellently appointed. (It seems important to comment on the number of women who cope admirably with home and job and are fulfilled by this outside interest and therefore happier and more content at home). (4) The spending power of teenagers who seek amusement and entertainment outside the home. (5) One suspects, too, the contribution of T.V., education though it may be. For though the family may gather round the small-screen, anyone who has visited friends hoping for an interesting and stimulating conversation can vouch for the barrier to inter-familial and social relationships a T.V. set can be.

Consequently, because our standards are so largely monetary or materialistic in many of today's homes there is not the time or the urge to provide a warmth and interest and discipline against which children can mature. Many of today's parents, too, are the generation that grew up during the war and were themselves the victims of broken or unsettled homes, irregular alliances, poverty or evacuation. And a parent who has himself experienced deprivation of affection naturally finds it difficult to pass on to his child something he does not know the feeling of (i.e., affection). Because human nature is resilient, most children, if deprivation is not too severe, weather the passage, finding alternative satisfactions and outlets ; some are referred to a Clinic because their reaction has produced disturbed symptoms. Parents of both these classes of children have usually some vague nagging guilt that something is wrong and that they have in some way deprived their child. And, again because money is so comparatively plentiful, have sought to make amends and reparation in the only way that seems to present itself, they lavish on the child a wealth of expensive impedimenta, record players, electric train sets and unopened sets of encyclopaedia which of course go only a very short way towards making up for lack of warmth and interest.

In this context, the Social Worker sometimes meets parents of deprived children who were themselves extremely deprived ; and in allocating time to cases, hard though it may seem, it is as well for the worker to try to make a realistic assessment of the amount of reparation possible in work with such parents. It may be that the Social Worker could stand them in good stead by supplying a stable and steady support, or in displaying a new set of standards. But it may be that very severely deprived parents cannot make any satisfactory relationship, or make excessive and impossible demands of the worker, which she could never fulfil, and the Clinics' time may be better used in more extensive work with other parents, while every effort is still made at prevention of similar deprivation in the present generation, i.e., the child under treatment.

VIII—NURSERY SCHOOL AND CLASSES

Severn Road Nursery School.—During the year the average number of children on the register of Severn Road Nursery School was 101, the average attendance being 82·5.

There are eight Nursery Schools and two Nursery Classes in the City, situated as follows :—

Nursery Schools :	1.	CANTON	Severn Road
	2.	GRANGETOWN	Ferry Road
	3.	SPLOTT	Moorland Road
	4.	ELY	Vachell Road
	5.	SPLOTT (Tremorfa) ...	Baden Powell School
	6.	ELY	Hywel Dda School
	7.	SOUTH (Docks)	West Close, Bute Street
	8.	RUMNEY	Rumney School
Nursery Classes :	1.	NINIAN PARK	Ninian Park School
	2.	ADAMSDOWN	Tredegarville C/W School

Accommodation is provided at the Nursery Schools for a total of 486 children aged 2—5 years. At the Nursery Classes 60 children aged 2—5 years can be accommodated.

Health Visitors pay a visit to each Nursery School and Class at least once in each week and very often at more frequent intervals as such visits become necessary. A Medical Officer visits the Nursery Schools and Classes at intervals of approximately one month for the purpose of medically inspecting new entrants and of reviewing the health of pupils.

X—MISCELLANY

INFECTIOUS DISEASES

The number of schoolchildren ascertained to be suffering from infectious diseases during the year were as follows :—

	Scarlet Fever	143
	Whooping Cough	38
	Diphtheria	—
	Measles	1,426
	Acute Pneumonia	37
	Meningococcal Infection	—
	Paralytic Poliomyelitis	—
	Non-Paralytic Poliomyelitis	1
	Acute Encephalitis—Infective	—
	Dysentery	448
	Para-Typhoid Fever	3
	Enteric or Typhoid Fever	—
	Erysipelas	3
	Food Poisoning	16
T. B. Section :	Tuberculosis—Respiratory	10
	Other Forms	6

In addition the following children were notified by Head Teachers as absent from school due to the diseases stated :—

Rubella	20
Mumps	40
Jaundice	14

PROVISION OF MEALS

Central Kitchens are in operation at Ely and Tremorfa for the following Schools :— **Gabalfa Special, Greenhill Open-air, Greenway Primary, Ton-yr-ywen, Heol Trelai, Windsor Clive, Cathays High, Canton High, Cardiff High for Girls, Glantaf, Gabalfa Primary, Moorland Primary, Fairwater Primary, Lady Margaret High, Cefn Onn, Peter Lea, Brynhafod, Penybryn, Heol Hir, Lady Mary R.C., Gabalfa Infants, Llanrumney Secondary, The Court, Llanishen, Howardian Grammar, Glan-yr-Afon, Cyntwell Secondary Modern, Waterhall, Woodlands Special** and eight Nursery Schools.

Canteens.—Facilities are available at 78 School Canteens for providing mid-day meals for approximately 6,500 children daily.

The number of children attending primary, high, special and nursery schools provided with dinners and/or milk during the first and last complete weeks of 1959 were as follows:—

	First complete week, 1959	*Last complete week*, 1959
Average number of necessitous children provided with dinner daily free	1,580	1,928
Average number of children provided with milk daily free	35,442	36,181
Average number of children provided with dinner daily on payment	8,750	9,896

MEDICAL EXAMINATIONS OF TEACHERS AND ENTRANTS TO COURSES OF TRAINING FOR TEACHING AND TO THE TEACHING PROFESSION

The School Medical Officer is an examining medical officer for the Education Committee in respect of the entry of teachers into the superannuation scheme. During the year, 138 teachers were examined for this purpose.

From 1st April, 1952, the Minister of Education instituted new arrangements for medical examinations for entrants to the teaching profession and for candidates applying for entry to training colleges, university departments of education and approved art schools. (Circular 249, 28th March, 1952).

The School Medical Officer has the duty of examining candidates applying for admission to training colleges and entrants to the teaching profession except those intending to enter the teaching profession on completion of an approved course of training, in which case they are examined as at present by the College Medical Officer. The School Medical Officer has to fulfil this last obligation in respect of students completing courses at the Cardiff College of Art as he acts as the College Medical Officer.

As a result of these requirements, 103 candidates and entrants were medically examined.

The Minister also directed that X-ray examinations shall be an essential part of the medical examination on entry to the teaching profession as from 1st April, 1953. (Circular 248, 28th March, 1952).

ACCIDENTS TO PUPILS

Head Teachers are requested to provide details of all accidents occurring to pupils on school premises or arising out of school activities.

During 1959, 170 such reports were made.

APPENDIX A

DESCRIPTION OF REGULAR CLINICS

	Minor Ailments	Cleansing Station	Ophthalmic	Orthoptic	E.N.T.	Juvenile Rheumatism	School Dental Service	Speech Therapy	Enuresis Clinic
(a) School Clinics also used for General Health Purposes :—									
Central Clinic, 30 Richmond Road ...	Yes	—	Yes	Yes	Yes	—	Yes	Yes	Yes
Gabalfa Clinic, 213 North Road ...	Yes	—	Yes	—	Yes	—	Yes	Yes	—
College Farm Clinic, Llanidloes Road ...	Yes	—	Yes	—	Yes	—	Yes	—	—
Splott Clinic, 139 Splott Road ...	Yes	—	Yes	—	Yes	—	Yes	Yes	—
Grangetown Clinic, Cambridge Street ...	Yes	—	Yes	—	Yes	Yes	Yes	Yes	—
Canton Clinic, Wessex Street	Yes	—	Yes	Yes*	Yes	—	Yes	Yes	—
Fairwater Clinic, Plasmawr Road ...	Yes	—	Yes	—	Yes	—	Yes	Yes	—
Ely Clinic, Redhouse Crescent ...	Yes	Yes	Yes	—	Yes	Yes	Yes	Yes	—
Llanishen Clinic, Newborough Ave. ...	Yes	—	Yes	—	Yes	—	Yes	Yes	—
(b) Public Health Clinics available for school-children :—									
Cleansing Station, St. David's Hospital	—	Yes	—	—	—	—	—	—	—
Llanrumney Clinic, Llanrumney Ave. ...	Yes	—	Yes	—	Yes	—	Yes	Yes	—

N.B.—Speech Therapy Sessions are also held at Llanishen Court and Gabalfa Special Schools, the Greenhill Open-Air School, Rhiwbina, Heol Hir County Secondary School and Rumney Infants School.

* Clinic suspended pending appointment of a Second Orthoptist.

January, 1960

APPENDIX B

New Clinics

A new school clinic built under the Education Authority's programme of minor works was opened at Newborough Avenue, Llanishen, in July, 1959. The plan of the clinic is similar in many respects to the Fairwater Clinic but several improvements have been made in the general design. A substantial reduction was made in the specification originally proposed in order to keep within the limits of expenditure of this programme, but the accommodation was not reduced. The clinic provides a waiting hall, small reception office in vestibule, nurses' room, medical officer's room, examination room with suspended cubicles and toilet opening off, and a dental suite comprising a dental surgery with office and enquiry hatch and a recovery room. The whole building is planned most economically and has a most pleasant outlook both from the front and the rear.

APPENDIX C

STUDENT HEALTH SERVICE

IN

CARDIFF TECHNICAL COLLEGES

Report for the year 1959-60 by

Dr. Geoffrey Ireland, Assistant Medical Officer

A short preliminary report was made at the end of the Michaelmas Term 1959, and this was subsequently published in The Medical Press. This now completes the first annual report of the Student Health Service for the academic year 1959-60.

During the year there were 150 consultations, 74 as a result of statements made in questionnaires and 76 made at the request of the student. A total of 281 attendances were recorded. One new case of tuberculosis (cervical adenitis) was diagnosed and the student was admitted to Glan Ely Hospital.

Table I.

Consultations and Attendances during Year 1959-60

College	Consultations from Questionnaires	Consultations at request of Student	Total Attendances	No. of Students	Average Attendance per Student
Welsh College of Advanced Technology	17	25	73	36	2·0
Llandaff Technical College	36	45	164	69	2·4
College of Art	4	3	19	7	2·7
College of Music and Drama	14	2	20	16	1·3
College of Food Technology	3	1	5	4	1·3
TOTAL	74	76	281	132	2·1

It is understandable that more use is made of the service by those colleges possessing a medical room. It is hoped that in the smaller colleges where this is lacking a more personal contact with the staffs and students will be made in the forthcoming year.

Poliomyelitis vaccination consists at present of three injections, the first two at an interval of one month and a third booster dose not earlier than six months after the second injection. Vaccination was offered to eligible staff and students, and as a result 536 injections were given. As far as possible all previous records of students whose vaccination state was incomplete were obtained from the appropriate local authority.

Table II.

Poliomyelitis Vaccination by College and Type of Injection

College	Type of Injection			Total
	1st	2nd	3rd	
Welsh College of Advanced Technology	50	46	180	276
Llandaff Technical College	24	56	22	102
College of Art	8	6	61	75
College of Music and Drama	11	9	12	32
College of Food Technology	19	18	14	51
Total	112	135	289	536

Tuberculin skin testing will show by a negative reaction that protection is required against tuberculosis in the form of B.C.G. vaccination. Further, a severe reaction may mean a recent exposure to tuberculosis and will indicate that further investigation in the form of a chest x-ray is required.

252 tuberculin skin tests were completed and the following reactions were obtained.

Table III.

Tuberculin Skin Test by College and Type of Reaction

College	Type of Reaction					Total
	Neg.	1	2	3	4	
Welsh College of Advanced Technology ...	15	28	24	11	6	84
Llandaff Technical College	23	29	44	18	2	116
College of Art	3	7	2	8	1	21
College of Music and Drama	—	—	—	—	—	—
College of Food Technology	10	8	11	2	—	31
Total	51*	72	81	39	9**	252

* 2 students refused B.C.G. ** 3 students recently x-rayed.

49 students were vaccinated with B.C.G. vaccine and 6 students were sent for x-ray. No case of tuberculosis was found in those sent for x-ray. For various reasons it was not found possible to carry out skin tests at the College of Music and Drama, but this service should commence in the forthcoming year.

Table IV.

Results of Tuberculin Skin Testing

College	Students tested	Tests Read	Students given B.C.G.	Students x-rayed
Welsh College of Advanced Technology ...	86	84	14	4
Llandaff Technical College	131	116	23	2
College of Art	27	21	3	—
College of Music and Drama	—	—	—	—
College of Food Technology	33	31	9	—
Total	277	252	49	6

The discrepancy between the number of skin tests carried out and the number subsequently examined or read at the College of Art was due to an administrative error, nevertheless the difficulties in getting a 100% response to any procedure which requires two attendances even in a closed community are well illustrated. If we exclude the College of Art the defaults amount to 6% of those originally tested.

A new questionnaire for completion by the students on entry to the college has been devised in the light of past experience (Appendix I). This should be easier to complete and interpret. It is planned that a member of the Student Health Service will issue these forms on enrolment day to all first year students and those second year students who were " missed " in 1959.

Mrs. M. P. Davies, the Health Visitor, commenced half-time duties at the beginning of the summer term and as a result of the increase in time available she was able to visit students with social and medical problems, and students who were absent from college (at request of college) or in hospital. She began making personal contact with hospital out-patient departments and other similar agencies whose work or interest have a bearing on the organisation and administration of the Student Health Service. Tuberculosis notifications of all students will now be dealt with by Mrs. Davies who will ensure that adequate after-care is being obtained.

Overseas students' accommodation is dealt with by the British Council but the arrangements for British students vary with each technical college. The Students' Union approves accommodation at the Welsh College of Advanced Technology and College of Food Technology. Llandaff Technical College approves accommodation by means of a postal questionnaire. No special arrangements exist in the case of the Colleges of Art and Music and Drama. In view of the present scheme at the Welsh College of Advanced Technology it was decided after consultation with the Principal to submit a report suggesting that the approval of student accommodation now be undertaken by the Student Health Service and proposing a scheme whereby this could be carried out.

The Principal of Llandaff Technical College, however, having no external arrangements agreed to the commencement of a proposed pilot scheme during the summer vacation. A questionnaire was drawn up (Appendix II) which was completed by Mrs. Davies when she visited and inspected the accommodation. Most of the lodgings on the present approved list have now been visited and a pattern of the average type of accommodation available for students is now becoming apparent. As a result it will now be possible to draw up realistic conditions by which approval can be granted. Complaints by students or about students regarding accommodation can in the future be investigated by Mrs. Davies.

The University and the Teacher Training College also approve student accommodation and as a landlady may be on more than one list it is important that an understanding between all three training services should be reached regarding a measure of uniformity of the conditions necessary for approval. With this in view a preliminary contact has been made with the University Accommodation Service.

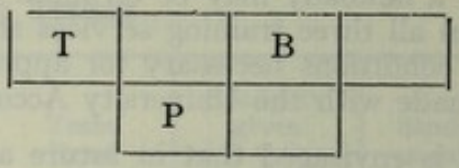
It is envisaged that in future all student accommodation will be approved by the Student Health Service and that it will become a college rule that students can only reside in such accommodation. It would be an enlightened Local Authority which would provide a hostel for technical college students; such a step would undoubtedly bring Cardiff to the fore in the field of further education.

At the request of the Principal of Llandaff Technical College an enquiry was conducted and a report submitted on the establishment of a First-Aid Service together with recommendations regarding existing hazards.

It is hoped to continue the investigation regarding the incidence of colour blindness in students at the College of Art with the new entrants this year.

This has been a reasonably successful year considering the initial difficulties which are likely to arise in the inauguration of any new service. There were early disappointments particularly the poor return of the questionnaires, but with the new scheme for distribution a better response can be anticipated next year. On behalf of those engaged in this new service I would like to thank the Principals and their colleagues in the colleges and also the staff of the Public Health Department with special reference to those in the School Health Service and Immunisation Sections, for their help and co-operation.

Strictly Confidential



CARDIFF TECHNICAL COLLEGES
STUDENT HEALTH SERFICE

This form must be completed by all students intending to follow a full-time course of study of one academic year or more and by such other students as may be directed by the Principal of the College after consultation with the Student Health Medical Officer.

Name of College.....

Name.....Date of Birth.....
Surname in BLOCK LETTERS. Christian names in FULL

Nationality.....Male or Female.....

Home Address .....

Address while at college 1. .....

2. .....

3. .....

Course of Study.....Length of course.....Date commenced.....

Occupation of head of family.....

PART I

Have you been innoculated against the following diseases :

1. Poliomyelitis YES/NO Where.....When.....
   Have you had a ' booster ' injection (3rd dose) YES/NO
2. Tuberculosis (BCG Vaccination) YES/NO Where.....When.....

PART II

You are requested to complete or have completed on your behalf the following consent form :—

I consent to (my son/daughter/ward) receiving :

1. Tuberculin Skin Tests YES/NO
2. BCG Vaccination against tuberculosis if indicated by the above YES/NO
3. Chest X-ray if advised by the Student Health Medical Officer YES/NO
4. Innoculations against poliomyelitis (if these are necessary) YES/NO

Signature.....*Date*.....

(If under 21 years of age, signature of parent or guardian is necessary.

PART III

Indicate by means of a tick (√) if you have suffered from any of the following conditions :

Tuberculosis	Epilepsy (Fits)	Headaches
Asthma	Skin conditions	Nervous or
Other chest conditions	Hay Fever	psychological conditions
Rheumatic Fever	Recurrent Tonsillitis	Fractures
Chorea (St. Vitus Dance)	Sinus Trouble	(broken bones)
Heart conditions	Ear conditions	Hernia (rupture)
Nephritis	Deafness	Diabetes
Other kidney conditions	Poor vision	Jaandice
Anaemia	Colour blindness	Poliomyelitis
Stomach disorders	Other eye conditions	Maearia

Any other condition .....

.....

Have you ever been admitted to hospital ? YES/NO. Why ?.....

.....

Do any of these conditions affect you at present YES/NO If yes, please specify.....

.....

.....

Date of last chest X-ray.....Result.....

How much tobacco do you smoke ? Cigarettes per day.....

(if a pipe) Ounces per week.....

PART IV

Name and address if doctor with whom registered at home.....

.....

.....

Name and address of doctor with whom registered in Cardiff.....

.....

All students living away from home should arrange to be temporarily registered with a local doctor.

Signature.....*Date*.....

This form should be returned to the college in a **Sealed Envelope** addressed to the Student Health Medical Officer.

STUDENT HEALTH SERVICE

ACCOMMODATION

Name .....

Address .....

.....

Type of House Council/Private/.....

No. of Occupants.....Adults.....Children.....

ACCOMMODATION AND FACILITIES

Bedroom/Study Room/Bed Study Room

Is bedroom shared/unshared/ If shared Single/double beds

Heating Coal/Gas/Electric/..... Lighting Suitable/unsuitable

Separate Meter Yes/No

Meals Communal/Separate/.....

Bathroom (reasonable access) Yes/No. Toilet Convenient/Inconvenient

No. of students required.....Male.....Female.....

Type of student Overseas/British/Either

Is accommodation available at weekends Yes/No.

Weekly Charge .....

Remarks

Approved/Not Approved

Signed.....

Subsequent Remarks

APPENDIX D

SUGGESTIONS FOR FIRST AID SERVICES IN TECHNICAL COLLEGES

by Dr. G. Ireland, B.Sc., M.B., B.Ch., D.P.H.,

Assistant Medical Officer and Student Health Medical Officer

The following table illustrates the number and type of accident which were recorded in one of the Cardiff colleges in 1958 and 1959 :—

Recorded Accidents 1958 and 1959

Year	Cuts and Bruises	Burns	Eye Injuries	Arc Eye	Crush Injuries	Fractures	Misc. Injuries	Total
1958	46	10	3	–	3	1	2	65
1959	30	14	1	1	3	1	3	53
Total	76	24	4	1	6	2	5	118

This gives an accident rate of 1·6 per week (as the college is in session 33 weeks in every year). It is certain, however, that many accidents were not recorded and this figure is, therefore, an under-estimation. Between six and eight students a year are referred to hospital for further treatment.

Existing Facilities and Arrangements

The first aid service in this College at present consists of a small first aid room adjacent to the workshop block which contains a couch, a small first aid box (recently replaced by a glass cabinet), a dressing trolley, and a hot and cold water supply with a wash-hand basin. This room is also used as an office by the Secretary to the Heads of the Departments of Engineering and Building. There is no recognised first aid attendant and no one is specifically charged with any responsibility regarding first aid, though the Secretary using the room does assist in the application of dressings if she is in the room at the time. The college does not possess a stretcher. Most of the workshops keep a small supply of elastoplast dressing strip, but only one workshop and the chemistry and biology laboratories have small first aid cabinets.

Students who suffer an injury are either treated on the spot or are sent to the first aid room, sometimes accompanied and sometimes alone. If they are unaccompanied, treatment may be given by the Secretary if she is in the room, or they may treat themselves. The latter procedure has led to misuse of equipment and waste. If accompanied by the lecturer, the class may be left without supervision until either the lecturer returns or a substitute is sent by the head of the department who, therefore, has to be notified of the existing situation. Students who are thought to require hospital treatment are usually taken to hospital in a car of a member of the staff.

Proposals for New Schemes

With the present expansion of existing colleges and the opening of many new technical training centres it would be reasonable to expect a proportionate increase in the number of accidents from those sources. Further, although very serious accidents may not have occurred during these last few years, the possibility of such an occurrence in the future must always be borne in mind. It is therefore important that first aid services be developed which can swing quickly and efficiently into action.

First Aid Room

Ideally this should be a ground floor room of reasonable proportions, easily accessible from the laboratories and workshops, well lit, with hot and cold water supplies and power points and constructed in such a way that a laden stretcher can be carried in and out without difficulty. It should be used solely for first aid purposes.

This room should contain :—

Examination couch
Blankets
Cabinet (containing dressings, bandages, antidotes, etc.)
Cupboard (storage)
Anglepoise lamp (floor model)
Resuscitation equipment (oxygen)
Small electric water sterilizer
Electric fire
First aid equipment (see appendix)
Dressing trolley
Accident record book
Formica topped table
Chairs

First Aid Staff

It is obviously desirable that a first aid attendant be on duty during college hours—9 a.m. to 9 p.m. The employment of staff specifically for this purpose may not be warranted in view of the number of accidents occurring in our particular college, but this would be dependent on the size and nature of the work undertaken in the college.

The responsibility might be placed on existing members of the staff who are on duty during this period, such as the porters, etc. These could be trained in first aid through the Red Cross or other First Aid Associations.

The overall responsibility for the first aid service should rest with the student health medical officer. He should regularly check the supplies and equipment in the first aid room, give advice to the attendants, and review accidents as they occur with a view to future prevention.

Workshops and Laboratories

Individual workshops and laboratories should each possess a small first aid kit containing dressings for immediate treatment. These kits should be refilled from the first aid room and checked regularly by a member of the staff of the student health service. In addition, laboratories should be supplied with eye wash bottles for the treatment of chemical burns of the eye.

A stretcher should be available in the workshop block, preferably in the corridor, resting on clamps fitted to a wall.

Good telephonic intercommunication system within the college, particularly extending to the workshops is essential so that the first aid attendant can be quickly called to the first aid room.

Conveyance to hospital can be by :—

Public transport
Taxi
Vehicles of members of the staff
Ambulance

} Expenses should be paid out of college funds

In conclusion it should be remembered that the minimum requirement under the Factories Act, 1937, is a first aid box or cupboard conforming to the prescribed standard. In each workroom a notice must be exhibited stating the name of a responsible person in charge of the first aid box. For each 150 persons employed an additional box must be provided. If more than 50 persons are employed the person in charge of the box must be trained in first aid.

EXISTING HAZARDS CALLING FOR SPECIAL PRECAUTIONS

These will vary with the nature and risk hazards of training syllabuses which are provided by the colleges. Some call for special mention.

Cyanide (Machine Tools and Fitting Workshop)

Cyanide, used in the steel hardening process, is demonstrated periodically to the students.

Gases such as hydrogen cyanide act not by their direct effect on the lungs but are absorbed and act by a toxic effect on the body cells, preventing them utilising oxygen.

Though cyanide poisoning causes sudden unconsciousness, death frequently does not occur for about an hour.

All emergency methods of treatment for cyanide poisoning must be available in the workshop concerned.

It is suggested that the remedies should be packed into two wooden boxes each clearly labelled and containing as follows :—

(1) Cyanide Poisoning—First Aid Treatment

Ampoules of amyl nitrate
Solution A and Solution B
Full instructions

(2) Cyanide Poisoning—Medical Treatment
(for the use of a doctor only)

50 cc. syringe and needles
10 cc. syringe and needles
Ampoules of sodium nitrite
Ampoules of sodium thiosulphate
Ampoules of sterile water
Full instructions

It is important that after first aid treatment the patient is moved with all speed to hospital and that the Medical Treatment Box is taken with him.

These boxes should be stored ni an easily accessible unlocked cupboard also clearly labelled, and first aid instructions in cyanide poisoning should be given to those members of the staff associated with this process.

Under the Factory Acts, Factory Form 388 must be exhibited where cyanides are used.

Electric Arc Welding (Gas and Electric Welding Workshop)

The hazards of electric arc welding are numerous. Electric shock may result from defective earthing of one pole of the welding current, from unguarded handles or electrodes during adjustment, and from failure of leads and switches. A welder in electrical contact with the earth will get a dangerous shock if he touches the other pole. Though the apparatus should be safe without additional precautions the use of insulating gloves, rubber boots or insulated flooring material on which to stand prevents or reduces the risk.

During the actual welding operation flying particles of hot metal may penetrate the skin, and the chipping away of slag which covers a weld when coated electrodes are used may cause flying particles. Suitable gloves or aprons should be used.

Exposure to infra-red and ultra-violet radiation produced by electric and oxyacetylene welding will cause a solar dermatitis of the exposed skin. Electric welding may also cause an intensely painful condition of the eyes known as arc flash. Arc flash in spite of its name is not due to a momentary exposure, but to a cumulative effect most often from the arc of other welders. Suitable eye lotions should be available for immediate first aid treatment.

For oxyacetylene welding goggles must be worn and for electric arc welding a shield, usually held in the left hand, is required to protect the face and neck. Flying particles of metal may cause pitting of the glass and so obscure vision. In acetylene welding this may lead to goggles being removed. Therefore all goggles and glass insets of shields should be checked and, if necessary, renewed periodically.

Eye Injuries (All Workshops)

The Protection of the Eyes Regulations, 1938, specify that goggles or effective screens to prevent flying particles entering the eyes must be employed for dry grinding of metals by hand or power operated wheels, turning of non-ferrous metals or iron, welding or cutting of metals by electrical or oxyacetylene process (fettling of castings, etc.) and breaking and dressing of stone concrete or slag.

It should be insisted that goggles be worn where any of the above situations exist and are not left hanging at the side of the machine.

Chemical Burns of the Eye (Laboratories)

The immediate removal of burning chemical agents from the eye is even more urgent than from the skin. Treatment must be started at once and eye wash bottles with suitable lotions should be available for the immediate flooding of the affected eye. The value is largely mechanical, but neutralising solutions can be used as follows :—

Acid burn	—	sodium bicarbonate 2% or normal saline.
Alkali burn	—	ammonium chloride 1% or normal saline.
Lime burn	—	ammonium tartrate 10%
Ammonia burn	—	normal saline.

All solutions, bottles, undines, etc. must be sterile so as to avoid introducing infection into a damaged eye.

After first aid treatment the patient should be transferred to hospital for further investigation.

Electricity (Electrical Installation and all Workshops)

The lowest voltage recorded as causing death is 60 volts, but a fatal outcome rarely follows a shock of less than 150-250 volts and occasionally up to 600-800 volts may pass through the body without resulting in death. Much depends on the contact between the electrode and the body and a moist or wet skin greatly increases the risk. A good contact to earth is also potentially dangerous, a wood or rubber floor diminishes the risk. Apparatus and all leads should be inspected periodically, special attention being paid to portable apparatus in which the leads are especially liable to become worn.

Death results from paralysis of respiration or paralysis of the heart—it being always assumed for the purpose of first aid that the former has occurred as in this instance the heart may continue to beat. The importance of speed in commencing artificial respiration is shown by the fact that successful restoration of consciousness is inversely proportional to the time taken to start artificial respiration. Instruction in the methods of artificial respiration is therefore essential.

Burns and Scalds (All Workshops and Laboratories)

A burn is an injury caused by dry heat, electricity, friction and corrosive chemicals. A scald is an injury caused by moist heat. The effects of a burn or a scald are the same and the dangers increase with increase in the surface area involved.

Thermal Burns. The areas of most burns and scalds, including the clothing involved are to all intents and purposes sterile for a short period and every effort should be made to keep them so. Prepared **dry** sterile dressings should always be used as there is a great danger of introducing infection. On no account should lotions, creams or vaseline be used on any but the most trivial injury.

Chemical Burns. These differ from thermal burns by the fact that the action of the causative agent, if not removed, will continue over a long period until it has neutralized itself by its action on the tissues. The first and absolute necessity in all chemical burns is washing which dilutes and mechanically removes the offending agent and less than 10-20 minutes is seldom sufficient.

Phenol burns should be carefully washed with rectified or methylated spirit as phenol is insoluble in water.

Phosphorus burns should be kept under water while phosphorus particles are being removed. This burn should then be washed with copper sulphate 2% to neutralize the remaining phosphorus and then with sodium bicarbonate 2% to remove precipitated copper

Lead (Plumbing)

Lead, usually in the form of oxides, carbonates or as a fine metallic dust, is absorbed by inhalation through the lungs and by ingestion through the mouth and may result in lead poisoning.

The provision of adequate washing facilities, including soap and nail brushes for use after work is important. No food, drink or tobacco should be consumed in the workroom.

A workman's capital is his health and ability to work and without these assets he is bankrupt, yet many seem quite indifferent to their own health and safety. The fear of being called a " Cissie " if one wears goggles or adopts other protective measures appears to be fairly widespread, particularly amongst the younger workers. A technical college, therefore, has an important part to play in the inculcation of good industrial practice and when all is considered the responsibility rests on the lecturers and demonstrators who, being men of experience, must set an example regardless of inconvience.

APPENDIX

First Aid Equipment

Splints
Triangular bandages
1″, 2″, 3″ } Roller bandages
Cotton wool (bleached)
Cotton wool (unbleached)
Gauze
½″, 1″, 2″ } Adhesive plaster
Elastoplas dressing (strip)
Elastoplast dressing (waterproof)
Scissors 5″
Dressing forceps 5″ x 2
Medicine glass
Undine
Round dishes 3″ x 2
Kidney dishes 6″ ; 9″ ; 12″
Rubber mackintosh
Cheatle's forceps
Prepared sterile dressings
Eye wash bottles
Electric torch
Safety line
Cetavlon
Ether/Meth. Solution
Finger stalls