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CITY OF LEEDS

REPORT

ON THE

Health & Sanitary

Administration

OF THE CITY

FOR THE YEAR 1955

BY

I. G. DAVIES, M.D., B.S., F.R.C.P., M.R.C.S., D.P.H.

Medical Officer of Health and School Medical Officer.

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HEALTH COMMITTEE.

LORD MAYOR (Alderman Sir James Croysdale)

Chairman : Alderman WINIFRED SHUTT.

Alderman LIZZIE NAYLOR, J.P.
 (to September, 1955)
 „ ELIZABETH M. LISTER
 „ Z. P. FERNANDEZ, B.A.,
 M.D., D.P.H.
 „ H. M. G. McKAY
 (to May, 1955)
 „ W. FOWLER

Councillor A. KING
 „ VYVYAN M. CARDNO
 „ MARGARET COLLINS
 „ L. WALSH, M.B., Ch.B.
 „ A. HARRISON, J.P.
 „ EVELINE COLEMAN

Councillor H. DRAKE
 „ W. M. JONES (Deputy
 Chairman)
 „ MAY FISH
 „ G. I. ADDLESTONE
 „ W. O. D. SMART, F.C.I.S.
 „ MARION S. MUSTILL
 „ E. J. L. WOOLER, M.B.E.
 J.P. (to May, 1955)
 „ W. MERRITT, R.M.N.
 (from September, 1955)
 „ LUCY LYONS (from May,
 1955)
 „ D. A. WOLSTENHOLME
 (from May, 1955)

EX-OFFICIO MEMBERS.

Representatives of Leeds Medical Committee (National Health Service)
 invited to attend in an advisory capacity :—

Dr. J. H. E. Moore and Dr. T. D. Pratt (or a deputy in each case).

SUB-COMMITTEES.**SUB-HEALTH (MATERNITY AND CHILD WELFARE) COMMITTEE.***Chairman* : Alderman LIZZIE NAYLOR, J.P. (to September, 1955)

Alderman WINIFRED SHUTT (from September, 1955)

Alderman ELIZABETH M. LISTER
 „ Z. P. FERNANDEZ, B.A.,
 M.D., D.P.H.
 „ H. M. G. McKAY (to May,
 1955)
 „ W. FOWLER
 Councillor A. KING
 „ VYVYAN M. CARDNO

Councillor MARGARET COLLINS
 „ L. WALSH, M.B., Ch.B.
 „ A. HARRISON, J.P.
 „ MARION S. MUSTILL
 „ LUCY LYONS (from May,
 1955)
 „ W. MERRITT, R.M.N.
 (from September, 1955)

CO-OPTED MEMBERS.

Mrs. D. BEEVERS Mrs. R. H. BLACKBURN, M.B.E.

SUB-HEALTH (MENTAL HEALTH SERVICES) COMMITTEE.

Chairman : Alderman Z. P. FERNANDEZ, B.A., M.D., D.P.H.

Alderman ELIZABETH M. LISTER	Councillor H. DRAKE
„ WINIFRED SHUTT	„ W. M. JONES
„ W. FOWLER	„ MAY FISH
Councillor MARGARET COLLINS	„ VYVYAN M. CARDNO (to May, 1955)
„ L. WALSH, M.B., Ch.B.	„ D. A. WOLSTENHOLME (from May, 1955)
„ A. HARRISON, J.P.	
„ EVELINE COLEMAN	

CO-OPTED MEMBERS.

Mrs. A. R. INCE	Mrs. S. MURRAY
Mrs. J. SLATER	

SUB-HEALTH (SANITATION, FOOD AND DRUGS) COMMITTEE.

Chairman : Councillor W. M. JONES.

Alderman LIZZIE NAYLOR, J.P. (to September, 1955)	Councillor W. O. D. SMART, F.C.I.S.
„ H. M. G. MCKAY (to May, 1955)	„ MARION S. MUSTILL
„ WINIFRED SHUTT	„ E. J. L. WOOLER, M.B.E., J.P. (to May, 1955)
„ W. FOWLER	„ EVELINE COLEMAN
Councillor VYVYAN M. CARDNO (from May, 1955)	„ D. A. WOLSTENHOME (from May, 1955)
„ H. DRAKE	„ W. MERRITT, R.M.N. (from September, 1955)
„ MAY FISH	
„ G. I. ADDLESTONE	

PUBLIC HEALTH STAFF.

Medical Officer of Health and Principal School Medical Officer.	I. G. DAVIES, M.D., B.S., F.R.C.P., M.R.C.S., D.P.H.
Deputy Medical Officer of Health and Deputy School Medical Officer	D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.

Medical Staff and Nursing Staff

Chief Assistant School Medical Officer	J. G. JAMIESON, M.A., B.M., B.Ch., D.C.H.
Medical Officer for Mental Health Services	J. M. McALPIN, M.B., Ch.B.
Assistant Medical Officer of Health in charge of Immunisation	HELEN M. CONNELL, M.B., B.S., M.R.C.S., L.R.C.P., D.C.H. (to 30.6.55) MONICA A. AXSON, M.B., Ch.B. (from 11.7.55)
Honorary Assistant Medical Officer of Health (by arrangement with the University of Leeds)	C. W. DIXON, M.D., D.P.H., D.L.O., D.C.H., Senior Lecturer in Public Health, University of Leeds
Chief Assistant Medical Officer for Maternity and Child Welfare	CATHERINE MARGARET GRAY, M.B., Ch.B., D.P.H.
Assistant Medical Officers for Maternity and Child Welfare	SARAH N. S. BARKER, M.B., Ch.B., L.R.C.P., M.R.C.S. ISOBEL B. ALEXANDER, M.B., Ch.B. EUGENIE C. ILLINGWORTH, B.Sc., M.B., Ch.B., M.R.C.S., L.R.C.P. JESSIE I. ROSIE, M.B., Ch.B., D.P.H. MARGARET C. PULLAN, M.B., Ch.B. JEAN M. BEECROFT, M.B., Ch.B. (to 31.5.55) BETTY STANDEVEN, M.B., Ch.B. (from 26.5.55) FRANCES E. SMITH, M.B., Ch.B., D.P.H. PHOEBE H. CHANCE, M.B., M.R.C.P., L.R.C.P. YVONNE R. SNEDDON, M.B., Ch.B.
Superintendent Health Visitor and School Nurse	JOYCE M. AKESTER, S.R.N., S.C.M.
Supervisor of Midwives	DOROTHY HUMPHREYS, S.R.N., S.C.M.
Superintendent Nurse, Home Nursing Service	EDITH G. MEADOWS, S.R.N., S.C.M.
Superintendent Nurse, Home Nursing Service	JEAN CORCORAN, S.R.N., S.C.M., Q.N.
Superintendent Nurse, Home Nursing Service	ELSIE BOULTON, S.R.N., S.C.M., Q.N.

Chief Sanitary Inspector and Deputy

Chief Sanitary Inspector		J. GOODFELLOW, F.R.S.H., M.I.P.H.E.
Deputy Chief Sanitary Inspector	..	W. F. SAXTON, M.R.S.H., F.S.I.A.

City Analyst and Deputy

City Analyst		C. H. MANLEY, M.A., F.R.I.C.
Deputy City Analyst	.. ..	R. A. DALLEY, F.R.I.C.

Administrative Staff

Chief Administrative Assistant	..	A. BATLEY
Executive Officer, Mental Health Services		J. SQUIRE HOYLE
Accountant	.. ..	H. A. CORLETT, A.S.A.A.
Assistant Administrative Officer	..	W. WILSON, A.C.I.S.
Chief Clerk, Accounts	.. ..	J. PEACOCK
Disinfestation Officer	.. ..	C. W. LAMB, M.R.S.H., M.S.I.A.
Ambulance Officer	.. ..	F. E. J. LARGE
Home Help Organiser	.. ..	Mrs. DOROTHY W. ALFORD
Convalescent Scheme Organiser	..	JESSIE CHIPPERFIELD

Consultants to the Health Committee

Consultant Adviser in Tuberculosis	..	G. F. EDWARDS, M.B.E., M.B., B.S., M.R.C.P., M.R.C.S.
Consultant Adviser, Infectious Diseases		E. C. BENN, M.B., Ch.B., D.P.H.
Consultant in Child Health	.. ..	Professor W. S. CRAIG, B.Sc., M.D., F.R.C.P.E., F.R.S.E., M.R.C.P.
Consultant Psychiatrists	.. ..	Professor G. R. HARGREAVES, O.B.E., M.R.C.S., L.R.C.P.
		I. SUTTON, M.Sc., M.D., D.P.M., L.R.C.P., M.R.C.S.
		J. W. AFFLECK, M.B., Ch.B., F.R.F.P.S., D.P.M.
		A. H. WILSON, M.B., Ch.B., D.P.M.
Consultant Adviser in Venereal Diseases		G. O. HORNE, Ph.D., F.R.C.P. (Edin.)

PUBLIC HEALTH DEPARTMENT

STAFF

<i>Class of Employees</i>	<i>No. employed at 31/12/55</i>
Sanitary Inspectors	40
Female Sanitary Inspectors	2
Student Probationer Sanitary Inspectors	12
Condemned Meat Room Attendant	1
Assistant Analysts	2
Health Visitors	57
Tuberculosis Health Visitors	4
Student Health Visitors	12
Midwives	44
Dispensers	13
Physiotherapists	5
Immunisation Nurses	2
Social Workers	4
Day Nurseries	196
Nursery Teacher	1
Nurses Homes	12
District Nurses	89
B.C.G. Nurse	1
Infectious Diseases Visitors	2
Clerical Staff	88
Welfare Foods	6
Wyther Hostel	9
The Hollies	16
Red Court Hostel	28
Convalescent Home, Southport	6
Central Ambulance Station Staff	131
General Disinfection and Disinfestation	25
Personal Disinfection and Disinfestation	5
Flushing Staff	9
Mortuary Service	6
Rodent Operatives	6
Lavatory Attendants	28
Lavatory Cleaner	1
Caretakers and Cleaners	35
Home Helps	156
Convenience Lighting	1

City of Leeds

To the Chairman and Members of the Health Committee.

Ladies and Gentlemen,

I present herewith the Annual Report of the Medical Officer of Health of the City of Leeds for the year 1955.

The population of the city, according to the Registrar General's estimate at the mid-year of 1955, was 507,400 as compared with the estimate for 1954 of 507,200.

**Vital
Statistics**

The birth-rate for the year was 15.0, the same figure as for 1954. The infant mortality rate for the year was 25 and this is the lowest yet recorded in Leeds. The neo-natal mortality rate—the rate calculated from the deaths of infants in the first four weeks—showed no change from 1954, remaining at 17.8. The principal causes of infant deaths were prematurity, malformations and pulmonary atelectasis. These three causes accounted for 57 per cent. of the infant deaths in the first year of life. The maternal mortality rate fell from 0.64 in 1954 to 0.51 in 1955. The deaths from tuberculosis are the lowest yet recorded in the City of Leeds.

For the second year in succession there has been no case of diphtheria. In the annual report for 1954 it was suggested that combined immunisation against diphtheria and whooping cough was beginning to reduce the number of cases of whooping cough. A further substantial decrease in the number of cases of whooping cough supports this opinion. The number of cases in 1955 was only one-third of those in 1953. Dysentery, mainly of the mild Sonne type, again increased in spite of energetic control measures, and the number of cases of measles was the highest recorded for many years. Sonne dysentery and measles are troublesome rather than dangerous diseases. Sonne dysentery has a particularly high nuisance value in the day nurseries. Children are excluded from day nurseries due to very mild attacks of this disease, in some instances so mild they would be disregarded at home. On the other hand the Health Department cannot knowingly expose children to the risk of infection however mild it may be.

**Infectious
Disease**

Poliomyelitis showed a higher prevalence in Leeds during 1955 than in the previous year. The same pattern was observed in Britain generally. The number of cases recorded in Leeds during 1955 was 60.

There was a further substantial fall in deaths from tuberculosis during 1955, the fall being most marked in respiratory tuberculosis. The fall in the number of deaths from pulmonary tuberculosis has been very marked during the last few years; the number of deaths in 1955 was 67 as compared with 166 in 1951. On the other hand, new notifications of the disease have risen slightly. There were 420 cases of respiratory tuberculosis notified in 1953, 470 cases in 1954 and 488 in 1955. Paradoxically this rise in notifications may have a favourable explanation since some of the new cases at least may be due to a more extensive search by radiography, contact and source tracing. Supporting evidence for this view is provided by the diminished calls by tuberculosis patients upon the Home Help Service, the decreased number of requests for loan of beds and bedding, and the increased number of patients referred to the Ministry of Labour for industrial rehabilitation and resettlement in work. All these things suggest that few patients are being found for the first time with advanced disease. A further encouraging sign is the virtual disappearance of the waiting lists for sanatoria. For the first time on record there was a surplus of sanatorium beds for certain categories of tuberculous patients. In spite of the encouraging signs of the decline of pulmonary tuberculosis as a clinical problem, there still remains the public health problem of the chronic ambulant cases, especially those without homes who live in hostels or lodging-houses or in public lodgings and are at work. Another undiscovered source of infection may be the aged person at home who, under the guise of chronic bronchitis, may be a case of chronic pulmonary tuberculosis intermittently excreting tubercle bacilli in the sputum. Such persons do not respond to mass radiography appeals. They are a serious risk to other members of the family and particularly to young children in the household.

Immunisation

The new mobile unit came into service in September and as expected has proved most useful. The function is to act as a mobile immunisation clinic and is particularly useful to cover outlying areas of the city which have no other clinic facilities. In addition it is used for those parts of the city in which the existing clinic premises are ill-adapted for work involving injections. The unit has also proved useful in connection with public sessions for mass radiography.

In December the Ministry of Health approved the modified proposals of the Health Committee relating to routine vaccination of school children and adults against smallpox and the existing proposals for immunisation under the National Health Service Act were widened in scope to include immunisation against any other disease for which arrangements could be made with the approval of the Minister. In addition, the Minister also approved the proposals for the provision of B.C.G. vaccination of any class of person as may be approved by the Minister from time to time.

Two new clinics were opened during the year, at the Ireland Wood Estate and at Nineveh Road. The Ireland Wood clinic is a very small centre built at a cost of £1,800 to provide a temporary clinic pending a more comprehensive scheme for a wider area at a later date. The Nineveh Road clinic has been provided by the adaptation of an old building and the result has been a most satisfactory clinic for maternal and child welfare and school health purposes. The accommodation provided is excellent. Further progress was made towards the provision of clinics at Seacroft and Belle Isle. There have been many difficulties to surmount and final approval of the Minister has not yet been obtained.

**Maternal
and Child
Health**

In December the Health Committee approved the use of Trichlorethylene (Trilene) for use by midwives as an analgesic in labour. The use of this analgesic has been the subject of research by the Medical Research Council together with the type of apparatus necessary for its administration to the patient. The Health Committee decided to equip all the midwives with an approved apparatus for the administration of Trichlorethylene as an analgesic.

The year 1955 is the first full year during which the home nursing services of the whole city have been under the direct administration of the Health Committee. Integration of the previously separate nursing districts has proceeded gradually so as not to impair the smooth running of the service. No major difficulties have been encountered in the transfer of the services so far as the availability of the service to patients is concerned, nor were there any staff problems which gave rise to difficulties. During the year the nurses' home in Whitfield Street, Hunslet, was closed and the premises returned to the Leeds District Nursing Association. The staff, who were previously resident, are now non-resident. The new arrangement is working satisfactorily. It is

**Home
Nursing**

probable that further homes will be closed in accordance with the Health Committee's policy laid down in 1948 that home nurses shall as far as possible be provided on a district basis similar to that of the midwives' service.

In March the Local Health Authority became a member authority of the Queen's Institute of District Nursing. One of the advantages of this is to safeguard the status of those members of the home nursing staff who are Queen's Nurses. It is the policy of the Queen's Institute that nursing staff employed by Local Health Authorities cannot continue to hold the title of Queen's Nurse until their employing authority is a member of the Queen's Institute.

The training arrangements for Queen's Nurses continued as formerly, pending the report of the Working Party on the Training of Home Nurses appointed by the Minister. The future training of home nurses carried on by the Health Committee will depend on the recommendation made by the Minister after his consideration of the Report of the Working Party.

In December Miss MacGowan, the Superintendent of the Domestic Street Nurses' Home, retired after a long and excellent record of devoted service to district nursing.

Mental Health

Dr. McAlpin and Mr. Hoyle deal in the body of this report with the detailed matter relating to the provision of mental health services in the city.

At the end of November the new occupation centre at Stanningley was opened by Dr. Godber, Deputy Chief Medical Officer of the Ministry of Health. This can truly be described as a model centre and one of which the city can justly be proud. Provision is made for 108 boys and girls between the ages of 2 and 16 years. This centre takes the children previously attending the Armley Grange Centre which will now become available for girls at present attending the South Leeds Centre. This new arrangement will make possible a large expansion of the laundry work at South Leeds.

A further interesting expansion of the Mental Health Services was the opening of the short-stay home at Nowell House adjacent to the East Leeds Occupation Centre. Nowell House provides residential accommodation for 12 children and is designed to take defective children normally living with their parents for a few weeks at a time when illness or domestic difficulties make home care impracticable or impossible, or

to enable parents to be relieved for temporary periods of the sometimes intolerable burden of the care of defective children. The maximum length of stay is two months. During the year arrangements were made for the Health Committee's Psychiatric Social Worker to attend weekly at the Education Committee's Child Guidance Centre and also to meet the health visitors to discuss cases presenting problems of mental health. These arrangements are proving a useful step in the co-ordination of mental health services in the city.

A further step was taken in the care and welfare of older mentally handicapped boys and adults by the introduction of new forms of industrial activity at the North Leeds Occupation Centre. Mr. Hoyle has arranged with a local manufacturer for simple engineering components to be processed at agreed rates of pay by mentally handicapped boys and men at North Leeds. It is hoped that other activities can be introduced and the possibilities of carrying out simple and light assembly work for other firms are being explored.

The brush-making processes at North Leeds have been discontinued. For many reasons this was unsatisfactory, not the least being the sale of the completed product in a severely competitive market.

In July a visit was made by members of the Royal Commission on the Law relating to Mental Illness and Mental Deficiency. An inspection of the Leeds Occupation Centres was made and certain aspects of the care and welfare of mentally ill persons and of mentally handicapped persons discussed with members of the Royal Commission.

The demands on the Ambulance Service continued to increase throughout the year. The increase was accounted for in the main by the out-patient and special departments of the various hospitals in the city. The developments which have taken place in St. James's Hospital and also at Seacroft Hospital as well as at the Public Dispensary have been necessarily reflected in the increased work done by the Ambulance Service.

Early in the year the Health Committee considered a report of the Ministry of Health, prepared as the result of a survey carried out in November, 1954. The Health Committee decided to make certain changes in the Ambulance Service and these decisions were communicated to the Minister who expressed his satisfaction with them. The changes included the discontinuance of the practice of employing qualified

midwives for the purpose of accompanying maternity patients to hospital. Certain changes in the method of allocation of crews in ambulances were also made as well as the routine maintenance inspection of the vehicles themselves.

Discussions took place during the year as to the arrangements which would operate in the city in the event of a major disaster. Agreement was reached with the appropriate officers of the major hospitals in the city and the necessary police co-operation was also secured with the assistance of the Chief Constable.

Venereal Diseases

Dr. Horne, Consultant in Venereal Diseases, presents in this report a review of progress in the last 25 years. The introduction of new and more effective drugs has reduced the incidence of these diseases dramatically, particularly that of syphilis. As Dr. Horne points out, syphilis in its early infectious form has virtually disappeared from the city. An interesting result of modern treatment is the eradication of congenital syphilis in infants. An important factor in this result is the close co-operation between Dr. Horne and the medical staff of the Local Authority's ante-natal clinics.

Health Centres

As the result of the plans of the Housing Committee for the re-development of the Burmantofts and York Road areas, it became necessary to consider the arrangements to be made for the provision of clinic facilities in the area as well as the provision of domiciliary medical services provided by medical practitioners displaced by the clearance proposals in the two areas. Joint meetings were held between representatives of the Health and Housing Committees and the Executive Council and it was decided that a health centre within the meaning of Section 21 of the National Health Service Act should be provided to cover the various services necessary. The Executive Council informed the Local Health Authority that they accepted the proposal that doctors' surgeries in the area should be provided by means of a health centre. Subsequently a similar decision in respect of dental services was made.

In December the Health Committee instructed the City Architect to prepare plans for a health centre to provide for six doctors' and two dentists' surgeries as well as clinic provision for Local Health Authority purposes. It will be necessary for agreement to be reached with the Executive Council on the plans and for the entire proposals to be submitted to the Minister for his approval.

The work of the Department has increased considerably in all matters relating to housing. In addition to a full programme of work in connection with clearance areas, there has been a marked increase of work in connection with improvement grants, certificates of disrepair, and house conversions. Enquiries regarding the "life of properties" have continued to increase and the detailed inspections required for these purposes have placed a heavy burden on an inspectorial staff depleted by staff shortage.

**Housing,
General
Sanitation
and Food
Hygiene**

The hygiene of food has entailed a great deal of inspectorial time and the prospect of new regulations has required a considerable amount of survey work to be done to assess the effect which the forthcoming Food Hygiene Regulations will provide.

A special chapter has been included in this report concerning experimental work done in the ventilation of back-to-back houses. This work was carried out with the encouragement and approval of the Ministry of Housing and Local Government. Its results are of great importance in a city which possesses so many back-to-back houses of good construction in a structural sense, and many of which were built comparatively recently.

In October the Health Committee considered the acquisition of land at Bridge Road, Kirkstall, for the erection thereon of a public convenience and quotations were invited for the erection of a public convenience in Harrogate Road. In December plans were approved for a public convenience in Otley Road. In June the control of the public convenience at the Central Bus Station was transferred to the Health Committee together with the staff formerly employed by the Transport Committee.

As in previous years the Health Department has received ready assistance and co-operation from those other Departments of the Corporation with which it must of necessity be closely associated.

**Acknowledg-
ments**

On behalf of the Health Department I give my thanks to the Chief Education Officer, the City Architect, the Chief Officer of the Housing Department, the Childrens' Officer, the Director of Works and the General Manager of the Waterworks.

The Health Committee have received much assistance and advice from the Transport Manager and his staff in connection with the maintenance of the ambulance fleet. For this expert advice I give my thanks. Nor would this record be complete without due acknowledgment

of the guidance given by the Town Clerk and his Department on the many difficult legal problems which arise in the course of the year.

I wish to thank the Deputy Town Clerk for his personal guidance and advice in the complex problems which fall to my Department in connection with housing.

I thank the members of my own staff for their loyalty to me during the year, and I commend them all to the Health Committee as efficient and faithful officers.

Finally, on behalf of myself and my Department I thank the Chairman and Deputy Chairman and Members of the Health Committee for their guidance, support and advice always sympathetically and courteously given to me in carrying out the duties of my office throughout another year.

I am,

Ladies and Gentlemen,

Your obedient servant,

I. G. DAVIES.

Public Health Department,

Leeds, 1.

July, 1956.

SUMMARY

1955

LATITUDE 53° 48' North. LONGITUDE 1° 32' West.

AVERAGE HEIGHT ABOVE SEA LEVEL 250 feet.

AREA OF CITY 38,296·5 Acres

HOME POPULATION (Registrar General's Estimate) .. 507,400

ESTIMATED NUMBER OF HOUSES 164,493

RATEABLE VALUE £6,411,779

SUM REPRESENTED BY A PENNY RATE £24,720

	Average	
	1955.	1945-54
BIRTH RATE (births per 1,000 living)	15·0	17·3
MARRIAGE RATE (persons married per 1,000 living) ..	17·8	18·9
DEATH RATE (deaths per 1,000 living)	11·5	12·7
NATURAL INCREASE OF POPULATION	1,814	2,245
(Excess of births over deaths in the year)		
INFANT MORTALITY RATE	25	37
(Deaths under 1 year per 1,000 births)		
DEATH RATE from Pneumonia and Bronchitis	1·41	1·57
.. .. . Cancer	2·11	2·02
.. .. . Diarrhoea and Enteritis (under 2 years)		
per 1,000 births	1·18	4·50

	Cases	Case-rate	Deaths	Death rate
SCARLET FEVER	603	1·19	..	..
DIPHTHERIA	..	..	..	..
TYPHOID FEVER	..	..	..	..
MEASLES	11,243	22·16	3	0·01
WHOOPING COUGH	563	1·11	..	..
RESPIRATORY TUBERCULOSIS	488	0·96	67	0·13
OTHER FORMS OF TUBERCULOSIS	85	0·17	3	0·01

Natural and Social Conditions

NATURAL AND SOCIAL CONDITIONS

Area.—The area of the city is 38,296·5 acres.

Population.—The Registrar General's estimate of the home population of the city at the mid-year of 1955 was 507,400.

Dwelling-houses.—The total number of dwelling-houses in the city at December, 1955, was 164,493.

Rateable Value.—The rateable value of the city at 1st April, 1956, was £6,411,779 and the estimated sum represented by a penny rate was £24,720. The corresponding figures for 1954 were £4,165,065 and £16,650 respectively.

Meteorological Conditions.—The hours of bright sunshine registered during the year were 1,380·75, the sunniest month being July with a daily average of 8·07 hours and the darkest December with a daily average of 0·47 hours. The daily average for the whole year was 3·78 hours.

The total rainfall for the year was 21·86 inches, the driest month being July with a total of 0·48 inches and the wettest December with 3·56 inches. Taking the four quarters of the year, the rainfall in the first quarter was 6·83 inches ; in the second 5·27 ; in the third 2·45 ; and in the fourth 7·31 inches.

The month with the highest average temperature was July with 69·66 degrees and the lowest February with 38·41 degrees. The average temperature for the whole year was 51·39 degrees.

VITAL AND MORTAL STATISTICS

MARRIAGES

The number of marriages which took place in Leeds during the year was 4,506, corresponding to a marriage-rate of 17·8 as compared with 4,168 and a rate of 16·2 for the previous year and an average of 4,335 and 17·1 for the previous five years.

The provisional marriage-rate for England and Wales for 1955 was 16·1 as compared with 15·4 for the previous year.

BIRTHS

The births registered in the city during 1955 numbered 8,259, comprising 4,262 males and 3,997 females. Of these 393 males and

337 females born to parents not residing in Leeds were transferred to the areas in which the home address was situated, whilst 61 males and 40 females, born outside the city to Leeds parents, were transferred in, making a nett total of 7,630 births, comprising 3,930 males and 3,700 females.

The birth-rate was 15.0 per thousand of the home population, as compared with 15.0 for the previous year and an average of 15.6 for the previous five years. The birth-rate for the city was the same as that for England and Wales which was 15.0 per thousand of the population.

Excess of Births over Deaths.—The excess of births over deaths, or the 'natural increase of population,' was 1,814 as compared with 1,829 for the previous year and an average of 2,245 for the previous ten years.

Illegitimate Births.—Of the 7,630 (nett) births registered, 7,143 (3,685 males and 3,458 females) or 93.6 per cent. were legitimate and 487 (245 males and 242 females) or 6.4 per cent. were illegitimate. The comparative figures for the previous year were 7,087 or 93.4 per cent. legitimate and 497 or 6.6 per cent. illegitimate.

ILLEGITIMATE BIRTHS

Year.	Illegitimate births.	Percentage of nett births registered.	Rate per 1,000 estimated population.
1937 ..	400	5.5%	0.81
1938 ..	429	5.6%	0.87
1939 ..	387	5.5%	0.78
1940 ..	402	5.8%	0.86
1941 ..	443	6.6%	0.94
1942 ..	460	6.4%	0.99
1943 ..	583	7.7%	1.28
1944 ..	683	8.0%	1.51
1945 ..	841	10.8%	1.86
1946 ..	764	7.7%	1.54
1947 ..	699	6.4%	1.42
1948 ..	595	6.4%	1.19
1949 ..	554	6.4%	1.08
1950 ..	546	6.7%	1.07
1951 ..	512	6.4%	1.02
1952 ..	512	6.6%	1.01
1953 ..	524	6.6%	1.04
1954 ..	497	6.6%	0.98
1955 ..	487	6.4%	0.96

Stillbirths.—The number of stillbirths registered during the year was 217 comprising 124 males and 93 females. The inward transfers numbered 4 (4 males) and the outward transfers 48 (26 males and 22 females), which, after adjustment, leaves a nett total of 173 made up of 102 males and 71 females. The rate per thousand of the population was 0.34 as compared with 0.37 for the previous year. The rate for England and Wales was 0.35. Expressed as a percentage of the total births the rate was 2.2 as compared with 2.4 for the previous year. Of the 173 (nett) stillbirths 162 or 93.6 per cent. were legitimate and 11 or 6.4 per cent. were illegitimate. The ratio of registered 'still' to registered 'live' births was 1 to 44 as compared with 1 to 40 for 1954.

Year	No. of stillbirths registered *	Per cent. of total births	Rate per 1,000 population
1938 ..	329 (19)	4.1	0.67
1939 ..	307 (19)	4.2	0.62
1940 ..	282 (27)	3.9	0.61
1941 ..	259 (29)	3.9	0.55
1942 ..	278 (32)	3.7	0.60
1943 ..	250 (22)	3.2	0.55
1944 ..	262 (23)	3.0	0.58
1945 ..	248 (38)	3.1	0.55
1946 ..	299 (29)	2.9	0.62
1947 ..	306 (26)	2.7	0.62
1948 ..	219 (26)	2.3	0.44
1949 ..	200 (23)	2.3	0.40
1950 ..	189 (16)	2.3	0.37
1951 ..	194 (20)	2.4	0.39
1952 ..	182 (18)	2.3	0.36
1953 ..	167 (14)	2.1	0.33
1954 ..	188 (20)	2.4	0.37
1955 ..	173 (11)	2.2	0.34

* Illegitimate Stillbirths in brackets.

DEATHS

The gross number of deaths registered in the city was 6,295 comprising 3,323 males and 2,972 females, giving a gross death-rate of 12.4 as compared with 12.3 for the previous year and an average of 12.8 for the previous five years. The inward transferable deaths numbered 168 (89 males and 79 females) and outward transfers 647 (374 males and 273 females), which, after adjustment, leaves a nett total of 5,816 deaths debitable to the city, made up of 3,038 males and 2,778 females.

The corresponding death-rate was 11.5 as compared with 11.3 for the previous year and an average of 12.2 for the previous five years. The death-rate for England and Wales was 11.7.

Comparison with other towns (crude death-rate).—Comparing the death-rate for Leeds with the twelve large towns in England and Wales, Leeds occupied eighth place, the towns with higher death-rates being Liverpool, Manchester, Sheffield, Bristol, Leicester, Newcastle and Bradford.

Adjusted Death-Rates.—The Area Comparability Factor (A.C.F.) for 1955 was 1.08 and this, when applied to the crude rate (11.5), gives an adjusted rate of 12.4.

An examination of the following table shows that, judged by the adjusted death-rate, Leeds occupies a favourable position among the large towns.

	Population	Birth-rate		Death-rate		Death-rate from		Infant Mor- tality Rate
		Crude	Adj- usted	Crude	Adj- usted	Resp. Tub.	Other Tub.	
London	3,295,000	15.1	13.1	11.5	11.4	0.16	0.01	23
Birmingham	1,111,700	16.0	15.1	11.3	12.9	0.19	0.01	24
Liverpool	779,900	19.6	18.0	11.9	14.3	0.24	0.02	30
Manchester	692,200	16.9	16.1	12.7	14.3	0.19	0.02	28
Leeds	507,400	15.0	14.7	11.5	12.4	0.13	0.01	25
Sheffield	501,100	13.5	13.4	11.8	12.6	0.22	0.02	24
Bristol	442,500	14.8	14.6	11.8	11.3	0.12	0.02	19
Nottingham	312,000	15.7	14.9	11.3	12.3	0.17	0.01	28
Hull	299,600	18.1	17.3	10.8	12.4	0.19	0.01	26
Bradford	286,400	16.2	16.2	14.0	13.6	0.10	0.01	29
Leicester	286,300	14.8	14.7	12.0	12.2	0.20	0.01	23
Newcastle	281,000	16.7	15.9	12.4	13.6	0.17	0.01	34
Stoke-on-Trent	274,000	15.6	14.7	11.4	14.1	0.27	0.03	31

Causes of Death.—The principal causes of death were, in order of numerical importance, malignant and lymphatic neoplasms (140-203, 205), coronary disease (420), vascular lesions of the central nervous system (330-334), heart disease (410-416, 421-443), bronchitis (500-502), pneumonia (490-493, 763) and other circulatory diseases (444-468) which together accounted for 4,506 or 77.5 per cent. of the total deaths. Last year this group of diseases was responsible for 4,488 or 78.0 per cent. of the total deaths.

The tables on pages 9 and 10 set out the causes of death in accordance with the International Statistical Classification of Diseases, Injuries and Causes of Death.

Deaths in Age Groups.—The table on page 11 sets out the deaths according to age groups. The aggregate number of deaths of children in the age groups 0-1, 1-2 and 2-5 was 222 or 3·8 per cent. of the total deaths, as compared with 230 or 4·0 per cent. for the previous year and an average of 277 or 4·5 per cent. for the previous five years. The number of deaths in all the age groups under 45 years was 582 or 10·0 per cent. as compared with 561 or 9·7 per cent. in the previous year. In the remaining age groups 45-65 and 65+ the deaths numbered 5,234 or 90·0 per cent. as compared with 5,194 or 90·3 per cent. in the previous year.

Cremations.—Out of a total of 5,816 Leeds deaths during the year, the number of bodies disposed of by cremation was 2,395 or 41·2 per cent. as compared with 2,214 or 38·5 per cent. in 1954. Of this number 1,783 were cremated at Lawnswood and the remainder, 612, at Cottingley. The total number of cremations represents an increase of 181 on the figure for the previous year and an increase of 300 on the average number of cremations for the previous five years.

INFANT MORTALITY

The number of children under one year of age who died in 1955 was 194 (males 107, females 87) as compared with 198 (males 118, females 80) in 1954. The infant mortality rate was 25 as compared with 26 for the previous year and an average of 30 for the previous five years. The infant mortality rate for England and Wales was 25.

Illegitimate Death-Rate.—Of the 487 illegitimate births, 17 died before reaching the age of one year, which is equal to an infant mortality rate of 35 as compared with 40 last year.

Causes of Death.—The principal causes of death of infants under one year of age during the year, in order of numerical importance, were prematurity 54 (27·8 per cent.), congenital malformations 29 (14·9 per cent.), post-natal asphyxia 28 (14·4 per cent.) and pneumonia 19 (9·8 per cent.). Respiratory diseases were responsible for 24 or 12·4 per cent. of the total deaths under one year of age; in 1954 the number was 32 or 16·2 and the average for the previous five years 54 or 23·0 per cent. For further details of causes of death of infants under one year, see tables on pages 12 and 13.

Prematurity.—The number of deaths from prematurity (unqualified) was 54. The death-rate from prematurity per thousand live births was 7·1 as compared with 6·5 for the previous year.

The following table shows the number of deaths classified to other diseases of early infancy in which prematurity was mentioned as a contributory cause of death.

INFANT DEATHS WITH MENTION OF PREMATURETY.

International List Nos.	Cause of death	Deaths	
		M.	F.
760·5	Intracranial and spinal injury at birth ..	..	2
762·5	Post-natal asphyxia and atelectasis ..	8	5
763·5	Pneumonia of newborn	1	..
770·5	Erythroblastosis	..	1

Deaths in Age Groups.—Of the total (194) infant deaths, 89 or 45·9 per cent. took place on the first day; 123 or 63·4 per cent. in the first week; 136 or 70·1 per cent. in the first month; 19 or 9·8 per cent. between one and three months; 26 or 13·4 per cent. between three and six months; 7 or 3·6 per cent. between six and nine months and 6 or 3·1 per cent. between nine and twelve months.

The percentage changes in the infant death-rates per thousand births in 1955 as compared with the previous ten years are as follows :—

Under 1 week decrease	18·3%	3-6 months decrease	32·0%
Under 1 month ..	15·6%	6-9	64·0%
1-3 months ..	58·3%	9-12	52·9%
Whole year decrease, 31·0%			

Neo-Natal Death-Rate.—The number of deaths occurring in the first month of life was 136 or one more than in the previous year, the corresponding neo-natal death-rate being 17·8 as compared with 17·8 in 1954.

Of the total deaths under one year of age, 70·1 per cent. occurred in the first month and of deaths in the first month 65·4 per cent. occurred on the first day, 90·4 per cent. in the first week and 94·1 per cent. in the first two weeks.

As in previous years, deaths in the first month were largely due to prematurity, atelectasis and post-natal asphyxia.

MATERNAL MORTALITY.

The number of mothers who lost their lives in childbirth during the year was four as compared with five for the previous year. The corresponding maternal mortality rate per thousand live births was 0.52 as compared with 0.66 for the previous year and an average of 0.66 for the previous five years. Calculated on the total number of births (live and still) the rate for the year was 0.51 as compared with 0.64 for the previous year and an average of 0.64 for the previous five years.

The causes of death were as follows :—

- (i) 1a. Pulmonary embolism.
 - b. Thrombo-phlebitis right saphenous vein.
 - c. Cæsarian section.
- (ii) 1a. Shock due to
 - b. Hæmorrhage due to
 - c. Retained products of conception.
- (iii) Eclampsia.
- (iv) Acute necrosis of liver due to pregnancy.

PRINCIPAL CAUSES OF DEATH

International List Nos.	Diseases	No. of deaths in 1955 (nett)	No. of deaths in 1954 (nett)	Death rate 1955
001-008	Tuberculosis, respiratory	67	83	0.13
010-019	Tuberculosis, other forms	3	4	0.01
020-029	Syphilitic disease	18	22	0.04
055	Diphtheria	..	..	..
056	Whooping Cough	..	..	..
057	Meningococcal infections	4	3	0.01
080	Acute poliomyelitis	2	..	0.00
085	Measles	3	..	0.01
Remainder of 001-138	Other infective and parasitic diseases	4	10	0.01
151	Malignant neoplasms: Stomach	141	140	0.28
162, 163	Lung, bronchus	270	237	0.53
170	Breast	90	98	0.18
171-174	Uterus	43	52	0.08
Remainder of 140-203	Other malignant and lymphatic neoplasms	489	485	0.96
205	Leukaemia, aleukaemia	39	18	0.08
204	Diabetes	41	37	0.08
260	Vascular lesions of central nervous system	852	843	1.68
330-334	Coronary disease, angina	933	961	1.84
420	Hypertension with heart disease	114	128	0.22
440-443	Other heart disease	627	627	1.24
444-468	Other circulatory disease	230	200	0.45
480-483	Influenza	21	16	0.04
490-493 } 763 }	Pneumonia	255	309	0.50
500-502 } 470-475 }	Bronchitis	463	408	0.91
510-527 }	Other diseases of the respiratory system	47	75	0.09
540, 541 } 543, 571 }	Ulcer of stomach and duodenum	76	57	0.15
572, 764 }	Gastritis, enteritis and diarrhoea	29	23	0.06
590-594	Nephritis and nephrosis	50	53	0.10
610	Hyperplasia of prostate	17	23	0.03
640-689	Pregnancy, childbirth and abortion	4	5	0.01
750-759	Congenital malformations	45	51	0.09
Residual	Other defined and ill-defined diseases	605	526	1.19
E810-E835 } E800-E802 }	Motor vehicle accidents	54	50	0.11
E840-E962 }	All other accidents	109	132	0.21
E963 } E970-E979 }	Suicide	63	67	0.12
E964-E965 } E980-E999 }	Homicide and operations of war	8	12	0.02
	Totals	5,816	5,755	11.46

CAUSES OF AND AGES AT DEATH DURING THE CALENDAR YEAR, 1955.

International List Nos.	Cause of Death	Nett Deaths at the subjoined ages of "Residents" whether occurring within or outside the District.										*Total Hospital Deaths in the District
		All Ages	Under 1 year.	1 & under 2 years.	2 & under 5 years.	5 & under 15 years.	15 & under 25 years.	25 & under 45 years.	45 & under 65 years.	65 & under 75 years.	75 and upwards.	
001-008	Tuberculosis, respiratory ..	67	1	..	..	..	4	19	27	11	5	38
010-019	Tuberculosis, other forms ..	3	..	..	..	..	..	..	1	1	1	10
020-029	Syphilitic disease ..	18	..	..	..	..	..	1	4	6	7	13
055	Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	1
057	Meningococcal infections ..	4	1	2	..	1	..	..	..	..	..	5
080	Acute poliomyelitis ..	2	..	..	..	..	1	1	..	..	..	4
085	Measles ..	3	1	1	1	..	..	..	..	..	..	3
Remainder of 001-138	Other infective and parasitic diseases ..	4	..	..	1	..	..	..	2	..	1	10
	Malignant neoplasms :											
151	Stomach ..	141	..	..	..	..	..	4	58	50	29	62
162, 163	Lung, bronchus ..	270	..	..	..	..	..	15	155	82	18	135
170	Breast ..	90	..	..	..	..	..	11	43	16	20	50
171-174	Uterus ..	43	..	..	..	..	..	4	21	12	6	28
Remainder of 140-203, 205	Other malignant and lymphatic neoplasms ..	488	..	..	1	2	6	32	174	158	115	307
204	Leukaemia, aleukaemia ..	40	..	..	1	4	5	9	15	4	2	41
260	Diabetes ..	41	..	..	..	..	..	1	10	17	13	37
330-334	Vascular lesions of central nervous system ..	852	..	..	..	4	3	13	157	294	381	465
420	Coronary disease, angina ..	933	..	..	..	..	..	26	309	331	267	365
440-443	Hypertension with heart disease ..	114	..	..	..	..	..	2	21	55	36	63
Remainder of 410-443	Other heart disease ..	627	..	..	..	..	3	30	99	127	368	184
444-468	Other circulatory disease ..	230	..	..	..	..	2	9	34	57	128	132
480-483	Influenza ..	21	..	..	..	..	..	..	5	5	11	1
490-493, 763	Pneumonia ..	255	19	7	1	2	..	6	37	59	124	199
500-502	Bronchitis ..	463	1	..	..	1	..	8	115	184	154	209
470-475	Other diseases of the respiratory system ..	47	4	2	1	..	1	5	17	9	8	28
510-527	Ulcer of stomach and duodenum ..	76	..	..	..	..	..	2	28	25	21	76
540, 541	Gastritis, enteritis and diarrhoea ..	29	8	1	..	..	..	3	7	6	4	30
543, 571	Nephritis and nephrosis ..	50	..	..	..	3	5	5	16	13	8	40
572, 764	Hyperplasia of prostate ..	17	..	..	..	..	..	..	1	2	14	18
590-594	Pregnancy, childbirth and abortion ..	4	..	..	..	..	1	3	..	..	..	3
610	Congenital malformations ..	45	29	3	3	1	1	6	2	..	..	66
640-689	Other defined and ill-defined diseases ..	605	118	1	1	8	6	19	90	99	263	617
750-759	Motor vehicle accidents ..	54	..	..	1	5	4	12	16	12	4	58
Residual	All other accidents ..	109	12	..	..	6	1	12	16	18	44	92
E810-E835	Suicide ..	63	..	..	..	1	3	14	27	12	6	6
E800-E802	Homicide and operations of War ..	8	..	..	..	1	2	1	..	3	1	8
E840-E962												
E963												
E970-E979												
E984,E985												
E980-E999												
	Totals ..	5,816	194	17	11	39	48	273	1,507	1,668	2,059	3,404

*Total Deaths whether of "Residents" or "Non-Residents" in Hospitals and Institutions in the District.

DEATHS IN AGE GROUPS (NETT), 1945-1955

Together with the percentage, of the total deaths, represented by each group
(in italics).

Year	Under 1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total
1945	438 <i>6.8%</i>	33 <i>0.5%</i>	37 <i>0.6%</i>	67 <i>1.1%</i>	104 <i>1.6%</i>	481 <i>7.5%</i>	1,752 <i>27.3%</i>	3,498 <i>54.6%</i>	6,410
1946	401 <i>6.1%</i>	29 <i>0.4%</i>	30 <i>0.5%</i>	49 <i>0.7%</i>	99 <i>1.5%</i>	458 <i>6.9%</i>	1,775 <i>26.8%</i>	3,773 <i>57.0%</i>	6,614
1947	552 <i>8.1%</i>	33 <i>0.5%</i>	59 <i>0.9%</i>	51 <i>0.8%</i>	85 <i>1.3%</i>	490 <i>7.2%</i>	1,677 <i>24.7%</i>	3,846 <i>56.6%</i>	6,793
1948	321 <i>5.4%</i>	34 <i>0.6%</i>	25 <i>0.4%</i>	43 <i>0.7%</i>	78 <i>1.3%</i>	401 <i>6.8%</i>	1,599 <i>27.1%</i>	3,401 <i>57.6%</i>	5,902
1949	254 <i>3.9%</i>	27 <i>0.4%</i>	30 <i>0.5%</i>	46 <i>0.7%</i>	87 <i>1.3%</i>	413 <i>6.4%</i>	1,704 <i>26.4%</i>	3,890 <i>60.3%</i>	6,451
1950	250 <i>4.0%</i>	9 <i>0.1%</i>	26 <i>0.4%</i>	42 <i>0.7%</i>	60 <i>1.0%</i>	346 <i>5.5%</i>	1,609 <i>25.7%</i>	3,912 <i>62.6%</i>	6,254
1951	247 <i>3.6%</i>	20 <i>0.3%</i>	24 <i>0.4%</i>	44 <i>0.6%</i>	52 <i>0.8%</i>	327 <i>4.8%</i>	1,758 <i>25.9%</i>	4,325 <i>63.6%</i>	6,797
1952	231 <i>3.7%</i>	20 <i>0.3%</i>	32 <i>0.5%</i>	25 <i>0.4%</i>	38 <i>0.6%</i>	327 <i>5.2%</i>	1,560 <i>24.8%</i>	4,059 <i>64.5%</i>	6,292
1953	261 <i>4.4%</i>	11 <i>0.2%</i>	22 <i>0.4%</i>	30 <i>0.5%</i>	48 <i>0.8%</i>	267 <i>4.5%</i>	1,558 <i>26.4%</i>	3,700 <i>62.7%</i>	5,897
1954	198 <i>3.4%</i>	13 <i>0.2%</i>	19 <i>0.3%</i>	28 <i>0.5%</i>	30 <i>0.5%</i>	273 <i>4.7%</i>	1,546 <i>26.9%</i>	3,648 <i>36.4%</i>	5,755
1955	194 <i>3.3%</i>	17 <i>0.3%</i>	11 <i>0.2%</i>	39 <i>0.7%</i>	48 <i>0.8%</i>	273 <i>4.7%</i>	1,507 <i>25.9%</i>	3,727 <i>64.1%</i>	5,816

DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE

International List Nos.	Cause of Death	1954	1955	% of total deaths under one
010	Tuberculosis of meninges and central nervous system	..	..	..
Rest of 001-019	Tuberculosis, other forms	..	I	0.5
020	Syphilis	..	..	..
050	Scarlet fever	..	..	..
055	Diphtheria	..	..	..
056	Whooping Cough	..	..	..
057	Meningococcal infections	I	I	0.5
085	Measles	..	I	0.5
340	Meningitis (non-meningococcal) ..	3	I	0.5
480-483	Influenza	..	..	..
490-493	Pneumonia (4 weeks—I year) ..	21	14	7.2
500-502	Bronchitis	4	I	0.5
560, 561, 570	Intestinal obstruction, hernia ..	4	2	1.0
571, 572	Gastro-enteritis (4 weeks—I year)	6	8	4.1
751	Spina bifida and meningocele ..	12	13	6.7
754	Congenital malformations of circulatory system	11	5	2.6
750, 752, 753 }				
755-759 }	All other congenital malformations	13	11	5.7
760-761	Birth injuries	12	14	7.2
762	Post-natal asphyxia, atelectasis ..	29	28	14.4
763	Pneumonia of newborn (—4 weeks)	6	5	2.6
764	Diarrhœa of newborn (—4 weeks) ..	..	..	..
765-768	Other infections of newborn	..	I	0.5
770	Hæmolytic disease of newborn ..	4	5	2.6
769 }	Other diseases peculiar to early			
771-773 }	infancy	4	2	1.0
774-776	Prematurity	49	54	27.8
E924	Accidental mechanical suffocation	2	6	3.1
Rem. of E800-999	Other violent causes	6	6	3.1
Residual	All other causes	11	15	7.7
	Totals	198	194	..

INFANT MORTALITY 1955. NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE

International List Nos.	Cause of Death	-1 day	1 day	2 days	3 days	4 days	5 days	6 days	1-2 weeks	2-3 weeks	3-4 weeks	Total -1 m'ths	1-3 m'ths	3-6 m'ths	6-9 m'ths	9-12 m'ths	Total -1 year
010	Tuberculosis of meninges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rest of 001-019	Tuberculosis, other forms	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
020	Syphilis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
050	Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
055	Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
057	Meningococcal infections	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
085	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
340	Meningitis (non-meningococcal or tuberculous)	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
480-483	Influenza	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
490-493	Pneumonia (4 weeks-1 year)	..	..	..	..	..	..	..	..	..	..	..	6	7	..	1	14
500-502	Bronchitis	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
560, 561, 570	Intestinal obstruction, hernia	..	..	..	..	1	..	..	..	..	..	1	..	1	..	..	2
571, 572	Gastro-enteritis (4 weeks-1 year)	..	..	..	..	..	..	..	..	..	..	..	2	4	2	..	8
751	Spina bifida and meningocele	4	..	..	..	1	1	..	2	1	1	10	1	2	..	..	13
754	Congenital malformations of circulatory system	..	..	1	..	..	..	..	..	..	..	1	4	..	..	..	5
Rest of 750-759	All other congenital malformations	5	1	..	..	2	..	..	..	..	..	8	1	..	..	2	11
760, 761	Birth injuries	7	1	4	..	1	..	..	1	..	..	14	..	..	..	..	14
762	Post-natal asphyxia, atelectasis	23	3	1	1	..	..	..	..	..	..	28	..	..	..	..	28
763	Pneumonia of newborn (-4 weeks)	..	1	2	..	1	..	..	1	..	..	5	..	..	..	..	5
764	Diarrhoea of newborn (-4 weeks)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
765-768	Other infections of newborn	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1
770	Haemolytic disease of newborn	4	..	1	..	..	..	..	..	..	..	5	..	..	..	..	5
769, 771-773	Other diseases peculiar to early infancy	1	..	..	..	..	..	..	..	1	..	2	..	..	..	..	2
774-776	Prematurity	43	3	4	..	1	2	..	1	..	..	54	..	..	..	..	54
E924	Accidental mechanical suffocation	..	..	..	..	..	..	..	..	..	1	1	1	2	2	..	6
Rest of E800-999	Other violent causes	2	..	..	..	..	..	..	..	..	..	2	..	3	1	..	6
Residual	All other causes	..	..	..	1	..	..	..	..	1	2	4	4	5	..	2	15
	Totals	89	9	13	2	7	3	..	5	3	5	136	19	26	7	6	194

INFANT MORTALITY IN WARDS AT DIFFERENT PERIODS OF THE FIRST YEAR OF LIFE, CALENDAR YEAR, 1955.

WARD.	Births in year.	Under one day.		Under one week.		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.	
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
City	..	294	13.6	7	23.8	8	27.2	2	6.8	..	6.6	..	2.2	..	..	10	34
Blenheim ..	..	453	13.3	7	15.5	9	19.9	3	6.6	3	..	..	..	..	..	16	35
Westfield ..	..	402	10.0	5	12.4	7	17.4	..	..	..	..	..	..	..	..	7	17
Wellington ..	..	270	33.3	11	40.7	11	40.7	1	3.7	1	3.7	..	..	..	..	13	48
Hyde Park ..	..	222	22.5	5	22.5	5	22.5	..	..	..	..	2	9.0	..	..	7	31
Kirkstall ..	..	244	8.2	3	12.3	3	12.3	1	4.1	2	8.2	..	..	..	..	6	25
Far Headingley ..	..	235	8.5	3	12.8	4	17.0	..	..	..	..	..	..	..	..	4	17
Meanwood ..	..	224	4.5	2	8.9	2	8.9	..	..	..	..	..	..	..	..	2	9
Woodhouse ..	..	314	9.6	4	12.7	4	13.0	1	3.2	..	..	1	3.2	..	..	6	19
Moortown ..	..	290	..	1	3.5	1	3.5	..	..	..	..	..	..	..	..	3	10
Allerton ..	..	231	13.0	3	13.0	3	13.0	..	..	..	..	..	..	..	..	3	13
Roundhay ..	..	248	4.0	3	12.1	3	12.1	..	..	..	..	..	..	..	..	3	16
Richmond Hill ..	..	328	21.3	8	24.4	10	30.5	..	..	1	4.0	..	3.1	..	..	4	43
Potternewton ..	..	323	9.3	6	18.6	7	21.7	..	..	1	3.1	..	3.1	2	6.1	14	25
Harehills ..	..	166	6.0	2	12.0	1	12.0	1	6.0	1	..	..	..	..	..	8	18
Burmantofts ..	..	247	16.2	5	20.2	2	24.3	2	8.1	..	..	..	..	..	..	3	32
East Hunslet ..	..	238	8.4	2	8.4	3	12.6	..	..	1	4.2	..	..	..	..	4	17
Osmondthorpe ..	..	289	10.4	6	20.8	6	20.8	..	..	2	6.9	..	..	1	3.5	9	31
Cross Gates ..	..	439	6.8	5	11.4	5	11.4	..	..	4	9.1	..	..	..	..	9	21
Halton ..	..	232	4.3	1	4.3	1	4.3	1	4.3	1	4.3	..	..	..	..	3	13
Beeston ..	..	220	4.5	1	4.5	2	9.1	..	..	..	..	..	..	..	..	2	9
Holbeck ..	..	269	14.9	5	18.6	6	22.3	..	..	3	11.2	..	..	..	..	9	33
Hunslet Carr ..	..	217	18.4	6	27.7	6	27.7	..	..	..	..	..	..	..	..	6	28
Middleton ..	..	319	15.7	5	15.7	5	15.7	1	3.1	2	6.3	..	..	..	..	8	25
Armley ..	..	198	10.1	3	15.2	3	15.2	..	..	..	..	1	5.1	..	..	4	20
Wortley ..	..	194	10.3	3	15.5	3	15.5	1	5.2	1	5.2	..	..	..	..	5	26
Bramley ..	..	247	16.2	6	24.3	6	24.3	4	16.2	3	12.2	..	4.1	1	4.1	15	61
Stanningley ..	..	277	10.8	5	18.1	5	18.1	1	3.6	..	..	..	..	..	..	6	22
City Totals	..	7,630	11.7	123	16.1	136	17.8	19	2.5	26	3.4	7	0.9	6	0.8	194	25

BIRTHS AND DEATHS UNDER ONE YEAR WITH RATES.—CALENDAR YEAR 1955

WARD.	TOTAL BIRTHS (net).	Birth rate per 1,000 population.	No. of legitimate births.	No. of illegitimate births.	Total deaths under one year (net).	Death rate per 1,000 births	No. of legitimate deaths under one year.	Legitimate death rate per 1,000 legitimate births.	No. of illegitimate deaths under one year.	Illegitimate death rate per 1,000 illegitimate births.
City ..	294	22.0	257	37	10	34	9	35	1	27
Blenheim ..	453	27.2	393	60	16	35	13	33	3	50
Westfield ..	402	24.4	349	53	7	17	6	17	1	19
Wellington ..	270	15.7	255	15	13	48	13	51	..	..
Hyde Park ..	222	12.5	212	10	7	31	6	28	1	100
Kirkstall ..	244	14.0	232	12	6	25	5	22	1	83
Far Headingley ..	235	13.0	228	7	4	17	4	18	..	..
Meanwood ..	224	11.4	212	12	2	9	2	9	..	..
Woodhouse ..	314	16.2	288	26	6	19	6	21	..	..
Moortown ..	290	13.6	287	3	3	10	3	11	..	..
Allerton ..	231	10.6	225	6	3	13	3	13	..	..
Roundhay ..	248	10.9	238	10	4	16	3	13	1	100
Richmond Hill ..	328	21.0	312	16	14	43	14	45	..	..
Potternewton ..	323	22.1	273	50	8	25	7	26	1	20
Harehills ..	166	10.4	156	10	3	18	3	19	..	..
Burmantofts ..	247	16.5	230	17	8	32	6	26	2	118
East Hunslet ..	238	13.6	232	6	4	17	4	17	..	..
Osmondthorpe ..	289	15.4	271	18	9	31	8	30	1	56
Cross Gates ..	439	17.9	416	23	9	21	7	17	2	87
Halton ..	232	13.3	230	2	3	13	3	13	..	..
Beeston ..	220	10.7	213	7	2	9	2	9	..	..
Holbeck ..	269	14.3	251	18	9	33	8	32	1	56
Hunslet Carr ..	217	11.7	212	5	6	28	6	28	..	..
Middleton ..	319	16.7	298	21	8	25	7	24	1	48
Armley ..	198	12.2	190	8	4	20	4	21	..	..
Wortley ..	194	11.6	184	10	5	26	5	27	..	..
Bramley ..	247	14.2	231	16	15	61	14	61	1	63
Stanningley ..	277	15.0	268	9	6	22	6	22	..	..
City Totals ..	7,630	15.0	7,143	487	194	25	177	25	17	35

INFANT MORTALITY DURING THE FOURTEEN YEARS 1942-1955 AT DIFFERENT PERIODS OF
THE FIRST YEAR OF LIFE.

Year.	Births in year.	Under one week.		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under twelve months.		Under one year.	
		Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
1942	7,204	154	21.4	214	29.7	58	8.1	49	6.8	31	4.3	17	2.4	369	51
1943	7,547	139	18.4	179	23.7	58	7.7	62	8.2	43	5.7	14	1.9	356	47
1944	8,518	177	20.8	242	28.4	75	8.8	55	6.5	42	4.9	15	1.8	429	50
1945	7,760	151	19.5	222	28.6	93	12.0	65	8.4	34	4.4	24	3.1	438	56
1946	9,886	174	17.6	235	23.8	79	8.0	41	4.1	25	2.5	21	2.1	401	41
1947	10,875	178	16.4	278	25.6	125	11.5	87	8.0	41	3.8	21	1.9	552	51
1948	9,234	122	13.2	162	17.5	70	7.6	49	5.3	22	2.4	18	1.9	321	35
1949	8,447	125	14.8	156	18.5	36	4.3	29	3.4	21	2.5	12	1.4	254	30
1950	8,113	122	15.0	148	18.2	43	5.3	35	4.3	16	2.0	8	1.0	250	31
1951	8,044	125	15.5	141	17.5	36	4.5	40	5.0	19	2.4	11	1.4	247	31
1952	7,740	126	16.3	144	18.6	28	3.6	37	4.8	11	1.4	11	1.4	231	30
1953	7,932	160	20.2	182	22.9	31	3.9	21	2.6	16	2.0	11	1.4	261	33
1954	7,584	118	15.6	135	17.8	24	3.2	21	2.8	12	1.6	6	0.8	198	26
1955	7,630	123	16.1	136	17.8	19	2.5	26	3.4	7	0.9	6	0.8	194	25

VITAL STATISTICS OF WHOLE DISTRICT DURING 1955 AND PREVIOUS YEARS

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NET DEATHS BELONGING TO THE DISTRICT.				
		Un-corrected Number.	Nett.		Number.	Rate.	Of Non-residents registered in the District.	Of Resi-dents not registered in the District.	Under 1 Year of Age.			At all Ages.	
			Number.	Rate.					Number.	Rate per 1,000 Nett Births.	Number.		Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13	
1936	489,800	7,845	7,340	15.0	7,003	14.3	620	283	476	65	6,666	13.6	
1937	491,860†	7,844	7,279	14.8	6,915	14.1	656	314	491	67	6,573	13.4	
1938	494,000	8,159	7,614	15.4	6,592	13.3	597	260	490	64	6,255	12.7	
1939	(a)497,000 (b)488,000	7,434	7,079	14.2	6,821	14.0	619	333	401	57	6,535	13.4	
1940	465,700	7,459	6,946	14.9	7,178	15.4	638	378	395	57	6,918	14.9	
1941	471,930	7,027	6,667	14.1	6,610	14.0	655	501	407	61	6,456	13.7	
1942	462,400	7,355	7,204	15.6	6,256	13.5	589	423	369	51	6,090	13.2	
1943	453,900	7,830	7,547	16.6	6,532	14.4	595	421	356	47	6,358	14.0	
1944	451,100	8,611	8,518	18.9	6,314	14.0	601	411	429	50	6,124	13.6	
1945	451,670	8,258	7,760	17.2	6,580	14.6	595	425	438	56	6,410	14.2	
1946	481,570	10,267	9,886	20.5	6,795	14.1	570	389	401	41	6,614	13.7	
1947	492,140	11,394	10,875	22.1	6,982	14.2	567	378	552	51	6,793	13.8	
1948	501,900	9,938	9,234	18.4	6,106	12.2	600	396	321	35	5,902	11.8	
1949	504,900	9,146	8,447	16.3	6,757	13.4	630	324	254	30	6,451	12.8	
1950	509,700	8,857	8,113	15.9	6,437	12.6	579	396	250	31	6,254	12.3	
1951	503,030	8,700	8,044	16.0	6,983	13.9	595	409	247	31	6,797	13.5	
1952	504,800	8,250	7,740	15.3	6,446	12.8	597	443	231	30	6,292	12.5	
1953	505,500	8,465	7,932	15.7	6,354	12.6	643	186	261	33	5,897	11.7	
1954	507,200	8,185	7,584	15.0	6,224	12.3	649	180	198	26	5,755	11.3	
1955	507,400	8,259	7,630	15.0	6,295	12.4	647	168	194	25	5,816	11.5	

Total population at all ages at the 1951 Census 505,219 (final figure)

Area of District in acres (land and inland water) } 38,296.5

+ Population adjusted to allow for change in boundary during the year. The mid-year population after the change is 491,880.
(a) Population used for calculation of birth-rate.
(b) do. do. death-rate.

TABLE II. CASES OF INFECTIOUS DISEASES ORIGINALLY NOTIFIED BEFORE ALTERATION OF DIAGNOSIS DURING THE CALENDAR YEAR 1955.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.																Total Cases removed to Hospital.	
	At all Ages.				At Ages—Years.													
	Under 1.		1 and under 5 years.		5 and under 15 years.		15 and under 25 years.		25 and under 45 years.		45 and under 65 years.		65 and upwards.					
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.				
Diphtheria	2	2	..	..	..	..	2	2	..	..	..	..	..	..	..	..	2	2
Dysentery	596	587	41	27	304	244	159	133	17	50	47	100	20	22	8	11	129	120
Encephalitis, acute { Infective	..	2	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Post-infectious	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	43	50	..	..	..	..	..	1	..	..	13	13	25	31	5	5	5	11
Food poisoning	19	39	..	..	..	..	..	1	2	3	5	11	4	14	2	4	2	16
Malaria	..	..	..	1	5	5	1	1	..	..	..	..	..	..	..	..	..	..
Measles	5,799	5,455	203	181	3,187	2,931	2,388	2,315	7	16	13	11	1	1	..	..	91	80
Meningococcal infections	4	10	2	5	2	3	..	1	..	..	..	1	..	..	..	..	..	2
Ophthalmia neonatorum	4	6	4	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paratyphoid fever	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia (acute primary)	194	126	6	9	12	13	21	9	11	4	29	24	79	25	36	42	10	12
(acute influenzal)	26	14	..	..	1	..	..	..	2	..	4	6	14	4	5	4	..	..
Polio-myelitis	42	48	3	1	12	13	15	14	5	2	6	16	1	2	..	..	39	44
Puerperal pyrexia	..	168	..	..	..	..	..	..	..	69	..	99	..	..	..	..	..	1
Scarlet fever	278	338	..	1	68	53	202	255	6	17	2	9	..	2	..	1	49	61
Typhoid fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough	281	284	33	33	132	123	114	124	1	3	..	..	1	1	..	..	17	18
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases	161	142	67	44	58	29	21	20	7	30	6	9	..	4	2	6	161	142
Totals	7,451	7,272	361	309	3,781	3,415	2,923	2,876	58	194	125	299	145	106	58	73	505	509
Respiratory tuberculosis	291(61)	197(28)	1	..	2	5	18	15(1)	46(10)	55(12)	113(30)	93(13)	85(10)	25(2)	26(2)	4	166	98
Other forms of tuberculosis	41(5)	44(1)	..	..	1	1	7(1)	4	8	10	19(4)	17(1)	4	8	2	4	16	27

The figures shown in brackets are "Transfer in" Cases and are included in totals.

TABLE IIA. ACCEPTED CASES OF INFECTIOUS DISEASES (AFTER CORRECTION OF DIAGNOSIS) DURING THE CALENDAR YEAR 1955.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.																Total Cases removed to Hospital.	
	At all Ages.				At Ages—Years.													
	Under 1		1 and under 5 years.		5 and under 15 years.		15 and under 25 years.		25 and under 45 years.		45 and under 65 years.		65 and upwards.		M.	F.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.				
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery	577	573	38	24	296	240	133	16	48	45	100	18	15	6	13	111	106	..
Encephalitis, acute { Infective	..	3	..	1	..	..	1	..	1	..	..	..	..	..	..	..	1	..
{ Post-infectious	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	42	49	..	..	..	..	1	..	..	13	13	24	30	5	5	4	10	..
Food poisoning	22	39	..	1	6	6	2	2	3	5	10	4	13	3	5	4	16	..
Malaria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	5,794	5,449	201	178	3,183	2,928	2,388	2,315	16	13	11	1	1	..	..	86	74	..
Meningococcal infections	5	11	2	6	3	3	..	1	..	..	1	..	..	..	..	1	3	..
Ophthalmia neonatorum	4	6	4	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Paratyphoid fever	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia (acute primary)	222	140	16	13	24	15	26	15	5	29	25	79	25	37	42	38	26	..
" (acute influenza)	26	14	..	..	1	..	..	..	..	4	6	14	4	5	4	..	..	..
Poliomyelitis	31	29	2	1	9	8	8	8	1	6	10	1	1	..	..	28	25	..
Puerperal pyrexia	..	168	..	..	..	..	..	..	69	..	99	..	..	..	..	..	1	..
Scarlet fever	274	329	..	..	68	51	199	253	14	2	8	..	2	..	1	45	52	..
Typhoid fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough	281	282	33	34	132	122	114	122	3	..	..	1	1	..	..	17	16	..
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases	171	179	63	45	59	41	28	26	34	8	16	3	14	2	3	171	179	..
Totals	7,451	7,272	361	309	3,781	3,415	2,923	2,876	58	194	125	299	145	106	58	505	509	..
Respiratory tuberculosis	291(61)	197(28)	1	..	2	5	18	15(1)	46(10)	55(12)	93(13)	85(10)	25(2)	26(2)	4	166	98	..
Other forms of tuberculosis	41(5)	44(1)	..	..	1	1	7(1)	4	8	10	19(4)	17(1)	8	2	4	16	27	..

The figures shown in brackets are "Transfer in" Cases and are included in totals.

TABLE IIA. (continued).

TOTAL ACCEPTED CASES (AFTER CORRECTION OF DIAGNOSIS) IN EACH MUNICIPAL WARD OF THE DISTRICT.																														
NOTIFIABLE DISEASE.	City	Blenheim	Westfield	Wellington	Hyde Park	Kirkstall	Far Headingley	Meanwood	Woodhouse	Moortown	Allerton	Roundhay	Richmond Hill	Potternewton	Harehills	Burmantofts	East Hunslet	Osmondthorpe	Cross Gates	Halton	Beeston	Holbeck	Hunslet Carr	Middleton	Armley	Wortley	Bramley	Stanningley	City Total	
	Diphtheria ..	98	158	17	5	1	17	3	39	16	6	72	7	112	33	6	46	205	62	43	6	8	12	21	64	40	25	10	18	1,150
Dysentery ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Encephalitis, ac. { Inf. ..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	
P. inf. ..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Erysipelas ..	1	3	2	5	3	6	6	5	3	1	5	4	5	3	2	1	1	1	9	3	3	5	2	3	5	..	..	1	3	91
Food poisoning ..	4	2	..	..	1	..	2	..	1	1	2	1	3	6	..	3	..	3	16	1	6	4	..	1	1	2	1	..	..	61
Malaria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles ..	388	523	430	297	253	415	365	349	319	441	407	435	489	292	252	284	441	410	973	303	278	361	418	666	267	275	358	554	11,243	
Meningococcal infections ..	1	1	2	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	2	..	..	1	3	..	3	16
Ophthalmia neonatorum ..	..	2	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	3	..	..	..	..	..	..	..	..	..	..	10
Paratyphoid fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2
Pneumonia (ac. primary)	17	24	14	23	7	16	9	13	18	6	21	13	8	14	1	8	8	16	32	12	11	16	7	9	14	15	8	2	362	
" (ac. influenza)	1	1	2	2	..	2	2	1	..	2	3	2	2	4	2	2	..	1	1	..	..	..	1	1	1	3	4	1	..	40
Poliomyelitis ..	..	4	7	1	..	1	5	3	1	5	1	3	..	2	..	..	1	3	7	2	2	1	1	2	2	1	1	5	..	60
Puerperal pyrexia ..	..	3	65	2	..	..	..	..	1	1	..	1	67	..	..	..	..	..	..	..	8	21	32	34	5	9	27	..	108	
Scarlet fever ..	22	60	50	13	40	27	42	29	35	16	17	11	17	15	11	14	13	7	28	8	21	15	32	34	5	9	8	4	603	
Typhoid fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough ..	33	13	17	55	7	9	12	4	18	10	17	16	9	11	8	13	23	14	31	5	37	35	42	30	27	14	24	29	563	
Smallpox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases ..	34	25	17	8	9	11	20	9	16	4	20	11	15	21	3	9	10	17	38	6	4	1	10	13	2	2	10	5	350	
Totals ..	601	820	623	411	322	505	466	452	427	494	565	504	727	402	287	380	702	534	1,182	346	370	451	537	823	367	350	451	624	14,723	
Respiratory tuberculosis ..	26(4)	29(6)	28(8)	17(3)	11(4)	25(3)	15(5)	16(1)	14(4)	7(3)	14(4)	19(4)	18	30(11)	12(3)	16(1)	17(1)	23(2)	28(5)	10	13(2)	21(2)	16(3)	13	12(3)	11(1)	14(3)	13(3)	488(89)	
Other forms of tuberculosis	4	2	3(1)	1	1	2	..	1	4	3	2	1	4	3(1)	3(1)	3	4	2	2	5(1)	4	5	4	5	2	5(2)	5	5	85(6)	

The figures shown in brackets are "Transfer in" Cases and are included in totals.

CITY OF LEEDS

VITAL AND MORTAL STATISTICS 1920 - 1955

Year	INFANT MORTALITY					STILL-BIRTHS			MATERNAL MORTALITY			DIPHTHERIA AND EXANTHEMA (All Forms)			CANCER			Deaths from Respiratory Diseases (inc. Influenza but excl. P.H. Tub.)		DYSENTERY		SCARLET FEVER		TYPHOID FEVER		MEASLES		WHOOPING COUGH				
	Population	Births	Birth-Rate	Deaths	Death-Rate	Deaths - 1 year	Rate per 1,000 live births	Non-Natal Mortality Rate	No.	Rate per 1,000 population	Deaths from Sepsis	Deaths from other causes	Total Deaths	Rate per 1,000 live births	Deaths under 1 year	Death-Rate per 1,000 live births	Deaths	Death-Rate	Deaths	Death-Rate	Cases	Deaths	No. of persons interned	Cases	Deaths	Cases	Deaths	Cases	Deaths			
1920	448,913	11,220	25.0	6,591	14.7	1,232	110	40.3	...	...	29	28	57	5.07	140	12.5	698	1.56	492	1.10	1,513	585	64	...	1,353	17	29	4	5,459	148	...	100
1	455,500	10,144	21.8	6,285	13.5	997	98	41.3	...	...	8	32	38	3.75	184	18.1	641	1.37	554	1.19	1,350	605	38	...	1,510	14	24	2	209	5	...	72
2	456,700	9,253	19.8	6,479	13.9	935	101	43.3	...	...	14	18	32	3.40	92	9.0	653	1.40	595	1.27	1,357	470	48	...	2,222	33	14	7	9,931	151	...	115
3	456,900	8,584	18.5	5,986	12.7	773	89	41.8	...	...	10	35	45	5.18	118	13.0	637	1.36	574	1.22	1,179	568	40	...	2,134	31	9	1	4,683	30	...	34
4	471,500	8,558	18.1	6,747	14.3	921	108	38.7	...	...	9	24	33	3.86	103	12.0	657	1.40	639	1.35	1,777	289	27	...	1,250	20	25	6	6,654	46	...	87
5	471,900	8,180	17.3	6,037	12.8	748	91	37.8	...	...	24	21	45	5.50	149	18.2	599	1.27	666	1.28	1,202	422	39	...	1,166	15	9	3	5,100	39	...	47
6	473,400	8,065	17.0	6,062	12.8	748	93	38.7	...	...	14	27	41	5.08	147	18.2	585	1.24	657	1.39	1,090	374	26	...	756	5	9	1	7,076	19	...	119
7	477,000	7,790	16.3	6,108	13.0	610	81	35.2	...	...	24	24	38	4.88	88	11.3	558	1.17	649	1.36	1,070	430	28	...	773	6	14	2	8,599	117	...	44
8	474,800	7,665	16.1	6,133	12.9	666	79	37.3	...	...	14	22	36	4.70	105	13.7	542	1.14	668	1.47	976	654	21	94	3,515	18	6	1	3,638	21	...	30
9	478,500	7,446	15.5	7,898	16.5	722	97	42.3	1,960	0.77	10	23	33	4.23	86	11.6	621	1.30	684	1.43	2,037	536	26	207	3,473	20	14	3	9,486	102	...	107
1929	458,500	7,518	15.8	5,930	12.4	512	68	38.5	332	0.60	10	22	32	4.05	34	4.5	533	1.11	728	1.54	798	994	54	179	2,183	23	4	2	913	2	...	32
1	466,400	7,219	14.8	6,366	13.4	552	76	32.3	367	0.75	17	22	39	5.14	68	9.4	527	1.08	740	1.52	1,047	995	86	318	1,467	12	10	2	10,955	56	...	43
2	464,900	7,004	14.4	6,469	13.3	617	88	36.4	334	0.60	8	13	21	2.86	106	15.1	493	1.02	700	1.57	966	880	48	1,524	931	8	9	...	3,540	52	...	41
3	465,000	6,943	13.7	6,574	13.6	537	81	36.6	333	0.60	15	12	27	3.87	104	15.7	499	1.03	706	1.46	1,148	1,057	88	720	1,900	9	10	1	3,973	22	...	28
4	466,500	7,190	14.8	6,201	12.9	513	71	35.6	300	0.66	15	14	29	3.86	76	10.6	462	0.95	801	1.65	711	2,511	156	2,450	2,211	16	8	1	10,576	90	...	25
5	467,200	7,221	14.8	6,432	13.2	463	64	33.1	334	0.60	8	16	24	3.18	62	8.6	435	0.89	803	1.65	772	1,335	60	30,062	2,082	5	5	...	1,347	4	...	48
6	469,800	7,340	15.0	6,666	13.6	470	65	30.0	320	0.65	10	14	24	3.13	71	9.7	468	0.83	843	1.72	801	799	16	1,937	1,868	12	4	...	8,744	49	...	28
7	467,800	7,279	14.8	6,573	13.4	491	67	33.4	313	0.64	6	11	17	2.24	65	8.0	406	0.83	777	1.58	959	941	44	1,135	2,234	5	16	3	2,373	9	...	10
8	464,000	7,014	15.4	6,255	12.7	490	64	33.1	310	0.67	2	12	14	1.76	94	12.3	397	0.80	879	1.78	645	948	33	11,172	1,717	8	3	...	6,707	18	...	13
9	467,000	7,070	14.2	6,535	13.4	491	57	30.2	307	0.63	6	13	19	2.60	54	7.7	413	0.85	847	1.74	662	427	20	894	960	2	12	1	1,673	2	132	18
1940	455,700	6,946	14.9	6,918	14.9	395	57	30.8	282	0.61	2	13	15	2.99	44	6.4	467	1.00	778	1.67	990	301	11	1,167	643	...	35	1	4,354	8	118	3
1	471,930	6,667	14.1	6,456	13.7	407	61	26.7	259	0.55	7	9	16	2.32	40	6.0	408	0.86	849	1.80	740	576	22	13,208	887	3	12	1	7,906	21	2,105	25
2	462,400	7,004	15.6	6,090	13.2	369	51	29.7	278	0.60	6	13	19	2.54	32	4.4	357	0.77	888	1.92	580	707	25	15,101	1,376	1	8	...	7,810	10	1,554	32
3	453,900	7,547	16.6	6,358	14.0	356	47	23.7	250	0.55	4	15	19	2.44	40	5.3	376	0.83	906	2.00	805	334	11	19,415	1,998	3	2	...	2,426	14	1,184	14
4	451,100	8,518	18.9	6,124	13.6	420	50	28.4	262	0.58	...	12	12	1.37	26	8.9	316	0.70	915	2.03	668	554	9	7,483	1,013	3	5	1	678	...	1,213	0
5	455,070	7,760	17.1	6,410	14.2	438	56	18.6	246	0.55	4	10	14	1.75	88	11.3	318	0.70	960	2.15	740	149	2	7,510	1,190	...	3	1	9,480	21	590	10
6	461,170	8,866	20.5	6,014	13.9	401	41	25.8	299	0.62	4	8	12	1.18	53	5.4	288	0.60	960	1.99	719	131	6	9,812	954	...	4	...	595	1	1,635	13
7	462,140	10,875	22.1	6,793	13.8	552	51	25.6	306	0.61	1	8	9	0.81	122	11.2	342	0.70	947	1.92	887	51	1	8,773	1,372	1	5	1	6,791	19	1,318	19
8	501,900	9,334	18.4	5,902	11.8	321	35	17.5	219	0.44	...	2	2	0.22	61	6.6	277	0.55	959	1.91	714	49	1	10,313	1,378	...	...	...	3,667	4	1,530	6
9	504,900	8,447	16.7	6,451	12.8	254	30	18.5	200	0.40	1	8	9	1.04	13	1.5	274	0.54	1,006	1.99	940	5	...	8,665	780	1	...	...	5,100	5	1,118	6
1950	509,000	8,113	15.9	6,254	12.3	250	31	18.2	189	0.37	1	4	5	0.60	13	1.6	293	0.58	1,092	2.08	793	30	1	7,494	569	...	...	...	5,693	2	2,409	6
1	503,900	8,044	16.0	6,797	13.5	247	31	17.5	194	0.39	1	4	5	0.61	7	0.9	182	0.36	1,021	2.00	1,272	2	...	8,151	324	...	...	...	7,660	3	1,625	4
2	504,800	7,740	15.3	6,292	12.5	231	30	18.6	182	0.36	1	5	6	0.76	7	0.9	123	0.24	1,071	2.12	1,006	2	...	7,450	794	...	...	...	4,915	3	1,537	...
3	505,500	7,932	15.7	5,797	11.7	261	33	22.9	167	0.33	2	3	5	0.62	13	1.6	120	0.24	991	1.99	1,023	2	...	6,510	699	...	...	...	6,825	4	1,799	1
4	507,200	7,584	15.0	5,755	11.3	198	26	17.8	185	0.37	1	4	5	0.64	8	1.1	87	0.17	1,030	2.03	808	...	...	6,857	622	1	...	...	701	...	812	...
1955	507,400	7,630	15.0	5,816	11.5	194	26	17.8	173	0.34	...	4	4	0.51	9	1.2	70	0.14	1,072	2.11	786	...	...	6,189	603	...	...	...	11,243	3	575	...

*For the calculation of birth rate, 1/2 for stillbirths.

*Registration of stillbirths in force 1920

1929 and onwards per 1,000 total births (live and still)

(Whooping Cough made artificial by Measles and Whooping Cough Notifications, 1929 to June 1930 October 1932)

CITY OF LEXINGTON

FATAL AND MORTAL STATISTICS

Year	Fatal Statistics			Mortal Statistics		
	No.	Rate	Per 1,000	No.	Rate	Per 1,000
1880	1,124	20.75	47.5	1,124	20.75	47.5
1881	1,142	21.00	48.0	1,142	21.00	48.0
1882	1,150	21.10	48.2	1,150	21.10	48.2
1883	1,160	21.20	48.4	1,160	21.20	48.4
1884	1,170	21.30	48.6	1,170	21.30	48.6
1885	1,180	21.40	48.8	1,180	21.40	48.8
1886	1,190	21.50	49.0	1,190	21.50	49.0
1887	1,200	21.60	49.2	1,200	21.60	49.2
1888	1,210	21.70	49.4	1,210	21.70	49.4
1889	1,220	21.80	49.6	1,220	21.80	49.6
1890	1,230	21.90	49.8	1,230	21.90	49.8
1891	1,240	22.00	50.0	1,240	22.00	50.0
1892	1,250	22.10	50.2	1,250	22.10	50.2
1893	1,260	22.20	50.4	1,260	22.20	50.4
1894	1,270	22.30	50.6	1,270	22.30	50.6
1895	1,280	22.40	50.8	1,280	22.40	50.8
1896	1,290	22.50	51.0	1,290	22.50	51.0
1897	1,300	22.60	51.2	1,300	22.60	51.2
1898	1,310	22.70	51.4	1,310	22.70	51.4
1899	1,320	22.80	51.6	1,320	22.80	51.6
1900	1,330	22.90	51.8	1,330	22.90	51.8
1901	1,340	23.00	52.0	1,340	23.00	52.0
1902	1,350	23.10	52.2	1,350	23.10	52.2
1903	1,360	23.20	52.4	1,360	23.20	52.4
1904	1,370	23.30	52.6	1,370	23.30	52.6
1905	1,380	23.40	52.8	1,380	23.40	52.8
1906	1,390	23.50	53.0	1,390	23.50	53.0
1907	1,400	23.60	53.2	1,400	23.60	53.2
1908	1,410	23.70	53.4	1,410	23.70	53.4
1909	1,420	23.80	53.6	1,420	23.80	53.6
1910	1,430	23.90	53.8	1,430	23.90	53.8
1911	1,440	24.00	54.0	1,440	24.00	54.0
1912	1,450	24.10	54.2	1,450	24.10	54.2
1913	1,460	24.20	54.4	1,460	24.20	54.4
1914	1,470	24.30	54.6	1,470	24.30	54.6
1915	1,480	24.40	54.8	1,480	24.40	54.8
1916	1,490	24.50	55.0	1,490	24.50	55.0
1917	1,500	24.60	55.2	1,500	24.60	55.2
1918	1,510	24.70	55.4	1,510	24.70	55.4
1919	1,520	24.80	55.6	1,520	24.80	55.6
1920	1,530	24.90	55.8	1,530	24.90	55.8
1921	1,540	25.00	56.0	1,540	25.00	56.0
1922	1,550	25.10	56.2	1,550	25.10	56.2
1923	1,560	25.20	56.4	1,560	25.20	56.4
1924	1,570	25.30	56.6	1,570	25.30	56.6
1925	1,580	25.40	56.8	1,580	25.40	56.8
1926	1,590	25.50	57.0	1,590	25.50	57.0
1927	1,600	25.60	57.2	1,600	25.60	57.2
1928	1,610	25.70	57.4	1,610	25.70	57.4
1929	1,620	25.80	57.6	1,620	25.80	57.6
1930	1,630	25.90	57.8	1,630	25.90	57.8
1931	1,640	26.00	58.0	1,640	26.00	58.0
1932	1,650	26.10	58.2	1,650	26.10	58.2
1933	1,660	26.20	58.4	1,660	26.20	58.4
1934	1,670	26.30	58.6	1,670	26.30	58.6
1935	1,680	26.40	58.8	1,680	26.40	58.8
1936	1,690	26.50	59.0	1,690	26.50	59.0
1937	1,700	26.60	59.2	1,700	26.60	59.2
1938	1,710	26.70	59.4	1,710	26.70	59.4
1939	1,720	26.80	59.6	1,720	26.80	59.6
1940	1,730	26.90	59.8	1,730	26.90	59.8
1941	1,740	27.00	60.0	1,740	27.00	60.0
1942	1,750	27.10	60.2	1,750	27.10	60.2
1943	1,760	27.20	60.4	1,760	27.20	60.4
1944	1,770	27.30	60.6	1,770	27.30	60.6
1945	1,780	27.40	60.8	1,780	27.40	60.8
1946	1,790	27.50	61.0	1,790	27.50	61.0
1947	1,800	27.60	61.2	1,800	27.60	61.2
1948	1,810	27.70	61.4	1,810	27.70	61.4
1949	1,820	27.80	61.6	1,820	27.80	61.6
1950	1,830	27.90	61.8	1,830	27.90	61.8
1951	1,840	28.00	62.0	1,840	28.00	62.0
1952	1,850	28.10	62.2	1,850	28.10	62.2
1953	1,860	28.20	62.4	1,860	28.20	62.4
1954	1,870	28.30	62.6	1,870	28.30	62.6
1955	1,880	28.40	62.8	1,880	28.40	62.8
1956	1,890	28.50	63.0	1,890	28.50	63.0
1957	1,900	28.60	63.2	1,900	28.60	63.2
1958	1,910	28.70	63.4	1,910	28.70	63.4
1959	1,920	28.80	63.6	1,920	28.80	63.6
1960	1,930	28.90	63.8	1,930	28.90	63.8
1961	1,940	29.00	64.0	1,940	29.00	64.0
1962	1,950	29.10	64.2	1,950	29.10	64.2
1963	1,960	29.20	64.4	1,960	29.20	64.4
1964	1,970	29.30	64.6	1,970	29.30	64.6
1965	1,980	29.40	64.8	1,980	29.40	64.8
1966	1,990	29.50	65.0	1,990	29.50	65.0
1967	2,000	29.60	65.2	2,000	29.60	65.2
1968	2,010	29.70	65.4	2,010	29.70	65.4
1969	2,020	29.80	65.6	2,020	29.80	65.6
1970	2,030	29.90	65.8	2,030	29.90	65.8
1971	2,040	30.00	66.0	2,040	30.00	66.0
1972	2,050	30.10	66.2	2,050	30.10	66.2
1973	2,060	30.20	66.4	2,060	30.20	66.4
1974	2,070	30.30	66.6	2,070	30.30	66.6
1975	2,080	30.40	66.8	2,080	30.40	66.8
1976	2,090	30.50	67.0	2,090	30.50	67.0
1977	2,100	30.60	67.2	2,100	30.60	67.2
1978	2,110	30.70	67.4	2,110	30.70	67.4
1979	2,120	30.80	67.6	2,120	30.80	67.6
1980	2,130	30.90	67.8	2,130	30.90	67.8
1981	2,140	31.00	68.0	2,140	31.00	68.0
1982	2,150	31.10	68.2	2,150	31.10	68.2
1983	2,160	31.20	68.4	2,160	31.20	68.4
1984	2,170	31.30	68.6	2,170	31.30	68.6
1985	2,180	31.40	68.8	2,180	31.40	68.8
1986	2,190	31.50	69.0	2,190	31.50	69.0
1987	2,200	31.60	69.2	2,200	31.60	69.2
1988	2,210	31.70	69.4	2,210	31.70	69.4
1989	2,220	31.80	69.6	2,220	31.80	69.6
1990	2,230	31.90	69.8	2,230	31.90	69.8
1991	2,240	32.00	70.0	2,240	32.00	70.0
1992	2,250	32.10	70.2	2,250	32.10	70.2
1993	2,260	32.20	70.4	2,260	32.20	70.4
1994	2,270	32.30	70.6	2,270	32.30	70.6
1995	2,280	32.40	70.8	2,280	32.40	70.8
1996	2,290	32.50	71.0	2,290	32.50	71.0
1997	2,300	32.60	71.2	2,300	32.60	71.2
1998	2,310	32.70	71.4	2,310	32.70	71.4
1999	2,320	32.80	71.6	2,320	32.80	71.6
2000	2,330	32.90	71.8	2,330	32.90	71.8
2001	2,340	33.00	72.0	2,340	33.00	72.0
2002	2,350	33.10	72.2	2,350	33.10	72.2
2003	2,360	33.20	72.4	2,360	33.20	72.4
2004	2,370	33.30	72.6	2,370	33.30	72.6
2005	2,380	33.40	72.8	2,380	33.40	72.8
2006	2,390	33.50	73.0	2,390	33.50	73.0
2007	2,400	33.60	73.2	2,400	33.60	73.2
2008	2,410	33.70	73.4	2,410	33.70	73.4
2009	2,420	33.80	73.6	2,420	33.80	73.6
2010	2,430	33.90	73.8	2,430	33.90	73.8
2011	2,440	34.00	74.0	2,440	34.00	74.0
2012	2,450	34.10	74.2	2,450	34.10	74.2
2013	2,460	34.20	74.4	2,460	34.20	74.4
2014	2,470	34.30	74.6	2,470	34.30	74.6
2015	2,480	34.40	74.8	2,480	34.40	74.8
2016	2,490	34.50	75.0	2,490	34.50	75.0
2017	2,500	34.60	75.2	2,500	34.60	75.2
2018	2,510	34.70	75.4	2,510	34.70	75.4
2019	2,520	34.80	75.6	2,520	34.80	75.6
2020	2,530	34.90	75.8	2,530	34.90	75.8
2021	2,540	35.00	76.0	2,540	35.00	76.0
2022	2,550	35.10	76.2	2,550	35.10	76.2
2023	2,560	35.20	76.4	2,560	35.20	76.4
2024	2,570	35.30	76.6	2,570	35.30	76.6
2025	2,580	35.40	76.8	2,580	35.40	76.8
2026	2,590	35.50	77.0	2,590	35.50	77.0
2027	2,600	35.60	77.2	2,600	35.60	77.2
2028	2,610	35.70	77.4	2,610	35.70	77.4
2029	2,620	35.80	77.6	2,620	35.80	77.6
2030	2,630	35.90	77.8	2,630	35.90	77.8
2031	2,640	36.00	78.0	2,640	36.00	78.0
2032	2,650	36.10	78.2	2,650	36.10	78.2
2033	2,660	36.20	78.4	2,660	36.20	78.4
2034	2,670	36.30	78.6	2,670	36.30	78.6
2035	2,680	36.40	78.8	2,680	36.40	78.8
2036	2,690	36.50	79.0	2,690	36.50	79.0
2037	2,700	36.60	79.2	2,700	36.60	79.2
2038	2,710	36.70	79.4	2,710	36.70	79.4
2039	2,720	36.80	79.6	2,720	36.80	79.6
2040	2,730	36.90	79.8	2,730	36.90	79.8
2041	2,740	37.00	80.0	2,740	37.00	80.0
2042	2,750	37.10	80.2	2,750	37.10	80.2
2043	2,760	37.20	80.4	2,760	37.20	80.4
2044	2,770	37.30	80.6	2,770	37.30	80.6
2045	2,780	37.40	80.8	2,780	37.40	80.8
2046	2,790	37.50	81.0	2,790	37.50	81.0
2047	2,800	37.60	81.2	2,800	37.60	81.2
2048	2,81					

Infectious and other Diseases

INFECTIOUS AND OTHER DISEASES

BY

D. B. BRADSHAW, M.A., M.B., B.Ch., D.P.H.

Deputy Medical Officer of Health,

Deputy School Medical Officer.

For the second year in succession there has been no case of diphtheria. Provided that parents continue to have their children immunised, there is no reason why this "nil return" should not be a regular annual feature. Combined immunisation against diphtheria and whooping cough has become the standard form of immunisation in Leeds and in my 1954 report I suggested that there were grounds for hoping that this combined protection was reducing the incidence of whooping cough. A further sharp reduction in the number of cases of whooping cough confirms this suggestion; the cases in 1955 numbered 563 as against 812 in 1954 and 1,769 in 1953.

Measles was epidemic in 1955 and over 11,000 cases were notified, the highest ever recorded. Notifications of dysentery, mainly of the mild *Sonne* type, also increased. For some years notifications of this disease, both locally and nationally, have increased steadily in spite of energetic efforts to bring it under control.

In Leeds, as in the country as a whole, poliomyelitis prevalence was moderately high. We had 60 cases with two deaths.

Diphtheria.—For the second year in succession, no case of diphtheria occurred in the city (see opening paragraph above).

Scarlet Fever.—There was again a decrease in the number of accepted cases of this disease during the year, 603 as compared with 622 last year and 699 in 1953. Of the 603 cases, 97 (16.1 per cent.) were treated in Seacroft Hospital. The case-rate was 1.19 as compared with 1.23 for the previous year. The disease continues to be mild. There were no deaths.

Smallpox, Typhoid and Paratyphoid Fevers, Typhus, Plague and Cholera.—No case of smallpox, typhoid fever, typhus, plague or cholera occurred during the year.

Two cases of paratyphoid fever were notified from a hospital in the city. One was a child aged 6 months and the other a child aged 8 months. The 8-months-old child was admitted to the hospital with a history of ear trouble and shortly after admission had a

sudden relapse with symptoms of meningitis. The child died on the seventh day after admission. The cause of death was given as:— 1a. Meningitis, b. ? cause, 2. Bilateral otitis media, chronic. The diagnosis of paratyphoid was made on post-mortem findings. In both cases the source of infection was untraced; fæces and urine specimens from other members of both families were all bacteriologically negative.

Five typhoid and five paratyphoid contacts were kept under observation as were four chronic typhoid carriers.

During the year, one doubtful case of smallpox was referred to the Department for a second opinion. The case was diagnosed as chickenpox. In addition, 7 "other" cases were visited at the request of medical practitioners and these were diagnosed as follows:—poliomyelitis (2), measles (1), chickenpox (1), enteritis (1) and scarlet fever (2).

Measles.—This was an epidemic year for measles. The number of accepted cases was 11,243 as compared with 701 last year. Cases began to increase in the last week of January and the outbreak reached its peak in April. The highest number of cases notified in any one week was 1,164 (week ended April 9th). The total cases (11,243) was the highest ever recorded in the city.

Of the total cases, 160 were treated in Seacroft Hospital. There were 3 deaths, giving a case mortality of 0.03 per cent. as compared with no deaths in 1954.

Whooping Cough.—There was again a decrease in the number of accepted cases of this disease during the year, 563 as compared with 812 last year and 1,769 in 1953. Of the total cases, 33 (5.9 per cent.) were treated in Seacroft Hospital. As in 1954, there were no deaths.

Puerperal Pyrexia.—The Puerperal Pyrexia (Amendment) Regulations, 1954, came into operation on 1st March, 1955. They amend the Puerperal Pyrexia Regulations, 1951, by prescribing a new form of certificate for the notification, by a medical practitioner, of cases of puerperal pyrexia. The new form requires the cause of the disease, if known, to be stated. A copy of the Regulations, together with a book of amended notification forms, was sent to each medical practitioner in the city.

There was a considerable increase in the number of accepted cases of this disease during the year, 168 as compared with 58 last year and 108 in 1953. Of the total, 158 (94.0 per cent.) occurred in

hospitals and institutions and 10 (6.0 per cent.) in the practices of general medical practitioners and midwives. One case was removed to Seacroft Hospital. There were no deaths.

Ophthalmia Neonatorum.—The number of accepted cases of this disease was 10 as compared with 9 last last year and 15 in 1953. None of the cases was treated in Seacroft Hospital and all recovered.

Erysipelas.—Accepted cases of this disease numbered 91 as compared with 87 last year. Of these, 14 (15.4 per cent.) were treated in Seacroft Hospital. There were no deaths.

Malaria.—No new case of malaria was notified during the year. Last year four cases were notified.

Dysentery.—There was again an increase in the number of accepted cases of this disease, 1,150 as compared with 845 last year and 319 in 1953. Of the 1,150 cases, 867 occurred at home, 81 in hospitals and institutions and 202 in day nurseries. The number treated in Seacroft Hospital was 207 or 18.0 per cent. of the total. Of the cases, 713 were *Sonne*, 45 *Flexner* and one *Amoebic*, whilst the remaining 391 were not typed. The *Amoebic* case, a soldier, had contracted the infection abroad.

The number of cases this year was an all-time record, exceeding the previous highest figure of last year by 305. The disease was mainly of the *Sonne* type. Cases occurred in most districts of the city; the worst affected were those in the central and southern areas.

Day Nurseries again contributed to the number of cases. Outbreaks of the *Sonne* type occurred in 7 day nurseries accounting for 182 cases (166 children and 16 staff). All the cases were confirmed bacteriologically and recovered; 10 of the 166 children were removed to Seacroft Hospital.

Sporadic cases also occurred during the year at other day nurseries. An outbreak of *Sonne* dysentery occurred in July and August in the nursery section at a Children's Home; 52 children and 5 staff were affected. 43 of the 52 children were removed to Seacroft Hospital. One child, aged one year, died in Seacroft Hospital but the diagnosis in this case was not confirmed, the cause of death being enteritis. All the other cases recovered.

In none of the outbreaks was it possible to trace the precise source of infection. There were no deaths.

Acute Poliomyelitis (including Polioencephalitis).—There was an increase in the number of accepted cases of this disease during the year, 60 as compared with 25 last year. This increase was also general throughout the country, where the total cases was the highest for some years. The increase was not unexpected, as the long spell of hot dry weather in the summer was particularly favourable to the spread of the disease.

Of the 60 cases, 53 (88·3 per cent.) were treated in Seacroft Hospital, 2 (3·3 per cent.) in other hospitals and 5 (8·3 per cent.) at home. There were two deaths.

The corresponding figures for the past five years are as follows :—

	Cases		Deaths	
1954	..	..	25	..
1953	..	..	18	2
1952	..	..	79	7
1951	..	..	35	..
1950	..	..	92	9

The highest monthly incidence was in August when there were 16 cases. The following tables show the monthly distribution of cases and the age groups affected :—

MONTHLY DISTRIBUTION

August, 1954	..	..	..	1
(case notified 22.1.55)				
January	..	..	..	1
February	..	..	..	1
March	..	..	..	1
April	..	..	..	1
May ..	..	..	..	1
June	..	..	..	7
July ..	..	..	..	13
August	..	..	..	16
September	..	..	..	10
October	..	..	..	6
November	..	..	..	..
December	..	..	..	2
Total	..	..	..	60

AGE GROUPS.

	0-5	5-10	10-15	15-25	25-35	35-45	45-55	60-65	Totals
Males ..	11	4	4	5	5	1	1	..	31
Females..	9	5	3	1	7	3	..	1	29
Totals..	20	9	7	6	12	4	1	1	60

Of the total, 55 had paralysis and 5 had no paralysis. At the end of the year 29 cases had recovered and 29 were still under treatment with the following results :—

- (a) slight paralysis or weakness 23
 (b) severe paralysis or weakness 6

Of the 28 wards in the city, 22 contributed to the number of cases. Those with more than 3 cases were Blenheim (4), Westfield (5), Far Headingley (5), Moortown (5), Crossgates (7) and Stanningley (5).

Individual case record cards on all notified cases of poliomyelitis were again forwarded to the Medical Research Council.

Acute Encephalitis.—Three cases of acute encephalitis were notified during the year as compared with one last year. The cases were diagnosed in a general hospital and recovered. One case of post-infectious encephalitis, a child aged 2 years, was also notified from the same hospital. This child died.

Meningococcal Infection.—During the year there were 16 accepted cases of meningococcal infection, the same as last year. Four cases were treated in Seacroft Hospital. There were 4 deaths giving a case mortality of 25.0 per cent.

Food Poisoning.—During the year 36 cases of food poisoning or suspected food poisoning, in different households, were notified by general medical practitioners. In none of these cases was it possible to trace the cause of the illness. All recovered.

In addition 11 cases of staphylococcal food poisoning were notified by the Consultant in Infectious Diseases at Seacroft Hospital. They were members of a coach party returning to Glossop after a day's outing at Bridlington and Malton. The party left Glossop on the morning of 6th June and had lunch at Bridlington. The return journey was via Malton, where they had tea at 6.30 p.m., and Leeds. Between Malton and Leeds all members of the party

were taken ill with diarrhoea and vomiting and on reaching the outskirts of Leeds had to call for medical attention. The whole party was sent to Seacroft Hospital, where 11 of them were detained. This was about 10 p.m. The remainder were allowed to proceed on the journey back to Glossop.

Full details were sent to the Medical Officers of Health for Glossop, Bridlington and Malton. Specimens of fæces and vomit from those persons admitted to hospital were examined with the following results :—

Fæces (9) : No known pathogenic intestinal bacteria isolated by both direct and indirect methods. In 2 specimens, heat resistant *Cl. Welchii* was isolated but the significance of this could not be ascertained without a sample of food. Staphylococci present in 8 of the 9 specimens.

Vomit (3) : No pathogenic intestinal organisms isolated by both direct and indirect methods. No evidence of heat-resistant *Cl. Welchii*. Staphylococci present in one specimen.

From investigations made at the hotels in Bridlington and Malton, where the party had meals, the following information was received from the Medical Officers of Health concerned :—

Bridlington : The lunch eaten was common to 20 residents in the hotel, who suffered no ill effect.

Malton : *Staphylococcus aureus* recovered from ham which formed part of the evening meal.

All members of the party recovered.

During the year 14 cases of *Salmonella typhi-murium* infection came to the notice of the Department. Of these, 10 occurred in private households, one in Leeds General Infirmary, one in St. James's Hospital, one in St. Mary's Hospital and one in Seacroft Hospital (not Infectious Diseases side). Of the 14 cases, 9 were admitted to Seacroft Hospital. In none of the cases was it possible to trace the precise source of infection. There was one death due to Salmonellosis, a man aged 75 years who died in Seacroft Hospital.

Influenza.—There were 21 deaths from influenza during the year as compared with 16 in 1954. The death-rates per thousand population were 0.04 and 0.03 respectively.

Pneumonia.—Accepted cases during the year numbered 402, of which 362 (90.0 per cent.) were primary and 40 (10.0 per cent.)

influenzal. The corresponding figures for 1954 were 362, of which 340 (93·9 per cent.) were primary and 22 (6·1 per cent.) influenzal. There were 255 deaths from all forms of pneumonia (including 5 deaths from pneumonia of the newborn) as compared with 309 last year. The mortality rates were 0·50 and 0·61 respectively.

Bronchitis.—There were 463 deaths assigned to this disease as compared with 408 in the previous year. The death-rates were 0·91 and 0·80 respectively.

Diarrhoea and Enteritis.—The number of deaths of children under two years of age from diarrhoea and enteritis during 1955 was 9, an increase of one on the figure for 1954. The death-rates per thousand births were 1·18 and 1·05 respectively.

Malignant and Lymphatic Neoplasms.—The appended table gives details of deaths certified as due to malignant and lymphatic neoplasms. The total of 1,072 deaths in this group of diseases is 42 more than last year's total.

1955 Cause of Death*	Age Groups																		All Ages		Grand Total		
	-1		1-		2-		5-		15-		25-		45-		65-		75-						
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
Malignant Neoplasms:																							
Buccal cavity and pharynx (140-148)															5	8	1	3	2	11	8	19	
Oesophagus (150)												1		3		3		3	2	10	2	12	
Stomach (151)												3	1	41	17	26	24	13	16	83	58	141	
Other digestive organs (152-159)										1		6	2	40	40	42	45	29	29	118	116	234	
Trachea, lung and bronchus (162-163)												13	2	136	19	69	13	14	4	232	38	270	
Other respiratory organs (160, 161, 164, 165)														1	7	3	6		2		15	4	19
Breast (170)														11	1	42		16		20	1	89	90
Cervix uteri (171)														4		13		7		4		28	28
Other parts of uterus (172-174)																8		5		2		15	15
Male genital organs (177-179) ..										1		2		2		10		19		34		34	
Skin (190-191)																		1	1	1	1	2	3
Bone and connective tissue (196-197)														1			1						
All other sites (Rem. of 140-199)							1	1	1	1	1	2	16	27	37	14	20	8	13	53	89	142	
Neoplasms of lymphatic tissues (200-203)										1	1	2		4	5	3	4	3		13	10	23	
Leukæmia and aleukæmia (204)							1	2	2	3	2	5	4	11	4	2	2	1	1	24	16	40	
Mycosis fungoides (205) ..																							
Total						2	3	3	7	4	34	41	273	193	183	139	96	94	596	476	1,072		

*International List Numbers are shown in brackets.

Venereal Diseases.—The number of deaths certified as due to syphilitic diseases was 18 which is equal to a death-rate of 0.04 per thousand of the population. The number of deaths in 1955 shows a decrease of 4 as compared with the figure for the previous year.

For details of the work of the Treatment Centre at Leeds General Infirmary and medical-social work, see page 107.

Incidence of Blindness.—I am indebted to Mr. R. A. Kellett, Blind Welfare Officer, for the following statistical information regarding the admission of persons to the Register of the Blind or Partially Sighted during the year.

A. FOLLOW-UP OF REGISTERED BLIND AND PARTIALLY SIGHTED PERSONS.

(i) Number of cases registered during the year in respect of which para. 7(c) of Forms B.D.8 recommends :—	CAUSE OF DISABILITY			
	Cataract	Glaucoma	Retrolental Fibroplasia	Others
(a) No treatment	12	8	..	66
(b) Treatment (medical, surgical or optical) ..	26	10	..	17
(ii) Number of cases at (i)(b) above which on follow-up action have received treatment	16	5	..	11

B. OPHTHALMIA NEONATORUM.

(i) Total number of cases notified during the year	10
(ii) Number of cases in which :—	
(a) Vision lost	..
(b) Vision impaired	..
(c) Treatment continuing at end of year	..

Tuberculosis

TUBERCULOSIS STATISTICS

The number of cases on the register at the end of 1955 was 3,716 as compared with 3,525 at the end of 1954, an increase of 191.

Notifications.—During the year 488 cases of respiratory tuberculosis (of which 89 were transfers from other areas) and 85 non-respiratory (of which 6 were transfers from other areas) were notified, making a total of 573 cases of which 95 were transfers. Compared with the previous year there was an increase of 18 in the respiratory notifications and an increase of 5 in the non-respiratory notifications. Compared with the average of the previous five years there was an increase of 15 in the respiratory notifications and a decrease of 9 in the non-respiratory notifications.

The case-rate of respiratory tuberculosis was 0.96, of non-respiratory 0.17 and of all forms of the disease 1.13 as compared with 0.93, 0.16 and 1.08 respectively for the previous year.

Of the total cases of respiratory tuberculosis notified 8.4 per cent. were children under 15 years, 20.7 per cent. persons between 15 and 25 and 70.9 per cent. were in the remaining age groups. The corresponding figures for the previous year were 12.6 per cent., 16.8 per cent. and 70.6 per cent. respectively.

With regard to the non-respiratory type of disease, 15.3 per cent. were children under 15 years and 84.7 per cent. were persons over 15 years. The corresponding figures for the previous year were 23.8 per cent. and 76.3 per cent. respectively.

Of the total cases notified, 331 were by the Chest Physician, 48 were by general medical practitioners, 99 came from hospitals and 95 were by transfer from other areas.

The number of cases of respiratory tuberculosis not heard of until time of death was 10 and the number of non-respiratory 4, making a total of 14, 2 of which were posthumous notifications. This is a decrease of 8 on the figure for the previous year.

Out of a total of 70 deaths from tuberculosis of all forms, 4 or 5.7 per cent. died within 7 days of notification, 7 or 10.0 per cent. died between 7 and 28 days after notification and 4 or 5.7 per cent. died between 28 days and 12 months after notification.

The following tables give details of notifications of tuberculosis received during the year :—

RESPIRATORY.

Ages	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males..	1	2	18	46 (10)	61 (27)	52 (12)	43 (8)	42 (2)	26 (2)	291 (61)
Females	..	5	15 (1)	55 (12)	64 (9)	29 (4)	20 (2)	5	4	197 (28)
Totals..	1	7	33 (1)	101 (22)	125 (36)	81 (16)	63 (10)	47 (2)	30 (2)	488 (89)

NON-RESPIRATORY.

Ages.	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males..	..	1	7 (1)	8	10 (3)	9 (1)	2	2	2	41 (5)
Females	..	1	4	10	15 (1)	2	6	2	4	44 (1)
Totals..	..	2	11 (1)	18	25 (4)	11 (1)	8	4	6	85 (6)

Figures in brackets are 'Transfer In' cases and are included in the totals.

Site	Males	Females	Total
Central nervous system	6	3	9
Abdominal	3	..	3
Spine	6	4	10
Bones and joints	4	2	6
Skin	..	2	2
Lymphatic system	12	20	32
Genito-urinary system	9	10	19
Other sites	1	3	4
Totals	41	44	85

Deaths.—Deaths from all forms of tuberculosis during the year numbered 70 of which 48 were males and 22 females. In the previous year the total was 87 of which 58 were males and 29 females. Of the total, respiratory tuberculosis accounted for 67 or 95·7 per cent. and non-respiratory 3 or 4·3 per cent. The death-rate from respiratory tuberculosis was 0·13, from non-respiratory 0·01 and from all forms of the disease 0·14 as compared with 0·16, 0·01 and 0·17 respectively for the previous year.

Set against the average rates for the previous five years, these figures represent a decrease of 0.13 in the respiratory rate, a decrease of 0.01 in the non-respiratory rate and in the rate for all forms of the disease a decrease of 0.14.

The following tables give details of deaths from tuberculosis during the year :—

**RESPIRATORY TUBERCULOSIS.
AGES AT DEATH.**

1955	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65 +	Total
Males ..	..	..	..	2	4	6	13	8	13	46
Females	1	..	..	2	7	2	2	4	3	21
TOTALS	1	..	..	4	11	8	15	12	16	67
Average 10 years 1945-1954	..	1	1	19	37	38	45	35	24	200

NON-RESPIRATORY TUBERCULOSIS. DEATHS.

1955	Tubercular meningitis	Abdomin- al.	Bones and Joints	Other tuber- culosis	Total.
Males ..	..	..	1	1	2
Females ..	..	1	..	..	1
Totals ..	..	1	1	1	3

AGES AT DEATH.

1955	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65 +	Total
Males ..	..	..	..	..	..	..	..	1	1	2
Females	..	..	..	..	..	..	..	..	1	1
Totals ..	..	..	..	..	..	..	..	1	2	3
Average 10 years 1945-1954	1	6	2	3	2	2	2	2	2	22

The following table gives details of notifications of and deaths from tuberculosis during the years 1936-1955 :—

TUBERCULOSIS.

YEAR.	DEATHS.						NOTIFICATIONS.					
	Respiratory tuberculosis.		Non-respiratory tuberculosis.		All forms tuberculosis.		Respiratory tuberculosis.		Non-respiratory tuberculosis.		All forms tuberculosis.	
	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Cases.	Case-rate.	Cases.	Case-rate.	Cases.	Case-rate.
1936	346	0·71	62	0·13	408	0·83	531	1·08	163	0·33	694	1·42
1937	354	0·72	52	0·11	406	0·83	548	1·11	214	0·44	762	1·55
1938	336	0·68	61	0·12	397	0·80	511	1·03	176	0·36	687	1·39
1939	353	0·72	60	0·12	413	0·85	555	1·14	137	0·28	692	1·42
1940	416	0·89	51	0·11	467	1·00	557	1·20	110	0·24	667	1·43
1941	362	0·77	46	0·10	408	0·86	598	1·27	162	0·34	760	1·61
1942	310	0·67	47	0·10	357	0·77	638	1·38	170	0·37	808	1·75
1943	325	0·72	53	0·12	378	0·83	595	1·31	151	0·33	746	1·64
1944	277	0·61	39	0·09	316	0·70	631	1·40	157	0·35	788	1·75
1945	286	0·63	32	0·07	318	0·70	579	1·28	156	0·35	735	1·63
1946	261	0·54	27	0·06	288	0·60	519	1·08	178	0·37	697	1·45
1947	305	0·62	37	0·08	342	0·70	518	1·05	133	0·27	651	1·32
1948	245	0·49	28	0·06	273	0·55	497	0·99	132	0·26	629	1·25
1949	244	0·48	30	0·06	274	0·54	480	0·95	108	0·21	588	1·16
1950	178	0·35	15	0·03	193	0·38	521	1·02	98	0·19	619	1·21
1951	166	0·33	16	0·03	182	0·36	476	0·95	104	0·21	580	1·15
1952	113	0·22	10	0·02	123	0·24	476	0·94	97	0·19	573	1·14
1953	111	0·22	9	0·02	120	0·24	420	0·83	91	0·18	511	1·01
1954	83	0·16	4	0·01	87	0·17	470	0·93	80	0·16	550	1·08
1955	67	0·13	3	0·01	70	0·14	488	0·96	85	0·17	573	1·13

REPORT OF THE WORK OF THE LEEDS CHEST CLINIC

BY

GORDON F. EDWARDS, M.B.E., M.B., M.R.C.P.

Senior Chest Physician

Epidemiology.—The situation in Leeds during 1955 is summarised in the following table:—

	Nos.	Rate per 1,000 popn.	Variation on previous year	"Trans- fers in"	Total	Rate per 1,000 popn.
No. of persons on Clinic Register	3,621	7.14	+150	95	3,716	7.32
New notifications:						
All forms of tuberculosis ..	478	0.94	—18	95	573	1.13
Respiratory tuberculosis ..	399	0.79	—18	89	488	0.96
Non-respiratory tuberculosis	79	0.16	..	6	85	0.17
Deaths:						
All forms of tuberculosis ..	70	0.14	—17	..	70	0.14
Respiratory tuberculosis ..	67	0.13	—16	..	67	0.13
Non-respiratory tuberculosis	3	0.01	—1	..	3	0.01

The fall in the death-rate continues and indeed appears to be somewhat accelerated. Of all the persons who died of tuberculosis during the year, 15 were notified during the year under review, 11 of whom died within a month of notification.

The notification rate of tuberculosis has also continued to fall albeit somewhat slowly, but for the first time on record the notification rate of new cases of tuberculosis arising in residents of the City of Leeds has fallen to less than one per thousand. The increased number of persons on the Clinic Register, in spite of the reduction of notifications, is due almost entirely to the fall in the death-rate, so that more cases of active tuberculosis are remaining alive for longer periods. Many of these patients have been kept alive by the use of anti-tuberculous drugs and chemotherapeutic substances, but their disease is too long-standing to be completely brought under control by these agents or by other therapeutic measures. This problem is probably the biggest of all the problems related to the epidemiology of tuberculosis. For it means that the infector pool may get larger year by year and hence increase the risk of primary tuberculous infections in the young susceptible individuals.

Incidence of Tuberculosis.—In 1955, 573 new cases of tuberculosis were notified, of whom 478 were Leeds residents, whilst 95 were transfers-in from other areas outside the Leeds City Boundaries. This shows an incidence of 0.94 per thousand, which is a continued fall in the notification rate during the previous years. In considering the age groups of notifications of the 478 cases of tuberculosis occurring in Leeds residents, about 11 per cent. occurred in the under 15 years age group, 20 per cent. in the 15-25 years age group, 39 per cent. in the 25-45 and 30 per cent. in the over 45's. These figures bear a remarkable similarity to the situation that obtained in 1954. From the tables published in the statistical section, the peak of notifications in males is in the 35-45 age group, whilst in females the peak occurs in the 25-35 age group. This applies to all forms of tuberculosis as well as to respiratory tuberculosis. During the year 30 cases of primary tuberculosis were notified, as compared to 24 in 1954.

Mortality of Tuberculosis.—The deaths from all forms of tuberculosis during the year numbered 70, of which 48 were males and 22 females. This is a further reduction in the death-rate as compared with 1954 when 87 deaths occurred. Respiratory tuberculosis accounted for 67 of the deaths in 1955 and the death-rates were :—

All forms of tuberculosis . . 0.14 as compared to 0.17 in 1954

Respiratory tuberculosis . . 0.13 „ „ „ 0.16 „ „

Non-respiratory tuberculosis 0.01 which is the same as in 1954

When deaths are viewed as combined age groups, as in the following table, it is clear that the overall fall in the death-rate has been equally divided in all age groups :—

TUBERCULOSIS DEATHS

Age Groups	1955			1954		
	All tub.	Resp. tub.	Non-resp. tub.	All tub.	Resp. tub.	Non-resp. tub.
	No. %	No. %	No. %	No. %	No. %	No. %
Under 15 years	1 (1%)	1 (1%)	..	2 (1%)	1 (1%)	1 (1%)
15—25 ..	4 (6%)	4 (6%)	..	3 (3%)	3 (3%)	..
25—45 ..	19 (27%)	19 (27%)	..	24 (27%)	22 (25%)	2 (2%)
Over 45 ..	46 (66%)	43 (62%)	3 (4%)	58 (70%)	57 (69%)	1 (1%)

It is noted that 9 males died to every 4 females although the notification rates show a ratio of 5 males to 4 females. In 1955, 171 cases were marked off the Register as recovered as compared with 115 marked off during 1954. These consisted of 116 cases of respiratory tuberculosis and 55 cases of non-respiratory tuberculosis.

Trends in Tuberculosis.—The following table shows the trends in tuberculosis in Leeds during the past 20 years :—

ALL FORMS OF TUBERCULOSIS, 1936—1955.
CASE-RATES, DEATH-RATES AND CLINIC REGISTER RATES

Year	Population	Clinic Register		Case-rate per 1,000 population	Death-rate per 1,000 population
		No.	Rate per 1,000 population		
1936 ..	489,800	2,994	6.1	1.42	0.83
1937 ..	491,860	3,056	6.2	1.55	0.83
1938 ..	494,000	3,112	6.3	1.39	0.80
1939 ..	497,000	3,126	6.3	1.42	0.85
1940 ..	465,700	3,041	6.5	1.43	1.00
1941 ..	471,930	3,229	6.8	1.61	0.86
1942 ..	462,400	3,464	7.5	1.75	0.77
1943 ..	453,900	3,619	8.0	1.64	0.83
1944 ..	451,100	3,936	8.7	1.75	0.70
1945 ..	451,670	3,986	8.8	1.63	0.70
1946 ..	481,570	4,076	8.5	1.45	0.60
1947 ..	492,140	3,894	7.9	1.32	0.70
1948 ..	501,900	3,662	7.3	1.25	0.55
1949 ..	504,900	3,388	6.7	1.16	0.54
1950 ..	509,700	3,196	6.3	1.21	0.38
1951 ..	503,030	3,101	6.2	1.15	0.36
1952 ..	504,800	3,182	6.3	1.14	0.24
1953 ..	505,500	3,273	6.5	1.01	0.24
1954 ..	507,200	3,525	7.0	1.08	0.17
1955 ..	507,400	3,716	7.3	1.13	0.14

It has already been suggested that as the case-rate falls and as the mortality rate falls, the Clinic Register increases because the chronic tuberculous patient is being kept alive as a result of modern methods of treatment. This produces a considerable public health problem ; many of these patients are in reasonable health, many of them are ambulant and able to get about and yet many of them are persistently excreting tubercle bacilli in their sputum. Thus, although they have reached a stage of more or less stability with their disease, they are a considerable danger to the public about them. It is mainly towards this group of individuals that the efforts of the tuberculosis health visitors are directed in the matter of personal hygiene, discipline and education. By maintaining

these patients under review, both in the Chest Clinic and in the home by the health visitor and the doctor, much of their danger can be reduced. But a much greater danger exists from those other unknown cases of active tuberculosis who have not yet been discovered and who, for this reason, are an even greater threat to the public health.

The incidence of new cases of tuberculosis in people over 45 years of age is tending to increase year by year. It is therefore reasonable to assume that the great bulk of the unknown infector pool also falls within this age group. Many of these individuals have relatively trivial symptoms, which are so often accounted for as being due to chronic bronchitis, and for this reason many of them are not further investigated. Whereas 20 or 30 years ago the problem of tuberculosis mainly centred around the young individual, it would appear now that the problem centres around the middle-aged and elderly.

The outlook for the young person who develops pulmonary tuberculosis for the first time is extremely good with the use of the anti-tuberculous drugs and other measures which are now available. The great majority of these young people make an apparently complete recovery, they rarely progress to a chronic infective type of disease and they nearly all return to a normal, healthy and productive life. But so long as the infector pool among the elderly persists, so long will new cases of primary tuberculosis and new cases of re-infection-type disease continue to appear.

Another significant change in the so-called tuberculosis epidemic is the fact that the need for sanatorium beds and the pressure upon those beds has reduced appreciably throughout the year. This has been a factor which has been somewhat obvious for the last 2 to 3 years but it is now clearly established that the sanatorium beds available in the Leeds area are equal to the demand which is placed upon them. At the end of 1954 all sanatorium beds were filled and there was a waiting period for a male bed of about three weeks and for a female bed of about a week. At that time there were 20 patients on the waiting list for admission to sanatorium. At the end of 1955, however, there was no waiting list, and there was no waiting period for admission to sanatorium, other than that necessitated by administrative routine.

As the death-rate from pulmonary tuberculosis falls year by year, the death-rate from cancer of the lung increases, as the following table shows :—

	1955	1954	1953
Deaths from pulmonary tuberculosis, all ages ..	67	83	111
„ „ pulmonary cancer „ „ ..	270	237	203
Deaths from pulmonary tuberculosis over 45 years	53	57	72
„ „ pulmonary cancer „ „ „	255	224	198
Deaths from pulmonary tuberculosis in males over 45 years	34	45	58
Deaths from pulmonary cancer in males over 45 years	219	202	168

It will be noted that there is a progressive widening of the differences between the number of deaths due to pulmonary tuberculosis and due to cancer of the lung especially in men over the age of 45.

Attention has been directed to the relationship between cigarette smoking and cancer of the lung, but greater attention should be drawn to the equally clear relationship which exists between cigarette smoking and bronchitis and coronary artery disease. To bring these problems into focus, it is interesting to contrast the number of deaths in Leeds from these conditions, and other hazards :—

	Age of max. mortality	1955	1954	1953
Pulmonary Tuberculosis	45-65	67	83	111
Cancer of the Lung	45-65	270	237	203
Bronchitis	45-75	463	408	481
Coronary Artery Disease	45-75	933	961	830
Accidents, including road accidents..	All ages	163	182	184
Pneumonia	65-75	255	309	434

Case-Finding Methods :

(1) Mass X-ray :—

(i) *Leeds Residents*.—During the year under review about 30,000 Leeds residents attended the Mass X-ray Unit more or less in equal proportions by sex and by each 10-year age period from 15-55. However, only something less than 1,700 of the total attenders were 60 years of age or more. Of the total Leeds residents examined, 100 cases of active pulmonary tuberculosis

were found, two-thirds of whom were males, and the highest incidence in both sexes being in the 45-65 years age groups. During the year 6 special sessions were organised for the general public. Three of these sessions were held at the Mass X-ray Unit at St. James's Hospital, Leeds, and three sessions were held in public halls in selected residential areas, namely at Armley, Middleton and Moortown. At each of these places the Mass X-ray Unit devoted about one week to X-raying the general public and each of these sessions occurred at intervals of about 2 months. 9,500 residents were examined during these periods and 39 cases of active pulmonary tuberculosis were discovered. It is of great interest that of the total examinees 45 per cent. had attended a Mass X-ray Unit previously.

(ii) *Special Groups and Surveys.*—The overall discovery rate of new cases of pulmonary tuberculosis as a result of a year's work by the Mass X-ray Unit, both in and out of the City of Leeds, when a total of 52,000 people was examined, was in the order of 3 per thousand. Much time and energy is expended on examination of special groups, much of which is apparently not particularly productive in finding new cases of active tuberculosis. Special attention, however, is drawn to the following groups :—

Group	Numbers examined	Pick-up rate per thousand
General Practitioners' Nominees ..	139	14.3
Mantoux-Positive School-leavers ..	149	13.4
Mental Hospital patients	2,135	10.8
Attendees at Ante-Natal Clinic ..	3,138	4.5
National Service Recruits	4,426	3.6
General Public and Workers	30,116	3.3
School-children under 14 years ..	1,696	1.2
Mental Hospital Staff; Teachers and Educational Staff; Training College Students and Staff; Day Nursery and Nursery School Attendants and Staff; Health Visitors	3,186	nil

It is extremely gratifying to note that the intense investigations in the Educational and Health Services staffs have failed to reveal a single case of pulmonary tuberculosis.

As far as the X-raying of ante-natal mothers is concerned, only about 55 per cent. of the women attending the Ante-Natal Clinics in fact accept the offer of a Mass X-ray appointment.

(iii) *Mass X-ray Survey in the University of Leeds.*—In October, 1955, at the start of the new academic year, all undergraduates and staff were offered an appointment with the Mass X-ray Unit, together with tuberculin-testing and, if necessary, B.C.G. vaccination. 3,555 persons attended for Mass X-ray and 72.5 per cent. of these underwent tuberculin-testing. Of the total cases examined by Mass X-ray, 4 new cases of active pulmonary tuberculosis were found.

(2) *Chest Clinic Exclusion X-ray Service for General Practitioners.*—For comparison, the Miniature Film X-ray Exclusion Service organised by the Chest Clinic for the benefit of General Practitioners examined 3,523 persons during the year, and as a result 70 new cases of active pulmonary tuberculosis were discovered by this method, giving a case-rate of 20 per thousand.

(3) *Out-Patient Consultations in the Chest Clinic.*—During the year 3,226 consultations for new patients were held in the Chest Clinic and 205 new cases of pulmonary tuberculosis were found and notified.

B.C.G. Vaccination.—(1) *Contacts of Cases of Tuberculosis.*—During the year, 1,657 contacts were examined in the Chest Clinic, the greater proportion of whom were children. This is roughly in a proportion of 4.2 contacts per newly notified source case. Of these contacts, 826 were vaccinated with B.C.G. during the year under review, which is nearly three times the number which were done two years ago. Examination of these 1,657 contacts produced 27 new cases of tuberculosis.

(2) *School Leavers.*—During the year, 2,891 school-leavers in their 13th year were tuberculin-tested. About a third were tuberculin-positive, and about two-thirds (1,852) were tuberculin-negative and were vaccinated with B.C.G. Only something less than 5 per cent. of the original numbers defaulted before the end of the investigation, for one reason or another.

(3) *University Undergraduates and Staff.*—It has already been seen that 72.5 per cent. of the 3,555 University numbers who were X-rayed attended for tuberculin-testing. Of the undergraduates 63 per cent. were tuberculin-positive whilst of the staff and post-graduates 83 per cent. were tuberculin-positive. Breaking these

figures down, the following table will show more clearly the variation in tuberculin-sensitivity :—

Grade	Numbers tested	Numbers tuberculin-positive	Numbers vaccinated with B.C.G.
1st-Year Students	624	377	222
2nd-Year Students	543	352	183
3rd and 4th Year Students ..	591	405	175
Staff and Post-graduates ..	738	610	121

The degree of tuberculin-positivity for sexes and age groups shows a variation of between 50 and 60 per cent. at the age of 18 ; of 55-65 per cent. at 20 ; 65-75 per cent. at 22, and over this age the degree of tuberculin-positivity increases to more or less a constant figure of about 83 per cent. It is of interest to note that the degree of positivity is somewhat greater in males at all ages to the extent of about 5 per cent.

Section 28 Activities.—*Home Helps.*—During the year 25 applications for Home Helps were made for tuberculous patients being nursed at home, and of these requests 20 were granted. It is still clear that the problem of getting Home Helps to agree to work in a tuberculous household is far from solved.

Rehousing.—At the beginning of the year it seemed that the rehousing of tuberculous patients may well be somewhat reduced as a result of the prior claims imposed by slum clearance, but in actual practice the co-operation of the Housing Department has been of the greatest assistance, so much so that 113 tuberculous families were rehoused during the year, and this represents a very significant part of the City of Leeds rehousing programme.

Rehabilitation.—The help and assistance which the Ministry of Labour through the Industrial Rehabilitation Unit, the Government Training Centre, and the Disablement Resettlement Officers, has given to the Chest Clinic, has been very considerable and very much appreciated. 40 patients attended the Industrial Rehabilitation Unit and 25 were returned to full employment. Of the 7 patients who attended courses of training at the Government Training Centre, 5 were successfully placed in re-employment afterwards. There is no doubt that one of the most satisfactory groups of patients, from the rehabilitation point of view, is that suffering from tuberculous disease. During the year a new scheme of starting tuberculous patients on part-time employment was initiated, but

it is too early yet to draw any deductions as to its long-term effect. At all events, this appears to be a most suitable and welcome innovation particularly from the patients' point of view.

"The Hollies."—This institution originally belonged to the Local Authority. On the Appointed Day of the National Health Service Act it was vested in the Minister as a hospital in spite of vigorous protest by the Local Authority. Its use as a hospital was relinquished on 1st April, 1954, and it was returned to the Local Authority on that date.

"The Hollies" has accommodation for 40 children and is used as a 'preventorium.' No child suffering from active tuberculosis is admitted but it takes children who are in need of residential care either for the prevention of tuberculosis or for after-care. The main types of case admitted are, firstly, children exposed to special risk in tuberculous households, particularly if they are debilitated, and children whose parents are in hospital or sanatorium suffering with tuberculosis. Secondly, it takes children who have been in hospital for the treatment of tuberculosis and who have so far recovered that they no longer require hospital care, but are not yet fit to return home. For this latter type of child, "The Hollies" acts as a long-term convalescent home.

The medical supervision of the children is undertaken by one of the Assistant Medical Officers of Health, at present Dr. Axson. In addition, one of the Chest Physicians attends weekly to discuss special problems.

On 1st January there were 31 children remaining in "The Hollies." During the year 53 children were admitted and 59 discharged. The average duration of stay is about 6 months, but 8 of the children have been resident for more than 12 months. The health of the children has been good but it was necessary to transfer three of them for short periods to Seacroft Hospital for the treatment of acute tonsillitis.

Health Visitors and Almoners.—As always, the Health Visitors have borne the brunt of the domiciliary visiting of the tuberculous patient, of their management and instruction at home, and of the organisation and administration of the Contact Department in the Chest Clinic.

The work of the Almoners continues unabated, and in addition they have been able to undertake regular visits to the Leeds patients

in the outlying sanatoria, particularly at Scotton Banks near Harrogate and at Middleton Sanatorium near Ilkley.

Domiciliary Treatment.—During the year the need for frequent domiciliary visiting has become somewhat less marked, as the pressure on sanatorium beds has become eased. The number of home visits by doctors has in consequence been reduced to 259, so that more economic use is made of their time in the Chest Clinic and sanatoria.

TUBERCULOSIS—SOCIAL WORK

BY

Miss B. M. R. NORTHROP, M.A.

Senior Tuberculosis Almoner

The arrangements for the care and after-care of the tuberculous were the same as in the previous years. The volume of work for the year as a whole showed little change from the previous year but was unevenly distributed; the second half of the year being much the busier.

Assistance given by the Health Committee.—Applications for help numbered 1,181 as against 1,268 last year.

As in previous years, the Almoners interviewed or wrote to all new patients in order to help with the various social, domestic and employment problems which are associated with this disease. This entailed 2,589 interviews with patients or their relatives, an increase of 62 on 1954.

The provision of extra nourishment for patients recommended by the Chest Physician continued during 1955 and 332 patients were supplied with one pint of milk per day free of charge. One debilitated patient was provided with eggs every week at the request of the Chest Physician.

Numerous applications for clothing were received from patients and their families; 344 grants were made.

Beds and Bedding.—There was a big drop this year in the number of patients who needed a single bed in order to accept medical advice to sleep alone. 25 patients, half the number in 1954, were loaned a bedstead and mattress complete with bedding. Mattresses and bedding were loaned to two patients who were thus enabled to make

use of bedsteads which they already possessed and five patients received bedsteads and mattresses for which they themselves could furnish the bedding. Four mattresses on loan replaced old worn-out mattresses which were not suitable for patients on complete bed rest, and one bedstead was loaned in place of a broken one. Grants of blankets and bed linen totalled 58, a little over half of last year's figure of 97.

Many patients on bed rest are made more comfortable by air-rings and back rests; loans of these and other medical equipment were made to 36 patients.

Co-operation with Other Departments.—Co-operation with other Departments of the Corporation has been maintained as usual. During the year 25 patients were referred to the Home Help Department for the provision of help in the home during the patient's incapacity. This is a surprisingly low figure in comparison with last year when 48 patients were in need of home help. One reason for the reduction in numbers is the much shorter waiting list for sanatorium.

The number of patients requiring convalescence increased to 37 as against 21 in 1954. Of these, 27 patients who were not suffering from pulmonary tuberculosis were referred to the Convalescent Department for admission to ordinary convalescent homes. Eight patients who were suffering from some form of tuberculosis were accommodated at Shoreston Hall in Northumberland and the remaining two patients made their own arrangements for admission to homes run by the National Association for the Prevention of Tuberculosis.

Three applications were made to the Maternity and Child Welfare Department for the admission of children to day nurseries whilst their mothers were ill and unable to look after them adequately at home.

The Care of Children Department was asked to admit three children to residential accommodation. In each case the mother of the child was the patient; two were admitted to sanatorium and one was going away for convalescence.

A third possibility, when children must be removed temporarily from home as the result of a parent's illness, is to ask the Education Committee to admit them to school in advance of their fifth birthday. Two such requests were made during the year. The Education Committee was also asked to provide school meals for the

children of two patients. An application was made for two more patients whose children already had meals at school, to have them provided free of cost.

One patient wishing to take a correspondence course applied for help with the cost. He wished to obtain further qualifications to help in his career when he was fit to return to work and the Education Committee made a generous grant towards the expenses of the course.

Queries to the Housing Department about housing applications are part of the daily routine of the Department in any year but 1955 brought new problems to be referred to that Department. The rehousing of patients in newly built houses, where the gardens consisted of rough ground, created a difficulty when the occupants were requested to keep their gardens in order. Several patients were not in a fit state to do the heavy manual work required, but representations to the Housing Department resulted in arrangements being made for the work to be done. An isolated problem occurred when disinfection was carried out in a Corporation dwelling and the patient could not meet the cost out of his restricted income. The amount was lowered when the position was brought to the notice of the Chief Housing Officer.

Steady contact was kept up throughout the year with other statutory bodies. The National Assistance Board was, as always, the mainstay of the majority of patients in financial need. During the year 198 patients were referred for allowances; 104 were newly notified patients, four had been on the notification list for some time but had not previously needed financial help, 35 were patients discharged from sanatorium and 22 were patients who relapsed after a period at work. All these patients were referred for the special higher scale of allowance. Two patients in sanatorium with no income were helped to apply for a pocket-money allowance. The remaining patients were referred for supplementation of part-time earnings, supplementary pensions, assistance during temporary unemployment and the like. In addition to these payments in cash, help in kind was requested from the National Assistance Board on 20 occasions for needs such as bedding, furniture, removal expenses, clothing, hire purchase commitments and special miscellaneous needs.

During the year 172 patients were referred to the Ministry of Labour as against 114 last year: 54 were recommended for a course

at the Industrial Rehabilitation Unit. The Industrial Rehabilitation Unit serves a dual purpose: it assesses the capabilities of a patient who has never worked or who cannot return to his former employment because it is unsuitable and who, in either event, has no idea what work he wants to take up. At the end of his rehabilitation course he is advised as to the type of work which is considered best for his physical and mental capacity and is referred to the Ministry of Labour for assistance in finding work of this type, which may mean a preliminary period at a Government Training Centre. The Industrial Rehabilitation Unit also provides rehabilitation for patients who have lost confidence in their ability to work, a not unusual result of long illness. Rehabilitates keep regular hours, practice various skills and come into contact with other people again. The course is valuable to our patients and the majority of them appreciate the material and psychological help which they receive. Financial worries are obviated by a scheme under which the National Assistance Board supplements the allowance paid by the Ministry of Labour, so that no patient is obliged to live on less than the amount he was receiving whilst "on sick." One patient this year who was recommended for the Industrial Rehabilitation Unit course is blind and special arrangements had to be made for him to go to the Industrial Rehabilitation Unit for blind persons in Torquay.

Seven patients were recommended for a Government Training Centre without a preliminary assessment at the Industrial Rehabilitation Unit; 95 patients were thought to be ready for immediate employment and were referred for help in obtaining it. Seven were working already and, of these, two were advised to change to more suitable employment and five to have their names placed on the disabled register. Five young patients were referred to the Youth Employment Bureau for help in finding employment. Of the total number of patients who needed assistance in matters to do with employment, four were non-tuberculous.

Patients in need of specialised help and advice were referred to the Probation Officers, the Alimony Department and the Ministry of Pensions and National Insurance.

Assistance given by Voluntary Organisations.—Voluntary organisations responded generously to the varied appeals made to them in 1955. The Leeds Association for the Care of Consumptives continued to provide grocery orders, bedding, clothing, furnishings

and wireless licences ; making allowances for fares and pocket-money, holidays and occupational therapy ; paying rent arrears and coal, gas and electricity bills. In all, 329 applications were made to the Committee during the year.

38 applications were made to 20 other voluntary bodies. The British Red Cross, British Legion and various Regimental Funds provided help for ex-Service patients. One patient, who is unfit for any sort of normal employment, was anxious to start making articles at home which he could sell to increase his income. He was referred to the Royal Air Force Association for help with capital to provide the materials he needed and a grant of £50 was made by the R.A.F. Benevolent Fund.

The Personal Service League and Women's Voluntary Service supplied generous grants of clothing whenever application was made to them and the Glasspool Trust, Friends of the Poor, Society of St. Vincent de Paul and Typographical Society also responded generously to appeals. In all, grants to patients from voluntary organisations totalled 96 during the year.

Patients were referred for advice and help of a less material kind to the Leeds Council of Social Service, Marriage Guidance Council and Old People's Welfare Department. We offer warm thanks to all the statutory officials and voluntary workers whose willing and generous co-operation in 1955 has brought so much benefit to our patients.

General.—The Senior Almoner paid 20 visits to Middleton Sanatorium in 1955 and dealt with requests for clothing, which were passed on to the Hospital Management Committee, housing enquiries and a variety of domestic problems, including enquiries as to how to get furniture, help with pointing a house, and a divorce.

A new departure this year was regular visits to Leeds patients in Scotton Banks Sanatorium by the Deputy Almoner, who made 18 visits. Once again, queries about clothing and housing were most numerous, the former, as usual, being referred to the Hospital Management Committee, but a variety of problems was raised. The value of this contact with patients so far from their homes is illustrated by the fact that two patients were considering leaving the sanatorium against medical advice in order to deal with personal problems. In both cases the Almoner was able to clear up the difficulties and enable the patients to settle down contentedly in the sanatorium.

The Senior Almoner lectured to groups of Health Visitor students during the year and was invited to give a lecture to Social Science students at the University. She was also asked to speak about the work of a Tuberculosis Almoner to women's meetings associated with three Leeds Churches. The Disablement Resettlement Officer and three Area Officers of the National Assistance Board visited the Department during the year and the Almoners paid a return visit to one of the Assistance Board offices. They also visited Lewis's and talked with the Personnel Manager, Medical Officer and Welfare Officer about the possibilities of employment for disabled people. Both Almoners attended meetings for Social Workers at the Leeds Council of Social Service and heard speakers from America and Canada.

As Christmas approached, we were delighted to receive generous gifts of toys and books from the "Yorkshire Evening Post," "Yorkshire Evening News" and Leeds Workpeople's Hospital Fund. We were able to invite the families of 136 patients to share these gifts and 250 children had the thrill of a parcel on Christmas morning. The Leeds Association for the Care of Consumptives made another welcome distribution of coal bricks to 50 patients and donations from friends of the Clinic enabled small parcels of food to be given to 25 elderly or infirm patients. It was good to draw near to the end of another year in the knowledge that so many patients had received extra help and comfort through the kindness of their more fortunate fellow citizens.

Disinfestation and Disinfection

DISINFESTATION AND DISINFECTION

BY

C. W. LAMB, M.R.S.H., M.S.I.A.,
Disinfestation Officer.

Personal Disinfestation.—Treatment for all types of verminous conditions of the human body is available at the specially designed Disinfestation Clinic at the Stanley Road Centre.

This building, adapted in 1954, has at one end of it the Head Clinic for the treatment of *pediculus capitis*. Three patients can be treated at the same time: an insecticidal hair lotion is first applied to the hair followed by shampooing. Whilst still wet, the *capitis* eggs are removed by a thorough combing and discriminate snipping of the hair, the latter is then dried under an industrial type of hair dryer and finally given a dressing of insecticidal brilliantine, which remains toxic for several days and safeguards against re-infestation from eggs that may have been overlooked during treatment.

A total of 2,040 persons, mainly school children and contacts were given 2,048 treatments during the year, in close collaboration with the School Medical Service. In connection with these cases, 1,460 homes were visited, advice given and arrangements made for treatment by the two visitors, both of whom are State Registered Nurses.

The other end of the building has been adapted for the treatment of *pediculus corporis*, *phthirus pubis* and scabies. Patients enter the "Infested" or "dirty" side to be treated according to their condition, and leave the centre on the "clean" side. *Corporis* cases, after undressing, step under a hot shower to remove lice from the body surface, then into a hot disinfectant bath to complete the treatment. After undressing, the patient's clothing is taken by the attendant and placed into a small Thresh gas-fired disinfestor. After steam disinfestation, the clothing is returned from the clean side of the disinfestor through a serving hatch into the bathroom. Similar treatment is given to persons infested with pubic lice, with the exception that the pubic hair is shaved thereby ensuring a complete removal of the eggs.

Scabies cases are only given hot baths if the infestation is severe and long standing or if the body is dirty. Benzyl benzoate emulsion is applied to the body, paying special attention to the infested areas of the skin. All direct contacts of the patient must attend for treatment, otherwise re-infections are likely to occur within a short time.

The treatment for all these conditions is supervised by a State Registered Nurse who is assisted by one male and two female attendants.

Cases of *corporis* numbered 276 and by far the greater proportion of these were vagrants. An increasing number of persons, coming within the definition of the National Assistance Act, 1948, Section 47, in need of care and attention and usually in a dirty and verminous condition were cleansed and disinfested before their admission to hospital or to South Lodge, under the care of the Welfare Services Committee. For this purpose, the bathroom has been specially adapted to deal with chronic and orthopædic cases which are conveyed to the Centre by ambulance. In all cases the homes, 115 in number, and common lodging houses were visited, contacts treated and personal and bedclothing subjected to steam disinfestation.

During the year, 119 persons were treated for scabies, 71 homes were visited and 59 contacts received prophylactic treatment. There was only one case of *phthirus pubis*.

The Clinic building also contains a lecture room which can accommodate thirty students. Instruction is given by the Disinfestation Officer to trainees from the Department of Preventive Medicine of Leeds University, to student trainees taking courses in connection with the Institute of Housing and the Royal Society of Health. Lectures and visits to the Centre are also arranged with various associations, church organisations and others.

General Disinfestation.—The Leeds Scheme of disinfestation by insecticidal spray treatment of verminous slum dwellings and their contents and the prophylactic spray treatment of the Corporation house about to be tenanted by the slum dweller has now been in operation since 1952. It has been found far superior to the dangerous and expensive HCN removal method as a means of preventing the extension of verminous conditions from the slum house to the new Corporation House. On previous occasions this report has stressed the fact that the HCN fumigation process, whereas most effective in dealing with verminous furniture, does not impart to the articles so fumigated the slightest degree of lasting toxicity as is the case with the modern synthetic insecticidal sprays. Not only that, the HCN process is easily twice as expensive as the spray treatment, which when applied to structure and/or furniture is entirely successful and gives immunity against re-infestation for a period of

at least six months. More important still, the use of the HCN fumigation process in connection with upholstered furniture can only be safely carried out under the most stringent conditions, with the utmost importance attached to aeration and to the final chemical testing of the upholstery for residual HCN gas before returning the furniture for use by the tenant.

The HCN plant, however, is still in use. It has been reduced to half its original capacity, leaving four container gas vans housed in the upper half of the existing HCN shed. The lower half is converted into an excellent garage for disinfestation vehicles and it is hoped, in the near future, to add a stores over the garage for general storage purposes. The plant specialises in the treatment of woodworm-infested furniture and timber and in the disinfestation of moth-infested textiles and carpets. In addition, the gas vans are used in the disinfection process of packing straw, jute mats, etc., on behalf of several glass bottle manufacturers in Yorkshire, who have to conform to certain import regulations of the countries to which their goods are exported. Instead of using HCN gas, formaldehyde is injected into the pre-heated gas vans, is held there for a specified period and then extracted.

All other works of disinfestation are carried out by the use of synthetic insecticides. Benzene hexachloride solutions are prepared in bulk at the Disinfestation Centre. The original mixing plant has been replaced by a special commercial type of mixer, using a flame-proof electrical unit. The mixer has reduced the mixing time considerably, the process is not complicated and effects a saving of nearly 50 per cent. in the cost of the ready mixed proprietary brands of insecticides. DDT in kerosene or in the form of a 10 per cent. dust is also extensively used. The type and form of insecticide employed naturally depends on the type and degree of infestation and solvent sprays are preferred to water emulsions when conditions allow.

The major programme of disinfestation concerns the Housing Department. Because of the large increase in the rate of the number of Corporation houses built and made available for the rehousing of slum dwellers, the number of disinfestations in this connection was doubled. Thus 1,806 dwellings were subjected to spray treatment, half of which being slum dwellings with their contents, and the other half Corporation houses prepared to receive the slum dwellers.

The corresponding figure for last year was a total of 1,552 thus providing a 16 per cent. increase for 1955.

The scheme as in the previous year worked well. The speeding up of the transfer of tenants from the verminous slum houses to the Corporation houses considerably reduced the time the latter stood empty, avoiding the loss of rent to the Housing Department. This speeding up was only possible with the co-operation of the Resident Housing Managers of the widely separated estates in the city and the direct contact made with the in-going tenants. All of these were visited, the houses inspected for verminous conditions and arrangements made for the disinfection of the dwelling and its contents and the Prophylactic spray treatment of the Corporation house which was to receive them. In this connection alone 1,391 visits were made.

The cost of this scheme is £4 10s. for each verminous case rehoused. The cost includes the spraying of both the slum and Corporation houses, the contents of the slum house and the disinfection by steam of bedding.

The results of the scheme have been entirely successful. No actual re-infestations of the Corporation houses sprayed during the year to receive verminous tenants have occurred, but a number of Corporation houses not so sprayed during the last twelve months became infested or re-infested mainly because of the introduction into the home of some second-hand article of furniture or bedding which had been purchased in a verminous condition privately or from some second-hand dealer. Thus 216 Corporation houses had to be disinfested, though it should be noted that the majority of these, as in the previous year, were cockroach and flea infestations, with bed bugs only accounting for 24 houses, i.e. 11.1 per cent. of the total.

Disinfection by steam is carried out by using two Thresh Low Pressure Current Disinfestors which are eminently suitable for the destruction of vermin and their eggs without unduly harming the bedding or clothing which harbour them. During the year, in connection with rehousing, 15,176 articles, mostly bedding, were disinfested, whereas in connection with re-infestations 522 articles were treated.

Apart from this specialised work of disinfection in relation to the rehousing process, insect pest control of Corporation dwellings has been maintained. Working in close collaboration with the Clerks

of Works of the Housing and Works Departments and the Resident Housing Managers of the various estates, infestations by woodworm, cockroaches, steam fly, red spider, etc., have been controlled and in most instances wiped out completely. Of these, woodworm infestations have continued to increase steadily in numbers, mainly because, no doubt, the average individual today has become more knowledgeable concerning these matters and does not hesitate to report the first signs of a commencing infestation. The latter occurs usually on estates which have trees left growing on them or which are bounded by woods or plantations. Dead timber in a plantation soon becomes infested and a favourable wind can very easily send an emerging swarm to the adjoining estate of houses, where they enter by open windows, air grates or under the eaves, and an infestation has started. The advice of this Section therefore was sought regarding the type and extent of infestations and the control measures to arrest and prevent further extensions. Subsequently when works of maintenance are commenced by the Works Department, spray treatments are carried out at the same time and appropriate arrangements made for subsequent applications of insecticide twice yearly for a period of not less than three years.

Other Corporation Departments took advantage of the facilities offered by the Disinfestation Section. Woodworm control of properties owned by the Waterworks Committee at Fewston and Swinsty was continued. The infestation by death-watch beetle and powder-post beetle at Swinsty Hall has been controlled and as this has been the third and final year of spray treatment of two applications of insecticide each year, 1956 should show the complete extermination of the two beetle infestations.

Outbreaks of woodworm in school furniture at various schools and precautions at the furniture store were dealt with on instructions from the Education Committee. In addition, attention was given to cockroach or steam-fly infested school kitchens, anti-fly precautions at the School Camp at Nesfield, Ilkley, and continued woodworm control at the Grange Hostel of the Training College.

Close collaboration with the Welfare Services Department in connection with bug, flea or lice infested dwellings occupied by aged persons after their removal to hospital was maintained. The dwelling and its contents are subjected to spray treatment, bedding disinfested by steam and articles of no commercial value destroyed. In a large

number of cases, where the aged person becomes a permanent inmate of an institution, the verminous contents of the dwelling are removed for HCN treatment at Stanley Road and from there, on the instructions of the Welfare Officer, to the salerooms for disposal by auction. The verminous dwelling is cleared and spray treatment applied before the keys are returned to the owner or his agent.

In addition to contract work for various Hospital Management Committees for cockroach, steam-fly or ant control, quite a large amount of work continued for the R.A.F., the Ministry of Supply, for private firms, property owners and the general public. These works included the disinfection of verminous bedding, woodworm infested furniture and structures, bug infested dwellings, cockroach and steam-fly infested hotel and restaurant kitchens, and control of and precautions against infestations by clothes moths.

Insect pest control is essentially a Public Health Service. Most insects either transmit diseases or interfere with the personal comfort of the individual: the house fly is known to transmit such diseases as dysentery, typhoid fever, summer diarrhoea, tuberculosis and possibly many others. Cockroaches and steam-fly contaminate food stuffs and make them unfit for human consumption, and bed bugs, lice and scabies cause sleeplessness, give rise to skin infections and generally lower the resistance of the human being. Control measures must be based on accurate scientific knowledge and must be precise in their application. Finally, the work must be carried out sympathetically, discreetly and efficiently at all times.

Disinfection.—Routine disinfection following the more common infectious diseases was discontinued some years ago, but is still available on request. By far the greater number of disinfections carried out was for cases of tuberculosis, either where a patient had gone to a sanatorium, or he and his family had been rehoused or a death from the disease had occurred. Including these and all other cases, 849 houses were visited, 732 rooms were disinfected by formaldehyde, 2,187 beds and 15,311 articles were disinfected by steam. Additional visits were made at the request of the Chest Clinic in connection with the loan of bedding, including blankets, sheets, pillow cases, etc., or for the distribution of bedsteads and mattresses, to tuberculous patients. For these purposes, 152 houses were visited and 797 articles which had been on loan were disinfected before return to store for further use. As in previous years, a small amount of disinfection was carried out for other Local Authorities; packing

straw, jute mats and bristles were sterilised for export purposes as specified by the Board of Trade and the Import Regulations of the countries of destination.

Steam disinfection is confined to one new high pressure steam disinfector, installed early in the year at a cost of £1,200 and used for bacteriological disinfection in connection with infectious diseases, and two Low Pressure Current Steam Disinfectors mainly limited to disinfestation of verminous bedding.

In connection with diagnostic investigation, 6,340 throat and rectal swabs were prepared at the Disinfestation Centre for distribution to general practitioners and supplied to the order of the Regional Hospital Board.

Transport.—The scheme for the distribution of food supplements (cod liver oils, orange juice and National Dried Milk) and stores to infant welfare centres and day nurseries was continued during the year. One stores van was maintained for this service and completed 8,431 miles.

Under the Medical Requisites Loan Scheme, the Section undertook the collection and delivery of invalid chairs, spinal carriages, mattresses, etc., which are stored at the Centre. During the year 316 visits were made and each chair and carriage was thoroughly cleansed and disinfected, inspected and repaired where necessary before distribution.

Because the Section possesses gas container vans, which can readily be adapted as removal vans, each of 550 cu. ft. capacity, and because a number of employees are skilled furniture packers, the Disinfestation Section undertook the removal of those Day Nurseries and District Nurses Homes which were closed during the year to Kidacre Street, which at present serves the Department as a General Store.

Public Conveniences.—The Disinfestation Section is responsible for the general maintenance and cleanliness of the city's conveniences. There are, in all, 73 unattended conveniences for males and females situated in 55 locations throughout the city; 31 of these locations are within a mile and a half radius from the city centre, 13 are between one mile and a half and two miles and 11 are over two miles. The locations of unattended conveniences comprise 36 for males only, one for females only and 18 for males and females. There are 54 conveniences for males and 19 for females.

There are 4 attended conveniences in the centre of the city, two for males and females, one for males only and one for females only. There is also a convenience for males and females at Crossgates which is attended for certain hours of the day.

During the year one new convenience, for males and females, was opened at Oakwood. It is only attended on the occasion of special functions at Roundhay, such as exhibitions, on Children's Day and August Bank Holiday Galas.

Cleanliness of the unattended public conveniences is controlled by daily visits made by three squads, each consisting of two men, equipped with a motor vehicle, carrying suitable flushing and cleansing appliances. During the year the three squads totalled 21,958 visits to the conveniences, both male and female. About 75 per cent. are cleansed each weekday and, in addition, those situated in the centre of the city are cleansed on Sundays, the remainder are visited on alternate days.

Maintenance work at unattended public conveniences is facilitated by these daily visits of the flushing squads, who report defects and structural damage to the Charge Officer concerned. These reports are checked and the necessary repair work is ordered from the Works Department, a scheme which avoids unnecessary delay in getting repair work executed, an important factor in the satisfactory maintenance of public conveniences. The six attended public conveniences are visited by the Charge Officer regularly and the same procedure adopted.

A special squad of two men equipped with a motor vehicle, both trained by the Street Lighting Department in the maintenance of automatic electrical switchgear and emergency repairs, inspect daily and maintain when necessary the lighting at all public conveniences. This service prevents accidents when lighting fails, especially important when a public convenience is below ground level and can only be reached by flights of steps. Thus during 18,390 visits paid, 311 lighting repairs and 546 emergency repairs, in connection with defective cistern and dangerous fittings, were effected.

The cost of repair work in attended public conveniences caused by fair wear and tear amounted to £21 8s. 2d. (£17 3s. 8d. in 1954) and by wilful damage to £37 4s. 6d. (£54 5s. 6d. in 1954). In unattended public conveniences the cost of repair work caused by fair wear and tear amounted to £123 3s. 4d. (£65 16s. 1d. in 1954) of which

£72 18s. 9d. (£40 16s. 11d. in 1954) was frost damage, whereas the cost of wilful damage repairs fell to £90 11s. 1d. (£148 11s. 8d. in 1954). This wanton destruction in unattended conveniences is mainly confined to water closets and their fittings, such as pedestal basins, cisterns, lead piping and seats. Electric light fittings, especially globular covers, appear to be the target for small boys and the amount of pilfering of electric lamps is alarming. To counter this damage to globes and lamps, the fitting of armour plated bulwark fittings has continued to give excellent results, especially where substituted at conveniences where the incidence of hooliganism is known to be high.

The fitting of lock boxes of the penny-in-the-slot type at one ladies' convenience where wilful damage had been particularly heavy resulted in a year free from damage altogether. There is little doubt that a great deal of damage caused can be attributed to children and it may be very excellent policy to fit penny-in-the-slot lock boxes, especially in those areas where damage has been particularly heavy. By fitting these lock boxes, children are kept out and much damage is thereby prevented.

In the construction of new conveniences it may be good policy in the future to include in each toilet compartment a wash-hand basin complete with pressure control taps. The compartment being secured by a penny-in-the-slot lock box, the wash-hand basin is protected from malicious damage and there is no waste of water from these special pressure control taps.

Public Sewer Flushing.—This work is carried out by a squad of drainage flushers equipped with a motor vehicle and necessary appliances, such as flushing hose, drain rods, drain plugs, smoke machine and a Mono Sludge Pump mounted on a trailer. These two men work under the immediate direction of sanitary inspectors in connection with (1) the cleansing of public sewers under the Public Health Act, 1936, Section 23, (2) the testing of drains in the investigation of unsatisfactory drainage conditions of a building as required under the Public Health Act, 1936, Section 39, (3) the removal of stoppages from drains and (4) the pumping out of flooded cellars, inspection chambers, etc.

The facilities of this service were extended to other Corporation Departments, especially to the Housing Department, the City Engineer's Department, the Markets Committee, the Parks and

Cemeteries Department, to private contractors and to property owners. Contract work for the regular cleansing of drainage systems of private schools, including the Leeds Girls' High School, the drainage system of several banks and some of the larger firms has been undertaken. Whereas the cost of cleansing of public sewers is a charge upon the Health Committee, the cost of all other works of cleansing, investigation and pumping has been recovered from the ordering bodies.

The demand for this specialised work is continuously increasing : indeed there are some days when the time-table of the squad is completely booked several days ahead. Because of its nature, some of the work can only be carried out on Sunday mornings or after business hours, therefore some overtime is unavoidable. During the year 746 public sewers were cleansed (655 in 1954) and the number of private drains tested and/or cleansed amounted to 16,404 (14,995 in 1954). Because of the increase in work, which after all cannot afford to wait, it may be necessary to establish a second squad of two men in the not too distant future.

By the establishment of this service the Health and Housing Committees have effected a tremendous saving in the cost of public sewer cleansing and other drainage investigations ; more important still, there has also been a tremendous saving in time, stoppages have been cleared in most instances the same day that they have been brought to the Section's notice.

DISINFESTATION CENTRE—REPORT OF WORK, 1955.

I. DISINFESTATION.

A. Work carried out at the request of the Housing Department :

(a) Rehousing :—

No. of dwellings (and contents) disinfested by insecticide	1,806
No. of articles disinfested by steam	15,176
No. of Visits	1,391

(b) Re-infestations :—

No. of dwellings (and contents) disinfested by insecticide	216
No. of articles disinfested by steam	522
No. of wet articles dried	353

B. Work carried out for other sources :

No. of premises (and contents) disinfested by insecticide	764
No. of articles disinfested by steam	3,228
No. of articles disinfested by H.C.N.	2,609

Continued on next page

DISINFESTATION CENTRE—REPORT OF WORK, 1954 *Continued.*

2. DISINFECTION.				
		City	Outside Authorities	
No. of houses visited	849		6	
No. of rooms disinfected	732		6	
No. of beds disinfected	2,187		8	
No. of articles disinfected	15,311		62	
Preparation of throat swabs :				
No. of swabs issued				6,340
No. of swabs prepared				7,657
3. TRANSPORT.				
(a) Medical Loan Scheme :—				
Visits made for collection and delivery of invalid chairs, spinal carriages, etc.				316
(b) Chest Clinic :—				
No. of houses visited				152
No. of bedsteads, beds, etc., delivered				797
(c) Delivery Service :—				
Miles run for Babies' Welcomes and Day Nurseries in connection with deliveries of stores..				8,431
4. PUBLIC CONVENIENCES.				
	No. of visits	No. of flushings :—		
		Drains	W.C.'s	
Visits paid for cleansing purposes	21,958	33,053	22,801	
	Total	Lighting	Repairs	
Visits paid for inspection of lighting and emergency repairs	18,390	311	546	
5. PUBLIC SEWERS.				
No. of public sewers cleansed				746
No. of private drains tested and cleansed				16,404
6. TREATMENT OF VERMINOUS PERSONS.				
(a) Pediculus Corporis :—				
No. of cases visited				115
No. of baths provided				276
(b) Pediculus Capitis :—				
No. of cases visited				1,460
No. of persons treated				2,040
No. of treatments involved				2,048
(c) Scabies :—				
No. of cases visited				71
No. of persons treated				119
No. of contacts treated				59
No. of re-infections				32

Maternity and Child Welfare

MATERNITY AND CHILD WELFARE SERVICES

BY

C. M. GRAY, M.B., Ch.B., D.P.H.,

Assistant Medical Officer of Health for Maternity and Child Welfare

NATIONAL HEALTH SERVICE ACT 1946

SECTION 22.—CARE OF MOTHERS AND YOUNG CHILDREN.

Maternity and Child Welfare Centres.—Health education should continue to play an important part in all the work carried out by the medical officers and health visitors. Visual aids and demonstration material have been prepared by the health visitors to illustrate health talks to the mothers, and these have been used very effectively. The demonstration given by the dental hygienists at each centre has interested the mothers in the proper care of their own and their children's teeth. Films have been shown at the clinics dealing with safety in the home and the care of the young child.

In January, an additional centre was opened at Ireland Wood, Leeds, 16.

Ante-Natal Clinics.—By 31st December, 1955, there were 202 ante-natal sessions held per month at 24 clinics. The number of expectant mothers attending the clinics during the year was 8,769 and of this total 6,176 were new cases. The total number of attendances at all clinics was 30,840. Applications for hospital confinement continued to be made through the clinics, also arrangements with the hospitals to book such cases for obstetric and social reasons. In addition to the ante-natal sessions at which the clinic doctor was in attendance, there were 98 sessions per month attended by municipal midwives.

Post-Natal Clinics.—There have been 21 post-natal sessions per month held at 9 clinics. The number of mothers who attended was 860 with a total number of attendances of 1,029. It has not been found necessary to increase the number of post-natal sessions as the majority of mothers now attend the hospital or their private doctor for post-natal examination.

Infant Clinics.—There were 28 clinics in operation at the end of the year at which 236 sessions were held per month. The number

of infants under one year attending the clinics for the first time was 5,491, an increase of 56. During the year 3,413 children between one and two years attended and 4,284 children between two and five years, a decrease of 201 and 592 respectively, making the total number of children attending 13,188 with 83,709 attendances made. The number of children on the register at all clinics on 31st December, 1954, was 13,335: with 6,591 new children registered, 6,760 names removed of children who were 5 years old, had defaulted, died or left the district, the number on 31st December, 1955, was 13,166, a decrease of 169 on the previous year.

Welfare Foods.—National dried milk for infants, and vitamin preparations for expectant and nursing mothers and children under five years were still supplied at the clinics.

Educational Work.—Demonstration material and models dealing with the nutrition and diet of the expectant and nursing mother and the young child, suitable clothing, play material, and safety in the home, have been used to illustrate talks by the health visitors. In addition, use has also been made of flannelgraphs as teaching aids, and that dealing with "The Birth of the Baby" has been used by both midwives and health visitors at the ante-natal clinics proving most acceptable to the expectant mothers.

Three film shows were held during the year at suitable clinics. The films dealt with behaviour problems in children, feeding children, and safety in the home and the prevention of accidents. The films on home safety were shown to a total number of 886 mothers and the attendances at the three film shows totalled 2,362.

Members of the Leeds Babies' Welcome Association have continued to give their regular and valuable help in the clinics as voluntary workers; assisting with routine clerical work; in some clinics organising play corners for toddlers; being responsible for the sale of knitting wool, baby clothes and fireguards; and at all times helping to maintain a friendly atmosphere in the clinics.

Consultative Infant Clinics.—The arrangements with the University Department of Pædiatrics and Child Health continued, and consultative infant clinics were held each month at three infant welfare centres. The total number of attendances of children under five years was 151.

Physiotherapy.—The number of children referred during the year for examination by the Orthopædic Consultant was 117, an

increase of 6 on the number referred in 1954. No cases were referred to hospital.

Artificial Sunlight.—This was given to 636 children during the year and the total number of attendances at the six infant welfare centres was 10,649. These figures show a decrease of 239 in the number of children attending compared with those for 1954. This would seem to indicate that the number of children attending the infant clinics who required to be referred for sunlight therapy is still decreasing.

Remedial Exercises.—A total of 406 children attended for exercises with 4,830 attendances, a decrease of 110 in the number of children in 1954.

Ante-natal and Post-natal Classes.—These exercise classes for expectant and nursing mothers were held at 6 welfare centres, and from October at 13 centres, and at Wyther Hostel. The value of these classes and of the explanatory talks given by the physiotherapist is much appreciated by the mothers who attend. There were 238 mothers who attended ante-natal classes and 80 attended for post-natal exercises. The total number of attendances was 901 and 303 respectively.

Dental Care.—See Report of Senior Dental Officer on page 74.

Eye Defects.—*Children classified as blind or partially blind.*—There were 11 children under five years on the register on 31st December, 1954. There were no children notified as blind during 1955; 3 children reached the age of 5 years and one child was found to be sighted, leaving 7 names on the register on 31st December, 1955. Of these, 5 children had previously been admitted to Sunshine Homes, but 2 children were returned as not suitable. These two children and two others were referred to the Mental Health Department.

The arrangement has continued for any child under 5 years attending the infant welfare clinics who is found to have a squint or other eye defect, to be referred to the ophthalmic consultant at the school clinic, thus providing continuity of supervision and treatment for such cases. During 1955 the number of children seen by the consultant for the first time was 178, in addition 469 children re-attended for further consultation, making a total of 647 children examined. This is an increase of 109 on the number seen in 1954.

Care of Premature Infants.—Between 1st January, 1955, and 21st December, 1955, there were 593 live births notified of infants weighing $5\frac{1}{2}$ lbs. or less at birth. Of these, 489 were born in hospital or nursing home in the city and 104 were born at home. The number of those born at home who were removed to hospital was 22 and the remaining 82 were nursed at home.

The number of infants who died within 24 hours of birth was 73; of these, 7 were born at home and 66 in hospital or nursing home.

Of the 82 infants nursed at home 43 received special nursing care by the premature baby nurses.

As well as nursing those infants born at home, the special nurses undertook the after-care of 370 infants requiring further nursing care following discharge from the Leeds Maternity Hospital, St. James's and St. Mary's Hospitals.

Wyther Hostel (*Mother and Baby Home*).—On 31st December, 1954, there were 16 mothers and 18 infants in the home. During the year 51 mothers and 46 infants were admitted; of these, 11 mothers were admitted for ante-natal care and 9 infants were admitted for a period of segregation after B.C.G. vaccination. Eight of these infants were admitted without the mother. The comparative figures for 1954 were 55 mothers and 60 infants.

Those discharged during 1955 were 54 mothers and 53 infants. Of these, 32 mothers were able to keep their babies, 9 babies were placed with a view to adoption through the Care of Children Department, 3 babies were admitted to residential nurseries, and 9 B.C.G. cases discharged home. There were 7 mothers discharged home or to hospital before the birth of the baby who were not re-admitted.

All cases of girls expecting illegitimate babies attending the ante-natal clinics are referred to the social worker for investigation. Arrangements are made by her, when necessary, for admission to Wyther Hostel, or in special circumstances, to a home run by voluntary agencies. After-care is also carried out in cases where this is possible.

Convalescence.—During 1955, 131 mothers and 143 children under five years were referred from the Maternity and Child Welfare Clinics and sent for a period of convalescence.

Day Nurseries.—There was still considerable demand for the admission of children to the 12 day nurseries, and there was a waiting list of children for admission to eight nurseries. Priority was still given to children according to social or economic circumstances necessitating the mother going to work, or, in a small number of cases, where the mother was dead or had deserted the family. A few special cases were admitted on medical grounds. Except in the special cases mentioned above, no child attended a nursery unless the mother was in regular full-time employment.

The following table gives details of the accommodation and attendances at the day nurseries during the year :—

Nursery	No. of places	Attendance per 5 day week	Total number of attendances
East Street	35	23·8	6,175
Sheepscar	35	28·5	7,321
Blenheim	50	45·8	11,994
Harehills	50	41·9	10,740
Hunslet Hall	50	43·4	11,021
Quarry Hill	50	41·6	10,678
Armley	55	43·2	10,907
Low Road	55	41·8	10,849
Meanwood	55	42·3	10,748
Rookwood	55	27·0	6,958
York Road	70	55·6	14,113
Burley Park	75	61·4	15,720
Total	635	496·3 (78·2%)	127,224

Adoption Act, 1950.—The liaison between the Care of Children Department and the Health Department has been maintained. Notice is received of all children under five years placed with a view to adoption through the Children's Officer and the health visitor visits the child in the home of the prospective adopter each month. A report is sent to the Children's Officer on the care and progress of the child.

Medical examination of the children is carried out at the infant welfare clinics and blood tests are taken prior to the child being placed for adoption.

In this connection 36 mothers and 38 children had blood tests carried out at the Central Clinic.* The comparative figures for 1954 were 33 and 48 respectively.

Nurseries and Child Minders Act, 1948.—Under this Act applications were received during the year from 10 persons for registration as child minders.

The following table shows the number of registered daily minders, the number of registered nurseries and the permitted number of children minded :—

	Child Minders	Nurseries
No. on register at 31st December, 1954	29	3
Permitted No. of children at 31st December, 1954	165	85
No. registered during the year	10	3
No. of applications refused	..	..
No. of registrations cancelled	14	1
No. on register at 31st December, 1955 ..	25	5
Permitted No. of children at 31st December, 1955	137	160

SECTION 23.—MIDWIFERY.—The demand for hospital accommodation for confinement has continued during the year and many cases have had to be confined in hospital for social reasons, unsuitable home conditions, or lack of help in the home.

In the domiciliary service there is good co-operation between the private doctor and the midwife. The scheme whereby the midwife ensures that the patient has booked a doctor for maternity medical services is working satisfactorily. This arrangement prevents the doctor being called in to an emergency knowing nothing of the patient, and such cases are now a comparatively rare occurrence. Even when the doctor is himself responsible for the ante-natal supervision of the patient, use is being made of the local health authority clinics, patients being referred for blood tests to be carried out and to take advantage of other facilities, such as ante-natal exercise classes, available at the clinics.

Midwifery Training—Part II.—The training school at Redcourt Hostel is becoming increasingly well known, as is shown by the number of applicants from Part I training schools in different parts of the country. The fact that the whole of the six months' training is taken in district work is found by the pupil midwives to give them greater experience in normal midwifery and a wider knowledge of social conditions. This is particularly valuable to the midwife who intends to practise district midwifery.

The training course is under the supervision of the midwifery tutor who is superintendent of the training school. There were 30 domiciliary midwives who were approved by the Central Midwives' Board as teachers of pupil midwives, but this number was reduced to 23 by the end of the year, as midwives had left the staff. The teacher midwives work in close liaison with the midwifery tutor. They instruct the pupils in their practical work, each midwife being responsible for training one or two pupil midwives.

During the year 46 pupil midwives completed their training. Of these, 44 passed the Part II examination of the Central Midwives' Board, only 2 failed to pass.

On 31st December, 1955, there were 22 pupil midwives in training.

Notified Births.—The total number of births of Leeds cases notified in the city during the year was 8,014. Of these, 5,705 or 71·2 per cent. took place in hospitals or nursing homes, and 2,309 or 28·8 per cent. were domiciliary cases. The comparative figures for 1954 were :—hospital cases 70·9 per cent. and home confinements 29·1 per cent.

Up to the end of June, 1955, there were 32 cases attended by ambulance midwives prior to or during transport to hospital.

The number of domiciliary births notified by midwives acting as midwives was 1,985 or 86·0 per cent. of the total domiciliary births.

Miss D. Humphreys, Lay Supervisor of Midwives, reports :—

Notification of Intention to Practise.—The number of midwives who notified their intention to practise as midwives during the year was 187, of whom 4 left the district and 9 ceased to practise, leaving 174 midwives practising in the city on 31st December, 1955. Of these, 106 were employed in hospitals, 19 in private nursing homes, 4 as private midwives and 45 were employed by the local authority.

Only 7 midwives notified their intention to practise as maternity nurses during the year.

Domiciliary Midwifery Service.—The average number of midwives employed by the local health authority in domiciliary work throughout the year was 45. Six midwives left the service and five

new appointments were made. On 31st December, 1955, there were 44 domiciliary midwives, including the three midwives undertaking the nursing care of premature babies. The number of domiciliary births attended by municipal midwives during the year was 2,243 or 28.0 per cent. of the total births notified in the city. The comparative figures for 1954 were 2,217 or 27.9 per cent.

The following table gives comparative figures for the work done by the domiciliary midwives during 1954 and 1955 :—

	1954	1955
Ante-natal visits	19,673	19,812
Attendance at birth { As midwife ..	2,003	1,985
{ As maternity nurse ..	214	258
Post-natal visits	48,037	57,242
Bookings { As midwife	1,566	1,721
{ As maternity nurse	554	584
Attendances by { At midwife's clinic	11,260	25,167
patients { At midwife's home	994	..
No. of patients who had gas/air analgesia	1,933 =87.2%	1,903 =84.8%

Of the 57,242 post-natal visits paid by the midwives in 1955, 5,292 were to patients discharged home from hospital before the 14th day of the puerperium; this shows an increase of 4,668 in post-natal visits to hospital cases.

Analgesia.—All municipal midwives are qualified to administer gas/air analgesia and 45 sets of apparatus are available for their use. Every expectant mother who books the services of a municipal midwife is given the opportunity of having this analgesic at her confinement unless she is medically unfit or her doctor prefers another form of analgesia. Of the 2,243 patients attended at home by municipal midwives 1,903 or 84.8 per cent. were given gas/air analgesia, compared with 1,933 or 87.2 per cent. in 1954. The Health Committee decided to equip the midwives with the approved apparatus for the administration of Trilene and this will be obtained early in 1956.

Maternity Outfits.—A sterilised and sealed packet containing all dressings required at the confinement as specified by the Ministry of

Health is provided by the Local Health Authority for every case attended by a municipal midwife. Outfits are also available for domiciliary confinements attended by private midwives or maternity nurses and may be obtained at the maternity and child welfare clinics. During 1955, 29 outfits were supplied in this way.

Medical Assistance.— During the year 924 notifications were received of having called in medical assistance for domiciliary midwifery cases where a doctor was booked for maternity medical services. There were 19 notifications for emergencies under Section 14 of the Midwives Act, 1951, compared with 17 for the previous year, but only 6 claims for payment for attendance were received from medical practitioners.

Supervision of Midwives.—The domiciliary municipal midwives were interviewed each week at the Health Department by the lay supervisor. The supervisor made 298 visits of inspection to the midwives in their homes and at their cases, and in addition paid 250 special visits.

SECTION 24.—HEALTH VISITING.—*Miss J. M. Akester, Superintendent Health Visitor reports:*—As in previous years, the duties of the health visitor included the visiting of expectant mothers, and children under 5, children placed for adoption, registered daily minders, and people of all ages in connection with problems of health, hygiene, and housing, also attendance at clinics.

The combination of tuberculosis visiting and health visiting was completed during the year, and arrangements were made for all the health visitors to undertake the routine visiting of tuberculous persons. Eight health visitors were allocated to spend part of their time in liaison with the Chest Clinic, attendance at contact clinics and special tuberculosis visits.

From 1st January, the work of one health visitor was arranged so that approximately half her time could be devoted to health education duties, and with the help of several colleagues she collected a valuable supply of visual aids and demonstration materials. These were used by various members of the health visiting staff for talks in clinics and welfare centres from June onwards, and also for 9 evening talks to outside organisations, e.g. St. John Ambulance Cadets, Young Wives' Clubs.

Visits to the various hospitals to report on the home conditions of children, and to obtain information about after-care on discharge, were continued.

Assistance with the practical training of students was also given as in the past.

The total number of visits paid by the health visitors was 138,785.

The following table gives comparable figures of the work done in 1954 and 1955 :—

	1954	1955
Notified births, including re-visits ..	118,772	108,895
Stillbirths	177	164
Deaths of children under 5 years ..	207	192
Ophthalmia Neonatorum	14	16
Expectant Mothers	3,259	2,698
Infectious Diseases	..	..
Cases discharged from hospital ..	932	297
Home Help investigations	18	66
Child Minders	224	244
Adoptions	231	248
Day Nursery admissions and absentees	108	107
Unclassified special visits	6,927	7,048
Ineffectual visits	19,025	18,810
Total visits for the year ..	149,894	138,785

REGISTERED NURSING HOMES.

	Maternity		Maternity and General.			General.		Total.		
	No. of Homes.	No. of Beds.	No. of Homes.	No. of Beds.		No. of Homes.	No. of Beds.	No. of Homes.	No. of Beds.	
				Mat'y.	Gen.				Mat'y.	Gen.
Existing at 31st Dec., 1954 ..	5	75	1	2	32	8	89	14	77	121
Registration approved during 1955	..	..	..	..	..	..	*1	..	..	1
Registration cancelled or surrendered during 1955 ..	..	..	..	..	..	..	..	..	..	..
Existing at 31st Dec., 1955 ..	5	75	1	2	32	8	90	14	77	122

* The Mountfields Nursing Home—1 additional general bed approved.

Nurses Act, 1943, Part II.—*Agencies for the supply of nurses.*

Under this Act only one nursing agency applied for registration in 1955 and a licence was issued.

DENTAL CARE OF MOTHERS AND YOUNG CHILDREN

BY

D. E. TAYLOR, L.D.S.

Senior Dental Officer

There was no change in the number of the staff during the year. Dental officers employed in the service worked 402 sessions, which is equal to one whole-time officer.

Owing to the shortage of dentists, the service cannot be expanded to any great extent but a scheme has been drawn up to inspect and treat some of the pre-school children. A start will be made early next year by selecting one age group from an area of the city. As it is impossible to forecast the number who will respond to the invitation and the condition of the mouths of those who do, the type of treatment to be offered has not yet been decided. It is likely that all that can be attempted will be the extraction of painful and septic teeth ; only a few can be offered systematic inspection and conservative treatment. Opportunity will be taken to advise the parents on the causes and means of prevention of dental disease.

The oral hygienists spent 209 sessions on talks and demonstrations to mothers at the child welfare clinics. This branch of dentistry is a pioneer service and it is only by an intensification of propaganda that the parents and children will be brought to understand that dental decay is a preventable disease. Although complete prevention is not attainable owing to the present refinement of foods, etc., it should be possible to reduce the incidence of caries to a degree which could be dealt with by conservation.

A demonstration of the method of teaching oral hygiene in Leeds was given at the Annual Conference of the British Dental Association at Glasgow in July. Interest was shown in the exhibits by both general and public practitioners. The technical skill shown in making the models of various dental conditions received favourable comment.

The high standard of work of the laboratory staff has been maintained during the year, appreciation of which has been expressed by many of the patients.

Professor T. Talmage Read continued to give advice on the treatment of difficult cases and operated on those requiring specialist surgical treatment, the after-care and prosthesis being supervised by him at the central clinic.

	Expectant Mothers	Nursing Mothers
No. of inspection invitations	5,017	13
No. of inspection attendances	951	2
No. found dentally fit	208	..
No. accepted treatment	664	2
No. refused treatment	79	..
Total No. of teeth filled	556	200
Type of filling given :—		
Synthetic porcelain	103	46
Cement	9	..
Amalgam	11	..
Lined Amalgam	485	169
Total fillings given	608	215
Total No. of teeth extracted	1,137	397
" " " persons fitted with dentures	..	172
" " " scalings	..	..
" " " other treatments	29	6
" " " local anæsthetics	238	154
" " " general anæsthetics	147	29
" " " treatment sessions	402	..
" " " inspection sessions	68	..
" " " attendances for treatment	959	1,322
" " " persons made dentally fit	265	339

WORK OF ORAL HYGIENISTS

	Expectant Mothers	Nursing Mothers
No. of attendances	378	12
" " scalings	378	12
" " treatment sessions		94
" " hygiene lecture sessions		209
" made dentally fit	197	10

NUMBERS PROVIDED WITH DENTAL CARE

	Number examined	Number found to need treatment	Number treated	Number made dentally fit
Expectant and Nursing Mothers	953	745	666	604
Children under 5 years ..	134	134	134	134

FORMS OF DENTAL TREATMENT PROVIDED

	Expectant and Nursing Mothers	Children under 5 years
Extractions	1,534	209
Anæsthetics :—		
Local	392	..
General	176	122
Fillings	823	..
Scalings or scaling and Gum Treatment ..	390*	..
Radiographs	12	..
Dentures provided :—		
Complete	206	..
Partial	81	..

*All by Oral Hygienists

MENTAL HEALTH SERVICES

The Department of Health and Human Services, through the Administration on Mental Health, is committed to providing a comprehensive system of mental health services. This system includes the development of policies and procedures, the allocation of resources, and the coordination of services across various levels of government and the private sector. The Department's efforts are focused on ensuring that all individuals have access to the care and support they need to lead healthy and productive lives.

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MENTAL HEALTH SERVICES

J. M. McALPIN, M.B., Ch.B.,
Medical Officer of the Mental Health Services

J. SQUIRE HOYLE,
Executive Officer

ADMINISTRATION

Constitution of Committee.—The Service is administered by a Sub-Committee of the Health Committee consisting of thirteen elected representatives of the City Council and three co-opted members. Meetings are held the second Friday in each month.

Number and qualifications of Staff.—There have been no staff changes during the year except that one Mental Health Worker has been allowed leave of absence to attend the Psychiatric Social Workers' Training Course, and the whole-time medical and lay establishment is set out in Table I of the Appendix.

Co-ordination with other Bodies.—Co-operation has continued to be maintained with Hospital Management Committees, the Regional Psychiatrist, the Department of Psychiatry and with other social, voluntary and statutory agencies in the city.

Voluntary Organisations.—Council grants were made to the National Association for Mental Health and to the Leeds Marriage Guidance Council, and the Medical Officer serves on the Committee of the latter body. Every encouragement is given to the local parents' organisation who enjoy the use of the Committee's premises for meetings and socials, etc.

Training of Staff.—All Mental Health Workers are now fully qualified but the Committee are fully alive to the need for recognised training courses both for Mental Health Workers and Occupation Centre Staff. Most of the latter are in this area trained by the Supervisor who is a trained Head Teacher with years of experience. The Head of another Centre holds the National Association Diploma.

The Committee have considered schemes for training Mental Health Workers and Occupation Centre Staff, and have given instructions for the preparation of a report and scheme for In-training on similar lines to student Sanitary Inspectors or Health Visitors, for submission to the Ministry.

WORK UNDERTAKEN IN THE COMMUNITY

Prevention, Care and After-Care.—(*Mr. Marrington*).—The following is a summary of the services provided under Section 28 of the National Health Service Act.

As in previous years lectures and talks were given to various statutory and voluntary organisations. The latter include Parent-Teacher Associations, religious organisations and youth clubs. These talks are of a general nature with the object of spreading information and breaking down prejudice against the mentally ill and mentally handicapped.

More detailed instruction is given to medical and social studies students and talks and case discussions with District Nurse and Health Visitor Students are regarded as of particular importance. The District Nurse and the Health Visitor are in frequent contact with the mentally ill in the home and it is essential that they should have a good knowledge of the extent of the services available and have a working knowledge of the signs and symptoms of mental stress.

The Local Authority continues to provide services under Section 28 of the National Health Service Act. Continuing emphasis has been placed upon the preventive aspect of the work. The Mental Health Social Worker has an important part to play in helping individuals to achieve a measure of adjustment with those around them and with the circumstances in which they are placed, so that they may develop their powers to the full and lead a happy life. Most people remain reasonably adjusted to their environment and manage their lives well enough, but a number are insecure and unhappy, get on badly in their personal relationships and fail to come to terms with their work. Such persons may be greatly helped to recover their confidence and self-assurance by being able to talk over their difficulties with a sympathetic and non-critical stranger who has an understanding of the problems which stem from present day society. The social worker, by his training, is able to help the individual in need to relate more easily to the circumstances around him and to help him to use the many social services available in a constructive way. Maladjustment is clearly a matter of degree and unlike a physical condition, precision in measurement is very difficult. Indeed its detection at times presents difficulties since it may not always show itself in characteristic domestic difficulties or

conflicts with the law. Some of the most severely maladjusted are quiet and passive. Moreover, maladjustment is not the same as unconveniality or oddness of behaviour or belief which may not do a person or his fellows any harm. It is the individual's own awareness of lack of tranquility which provides in many cases the key. It is in such persons that the social worker may be able to prevent minor disturbances becoming major by helping them to achieve a more satisfying solution and a better understanding of their difficulties.

The social worker's emphasis should not however rest with the preventive aspect of mental health but should take a positive attitude and regard the promotion of mental health as of fundamental importance. Whenever possible efforts must be made to encourage the development of an environment and attitudes of mind which are conducive to mental well-being. As social workers dealing with individuals in their families, mental health workers have many opportunities to discuss with parents the problems they have with their children. A positive approach to mental health is the surest way to prevent maladjustment arising in children. The various social services and particularly those dealing with mental health are well placed to give guidance to help parents understand and handle their own children without relieving them of their normal responsibilities.

During the year an attempt has been made to bring about a closer integration between the Department and the Maternity and Child Welfare Services. The Psychiatric Social Worker now meets the staff of a Maternity and Child Welfare Clinic at monthly intervals to discuss cases where the mental health aspects appear prominent. Thus, much useful exchange of professional knowledge is facilitated and a more economic use made of the services available to the community. It is hoped to extend this activity in due course. The Psychiatric Social Worker has also commenced to attend at the Education Department's Child Guidance Clinic for one session each week, thereby facilitating an improved contact between the two services.

The Therapeutic Social Club continues to function, although the need anticipated last year of opening on an additional evening did not materialise. It is, however, possible to extend the activities of the Club at any time should the need arise.

Lunacy and Mental Treatment Acts, 1890 to 1930.—(Mr. Hawkesworth).—Statistical information is contained in the Appendix (Tables II and III).

During 1955 there has been little change in the numbers of patients referred to the Duly Authorised Officers, a total of 1,384 as compared with 1,429 for 1954, a decrease of 45. The total number of visits entailed shows a decrease of one, the figures being 1954—1,886 and 1955—1,885.

The number of patients admitted under Section 20 of the Lunacy Act, 1890, also shows a slight decrease being 34 less than in 1954. This is accounted for to some extent by the fact that it has been somewhat easier to obtain voluntary beds in the various Mental Hospitals, direct admission of voluntary patients showing an increase of 93.

Senile patients continue to present a problem and although Dr. Droller, Consultant Geriatrician, continues to help whenever possible, it was found necessary to admit 81 persons aged 70 years or over under Section 20 Orders. It is interesting to note, however, that certification was avoided in all but 7 of these cases and, of the seven, 5 remained in Mental Hospitals, one died and the other, a man of 82, made a recovery and has since remarried.

It is gratifying to report that the number of patients it has been found necessary to certify has decreased, the total number admitted to Mental Hospitals on Reception Orders having declined from 252 in 1954 to 188 in 1955. This is the lowest figure since the National Health Service Act came into force in 1948 and but for the well known overcrowding of the Mental Hospitals could no doubt have been further reduced by earlier admission as voluntary patients.

Admissions as voluntary patients show a further marked increase, 174 more being admitted than in 1954. Temporary patients admitted numbered 9 as against 10 in 1954, and of the total admissions 78·2 per cent. were either voluntary or temporary as against 66·5 per cent. in 1954 and the total admissions 861 compared with 752 in 1954.

Mental Deficiency Acts, 1930 to 1938.—*Ascertainment.*—Statistical information is contained in Tables IV and V of the Appendix. The total on the registers represents 3·8 per thousand of the city's estimated population of whom 3·5 are "ascertained" cases.

Community Care.—The Committee have continued to carry out their policy of discharging from the Supervision Register those defectives who although subject to be dealt with under the Statute and placed under Supervision have nevertheless stabilised themselves in their situations, proved themselves to be socially adaptable and under good home care. Numbers have thus been removed from the Register which would probably otherwise show a larger figure of ascertainment than the published figure of 3·5 per thousand. This is particularly the case with regard to school leavers, Section 57(5). Very few of these cases have proved unsatisfactory for work in the community and the careers of those notified to the Department during the last two years have recently been followed up.

	Males	Females	Total
1. Number who have maintained the same job since leaving school	23	19	42
2. Had numerous jobs owing to instability, epilepsy, bad time-keeping, etc.	6	..	6
3. Had two or more jobs but eventually settled down to regular work	10	10	20
4. Unemployable and attending industry centres	1	1	2
5. Admitted to institutions for anti-social conduct	1	1	2
6. Unlikely to be employable and on the waiting list for institution care	2	..	2
7. Left City and transferred to other Authorities	..	3	3
	43	34	77

In this area the Education Committee notify every case on leaving one of the four schools for the educationally sub-normal as they consider that we have the staff and the facilities for following them up. They prefer to leave to us the responsibility of deciding whether or not a child needs further supervision. In practice we usually maintain such supervision for approximately two years and if boys or girls have been stable in character and temperament and satisfactory in their situations, to discharge them from the live register. This system is popular with parents, some of whom, quite naturally, at the time of notification are somewhat resentful of the fact that the case has been referred to a mental health authority. In some cases a minimum of supervision is offered and many parents are happy in the knowledge that the organisation is there if they need

assistance. Exemption from registration for military service, assistance in finding suitable jobs, introduction to youth organisations, and innumerable other services are available to parents who eventually realise that our intentions are in the best interests of the child and the advantages to be obtained by supervision by a mental health department often outweigh the initial reluctance to receive the visitor.

Although the children are technically "ascertained" to be mental defectives this term is rarely used in our dealing with parents and we refer, rightly or wrongly, to our service as after-care of school leavers. It is a controversial point as to whether or not the local Education Authority should carry out this work but the Department has a specialised knowledge of the occupational needs, and which helps to bridge the gap between leaving school and ultimately finding their feet in industry.

On the other hand, it is important to note that more than an appreciable number do stabilise themselves with little or no help from the Department (80 per cent. in this particular period under review) and could with safety have been left to their own devices.

The number of cases awaiting admission to hospital at the end of the year was 41, and it is refreshing to note that some of those on the list have been removed therefrom at the parents' request owing to their improvement whilst attending Occupation Centres.

In accordance with the approved scheme a Short-Stay Home has been opened, on the same site as the East Leeds Occupation Centre, for children between the ages of two and sixteen in whose cases domestic stress may arise and temporary detention is necessary, as set out in the Ministry of Health Circular 5/52. The building is of the bungalow type constructed by pre-fabricated units and accommodates twelve children. There were seven children at Nowell House at the end of the year:

OCCUPATION CENTRES

East Leeds Occupation Centre (Mrs. A. M. Taylor).—At the close of 1955, the East Leeds Centre accommodated 124 children of whom 75 were boys and 49 girls and of this number 42 children were under seven years of age.

The attendance continues to reach a daily average of about 108 and even in the worst weather the children attend well as a

result of the special transport provided. Of the total number, only 20 are provided with free dinners, and in some instances the arrangement is only a temporary one. The general standard of health amongst the children has been good and only a very small number of the children are not clean and well clothed and the parents are co-operative and show a keen interest in the activities of the Centre.

Many visitors from at home and abroad have visited the Centre during the year and members of Parents' Associations and Women's Organisations have been shown the work whilst several students have received training in the Centre.

A course in the teaching of Physical Education was given at the Centre in September by Mrs. M. Laing (formerly Organiser of Physical Education for the Leeds Education Authority) and the lectures were attended by 36 supervisors and assistants from Centres in Leeds and the West Riding.

The staff of the Centre have had opportunities for visiting other Centres in and around Leeds and they have also attended lectures at the University Institute of Education during the term and have taken holiday courses of training.

Mrs. D. Dent, who had been Senior Assistant at the Centre since 1941, retired in February after 21 years service in Leeds and Mrs. M. Tingle was appointed to the post.

Stanningley Occupation Centre (Miss I. Bye).—On the 29th November the new Stanningley Occupation Centre was opened by Dr. Godber, Deputy Chief Medical Officer to the Ministry of Health.

The site for the new Centre was purchased by the former Mental Health Services Committee in February, 1948, and the building is the culmination of the Leeds Health Committee's approved scheme for the training, occupation or employment of the mentally handicapped of all grades and ages.

The building accommodates 108 children of both sexes under 16 years of age and replaces the premises at Armley Grange now under process of alteration for the use of older girls.

The building was designed by the City Architect, R. A. H. Livett, O.B.E., A.R.I.B.A., and has been erected by Messrs. Wm. Airey & Son (Leeds) Ltd., at a cost of £43,679.

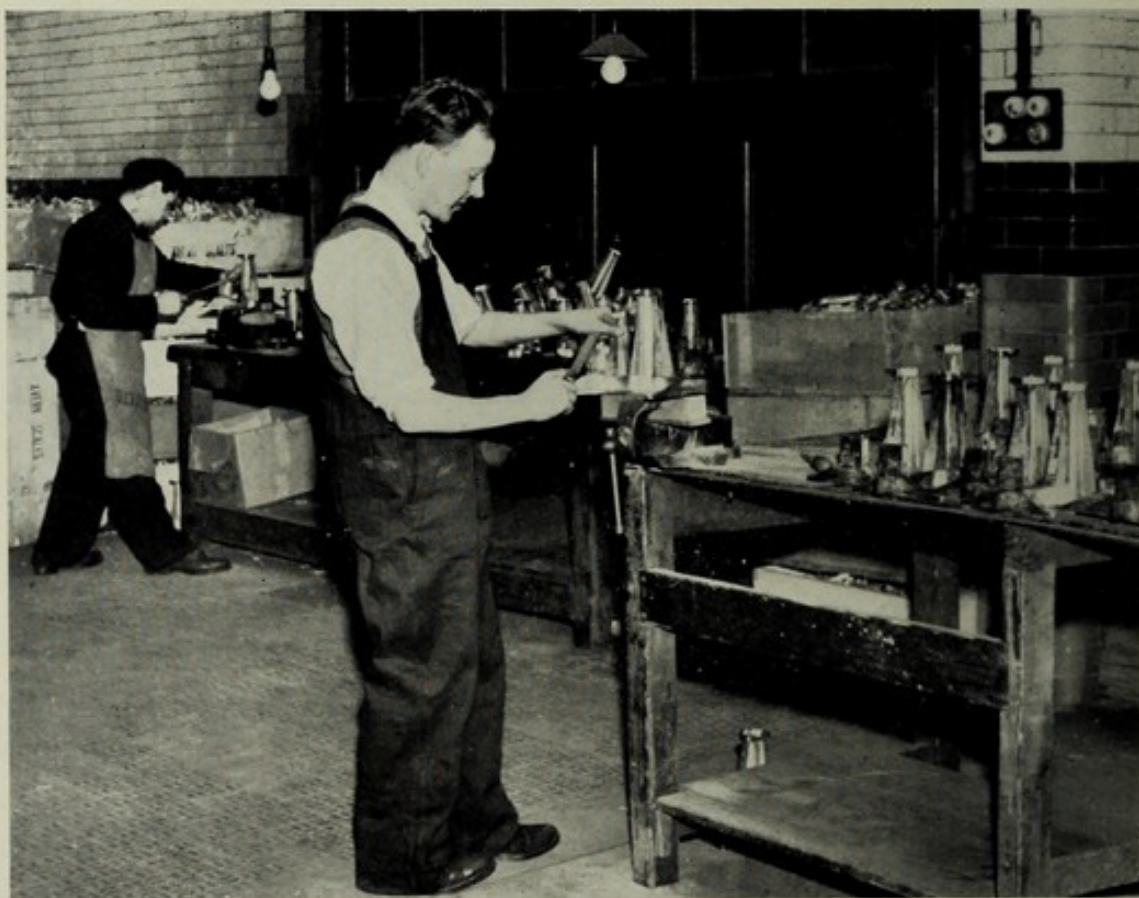
It comprises a large combined dining and assembly hall and administrative rooms, with nine classrooms in two blocks planned



Spastic children at the Stanningley Occupation Centre.



The new Stanningley Occupation Centre.



Die-cast fettling at North Leeds Industry Centre.

at right angles to the assembly hall. The dining room is served by a kitchen with a communicating service counter.

A paved recreational area is provided on the North-West side of the centre and a grass court between the two classroom blocks.

During the year the Centre in its old premises has had a good percentage of attendance and very little sickness of any kind amongst the children. Ten children have been admitted during the year, all younger children of low grade. The number of children who also suffer from cerebral palsy continue to increase. These children also enjoy and find great benefit from the weekly swimming pool facilities made possible by the Spastic Association and the Leeds Education Department. The Parents' Association is very active.

Nineteen Leeds children have left during the year, fourteen having been transferred to other Centres, one found to be unsuitable, two admitted to hospital, one left the City and one transferred to a residential home for the physically handicapped. Twenty-four children attending this Centre are sent by the West Riding Local Health Authority.

Armley Grange (Mrs. K. Taylor).—This building, which previously housed the children who have been transferred to the new centre at Stanningley, has been structurally altered by the Works Department and tastefully decorated. Girls from the South Leeds Occupation Centre will be transferred to this modernised building on reopening after the Christmas vacation. The Centre has continued to function in an informal and homely atmosphere. Most of the girls have been taught to darn, sew on buttons and do simple repairs. Various types of rug making, knitting and embroidery have been done during the year realising £150. Light domestic duties are carried out, which include sweeping, dusting, table laying and the washing of crockery and cutlery, and also the preparation of vegetables.

The annual visit to the pantomime is a source of great delight to these older girls, and also the outings to the sea and country are thoroughly enjoyed and appreciated. There are forty-two girls on the register and the efficient car service has largely contributed to the high attendance.

The whist drives and dances held approximately once a month from October to April by the Parents' Association, have been very popular.

South Leeds Laundry Centre (Mrs. A. C. Petty).—The transfer of the South Leeds Centre to the Armley Grange premises will release the premises in Clowes Street entirely for laundry purposes and at the close of the year the Committee had given authority for the preparation of sketch plans for enlarging and modernising the laundry. There are thirty girls at this Centre, the discipline is not rigid and social activities are encouraged.

North Leeds (Rutland Lodge) Occupation Centre and Workshop for the Handicapped (Mr. H. C. Allan).—During the year under review the brushmaking industry taken over a year or two ago from the Tuberculosis After-care Committee has been discontinued. Brush making is a highly skilled occupation; only a brush foreman and one very high grade youth were employed. The trade was hardly carrying out the functions of an occupation centre in providing work for a number of youths. In its place the Committee have taken over work in connection with the fettling and assembling of engineering components for a local firm. The processes are simple involving little expenditure apart from wages and the receipts average forty pounds per week. This is, however, secondary to the more important fact that to the end of the year it has enabled eight low grade mentally defective youths who had previously been regarded as unemployable to be gainfully employed and taking home a wage packet instead of having to be maintained by public assistance. The project would not have been possible without the assistance of the Works Manager of the firm contracting out the work, a man who is not afraid to mix sentiment with business. The co-operation has been remarkable and his planning officer and foreman and other key men have paid regular visits to the Centre to advise as to workshop layout, etc. The work has now passed through the experimental stage and has become an accomplished fact and will, it is hoped, be instrumental in encouraging other firms to participate in such a scheme.

The Local Authority's film "Occupation and Training of the Mentally Handicapped" has been fully booked up during the year.

In addition to the usual visitors to the Service from home and abroad, members of the Royal Commission on Mental Illness paid the city a visit in connection with the Community Services provided.

Conclusion.—The Department is pleased to place on record the valuable co-operation which it has received from Dr. Wilson, Medical Superintendent of the Meanwood Park Hospital, the Regional Psychiatrist, the Chief Assistant School Medical Officer, and Medical Superintendents of the local Mental Hospitals, the Department of Psychiatry and Corporation Departments. Thanks too are due and hereby tendered to the Chief Constable whose staff have contributed in no small measure to a sympathetic carrying out of the exacting duties of the Mental Health Workers in removal to hospital of patients suffering from mental illness.

APPENDIX.

TABLE I.

STAFFING

Mr. R. Perry..	..	Deputy Executive Officer
Mr. W. B. Sykes ..	..	Chief Clerk
Mr. T. S. Hawkesworth	..	Senior Authorised Officer
Mr. A. Marrington ..	..	Senior Psychiatric Worker
Mrs. U. A. Fletcher	..	Senior Mental Health Worker
Miss M. A. Casson ..	..	Secretarial

OTHER STAFF

Administrative Staff:—

Clerks and Typists	..	..	..	..	3
Telephonist	..	..	..	..	1

Clinical Staff:—

Mental Health Workers ..	..	..	..	..	7
--------------------------	----	----	----	----	---

Industry and Occupation Centres:—

Supervisors	..	..	..	..	5
Assistants ..	..	..	..	..	21
General Helps to above ..	..	..	..	..	8
Clerical ..	..	..	..	..	3
Handicraft Instructors ..	..	..	..	..	4
Engineering Components ..	..	..	..	..	1
Firewood Department ..	..	..	..	..	11
Laundry Staff ..	..	..	..	..	7
Cooks and Domestics ..	..	..	..	..	16
Caretakers ..	..	..	..	..	3

Nowell House Short-Stay Home:—

House Mother ..	..	..	..	..	1
Assistant House Mother ..	..	..	..	..	1

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TABLE II.

NUMBER OF LEEDS CASES IN HOSPITALS.

	Menston			Stanley Royd			Storthes Hall		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
On books 1.1.55 ..	474	429	903	235	507	742	21	53	74
Admitted 1.1.55- 31.12.55 ..	124	71	195	8	61	69	4	4	8
	598	500	1,098	243	568	811	25	57	82
Deaths and discharges ..	116	78	194	20	82	102	1	6	7
Remaining on books 31.12.55	482	422	904	223	486	709	24	51	75

TABLE III.
CASES DEALT WITH BY AUTHORISED OFFICERS

	Males	Females	Total
1. Visits paid	676	1,209	1,885
2. Removed to St. James's Hospital under Section 20 of the Lunacy Act, 1890 ..	251	327	578
3. Certified patients transferred to Menston Hospital	83	47	130
4. Certified patients transferred to Stanley Royd Hospital, Wakefield	1	34	35
5. Certified patients transferred to Storther Hall Hospital	2	4	6
6. Certified patients transferred to other Mental Hospitals	6	7	13
7. Direct admissions to Mental Hospitals (certified)	3	1	4
8. Total Mental Hospital admissions on Summary Reception Orders or Petition	95	93	188
9. Patients admitted to St. James's Hospital under Section 20 and transferred to Voluntary	44	73	117
10. Voluntary patients admitted to Mental Hospitals direct	229	214	443
11. Voluntary patients admitted to Mental Hospitals on transfer from St. James's Hospital	29	75	104
12. Total voluntary patients	302	362	664
13. Temporary patients admitted to Mental Hospitals (all via St. James's Hospital)	3	6	9
14. Total admissions to Mental Hospitals (Total of Items 8, 9, 10, 11 and 13) ..	400	461	861

TABLE IV.
PARTICULARS OF LEEDS MENTAL DEFECTIVES ON 1ST JANUARY, 1956.

	Males	Females	Total
1. " Subject to be dealt with " :—			
(a) Under Statutory Supervision ..	423	336	759
(b) Under Guardianship	15	10	25
(c) In certified Institutions	522	467	989
(d) In " Places of Safety "	1	3	4
(e) Action not yet taken	..	..	..
2. Certified defectives but not yet " subject to be dealt with " :—			
Under Voluntary Supervision ..	54	82	136
Totals	1,015	898	1,913

TABLE V.
PARTICULARS OF MENTAL DEFECTIVES ASCERTAINED DURING 1955.

	Males	Females	Total
1. Ascertainment.			
(a) Cases reported by Local Education Authority (Section 57, Education Act, 1944) :—			
(i) Ineducable children	29	17	46
(ii) At 15 years—on leaving Special School	17	20	37
(b) Other cases reported during 1955 and ascertained to be "subject to be dealt with"	1	..	1
(c) Other cases reported during 1955 who are not at present "subject to be dealt with" but for whom the Local Health Authority may subsequently become liable	28	13	41
Total number of cases reported during the year	75	50	125
2. Disposal of cases reported during the year.			
(a) Cases ascertained to be "subject to be dealt with" :—			
(i) Placed under Statutory Supervision	46	34	80
(ii) Placed under Guardianship (by Order)	..	..	..
(iii) Admitted to Institutions (by Order) or placed on waiting list	1	2	3
(iv) Taken to "Places of Safety"	..	1	1
(v) Died or removed from area	..	..	..
(vi) Action not yet taken	..	..	..
(b) Cases not at present "subject to be dealt with" :—			
(i) Placed under Voluntary Supervision	28	13	41
(ii) Action not yet taken	..	..	..
(iii) Action unnecessary	..	..	..
Totals	75	50	125

TABLE VI.
NO. OF CHILDREN ATTENDING OCCUPATION CENTRES AT 31ST DECEMBER, 1955.

Centre	Male		Female		Totals
	Under 16	Over 16	Under 16	Over 16	
North Leeds	27	77	..	..	104
South Leeds and Laundry	..	1	4	60	65
East Leeds	74	..	46	1	121
Stanningley Centre	41	1	26	..	68
Totals	142	79	76	61	358
	Plus 39 out-of-city cases				

TABLE VII.
PSYCHIATRIC AFTER-CARE

	Males	Females	Total
1. Hospital cases (in- and out-patients) ..	149	215	364
2. After-care cases	180	322	502
3. Total cases dealt with	329	537	866
4. Total new cases referred	174	268	442
5. Total visits and interviews	1,429	3,090	4,519

National Health Service Act 1946

- Section 25 HOME NURSING
 - Section 26 VACCINATION AND DIPHTHERIA IMMUNISATION
 - Section 27 AMBULANCE SERVICE
 - Section 28 PREVENTION, CARE AND AFTER-CARE
 - Section 29 DOMESTIC HELP
-
-

SECTION 25

HOME NURSING

BY

MISS E. G. MEADOWS

Superintendent Nurse, Home Nursing Service

This is the first full year during which the Home Nursing Service as a whole has been directly administered by the Health Committee.

SOURCES OF CASES 1953-1955

	1953	1954	1955
General practitioners	10,638	11,169	10,581
Hospitals	2,075	1,511	1,665
All Sections of the Public Health Department	324	549	909
Direct application and/or relatives, etc.	200	94	42
Totals	13,237	13,323	13,197

CLASSIFICATION OF CASES, 1953-1955

Classification	1953		1954		1955	
	New Cases	Visits	New Cases	Visits	New Cases	Visits
Medical ..	9,043	177,575	9,494	203,858	9,598	206,898
Surgical.. ..	2,201	35,964	1,929	33,518	2,011	35,298
Children under 5 years ..	1,296	8,809	916	6,653	789	5,992
Pneumonia ..	212	1,971	285	2,561	274	2,612
Tuberculosis ..	409	11,216	593	25,464	453	22,641
Maternal complications..	42	515	72	581	49	357
Ophthalmia neonatorum ..	4	85	6	90	3	42
Infectious diseases ..	30	237	28	161	20	102
Totals	13,237	236,372	13,323	272,886	13,197	273,942

There has been a decrease of 126 new patients on the previous year, but an increase of 1,056 visits.

Of these 13,197 patients, 7,156 have received injection treatment of various types necessitating 75,757 visits.

During the year 4,405 patients of 65 years of age and over were nursed and received 136,434 visits as compared with 4,338 patients and 122,643 visits during 1954.

The following table gives the increase in the number of patients nursed aged 65 years and over :—

		<i>Patients</i>	<i>Visits</i>
1953	.. ..	4,002	98,877
1954	.. ..	4,338	122,643
1955	.. ..	4,405	136,434

Tuberculous patients nursed numbered 453 and received 22,641 visits as against 593 and 25,464 respectively in 1954.

Tuberculous Patients Nursed

		<i>Patients</i>	<i>Visits</i>
1953	.. ..	409	11,216
1954	.. ..	593	25,464
1955	.. ..	453	22,641

During the year 6 patients living in surroundings unsuitable for home nursing were transferred to the care of relatives, hospitals or hostels during the year.

The nursing staff is as follows :—

		<i>Full-time</i>	<i>Part-time</i>	<i>Staff in terms of full-time</i>
December, 1953	..	67	15	75
„ 1954	..	67	15	75
„ 1955	..	66	22	77

There are 18 motor cars available for use in the more distant areas of the city.

MEDICAL REQUISITES LOAN SCHEME

The arrangements for the loan of sick-room equipment and medical and surgical requisites have been operated from the depot at Market Buildings and for tuberculous cases from the Chest Clinic.

During the year 4,373 articles were loaned and 4,329 returned, decreases on the previous year of 445 and 197 respectively. There were 4,035 applications for extension of loan periods and 397 persons defaulted with regard to conditions of loan. The number of articles on loan on 31st December, 1955, was 1,232.

CLASSIFICATION OF MEDICAL REQUISITES

Medical Requisites	1953		1954		1955	
	Loaned	Returned	Loaned	Returned	Loaned	Returned
Bed pans ..	1,000	897	1,029	995	931	903
Air rings ..	1,151	1,125	1,050	999	924	935
Draw macintoshes ..	1,329	1,269	1,218	1,111	1,175	1,171
Back rests ..	747	682	751	715	635	649
Urinals ..	393	372	423	394	360	355
Miscellaneous ..	402	367	347	312	348	316
Totals	5,022	4,712	4,818	4,526	4,373	4,329

SECTION 26

VACCINATION AND IMMUNISATION

BY

MONICA A. AXSON, M.B., Ch.B.

Assistant Medical Officer of Health for Immunisation

For the second year in succession, no case of diphtheria occurred in Leeds. The eradication of this disease is due to immunisation and as long as parents continue to see that their children are fully protected, diphtheria will remain extinct.

A new Mobile Immunisation Clinic was purchased during the year and it commenced to operate on 21st September. It is being used on the new and outlying housing estates and to replace certain clinics where conditions are unsuitable for injection work. We are now operating monthly sessions with the Mobile Clinic at Seacroft, Ireland Wood, Kirkstall and Gipton and its use will extend considerably in the Spring of 1956.

The combined prophylactic giving protection against diphtheria and whooping cough is now the most popular method of primary immunisation, both by general practitioners and clinic doctors. The "Triple Antigen," giving in addition protection against tetanus, is gaining in popularity.

From 1st January, 1955, the Saturday morning clinic held at 8, Park Square, was discontinued. The clinic is now open for inoculations on Tuesday and Friday afternoons only from 2 p.m.—4 p.m. or, in urgent cases, by appointment. In September the Immunisation Clinic held at Hawksworth was closed due to the small number of patients. During the year the Belle Isle Immunisation Clinic was transferred to new premises at the Congregational Church, Westfield Road, Leeds, 10.

ISSUE OF PROPHYLACTIC MATERIAL TO PRACTITIONERS

Material	1955	1954
Diphtheria (P.T.A.P.)	849 doses	1,001 doses
Diphtheria (T.A.F.)	218 „	354 „
Combined diphtheria and whooping cough	6,789 „	7,891 „
Whooping cough vaccine	459 „	876 „
Diphtheria/Tetanus/Pertussis	1,179 „	123 „

Vaccination.—Numbers of vaccinations and re-vaccinations performed during the year are shown in the following table :—

	Under 1 year	1-4 years	5-14 years	15 and over	1955 Total	1954 Total
Vaccinated (a)	1,562	103	18	41	1,724	1,870
(b)	2,234	236	53	144	2,667	2,780
Re-vaccinated						
(a)	..	14	30	376	420	350
(b)	..	28	50	504	582	741
Totals ..	3,796	381	151	1,065	5,393	5,741

(a) by clinic staff.

(b) by general practitioners.

From the returns of primary vaccinations in infants, it is calculated that approximately 50.6 per cent. of the infant population born between July, 1954, and June, 1955, has been protected.

Diphtheria Immunisation.—This work has proceeded as usual during the year at the Central Clinic, at all Infant Welfare Centres, at Day Nurseries and at Schools. In addition, individual home visits were made where special circumstances were reported by health visitors and the new mobile clinic was used for the first time during September.

The following table shows immunisation work done by clinic doctors and general practitioners during 1955 :—

Prophylactic	Clinic doctors :—				General Practnrs.	Total
	I.W.C.'s	Schools	Home visits	Mobile Clinic		
Diphtheria only ..	244	1,238	26	7	218	1,733
Diphtheria/ Whooping Cough ..	2,068	1	170	53	1,968	4,260
Triple Antigen ..	26	..	..	..	170	196
Whooping Cough only	51	..	2	1	83	137
Total protected against Diphtheria	2,338	1,239	196	60	2,356	6,189
Total protected against Whooping Cough	2,145	1	172	54	2,221	4,593
Refresher Doses :—						
Diphtheria only ..	66	8,182	2	1	441	8,692
Diphtheria/ Whooping Cough ..	19	277	1	..	325	622
Triple Antigen ..	..	..	..	..	9	9
Whooping Cough only	161	..	7	1	2	171

Schick Tests after Inoculation with Mixed Diphtheria/Whooping Cough Vaccine.—We continued to investigate the duration of immunity provided by this material. During the year 180 tests were carried out on children who had been inoculated $1\frac{1}{2}$ -2 years previously. All the results were negative.

Home Visiting.—This service is provided for the benefit of mothers who, for health or social reasons, are unable to bring their children to the clinics. During the year 438 visits were made.

Estimate of the Child Population Immunised against Diphtheria.—On 31st December, 1955, it was estimated that 65.2 per cent. of children under five years of age (72.2 per cent. between the ages of one and five years) and 95.0 per cent. between the ages of five and fifteen years had been immunised against diphtheria. It is calculated that of children up to the age of fifteen years, 85.0 per cent. have been protected. The table on page 101 indicates the progress of immunisation work since 1928.

Whooping Cough Immunisation.—The following table shows the progress of whooping cough inoculations since 1947. The table includes inoculations of combined vaccine, but excludes children inoculated in the Whooping Cough Immunisation Trial.

Year						Number immunised against Whooping Cough
1947	..	..	..	..	..	975
1948	..	..	..	..	..	908
1949	..	..	..	..	..	1,016
1950	..	..	..	..	..	1,537
1951	..	..	..	..	..	3,801
1952	..	..	..	..	..	3,892
1953	..	..	..	..	..	4,877
1954	..	..	..	..	..	5,276
1955	..	..	..	..	..	4,593
Total						26,875

This means that approximately 57.6 per cent. of children under the age of five years have received some protection against whooping cough.

Inoculations for Overseas.—The number of preventive inoculations at the Central Immunisation Clinic against certain infectious diseases are as follows :—

Smallpox (vaccination)	..	488
Typhoid	.. .. .	179 (and 6 refreshers)

Cholera	..	..	..	143 (and 7 refreshers)
Typhus	..	..	..	9
Tetanus	..	..	..	15 (and 2 refreshers)

The above figures are for completed courses.

Other Work Undertaken by the Section.—*Examination of Convalescents.*—During the year 768 applicants for convalescence, including 503 children, were examined. Throat swabs were taken for bacteriological examination in 14 cases and 4 were found to be positive for Hæmolytic Streptococci.

Training.—Special sessions were given to the training of Health Visitors who received, in addition, practical instruction on the organisation and working of immunisation clinics. The time and effort spent on this work is amply repaid by the appreciation of the students and the very real co-operation of the newly qualified Health Visitors..

Voluntary Workers.—The Department once again wishes to thank the voluntary workers of the Leeds Babies Welcome Association who have given such valuable help at the immunisation clinics.

DIPHTHERIA IMMUNISATION.

Illustrating the progress of the Immunisation Scheme since its inception.
Number of Persons in Age Groups, having had Full Course of Injections.

Age at date of Inoculation	1928-1935	1935	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	Total
Under 1 year ..	657	383	68	210	38	75	24	..	..	..	5,110	..	788	3,127	3,301	2,561	3,479	3,450	3,143	3,241	2,678	Total
1-2 years ..	1,309	820	245	820	215	411	941	3,980	3,990	4,412	240	5,137	5,304	4,923	3,078	2,931	2,714	2,056	1,757	1,898	1,658	under 5 years at end of 1955
2-3 ..	1,391	937	177	788	116	173	814	2,262	1,024	469	220	777	418	455	438	457	514	391	234	295	247	24,510
3-4 ..	1,671	1,188	92	1,008	96	121	943	2,053	1,063	463	257	557	327	220	231	249	277	212	137	144	128	
4-5 ..	2,124	1,638	79	1,241	64	62	865	1,940	1,043	381	..	463	288	260	196	147	193	152	111	146	102	
5-6 ..	2,930	2,337	72	1,752	46	30	1,563	1,486	1,667	451	359	556	366	323	328	290	263	321	274	270	338	Total
6-7 ..	3,214	2,522	53	1,818	12	10	1,450	940	1,622	302	233	467	296	229	286	215	234	320	348	315	393	5-10 years
7-8 ..	2,927	2,546	27	1,239	7	6	1,174	676	1,482	197	185	392	225	165	143	141	108	144	147	191	217	36,548
8-9 ..	2,877	2,606	7	571	13	6	979	466	1,357	164	188	275	153	126	132	95	72	71	109	99	133	
9-10 ..	2,904	2,647	9	396	6	3	926	325	1,271	157	142	259	142	110	119	70	51	65	68	70	82	
10-11 ..	3,180	2,955	14	317	19	4	892	252	1,197	130	152	250	100	90	108	79	64	61	71	63	57	Total
11-12 ..	3,059	2,846	7	287	17	4	921	205	1,089	109	128	249	113	67	73	60	55	37	31	42	40	10-15 years
12-13 ..	3,099	2,930	7	212	19	5	839	193	1,193	96	109	185	97	80	69	55	40	48	28	26	43	34,116
13-14 ..	2,792	2,673	5	154	32	7	704	175	1,035	78	79	138	100	61	55	35	40	48	25	29	24	
14-15 ..	544	475	..	17	20	..	74	148	382	8	29	34	13	49	54	31	27	38	23	20	41	
15 years and over	539	408	144	25	174	37	65	..	..	55	79	83	43	53	54	48	23	42	4	8	8	Total 15 years & over
Age not known	245	151	129	317	..	213	34	..	..	11	..	..	..	..	..	..	..	..	..	..	..	Total 98,580 age not known 958
TOTALS ..	35,462	30,062	1,135	11,172	894	1,167	13,208	15,101	19,415	7,483	7,510	9,822	8,773	10,338	8,665	7,464	8,154	7,456	6,510	6,857	6,189	194,712

SECTION 27

AMBULANCE SERVICE

BY

F. E. J. LARGE
Ambulance Officer

The table appended shows the work carried out by the Municipal Ambulance Service during the year :—

Type of Case	Number	Mileage
By Ambulance :—		
Accidents (Road)	1,850	} 352,701
" (Emergency Calls)	2,071	
Illness	3,016	
Maternity	4,384	
Tuberculosis	152	
Hospital admissions and discharges	19,861	
Infectious diseases	1,182	
Mental	205	
Lunacy	25	
Special treatment	30,914	
Others (incl. fruitless journeys)	5,007	
Total	68,667	
By Sitting Case vehicles :—		
Maternity and Child Welfare	1,402	} 504,117
Special treatment	159,237	
Immunisation	286	
Doctors and Midwives	1,877	
Others (incl. fruitless journeys)	1,443	
Total	164,245	
Mortuary Service :—		
Bodies removed	646	3,790
Hospital Car Pool :—		
Special treatment	14,375	91,502
Grand Totals	247,933	952,110

In addition to the above, 5,997 Leeds cases were carried by other Authorities under the co-ordination arrangements.

The following table gives a summary of cases removed and the mileage covered by the Municipal Ambulance Service ambulances

and sitting-case vehicles during the year. The figures for the five preceding years are given for comparison :—

	1950	1951	1952	1953	1954	1955
Cases :—						
Ambulance ..	50,364	53,337	57,361	73,657	77,475	68,667
S.C. vehicles ..	85,855	85,125	97,649	114,018	141,574	164,245
Total ..	136,219	138,462	155,010	187,675	219,049	232,912
Mileage :—						
Ambulance ..	317,032	324,224	322,519	353,063	372,221	352,701
S.C. vehicles ..	354,849	371,446	379,707	415,634	469,358	504,117
Total ..	671,881	695,670	702,226	768,697	841,579	856,818

It will be noted from the above table that the demands on the Service continue to increase, especially for sitting cases. This continuous heavy increase in demand is being watched with some anxiety and it has inevitably led to difficulties in the running of the Service.

“ 999 ” Calls.—The total number of calls of this type received during the year was 5,997.

Staff.—The staff of the Ambulance Service is 136, made up as follows :—

Administrative :—

Ambulance Officer	1
Station Officers	2
Chief Clerk	1
Clerks (male) (Rotary Shifts)	7
Radiotelephone operators (male)	2
Clerks (female)	2
Telephonist	1
	—
	16
	—

Operational :—

Shift leaders	5
Drivers	84
Female attendants	17
Mortuary Drivers	2
	—
	108
	—

Maintenance :—

Mechanics	..	..	..	..	..	2
Garage hands	..	..	..	..	..	2
Washers	..	..	..	..	..	2
Store-keepers	..	..	..	..	..	1
						—
						7
						==

Domestic :—

Cook	..	..	..	..	..	1
Cleaners	..	..	..	..	..	4
						—
						5
						==

Vehicles.—During the year no additional vehicles were added to the fleet. The strength is 60 vehicles, made up as follows :—ambulances 31, sitting-case vehicles 19, cars 8 and mortuary vans 2.

Accidents.—During the year accidents to vehicles numbered 45, involving 31 drivers, an average of one accident per 19,040 miles.

Telecommunications.—All ambulances and cars are now equipped with two-way radio-telephony. The equipment is giving good service. Very few breakdowns have been experienced during the year, hence the cost of maintenance has been very small.

Co-operation with Other Authorities.—The co-ordination scheme has worked so efficiently during the year that it has not been necessary to call any meetings. Our thanks are due to Authorities within the scheme for their help and co-operation.

Hospital Car Service.—The Hospital Car Service has dealt with all requests for transport for sitting cases in a helpful and efficient manner. The assistance of this Service is greatly appreciated.

Midwives.—From its inception in 1937, the Ambulance Service had always employed a small number of midwives to accompany maternity cases. This arrangement was criticised by the Ministry of Health on the grounds of expense and was discontinued on 30th June. Under the new arrangements the Ambulance Service calls upon the rota of municipal midwives on emergency duty when this is necessary. This system has worked satisfactorily.

Accommodation.—*Main Station (Saxton Lane).*—This new Station is ideally situated and has solved the administrative difficulties and garaging problems previously experienced.

Sub-Station (Hill Top, Armley).—The conditions at this Station are good and excellent cover is given to the west side of the city.

SECTION 28

PREVENTION, CARE AND AFTER-CARE

HEALTH EDUCATION AND PUBLICITY

Local Activities.—As in previous years, lecturers were provided to address youth clubs, associations and the like on various health topics. This is a valuable method of health education and the Department is always pleased to assist organisations by providing lecturers.

Posters, Leaflets, etc.—Copies of all posters and leaflets issued by the Central Council for Health Education have been received and, where appropriate, have been distributed within the city. Copies of the "Better Health" Journal were distributed monthly to Out-Patient Departments of the hospitals in the city and to the infant welfare clinics. Six former Empire Marketing Board frames have again been utilised for the display of posters.

Hygiene.—Publicity material bearing on the clean handling of food was issued to catering establishments in the city.

General.—The Health Visitor has always had an important part to play in health education but there is no doubt that more use could be made of the health visitor's opportunities as an educator. During the year a start has been made in expanding the use of health visitors in this field. One of the senior health visitors, Mrs. Beard, has devoted a good deal of her time to organising and to the production of attractive demonstration material. In this she has had the enthusiastic co-operation of the health visitors, some of whom have shown marked talent in poster work and the like. The following is a summary of the work completed during the year.

Visual aids prepared by the health visitors are now in regular use at clinics, welfare centres and elsewhere, and talks are being given on a variety of subjects. The stock of demonstration material includes :—

Displays :

1. Nutrition
2. Clothing
3. "Safety First"
4. Playthings and Occupations for Young Children
5. Foot Development
6. "Make Do and Mend."

Each display occupies about 12 feet of table space and consists of models, posters, etc.

Flannelgraphs :

Stages of Pregnancy
Birth of a Baby
Breast Feeding
Daily Routine for Expectant and Nursing Mothers
" Vicious Circle " (Food Hygiene)
Storage of Food

Displays in Preparation are :

Vaccination and Immunisation
Welfare of Old People

Health Education in Clinics and Welfare Centres.—Since 22nd June, 1955, when the visual aids were first used, 28 displays have been arranged in clinics. Each display remains at a clinic for a month and talks and demonstrations are given by the health visitors at each session during that time, Flannelgraphs have been issued 22 times and have also remained at the clinics for about a month each time.

Talks to Outside Organisations.—7 talks with flannelgraphs have been given to St. John Ambulance Brigade Cadets, Young Wives Clubs, etc.; 3 displays have been arranged for St. John Ambulance Brigade Cadets ; 2 displays have been arranged at Redcourt Hostel for midwife's refresher courses ; one display has been arranged for the Leeds Educational Film Society at the request of Miss Keeling, Domestic Science Organiser, Education Department. This display included nutrition, clothing, toys, " Safety First " and a demonstration of teaching with flannelgraphs was also given. The session was well attended by teachers of domestic science and mothercraft.

Health Education at South Lodge.—A health visitor is attending at South Lodge when the " Mothers' Club " organised by the Council of Social Service holds its weekly session. " Make Do and Mend " classes have been held during March and a series of simple cookery lessons will be given in the near future.

National Activities.—Government sponsored press and poster publicity in relation to diphtheria immunisation and other health subjects has been maintained during the year and Leeds has shared in the benefits.

During the year the Ministry of Health's display sets on various health topics have been distributed for exhibition to Corporation Departments, hospitals and Associations.

VENEREAL DISEASES

BY

GORDON HORNE, Ph.D., F.R.C.P.(Ed.)
*Director of Venereal Diseases Department,
The General Infirmary, Leeds*

The Department of Venereal Diseases at the General Infirmary at Leeds was transferred in March, 1956, from the building that has housed it for over thirty years to a newly constructed clinic in the main part of the Infirmary. This transfer was due to the necessity to demolish the old building in order to make way for an extension to the outpatient wing of the Infirmary. It was thought that this might be an opportune time to review the progress that has been made with regard to venereal diseases in the city during the last twenty-five years.

Incidence of Venereal Diseases.—*General considerations.*—Since venereal diseases are not compulsorily notifiable the interpretation of statistics relating to the incidence of these diseases is subject to certain limitations. The only statistics available in this country are those of patients registered in venereal diseases clinics, and no data are readily available on patients examined or treated solely elsewhere, for example, by other specialists or general practitioners. The total incidence in any area can therefore never be accurately assessed, but the trends in incidence over years is reflected in the clinic statistics.

However, there are some factors which influence the proportion of the total number of cases of any particular venereal disease referred to clinics, and thus there may sometimes be difficulty even in interpreting trends. For example, in pre-penicillin days the treatment of both syphilis and gonorrhoea was a fairly complicated affair, requiring a considerable amount of specialised equipment and manual skill in addition to professional knowledge, and few general practitioners undertook such treatment. Penicillin rendered the treatment so much simpler that undoubtedly during the last ten years or so a higher proportion of such cases have never reached venereal diseases clinics, and therefore have not featured in any statistical return.

There are other factors which influence the proportion of cases which are recorded. Even the siting of a clinic is important. For example, one within the precincts of a general hospital is more likely to have cases referred to it from other departments, and especially if it is a teaching hospital. The particular qualifications and interests of the medical staff, and their status and relationship with their medical colleagues will also have an influence. If the venereologist is a genito-urinary surgeon rather than a physician, for example, a relatively small proportion of the cases of late syphilis in the area may be referred to him, and so, with the staff of a clinic changing over the years, fluctuations on this account are inevitable.

Another factor to be considered is the "popularity" of a clinic, which is reflected partly by the extent to which a clinic goes out of its way to meet the peculiar requirements of patients with venereal disease. This varies from one area to another, and even from time to time in the same area, depending on the policy and organisation of the clinic. The proportion of people with venereal disease seeking private treatment would obviously be related partly to the facilities offered by the clinic, and partly also to prevailing economic conditions: at some periods people particularly prone to acquiring venereal disease have more money than at others. The introduction of the National Health Service may have diverted to clinics a number of patients who would, formerly, have been treated privately, although free treatment had, of course, long been available under local health authorities.

Differing standards of diagnosis and advancement of knowledge also have an influence. For example (for reasons which cannot be discussed here), it is possible that in the pre-war years many male cases of "gonorrhoea" would now be recorded as "non-gonococcal urethritis"; and the criteria for recording infants born to mothers with syphilis have varied among different clinics, and even in the same clinic from time to time.

Leeds statistics.—The accompanying graphs show the annual incidence of the principal types of venereal diseases, and the annual number of new patients of all types dealt with, in the Department of Venereal Diseases at the General Infirmary at Leeds from 1931 to 1955. These statistics are not exempt from the flaws discussed above, and their interpretation, especially in certain details, must be guarded. Nevertheless, the graphs reveal some striking and unimpeachable features.

The fluctuations in the incidence of syphilis and gonorrhoea are well shown, and particularly the dramatic rise at the end of the last war. In the interpretation of these figures, the effect of mobilisation and demobilisation of the group of the population most susceptible to venereal diseases must be specially borne in mind.

Recent trends are obviously very satisfactory. It can safely be concluded that there is now virtually no infectious syphilis in the Leeds area. Not a single case of infantile syphilis has been seen in the Clinic since 1952, and of the 12 adults with primary and secondary syphilis seen since the beginning of 1953, 8 stated that they had contracted the disease outside the Leeds area, and it is almost certain that the other 4 were also infected elsewhere.

The much slower decline in the incidence of the later manifestations of syphilis is, of course, in accord with the natural history of the disease, and cases of this type can be expected to occur for at least another twenty to thirty years. Many cases of latent syphilis (the stage of the disease in which there are no signs or symptoms, but serological tests are positive) are still discovered by routine antenatal blood testing, and it is mainly as a result of the adequate treatment of these syphilitic mothers that congenital syphilis has virtually been eliminated.

The incidence of gonorrhoea has continued to fall during the last few years, although the incidence of non-gonococcal urethritis in men has remained at a constant level. The significance of this was discussed in the Annual Report of 1954. No case of gonococcal ophthalmia neonatorum has been registered in the Clinic for more than five years.

It will be seen that each year there is a big difference between the number of "new patients" and the total number of all the cases of syphilis, gonorrhoea, and non-gonococcal urethritis. The balance constitutes numerically, and in other respects as well, quite a large proportion of the work of the clinic, one of the important aspects of which is the elimination of venereal disease in people who *might* have it. Some of this group come of their own accord, some are referred by general practitioners and other departments of the hospital, and some are seen as a result of the investigations that necessarily follow the discovery of any case of venereal disease. Then there are a number of patients who have minor complaints, which, whilst not venereal in the accepted sense of the word are conveniently treated in the Clinic.

And finally, each year, quite a large number of patients are dealt with who have " anxiety states " of varying degrees of severity, associated with fear of venereal disease and with sexual conduct generally. Some of these patients can be quite easily reassured, others with more difficulty ; but in most of them mental health can be restored, and thus potential psychiatric casualties prevented. In a few the fears are manifestations of true psychiatric disease, and these are referred to the appropriate department after venereal disease has been eliminated.

National statistics.—Similar trends have been recorded in the statistics published by the Ministry of Health for the whole of the country, although there are, of course, differences between urban and country districts, and between inland towns and seaports. The progress in Leeds, however, compares very favourably with other similar areas.

Treatment of Venereal Disease.—Great advances have been made in the treatment of all types of venereal disease during the last twenty-five years—principally the sulphonamides in the treatment of gonorrhoea, penicillin in the treatment of syphilis and gonorrhoea, and the newer antibiotics (such as terramycin) in the treatment of non-gonococcal urethritis. As a result of these advances treatment is much more efficient in every way, both from the point of view of the patient and of the public health. It is also much less expensive. Some of the later manifestations of syphilis are still little influenced even by modern treatment, but interstitial keratitis (once the scourge of congenital syphilis) can now be completely controlled by cortisone.

Advances in treatment have also influenced very considerably the medical-social aspects of the work of the Clinic. This has been discussed briefly in several recent Annual Reports.

The Department in Leeds.—*The Clinic.*—The new Clinic is more compact than the old one, and has been designed in the light of current requirements and possible future trends, and it is believed that the optimum use has been made of the space available. In particular, arrangements have been made to give the patients ease of access combined with the maximum privacy inside the Clinic.

Clinic times.—To suit current demands there has been a change in the times of the out-patient clinics. These have been adjusted so as to maintain a wide selection of times (including evenings) when

patients of both sexes can attend, and to allow of a more economic use of the medical and nursing staff. The teaching requirements of the University have also been borne in mind.

The new clinic times are as follows :—

	<i>Men</i>	<i>Women</i>
Monday	.. 5 p.m.—7 p.m.	
Tuesday	.. 10 a.m.—12 noon	10 a.m.—12 noon
Wednesday	.. 2 p.m.—4 p.m.	
Thursday	.. 10 a.m.—12 noon	5 p.m.—7 p.m.
Friday ..	.. 5 p.m.—7 p.m.	
Saturday	.. 10 a.m.—12 noon	10 a.m.—12 noon

The clinic is open every week-day from 9 a.m. to 5 p.m. (Saturdays, 9 a.m. to 12 noon) for routine treatment, and patients can be seen by appointment at other than the official clinic times if necessary.

A doctor is also in attendance at the Central Clinic, Park Square, on Wednesdays, from 2 p.m. to 3 p.m. This clinic is held principally for the purpose of dealing with patients referred from ante-natal clinics in the city, and for carrying out the necessary blood tests on mothers and babies when adoption is being considered.

In-patients.—There are beds for in-patients at the General Infirmary (2 male and 2 female) and at St. James's Hospital (6 male) ; other beds are available as necessary.

Staff.—The fluctuation in the incidence of venereal disease over the years and the simplification of treatment have, of course, been reflected in the staff required to deal with the patients. The medical staff of the Clinic now consists of one consultant, one senior hospital medical officer, one junior hospital medical officer, and one registrar. In 1949 there were three whole-time almoners (with a secretary) ; now this aspect of the work, though still important, is very adequately carried out by a part-time almoner and a part-time health visitor. It has been possible also to reduce considerably the nursing and clerical staff. In few branches of the National Health Service can similar economies have been effected.

Conclusion.—Although the present position with regard to venereal diseases in the city is satisfactory, complacency is dangerous and continuing vigilance is essential. Early infectious cases must be traced, diagnosed and adequately treated as soon as possible if the present trend is to be maintained ; similar attention must be paid to patients with the later manifestations of venereal disease ; routine

ante-natal blood testing must be maintained ; patients with worries and fears about venereal disease must be adequately reassured. It is believed that the new Clinic will help to serve these purposes well.

NEW PATIENTS REGISTERED AT THE VENEREAL DISEASES CLINIC
AT THE GENERAL INFIRMARY AT LEEDS

	Year 1955		Year 1954		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis	55	58	75	56	-20	+2
Gonorrhœa	121	34	158	29	-37	+5
Non-gonococcal urethritis	192	..	219	..	-27	..
Other conditions	636	227	622	258	+14	-31
Total	1,004	319	1,074	343	-70	-24
Total attendances	7,449		8,804		-1,355	

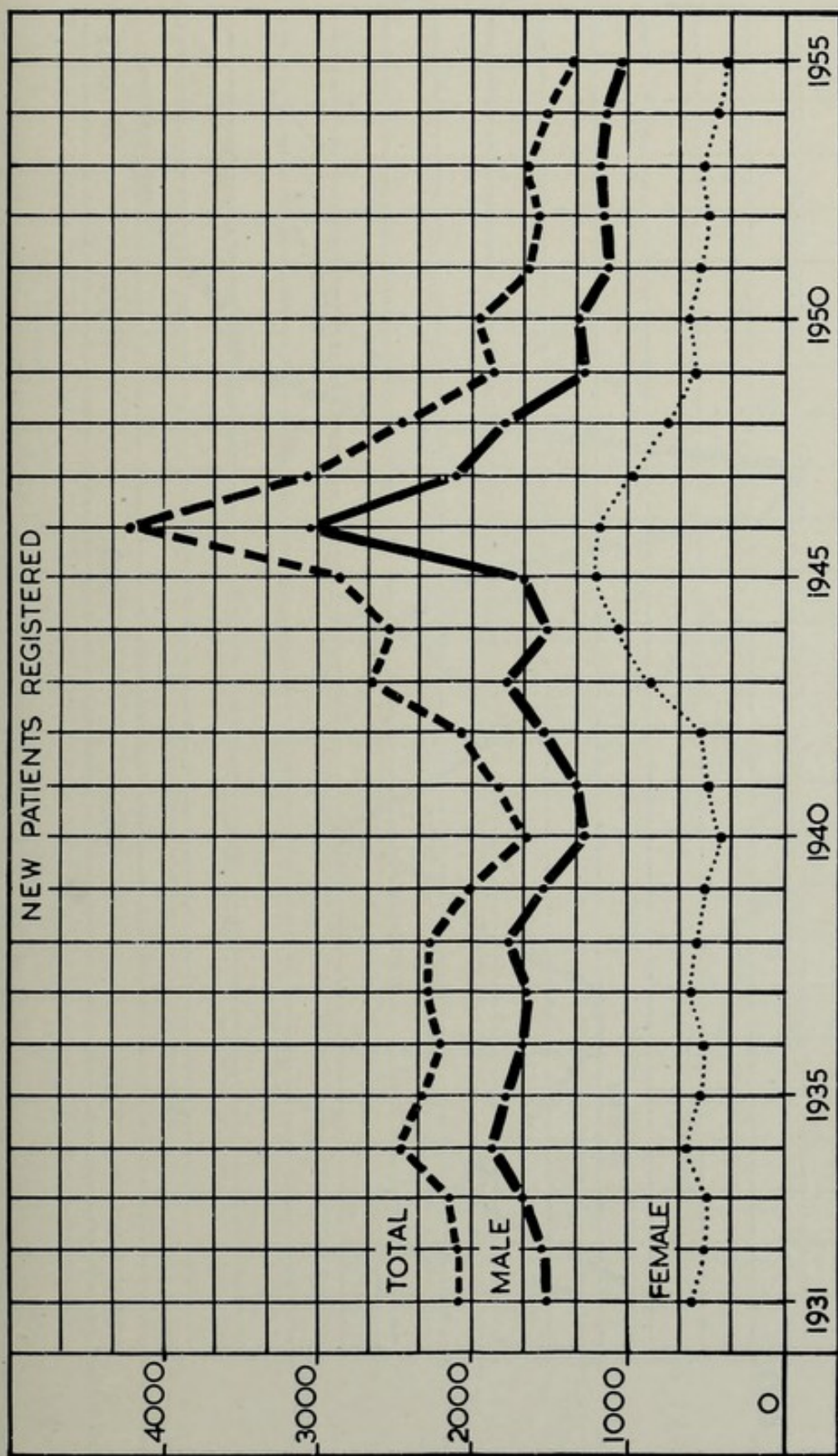
Details of new patients resident in Leeds registered during 1955 are given in the following table :—

LEEDS PATIENTS.

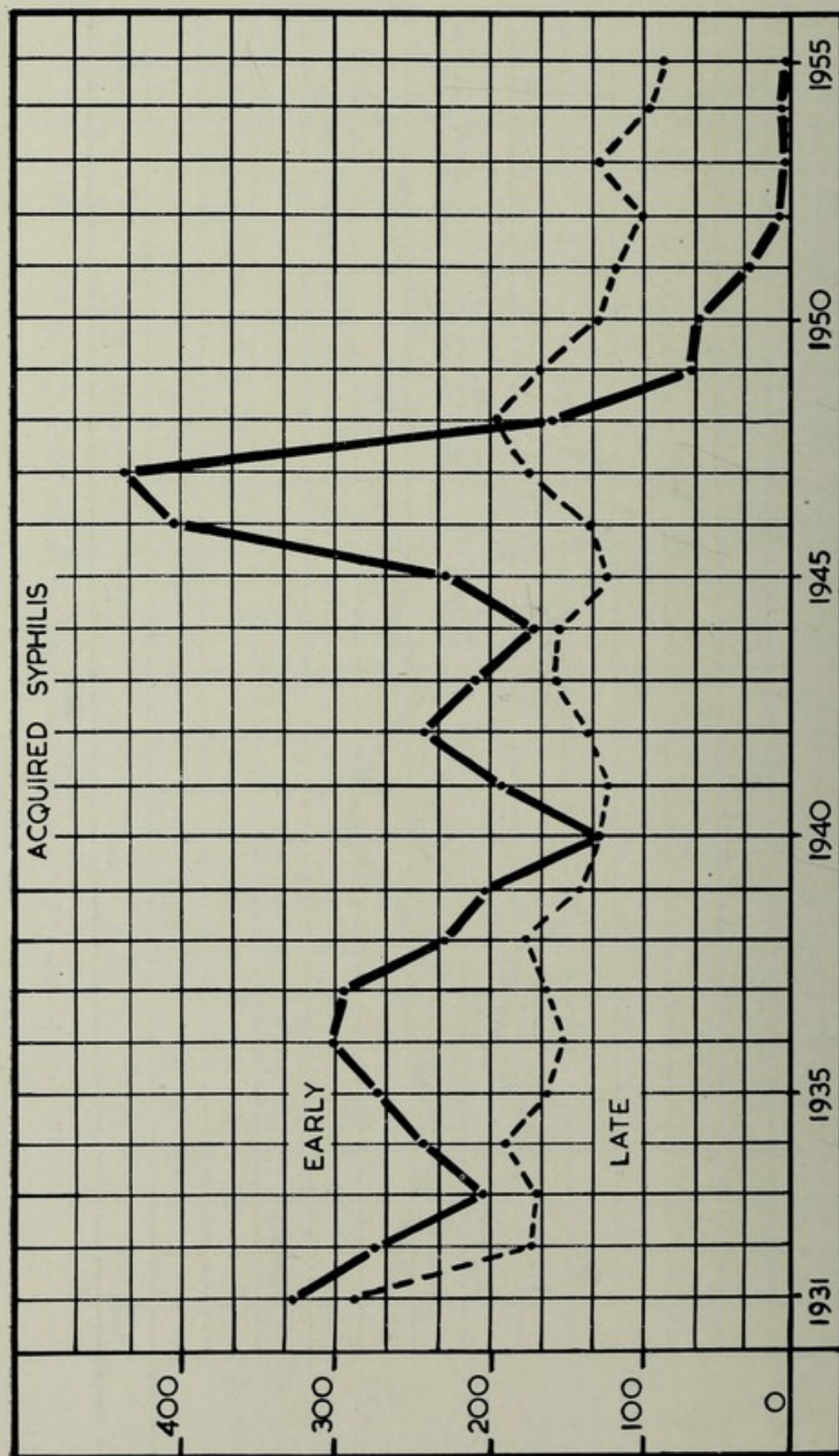
	Year 1955		Year 1954		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis, acquired						
Early	1	2	4	1	-3	+1
Late	32	29	38	32	-6	-3
Syphilis, congenital						
Under 1 year old	..	..	..	..	..	..
Over 1 year old	1	10	4	7	-3	+3
Gonorrhœa	97	30	128	26	-31	+4
Non-gonococcal urethritis	149	..	165	..	-16	..
Other conditions	494	199	469	226	+25	-27
Total	774	270	808	292	-34	-22
Total attendances	6,270		7,316		-1,046	
Total No. of In-patient days	2,270		2,064		+206	

Number of Leeds patients under treatment or observation at 31st December, 1955 :—

	Males	Females	Total
Syphilis	224	180	404
Gonorrhœa	30	13	43
Non-gonococcal urethritis	33	..	33
Other conditions	80	27	107
	367	220	587



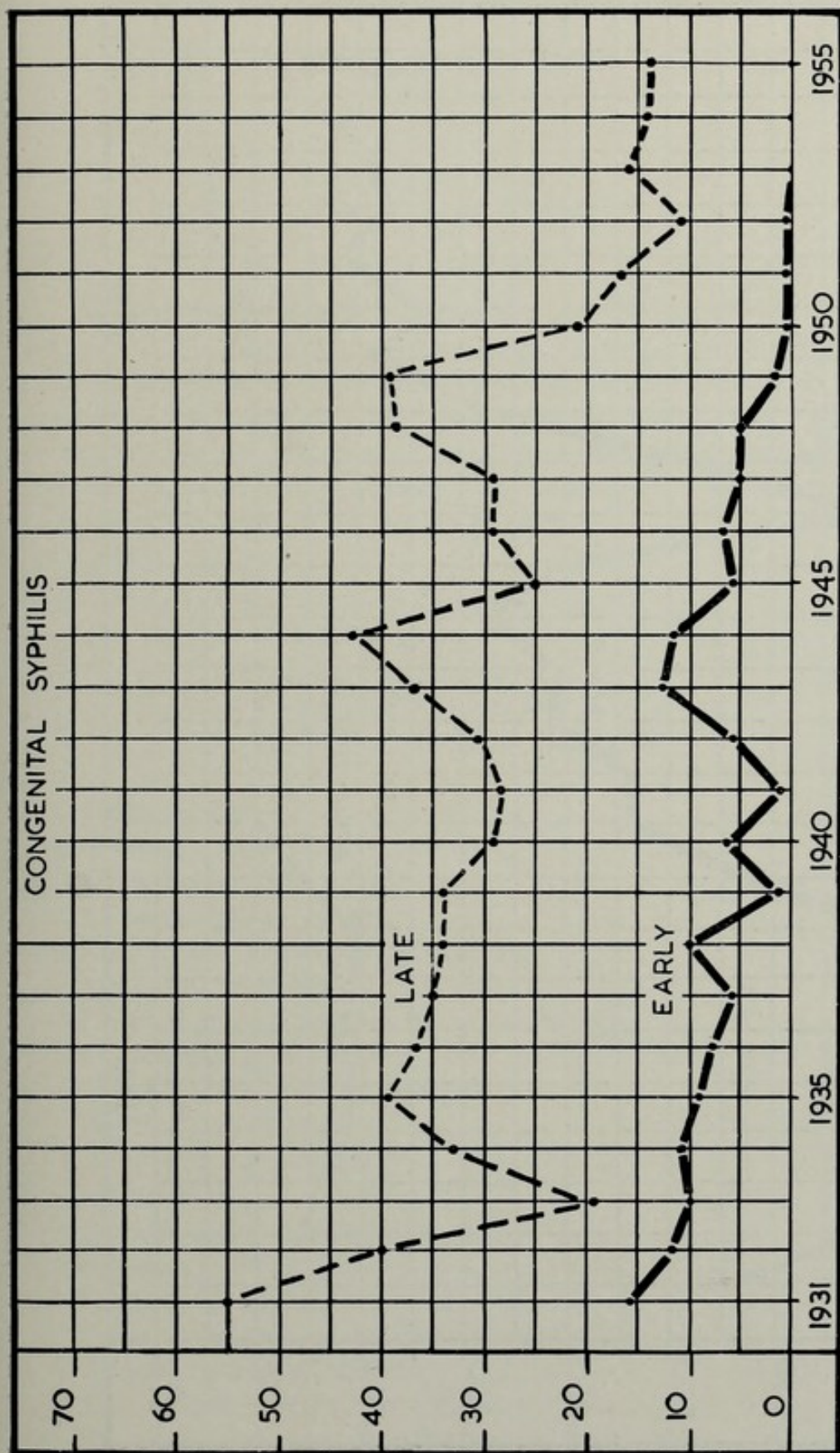
Items 2, 3, 4, 10, 11, 12, 18, 19 and 20 of Ministry of Health Form V.D. (R)



ACQUIRED SYPHILIS—Item 4 of Ministry of Health Form V.D. (R)

"Early" = Primary, secondary and latent in the first year

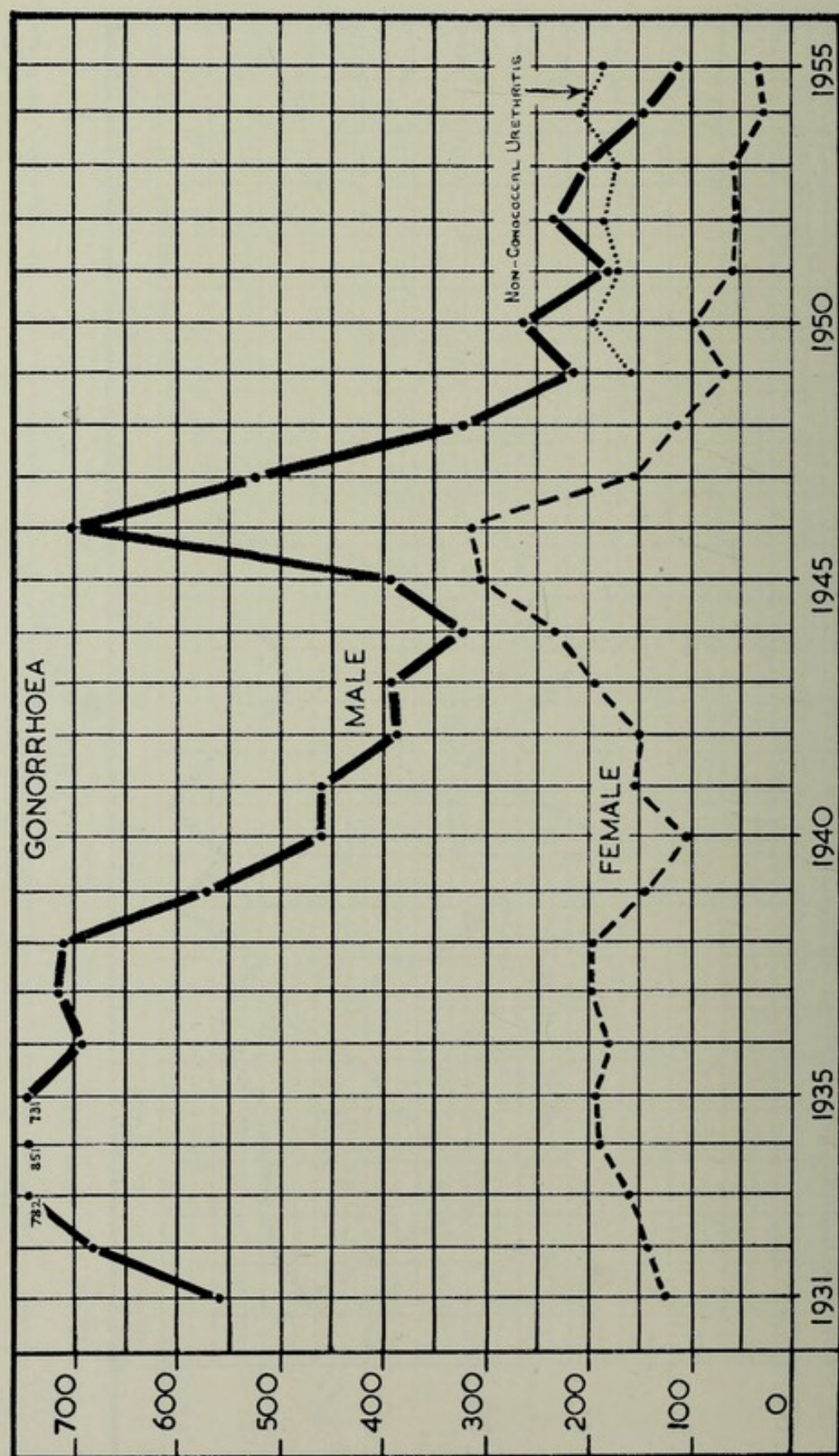
"Late" = All other cases



CONGENITAL SYPHILIS—Item 4 of Ministry of Health Form V.D. (R)

"Early" = Under one year of age

"Late" = all other cases



GONORRHOEA—Item 12 of Ministry of Health Form V.D. (R)
NON-GONOCOCCAL URETHRITIS—Item 23 of Ministry of Health Form V.D. (R)

MEDICAL SOCIAL WORK

(General)

BY

Miss I. B. PATON,
Medical Social Worker

Type of case dealt with.—During the year the number of cases referred to the Social Workers was 192. Cases were referred by medical practitioners, National Assistance Board officials, health visitors, probation officers and other social agencies; others were brought to the notice of the social workers through letters sent to the Medical Officer of Health and by City Councillors. The following table gives some idea of the variety of cases :—

Hospital cases :

After-care, geriatric, St. James's Hospital	47
„ surgical wards, „ „	27
„ St. Mary's Hospital	4
„ Leeds Public Dispensary ..	1
„ Royal Bath Hospital, Harrogate	5
	—84
Financial help	11
Housing	8
Domestic help	8
Accommodation—lodgings	7
Fuel grants, Christmas parcels, toys	7
Admission to hospital	5
Hospital patients worried about their families ..	5
Matrimonial cases	5
Problem cases (women and girls)	4
Bedding and clothing	4
Physiotherapy patients	4
Spectacles	4
Convalescence at home and abroad	3
Old people living alone	3
Disposal of furniture, invalid chair, etc. ..	3
Cases to be referred to Sanitary Section ..	3
Alleged neglect of children	3
Out-patients referred for follow-up	3
Home circumstances of patients to be discharged	2

Treatment required at Mental Health Department	2
Employment or change of employment.. ..	2
Request for magnifying glass and long shoehorn ..	2
Companions for old people	2
Cases referred to Children's Department ..	2
Admission to hostel	1
Blind Welfare	1
Student requested to look after children ..	1
Legal aid requested	1
Request for wireless set	1
Deaf aid	1

192

The above cases have meant much work with several offices of the National Assistance Board and the Social Workers appreciate the help so willingly given to them by the Area Officers and their staff.

The after-care cases referred by Almoners bring the Social Workers into contact with many social agencies in the city and they are most indebted to the British Red Cross Society for help with blankets and food parcels; to the Organiser of Old People's Welfare at the Leeds Council of Social Service for Christmas parcels and fuel vouchers and also to the Women's Voluntary Service for the help with "Meals on Wheels."

The visitation of patients referred by their doctors for admission to the Geriatric Wards at St. James's Hospital has again increased this year. During the year 1,358 pre-admission visits were made, an increase of 84 on the number for 1954. In 28 cases, patients were advised on how to apply for national assistance; 17 were advised regarding nursing requisites and 2 were referred to the Home Help Section. The co-operation between the Hospital Almoners and the Social Workers is most friendly and helpful.

During the year 431 visits were made to new cases and 666 to old cases; 143 visits were received from new cases and 92 from old cases. The Social Workers paid 353 visits to St. James's Hospital, the Magistrates' Court and other social and statutory agencies. Eight visits were made for the Home Help Assessor in connection with her work.

The reduction in the number of after-care cases reported during the year to the Social Workers was due to the long illness of the Senior Social Worker and to the Assistant's resignation in September. Her post was not filled until 28th December.

Social Care of the Unmarried Mother.—During 1955 the number of women and girls having an illegitimate child who were visited and advised was 170, 13 less than during 1954. In 119 cases it was the first child, in 26 cases the second child, in 9 cases the third child, in 2 cases the fourth child, in 3 cases the fifth child and in 11 cases married women gave birth to an illegitimate child.

Of the 170 women and girls visited, 68 intended to return to their homes or lodgings after confinement ; 57 were to be married ; 2 were returning to stay with relatives or friends ; 25 applied for admission to Wyther Hostel ; 2 applied for admission to Mount Cross Home ; 2 girls were referred to the Roman Catholic Social Worker ; one girl applied for admission to Browning House ; 2 girls had home confinements ; 6 girls were returning to live with the putative father ; 3 girls had miscarriages ; one girl disappeared from the city and one was undecided about her arrangements.

All the women and girls attended the Department's Infant Welfare Centres. Cases referred directly to the Social Workers by doctors and other Departments are immediately referred to the Clinic in the district where they are residing.

Again thanks are due to Mrs. Moore, Warden of the Greater World Hostel, for her kindness and help to several girls who were stranded in the city.

Twenty girls were assisted in obtaining affiliation orders. The National Assistance Board now refers girls for help when it is known that they have previously been assisted by the Social Workers.

Many girls are diffident about applying to the Court for an affiliation order until it is explained to them that this is a Civil case, that no-one is allowed into the Court while proceedings are taking place and no pressmen attend. Several girls have been referred to a lawyer where there have been difficulties.

After-Care.—As far as has been possible, all local girls who have been in Wyther Hostel have been visited. Several girls have been assisted in obtaining a room.

Barrack Road Girls' Club.—Since the attendance during January and the beginning of February dwindled down to one, the Club was closed. It has not been deemed advisable to re-open it meantime.

During the year, the Senior Social Worker, when possible, attended the monthly meetings of St. Margaret's Committee and the Mount Cross Home. She also attended the quarterly meeting of the Leeds Council of Social Service Old People's Welfare Committee. The Senior Social Worker attended the Leeds International Council Conference on 3rd December; the theme of the Conference was "Strangers in Our Midst."

Warmest thanks are again due to the Editor of the "Yorkshire Evening Post" for the gift of toys. 115 families recommended by health visitors were invited to call and choose toys and it was estimated that 485 children received them. This work was undertaken by Mrs. Ferguson of the Convalescent Section. The packing of the toys was done by the Senior Social Worker on the two Sundays prior to Christmas.

Several large toys such as tricycles, dolls' houses, wheel-barrows, kiddicars, etc., were obtained for the use of children attending the Maternity and Child Welfare Clinics.

Thanks are also due to the Editor of the "Yorkshire Evening News" for 47 Christmas parcels for old people and 28 vouchers worth 7s. each for coal. Sixteen parcels donated by the British Red Cross Society were also delivered to sick people.

Student health visitors again spent a day with the Senior Social Worker and were told of the work done for girls expecting an illegitimate child and of the after-care work done for the hospitals.

CONVALESCENT TREATMENT

BY

Miss J. CHIPPERFIELD
Convalescent Treatment Organiser

During the year 2,308 applications for convalescent treatment were received and 40 were brought forward from 1954, making a total of 2,348. Of this number, 1,754 patients were sent to convalescent homes, 576 applications were withdrawn or refused and 18 were held over for 1956.

The following table gives details of the number of adults and children sent for convalescence and the average number of weeks per patient.

	Adults	Children
Number sent for convalescence ..	1,219	535
Weeks away	2,438	1,245
Extensions (weeks)	5	15
Total number of weeks away	2,443	1,260
Average number of weeks per stay ..	2	2 ² / ₇

In all the homes the accommodation is very satisfactory and, in many cases, personal kindness received from the staff contributes greatly to the patients' rapid return to health. The Men's Home at Rhyl closed at the end of 1954 but adequate places were obtained in 1955 for men patients in the other homes.

Admission to the Southport Home for mothers and babies was cancelled for two weeks in April as a precaution owing to the high number of cases of measles in Leeds.

The Ambulance Service has continued to provide transport for mothers and babies going to Southport and for children going to St. Annes. Three voluntary escorts have given valuable help with the children. During the year 265 adults and 503 children were seen by the doctor at the Central Clinic before proceeding on convalescence. This number includes all the mothers and babies admitted to the Southport Home.

The allocation of patients to the various homes is shown as follows :—

Home	Adults	Babies	Child- ren	Total
Southport (Mother and Baby Home)	229	201	..	430
Blackpool (Horncliffe)	267	..	6	273
Blackpool (Westwood)	122	..	20	142
St. Annes (Rockfield)	138	..	..	138
Bridlington (Yorkshire Foresters)	134	..	..	134
St. Annes (Ormerod)	..	..	107	107
St. Annes (Blackburn)	101	..	..	101
Freshfield (St. Joseph's)	..	..	94	94
St. Annes (Seabright)	81	..	1	82
Morecambe (Craig)	..	..	73	73
Southport (Milne)	68	..	..	68
Grange-over-Sands (Boarbank Hall)	59	..	..	59
St. Annes (Rochdale Home)	..	..	33	33
Southport (Jewish Home)	10	..	..	10
Chathill	10	..	..	10
Totals	1,219	201	334	1,754

The following table gives monthly statistics of cases sent for convalescence.

	Adults	Mothers and Babies		Children	Total
January ..	20	1	1	4	26
February ..	28	..	..	3	31
March ..	52	17	17	31	117
April ..	121	8	9	15	153
May ..	125	28	28	28	209
June ..	121	23	22	49	215
July ..	151	27	27	45	250
August ..	120	32	35	40	227
September ..	162	26	28	49	265
October ..	93	23	26	21	163
November ..	27	6	8	28	69
December ..	8	..	..	21	29
Total ..	1,028	191	201	334	1,754

SECTION 29

HOME HELP SERVICE

BY

Mrs. D. W. ALFORD

Organiser

At 31st December, 1955, the Home Helps employed numbered :—

Whole-time	..	..	73
Part-time	..	..	82
			155

During the year 1,521 cases received help. Cases needing help were brought to the notice of the Home Help Service by the following :—

Blind Welfare Department	..	..	26	(2%)
Welfare Services Department	..	..	129	(8%)
Hospitals	..	..	243	(16%)
General medical practitioners	..	..	264	(17%)
Midwives, District Nurses and				
Health Visitors	..	..	102	(7%)
Chest Clinic	..	..	50	(3%)
Mental Health Services, N.S.P.C.A.,				
W.V.S., National Assistance Board,				
Social and Church workers, Factory				
Welfare Officers, relatives and mem-				
bers of the general public	..	..	707	(47%)

Maternity Cases.—During the year 469 maternity cases were attended by home helps as against 506 in the previous year. Full-time home helps are usually provided for home confinements.

Tuberculosis.—The number of cases receiving help was 51 as against 68 in the previous year. The needs of these cases are very varied, from full-time help for bed cases, down to help with heavier household tasks in the case of patients who are well advanced on the road to recovery.

Long-Term Cases.—This group includes the chronic sick and the aged and infirm. A total of 706 cases received home help, many of them for long periods. The problem of the old person who lives alone and who has no near relatives is a growing one. Many of these old people prefer to live independently rather than accept admission to a hostel and the part-time services of a home help is often essential to enable them to carry on and to keep themselves and their homes in reasonable condition.

Night Sitting-in Service.—This service provides a sitter-in for two or three nights a week to allow tired relatives to get a night's rest. It is provided only on a certificate of the patient's doctor. During the year night sitters-in were provided for 13 cases.

Problem Families.—We have again co-operated with the Mental Health Department, the N.S.P.C.C. and other bodies in helping to rehabilitate problem families.

The table below shows the actual hours worked by the Home Helps during 1955. The number of cases shown does not give a fair picture of the work done as one case may continue intermittently from January to December and only be numbered as one case. The hours for meal times, travelling or office time are not shown in the table.

Hours	Type of case :—							Total
	Mater- nity	Old age Pensrs.	Emer- gency Illness	Hospital discharge	Chronic sick	Tuber- culosis	Nights	
Jan. ..	3,559	6,558	505	1,165	3,306	2,493	152	17,738
Feb. ..	3,440	4,749	159	993	2,483	1,797	88	13,709
March	3,382	5,227	371	940	2,353	1,734	16	14,023
April ..	4,004	5,693	285	1,371	2,689	1,914	..	15,956
May ..	3,175	5,276	453	976	2,743	1,532	..	14,155
June ..	2,186	5,873	687	843	2,266	1,716	16	13,587
July ..	3,171	7,604	550	995	3,282	1,958	32	17,592
Aug. ..	2,010	4,844	375	625	2,207	1,440	72	11,573
Sept. ..	2,122	6,532	489	798	2,674	1,726	112	14,453
Oct. ..	3,232	9,356	677	831	3,457	2,237	88	19,878
Nov. ..	2,992	7,571	575	774	2,905	1,384	65	16,266
Dec. ..	2,798	10,179	506	851	3,709	1,689	56	19,788
Totals	36,071	79,462	5,632	11,162	34,074	21,620	697	188,718

The Improvement of Back-to-Back Houses with Special Reference to Ventilation

THE IMPROVEMENT OF BACK-TO-BACK HOUSES WITH SPECIAL REFERENCE TO VENTILATION

The following is an account of research carried out during 1955 into the ventilation of back-to-back houses in Leeds.

The Leeds Health Committee wishes to thank the London School of Hygiene and Tropical Medicine for expert advice and guidance during these experiments and particularly Professor G. P. Crowden, Professor of Applied Physiology of the London School of Hygiene, University of London, who made available the facilities of his department to the Chief Sanitary Inspector and instructed him in the use of the Carbon Dioxide Direct Analysis Technique.

The thanks of the Health Department are also due to Mr. C. H. Manley, City Analyst, who carried out the necessary gas analyses and to Supervisory Inspectors Wyatt, Busfield, Bowers, Wheatley and Lee who carried out the tests.

The necessary apparatus was obtained by special permission of the Leeds Health Committee who also gave consent for the tests to be carried out.

For the purpose of Section 1 of the Housing Repairs and Rents Act, 1954, the estimated number of unfit houses in Leeds to be dealt with by demolition within the next 9 years is 22,500. None of these unfit houses are suitable for "patching" and retention as temporary accommodation under Section 2. It is considered that the best method of keeping these houses suitable for temporary accommodation until they are dealt with is to continue to make use of the nuisance sections of the Public Health Act, 1936, which sections have long been and still are in daily use for this purpose.

There are in existence in Leeds a further 20,000 Type II back-to-back houses, and 13,000 Type III back-to-back houses, neither of which groups are included in the 22,500 unfit houses suitable for action under Section 11 or Section 25 of the Housing Act, 1936. It is considered that the 20,000 Type II back-to-back houses could be brought up to the standard laid down for the purpose of improvement grants, and the Council are prepared to make improvement grants for this purpose.

The Classification of Back-to-Back Houses.—Back-to-back houses are classified according to age and type as follows :—

Type I.

These consist of the oldest type built prior to 1872. They are the worst and smallest type. Each house contains a living room opening directly on to the street and usually one bedroom, although there may be a second bedroom or an attic. There is no separate windowed scullery. The houses were built in long unbroken rows, with common ashpit and block of shared closets at the end of the row. The houses have no hot water supply, no bath, no food store ; but have a copper and a sink with cold water tap, and a coal fired cooking stove all situated in the ground floor living room. There is a coal cellar underneath. There are 13,000 of these Type I back-to-back houses now left in Leeds and all of them are to be dealt with by Clearance Area procedure as soon as possible.

Type II.

These form an intermediate group of back-to-back houses, built between 1872 and 1890 and usually in blocks of four. They are double fronted houses comprising two bedrooms on the first floor and in some cases an attic bedroom above. On the ground floor there is a living room and a separate windowed scullery ; and in the basement there is a keeping cellar under the living room and coal cellar under the scullery. Ashes and closet accommodation are situated in the common yard at the end of the block. There are 28,000 of these Type II back-to-back houses in Leeds. It is estimated that 8,000 of the oldest of these houses are so dilapidated, or the structures have so deteriorated, that they will have to be dealt with by slum clearance.

20,000 of these Type II back-to-back houses are very well-built structures. The walls are of good brickwork with an engineering brick type surface. The door and window openings have good quality stone heads and sills. The roofs are good quality blue slate. These houses are capable of improvement and even when one bedroom is made into a bathroom, with internal water closet there remains adequate sleeping accommodation.

It has been decided to encourage improvement of these houses by the payment of improvement grants and loans in those cases which have at least 15 years life and where the houses are capable of

having the small bedroom over the scullery converted into a bathroom with an internal water closet, and provided they can be made to comply with the twelve conditions laid down for improvement grant purposes under Section 20 of the Housing Act, 1949.

Type III.

These consist of back-to-back houses built since 1890. They are completely self contained housing units, built in terraces, each house with its own garden. These houses stand higher than the street level and are entered up a short flight of steps leading to the front door, and consequently the cellars are well lit by windows.

They comprise an attic room which can be made into a useful bedroom. On the first floor the main bedroom is situated over the living room, while the small room over the hall and scullery is a bathroom with hot and cold water over bath and lavatory basin, and also an internal water closet. On the ground floor the front door gives access to a narrow hall with leads on the one side to a living room with fireback boiler, and on the other to a scullery with sink with hot and cold water and a gas cooker. A staircase leads down to the basement which contains a separate well lit and ventilated keeping cellar, separate washing cellar and coal cellar. There are 13,000 of these Type III back-to-back houses in Leeds. They have a life in excess of 20 years ; and they do not need assistance under improvement grant procedure.

Improvement Grants Under Section 20 of the Housing Act, 1949.—Section 20 of the Housing Act, 1949, empowers local authorities to make grants to private owners for the improvement of existing dwellings.

Before an improvement grant is made the local authority must satisfy itself on the following three matters :—

- (a) the dwellings to be improved must have a 15 years life.
- (b) the cost of improvements must be more than £100.
- (c) the dwellings, after improvement, must come up to an approved standard.

The Minister has laid down twelve conditions to which the dwelling must conform after the improvements have been completed.

The dwelling must :—

- 1. Be in a good state of repair and substantially free from damp.

2. Have each room properly lighted and ventilated.
3. Have an adequate supply of wholesome water laid on inside.
4. Be provided with efficient and adequate means of supplying hot water for domestic purposes.
5. Have an internal or otherwise readily accessible water closet.
6. Have a fixed bath preferably in a separate room.
7. Be provided with a sink or sinks and with suitable arrangements for the disposal of waste water.
8. Have a proper drainage system.
9. Be provided in each room with adequate points for gas or electric lighting.
10. Be provided with adequate facilities for heating.
11. Have satisfactory facilities for storing, preparing and cooking food.
12. Have proper provision for the storage of fuel.

The application for a grant must be submitted to and approved by the Local Authority before the work of improvement is begun.

The Ventilation of Back-to-Back Houses.—In the case of the improvement of back-to-back houses ventilation is of considerable importance.

Early in 1955 the consent of the Minister was obtained to proceed with the improvement of 24 back-to-back houses, and to carry out experiments and tests in regard to their ventilation. These experiments were designed to see whether or not the ventilation of *each room* in a back-to-back house could be made satisfactory, without converting two such houses into one through house. If the principle was to be established that certain back-to-back houses could, without altering their back-to-back character, be improved in accordance with the improvement grant procedure under Section 20 of the Housing Act, 1949, it would be necessary for the Medical Officer of Health to certify that each room in the house so improved was properly ventilated.

The standard for room ventilation aimed at is the recommended minimum fresh air supply to buildings for human habitation, laid down in the British Standard Code of Practice CP3—Chapter 1(c) (1950).

<i>Type of Rooms</i>	<i>Recommended minimum rate of fresh air supply</i>
Bathrooms and W.C.'s	2 air changes per hour
Kitchens	2,000 cu. ft. per hour
Pantries or larders	2 air changes per hour
Living rooms and bedrooms	
in which	{ 300 cu. ft. per person 720 cu. ft. per hr. per person
there is	{ 400 cu. ft. per person 600 cu. ft. per hr. per person
	{ 500 cu. ft. per person 420 cu. ft. per hr. per person

Natural ventilation is usually considered suitable for houses and flats, and this has been relied upon in the case of back-to-back houses. Natural ventilation relies for its action upon wind, and upon differences of temperature. The standard minimum rates of fresh air supply have been achieved by natural ventilation by providing *in each room* an inlet ventilator (of appropriate size), and where necessary (where one does not already exist) an outlet ventilator.

Inlet Ventilation.—The infiltration of air between doors or windows and their frames may be considerable, especially when they are illfitting. However, it is undesirable to rely upon fortuitous leakage from these sources to obtain the necessary inlet ventilation. Adequate inlet ventilation has been secured by the provision of a 9 in. $\times$ 9 in. or 9 in. $\times$ 6 in. air-brick in the external wall of each room. It has been found that in times of high wind an uncontrolled air-brick may cause a draught, and is, therefore, liable to be papered over. For this reason a constant flow natural ventilator has been fitted to the inside of the air-brick opening. It should be emphasised that this constant flow ventilator is not an air impeller, or mechanical ventilator, and its only effect is to control and direct *natural* air movement.

Outlet Ventilation.—As regards *outlet ventilation*, living rooms and large bedrooms with an existing fireplace and flue may be adequately ventilated by these means as the outlet ventilator. In the case of kitchens, where the recommended minimum rate of fresh air supply is relatively high, an outlet is necessary, and in these cases a disused set-pot flue has been adapted to act as the outlet ventilator. This set-pot flue is a most efficient extractor if connected with a ventilator set in the kitchen ceiling, and extended above the roof with an anti-down draught chimney pot. In the case of small bedrooms which have been converted into bathrooms, the provision of one 9 in. $\times$ 9 in.

inlet ventilator alone is not sufficient to produce the necessary 2 air changes per hour, some outlet ventilation is also necessary. Where the new bathroom is at the corner of the block, the position enables a second ventilator to be placed in the gable wall or side wall of the bathroom, so that in the bathroom there is a diagonal cross ventilation. Where the new bathroom is not at the corner of the block, the inlet ventilator in the face wall can be assisted by an outlet ventilator through the ceiling into the roof space.

Making use of Staircase Ventilation.—The ventilation of the staircase helps the ventilation of all the rooms in a back-to-back house. If the staircase happens to be against a gable wall, the fixing of an air-brick right at the top of the staircase helps the staircase to act as a gentle extractor from all the rooms. Where the staircase opens into an attic, in which there is an existing fireplace and flue, there is an even better effect. When the attic has no fireplace and flue, and is to be used as a bedroom, then it should be improved by the provision of a dormer window, with a constant flow ventilator in the cheek of the dormer.

The Measurement of Rate of Ventilation.—The method of measuring the rate of ventilation of rooms in back-to-back houses is that developed by the Department of Physiology of the London School of Hygiene and Tropical Medicine. This method is known as the Carbon Dioxide Direct Analysis Technique.

In all cases the rates of ventilation are measured with the windows closed and doors shut. The following is the standard technique :—

An initial concentration of approximately 4 per cent. of carbon dioxide is produced in the room to be tested. Carbon dioxide is first liberated from a cylinder into large Douglas bags of 500 and/or 1,000 litres capacity as required. These filled Douglas bags are then allowed to stand in order to take up atmospheric temperature before the carbon dioxide is liberated in the room. It has been found convenient (in order to save time at the room to be tested) to fill the Douglas bags on the previous day, and transport the Douglas bags already filled.

As the gas is liberated in the room from the Douglas bags the emergent stream is passed in front of an electric fan. For rooms of 1,000 cu. ft. two fans of 10 inch diameter 620 r.p.m. are in operation during the entry of the gas, and throughout the whole test in order to prevent stratification, and produce efficient mixing.

After allowing 2–3 minutes for the complete mixing of the gas and the room air, air sampling is commenced, and four air samples are taken at 5 minute intervals, timed by a stop watch. Acidulated

and evacuated Haldane gas sampling tubes of 7 c.c.s. volume are used. The samples are taken by the two observers in the room.

In carrying out the test the head of the sampling officer is turned to one side, the breath is held for 15 seconds prior to sampling, and the tube is held at arms length at the required point in the room. This is in order to prevent contamination by expired air. For routine experiment in closed rooms it is usual to take samples in the middle of the room above head level.

The estimations of concentration of carbon dioxide in the air samples are made by the City Analyst using the standard 10.c.c. Haldane gas analysis apparatus.

Then if P_0 = concentration at time 0 minutes
 P_1 = concentration at time 5 minutes
 P_2 = concentration at time 10 minutes
 P_3 = concentration at time 15 minutes

the ventilation rate, derived from the statistically best fitting straight line through these points is given by the following equation :—

$$\text{Air change} = 1.2 (3(\log_e P_0 - \log_e P_3) + (\log_e P_1 - \log_e P_2))$$

This can be solved algebraically, or the air change can be found diagrammatically by graphing.

Results Obtained.—It is most interesting to compare the measured rates of ventilation obtained in an improved Type II back-to-back house with those of a modern semi-detached house.

Scullery.

The rate of ventilation of the scullery of an improved Type II back-to-back house was measured at 11 a.m. on 21st July, 1955; and the rate of ventilation of the kitchenette of a modern semi-detached house was measured at 11.40 a.m. on the same day. It is interesting to note that the provision of an air-brick-inlet, and the use of the adapted set-pot flue as an extractor, secured a better rate of ventilation in the scullery of the improved Type II back-to-back house, namely, 2.14 air changes per hour, than pertained in the kitchenette of the modern semi-detached house built in accordance with the building byelaws, namely, 0.94 air changes per hour.

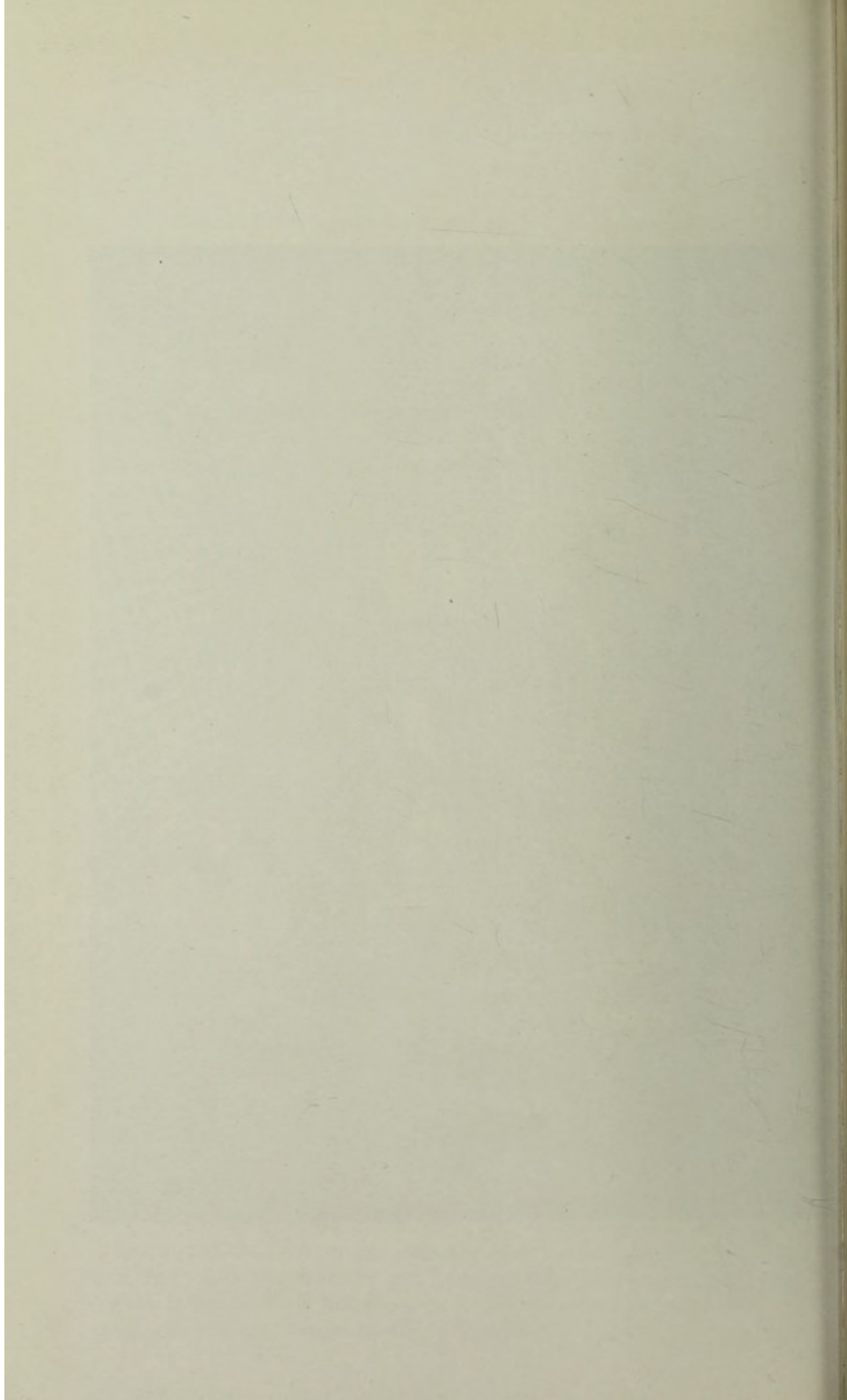
Living Room.

The living rooms of the same two houses were measured in the forenoon of 20th July, 1955, when the measured air change in the living room of the improved back-to-back house was 1.59 per hour, while in the case of the living room of the modern semi-detached house the measured air change was only 1.06 per hour.



Measurement of Rate of Ventilation

Photograph of sampling technique, showing Douglas bag from which CO₂ has been expressed and twin fans to mix CO₂ with air. Air samples being taken in Haldane gas sampling tube at 5-minute intervals by stop watch.



Bathroom.

The rate of ventilation of the bathroom of the same two houses was measured during the morning of the 25th July, 1955. That obtained in the case of the improved back-to-back house was 1.43 air changes per hour as compared with 1.95 air changes per hour in the modern bathroom. It will be seen that in the case of this room, the ventilation of the modern house is better. This is because the bathroom of the modern house had a 9 in. $\times$ 9 in. air-brick ; and in the case of the improved back-to-back house (this being an early experiment), there was provided a 9 in. $\times$ 6 in. air-brick only in the new bathroom.

Bedroom.

The rate of ventilation of the large bedroom in the same two houses was measured in the forenoon of the 22nd July. In the case of the improved back-to-back house the measured air change in the large bedroom was 2.34 per hour as compared with 0.73 per hour in the large bedroom of the modern semi-detached house.

As a result of the tests made during 1955, the Ministry of Housing and Local Government approved improvement grants for back-to-back houses, subject to certain conditions.

The letter from the Minister read as follows :—

“ The Minister has had under consideration the reports of the ventilation tests made on improved back-to-back houses in Leeds and he wishes to thank the Leeds City Council for their pioneer work which demonstrates the improvement in ventilation brought about by the use of modern techniques.

The Minister is aware that a special problem exists in Leeds because of its larger number of back-to-back houses. He understands that many of these are included in the Council's Slum Clearance proposals and will be demolished at the earliest opportunity, but that the magnitude of the task will mean that a considerable number, many of them soundly constructed, will have to remain for a period of 15 years or more.

He agrees that in these circumstances the Council should take steps to encourage the improvement of living conditions in those houses not due for demolition within 15 years, subject to the conditions in the next paragraph, where such improvement is practicable at reasonable cost. He is satisfied as a result of the experiments carried out by the Leeds City Council and on the evidence of the City Medical Officer of Health that back-to-back houses can now be properly ventilated.

He agrees, therefore, that improvement grants can be given for the improvement of these houses where the improved house is able to satisfy the standards defined in Paragraph 11, of Circular 36/54,

and in particular that the Medical Officer of Health is able to certify that each room is properly ventilated."

Analysis of Tests.

Altogether 74 separate room tests, were made during 43 days by sanitary inspectors specially trained in the technique required.

Number of different buildings where rooms were tested—13.

Comprising 1 office block

2 modern semi-detached houses

3 through terrace houses

7 back-to-back houses

Number of tests completed to date—74

(Viz. each room with its set of 4, 5 and 6 tubes)

	Living rooms	Sitting rooms	Bed rooms	Attic Bedrooms	Kitchen Sculleries	Bath rooms	Misc.	Totals
Tests on houses not then improved	A 3	1	9	5	1	..	..	19
	B 1	1	1	..	..	1	..	4
	C ..	1	..	..	2	2	..	5
Tests on houses improved	A 6	2	9	5	1	3	2	28
	B ..	..	..	1	..	3	..	4
	C 1	..	..	1	4	..	..	6

A signifies above British Standard Code of Practice Standard

B signifies approximating to B.S.C.P.S.

C signifies failing to attain B.S.C.P.S.

Living rooms were judged as for four persons.

Bedrooms were judged on the permitted number of occupants.

This table includes tests carried out while the Department was experimenting with means of natural ventilation. It shows that very special attention must be given to the ventilation of kitchen/sculleries.

An important and necessary feature of these experiments was to show that rooms in back-to-back houses could be satisfactorily ventilated. By these means it was possible to present to the Ministry of Housing and Local Government measurements of ventilation rates, that were obtained by a modern, recognised scientific method.

The Leeds Public Health Department has now shown, beyond doubt, that each room in a back-to-back house, can be satisfactorily ventilated; and moreover that this can be done very simply and cheaply.

The result has been in fact to change the housing category of some 20,000 well built houses in this City.

APPENDIX I

I. G. Davies,
M.D., B.S., F.R.C.P., D.P.H.
Medical Officer of Health

Public Health Department,
Sanitation Section,
12, Market Buildings,
Leeds, 1

J. Goodfellow,
F.R.S.H., M.I.P.H.E.,
Chief Sanitary Inspector

VENTILATION TEST REPORT

Address of premises : 13, Providence Road, Date : 22nd July, 1955
Delph Lane, Leeds, 6

Type of building : Back-to-back Intermediate, Improved Time : 10.46 a.m.

Room : Large Bedroom Aspect : S Dimensions : 13' 9" × 12' 9" × 9' cu. ft. 1575

Internal temperature : 70°F. Amount of CO₂ liberated : 1000 litre Est. % CO₂ 2.1

Furnished/~~Unfurnished~~ Degree : Normal

Means of ventilation : Door to landing—closed

Double sash window—closed

Flue from open fireplace—no fire

9" × 6" Colt ventilator

N.B. Include all doors,
windows, ventilators,
flues, and state whether
open or closed in each
case and state whether
fires on or not

Means of heating : Open fireplace—no fire

Weather : Warm and sunny Sky : 0/10 cloud Wind dir. : variable Wind Force 1,
haze. (Beaufort Scale)

Ext. temp : 67°F. No. of persons in room during test : 2

Remarks : Assessed for 2 persons

Air space in cu. ft. per person = 500

B.S.C.P. recommended fresh air supply in cu. ft./hr. = 840

Measured rate above minimum of B.S.C.P.

Signature : FREDERICK LEE,
Sanitary Inspector

CITY ANALYST'S REPORT

Lab. ref.	Time	CO ₂ %	log _e
SP. 1825	0 min.	2.91	1.0682
SP. 1826	5 min.	2.39	0.9713
SP. 1827	10 min.	1.97	0.6780
SP. 1828	15 min.	1.62	0.4824

Estimated Air Change = 2.34 per hour

Date : 23rd July, 1955

Signed : C. H. MANLEY, M.A., F.R.I.C.
City Analyst

APPENDIX II.

13, *Providence Road, Delph Lane, Leeds, 6.*

13, Providence Road was one of a terrace of large brick built Type II back-to-back houses about 65 years old.

The accommodation comprised :—

On the ground floor—living room and scullery.

On the first floor—large bedroom and small bedroom.

On the second floor—two attic bedrooms.

There was a shared water-closet in a common yard at the end of the block.

If this back-to-back house was connected through to the house at the rear, the resulting through house would still have seven bedrooms after converting one into a bathroom. There is no demand for a house of this size in this locality, and it would tend to develop into a house let-in-lodgings ; and the last condition would be worse than the first.

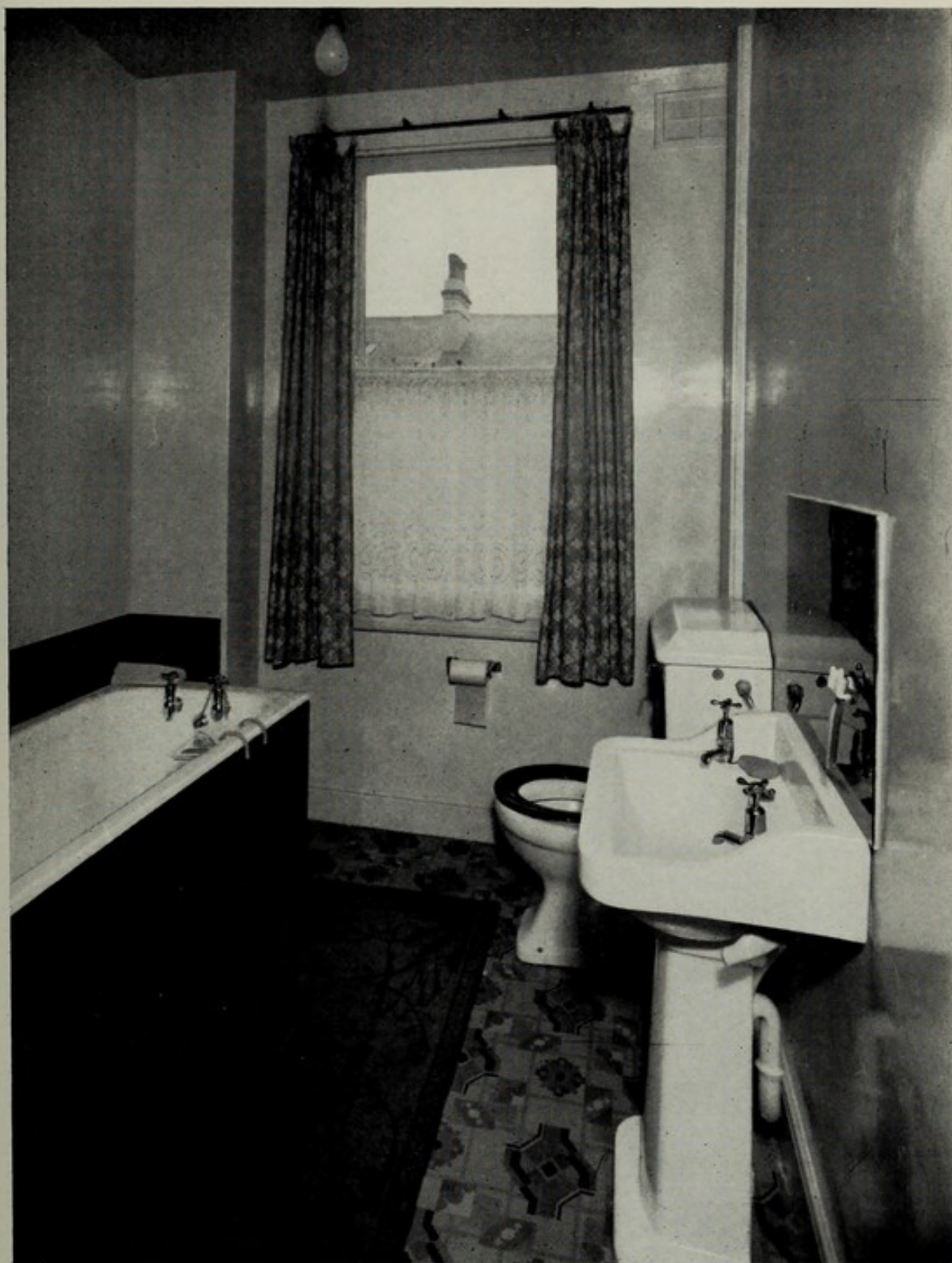
The owner-occupier made an application for an improvement grant for the provision of a new bathroom and water-closet in the small first floor bedroom. The Department sponsored this application and advised the applicant on the additional works necessary to make this house comply with all the requirements of Circular 36/54 of the Ministry of Housing and Local Government.

The total cost of these works necessary to provide this house with all modern amenities, and to bring it up to the standard for a satisfactory house amounted to £125 12s. plus £3 3s. in architect's fees. The amount of grant paid in this case was therefore £62 16s.

The Net Annual rent of this house before improvement was £28 18s. 6d.

The Net Annual rent recommended after improvement was £37 14s.

APPENDIX III



Internal view of new bathroom and water-closet at 13, Providence Road, Leeds, 6.

APPENDIX IV



Photograph, after improvement, of external elevation showing air inlets of No. 13, Providence Road, Leeds, 6.

Housing

HOUSING ACTS, 1936-1954.

Repair, Individual Demolition, Clearance and Overcrowding

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,
Chief Sanitary Inspector

Statistical data in this section of the report has been compiled by Mr. H. P. Gill, Supervisory Inspector, Housing Section.

Number of Houses.—The total number of houses and flats in the city on 31st December, 1955, was 164,493, including 57,482 back-to-back houses and 107,011 through houses and flats.

This total is based on the Registrar General's figure for the number of structurally separate dwellings in the city as ascertained in the Census taken on the night of 8th/9th April, 1951.

New Houses.—The number of permanent new houses and flats completed during the year was 2,613. No temporary houses were erected during the year but 39 houses were converted into 96 self-contained flats.

Housing Shortage.—The number of applications for houses on the registers at the Housing Department on 31st December, 1955, was 27,301 of which 25,249 were regarded as inadequately housed.

Overcrowding.—There is a small improvement in the degree of overcrowding, the percentage on Corporation Estates having fallen from 1.44 to 1.0.

HOUSING ACT, 1936, PART IV.—OVERCROWDING. January 1st to December 31st, 1955

	1954	1955
Number of new cases of overcrowding discovered in houses owned by the Corporation	25	9
Number of cases of overcrowding in houses owned by the Corporation which have been relieved	122	128
Number of overcrowding cases relieved during the year in course of slum clearance operations under S.S. 11, 12 and 25	60	54
A. No. of dwellings known to be overcrowded at the end of the year	2,327	2,305
B. No. of new cases of overcrowding reported during the year	712	303
C. No. of cases of overcrowding relieved during the year	605	325
D. Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority has taken steps for the abatement of overcrowding	2	4

There are 34,953 occupied dwellings on the municipal estates in the city and the average percentage of overcrowding during the year was 1.0.

134 families that were living in overcrowded privately owned houses have been rehoused ; all these families have been accommodated in municipal dwellings.

There have been no applications for licences to permit temporary overcrowding during the year.

303 new cases of overcrowding were reported to the Housing Department ; the number of certificates of permitted numbers issued during the year was 282, making a total of 89,826 certificates issued since the Act became operative.

Housing Repairs and Rents Act, 1954.—Section 1.—*Proposals for dealing with Unfit Houses.*—By Section 1 of this Act, the Minister of Housing and Local Government required Local Authorities to submit proposals for dealing with unfit houses in their areas.

In accordance with the instructions of the Housing Committee, a report was submitted showing that there were in the city 22,500 houses which were regarded as unfit and suitable for action under the Demolition and Clearance Section of the Housing Act, 1936. It was proposed that these should be dealt with in the next nine years.

By the terms of Section 2 of the above-mentioned Act, Local Authorities are empowered to retain in occupation houses in clearance areas which, in the opinion of the Local Authority, are or can be rendered capable of providing accommodation of a standard which is adequate for the time being and carry out repairs to them. In view of the type and condition of the houses in the clearance programme, the Committee decided not to take any action as indicated above.

Unfit Houses.—During the year 24,068 dwelling-houses were surveyed and examined and 8,591 nuisances and housing defects were remedied. Houses numbering 4,257 found to be defective in one respect or another under the Public Health Act were repaired in response to notices served under this Act.

The number of houses inspected under the Housing Act, 1936, and found not to be in all respects reasonably fit for human habitation was 275. 65 dwelling houses were repaired in response to notices served under this Act.

When private owners failed to remedy urgent housing defects or serious nuisances after the service of statutory notices, the Department carried out the necessary work as a matter of urgency. Such work in default was carried out to 12 houses under the Housing Acts at a cost of £64 os. 7d. and to 7 houses under the Public Health Act at a cost of £130 9s. these amounts being recovered from the owners of the properties concerned.

Demolition of Individual Unfit Houses.—The number of Demolition Orders made was 99 whilst 15 Closing Orders were made on parts of buildings. In the case of 9 houses, the demolition of which was inexpedient because of structural considerations, Closing Orders were made under the terms of Section 10 of the Local Government (Miscellaneous Provisions) Act, 1953.

The number of houses demolished was 106 consisting of 96 occupied houses and 10 derelict houses. During the year 124 families affected by either Demolition or Closing Orders were rehoused by the Council, while 13 families found their own accommodation; a further 71 houses were demolished by other Departments of the Council.

In the case of 7 houses represented as unfit for habitation, a change of user was agreed in lieu of the making of Demolition Orders.

12 houses were demolished by owners in response to informal action.

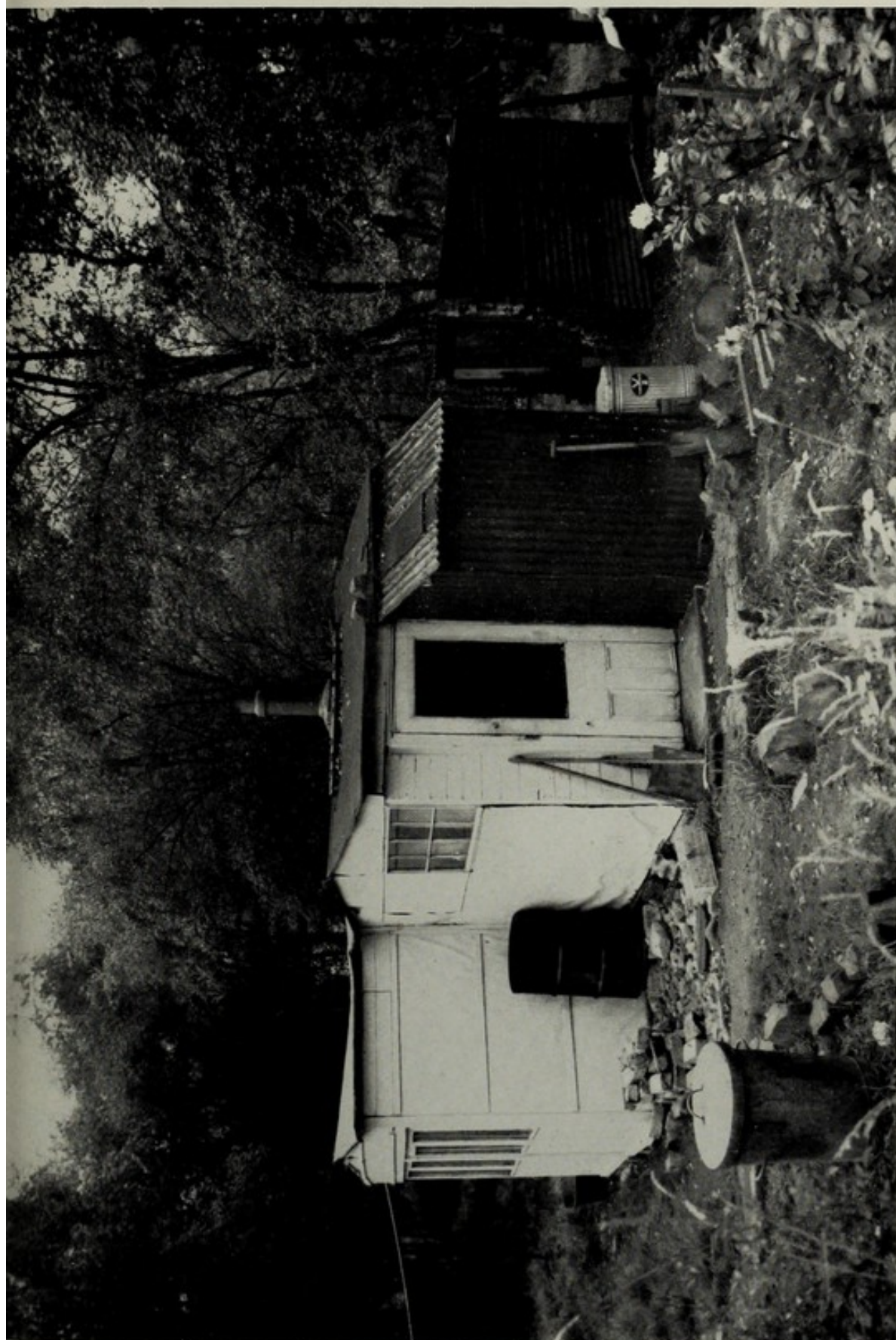
Clearance Areas.—During the year Slum Clearance has continued at a high level.

In all, 26 representations involving 60 areas were made, the numbers of houses in these areas being 2,024, as compared with 19 representations involving 83 areas and 2,549 houses for the previous year.

During the year twelve Public Inquiries were held in respect of the following 77 areas, comprising 1,999 houses :—

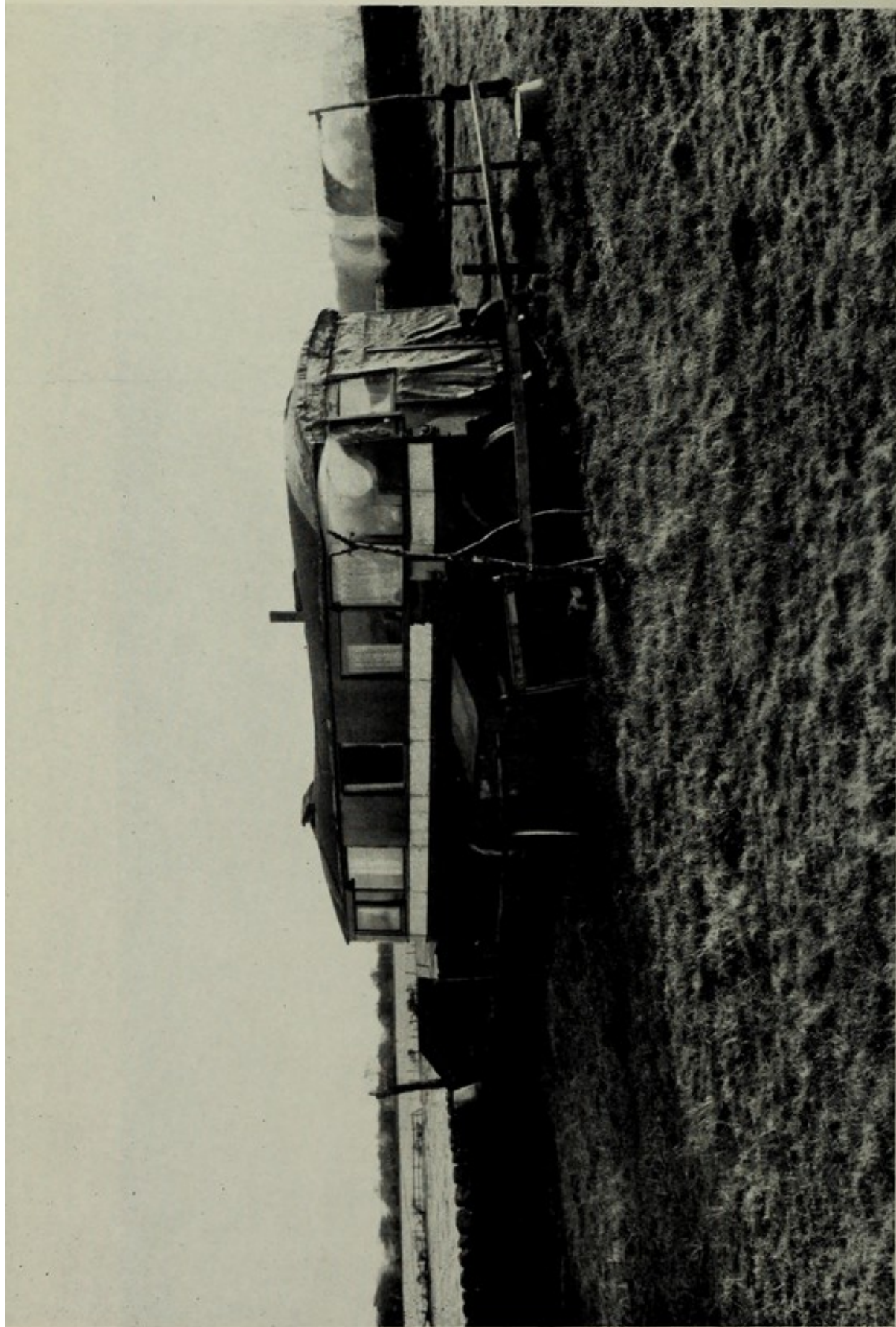
No. of houses	Areas	Date of Inquiry
367	Saville Green Nos. 2, 3, 4, 5, 6, 7, 8, 9 and 10 ..	19.1.55
68	Cobourg Street Nos. 1, 2, 3, 4, 5, 6, 7 and 8 ..	19.1.55
123	New Inn Street Nos. 1, 2, 3 and 4	1.3.55
44	Silver Royd Hill Nos. 1 and 2	1.3.55
84	Armley Road Nos. 1 and 2	8.6.55
21	Alfred Place (Camp Road) Nos. 1, 2, 3, 4, 5 and 6 ..	8.6.55
62	Greenside Road Nos. 1, 2, 3 and 4	14.6.55
168	Upper Wortley Road Nos. 1, 2, 3, 4, 5, 6, 7 and 8 ..	30.8.55
645	Green Road (Burmantofts) Nos. 1, 2, 3, 4 and 5 ..	6.10.55
188	Town Street (Beeston) Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11	25.10.55
162	Church Street (Hunslet) Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 15	22.11.55
67	Villiers Terrace (Camp Road) Nos. 1, 2 and 3	23.11.55

The confirmation of the Minister of Housing and Local Government has been received for 52 areas, the total number of houses affected being 1,418.



Unfit "shanty" dwelling in Moseley Wood, Cookridge, Leeds, dealt with by Individual Action under the Housing Acts. This picture shows method of "shanty" construction. Living room built of tongued and grooved boarding; bedroom added of wooden structure covered by felt; fuel store and pail closet compartment built of corrugated asbestos.

Date of official representation—17.10.55.
Demolition Order made—17 11 55.



Caravan, Lane End Farm, Cookridge, Leeds
Converted from old single-decker 'bus—occupied as dwelling by man, wife and four children. Well water 100 yards distant;
insanitary pail closet; no proper standing or approach path.

Date of official photograph made 21.1.25.

The average number of persons per house in all areas represented since the war shows a further slight drop to 2.89.

During the year 3,854 enquiries about the position of houses in relation to the Council's Slum Clearance Programme were answered.

The table below gives a summary of action under Sections 11, 12 and 25 of the Housing Act, 1936, and Section 10 of the Local Government (Miscellaneous Provisions) Act, 1953 :—

	1953	1954	1955
SECTION 11—HOUSING ACT, 1936 :—			
No. of houses represented for demolition	124	172	87
No. of Demolition Orders made	117	147	99
No. of families concerned	99	138	97
No. of persons concerned	353	443	286
SECTION 12—HOUSING ACT, 1936 :—			
No. of dwellings represented for closing	12	14	23
No. of Closing Orders made	12	14	15
No. of families concerned	12	13	23
No. of persons concerned	44	45	70
SECTION 10—LOCAL GOVERNMENT (MISCELLANEOUS PROVISIONS) ACT, 1953 :—			
No. of dwellings represented for closing	..	..	9
No. of Closing Orders made	..	..	9
No. of families concerned	..	..	9
No. of persons concerned	..	..	30
No. of undertakings accepted from owners	5	6	7
No. of houses demolished (S. 11, H.A., 1936)	132	100	106
No. of houses and rooms closed (S. 12, H.A., 1936)	26	12	15
No. of houses closed (S. 10, L.G.M.P.A., 1953)	..	..	9
No. of families re-housed by Corporation at 31.12.55 (S. 11 and S. 12, H.A., 1936 and S. 10, L.G.M.P.A., 1953)	119	167	124
No. of families awaiting re-housing at 31.12.55 (S. 11 and S. 12, H.A., 1936 and S. 10, L.G.M.P.A., 1953)	42	59	30
No. of families who found own accommodation at 31.12.55 (S. 11 and S. 12, H.A., 1936 and S. 10, L.G.M.P.A., 1953)	28	9	13
No. of families re-housed at 31.12.55 (S.25, H.A., 1936)	46	441	1,121
No. of families who were required to find own accommodation (S. 11 and S. 12, H.A., 1936)	1	..	..
No. of families who found own accommodation (S. 25, H.A., 1936)	3	35	94
No. of houses referred for opinion but not represented	259	191	154
No. of dwellings represented (S. 11 and S. 12, H.A., 1936) which stood in Slum Areas	84	121	58

Table showing the number of houses examined by the Medical Officer of Health as part of the general survey of the city during the year ended December 31st, 1955, and the numbers represented or otherwise dealt with, pursuant to the Public Health Act and Housing Acts, with the corresponding figures for 1953 and 1954.

	1953	1954	1955
Number of new houses erected during the year	3,296	3,345	2,613
(i) By the Local Authority	2,424	2,541	1,659
(ii) By other bodies and persons	872	804	954
I. Inspection of dwelling-houses during the year.			
(1) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts and the number of inspections made	25,884	24,625	24,068
(2) Number of dwelling-houses (included under Sub-head (1) above) which were inspected and recorded under the Housing Consolidation Regulations, 1925, and the number of inspections made	2,289	1,198	2,881
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	582	2,765	2,137
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	147	875	30
2. Remedy of Defects during the year without Service of Formal Notices.			
Number of defective dwelling-houses rendered fit in consequence of informal action	2,442	2,236	2,502
3. Action under Statutory Powers during the year.			
A.—Proceedings under Section 9 of the Housing Act, 1936.			
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	84	319	23
(2) Number of dwelling-houses which were rendered fit after service of Formal Notices :—			
(a) By owners	43	116	28
(b) By Local Authority in default of owners	12	10	12
B.—Proceedings under the Public Health Acts.			
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	1,781	1,430	2,176
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—			
(a) By owners	1,044	649	1,197
(b) By Local Authority in default of owners	57	91	30
C.—Proceedings under Sections 11 and 12 of the Housing Act, 1936.			
(1) Number of dwelling-houses in respect of which			
(a) Demolition Orders were made	117	147	99
(b) Closing Orders were made :—			
(i) Section 12	12	14	15
(ii) Section 10, L.G.M.P.A., 1953	..	..	9
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	132	100	106

Certificates of Disrepair.—Details of the number of applications for Certificates of Disrepair and applications for revocation of Certificates of Disrepair which have been dealt with from 1st April, 1955, until 31st March, 1956, are given in the following table :—

HOUSING REPAIRS AND RENTS ACT, 1954.

RETURN OF CERTIFICATES OF DISREPAIR ISSUED BY THE LOCAL AUTHORITY UNDER SECTION 26(1) OF THE ABOVE ACT BETWEEN 1ST APRIL, 1955 AND 31ST MARCH, 1956.

	(a) Dwelling-houses which have been the subject of a notice of repairs increase of rent under Part II of the 1954 Act.	(b) Dwelling-houses which have <i>not</i> been the subject of a notice of repairs increase of rent under the 1954 Act but in respect of which permitted increases of rent are recoverable under Section 2 (1) (c) and (d) of the Increase of Rent and Mortgage Interest (Restrictions) Act, 1920.
No. of applications for certificates	85	8
No. granted	77	7
No. refused	8	1
No. of applications for revocation of certificates	92	..
No. granted	74	..
No. refused	18	..

Improvement Grants.—The Housing Committee has continued the policy of making grants under the provisions of Section 20 of the Housing Act, 1949, for the improvement of the better type of existing houses by the provision of amenities which are standard equipment in modern dwellings, i.e. a hot water system, bath, lavatory basin and internal water-closet.

All applications are dealt with by the staff of the Sanitation Department from inception to completion. The position from the commencement of the scheme to the end of the year 1955 is as follows :—

Number of houses in respect of which applications received	623
Number of houses in respect of which applications withdrawn	75
Number of houses not suitable for improvement	242
Number of houses suitable for improvement	250
Number of houses in respect of which formal applications have been received	89
Number of formal applications approved by Local Authority	82

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Skinner Lane Areas 1 and 2	19.9.49	C.P.O.	27	71	..	29.5.51	27	27
Upper Carr Place Areas 1, 2, 3 and 4	17.7.51	C.P.O.	30	107	..	26.11.52	30	30
Brown's Yard (North Street)	12.5.52	C.P.O.	32	131	..	1.2.54	32	32
Temperance Street (Kirkstall)	8.9.52	C.P.O.	21	62	..	19.5.51	21	21
Burton Street (Dewsbury Road)	20.10.52	C.O.	33	76	..	28.10.53	33	29
Benson Street (Sheepscar)	19.1.53	C.O.	7	13	..	1.8.53	7	4
Franchise Street Areas 1, 2, 3 and 4	15.12.52	C.P.O.	25	79	..	Areas 1, 2 and 4 :— 10.11.53 Area 3 :— 29.10.53	25	25
Low Moor Side (Holbeck) Areas 1 and 2	16.3.53	C.P.O.	30	101	..	18.1.54	30	30
Freehold Street Area	16.3.53	C.P.O.	20	52	..	3.2.54	20	20
Monkton Street (Dewsbury Road) Area	15.6.53	C.P.O.	30	83	14.1.54	8.3.54	30	30
Camp Street Area	15.6.53	C.P.O.	24	76	..	20.1.54	24	24
Saville Green No. 1 Area	13.7.53	C.P.O.	115	349	9.6.54	22.7.54	115	114
Victoria Place (Camp Road) Area	13.7.53	C.P.O.	10	108	6.4.54	9.6.54	10	10
Carr Road (Camp Road) Areas 1, 2 and 3	13.7.53	C.P.O.	16	65	6.4.54	14.5.54	16	16
Sheepscar Street North Area	21.9.53	C.P.O.	14	38	9.6.54	22.7.54	14	12
Pottery Fields Area No. 1	21.9.53	C.P.O.	23	89	..	28.6.54	23	23
Oldfield Lane Areas 1 and 2	16.11.53	C.P.O.	27	84	9.6.54	22.7.54	27	27
Potternewton Lane Areas 1 and 2	16.11.53	C.P.O.	17	36	19.10.54	24.1.55	17	..
Area No. 1	16.11.53	C.P.O.	8	22	9.6.54	22.7.54	8	8
Area No. 2	..	..	..	..	..	..	..	..
Woodhouse Cliff (Smith's Court) Areas 1 and 2	14.12.53	C.P.O.	16	45	..	..	..	..
Area No. 1	14.12.53	C.P.O.	6	7	..	7.7.54	6	6
Area No. 2	..	..	..	..	..	..	..	..
Cobourgh Street Areas 1 to 8 :—	14.12.53	C.O.	2	6	19.1.55	6.7.55	2	..
Area No. 1	14.12.53	C.P.O.	36	123	19.1.55	6.7.55	36	..
Areas Nos. 2, 3 and 4	..	..	..	..	..	..	..	..

C.O.—Clearance Order C.P.O.—Compulsory Purchase Order

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1930—continued

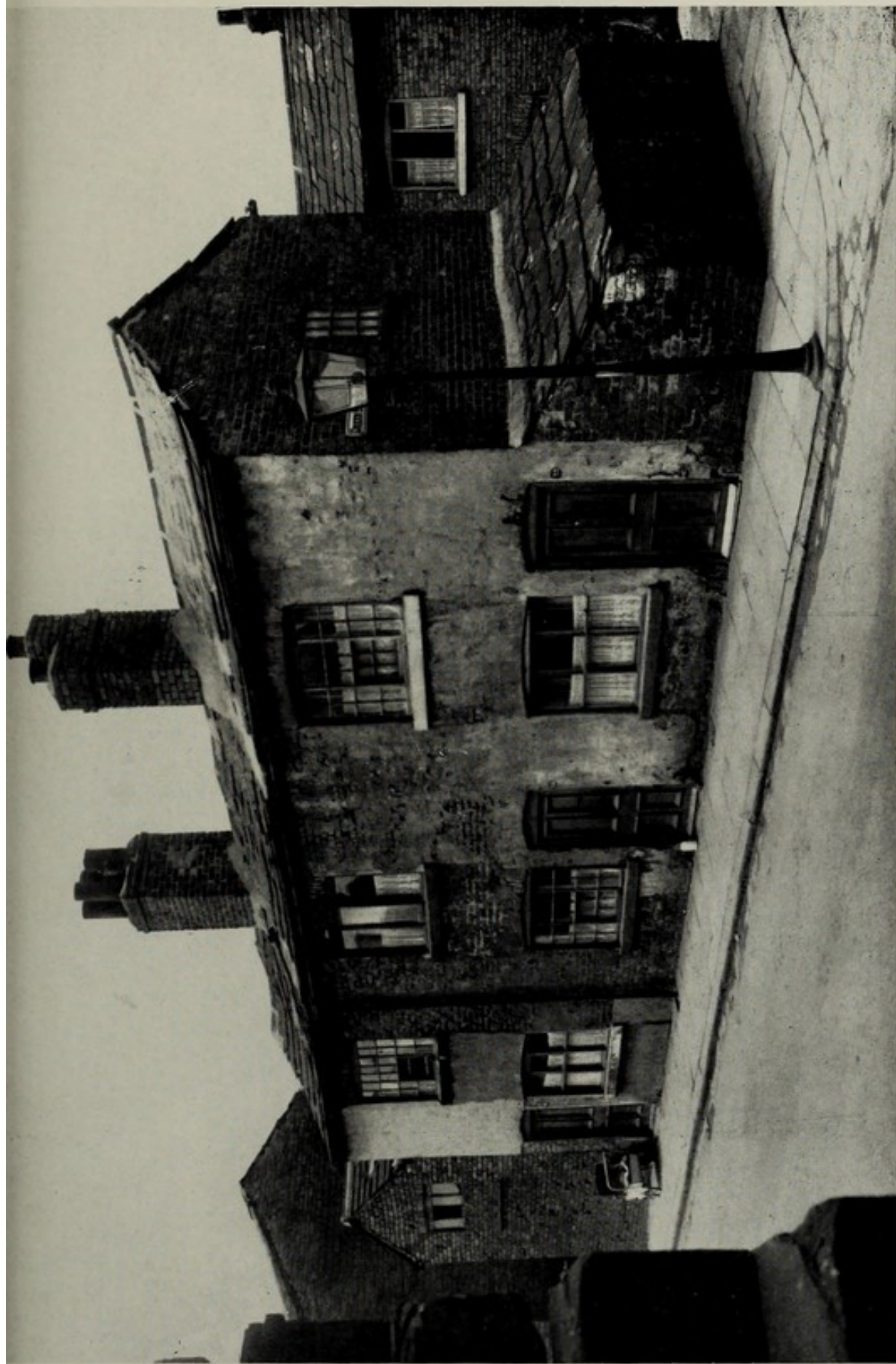
AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Cobourg Street Areas 1 to 8 :—								
Area No. 5 (part) ..	14.12.53	C.O.	4		19.1.55	6.7.55	4	..
Area No. 6 (part) ..	14.12.53	C.O.	5	83	19.1.55	6.7.55	5	..
Area No. 5 (part) ..			5					
Area No. 6 (part) ..			2					
Area No. 7 ..	14.12.53	C.P.O.	11		19.1.55	6.7.55	21	..
Area No. 8 ..			3					
Saville Green Areas 2 to 10 ..	18.1.54	C.P.O.	367	1,140	..	..	..	..
Potternewton Lane Area 3 ..	18.1.54	C.P.O.	3	3	19.10.54	24.1.55	3	50
Carlisle Street (Wellington Road) ..	15.2.54	C.P.O.	42	159	19.10.54	24.1.55	42	20
Charing Cross Street and Scott Street (Woodhouse) ..	15.2.54	C.P.O.	204	595	19.10.54	24.1.55	204	164
Pottery Fields Areas 2 to 7 ..	22.3.54	C.P.O.	153	489	26.10.54	25.2.55	153	7
New Inn Street (Tong Road) :—								
Area No. 1 ..	22.3.54	C.P.O.	5	8	..	24.3.55	5	..
Area No. 2 ..	22.3.54	C.P.O.	6	8	..	24.3.55	6	..
Area No. 3 ..	22.3.54	C.P.O.	43	116	..	5.5.55	43	..
Area No. 4 ..	22.3.54	C.P.O.	69	186	..	24.3.55	69	..
Whitelock Street (North Street) :—								
Area No. 1 ..	22.3.54	C.P.O.	11	47	26.10.54	10.2.55	46	..
Area No. 2 ..	22.3.54	C.P.O.	31	114	26.10.54	20.5.55	31	..
Area No. 3 ..	22.3.54	C.P.O.	16	53	26.10.54	20.5.55	16	..
Area No. 4 (part) ..	22.3.54	C.O.	2	8	26.10.54	16.2.55	2	..
Area No. 4 (part) ..	22.3.54	C.P.O.	39	170	26.10.54	20.5.55	39	1
Upper Wortley Road Areas 1 to 8 ..	21.4.54	C.P.O.	171	435	30.8.55	..	..	..
Silver Royd Hill Areas 1 and 2 ..	21.4.54	C.P.O.	44	111	1.3.55	16.2.55	44	..
Greenside Road (Lower Wortley)								
Areas 1 to 4 ..	21.5.54	C.P.O.	62	173	14.6.55	4.8.55	62	..
Green Road (Burmantofts) Areas 1 to 5 ..	16.7.54	C.P.O.	645	1,805	6.10.55	..	..	..
Town Street (Beeston) Areas 1 to 11 ..	24.9.55	C.P.O.	184	413	25.10.55	..	..	..
Armley Road Areas 1 and 2 ..	19.10.54	C.P.O.	84	229	8.6.55	3.8.55	84	..
Oatland Row (Meawood Road) ..	19.11.54	C.P.O.	37	86	..	19.5.55	..	..
Church Street (Hunslet) Areas 1 to 15 ..	19.11.54	C.P.O.	162	440	22.11.55	..	..	..
Cross Lane Farnley Areas 1 to 5 ..	17.12.54	C.P.O.	146	374	..	..	..	..

C.O.—Clearance Order

C.P.O.—Compulsory Purchase Order

SUMMARY OF ACTION UNDER SECTION 25 OF THE HOUSING ACT, 1936—continued

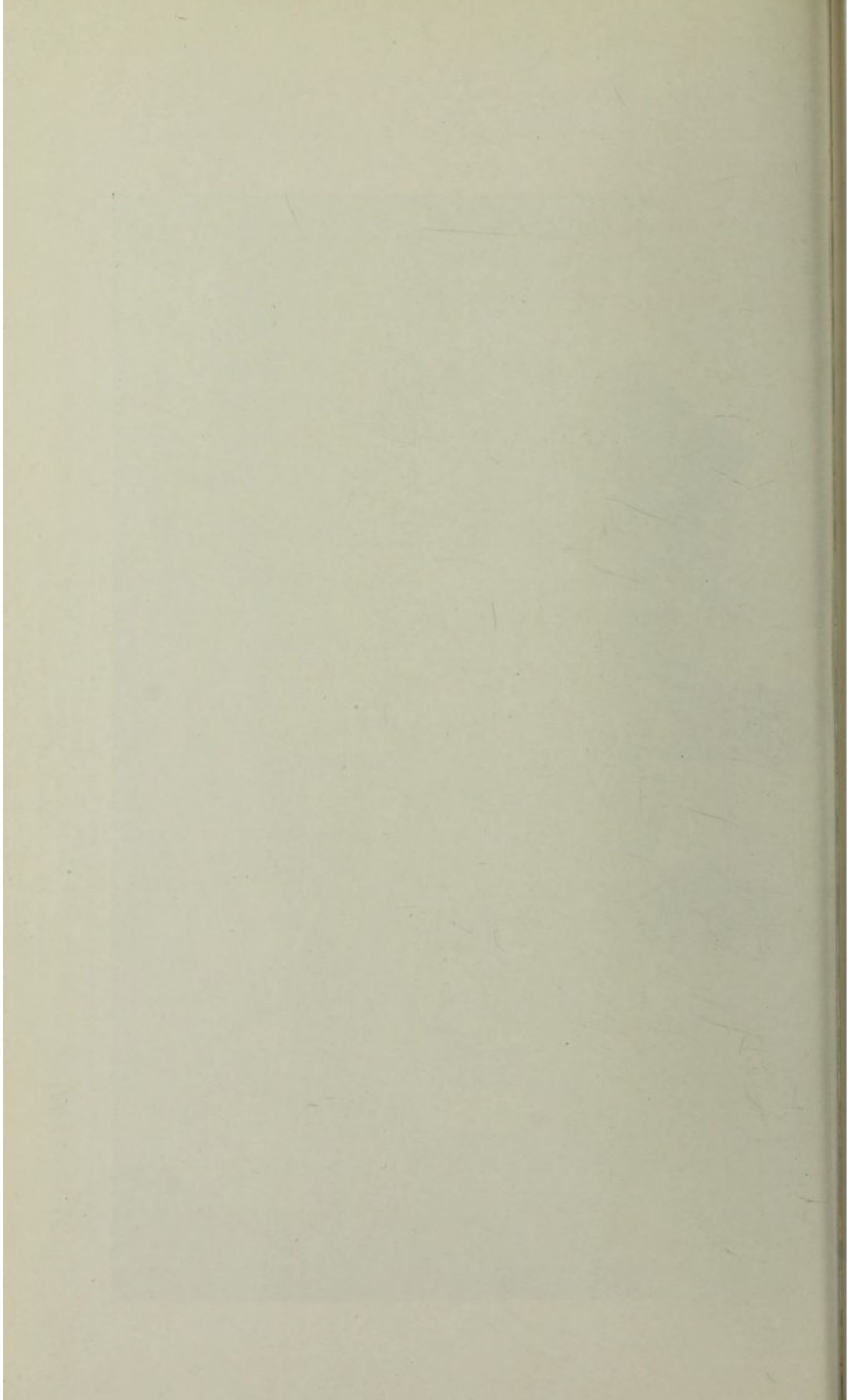
AREA	Date of Representation	Type Order	No. of Houses	Population	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Alfred Place (Camp Road) Areas 1 to 6	17.12.54	C.P.O.	21	92	8.6.55	4.8.55	21	..
Villiers Terrace (Camp Road) Areas 1 to 3	21.1.55	C.P.O.	67	491	23.11.55	..	..	..
Belinda Street (Hunslet) Areas 1 to 6	18.2.55	C.P.O.	126	391	..	..	..	..
Michael Street (Hunslet)	18.2.55	C.P.O.	12	28	..	2.11.55	12	..
Minor Street (Kirkstall Road)	18.2.55	C.P.O.	14	30	..	4.8.55	..	..
Langham Street (Wellington Road)	25.3.55	C.P.O.	297	913	..	..	..	..
Milnes Street (Wellington Road) Areas 1 and 2	25.3.55	C.P.O.	43	108	..	..	..	..
Beckett Street (Burmantofts) Areas 1 and 2	25.3.55	C.P.O.	429	1,111	..	..	..	..
Meynell Street (Holbeck) Areas 1 to 5	20.5.55	C.P.O.	443	1,194	..	..	..	..
Northfield Villas (Northfield Terrace)	16.6.55	C.P.O.	4	26	..	..	..	..
Nevin Street (Hunslet Road)	14.7.55	C.P.O.	13	36	..	..	..	..
Ramsden Terrace (North Street)	14.7.55	C.P.O.	4	17	..	..	..	..
Buslingthorpe Lane (Meanwood) Areas 1 to 7	14.7.55	C.P.O.	179	471	..	..	..	..
West End Terrace (Hyde Park) Areas 1 to 4	14.9.55	C.P.O.	34	56	..	..	..	..
Burley Village (Burley Road) Areas 1 and 2	14.9.55	C.P.O.	56	105	..	..	..	..
Oatland Houses (Dewsbury Street)	20.10.55	C.P.O.	3	15	..	..	..	..
Meanwood Street (Meanwood Road) Areas 1 to 4	20.10.55	C.P.O.	71	207	..	..	..	..
Bentley Cottages (Meanwood)	17.11.55	C.P.O.	15	46	..	..	..	..
Burton Row (Hunslet) Areas 1 and 2	17.11.55	C.P.O.	40	79	..	..	..	..
Rutland Terrace Areas 1 to 4	17.11.55	C.P.O.	55	173	..	..	..	..
Belle Isle (Middleton) Areas 1 and 2	17.11.55	C.P.O.	21	60	..	..	..	..
Louis Street	17.11.55	C.P.O.	2	25	..	..	..	..
Newsam Square (Halton)	15.12.55	C.P.O.	27	64	..	..	..	..
Sowden Row (Crossgates) Areas 1 and 2	15.12.55	C.P.O.	10	21	..	..	..	..
Mistress Lane (Armley) Areas 1 and 2	15.12.55	C.P.O.	38	101	..	..	..	..
Strawberry Road (Hall Lane)	15.12.55	C.P.O.	4	10	..	..	..	..
Byron Street	15.12.55	C.P.O.	7	26	..	..	..	..



*This shows 3 of the 62 unfit houses in the Greenside Road Clearance Areas, Leeds, 12
old and showed well-marked decay and dilapidation.*

Date of official representation—18.5.54. Date of Inquiry—14.6.55.

Compulsory Purchase Order made—2.3.55. Date of confirmation—4.8.55.



Food Hygiene

FOOD INSPECTION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,
Chief Sanitary Inspector

During the year under review, 4,899 visits were made by inspectors to premises in which foodstuffs intended for human consumption are manufactured, sold or stored. Of these, 1,606 were to premises registered with the Health Committee under the provisions of Section 14 of the Food and Drugs Act, 1938, that is, to premises used for the manufacture of foods such as sausages, pork products, pickles and sauces, fried fish and ice-cream. The remaining 3,293 inspections were of non-registrable premises such as bakehouses, restaurants, canteens, cafes, butchers' shops, provision merchants, etc. Conditions, at least as far as the structure is concerned, at the registered premises have generally been found to be good, the possibility of a refusal by the Health Committee to register premises or to renew existing registration being sufficient to ensure that these places are properly kept. The same cannot be said of the other non-registered food-handling premises. Whilst the majority are in reasonably good condition, there are a few places which, on structural or other grounds, need careful supervision and very frequent visits. The alterations and improvements secured in all these food premises are set out on lines 129 to 135 of the table of work done by sanitary inspectors given on page 197 of this report.

Up to the end of the year, the powers to deal with these places were contained in Sections 13 and 14 of the Food and Drugs Act, 1938, and in Byelaws made by the City Council for the handling, wrapping and delivery of food intended for human consumption, under the provisions of Section 15 of the Act. The Food and Drugs Act, 1938, has now been repealed and replaced by the Food and Drugs Act, 1955, and the Food Hygiene Regulations, 1955, which came into operation on 1st January, 1956. 1955 was, therefore, the last full year in which the old legislation operated and it will be interesting to see how effective the new powers will prove and in particular the more stringent requirements of the Food Hygiene Regulations.

In the report for 1954, it was mentioned that agreement had been reached on the provision of new butchers' shops in the Leeds Market. The construction of these was started in 1955 but was not completed by the year-end. However, the work is progressing satisfactorily and the new shops will be a very great improvement upon the existing ones. With the coming into operation of the Food Hygiene Regulations, the Department's work in connection with the proper handling of food will greatly increase, and the inspectors will be in a much stronger position in asking for alterations to privately owned premises now that they can point to improvements being made in the Corporation's own Markets. In fact, of course, in addition to the new butchers' shops, a good deal of work has been put into the improvement of other stalls in the Market, notably those which are being used for the sale of confectionery and bread, groceries and provisions.

Transport and Handling of Meat.—The facilities available at the Leeds Abattoir for the loading of meat into vans are not satisfactory. The majority of vehicles are metal in structure and a number have corrugated floors. Some of the vehicles in use are fitted with overhead rails, and on these, small carcasses of sheep, pigs and calves are hung; but quarters of beef and large pig carcasses have to be stacked on the floors of the vehicles owing to the absence of satisfactory facilities for loading in a hanging position.

Transport of Fish.—There has been further improvement with regard to the cleanliness of fish boxes for conveyance of fish from the ports to the Leeds Wholesale Fish Market. Only very rarely during the year has it been necessary to draw attention to dirty boxes.

Cafes, Canteens, etc.—During the year, 1,389 visits were paid by inspectors to cafes, canteens, snack bars and other places where meals and light refreshments are sold to members of the public. Several new snack bars and cafes have been opened during the year and in most instances the proprietors have approached the Department in advance to enquire what standards were required. In one instance a snack bar was opened without prior notification to the Department and inspectors who subsequently came across this, quite by accident, had to ask for alterations to be made. There is, of course,

no obligation upon any person to notify the Department when opening a catering establishment and it is quite possible for sub-standard premises to be in use for some time before the Health Department becomes aware of them.

The routine work of the Department continues to secure improvements and alterations to cafe premises. Much of the work is done by direct verbal representations to the proprietors, although in some instances it is thought advisable to serve written notifications of alterations required. The conditions found by inspectors during the year have been reasonably good, although there is always room for improvement in particular premises. Defects and unsatisfactory conditions which have been dealt with this year by notice may be classified under the following headings :—

Lack of ventilation in food rooms	5
Defective structural matters (floors, walls, ceilings, etc.)	12
Dirty conditions (premises and/or equipment) ..	30
Lack of sufficient washing facilities	3
Worn equipment (sinks, utensils, etc.)	11
Lack of accommodation for personal effects ..	5
Lack of proper food storage facilities	2
Other matters	27

Inspectors visiting factories inspect the canteens and messrooms as a matter of routine and have, during the year, had occasion to serve 7 notices requiring improvements at these places in addition to a number of verbal requests to managements. The matters dealt with include :—

Inadequate or insufficient washing facilities ..	2
Unsatisfactory sinks	1
Dirty or defective or unsuitable walls, floors and ceilings	7
Dirty and inadequate equipment .. * ..	5
Inadequate means of ventilation	2
Unsuitable storage accommodation (food, crockery, staff clothing, etc.)	3
Other matters	1
Inadequate refuse accommodation	3

Conditions generally in these industrial canteens have been found to be reasonably satisfactory, although they are not generally as good structurally as the commercial kitchens where meals are prepared for sale to the general public. However, the new Food Hygiene Regulations will be of very considerably use in bringing all these places up to a satisfactory standard. In this connection the Department has received considerable help from H.M. Factory Canteen Adviser, particularly with regard to the notification of canteens in need of improvement.

One mobile snack bar was approved during the year, approval being based upon the recommendations for mobile food vans contained in paragraphs 47 and 56 of the Report of the Catering Trades Working Party, which was issued in 1951. This snack bar was submitted voluntarily for approval. There is not at present any statutory requirement that the proprietors of these vans shall submit them for prior approval by the Local Authority and there is no certain way of knowing when such vehicles are brought into use although the new Food Hygiene Regulations will enable hygienic control to be maintained when in use. The projected regulations which are to be made by the Minister in connection with the licensing of mobile food vans should cover this point.

Ice-Cream Premises.—During the year, 563 visits were paid to the premises in the city which are used for the manufacture or sale of ice-cream.

Fish Frying Premises—The number of visits paid to registered fish-frying premises was 809. Three applicants were granted registration subject in two instances to the carrying-out of works.

Other Registered Food-Preparing Premises.—During the year 3,527 visits were paid to other registered food-preparing premises such as those used for the preparation or manufacture of sausages, pork products, meat pies, jams, pickles and sauces.

Ten applications for registration of premises used for one or other of these purposes were granted subject in 6 cases to the carrying-out of works of alteration to the premises.

It was necessary to serve 280 informal notices in respect of premises contravening the law and in 10 instances statutory notices had to be served.

Statistics with regard to registration of premises under Section 14 of the Food and Drugs Act, 1938, are set out in the following table :—

REGISTRATION

Number of premises registered for the manufacture of ice-cream during 1955	..
Number of premises registered for storage of ice-cream during 1955	..
Number of premises registered for the sale of ice-cream during 1955	62
Number of premises registered for the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale (3 fried fish shops, 10 manufacturers of sausages, potted meat, meat pies, etc.)	13
Number of notifications of change of occupier received :— ice-cream premises	48
food-preparing premises	48
Number of premises removed from register :— Ice-cream premises (manufacture)	..
Ice-cream premises (storage)	..
Ice-cream premises (sale)	16
Food preparing premises	6
Number of premises on the register 31st December, 1955 :— (a) used for manufacture of ice-cream	55
(b) used for the sale of ice-cream	1,355
(c) used for the storage of ice-cream intended for sale	9
(d) used for the manufacture of sausages, or preparation of preserved food	759

The operator of a mobile fried fish and chip van who refused to allow the inspector to make an inspection of the vehicle was summoned for obstructing a duly authorised officer in the course of his duties. The defendant, who had previously been fined £5 for the dirty and dilapidated condition of the vehicle, was found guilty and fined a further £5.

Food Sampling.—Supervisory Inspector H. Long reports that the inspectors in the Food and Dairies Section took 2,545 formal and 10 informal samples of milk, 121 formal and 35 informal samples of foods and drinks, and 11 formal and 3 informal samples of drugs.

Administrative action was taken in all cases where the samples were found to be adulterated or deficient. Minor cases of adulteration or deficiency were dealt with by a warning letter to the firm or persons responsible. Serious cases were dealt with by prosecution and the results of the summonses issued under the Food and Drugs Act, 1938, during the year are shown in the tables on pages 153 and 154.

Extraneous Matter in Food.—The number of complaints received from the public of the finding of extraneous matter in food has shown a notable increase in the past twelve months. In nine instances it was necessary to institute legal proceedings and the results of the hearing in each case are set out in the table on page 150. In all other instances which have been brought to the notice of the Department suitable action has been taken.

During the year the following extraneous matter has been found in food :—

- Nail in fish and chips
- Nail in cake
- Piece of rubber in bottle of orange juice
- *Piece of wood in toffee
- Piece of paper in cake
- Bristle hairs in biscuit
- Mouldy sausage roll
- Glass in sandwich
- Milk bottle tops in bottle of milk
- Cement in bottle of sterilised milk
- String in loaf of bread
- Dirty milk bottles (4)
- Insect in loaf of bread (3)
- *Cockroach in loaf of bread (2)
- Piece of rubber in a biscuit
- Piece of leather in polony
- Decayed tooth in loaf of bread
- *Hairs in quantity of minced chicken
- *Piece of metal in vienna loaf
- Dark flocculent matter in bottle of ginger beer
- Mouldy pork pie
- Maggot in meat pie
- Insect in tin of Tuna
- Mouldy wrapped loaf

(continued)

- Gritty particles in strained cream cereal
- Cement in loaf of bread
- String in currant loaf
- *Glass in ice-cream
- Piece of metal in packet of savoury straws
- Quantity of stockinette wrapping in tin of stewed steak
- Metal screw in bag of hot salted peanuts
- Elastoplast in tin of strawberries
- Nail in walnut cake
- Larva in bread cake
- Fly in sausage roll
- Fly in strawberry jam
- Cigarette end in packet of potato crisps
- *White loaf containing thick black grease (2)
- *Bottle of mineral water containing cresols
- Loaves of bread containing foreign matter (9)

* denotes legal proceedings taken

EXTRANEOUS MATTER IN FOOD.

SUMMONSES ISSUED DURING 1955, UNDER THE FOOD AND DRUGS ACT, 1938.

Article	Extraneous Matter	Result of Hearing
Wrapped Toffee	Contained a piece of wood	Fined £1 and ordered to pay £1 5s. costs Milk supplier to manufacturers.
Large White Loaf	Contained a cockroach	Fined £2 and ordered to pay 8s. 6d. costs. Baker.
Vienna Loaf	Contained a piece of metal	Fined £5. Baker.
Ice-Cream	Contained a piece of glass	Fined £2 and ordered to pay £1 15s. costs. Vendor.
Small White Loaf	Contained thick black grease	Fined £10. Baker.
Sliced White Loaf	Contained thick black grease	Fined £10 and ordered to pay £1 17s. 6d. costs. Baker.
Wrapped Sliced Loaf	Contained cockroach on base of loaf	Given absolute discharge and ordered to pay £1 costs. Baker.

Fertilisers and Feeding Stuffs Act, 1926.—During the year, 14 formal samples of fertilisers and 2 formal samples of feeding stuffs were taken under the above-mentioned Act and submitted to the Agricultural Analyst for examination. Six of the fertiliser samples were classified as unsatisfactory by analysis or where some non-compliance with the provisions of the Act has been noted, and in each case the matter was taken up with the manufacturers concerned.

Rag Flock and Other Filling Materials Act, 1951.—During the year the licences of two premises used for the manufacture of rag flock and one licence of premises used for the storage of rag flock were renewed.

No applications were received for the registration of premises where rag flock and other filling materials are used. The total number of registered premises in the city is now 55.

Six samples of rag flock or other filling materials were taken and submitted for analysis by the prescribed analyst. All passed the prescribed tests.

Ice-Cream Sampling.—During the year 30 samples of ice-cream were taken for bacteriological examination from the places of manufacture or from local vendors. All the laboratory results were communicated to the ice-cream manufacturers and vendors. When the result showed an unsatisfactory ice-cream, a special follow-up visit was made to advise on improved methods. Most frequently the cause of bad results has been found to be inadequate cleansing of plant and inefficient sterilisation.

The results are shown in the following table :—

METHYLENE BLUE TEST

Grade	No. of Samples	Percentage	Remarks
1	13	43·3	Good
2	4	13·3	Satisfactory
3	11	36·7	Unsatisfactory
4	2	6·7	Very unsatisfactory

Legal Proceedings.—*Food and Drugs Act, 1938, and Byelaws under Section 15, Food and Drugs Act, 1938.*—Proceedings were taken against a butcher for the dirty condition of his shop premises and a fine of £10 was imposed by the Court.

Pharmacy and Poisons Act, 1933 (Part II).—The administrative year for the purpose of the above-mentioned Act is the period 1st May to 30th April. The following table gives a detailed summary of the work done during the year ended 30th April, 1956.

Persons on the List on 30th April, 1955	442
Persons added to the List during the year	39
Persons removed from the List during the year	48
Persons on the List on 30th April, 1956	433
Premises on the List on 30th April, 1955	578
Premises added to the List during the year	41
Premises removed from the List during the year	54
Premises on the List on 30th April, 1956	565
Visits paid to :—	
1. Listed Premises in connection with new applications	13
2. Listed Premises in connection with unpaid fees	..
3. Listed Premises for routine inspection	68
4. Unlisted Premises	..
Contraventions :—	
Persons found to be selling Part II Poisons on Unlisted Premises	..
Listed Sellers found with incorrectly labelled Part II Poisons in stock	..
Contraventions dealt with :—	
Persons ceasing to sell Part II Poisons from Unlisted Premises	..
Persons selling Part II Poisons from Unlisted Premises who subsequently applied for listing	..
Listed Sellers who have corrected labels found to be not in accordance with requirements as to labelling	..

Pharmacy and Medicines Act, 1941.—No contraventions came to the notice of the Department during the year.

SUMMONSES ISSUED DURING 1955 UNDER THE FOOD AND
DRUGS ACT, 1938.

No. of Sample	Article.	Adulteration or Deficiency.	Result of Hearing
1353/G	Milk	24.0% deficient in fat ..	Fined £40 and ordered to pay £8 7s. costs. Producer.
1/B	Milk	17.0% deficient in fat ..	
2/B	Milk	12.0% deficient in fat ..	
113/L	Buttered Milk Cake	" Butter " consisted of a mixture of 65% butter and 35% margarine	Fined £1 and ordered to pay £2 5s. 6d. costs. Vendor.
126/L	Milk	10.0% of added water ..	Fined £30 and ordered to pay £11 5s. 3d. costs. Producer.
127/L	Milk	10.0% of added water ..	
133/L	Milk	12.5% of added water ..	
134/L	Milk	8.0% of added water ..	
145/L	Milk	8.0% of added water ..	
146/L	Milk	12.0% of added water ..	
167/L	Meat Pie	Contained a rodent dropping	Fined £10 and ordered to pay £1 15s. costs. Baker.
364/L	Milk	9.0% of added water ..	Fined £5 and ordered to pay £2 2s. costs. Producer.
374/L	Milk	7.0% of added water ..	
527/L	Genuine Minced Chicken	Contained a number of hairs	Fined £5 and ordered to pay £1 15s. costs. Manufacturer.
749/L	Milk	7.5% of added water ..	Given a conditional discharge on payment of £1 15s. costs. Producer.
768/L	Pork Sausage	15.4% deficient in meat content	Given a conditional discharge and ordered to pay £1 19s. costs.
788/L	Milk	3.5% of added water ..	Fined £4 and ordered to pay £4 4s. costs. Producer.
789/L	Milk	3.5% of added water ..	
791/L	Milk	9.5% of added water ..	
798/L	Milk	12.5% of added water ..	
992/L	Milk	8.0% of added water ..	Fined £4 and ordered to pay £3 3s. costs. Producer.
993/L	Milk	3.0% of added water ..	
360/B	Pork Sausage	23.0% deficient in meat content	Fined £10 and ordered to pay £1 15s. costs. Retailer.

(continued)

SUMMONSES ISSUED DURING 1955, UNDER THE FOOD AND
DRUGS ACT, 1938.

No. of Sample	Article	Adulteration or Deficiency	Result of Hearing
416/B	Milk	7.0% of added water ..	Fined £50 and ordered to pay £7 7s. costs. Producer.
418/B	Milk	6.0% of added water ..	
419/B	Milk	5.5% of added water ..	
420/B	Milk	4.0% of added water ..	
421/B	Milk	3.0% of added water ..	
422/B	Milk	7.0% of added water ..	
423/B	Milk	5.5% of added water ..	Fined £4 and ordered to pay £5 4s. 5d. costs. Producer.
1415/B	Milk	8.0% of added water ..	
1421/B	Milk	10.0% of added water ..	
1430/B	Milk	4.0% of added water ..	
1431/B	Milk	4.0% of added water ..	Fined £3 and ordered to pay £2 2s. costs. Producer.
1418/B	Milk	7.0% of added water ..	
1425/B	Milk	5.5% of added water ..	
1420/B	Bottle of Mineral Water	Contained 30 parts per million Cresols	Fined £5 and ordered to pay £1 15s. costs. Manufacturer.

SAMPLING OF MILK

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,
Chief Sanitary Inspector.

Supervisory Inspector H. Long reports that the inspectors in the Food and Dairies Section have, in all, taken 4,256 samples of milk for examination.

The Milk (Special Designation) (Specified Areas) Order, 1955.—This Order came into operation on 21st March, 1955, within an area which included the County Borough of Leeds. Briefly, the Order prohibits the retail sale of ungraded milk and is an important step forward in food hygiene.

The complete change-over in Leeds to the sale of designated milks proceeded smoothly and efficiently. Prior to the introduction of the Order there was very little ungraded raw milk sold in the city. The change-over, therefore, showed little variation in the types of milk consumed by the public and no difficulties have been experienced.

The bulk of the milk supply of Leeds is handled by the three large dairies in the city and the remainder is obtained from a dairy which is situated outside the city boundaries and from two producer-retailers. The daily average consumption of Pasteurised and Tuberculin Tested Pasteurised milk is in the region of 30,000 gallons and, in addition, there is consumed daily approximately 5,200 gallons of Sterilised milk.

Raw Milk.—The sale of raw milk is now confined to Tuberculin Tested Farm Bottled milk, including the Jersey and Channel Island milks. This amounts to approximately 150 gallons per day. The sale of raw milk is, therefore, approximately 0.4 per cent. of the total amount of milk consumed. Farm bottled milk sales vary considerably, depending on the time of the year, and there is always a greater sale in the winter months than in the summer months. The seasonal sale has been similar prior to and after the date of operation of the Specified Areas Order. No offences against the provisions of the Order have been observed and the position appears to be satisfactory.

Adulterated Milk.—Nine cases of adulterated and fat deficient milks have resulted in prosecutions.

Four summonses were issued against large dairy firms under the Milk and Dairies Regulations, 1949, Article 26(1), for filling an unclean milk bottle.

Dairy Inspection and Milk Sampling.—The following visits were paid during the year by the Food and Drugs Inspectors :—

To dairies	166
To pasteurising and sterilising plants ..	613
To bottled milk shops	20
Other visits of inquiry	106
No access visits	1
Attendance at Court	34
Visits in connection with adulterated samples	53

During the year, 1,094 samples of milk were submitted to the City Analyst for bacteriological examination. An additional seven samples of tuberculin tested (farm bottled) milk were taken but the test was invalidated owing to overnight temperature exceeding 40°F. The samples were taken from dairies, day nurseries, schools and retailers in the streets. They were taken from the following grades of milk :—

" Pasteurised "	447
" Tuberculin Tested " (Pasteurised) ..	160
" Sterilised "	102
" Tuberculin Tested " (Farm Bottled) ..	392

The accompanying tables give detailed information of the results of the tests applied :—

METHYLENE BLUE (REDUCTION) TEST.

Designation		Total Samples Taken	Result of Test			
			Satisfactory		Unsatisfactory	
			No.	Percentage	No.	Percentage
*Pasteurised	{ Dairies ..	252	251	99·6	1	0·4
	{ Schools ..	118	108	91·5	10	8·5
	{ Day Nurseries	77	77	100·0	..	..
*Tuberculin Tested (Pasteurised)	{ Dairies ..	155	155	100·0	..	..
	{ Day Nurseries	5	5	100·0	..	..
†Tuberculin Tested (Farm bottled) Dairies		385	332	86·2	53	13·8

*Satisfactory samples not to decolourise Methylene Blue at 37°C. in 30 minutes.

†Satisfactory samples not to decolourise Methylene Blue at 37°C. in 4½ hours, May to October, or 5½ hours, November to April.

PHOSPHATASE TEST.

Designation		Total Samples Taken	Result of Test			
			Satisfactory		Unsatisfactory	
			No.	Percent-age	No.	Percent-age
Pasteurised	Dairies ..	252	246	97·6	6	2·4
	Schools ..	118	117	99·2	1	0·8
	Day Nurseries	77	77	100·0	..	..
Tuberculin Tested (Pasteurised)	Dairies ..	155	155	100·0	..	..
	Day Nurseries	5	5	100·0	..	..

Satisfactory samples not to give colour reading of more than 2·3 Lovibond Blue Units.

TURBIDITY TEST.

Designation		Total Samples Taken	Result of Test			
			Satisfactory		Unsatisfactory	
			No.	Percent-age	No.	Percent-age
Sterilised .. ..	.. ..	102	102	100·0	..	..

Bacteriological Examination of Milk.—The high number of failures of the methylene blue test arose chiefly during the months of July, August and September when the daily temperatures were between 70° and 80°F.

The prescribed methylene blue test for Pasteurised milk contained in the Third Schedule, Part III of the Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949, begins by saying "on arrival at the laboratory . . ." and goes on to say that where the temperature has exceeded 65°F. the tests shall be void. From this paragraph it is obvious that the details relate only to the procedure that shall be adopted after the delivery of samples at the laboratory. There are, however, occasions during the summer months when the atmospheric shade temperature in the immediate vicinity of the milk before the sample is taken will have exceeded 65°. This may happen where school milks have been deposited in school yards and have been exposed to the sun's rays. Under such circumstances the applicability of the methylene blue test may be doubted.

Of the seven milks which failed to pass the phosphatase test, five were from one producer-retailer whose method of pasteurisation was the "Holder" process. This milk producer was called upon to appear before the Sub-Health (Sanitation, Food and Drugs) Committee to show cause why his licence to pasteurise milk should not be suspended or revoked. The dairyman was warned to exercise more care in the future and it was resolved that no action be taken at the moment and that further samples should be taken. The plant is being kept under constant surveillance and so far there have been no more unsatisfactory results. The remaining two failures were from two different dairies.

Flavoured Milk.—In the early part of the year, certain of the larger dairy companies were considering the production of flavoured milk. Experiments were carried out but the scheme has not been proceeded with.

Dairies and Milk Sellers.—The following tables show the number of registered dairies and milk sellers in the city.

DISTRIBUTORS OF MILK AND DAIRY PREMISES.

	Dairies	Distributors of milk
No. on the register on 31st December, 1954 ..	47	49
No. added to the register during the year ..	..	..
No. removed from the register during the year ..	2	2
No. on the register on 31st December, 1955 ..	45	47

DISTRIBUTORS OF BOTTLED MILK ONLY.

No. of distributors of milk on the register on 31st December, 1954	897
No. added to the register during the year	126
No. removed from the register during the year	115
No. of distributors of milk on the register on 31st December, 1955	908
No. of shops, etc., from which bottled milk only is sold, on 31st December, 1955	1,170

GRADED MILK LICENCES.

Description	Number in force on 31st December		
	1953	1954	1955
To use the designation "Tuberculin Tested"—			
1. To sell by retail	128	150	159
To use the designation "Pasteurised"—			
1. Pasteurisers' Licences	6	5	5
2. To sell by retail	161	164	174
To use the designation "Sterilised"—			
1. Sterilisers' Licences	2	2	2
2. To sell by retail	1,062	1,127	1,108

Biological Tests.—During the year, 600 samples of milk were submitted to the City Bacteriologist for biological examination for the presence of tubercle bacilli. The results are shown in the following table :—

Designation	Total Samples Taken	Result of Test			
		Positive		Negative	
		No.	Percentage	No.	Percentage
Tuberculin Tested ..	317	2	0·6	315	99·4
Pasteurised	10	..	..	10	100·0
Ungraded	273	12	4·4	261	95·6
Total	600	14	2·3	586	97·7

Milk and Dairies Regulations, 1949.—Regulation 20.—During the year it was found necessary to serve five notices under the above-mentioned Regulations.

Fourteen of the 600 samples taken for biological examination were found to contain tubercle bacilli ; these were taken from twelve producers.

The milk of 10 of these 14 samples was produced outside the city and was already being pasteurised before retail sale (the samples were taken before pasteurisation). Details of the 10 samples were forwarded to the Medical Officer of Health of the district and to the Divisional Veterinary Officer of the Ministry of Agriculture, Fisheries and Food (Animal Health Division) for investigation.

The remaining four samples were taken from producers in the city and in consequence Notice under Regulation 20 was served on the farmers requiring that all milk produced at their farms should be heat treated to the satisfaction of the Medical Officer of Health. Following investigations by the Ministry's Veterinary Inspectors, six cows were slaughtered under the Tuberculosis Order, 1938, the notices then being withdrawn.

A further notice was served under Regulation 20, Section 3(a), which deals with milk suspected to be infected with a notifiable disease (in this case Poliomyelitis). This action was taken following the receipt of information regarding a case of a notifiable disease which had occurred in the family of a milk producer with premises outside the city who consigns milk to a wholesale dairy in this city. This notice was served on the dairy concerned requiring that all milk from this producer should be treated by a process of sterilisation to the satisfaction of the Medical Officer of Health. Under Sub-Section 3(a) of the above Regulations, the notice shall operate for a period not exceeding 24 hours and in this case the notice was served daily for a period of 16 days.

Legal Proceedings.—*Milk and Dairies Regulations, 1949, Article 26(1).*—Two large firms or retail distributors of milk were summoned on two occasions for filling dirty bottles with pasteurised milk. Both firms were found guilty and fined £20, £5, £15 and 5s. 6d. costs and £2 respectively.

Article 30(a) (b).—A retail distributor of milk was summoned for depositing milk on the highway and was given a conditional discharge and ordered to pay 4s. costs.

MEAT INSPECTION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,

Chief Sanitary Inspector.

Statistical data of this section of the Report has been compiled from reports submitted by Mr. D. Forbes, Supervisory Sanitary Inspector for Meat and Other Foods.

Animals Slaughtered.—During the year, 251,469 animals were slaughtered for human consumption at the Public Abattoir and private slaughterhouses.

The following table gives an analysis of the animals slaughtered for human consumption at the Public Abattoir and private slaughterhouses.

ANIMALS SLAUGHTERED AT THE PUBLIC ABATTOIR AND PRIVATE SLAUGHTERHOUSES.

	Year	Cattle ex. Cows	Cows	Calves	Sheep	Pigs	Total
Public Abattoir ..	{ 1954	21,250	8,507	30,847	94,778	29,104	184,486
	{ 1955	18,783	9,661	41,351	100,514	25,375	195,684
Danube Road ..	{ 1954	5,956	795	1,414	21,840	15,618	45,623
	{ 1955	5,157	..	1	8,889	12,480	26,527
26, Gelderd Road ..	{ 1954	..	..	..	..	8,798	8,798
	{ 1955	..	..	73	..	17,645	17,718
Austhorpe Road ..	{ 1954	103	..	..	513	1,201	1,817
	{ 1955	199	..	..	846	2,248	3,293
Cross Lane, Wortley	{ 1954	169	67	5	1,003	30	1,274
	{ 1955	178	217	4	1,052	53	1,504
Harrison's Yard, Bramley ..	{ 1954	..	..	..	..	2,479	2,479
	{ 1955	..	..	..	..	5,868	5,868

It can be seen from the foregoing table that the number of bovine animals slaughtered for human consumption has increased from 69,113 in 1954 to 75,624 in 1955. The increases were as follows :— cows 509, calves 9,163. There was an increase of 6,439 in the number of pigs slaughtered.

In addition to the above animals, 875 horses were slaughtered at the Public Abattoir for human food as compared with 1,082 horses slaughtered last year. Once again there has been a very notable decrease in the number of horses slaughtered for human consumption.

In December the Markets Committee, which controls the Public Abattoir, passed resolution to the effect that horse slaughtering should cease forthwith. In consequence no slaughtering of horses has taken place in the Abattoir since that time.

Slaughterhouses.—The licences of six private slaughterhouses were renewed during the year, namely those belonging to the Leeds Industrial Co-operative Society, Ltd., Danube Road, Leeds ; C. H. and J. W. Ellison, Cross Lane, Wortley ; Mrs. S. U. Wilson, Marshall Street, Crossgates ; E. Taylor, Harrison's Yard, Bramley ; T. Adamson and Sons, 26, Gelderd Road and P. H. Hutchinson, Cross Granby Terrace. The slaughterhouse at Cross Granby Terrace is still not being used as a slaughterhouse but is used for storage purposes only.

Licensing of premises used for the purpose of confinement of animals awaiting slaughter at a slaughterhouse.—In accordance with the provisions of Section 1 (2) of the Slaughter of Animals (Amendment) Act, 1954, two applications were received for licensing of premises used as lairages for the confinement of animals awaiting slaughter as follows :— Leeds Industrial Co-operative Society, Ltd. (lairage in Gelderd Road) and H. Sherburn (lairage at piggeries, Field End Road, Halton). The applications were approved and the licences granted under Section 57 of the Food and Drugs Act, 1938.

Knacker's Yard.—There is only one knacker's yard in the city, namely that belonging to J. R. C. Wilkinson at 133, Carr Moor Side, Hunslet, which was well conducted and accordingly its licence was renewed.

Slaughter of Animals Acts, 1933-1954.—During the year, 22 new licences to slaughter or stun animals were granted by the City Council and 144 were renewed.

Whole and part carcasses condemned.—The following table shows the different species of animals and the number of whole carcasses or parts condemned for tuberculosis and other diseases :—

CARCASSES INSPECTED AND CONDEMNED.

	Cattle (exclud- ing cows)	Cows	Calves	Sheep and Lambs	Pigs	Horses
NUMBER KILLED ..	24,317	9,878	41,429	111,301	63,669	875
NUMBER INSPECTED ..	24,317	9,878	41,429	111,301	63,669	875
ALL DISEASES EXCEPT TUBERCULOSIS.						
Whole carcasses	12	56	83	156	157	1
Carcasses of which some part or organ was condemned	1,432	453	10	4,560	4,640	87
Percentage of numbers inspected affected with diseases other than Tuberculosis	5.94	5.15	0.22	4.24	7.53	10.06
TUBERCULOSIS ONLY.						
Whole carcasses	28	122	5	..	60	1
Carcasses of which some part or organ was condemned	1,626	803	..	1	1,709	1
Percentage of numbers inspected affected with tuberculosis	6.8	9.36	0.01	0.001	2.78	0.23

There was a marked decrease in the incidence of tuberculosis in all species of animals killed during the year.

Cysticercus Bovis.—Systematic examination for cysticercus bovis has continued. During the year 98 cases of this condition were found, of which about 50 were in a degenerated condition. In 97 cases one, or at the most two, cysts were found. In one case only was generalised cysticercus bovis found.

Meat and Other Foods Condemned as Unsound.—The total weight of food destroyed by consent during the year was 546,029 lbs. as compared with 635,312 lbs. in the previous year. About 66 per cent. of the total weight condemned comprised carcasses of cattle, swine and sheep or parts of carcasses and offal found to be diseased at the time of slaughter.

Details of food destroyed are given in the following table :—

MEAT, ETC., DESTROYED BY CONSENT.

	1955	1954	1953	1952
Beef	124,073 lbs.	182,558 lbs.	184,724 lbs.	139,509 lbs.
Veal	3,551 "	6,922 "	3,720 "	3,391 "
Mutton	10,428 "	9,838 "	11,604 "	8,944 "
Pork	38,501 "	52,359 "	44,996 "	35,061 "
Bacon and Ham ..	773 "	77 "	..	..
Offals	181,641 "	226,963 "	263,477 lbs.	244,672 lbs.
Rabbits	2,565 "	8,377 "	7,757 "	6,806 "
Poultry	1,278 "	2,475 "	2,650 "	1,661 "
Game	54 "	391 "	155 "	401 "
Horseflesh	1,190 "	4,260 "	5,055 "	10,900 "
Horse Offals	1,127 "	2,238 "	2,783 "	2,718 "
Fish	31,250 "	29,121 "	31,474 "	50,039 "
Shellfish	5,302 "	4,246 "	4,228 "	13,612 "
Vegetables	48,436 "	17,109 "	35,635 "	7,734 "
Fruit	7,329 "	10,309 "	19,205 "	32,144 "
Tinned goods	68,780 "	61,455 "	73,268 "	76,629 "
Cheese	1,624 "	2,147 "	1,849 "	1,673 "
Edible fungi	222 "	12 "	324 "	10 "
Bread and Cereals ..	..	..	619 "	9,903 "
Flour	..	..	3,263 "	..
Confectionery	589 lbs.	3,243 lbs.	4,202 "	3,443 lbs.
Sundries	17,316 "	11,212 "	13,475 "	6,024 "
Totals	546,029 lbs.	635,312 lbs.	714,463 lbs.	655,274 lbs.

Disposal of Condemned Food.—The wholesale butchers have continued their arrangements for selling all condemned carcasses and offal, the bulk of which has gone during the year to Messrs. Broadbent and Mitchell, Fertiliser Manufacturers, Halifax. A few small carcasses, i.e. sheep and calves, and some offal, have been sent to Messrs. Wiles, Fertiliser Manufacturers, Woodmansey, Beverley.

Other Foods.—All other condemned foods, including tinned goods, fruit and vegetables, etc., were disposed of by incineration at the Corporation Destructors.

Rabbits.—The condemnation of rabbits fell considerably during the year, due to the much smaller quantity which came into the market. Very small quantities of skinned frozen Australian rabbits have been noted in the markets, but it would appear that rabbits are not now popular as an article of food.

Fish.—When fish has been in short supply, quantities of inferior quality fish have been filleted and sent into Leeds in the hope that

scarcity would ensure a quick sale ; however, large quantities have had to be condemned.

Vegetables.—Due to the hot dry summer, condemnations of vegetables increased considerably, some types of vegetables coming into the market became limp and unsaleable, and quantities of lettuce and cabbage were affected with greenfly and caterpillars respectively.

Cheese.—The majority of cheese brought for condemnation was of the processed variety which, under certain atmospheric conditions, soon goes mouldy.

Shellfish.—The condition of shellfish coming into the city for sale continued to receive special attention.

During the year twelve samples of mussels and one sample of cockles exposed for sale in the wholesale and retail markets were taken and submitted to the Medical School for bacteriological examination. Of the twelve samples of mussels, three were from Denmark and eight from Eire, all purified ; the other sample was from the Wash and was not purified. One of the samples from Killorglin, Eire, was found to be unsatisfactory and details of this sample were passed to the Medical Officer of Health, Kerry County Council. Further sampling from the same source proved satisfactory.

Salmon and Freshwater Fisheries Act, 1923.—(*Imported Salmon Out of Season Regulations*).—A consignment of chilled Norwegian Grilse was found to have no certificate of origin and, on the omission being pointed out to the firm concerned, a certificate was immediately forwarded from the port of landing. All other consignments had the certificate with them.

Dried Fruit.—Since importation has reverted to the private trader, the quality of imported dried fruit has improved and during the year we have had very few complaints.

Legal Proceedings.—*Public Health (Meat) Regulations, 1924, Section 21 (1a).*—Proceedings were taken against a firm of butchers and one of their employees for depositing meat on the floor of a dirty van. Both defendants were found guilty, the firm being fined £5 and the employee in charge of the van £10.

City of Leeds Byelaws, 1922, with respect to Slaughterhouses provided by the Corporation.—Proceedings were taken against a wholesale butcher for committing a nuisance in the Public Abattoir. The defendant pleaded guilty and was fined £1.

Food and Drugs Act, 1938, Section 9.—Proceedings were taken against a person in the open market for exposing for sale unsound cherries unfit for human consumption. The defendant was found guilty and fined £2.

DISEASES OF ANIMALS

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,
Chief Sanitary Inspector.

Tuberculosis Order of 1938.—The table hereunder, which shows the number of bovines suspected to be affected with tuberculosis and the action taken, was compiled from information supplied to the Local Authority by the Animal Health Division of the Ministry of Agriculture, Fisheries and Food.

No. of suspected animals reported or found.	No. affected with tuberculosis and slaughtered.	No. of animals found to be not amenable to the Order.
8	8	..

Swine Fever Order of 1938.—During the year 16 cases of suspected swine fever were notified, all of which were investigated by the Ministry of Agriculture, Fisheries and Food. Four of these cases were confirmed.

Regulation of Movement of Swine Order, 1954.—Under this Order, 408 licences for the disposal of 3,600 pigs from the Whitkirk Auction Mart were issued and 640 visits have been paid to pig-keeping premises to ascertain whether the recently removed store pigs were detained and isolated for the appropriate period. In addition, 67 licences have been issued to pig dealers for the movement of pigs within the city.

Anthrax Order of 1938.—Five cases of suspected anthrax were reported during the year, two cases being confirmed by the Ministry of Agriculture, Fisheries and Food, and on post-mortem examination of the carcasses of the other three animals it was found that death had ensued from causes other than anthrax.

The two confirmed cases were sows which had died at pig-keepers' premises in the city. The Divisional Inspector of the Ministry of Agriculture, Fisheries and Food was notified and pathological specimens were forwarded to the Ministry's Veterinary Laboratory and reports were received that the animals were affected with anthrax.

Efficient disinfection was carried out at both these premises by the Disinfection Section of the Department using small portable flame-throwers, strong disinfectant and chloride of lime.

The carcasses were disposed of by incineration at the Armley Road Destructor.

Foot-and-Mouth Disease.—No case of this disease occurred in the city during the year and the city was not affected by the various Orders made by the Ministry of Agriculture, Fisheries and Food in connection with outbreaks of Foot-and-Mouth Disease in other parts of the country.

Fowl Pest Order of 1936.—No outbreaks of this disease occurred in the city during the year. Notice Form B, imposing restrictions on the movement of poultry exposed to infection, was served by the Ministry of Agriculture, Fisheries and Food on two poultry dealers in the city. These two dealers had purchased poultry from Surrey and Sussex, where suspected outbreaks of this disease had occurred. Later the Ministry of Agriculture, Fisheries and Food served Notice Form C on the poultry dealers withdrawing the premises from restrictions.

Warble Fly (Dressing of Cattle) Order, 1948.—The following measures were adopted in connection with the enforcement of the above-mentioned Order :— copies of the Order in pamphlet form were given to each farmer along with a post-card (pre-paid) asking that in the event of infestation being discovered, the post-cards be completed and returned. It is regretted that no official posters were received by the Department this year for posting in the markets, etc., as this form of publicity was valuable.

During the period of the operation of the Order, all premises where cattle were kept were visited and the cattle inspected. In cases of infestation, the cattle were inspected shortly after dressing.

Six post-cards were received from cattle owners reporting that 18 cattle were infested ; these were all visited for purposes of inspection.

There was a 69 per cent. decrease on the previous year in the number of infested cattle. It was found that personal visits and talks with the owners were effective in securing their co-operation.

No prosecutions were necessary under the Order.

DETAILS OF WORK DONE			
	1953	1954	1955
No. of visits paid to farms	194	199	182
No. of cattle inspected on farms	4,557	1,829	2,198
No. of leaflets and cards distributed	62	85	77
No. of cattle infested	118	58	18
No. of infested cattle treated	118	58	18
No. of non-infested cattle treated voluntarily	412	172	214

Animals (Landing from Ireland, Channel Islands and the Isle of Man) Order, 1933.—This Order was revoked by the Animals (Landing from Channel Islands, Isle of Man, Northern Island and Republic of Ireland) Order, 1955, which came into operation on 1st September, 1955, and now deals with the importation of sheep and pigs only.

During the year, 9,812 Irish sheep were received under licence for immediate slaughter at the Public Abattoir, Leeds, and the Leeds Industrial Co-operative Society, Ltd., Slaughterhouse, Gelderd Road, Leeds. As compared with the previous year, the number of imported sheep decreased by 580. No imported pigs were received on licence during the year.

Diseases of Animals Act, 1950.—The movement of imported cattle is now regulated by the Second Schedule of the Diseases of Animals Act, 1950. During the year, 5,279 Irish Cattle were received under licence for immediate slaughter at the Public Abattoir and the Leeds Industrial Co-operative Society, Ltd., Gelderd Road, Leeds. As compared with the previous year the number of imported cattle decreased by 891.

The Transit of Horses Order, 1951.—During the year vehicles were regularly examined at the Public Abattoir to see that they complied with the above-mentioned Order.

The Sheep Scab Order, 1938.—Under the Sheep Dipping Regulations all sheep are required to be dipped in an approved dip during the period 1st September to 15th December. This is the recognised treatment of the disease known as "sheep scab" and caused by parasitic insects known as "acari."

The photograph opposite page 170 illustrates sheep dipping in progress at a farm in the City of Leeds.

During the year all farms within the City Boundary were visited and a census taken of farms keeping sheep. There are now only seven farms keeping sheep in Leeds.

During the year five farms undertook the dipping of sheep under observation by an inspector from this Department. In the case of the remaining two farms (Mount Pleasant Farm, Eccup and Owlet Hall Farm, Eccup), owing to close proximity of the Reservoir, the sheep were dipped at a neighbouring farm in the West Riding area.

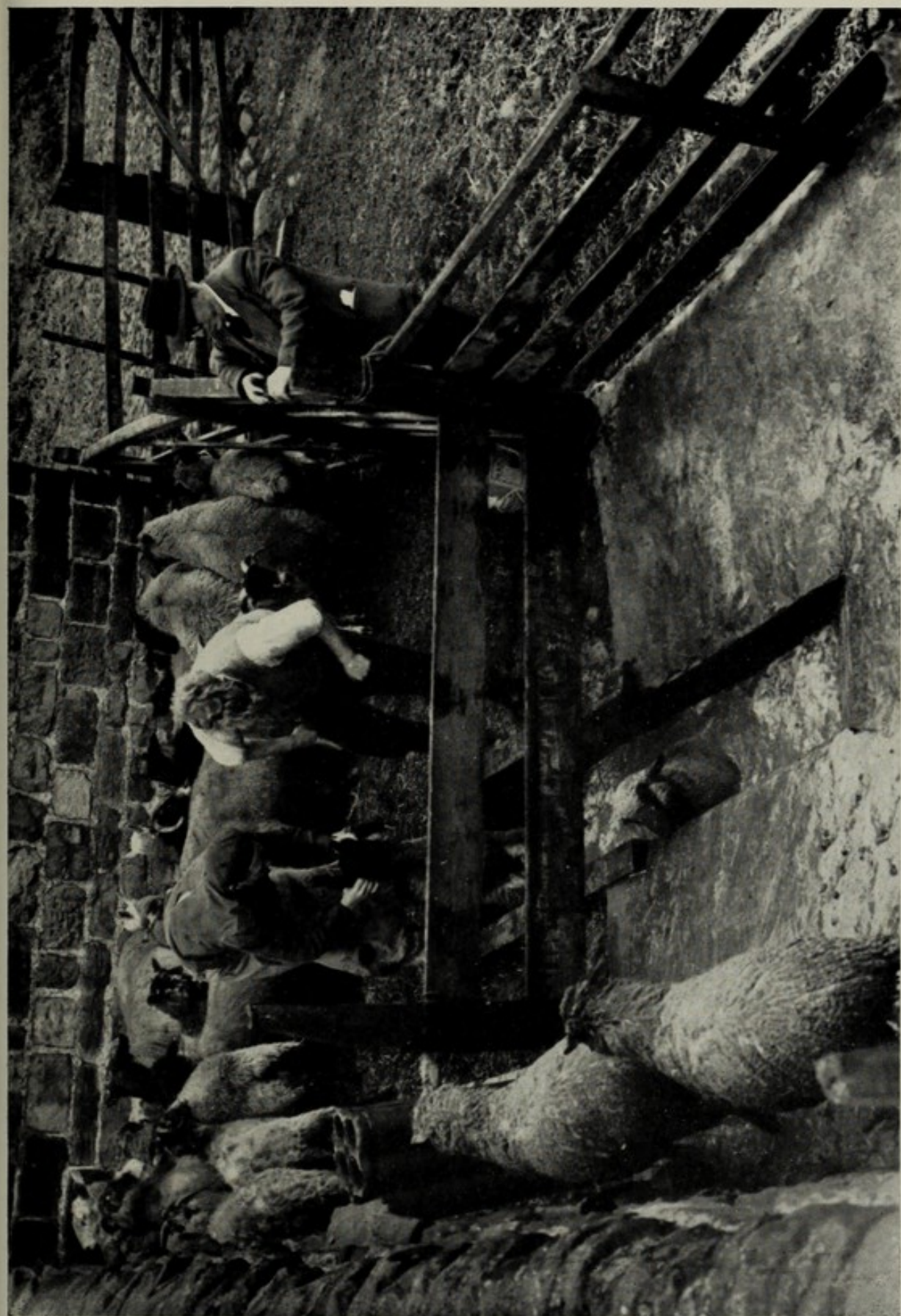
The undermentioned list gives sheep farms and the number of sheep dipped :—

O. Lister, Black Hill Farm, Eccup	..	80	sheep	dipped
J. Rowling and Son, King Lane Farm, Alwoodley	.. .. .	115	„	„
S. Allen, Thornbush Farm, Eccup	..	40	„	„
J. Rowling & Son, Brooklands Farm, Eccup	75	„	„	„
Edwin E. Todd, Mount Pleasant Farm, Eccup	.. .. .	65	„	„
H. C. Peate, Owlet Hall Farm, Eccup	94	„	„	„
G. Whitfield, Park Farm, Colton	..	9	„	„

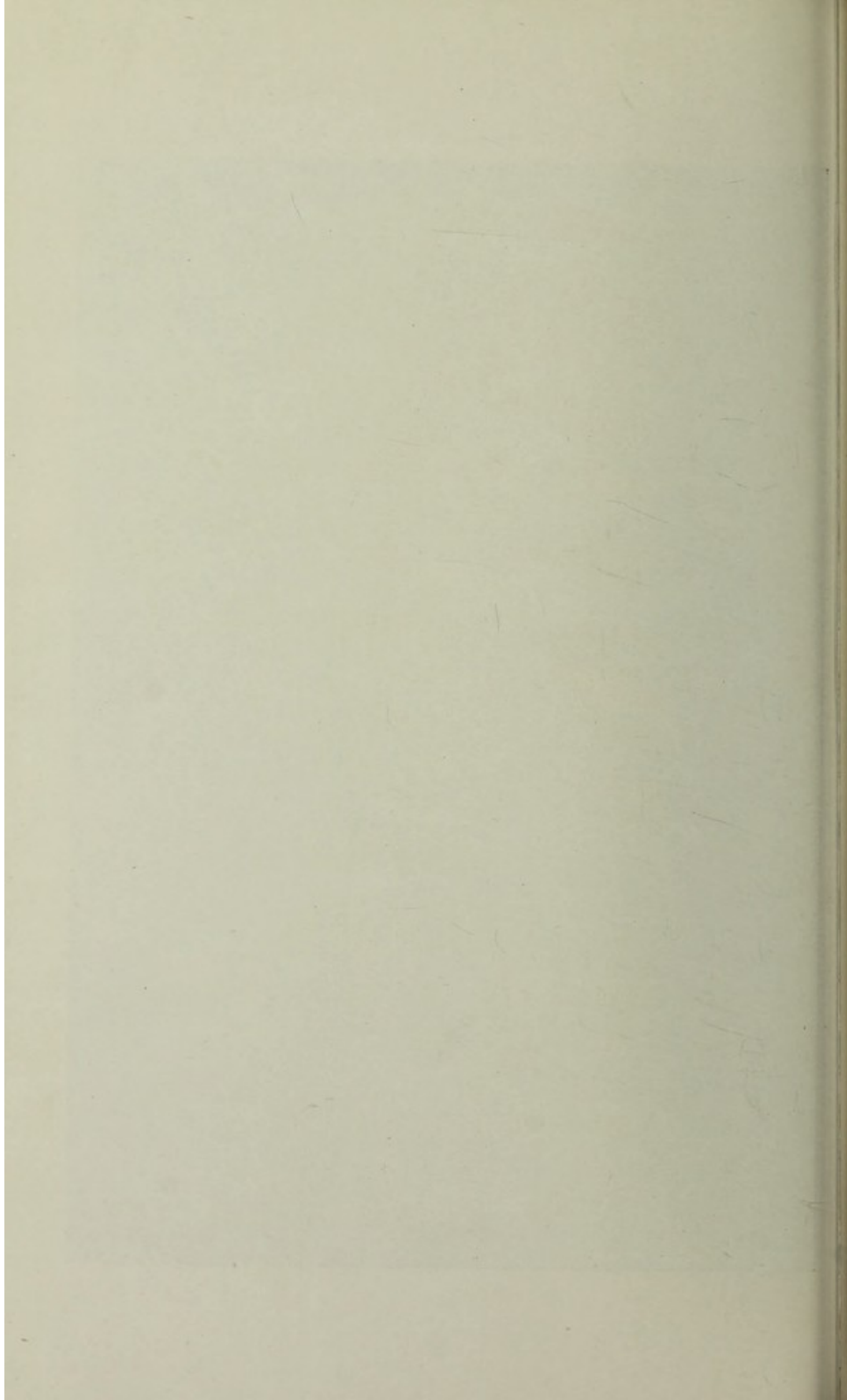
Legal Proceedings.—A pig-keeper was prosecuted under the Movement of Animals (Records) Order, 1925, for failure to keep a form of record. The defendant was given a conditional discharge on payment of 4s. costs.

A pig-keeper was prosecuted under the Regulation of Movement of Swine Order, 1954, for moving pigs from a market without a licence, and under the Movement of Animals (Records) Order, 1925, for failing to keep a form of record. The defendant was found guilty and fined £1 on the first summons and given an absolute discharge on payment of 4s. costs on the second summons.

A pig-keeper was prosecuted under the Regulation of Movement of Swine Order, 1954, for the movement of a boar without licence during the period of 28 days following a previous movement. The defendant was found guilty and fined 10s.



Sheep Dipping Regulations
Sheep being dipped at a farm in the City under the supervision of a sanitary inspector.



General Sanitation

INSPECTION OF FACTORIES

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,
Chief Sanitary Inspector

Mr. J. H. Wyatt, Supervisory Inspector of the Factories Section, has furnished details of the inspections included in this Section of the Report.

Inspectors in the Factories Section carry out inspections of factories, workplaces, shops, the larger food-preparing establishments, cafes, canteens, restaurants and outworkers' premises. The staff consists of both male and female inspectors. The female inspectors deal principally with the inspection of cafes, restaurants and outworkers' premises and also any matters which concern females. The figures given in the first two tables on page 177 deal with inspections of factories and of defects found and remedied by the male inspectors. The tables on page 178, dealing with outwork and other matters, shows the work of the female inspectors. Other statistics regarding the inspection of cafes and canteens and food-preparing establishments are included in the figures given in the table on page 197.

Factories.—Statistics regarding the visits of inspectors to factories are set out in the tables printed on pages 177 and 178 of this Report. The first three of these tables are extracted from the return which must be made annually by the Medical Officer of Health to the Minister of Labour and National Service, in accordance with the provisions of Section 128 (3) of the Factories Act, 1937.

The Section deals with all those matters in the Factories Acts, which have been declared to be the responsibility of the District Council, with the single exception of the means of escape in case of fire. This is dealt with by the Building Surveyor's Department, and details of the work done in this respect are not given.

The register of factories now contains the addresses of 187 non-mechanical factories and 3,051 mechanical factories. The number of non-mechanical factories continues to fall—in 1950, for example, there were 584 on the register and there have been successive decreases each year since then. During the year 1,683 visits were paid to all types of factories for the purpose of inspections under the

Factories Acts. 184 defects were found during these inspections, and 164 were remedied. The number of written notices issued in respect of the defects found was 158. Many defects found were remedied immediately upon being pointed out to the firms concerned, and in these cases no written notice was required. No prosecution was instituted during the year, but in one case, concerned with insufficient sanitary accommodation, the matter was referred to the Town Clerk for the institution of proceedings, but these had to be deferred, upon the Town Clerk's advice, owing to a change in the title of one of the firms implicated, which had been made after the service of the notice. This case is being followed up.

In the table of "Inspections for Purposes of Provisions as to Health," which is printed on page 177, there are 98 premises other than factories in which Section 7 of the Factories Act, 1937, is enforced by the District Council. These premises are those 'Works of Building and Engineering Construction' as are mentioned in Sections 107 and 108 of the Act. The number of these on the register has increased considerably during the past few years, partly due to the great increase of building since the abandonment of licensing and partly due to better arrangements for notification which have been made by the local offices of H.M. Inspectors. A proportion of the reports of new building operations received during the year refer to the extension of existing premises or sites where adequate sanitary accommodation is normally available, and the need for inspection of these is correspondingly less. On new sites, however, the inspections made have been directed towards securing the provision of a sufficient number of properly equipped and screened chemical closets, with a regular service for emptying. In certain instances, however, where the contracts are so large that the work would take a very long time to complete, as, for example, the new flats for the Corporation at Saxton Gardens, water-closets have been provided for the workers—facilities which are much more satisfactory than chemical closets, however carefully these are looked after. During the year 23 visits have been paid to building sites, four written notices and a number of verbal notifications have been given to deal with unsatisfactory conditions in the accommodation provided.

In Table II of the return to the Minister of Labour and National Service it will be seen that in 4 instances factories were found to be dirty and that 7 were cleansed. The apparent discrepancy is due to a

backlog carried over from 1954, when 10 were found and 6 only cleansed. Seven reports were received from H.M. Inspectors about dirty premises, but 3 of these referred to bakehouses, where mechanical power is used. The cleanliness of such places is dealt with by the Local Authority under the provisions of the Food and Drugs Act, and action taken is not, therefore, recorded in columns 2 and 3 of Table II, but is, in fact, included in the Section of the report dealing with food hygiene. The 7 instances mentioned in column 2 of the Table II refer, therefore, only to non-mechanical factories other than food-handling factories.

The number of bakehouses at the foot of the table dealing with "Other Matters" refers to bakehouses registered under the Factories Acts—it does not include a number of small one-man or family concerns. The total of 195 is made up of 3 non-mechanical and 192 mechanical bakehouses. There are now no basement bakehouses in the city which have certificates of suitability under the Act and no inspections of such places under Section 54 were, therefore, necessary.

A few reports have been received during 1955 about discoloured or allegedly tainted drinking water supplies, but tests which have been made have been in all cases satisfactory. Complaints about this are forwarded to the Waterworks Engineer for his attention as well as being investigated by sanitary inspectors. No requests for approval of drinking water supplies obtained otherwise than from a public main, have been received during the year, and, in fact, no factories are known which are not served by the public water supply.

The number of outworkers continues to increase and in August, 1955, 1,182 were notified. This compares with 962 in 1953 and 1,057 in 1954. In one instance it was found necessary to resort to legal proceedings to obtain the return of outworkers. In this case, after sending several reminders to the firm in question, a summons was issued, and this resulted in the return being sent in. Because of the receipt of this, the matter was not taken to Court and the proceedings were withdrawn. The number of addresses of outworkers received from other authorities was 208 and the number sent from Leeds to other districts 167.

In 1955, 455 visits were paid to outworkers premises. No instance of work being done in unwholesome premises was found, and no action was, therefore, found to be necessary under Section III

of the Factories Act, 1937. 45 cases of notifiable infectious disease occurred in homeworkers premises during the year—these included 43 of measles, 1 of scarlet fever and 1 of whooping cough.

The figures given in the table dealing with visits paid to factories and defects found and remedied do not give by any means a complete picture of work done by inspectors. Apart from those parts of the Factories Acts which are administered by District Councils, inspectors also deal with matters, in factories, which come under the provisions of the Public Health Acts, and they also see that the provisions of the Food and Drugs Acts are complied with in the larger food handling establishments, e.g., bakehouses, fish canners, sugar confectionery factories, etc. Statistics in connection with this are included in the table of work done by sanitary inspectors. Complaints which are received in connection with factories vary widely in type—typical reports refer to nuisances caused by grit emissions from cupolas, sand blasting equipment and chimneys, offensive smells from the manufacture of fertiliser, the re-spraying of car bodies and the making of various sorts of chemicals. Some of the complaints refer to places which are registered by H.M. Inspector under the Alkali, etc., Works Regulation Act, and in these cases, the help of H.M. Inspector has been readily forthcoming and is much appreciated. The problem of dealing with some of the very pungent smells created is one which is fraught with difficulty, and in some cases the only really sure way of preventing further trouble would be the removal of the factories to an area specially allocated to trades likely to create nuisance. Such action would be likely to involve payment of heavy compensation by the Local Authority, and cannot be regarded as a really practical solution nowadays. In most cases the prevention of nuisance from smells depends upon the use of complicated scrubbing or deodorising equipment, and extensive experiment is often necessary before a satisfactory method is found.

Complaints about nuisance from noise and vibration continue to come in. The Department has no power to deal with such complaints under existing legislation, but generally speaking, informal representations about these nuisances are usually successful. Some legal backing to the inspectors' representations would, however, be helpful in a number of instances, and it is to be hoped that the provision in the Corporation Bill which is to be promoted,

making noise and vibration a statutory nuisance under the Public Health Acts, will be confirmed.

Apart from nuisances caused by work and processes carried on in factories, inspectors are frequently called upon to deal with complaints caused by defects in the structure of factory buildings, e.g. leaking roofs, broken and leaking eaves-spouting and other matters which might affect the health and comfort of workpeople. They are also frequently asked to deal with nuisances from the discharge of offensive effluents and with accumulations of refuse—all matters which come under the provisions of the Public Health Acts.

While carrying out their routine inspections of factories, inspectors also visit canteens and messrooms provided for employees to see whether the premises conform to the requirements of the Food and Drugs Act. In some instances H.M. Factory Canteen Adviser sends on reports about canteens which he considers to be below standard either structurally or from the point of view of cleanliness. His help in such cases is greatly appreciated by the sanitary inspectors. Generally speaking, the canteens are not structurally up to the same standard as the commercial cafes and restaurant kitchens in the city, and a good deal of work will be required to bring all of them up to a reasonable standard.

The arrangement between the City Engineer and the Health Department for the exchange of information as to the establishment of factories in the city continues to function satisfactorily. A copy of the list of changes in the occupation of factories which is received each month from H.M. Inspectors is forwarded to the City Engineer.

Workplaces.—615 inspections of workplaces were made in 1955, a high proportion of these being of office accommodation. Conditions were found generally to be good, and few defects were discovered. 13 notices were served for various matters to be remedied, and in response to these, 7 conveniences have been repaired and one other defect put right. One report of lack of washing facilities was received in the year; this has been dealt with by informal approach to the firm concerned.

Shops.—Inspections of shops are carried out in accordance with Section 38 of the Shops Act, 1950, the administration of which has been delegated to the Health Committee—other matters, such as closing hours and hours of employment being dealt with by the

Weights and Measures Inspectors. In 1955, 648 inspections of shops were made, and 35 notices were served to deal with various defects or contraventions which were found. The defects which were remedied were :—

Shops provided with adequate ventilation	4
Washing facilities provided	7
Other defects of various kinds	23

No applications were received during the year for exemption from the provisions of Sub-sections 2 and 4 of Section 38 of the Shops Act, 1950.

**INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH
(INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS)**

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	187	142	12	..
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	3,051	1,541	146	..
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	98	23	4	..
Total	3,336	1,706	162	..

CASES IN WHICH DEFECTS WERE FOUND

Particulars	No. of Cases in which defects were found				No. of cases in which prosecutions were instituted
			Referred		
	Found	Remedied	To H.M. Inspector	By H.M. Inspector	
Want of cleanliness (S. 1) ..	4	7	..	7	..
Overcrowding (S. 2)	..	..	..	..	..
Unreasonable temperature (S. 3)	..	..	..	..	..
Inadequate ventilation (S. 4) ..	..	..	..	..	..
Ineffective drainage of floors (S. 6)	..	..	..	..	..
Sanitary Conveniences (S. 7)—					
(a) Insufficient	36	31	..	5	..
(b) Unsuitable or defective ..	138	111	..	28	..
(c) Not separate for sexes ..	6	5	..	1	..
Other offences against the Act (not including offences relating to Outwork)	..	10	10	..	..
Total	184	164	10	41	..

SANITATION

BY

J. GOODFELLOW, F.R.S.H., M.I.P.H.E.,
Chief Sanitary Inspector

Water.—During the year 422 samples of drinking water were taken by the Department for bacteriological examination. Of these samples, 420 were taken from the Corporation's main supply, one was a sample of well water and one a sample of spring water. Only four of the samples of town's water were unsatisfactory due to minor causes and subsequent samples from the same domestic taps proved satisfactory. Both the sample of well water and the sample of spring water were unsatisfactory.

Water Supply (Report of Mr. Kenneth L. Forster, General Manager and Engineer of the Waterworks Department).—The water supply of the city and its several parts during 1955 has been (a) satisfactory in quality, except for some instances of taste which occurred during the late Spring and Summer as a result of algal growths in the storage reservoir at Eccup, and (b) satisfactory in quantity.

Bacteriological examinations of raw water arriving at Headingley Filtration Works were made during the year, and the water going into supply after filtration and chlorination was also classified and the following table shows the results of these examinations.

SUMMARY OF BACTERIOLOGICAL EXAMINATIONS

Raw Water Arriving at Headingley Filtration Works		No. of samples	Average Count
Presumptive Coli-aerogenes bacteria in 100 ml.	..	306	178
B.Coli Type I in 100 ml.	.. .. .	306	73
Cl. Welchii in 40 ml. (Wilson and Blair's test)	..	54	1
Agar plate count, 48 hours at 37°C. Colonies per ml.	..	51	32
Agar plate count, 72 hours at 22°C. Colonies per ml.	..	51	170

WATER GOING INTO SUPPLY AFTER FILTRATION AND CHLORINATION				
No. of samples	Ministry of Health Classification			
	Class 1	Class 2	Class 3	Class 4
*1,835	98.5%	1.3%	0.2%	Nil

* Excluding samples taken by Health Department.

During the year 182 samples of town's water from the public supply were subject to chemical analysis and the table which follows summarises the results of these analyses.

SUMMARY OF ANALYSES OF THE PUBLIC WATER SUPPLY FOR THE YEAR ENDED DECEMBER 31st, 1955. SUMMARY BASED ON 182 ANALYSES OF SAMPLES OF WATER FROM THE PUBLIC SUPPLY.

	Parts per million except where otherwise stated		
	Average	Maximum	Minimum
*Turbidity (Silica scale)	← Less than 2 →		
*Colour (Hazen Units)	20	55	5
*pH.	7.25	8.1	6.8
Free Carbon Dioxide	1.9	3.6	1.0
Alkalinity (in terms of CaCO ₃)	21	29	15.5
Total Hardness (in terms of CaCO ₃)	53	59	46
Non-Carbonate (Permanent) Hardness (in terms of CaCO ₃)	32	40.5	22
Oxygen absorbed from Permanganate in 4 hours at 27°C.	1.75	3.70	0.75
Ammoniacal Nitrogen (in terms of N)	0.007	0.036	Nil
Albuminoid Nitrogen („ „ „ „)	0.053	0.119	0.015
Nitrite Nitrogen („ „ „ „)	Nil	Nil	Nil
Nitrate Nitrogen („ „ „ „)	0.45	0.70	0.25
Chlorine present as Chloride (in terms of Cl)	13.5	15.0	10.0
Silica (in terms of SiO ₂)	5.5	9	4
Iron compounds (in terms of Fe)	0.01	0.24	Nil
Manganese „ („ „ „ Mn)	Nil	Trace	Nil
Lead „ („ „ „ Pb)	Nil	0.05	Nil
Total solids dried at 180°C.	96	108	80
*Electrical Conductivity—			
Micro-ohms/CM ₃ at 20°C.	135	162	120
*Residual Chlorine	0.07	0.85†	Nil

* Summary based on daily determinations on samples taken from Distribution Mains supplying all parts of the City and weekly determinations on samples from Service Reservoirs.

† High chlorine residuals are found only at points close to the filtration works. In most parts of the city the water reaching the consumer is free from chlorine.

Plumbo-solvency.—Water leaving the storage reservoir at Eccup is treated with lime at the rate of 5 to 6 p.p.m. with the object of producing in the treated water going into supply a pH of between 7.0 and 7.4 and an alkalinity of approximately 20 p.p.m. CaCO₂.

Determinations are made daily of pH and weekly of alkalinity on samples of water from all mains leaving the filtration works. The determination of lead is included in the chemical analysis of

samples which have been drawn through lead pipe. The maximum amount of lead found in a sample during 1955 was 0.05 p.p.m. but the majority of the samples examined were free from lead.

Action in respect of any form of contamination.—No special action was needed during 1955.

Particulars of the number of dwelling-houses and the number of the population supplied from the public water mains.—(a) Number of dwelling-houses within the Statutory Area of supply (including houses attached to shops)—178,740 ; (b) Population supplied from the public water mains : (i) direct to houses—512,536, (ii) by means of stand-pipes—none. (N.B. These particulars relate to the Statutory Area of Supply at 31st March, 1956).

The number of cistern water-closets in use at 31st March, 1956, was 202,517.

Sewage Disposal (Report of Mr. D. Currie, City Engineer).—During 1955, 15 per cent. of the bacteria beds were out of action and extensive repairs were in progress. The corresponding figure for 1954 was 8 per cent.

The average analyses of final effluent at Knostrop Sewage Works from January 1st to December 31st, 1955, are :—

Oxygen absorbed in 4 hours ..	2.45 parts per 100,000
Suspended solids	2.9 " " "

Public Cleansing (Report of Mr. A. Mann, Director of Public Cleansing).—Particulars of refuse collection and disposal during 1955 are as follows :—

	Tons
Household refuse and nightsoil collected	139,939
(a) Dealt with at destructors	64,304
(b) Dealt with at tips for agricultural purposes ..	75,635

The quantity of refuse dust extracted during mechanical separation :—

	Tons
(a) Sold to farmers for agricultural purposes ..	10,850
(b) Used as covering at refuse tips	10,430

Dustbins and Ashpits.—The number of dustbins provided by the Cleansing Department and delivered to dwelling-houses in Leeds during the year was 9,913. The total number provided since the inception of the scheme in December, 1946, was 110,395.

During the year the Health Department secured the abolition of 28 ashpits and the Corporation approved grants-in-aid amounting to £254 7s. 8d. in connection with the abolition of these ashpits and the provision of dustbins in lieu.

Keeping of Animals.—The number of pig-keepers in the city decreased to 207. The number of pigs kept was 4,725, being a decrease as compared with the previous year.

The Health Committee continued its policy with regard to the enforcement of the City of Leeds Byelaws with regard to the keeping of swine.

During the year only five cases came to the notice of the Department where piggeries had been established too close to dwelling-houses. Verbal or informal notice is now generally sufficient to achieve compliance with the Byelaws and in four cases pig-keeping at the premises was discontinued. In the other case the number of pigs kept was reduced to fewer than the permitted three.

Closet Accommodation.—During the year a pail closet serving two cottages was abolished and two pedestal water-closets provided in lieu. The Corporation made a grant of £40 to the owner concerned in respect of the work.

A large number of informal notices was served on owners of property in connection with closet accommodation and in 225 cases statutory notices had to be served. In the owners' default the water-closets appurtenant to 4 houses were repaired at a cost of £13 15s. and these amounts were recovered from the owners concerned.

Removal of Offensive or Noxious Matters.—Contraventions of the Byelaws relating to the removal of offensive or noxious matters occurred in 20 cases and were dealt with.

Offensive Trades.—During the year an application was received from a firm for consent to the extension of factory premises used for the offensive trades of fat melter, bone boiler, size maker, tallow melter and tripe boiler. The business was established on the same site in 1910 and was not subject to annual renewal of consent. The extension involved the construction of a new first floor reception room and store over the main part of the factory and this enlargement of the factory required consent under the provision of Section 107 of the Public Health Act, 1936, as would the new establishment of an offensive trade. The application for consent was granted and

it is considered that with the undertaking becoming subject to annual review, a regular process of improvement can best be obtained. The extension has tiled walls and the older part of the building is to receive like treatment. Extract ventilation and cremation of the fumes are planned and a gradual process of improvement is in prospect with the officers of the Department and the proprietor co-operating helpfully.

The number of premises in the City where offensive trades are carried on is 113. During the year 43 visits of inspection were made.

Common Lodging Houses.—During the year 257 visits were made to common lodging houses.

Houses-Let-in-Lodgings.—The total number of visits paid to houses of this type was 314. Informal action was taken in three cases whilst nineteen statutory notices had to be served in respect of offences against the relevant Byelaws or contraventions of the Public Health Act, 1936.

Cellar Dwellings and Underground Sleeping Rooms.—During the year 56 visits were paid to underground sleeping rooms.

New regulations prescribed by the Council for securing the proper ventilation and lighting of rooms to which subsection (2) of Section 12, of the Housing Act, 1936, applies, and the protection thereof against dampness, effluvia or exhalation came into force on the 23rd September, 1955. Previous regulations under Section 17(7) of the Housing, Town Planning, etc., Act, 1909, were repealed.

Tents and Vans.—2,868 visits of inspection were made to tents, vans and sheds used for human habitation wherever they appeared.

Vigilance was exercised to ensure that no unauthorised land was used "for camping purposes on more than 42 consecutive days."

Two applications for licences to station movable dwellings in the City were received. Due to unsatisfactory conditions with regard to water-closet accommodation, water supply and absence of hard standings for the caravans, the licences were refused.

Canal Boats.—The number of canal boats on the register at the end of the year was 123; periodical visits of inspection were made to wharves and locks and a complete inspection was made of 477 boats.

Public Sewers.—During the year 803 public sewers affecting 2,853 houses or other premises were cleansed at a cost to the Department of £1,234 16s. 1d. Works of repair or maintenance were carried out to 136 defective public sewers affecting 487 houses or other premises, and the cost of this work amounting to £1,150 13s. was recovered from the owners of the premises served by the sewers.

Drains.—It was necessary to carry out 1,323 drain tests ; 79 of these being new drains relaid in place of those found defective. A large number of informal notices was served on owners of property for drainage repairs and in 571 cases it was necessary to serve statutory notices under Section 39 of the Public Health Act, 1936. The drains or other appliances of 39 houses were repaired or renewed by the Department in default as a matter of urgency at a cost of £210 14s. 3d. which was recovered from the owners concerned. The drains of 704 houses or other premises belonging to other Corporation Departments were repaired or renewed at a cost of £768 19s. 7d. which was recovered from the Departments concerned.

Removal of Persons in need of Care and Attention (Section 47, National Assistance Act, 1948).—During the year eleven cases of persons alleged to be living in insanitary surroundings were brought to the notice of the Department.

In two cases certificates were issued by the Medical Officer of Health under Section 47 of the National Assistance Act, 1948, and the persons concerned were admitted to hospital.

DETAILS OF CASES IN RESPECT OF WHICH CERTIFICATES WERE
ISSUED UNDER THE PROVISIONS OF THE NATIONAL ASSISTANCE
ACTS, 1948-1951

Case	Sex	Age	Circumstances of Case	Action Taken	Outcome
No. 1	F	78	Reported by Welfare Services Officer. Person aged, infirm, living in insanitary surroundings, unable to devote to herself and not receiving from other persons, proper care and attention.	Certificate issued under Section 47 of the National Assistance Act, 1948.	Case admitted to Hospital.
No. 2	M	78	Reported by Welfare Services Officer. Person aged, infirm, living in insanitary surroundings, unable to devote to himself and not receiving from other persons, proper care and attention.	Certificate issued under Section 47 of the National Assistance Act, 1948.	Case admitted to Hospital.

Of the remaining nine cases, three were found not to come within the provisions of Section 47, and six were admitted to hospital by arrangement with the Regional Hospital Board.

Articles Exchanged for Rags.—The number of offences against Section 154 of the Public Health Act, 1936, which places restrictions on articles exchanged for rags, decreased during the year. Two persons were prosecuted for offences and were each fined £1.

Examination of Plans.—The arrangement whereby certain plans of new work submitted to the Building Surveyor's Office are forwarded to this Department for comment continued during the year. 773 such plans were forwarded to the Department for the Medical Officer of Health's comment.

District Inspection and Investigation of Complaints.—The total number of houses surveyed and examined was 24,068. The number of complaints investigated during the year was 8,180 and 8,506 nuisances and housing defects were remedied.

The tables on the following pages give details of the work done by Sanitary Inspectors in 1955.

Notices.—The number of informal notices served in relation to Public Health Act matters was 4,568 and statutory notices served in this connection numbered 2,076.

Legal Proceedings.—Public Health Act, 1936.—During the year 8 owners of dwelling-houses were summoned for non-compliance with abatement notices served in respect of nuisances arising from various defects of repair.

In one case the defendant was fined 20s. in respect of each of three summonses and ordered to pay 6s. 6d. costs. A nuisance order was made for the work to be done in four weeks.

In another case the defendant was ordered to pay 6s. 6d. costs and a nuisance order was made for the work to be done in four weeks.

In the six other cases the works required by the notices had been executed subsequent to the service of the summons. In three of these cases the Court ordered the defendants to pay £2 2s. costs in respect of expenses incurred by the authority in connection with the making of the complaint and the proceedings before the Court, under the provisions of Section 94(3), Public Health Act, 1936. The summonses relating to the remaining three cases were withdrawn.

The occupier of a dwelling-house was summoned for failure to comply with a Statutory Notice in respect of animals, namely four cats and five kittens kept in such a manner as to be a nuisance, and in respect of the filthy condition of her house. A court order was made directing the defendant to reduce the number of animals kept to two within one month and she was given a conditional discharge in respect of the dirty condition of the house. At a later date the defendant was summoned for failing to comply with the above-mentioned court order and she was fined £5. The Magistrates directed that the excess of animals be removed from the premises forthwith.

Proceedings were also taken against the occupier of a dwelling-house in respect of its dirty condition. After failing to comply with a nuisance order the defendant was subsequently arrested and brought before the Court. The Stipendiary Magistrate noted her condition and after a medical report had been submitted he made an order that she be removed to hospital for the purpose of cleansing and to receive the care and attention she so obviously needed. The proceedings against the defendant under Section 93, Public Health Act, 1936, were adjourned *sine die*.

Rodent Control.—Mr. W. Pickles, Sanitary Inspector in charge of Rodent Control, has reported details of the work of the rodent operatives for inclusion in this section of the report.

Complaints.—During the year 1,439 complaints of rodent infestation were received the number referring to rats being 872 and the number of complaints of mice infestation was 567.

The following table shows the number of complaints of rats and mice received during the various months and analysed according to types of premises affected.

1955	Rats					Mice				
	B	PD	LA	A	Total	B	PD	LA	A	Total
Jan. ..	15	43	1	..	59	14	33	6	..	53
Feb. ..	12	39	1	..	52	11	23	..	..	34
Mar. ..	11	56	2	..	69	11	23	3	..	37
April ..	10	67	5	..	82	9	24	2	..	35
May ..	14	63	7	1	85	14	22	..	..	36
June ..	15	51	2	..	68	10	22	2	..	34
July ..	9	60	3	..	72	5	22	1	..	28
Aug. ..	15	74	5	..	94	15	35	1	..	51
Sept. ..	14	55	1	..	70	17	43	2	..	62
Oct. ..	23	59	3	1	86	13	53	3	..	69
Nov. ..	18	63	4	..	85	15	56	8	..	79
Dec. ..	9	33	8	..	50	10	34	5	..	49
Totals ..	165	663	42	2	872	144	390	33	..	567

B—Business Premises
PD—Private Dwellings

LA—Local Authority's premises only
A—Agricultural or Horticultural Premises

Inspections.—The number of inspections and visits made in connection with alleged or suspected rodent infestation was 28,678. This figure includes 19,037 inspections of Leeds Corporation sewer manholes.

Sewer Baiting.—This work continued throughout the year in accordance with the Ministry's recommendations and sewer manholes continue to increase in number as Corporation Housing Estates develop. The new lengths of sewer were test baited and treatment was included in maintenance treatment where infestation had been proved. Maintenance treatments have been proceeded with in the case of manholes where takes have been recorded with the requisite manholes on either side.

During the second maintenance treatment of sewers an officer of the Ministry of Agriculture and Fisheries carried out an experimental treatment of the selected site in the Burmantofts area, using as bait base Sausage Rusk with $2\frac{1}{2}$ per cent. Zinc Phosphide. The observations made revealed complete takes of 8 ozs. poison occurred at two manholes, and it was recommended that where a complete take of prebait was recorded that the doubling-up technique should be applied bringing the total of poison bait up to 16 ozs. This procedure will be adhered to in future treatments where Zinc Phosphide is used.

During this experimental treatment a sample of waste meal from the manufacture of dog biscuits became available. This was damped one part meal and one part water and 4 ozs. was deposited alongside 4 ozs. damp sausage rusk at 7 manholes. It was found that the biscuit meal was acceptable to rats and being much cheaper than other bait bases, this product will be used exclusively on a future treatment to confirm its acceptability.

Treatments.—During the year 981 new infestations were recorded, 523 premises were found to be seriously infested by mice, and 458 premises were found to have some degree of rat infestation. Of these, 971 premises were treated by the Rodent Control Section of this Department.

During the year notification was received of a case of Weils disease contracted by a person listed as a metal broker. It was found after enquiries that this person stabled a hired pony on premises which were used as a scrap yard and piggery. Inspection

revealed a fairly heavy rat infestation. The premises were immediately serviced using traps in the first instance for the purpose of obtaining rodent specimens and subsequently using poison in the form of Warfarin.

Seven rats were removed from traps and forwarded to the International Leptospira Laboratories in London where on microscopical examination of the liver suspensions, *leptospiræ* were recovered from one of the rats. Four live rats were delivered to the Medical School in Leeds for further tests. The photographs show the premises where this outbreak occurred.

General.—Myxomatosis reached the outskirts of the city in 1955 and considerably reduced the population of rabbits. Time alone will reveal whether or not some rabbits by developing immunity to the disease may cause the problem of rabbit damage to again become important. Isolated rabbits in some inner areas caused annoyance and damage to gardens and allotments and no notification has been received of the finding of any rabbits affected with myxomatosis in these inner areas.

Prevention of Damage by Pests Act, 1949.—Under the Prevention of Damage by Pests Act, 1949, the number of informal notices served for treatments and structural proofing was 17.

During the year 15 premises were proofed against rodents. Good co-operation has been given by owners and occupiers, who have readily followed the Department's advice on structural steps to make their premises rat proof. Small proofing works have been carried out by the rodent control staff at the time of servicing; major proofing works were executed by contractors and were supervised by the Department.

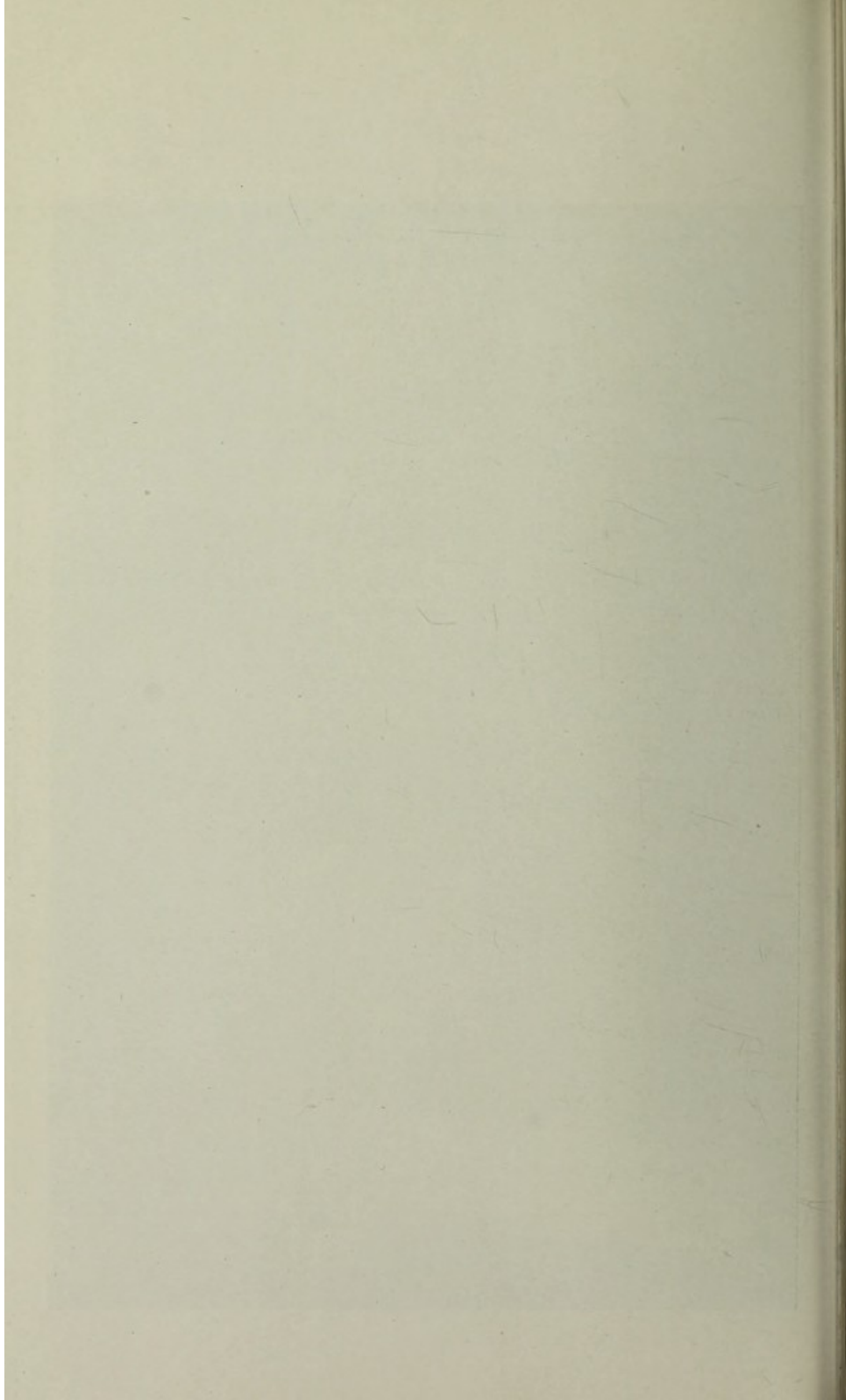
Advice and assistance was also given to occupiers of premises with regard to nuisance from sparrows. The fixing of wire guards to openable windows, the destruction of nests in roof trusses and the fixing of baffles to doors, brought about satisfactory results.

Warfarin is still proving most successful and is still the main poison used for the extermination of rats and mice in buildings.

No estimated kill by Warfarin poisoning has been made but during the year 1,982 actual bodies were recovered.



Following a case of human Weils Disease, rats caught in stable of scrap metal yard were found to contain leptospiræ.



PREVENTION OF ATMOSPHERIC POLLUTION

BY

W. F. SAXTON,

Deputy Chief Sanitary Inspector

In considering the information recorded by atmospheric pollution apparatus it is essential that the information be recorded for a number of years and be collated to some extent with the relevant atmospheric conditions obtaining during the period under survey.

During 1955 the pollution by solids as recorded at the seven atmospheric pollution stations in the City area showed in five cases lower figures than for any period in the last eight years. The reductions in English tons per square mile per annum in relation to 1954 are as follows:—Headingley 68, City Centre 65, Armley Park 86, St. James's Hospital 31, Burley Park 180. It is worthy of note that the figure at Burley Park in 1951 was 714 tons and in 1955, 272 tons per square mile per annum.

These figures it is hoped indicate an improvement in the atmosphere of our City but some reduction may be due to the decrease of approximately one-third in the amount of rainwater collected in the deposit gauges.

Estimation of Atmospheric Pollution by the Lead Peroxide Method.—The table on page 192 gives the estimation of sulphur compounds in the atmosphere in the years 1954 and 1955. The station showing the highest monthly average was Hunslet (4.11) and the lowest Headingley (2.34). The monthly average is shown in graph form opposite page 194.

Deposit Gauges.—The table on page 193 shows the monthly deposit of solids from the atmosphere in tons per square mile for the years 1954 and 1955. The station with the highest monthly average during the year 1955 was Hunslet (31.68) and the lowest Headingley (10.52). The table on page 194 shows the records from 1926 to 1955 of the deposits of solids from the atmosphere in tons per square mile. The monthly average of all stations is shown in graph form opposite page 195.

Concentration of Smoke and Sulphur Dioxide by the Volumetric Method.—There is a smoke filter and sulphur dioxide apparatus installed in the laboratory at Market Buildings and similar

apparatus, not under the Department's control, is installed in premises approximately one mile to the north-west of the City Centre. The information from these sources is recorded for purposes of comparison.

1955	SMOKE				SULPHUR DIOXIDE			
	Milligrammes per 100 cubic metres				Milligrammes per 100 cubic metres			
	Monthly Average		Highest Daily Average		Monthly Average		Highest Daily Average	
	City Centre	North West	City Centre	* North West	City Centre	North West	City Centre	North West
January ..	89	30.1	172	161.9	13.9	16.7	37.1	54.6
February ..	64	44.7	95	82.8	8.4	11.0	12.6	22.5
March ..	59	37.0	104	87.0	6.9	9.0	12.3	29.0
April ..	48	21.0	86	47.0	6.6	8.0	16.5	17.0
May ..	22	—	45	—	8.0	—	13.0	—
June ..	20	19.0	30	41.0	11.0	3.0	21.0	6.0
July ..	20	9.0	34	16.0	11.0	2.0	21.0	4.0
August ..	24	14.0	49	43.0	14.0	2.0	27.0	9.0
September ..	44	22.0	76	76.0	11.0	6.0	21.0	14.0
October ..	96	29.0	227	165.0	15.0	8.0	39.0	41.0
November ..	121	46.0	260	150.0	20.8	13.0	47.5	30.0
December ..	105	40.0	229	134.0	20.4	14.0	55.0	37.0

The analysis of the matter collected in the deposit gauges and of the lead peroxide cylinders was carried out in the laboratory of the Public Analyst, Mr. C. H. Manley, M.A., F.R.I.C.

The work of the sanitary inspectors in connection with smoke abatement during 1955 was as follows :—

Smoke observations	344
Grit deposit records	10
Boiler plant inspections	99
Visits for enquiry	99
Furnaces altered, repaired or renewed	4
Furnaces newly provided	—
Chimneys newly erected	—
Chimneys extended or improved ..	1
Firms adopting smokeless fuel ..	—
Notices served	40

All reports of smoke nuisances were investigated at once and routine observations were made by the district inspectors in the course of their normal duties, and where offences were noted the boiler plants were inspected to ascertain the cause of the excessive emission.

General action to combat atmospheric pollution is being taken as follows :—

(a) *Leeds Central Shopping and Business Area :—*

In the central shopping and business area of the city, while there is, as yet, no legal smokeless zone, the Health Department has been working for the past 15 years by administrative means and by collaboration with the Town Planning Department towards the promotion of a smokeless zone.

In this area there is a natural tendency to go over to the use of smokeless fuels for heating. Whenever a plan has been submitted for the installation of fuel burning appliances the City Engineer has passed this plan to the Medical Officer of Health for official comment, and it has been made a requirement of planning that newly installed heating appliances shall be limited to those burning smokeless fuel.

(b) *Seacroft Light Industrial Estate and the Kirkstall Light Industrial Estate :—*

In these two newly developed industrial estates the Town Planning and Improvements Committee are only allowing the erection thereon of new factories, providing the fuel burning appliances are so designed and burn fuels which conform to the smoke control requirements.

(c) *Roman Avenue Housing Estate :—*

This Corporation housing estate will be made a smokeless zone by making it a condition of tenancy that only solid smokeless fuels may be burned, and the houses will be let to people who are willing to sign an agreement to comply with this condition of tenancy. Arrangements will be made with the Gas Board for the regular delivery of satisfactory supplies of suitable solid smokeless fuel.

(d) *Saxton Lane Housing Re-development :—*

This comprises several blocks of eleven storey flats (comprising 448 flats) all of which are to be provided with heating and hot water supply by means of a district heating system.

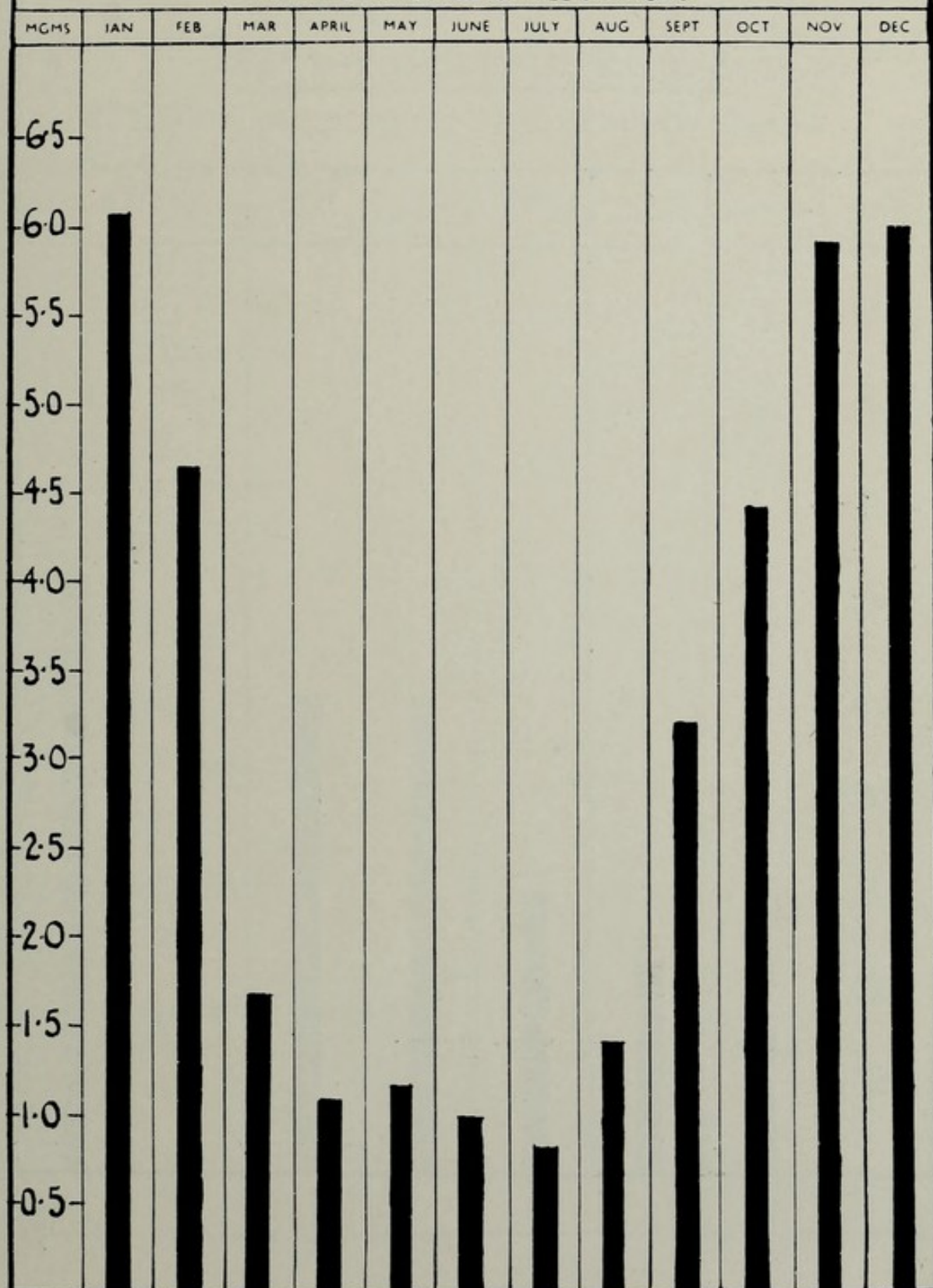
Legal Proceedings.—Legal proceedings were taken in respect of contraventions of the smoke nuisance provisions of the Public Health Act, 1936, in three cases. The defendants in one case were fined £40 and in each of the other two cases a fine of £10 was imposed.

DEPOSIT GAUGES RECORDS, 1926-1955.
ENGLISH TONS PER SQUARE MILE PER ANNUM.

Year	STATIONS							
	Headingley	City Centre	York Road	Hunslet	Temple-newsam	Armley Park	St. James's Hospital	Burley Park
1926	98.02	307.7	*288.1	362.8	..	..	..	..
1927	*133.5	354.5	391.9	501.2	..	..	..	..
1928	141.9	349.5	319.2	304.3	† 61.2	..	..	..
1929	*108.4	321.0	302.6	305.4	† 80.4	..	..	..
1930	123.9	344.3	299.5	290.5	101.8	..	..	..
1931	126.5	336.2	*266.9	268.5	109.3	..	..	..
1932	105.8	320.7	264.7	255.6	87.5	..	..	..
1933	107.86	305.0	277.83	*276.32	* 81.59	..	..	..
1934	124.28	341.7	284.74	294.49	86.24	..	..	..
1935	*131.92	358.88	321.25	*317.55	†108.67	..	..	..
1936	136.95	381.40	301.89	290.13	*118.20	..	..	..
1937	135.93	*331.53	325.35	301.71	*123.39	..	..	..
1938	*119.80	359.51	289.56	*231.39	133.37	..	..	..
1939	155.32	314.96	255.15	*234.74	122.67	..	..	..
1940	†180.30	†413.29	*247.36	†279.58	†243.33	..	..	..
1941	†188.31	†285.51	§129.75	*301.31	164.21	..	..	..
1942	†138.21	*371.14	..	*235.37	*159.03	..	..	..
1943	186.93	389.03	..	271.82	171.43	..	..	..
1944	175.37	374.50	..	277.14	†114.80	..	..	..
1945	*151.29	*288.44	..	*262.11	*139.27	..	..	..
1946	*146.50	326.26	..	*267.10	*166.64	..	..	..
1947	||121.94	288.76	..	*209.66	149.12	§176.12	§87.27	..
1948	162.78	338.02	..	213.49	*134.68	*367.06	*183.13	..
1949	181.24	411.91	..	225.68	164.28	327.56	211.20	..
1950	195.36	378.57	..	206.31	147.62	414.14	220.55	630.62
1951	*228.04	403.97	..	229.99	162.32	494.91	205.88	664.56
1952	*135.00	356.58	..	199.43	126.34	532.86	†199.00	714.33
1953	159.28	348.84	..	183.17	117.59	370.85	*184.39	430.99
1954	184.21	354.14	..	||245.99	†109.14	400.56	182.72	516.50
1955	*115.74	288.50	..	†316.83	*120.47	383.11	208.49	453.34
	|| 9 months	† 8 months		* 11 months		† 10 months		*272.78
	¶ 8 months			† 7 months		§ 5 months		

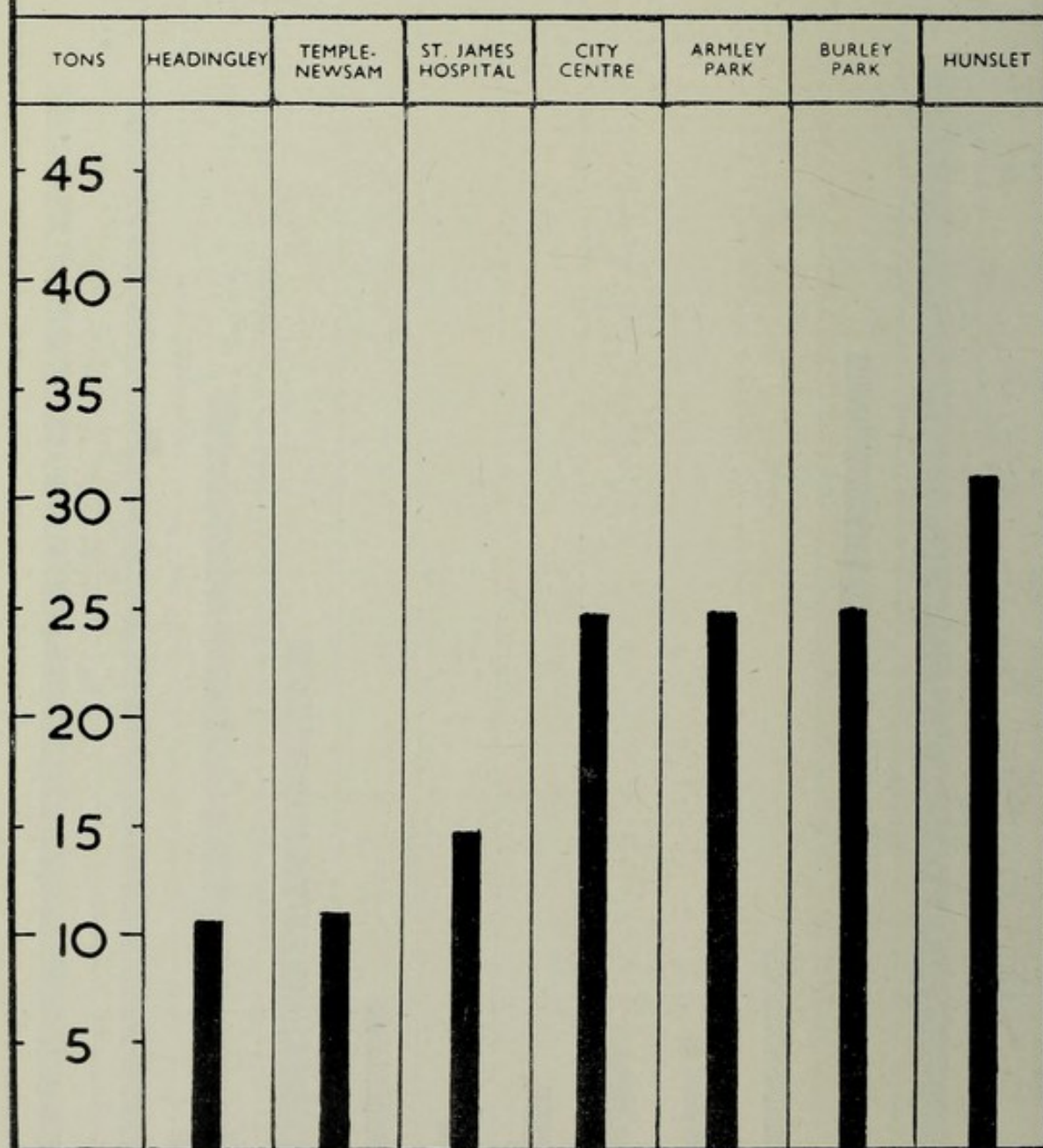
SULPHUR EMISSION—1955.

AMOUNT OF SO₂ IN MILLIGRAMMES PER DAY PER 100 SQUARE CENTIMETRES
MONTHLY AVERAGE OF ALL STATIONS



SOLID DEPOSIT—1955.

AVERAGE MONTHLY DEPOSIT IN TONS PER SQUARE MILE



WORK DONE BY SANITARY INSPECTORS, 1955.

ANALYSIS OF INSPECTIONS		North Div.	South Div.	East Div.	West Div.	Fact- ories Div.	Hous- ing Div.	(a) Canal Boats & Common Lodging Houses (b) Rodent	Food and Dairies	Total
DWELLINGS.										
1.	Houses fit in all respects	90	122	207	47	..	..	..	..	466
2.	Houses unfit and capable of repair ..	57	12	166	40	..	..	..	..	275
3.	Houses unfit and incapable of repair ..	347	10	38	31	..	1,148	..	..	1,574
4.	Underground dwellings and parts of buildings ..	8	23	1	..	..	24	..	..	56
5.	Houses for drainage	4,483	2,078	4,098	2,154	..	6	(a) 4	..	12,823
6.	Houses for ashes accommodation	426	494	254	164	..	17	..	..	1,355
7.	Houses for closet accommodation	930	680	530	321	..	17	..	..	2,478
8.	Houses for complaints and defects	2,806	2,050	2,265	1,059	..	..	..	..	8,180
9.	Houses for infectious diseases	..	1	..	7	..	..	..	..	8
10.	Houses for overcrowding	114	81	70	114	..	..	(a) 1	..	380
11.	Houses for filthy conditions	115	34	70	18	..	1	..	..	238
12.	Houses for verminous conditions	184	57	80	44	..	2	..	..	367
13.	Housing re-inspections	4,931	9,379	5,963	3,603	..	1,918	(a) 1	..	25,795
14.	Houses let in lodgings	26	4	36	15	..	233	..	..	314
15.	Separate dwellings within houses let in lodgings	80	6	67	10	..	141	..	..	304
16.	Common lodging houses	..	1	..	..	..	1	(a) 255	..	257
17.	Canal boats	..	..	..	..	..	..	(a) 477	..	477
18.	Sites for tents, vans, sheds, etc.	..	4	..	..	..	..	(a) 158	..	162
19.	Tents, vans or sheds	4	9	..	..	..	..	(a) 2,855	..	2,868
20.	Other visits not included above	251	752	693	390	..	8,065	(a) 521	..	10,672
FOOD AND DRUGS PREMISES.										
21.	Dairies	..	..	..	..	..	..	..	166	166
22.	Pasteurising and sterilising plants	..	..	..	..	..	..	..	613	613
23.	Bottled Milk Shops	..	..	..	..	..	..	..	20	20
24.	Railway stations	..	..	..	..	..	..	..	1	1
25.	Ice-cream	47	241	249	26	..	..	..	..	563
26.	Fried Fish	153	337	236	83	..	..	..	..	809
27.	Pickles and sauces	..	2	12	1	..	..	..	..	15
28.	Sausages and pork products	20	54	62	8	3	..	..	..	147
29.	Other registered premises	8	3	37	9	15	..	..	..	72
30.	Bakehouses	86	143	148	75	76	..	..	2	530
31.	Private slaughterhouses	..	..	..	..	..	..	..	1,323	1,323
32.	Butchers	46	102	260	133	..	..	..	146	687
33.	Provision merchants	26	16	212	40	17	..	..	118	429
34.	Restaurants, cafes, kitchens	8	..	9	..	1,372	..	..	21	1,410
35.	M.O.F. depots	..	..	..	..	..	..	..	2	2
36.	Other food premises	64	63	228	66	103	..	..	56	580
37.	Food manufacturing premises	..	..	..	..	..	..	..	19	19
38.	Visits for enquiry	15	44	101	10	82	..	..	152	404
39.	No access visits	..	..	..	..	..	..	..	1	1
40.	Attendance at Court	..	..	..	..	..	..	..	34	34
41.	Visits re adulterated samples	..	..	..	..	..	..	..	53	53
42.	Notices served under Reg. 20 M. & D. Regs. ..	..	..	..	..	..	..	..	20	20
PHARMACY AND POISONS ACT.										
Visits paid to premises:—										
43.	New applicants for listing	..	..	..	..	..	..	..	13	13
44.	Routine inspection	..	..	..	..	..	..	..	68	68
45.	Unlisted premises	..	..	..	..	..	..	..	..	..
46.	Other visits	..	..	..	..	..	..	..	..	..
47.	No access visits	..	..	..	..	..	..	..	..	..
RAG FLOCK AND OTHER FILLING MATERIALS ACT.										
Visits paid to premises:—										
48.	Registration	..	..	..	..	..	..	..	..	..
49.	Licensing	..	..	..	..	..	..	..	..	..
50.	Routine inspection of Registered premises ..	..	..	..	..	..	..	..	4	4
51.	Routine inspection of Licensed premises ..	..	..	..	..	..	..	..	1	1
52.	Enquiries	..	..	..	..	..	..	..	..	..
53.	No access visits	..	..	..	..	..	..	..	..	..
FERTILISER AND FEEDING STUFFS ACT										
Visits paid to premises:—										
54.	Enquiries	..	..	..	..	..	..	..	..	..
55.	Other visits	..	..	..	..	..	..	..	4	..

WORK DONE BY SANITARY INSPECTORS, 1955.—contd.

ANALYSIS OF INSPECTIONS		North Div.	South Div.	East Div.	West Div.	Fact- ories Div.	Hous- ing Div.	(a) Canal Boats & Common Lodging Houses (b) Rodent	Food and Dairies	Total
DISEASES OF ANIMALS ACTS.										
Visits paid to piggeries:—										
56.	Inspection	..	..	..	..	..	..	..	824	824
57.	Enquiries	..	..	..	..	..	..	..	10	10
Visits paid to farms:—										
58.	Warble Fly	..	..	..	..	..	..	..	182	182
59.	T.B. Order—Disinfection	..	..	..	..	..	..	..	8	8
60.	Foot and mouth disease	..	..	..	..	..	..	..	..	..
61.	Anthrax	..	..	..	..	..	..	..	7	7
Visits paid to:—										
62.	Whitkirk Auction Mart	..	..	..	..	..	..	..	50	50
63.	Victoria Cattle Market	..	..	..	..	..	..	..	..	..
64.	Poultry Market and Shows	..	..	..	..	..	..	..	77	77
TRADES AND BUSINESSES.										
65.	Factories with mechanical power	..	..	..	..	1,541	..	..	..	1,541
66.	Factories without mechanical power	..	..	..	..	142	..	..	..	142
67.	Other premises, constructional work, etc.	1	..	..	..	22	..	..	..	23
68.	Workplaces	..	..	14	..	601	..	..	..	615
69.	Shops	1	6	91	..	550	..	..	..	643
70.	Outworkers	1	..	..	..	454	..	..	..	455
71.	Offensive trades	3	24	13	3	..	..	..	..	43
72.	Visits for enquiry	4	13	8	7	309	..	..	..	341
SMOKE ABATEMENT.										
73.	Smoke observations	28	40	50	101	125	..	..	..	344
74.	Grit deposit records	..	6	..	4	..	..	..	..	10
75.	Boiler plant	2	23	1	30	43	..	..	..	99
76.	Visits for enquiry	5	16	7	18	53	..	..	..	99
GENERAL.										
77.	Rodent infestations	89	87	94	15	..	..	*(b) 28,393	..	28,678
78.	Farms	4	2	1	..	..	..	..	..	7
79.	Stables	50	4	30	7	..	..	..	..	91
80.	Pig-styes	23	52	72	4	..	..	..	..	151
81.	Poultry and other animals	19	18	178	4	..	..	..	..	219
82.	Water supply	123	74	145	119	..	..	..	..	461
83.	Infirm and diseased persons	..	..	6	4	..	..	..	..	10
84.	Watercourses and ditches	44	5	72	5	..	..	..	..	126
85.	Culverts	3	..	23	..	..	..	..	..	26
86.	Other nuisances	48	46	70	10	4	..	..	..	178
87.	Public conveniences	224	80	234	275	843	..	..	..	1,656
88.	Visits for enquiry	178	617	147	166	28	6	(a) 2	..	1,144
89.	No access visits	1,133	1,534	1,340	985	158	592	(a) 2	..	5,744
90.	Other visits (not included above)	58	24	119	127	166	9	..	..	503
REPAIRS AND IMPROVEMENTS.										
91.	Roofs, valley gutters, flashings, etc.	237	518	607	286	..	..	..	..	1,648
92.	Chimney stacks, flues, pots, etc.	54	126	94	81	..	..	..	..	355
93.	Eaves spouts	97	190	198	89	..	..	..	..	574
94.	Fallpipes	118	171	103	55	..	..	..	..	447
95.	Walls, brickwork, pointing	46	102	57	57	..	..	..	..	262
96.	Damp-proof courses provided	..	7	1	..	..	..	..	..	8
97.	Dampness otherwise remedied	6	33	9	12	..	..	..	..	60
98.	Wallplaster	7	63	101	72	..	..	..	..	243
99.	Ceilings	6	40	39	34	..	..	..	..	119
100.	Floors	10	34	14	20	..	..	..	..	78
101.	Windows, frames, cords, etc.	21	333	78	97	..	..	..	..	529
102.	Doors, door-frames	8	38	13	30	..	..	..	..	89
103.	Ovens, fire-ranges, grates, etc.	15	76	58	39	..	..	..	..	188
104.	Washing boilers, setpots, etc.	2	4	7	1	..	..	..	..	14
105.	Sinks, lavatory basins, etc.	14	23	32	30	..	..	..	..	99
106.	Waste pipes	35	57	76	40	..	..	..	..	208
107.	Water supply provided	6	14	10	3	..	..	..	..	33

* Includes 19,037 for sewer baiting

WORK DONE BY SANITARY INSPECTORS, 1955.—contd.

ANALYSIS OF WORK DONE	North Div.	South Div.	East Div.	West Div.	Factories Div.	Housing Div.	(a) Canal Boats & Common Lodging Houses (b) Rodent	Food and Dairies	Total
REPAIRS AND IMPROVEMENTS (continued)									
108. Food stores	..	3	2	..	..	..	..	..	5
109. Pavings, yards and passages	12	27	17	6	..	..	..	..	62
110. Repairs to water closets	71	411	177	128	..	..	..	..	787
111. New water closets provided	..	11	1	6	..	..	..	..	18
112. New pail closets provided	1	..	..	..	..	..	..	..	1
113. Trough closets abolished	..	1	..	..	..	..	..	..	1
114. Privy closets abolished	..	1	..	..	..	..	..	..	1
115. Pail closets abolished	..	..	..	..	..	..	..	..	..
116. Dustbins provided	2	14	15	27	..	..	..	..	58
117. Ashpits repaired	3	2	..	..	..	..	..	..	5
118. Sunken ashpits abolished	..	1	..	1	..	..	..	..	2
119. Other ashpits abolished	..	9	3	11	..	..	..	..	23
120. Other repairs to houses	7	40	22	9	..	..	..	..	78
121. Verminous houses disinfested	..	9	3	..	..	..	..	..	12
122. Dirty houses cleansed	..	6	20	1	..	..	..	..	27
123. Closets cleansed or limewashed	1	5	14	5	..	..	..	..	25
124. Underground dwellings made fit or closed	..	..	..	..	..	..	..	..	..
125. Other improvements to common lodging-houses	..	..	..	..	..	..	..	..	..
126. Other improvements to houses let in lodgings	..	1	..	..	..	..	..	..	1
127. Improvements to canal boats	..	..	..	..	..	..	..	..	..
128. Improvements to caravan sites	..	..	..	..	..	..	..	..	..
FOOD PREMISES.									
129. Walls, ceilings, floors, etc., repaired	5	41	13	7	8	..	..	..	74
130. Walls, ceilings, floors, etc., cleansed	46	83	84	28	57	..	..	..	298
131. Ventilation provided or improved	1	49	10	2	7	..	..	..	69
132. Articles, apparatus, clothing cleansed	3	2	55	4	11	..	..	..	75
133. Washing facilities provided	7	21	13	8	8	..	..	..	57
134. Washing facilities maintained	5	4	22	71	3	..	..	..	105
135. Other improvements	5	40	16	6	28	..	..	..	95
TRADES AND BUSINESSES.									
Factories.									
136. Rooms cleansed	..	..	..	..	7	..	..	..	7
137. Rooms ventilated	..	..	..	..	..	..	..	..	..
138. Reasonable temperature secured	..	..	..	..	..	..	..	..	..
139. Overcrowding abated	..	..	..	..	..	..	..	..	..
140. Floors drained	..	..	..	..	..	..	..	..	..
141. Insufficient conveniences remedied	..	..	..	..	31	..	..	..	31
142. Unsuitable/defective conveniences remedied	..	..	..	..	111	..	..	..	111
143. Conveniences made separate for sexes	..	..	..	..	5	..	..	..	5
144. Other offences remedied	..	1	..	..	46	..	..	..	47
145. Absence of abstract noted	..	..	..	..	10	..	..	..	10
Workplaces.									
146. Rooms ventilated	..	..	..	..	..	..	..	..	..
147. Overcrowding abated	..	..	..	..	..	..	..	..	..
148. Rooms cleansed	..	..	..	..	..	..	..	..	..
149. Sufficient conveniences provided	..	..	..	..	7	..	..	..	7
150. Other defects remedied	..	..	..	..	1	..	..	..	1
Shops.									
151. Ventilated	..	1	3	..	..	..	..	..	4
152. Reasonable temperature secured	..	..	..	..	..	..	..	..	..
153. Sufficient conveniences provided	..	..	..	..	..	..	..	..	..
154. Lighting provided	..	..	..	..	..	..	..	..	..
155. Washing facilities provided	..	1	..	3	3	..	..	..	7
156. Meals facilities provided	..	..	..	..	..	..	..	..	..
157. Other defects remedied	..	3	3	..	17	..	..	..	23
Offensive Trades.									
158. Bye-law offences remedied	..	..	..	..	..	..	..	..	..
159. Other improvements secured	..	1	2	..	..	..	..	..	3

WORK DONE BY SANITARY INSPECTORS, 1955.—contd.

[illegible]

Report of the City Analyst

MUNICIPAL LABORATORY

BY

C. H. MANLEY, M.A., F.R.I.C.,
City Analyst.

This is the twenty-eighth Annual Report issued by the present Public Analyst and the fourth relating to the work of the Department since its transference from No. 1, Swinegate to No. 12, Market Buildings early in 1952.

The general pattern of the work has been similar to that of the previous year, being concerned mainly with the analysis of food, drugs, fertilisers, feeding stuffs and waters, and the investigation of atmospheric pollution. Work has also continued to be carried out for the City Coroner and the Chief Constable as well as for the heads of other Corporation Departments requiring advice and assistance and for the local hospitals.

The year has proved to be the last for the operation of the Food and Drugs Act, 1938, notice being issued by the Ministry of Agriculture, Fisheries and Food on the 21st December that in effect this Act would be consolidated and superseded by the Food and Drugs Act, 1955 on the 1st January, 1956, the Food and Drugs Amendment Act, 1954, first coming into force on this day (with the exception of Section 28 which came into operation on the 25th November, 1954) and then being repealed forthwith by the 1955 Act.

A report has also been issued during the year by the Food Standards Committee of the Ministry on revised recommendations for limits of arsenic in foods, and a supplementary report regarding colouring matters in foods.

I am very glad to take this opportunity of extending once again to my Deputy (Mr. R. A. Dalley, F.R.I.C.) and the other members of the staff my cordial thanks for their continued loyal and valued assistance, and to express to the Senior Sampling Officer (Mr. H. Long) my appreciation of his helpful co-operation.

One staff change occurred, Mrs. B. J. Pegler, B.Sc.(London), who takes with her our best wishes, resigning on 1st January and a successor assuming office on 2nd May, the personnel now being :—

Mr. R. A. Dalley, F.R.I.C. (Deputy City Analyst), Mr. Wyndham Rawson, B.Sc., Mrs. Derek Barton, B.Sc., Mr. R. G. Blamires and Miss V. Greener.

The following is a summary of the analyses made during 1955 :—
Samples submitted by Public Health Department :—

Food and Drug samples	2,725
Fertilisers and Feeding stuffs	16
Miscellaneous samples	38
Ventilation tests	294
Rain Gauges	81
Sulphur dioxide tests (lead peroxide method)	84
Atmospheric volumetric and smoke tests ..	606
Milks for Bacteriological examination ..	1,094
Ice-cream for bacteriological examination ..	30
	4,968

Samples submitted by other Departments :—

Central Purchasing Department	13
City Coroner	21
Leeds Group " A " Hospital Management Committee	1
Leeds Group " B " Hospital Management Committee	14
Leeds General Infirmary	2
Police Headquarters	18
Waterworks	12
Welfare Services	3
Works Department	1
	85
Total ..	5,053

FOOD AND DRUGS

The table on pages 217 to 220 summarises the samples taken under the Food and Drugs Act, 1938, and the Defence (Sale of Food) Regulations, 1943.

The percentage of adulteration was 3·0 as in 1954, this equalling the lowest recorded figure for the city.

The table on pages 153 and 154 lists the summonses issued respecting those adulterated samples in respect of which legal proceedings were instituted.

FOODS (2,725) :—

Milk.—The average composition of the 2,555 samples analysed was as follows, the corresponding figures for 1954 and 1939 being given for comparison :—

		1955	1954	1939	Minimum require- ment
Non-fatty solids	..	8.71%	8.70%	8.78%	8.50%
Fat	.. ..	3.66%	3.69%	3.71%	3.00%
Total solids	..	12.37%	12.39%	12.49%	11.50%

The adulteration figure was 2.3 per cent., as against 2.7 per cent. in 1954 (the lowest previously recorded), and therefore represents a still further improvement on any previous figure.

Of the 58 unsatisfactory samples, 37 contained added water, 14 were fat deficient, 5 were both watered and fat deficient, and 2 contained extraneous matter in the form of 1 part of lacquer per 100,000 in No. 178/L, and 20 parts of dirt per 100,000 in No. 260/L. The greatest proportion of added water found was 12.5 per cent. (Nos. 133/L, 780/L and 798/L) and the greatest fat deficiency 52 per cent. (No. 816/B).

Legal proceedings were instituted in nine cases involving eight watered milks (including four samples that were also fat deficient) and one fat deficient milk. All the cases were proved, the total fines imposed being £140 and the total costs £45 9s. 8d., of which the Analyst's fees amounted to £32 11s.

In the remaining cases either warnings were issued where considered necessary or repeat samplings carried out after an interval where such procedure was possible.

The following samples other than milk were found unsatisfactory :—

Meringo Biscuits.—(No. 777/L) (*Informal*).—The purchaser of these complained that they tasted of carbolic. Investigation proved, however, that this was incorrect, the abnormal taste observed being due to the biscuits having been made with coconut, the oil of which had become rancid. The free fatty acids in the coconut oil amounted to 4 per cent. as compared with a recognised maximum of 1.5 per cent.

Bread.—Complaints were made about six individual loaves of bread and one buttered teacake. Four of the loaves contained dirty dough, the discolouration being probably due to splashing of the oil used for lubricating the machinery: the fifth contained two small pieces of concrete and the sixth an insect.

The *teacake* (No. 113/L) had been spread with a mixture of 65 per cent. butter and 35 per cent. margarine. On legal proceedings being instituted, the shopkeepers admitted the offence, stating that there were two containers in the kitchen, one with butter and the other with margarine, and that by mistake the teacake had been spread with both butter and margarine instead of with butter alone. A fine of £1 was imposed along with costs amounting to £2 5s. 6d.

Minced Chicken.—(No. 527/L).—This was sold in a 2½ oz. jar as "Genuine Minced Chicken," a private purchaser complaining that it contained hairs in large quantity. This complaint was substantiated, the average number of chicken hairs present being 112 to the gram or 7.900 in the 2½ oz. supplied. The chickens used for the manufacture of this product had obviously not been adequately prepared before being minced, apart from which the proportion of actual chicken meat present was only 57 per cent., the remainder being chicken jelly and condiments. A visit was paid by the Senior Sampling Officer to the factory (situated outside Yorkshire), where it was found that there were feathers on the floor as well as on the sides of the water tank used for boiling the chickens: accordingly it was easy to understand how the contamination had occurred. Legal proceedings were subsequently instituted in respect of the hairs but not of the deficiency in meat content. For the defence it was stated that it was owing to the negligence of a member of the staff that this particular batch had gone out of the factory and that attempts had been made to recall the jars representing it. A fine of £5 was imposed and an order made for 35s. costs.

Creamed Cereal.—(No. 938/B and No. 961/B).—The first was an opened tin of this food, alleged by the purchaser to contain particles of extraneous matter. The second was an unopened tin. The presence of gritty particles was confirmed and it was found that in each case they consisted of calcium lactate, which, although, not properly speaking, extraneous matter, was nevertheless undesirable in this strained creamed cereal. It transpired that the contents of the unopened tin (purchased for control purposes by a sampling officer) was 2½ years old.

Ginger Beer.—(No. 573/L).—A complaint was made by a private purchaser regarding the dark brown deposit found in this. Microscopical examination showed that the deposit consisted of a mould, the appearance of which was consistent with its being *Aspergillus Niger*.

Meat Pie.—(No. 167/L).—This was received as the result of a complaint by a private purchaser. On examination it was found to contain a rat dropping. On proceedings being instituted against the vendors the latter were fined £10 and ordered to pay 35s. costs.

Tinned Peas.—(No. 558A/L).—A complaint was made that these had a sour taste and had caused vomiting. Examination showed the chemical composition to be normal and no poisonous metallic compounds to be present. It seemed probable, however, that these peas had been infected with one of the "flat-sour" groups of bacteria, which are spore-forming organisms sometimes found in tinned peas, and which produce acid but no gas. No "blowing" of the tin therefore occurs, and the only evidence to the consumer of the presence of these organisms is the unpleasant taste.

Salmon and Salmon Sandwiches.—(No. 1277/B and No. 902/L).—The sandwiches in this case had been prepared with so-called "First Quality Atlantic Salmon" (a canned product), and a complaint made regarding the taste of the latter. Examination of a sample of this proved that, whilst smelling like genuine salmon, it was definitely inferior to this both in taste and texture. The Fishmongers' Company, to whom a specimen was submitted for their expert opinion, stated that it was probably a portion of a small grilse or sea trout, the habitat of which is the North Atlantic Ocean.

Sausages.—Of the 17 samples analysed four received adverse reports, three of these being pork and one beef.

Legal proceedings were instituted in respect of two of the pork sausage samples, these containing respectively only 50 per cent. and 55 per cent. meat instead of an expected 65 per cent. minimum. A plea of guilty was entered in each case, the explanation in the first one (No. 360/B) being that the mixing machine had broken down and the process had to be completed by hand, a fine of £10 with 35s. costs being imposed. In the second case (No. 768/L) the manufacturer was given a conditional discharge on payment of 39s. costs. The third sample of pork sausage to receive an adverse report contained

sulphur dioxide permitted preservative (250 parts per million), without declaration at the time of sale, the maximum allowed with declaration being 450 parts per million = 0.045 per cent. The branch manager of the firm concerned was warned.

The unsatisfactory beef sausage (No. 37/L) contained only 44 per cent. meat instead of an expected 50 per cent. minimum, a warning letter being sent to the retailer regarding this.

The average meat content of the 6 pork sausages analysed (including the two with less than 65 per cent. was 62 per cent., that of the four with satisfactory meat contents being 66.8 per cent. Similarly, the 10 beef sausages analysed (including the one with less than 50 per cent. meat) had an average meat content of 52.7 per cent., the corresponding figure for the nine satisfactory ones being 53.6 per cent. The remaining sample (a beef and pork sausage) had a 56 per cent. meat content. It is a matter for regret that, following the agreement reached between the Association of Public Analysts and the Sausage Manufacturers' Association (S.M.A.) and referred to in the previous Annual Report, the S.M.A. have withdrawn their support of the "dual" standard for pork sausages (65 per cent.) and beef sausages (50 per cent.), doubtless as a result of the National Federation of Meat Traders Association favouring a "single standard" only of 50 per cent. for both types. Despite this, as has been seen, the "dual" standard has been adhered to by the Leeds Local Authority, the basis in the absence of a statutory standard being the figures of composition found to hold both for the city and the country as a whole, due regard being continued to be paid to the price charged when formulating reports.

Tizer.—(No. 1420/B).—A complaint was received from a private purchaser that a pint bottle of this well-known effervescent soft drink had an objectionable taste, her 2 year old boy to whom it was given letting it run out of his mouth and starting to cry. On drinking some of it herself, the mother said that she noticed a peculiar flavour, as of a disinfectant. Analysis proved that the complaint was justified, the smell and taste being found to be due to the presence of cresols to the extent of 30 parts per million. Proceedings were instituted and a plea of guilty entered, the defending solicitor remarking that the real defendants in such a case as this are a few members of the public who use these bottles for purposes for which they are never intended, and then return them to recover the 2d. deposit.

It was stated, moreover, that the firm had been trading for over 50 years without a single conviction and during the last few years had been washing 300,000 bottles per week. The manufacturers were fined £5 and ordered to pay 35s. costs. The plastic cap of a mineral water bottle used for storing disinfectant becomes contaminated and is possibly not so easily freed from the disinfectant as is the bottle, with the result that the contents of a refilled bottle dissolve cresols from an incompletely cleansed cap, the caps and the bottles being submitted to separate washing processes. A second pint bottle (No. 1501/B) (*Informal*), received about a fortnight after the first, was similarly contaminated, and although only 5 parts of cresols per million were found in its contents, this amount was sufficient to render the drink unpalatable.

Indian and Ceylon Tea.—(No. 225/L).—This was an informal sample brought by a private purchaser who complained of the presence in it of an unduly large proportion of coarse woody material. Analysis proved that the tea contained 10 per cent. of this as against only 3 per cent. of much less coarse material found in another tea sold at the same price of 1s. 6d. per quarter. Moreover, the percentage extract yielded to boiling water was below the normal figure of 35 per cent.—50 per cent. being only 28.3 per cent., or 31.4 per cent. in the wood-free product. The product was therefore a particularly poor specimen. A formal sample bought for 1s. 7d. from the same stall as the informal one was a marked improvement on the latter, the woody material and hot water extract being 3 per cent. and 33 per cent. respectively, although the brand was distinctly border-line as regards the latter figure.

Of the samples classified as genuine the following are deemed worthy of mention :—

Chocolate Blanemange Powder.—(No. 487/B).—This consisted of cornflour = 86 per cent., cocoa = 12 per cent., salt, colour and flavouring = 2 per cent., the ingredients being listed in the correct order.

Golden Cake Mixture.—(No. 1555/B).—This consisted of flour = 43 per cent., sugar = 33 per cent., shortening = 17 per cent., baking powder = 4 per cent., salt, colouring and flavouring = 3 per cent.

Citroze.—(No. 1390/B).—This was a glucose drink containing dextrose monohydrate = 30 per cent., sugar = 17 per cent., lemon

juice = 6 per cent., citric acid = 1 per cent., with benzoic acid as preservative (600 parts per million).

Drinking Chocolate.—(No. 177/B).—This consisted of sugar = 71.5 per cent., cocoa = 27.5 per cent., salt, etc., = 1 per cent.

Farinoca.—(No. 111/B).—This consisted of gelatinised potato starch.

Ice Cream.—The two samples analysed were both well above the legal limits, the fat contents being 11.4 per cent. and 7.8 per cent. respectively, as against the statutory 5 per cent. minima.

Ribena Blackcurrant Juice.—(No. 278/B).—This fruit juice concentrate contained 58 per cent. sugars and 21 mg. of Vitamin C (ascorbic acid) per fluid ounce, as against 20 mg. guaranteed.

Its sulphur dioxide preservative of 260 parts per million was, moreover, within the maximum permitted amount of 350 p.p.m.)

Ricory.—(No. 817/B).—This was a powder stated to contain soluble solids from both coffee and chicory, and had a caffeine content of 1.2 per cent.

Tinned Creamed Rice.—(No. 726/B).—This consisted of milk = 80 per cent., rice = 15 per cent., and sugar = 5 per cent.

Tinned Strawberries in Syrup.—(No. 145/B).—This product consisted of strawberries = 47.5 per cent., syrup = 52.5 per cent., the sugar content of the syrup being 22 per cent.

Tuna.—(No. 620/B).—This is a form of salmon substitute containing 28 per cent. protein and 11.5 per cent. oil.

Cider Vinegar.—(No. 20/B).—This had the excellent acetic acid content of 5.8 per cent.

Finally, the 5 samples of wine analysed ranged in alcohol content from 11 per cent. to 15.5 per cent.

DRUGS (14)

These were reported as satisfactory with the exception of the *Indian Brandee* (No. 851/B) which was claimed to contain, besides tinctures of capsicum and rhubarb, essence of ginger and syrup, 25 per cent. sweet spirits of nitre. None of the latter was, however, present, and there was only the barest indication that any had been present originally, although the formula was identical with that for No. 1372/L (received 1/12/52) in which there were definite suggestions that sweet spirits of nitre had been so used.

In the case of *Crestinja*, two informal samples of which were submitted, the complaint was made that the preparation burnt the throat even when diluted and sweetened according to the directions. In addition to 6 per cent. phosphoric acid it contained essence of ginger and essence of capsicum, colour and flavouring. When correctly diluted it was considered to have a satisfactory taste, due allowance being made for the fact that a medicine containing ginger and capsicum is bound to be somewhat "hot" by reason of its very nature.

Of the remainder the *Dellipsoids* (No. 1316/B) contained phenacetin as the major constituent combined with smaller amounts of caffeine, quinine and atropine sulphate, whilst the *Tyrozets* (No. 1067/B), described as antibiotic throat lozenges, contained 5-6 mg. benzocaine per lozenge.

OTHER ANALYSES

Fertilisers (14) and Feeding Stuffs (2).—Both the feeding stuff samples complied with the statutory statements, but five of the fertilisers failed in part or in whole to conform with the warranties, the worst being a compound fertiliser in which the nitrogen instead of being 4.43 per cent. was only 2.43 per cent. (No. 15/B). A less serious case was that of the *Hoof Meal* (No. 10/B) with 13.2 per cent. nitrogen as against 14.3 per cent. guaranteed, the permitted limit of variation being 0.5 per cent. In one other case (No. 3/B, John Innes Base Fertiliser), the required statutory statement was not required.

Miscellaneous samples (38).—These consisted of 10 drinking waters, 1 cellar water, 9 experimental rain gauge waters, 6 dusts, 3 tins of corned beef (with cereal), 2 tins of Jamaica grapefruit, 1 piece of contaminated meat, 1 portion of cooked mutton, 1 piece of glass, 3 ox pancreas stones, and 1 orange-flavoured milk.

The six samples of dust were obtained in the neighbourhood of Skelton Grange Power Station.

Of the 3 tins of corned beef received (Sp. 1736), slices taken from the first showed several green streaks together with a number of small green nodules, both these peculiarities being found in the gelatin portions. The contents of the second tin were normal, whilst those of the third tin showed a single green streak, but no nodules. Microscopical examination revealed that the green material was not a mould, chemical analysis subsequently proving that it was a compound of iron, which was therefore not likely to constitute any danger to health if consumed.

The contents of the 2 tins of Jamaica grapefruit (Sp. 1911) had been found to have numerous small white spots embedded in the flesh. Microscopical examination and chemical tests showed these to consist of needle shaped crystals occurring in fan formation and consisting of Naringen, the glycoside to which the characteristic flavour of grapefruit is due. The crystals had doubtless separated as the result of long or cold storage or a combination of both these factors. This phenomenon has been previously reported from both Kent and Southampton by the public analysts for these areas.

The cooked mutton (Sp. 1912) was submitted by a housewife as it had developed a red colour which could not have come through contact with any coloured material. The presence of a red dye was confirmed, the Medical School reporting that it must have been produced by a non-pathogenic organism, which was duly isolated.

The 3 stones found in the pancreas of an ox (Sp. 1730) consisted mainly of calcium carbonate, (approximately 90 per cent.), the remainder being free lime, phosphate and organic matter.

The orange-flavoured milk consisted of 90 per cent. whole milk, 5.5 per cent. added sugar and 4.5 per cent. added water, colouring and flavouring. This is a new product regarding the composition of which public analysts are having to form an opinion. The present view is that such a product shall be regarded as genuine provided that it contains not less than 85 per cent. full-cream milk and not more than 15 per cent. of a mixture of various sugars and flavourings with an appropriate colouring.

Ventilation Tests (294).—In connection with the question of improvement grants to occupiers of certain back-to-back houses under the Housing Act, 1949, a series of special tests was carried out to measure the ventilation rates in these houses, control tests being carried out at the same time in modern semi-detached houses. The method adopted was known as the "Carbon dioxide (CO_2) direct analysis technique," which was developed by Professor G. P. Crowden at the London School of Hygiene and Tropical Medicine, where a demonstration was given in May prior to the inauguration of tests in Leeds in July. The operation consists in first liberating 500–1,000 litres (17.5–35 cu. ft.) of carbon dioxide gas from a Douglas bag in front of an electric fan into the room undergoing test and then taking four samples of the air at 5 minute intervals in evacuated glass tubes. After this the latter are brought back to the laboratory where the CO_2 content of each is ascertained by means of a Haldane gas

apparatus, and the number of air changes per hour calculated. An initial concentration of approximately 3 per cent. CO_2 is aimed at, a room of 1,000 cu. ft. capacity requiring 750 litres of gas.

Tests showed the effectiveness of installing in the external wall of each room of a back-to-back house an air-brick fitted with a colt constant flow ventilator, this form of ventilation proving superior to that in a modern semi-detached house in which (apart from the windows and doors which were all closed to make the tests comparative) escape of the impure air was up the unlit fire-place chimney.

As an example, under equal weather conditions, with a cloudless sky, shade temperature = 79°F . and wind force (Beaufort Scale) = 1, the air change per hour in a back-to-back house sitting room was 1.2 and in a modern semi-detached house sitting room 0.2. During the investigations tests have been carried out in kitchens, living rooms, bathrooms, bedrooms and attics, these being in the nature of pioneer work, which may be regarded as highly successful, and which has incidently received the approval of the Ministry of Housing and Local Government.

ATMOSPHERIC POLLUTION.

When acquiring a satisfactory degree of ventilation in a house it is desirable that the incoming air should be derived from an unpolluted atmosphere. This object, of course, comes nearer to attainment in a residential district than in an industrial area, even more so in a residential district in which smokeless fuel is burnt instead of coal. The monthly measurement of the atmospheric pollution in seven widely separated parts of Leeds has been continued throughout the year, the following tables recording the results obtained, along with the 1954 figures for comparison :—

SITE	RAIN GAUGES		LEAD PEROXIDE METHOD	
	Average monthly deposit in tons per sq. mile		Average daily sulphur pollution as mgrms. of SO_2 per 100 sq. cms. of fabric exposed.	
	1955	1954	1955	1954
Headingley	9.6	15.3	2.4	2.5
Market Buildings	24.0	29.5	3.7	3.5
Hunslet	35.2	27.3	4.1	3.2
Temple Newsam	10.9	10.9	2.9	2.5
Armley Park	24.7	31.9	3.0	3.0
St. James's Hospital	14.8	17.4	3.3	3.4
Burley Park	24.8	37.8	2.9	3.3

RAIN GAUGES.
DEPOSITS FOR YEAR.

	Tons per sq. mile	
	1955	1954
Headingley	115·7	184·2
Market Buildings	288·5	354·2
Hunslet	387·5	246·0
Temple Newsam	120·5	109·1
Armley Park	296·3	382·8
St. James's Hospital	177·1	208·3
Burley Park	272·7	453·4

The average monthly deposit figures indicate improvements at all stations except Hunslet (at which there was an increase of nearly 8 tons per square mile) and Temple Newsam (for which the amount was unchanged). The total deposit figures for the year reveal a similar state of affairs, save that the figure for Temple Newsam exceeded that for 1954 by approximately 11½ tons.

Whether judged by the average or the total figure there is little difference between Headingley and Temple Newsam, each of which continues to furnish the least pollution to the atmosphere of the districts investigated, and it would be both interesting and valuable to ascertain the present deposit figures for a district like Roundhay which is not only a large residential area but one which is but little polluted by other than domestic smoke. It is noteworthy that for the 12 months from 1st June, 1927 to 31st May, 1928, during which analyses were made of the contents of a gauge placed somewhere in Roundhay, the total deposit was 110·8 tons per square mile corresponding to an average monthly figure of 9·2, these being very similar to the present Headingley figures, but appreciably better than the corresponding Headingley figures for 1927-1928, which were 132 and 12 respectively.

As regards the City Centre, the dream of the future mentioned in my previous Report seems to be coming nearer to realisation, with the announcement of the intended electrification of the Leeds Central to King's Cross line within the next two or three years. Electrification of the Huddersfield-Leeds-York line will, however, still be needed if Lower Briggate and similarly situated thoroughfares are to be given a chance of approximating to smokeless zones.

In addition to the foregoing analyses the daily measurements of the City Centre Smoke and Sulphur dioxide have been continued with the aid of the volumetric apparatus installed in one of the laboratories, the accompanying table summarising the results obtained :—

1955	SMOKE		SULPHUR DIOXIDE	
	Milligrams per cubic metre		Volumes per million volumes of air	
	Daily Average	Highest Daily Value	Daily Average	Highest Daily Value
January	0.89	1.72	0.139	0.371
February	0.64	0.95	0.084	0.126
March	0.58	1.04	0.069	0.123
April	0.48	0.86	0.066	0.165
May	0.22	0.45	0.077	0.129
June	0.20	0.30	0.111	0.214
July	0.21	0.34	0.111	0.212
August	0.24	0.49	0.114	0.266
September	0.44	0.76	0.110	0.206
October	0.96	2.27	0.153	0.390
November	1.21	2.60	0.208	0.475
December	1.05	2.30	0.204	0.636
Mean	0.59	..	0.120	..

The comparative daily averages for 1953, 1954 and 1955 are as follows :—

	Smoke	Sulphur Dioxide
1953	0.66	0.158
1954	0.72	0.141
1955	0.59	0.120

the sulphur dioxide figures being roughly one fifth of the smoke figures as tabulated, though not in actual amount, the mode of expression in the two cases being of course different.

" SMOG "

In the autumn the volumetric method was usefully extended, for, following correspondence between the Department of Scientific and Industrial Research and the Medical Officer of Health, it was agreed to install four additional sets of apparatus in the West Park, Roundhay, Farnley and Hunslet districts respectively. The Medical Officer of Health, the Chief Sanitary Inspector and two other

Sanitary Inspectors made themselves responsible for operating these sets, which went into action for the first time on 1st and 2nd December, the City Analyst and his staff subsequently determining the concentrations of smoke and sulphur dioxide by examination of the filter paper discs and hydrogen peroxide solutions which formed part of the apparatus. These filter papers and solutions were changed every 3 hours and readings taken at the same time of the volume of air drawn through. A similar procedure was followed with the apparatus in the City Analyst's Laboratory (City Centre), but the 3-hourly readings were made during the day only. Of the four outlying stations Hunslet had the heaviest smog and Farnley the least, the former furnishing about four times the normal daily amounts for December and the latter being about normal. Whilst the fog was at its worst during the daytime on 1st December, and before the four additional sets were brought into operation, the apparatus at the City Centre recorded figures indicating 5 times the normal daily amount of smoke and 10 times the normal daily amount of sulphur dioxide for December.

The maximum figures obtained at each station were as follows :—

<i>1st December</i>		<i>Smoke</i>	<i>Sulphur Dioxide</i>
City Centre	9 a.m.—noon	5·1	1·4
Hunslet	6 p.m.—9 p.m.	3·7	0·5
West Park	8.45 p.m.—11.45 p.m.	2·0	0·4
Roundhay	11.30 p.m.—2.30 a.m.	1·6	0·3
Farnley	8.30 p.m.—11.30 p.m.	0·7	0·1

In considering the foregoing figures obtained under both clear and foggy conditions in the city, we are faced with the fact that even when we have eliminated atmospheric smoke (pollution from which tends to be greater in the winter months) the problem of atmospheric sulphur dioxide remains. It is submitted, however, that under normal conditions this need not be an undue cause of anxiety, seeing that its daily average concentration is only of the order of 0·1–0·2 part per million, whereas it is held that it is above a threshold concentration of 1 part per million that it is damaging to the health of human beings, especially those subject to bronchitis. Elimination of atmospheric smoke, therefore, whilst abolishing smog but not fog, might well cause the occurrence of the latter to be less frequent and less severe, with the result that the concentration of the sulphur

dioxide would be kept within quasi-harmless limits for a much greater part of the year. Meantime it is understood that the most favoured process at present for its removal from flue gases is one in which it is absorbed in a solution of ammonia and eventually converted into sulphur and sulphate of ammonia. The prevention of its escape into the atmosphere is of course important not only from the standpoint of health but also because of the potential danger to buildings, especially those in industrial areas.

BACTERIOLOGICAL WORK

1,094 Milks and 30 Ice-creams were submitted to the required tests, the results being tabulated hereunder :—

MILK (1,094)

Designation	Number examined	Unsatisfactory by		Percentage reported unsatisfactory
		Methylene Blue test	Turbidity test	
T.T. Raw	385	53	..	13·8
Accredited	..	..	..	..
Sterilised	102	..	..	..

Satisfactory samples do not decolourise Methylene Blue at 37°C. in 4½ hours, May to October, or 5½ hours, November to April.

Designation	Number examined	Unsatisfactory by		Number reported unsatisfactory	Per cent. reported unsatisfactory
		Methylene Blue test	Phosphatase test		
Pasteurised (447)	Dairies ..	252	1	6	2·4
	Schools ..	118	10	11	9·3
	Day Nurseries..	77	..	..	..
T.T. Pasteurised (160)	Dairies ..	155	..	..	..
	Day Nurseries..	5	..	..	..

Samples complying with the phosphatase test must not give a colour reading of more than 2·3 Lovibond Blue Units.

ICE-CREAM (30)
METHYLENE BLUE TEST

Grade	Time taken to reduce Methylene Blue at 37°C	Number	Percentage	Quality
1.	4½ hours or more ..	13	43·3	Good
2.	2½ to 4 hours	4	13·3	Satisfactory
3.	½ to 2 hours	11	36·7	Unsatisfactory
4.	Nil	2	6·7	Very unsatisfactory
		30	100·0	

	Number examined	Grade 1 or 2	Percentage
Wrapped *	7	5	71·5
Tubs	7	2	28·6
Loose	15	10	66·7
Unwrapped Block	1	..	..

Of the 13 Grade 3 and 4 samples, four were loose, three were wrapped, five were cartons and one was an unwrapped block.

SAMPLES SUBMITTED BY OTHER DEPARTMENTS

These are numerically detailed in the summary at the commencement of the Report and represent work carried out for six Corporation Departments and three Hospital Groups. They include foods, waters, detergents, soft drinks, intoxicating liquors, a boiler deposit, fireworks and a paint solvent.

The paint solvent (diacetone alcohol) was discovered in a bottle outside a works by a 5 year old boy who saw fit to drink some of it and as a result became unconscious. The unconsumed solvent was submitted for identification, the boy meantime having been taken to hospital, where after appropriate treatment he regained consciousness.

City Coroner.—The 21 specimens examined are representative of five deaths, three of which were proved to be due to natural causes (C.27, C.29, C.31, C.33) and two to poisoning (C.26 and C.32), both deceased concerned being women. The first (aged 76) was found dead in bed on 1st January, having left a note indicating that

she intended suicide. She was suffering from an advanced form of heart disease, and analysis showed that death had been caused by an overdose of Ephedrine hydrochloride present in the form of a proprietary brand of asthma tablets, which also contained Phenazone (Antipyrine) and Fluorescein sodium, the presence of which became apparent by its brilliant green fluorescence when the brown acid stomach contents were in due course treated with caustic alkali. Examination of both stomach contents and urine indicated that at least $6\frac{1}{2}$ grains of Ephedrine hydrochloride and 28 grains of Phenazone had been taken (28 tablets). This unusual case was the more unusual by reason of the fact that a second dye was found in the urine, which contained Methylene blue, this originating from a well known brand of backache pills, which were included amongst the various drugs discovered in the dead woman's house. Strange to say, no report of this appeared in the press, despite the excellent opportunity given it of showing how a drain-testing dye had pointed the way to the cause of an aged woman's death.

The second case concerned a woman of 55 in whose stomach contents were found 51 grains of Tuinal, equivalent to seventeen 3 grain capsules of this hypnotic of the barbiturate class, the fatal dose being taken shortly before the deceased was arrested at night, death occurring in the early hours of the following day.

The fees accruing amounted to £35 14s.

FOOD AND DRUGS ACT, 1938.
SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1955.

Article.	No. examined.			No. adulterated.			Per-centage adultera-tion.
	Formal	Informal	Total	Formal	Informal	Total	
FOODS (2,711)							
Bev	I	..	I	..	..	..	..
Baked beans with pork sausages and tomato sauce	I	..	I	..	..	..	..
Baking powder	I	..	I	..	..	..	..
Beef paste, potted ..	2	..	2	..	..	..	..
Biscuits, Meringo ..	..	I	I	..	I	I	100
Black pudding	I	..	I	..	..	..	..
Bread	..	7	7	..	7	7	100
Butter	I	..	I	..	..	..	..
Cake Mixture, Golden ..	I	..	I	..	..	..	..
Chicklettes	I	..	I	..	..	..	..
Chicken, minced	..	I	I	..	I	I	100
Chicken spread	I	..	I	..	..	..	..
Chocolate Blanc-mange powder	I	..	I	..	..	..	..
Chocolate, drinking ..	I	..	I	..	..	..	..
Cheese, processed celery flavoured	I	..	I	..	..	..	..
Chutney, fruit	I	..	I	..	..	..	..
Chutney, Green Label Indian Mango	I	..	I	..	..	..	..
Citroze	I	..	I	..	..	..	..
Coffee	I	..	I	..	..	..	..
Coffee and chicory essence, sweetened ..	I	..	I	..	..	..	..
Cookeen, comp. cooking fat	I	..	I	..	..	..	..
Cooking fat	I	..	I	..	..	..	..
Corned beef	I	..	I	..	..	..	..
Crab meat	I	..	I	..	..	..	..
Creamed cereal	..	2	2	..	2	2	100
Cream, double	I	I	2	..	..	..	..
Cream, single	..	2	2	..	..	..	..
Custard powder	2	..	2	..	..	..	..
Farinoca	I	..	I	..	..	..	..
Fish cakes	I	..	I	..	..	..	..
Carried forward	27	14	41	..	11	11	..

FOOD AND DRUGS ACT, 1938.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1955—continued

Article.	No. examined.			No. adulterated.			Percentage adulteration.
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	27	14	41	..	11	11	..
Flour, self-raising ..	1	..	1	..	..	..	..
Garden mint in vinegar ..	1	..	1	..	..	..	..
Ginger beer ..	..	1	1	..	1	1	100
Ginger cordial ..	1	..	1	..	..	..	..
Ginger, ground ..	1	..	1	..	..	..	..
Ginger-co. Scotch ..	1	..	1	..	..	..	..
Ginger, stem in syrup ..	1	..	1	..	..	..	..
Horlicks ..	1	..	1	..	..	..	..
Honey, pure natural ..	1	..	1	..	..	..	..
Iced Lollipops ..	..	2	2	..	..	..	..
Ice-cream ..	2	..	2	..	..	..	..
Icing sugar ..	1	..	1	..	..	..	..
Irish stew ..	1	..	1	..	..	..	..
Jam ..	3	..	3	..	..	..	..
Jelly, strawberry ..	1	..	1	..	..	..	..
Lard ..	1	..	1	..	..	..	..
Lemonade ..	1	..	1	..	..	..	..
Lemon squash ..	1	..	1	..	..	..	..
Lime juice cordial ..	1	..	1	..	..	..	..
Lucozade ..	1	..	1	..	..	..	..
Macaroni, quick ..	1	..	1	..	..	..	..
Malt fruit loaf ..	..	1	1	..	..	..	..
Margarine ..	..	1	1	..	..	..	..
Margarine, 10% butter ..	2	..	2	..	..	..	..
Meat pies ..	..	2	2	..	1	1	50
Meat, potted ..	..	1	1	..	..	..	..
Milk ..	2,545	10	2,555	55	3	58	2.3
Mincemeat ..	1	..	1	..	..	..	..
Nescafe ..	1	..	1	..	..	..	..
Non-brewed condiment ..	1	..	1	..	..	..	..
Nutmeg, ground ..	1	..	1	..	..	..	..
Orange drink ..	3	..	3	..	..	..	..
Orange juice ..	1	..	1	..	..	..	..
Orange juice, conc. ..	..	1	1	..	..	..	..
Orange squash ..	1	..	1	..	..	..	..
Ox Tongue spread ..	1	..	1	..	..	..	..
Oxo cubes ..	1	..	1	..	..	..	..
Parkin ..	..	1	1	..	..	..	..
Carried forward ..	2,607	34	2,641	55	16	71	..

FOOD AND DRUGS ACT, 1938.

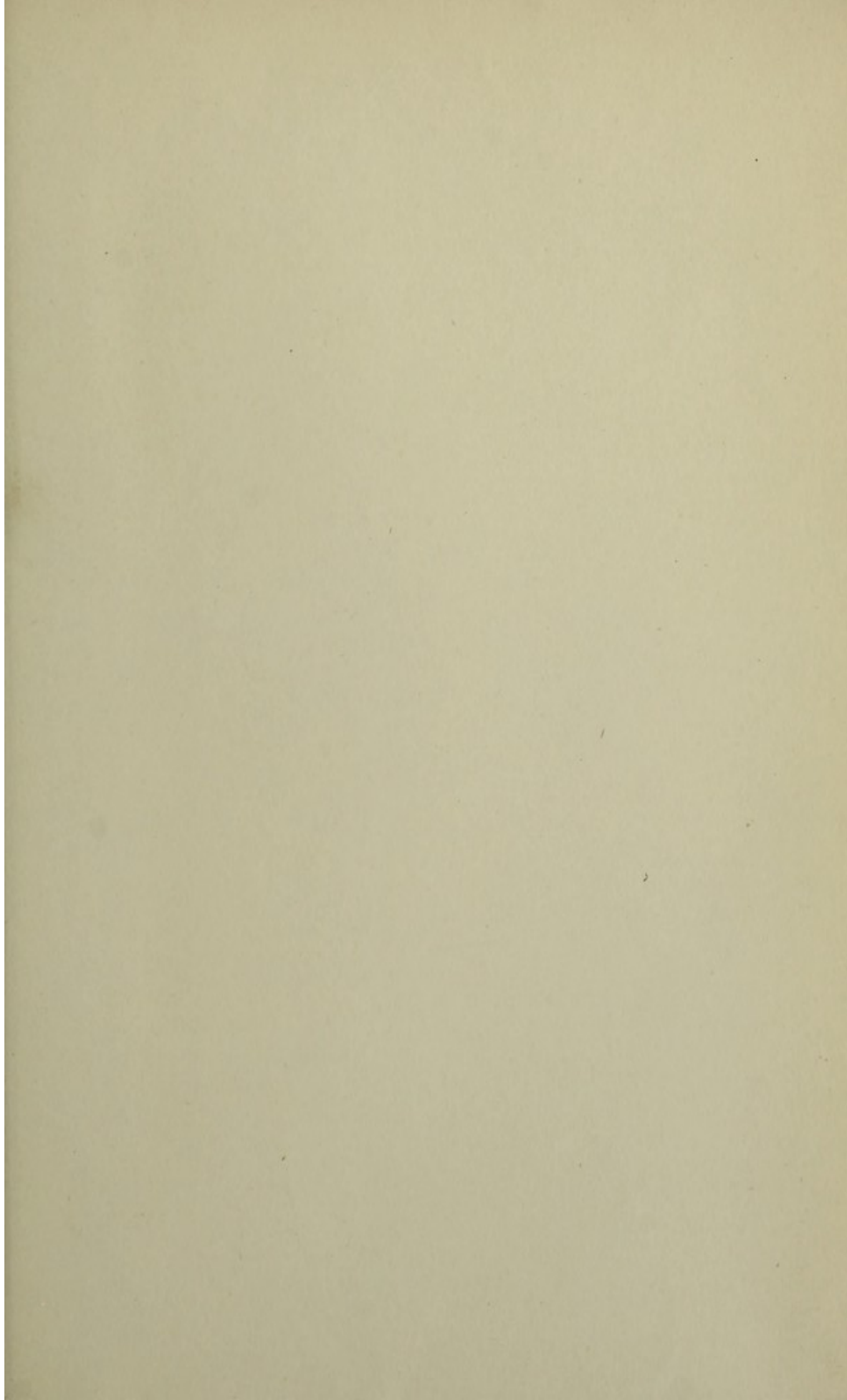
SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1955—continued

Article.	No. examined.			No. adulterated.			Per centage adultera- tion.
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	2,607	34	2,641	55	16	71	..
Peas, dried	1	..	1	..	..	..	..
Peas, processed	2	..	2	..	..	..	..
Peas, tinned	..	1	1	..	1	1	100
Pearl barley	1	..	1	..	..	..	..
Pears in syrup	1	..	1	..	..	..	..
Pickled onions	1	..	1	..	..	..	..
Plums in syrup	1	..	1	..	..	..	..
Polony	2	..	2	..	..	..	..
Pork luncheon meat ..	1	..	1	..	..	..	..
Ribena blackcurrant juice	1	..	1	..	..	..	..
Ricory	1	..	1	..	..	..	..
Rice, creamed tinned ..	1	..	1	..	..	..	..
Rice, ground	2	..	2	..	..	..	..
Sage and onion stuffing ..	1	..	1	..	..	..	..
Salad cream	1	..	1	..	..	..	..
Salmon	1	1	2	1	..	1	50
Salmon sandwiches	..	1	1	..	1	1	100
Sauce	2	..	2	..	..	..	..
Snow cake mixture, sweetened	1	..	1	..	..	..	..
Sponge mixture, sweetened	1	..	1	..	..	..	..
Sausage	17	..	17	4	..	4	23.5
Sild in tomato sauce ..	1	..	1	..	..	..	..
Soup, pea with smoked ham	1	..	1	..	..	..	..
Steak, lean minced ..	1	..	1	..	..	..	..
Stewed beef and vegetables	1	..	1	..	..	..	..
Strawberries, tinned ..	1	..	1	..	..	..	..
Sweets, buttered brazils	1	..	1	..	..	..	..
Sweets, cigarettes ..	1	..	1	..	..	..	..
Sweets, coconut butters	1	..	1	..	..	..	..
Sweets, time stoppers ..	..	1	1	..	..	..	..
Synthetic cream powder	1	..	1	..	..	..	..
Synthetic solution of food colouring	1	..	1	..	..	..	..
Carried forward ..	2,656	38	2,694	60	18	78	..

FOOD AND DRUGS ACT, 1938.

SAMPLES SUBMITTED TO THE CITY ANALYST DURING 1955—continued.

Article.	No. examined			No. adulterated.			Per-centage adultera-tion
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	2,656	38	2,694	60	18	78	..
Tea	3	2	5	..	1	1	20
Tizer	..	4	4	..	2	2	50
Tomatoes, Italian tinned ..	..	1	1	..	..	..	..
Tuna (fish)	1	..	1	..	..	..	..
Vinegar, pure cider ..	1	..	1	..	..	..	..
Wine, British Sherry ..	1	..	1	..	..	..	..
Wine, Egg	1	..	1	..	..	..	..
Wine, Fine Old Tent ..	1	..	1	..	..	..	..
Wine, Port	1	..	1	..	..	..	..
Wine, Ruby	1	..	1	..	..	..	..
DRUGS (14)							
Cinnamon and Quinine ..	1	..	1	..	..	..	..
Compound Aniseed Cough Balsam	1	..	1	..	..	..	..
Compound Glycerine of Thymol	1	..	1	..	..	..	..
Crestinja	..	2	2	..	..	..	..
Dellipsoids	1	..	1	..	..	..	..
Fenning's Fever Mixture ..	..	1	1	..	..	..	..
Fruit flavoured sulphur tablets	1	..	1	..	..	..	..
Indian Brandee	1	..	1	1	..	1	100
Influenza Mixture	1	..	1	..	..	..	..
Parrish's Food	1	..	1	..	..	..	..
Twelve Herb indigestion, flatulence, gastritis mixture	1	..	1	..	..	..	..
Tyrozets	1	..	1	..	..	..	..
Vital Restorers for Women	1	..	1	..	..	..	..
TOTAL FOOD AND DRUGS	2,677	48	2,725	61	21	82	3.0



List of names	
1. John Smith	2. Mary Jones
3. Robert Brown	4. Elizabeth White
5. James Wilson	6. Sarah Davis
7. Thomas Miller	8. Anna Taylor
9. Charles Moore	10. William Clark
11. George Hall	12. Richard King
13. Henry Adams	14. Benjamin Franklin
15. Daniel Webster	16. John Jay
17. Andrew Jackson	18. Martin Van Buren
19. James K. Polk	20. Zachary Taylor
21. Millard Fillmore	22. Fremont
23. James Buchanan	24. Abraham Lincoln
25. Andrew Johnson	26. Ulysses S. Grant
27. Rutherford B. Hayes	28. James A. Garfield
29. Chester A. Arthur	30. Grover Cleveland
31. Benjamin Harrison	32. William McKinley
33. Theodore Roosevelt	34. William Howard Taft
35. Woodrow Wilson	36. Warren G. Harding
37. Calvin Coolidge	38. Herbert Hoover
39. Franklin D. Roosevelt	40. Harry S. Truman
41. Dwight D. Eisenhower	42. John F. Kennedy
43. Lyndon B. Johnson	44. Richard M. Nixon
45. Gerald R. Ford	46. Jimmy Carter
47. Ronald Reagan	48. George H. W. Bush
49. Bill Clinton	50. George W. Bush
51. Barack Obama	52. Donald Trump
53. Joe Biden	54. Kamala Harris
55. Mitch McConnell	56. Kevin McCarthy
57. Nancy Pelosi	58. Chuck Schumer
59. Mark Warner	60. Tim Wainwright
61. Robert F. Kennedy Jr.	62. Elizabeth Warren
63. Cory Booker	64. Kamala Harris
65. Alexandria Ocasio-Cortez	66. Eric Swalwell
67. Pramila Jayapal	68. Gabe Geller
69. Mark Takano	70. Mark Takano
71. Mark Takano	72. Mark Takano
73. Mark Takano	74. Mark Takano
75. Mark Takano	76. Mark Takano
77. Mark Takano	78. Mark Takano
79. Mark Takano	80. Mark Takano
81. Mark Takano	82. Mark Takano
83. Mark Takano	84. Mark Takano
85. Mark Takano	86. Mark Takano
87. Mark Takano	88. Mark Takano
89. Mark Takano	90. Mark Takano
91. Mark Takano	92. Mark Takano
93. Mark Takano	94. Mark Takano
95. Mark Takano	96. Mark Takano
97. Mark Takano	98. Mark Takano
99. Mark Takano	100. Mark Takano