

[Report 1962] / Medical Officer of Health, Leeds City.

Contributors

Leeds (England). City Council.

Publication/Creation

1962

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CITY OF LEEDS

CONTENTS

PAGE

HEALTH COMMITTEE AND SUB-COMMITTEES 14

PUBLIC HEALTH STAFF 15

INTRODUCTION 16

NATURAL AND SOCIAL CONDITIONS (VITAL STATISTICS) 17

REPORT

ON THE

HEALTH

OF THE CITY

FOR THE YEAR 1962

VACCINATION AND IMMUNIZATION (Ss2) 22

AMBULANCE SERVICE (Ss3) 24

EXERCISE, CARE AND AFTER-CARE (Ss3) 24

HOME HELP SERVICE (Ss3) 212

MENTAL HEALTH SERVICES (Ss3) 213

SCOUTS 214

YOUTH WORKERS 215

GENERAL SANITATION 216

REPORT OF THE CITY ANALYST 214

BY

Professor D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.
Medical Officer of Health and Principal School Medical Officer.

CITY OF LEEDS

REPORT

HEALTH

OF THE CITY
FOR THE YEAR 1962

Prepared by D. B. BARNARD, M.A., M.B., B.S., D.P.H.
Medical Officer of Health and Principal School Medical Officer

CONTENTS

	PAGE
HEALTH COMMITTEE AND SUB-COMMITTEES	iv
PUBLIC HEALTH STAFF	vi
INTRODUCTION	ix
NATURAL AND SOCIAL CONDITIONS : VITAL STATISTICS ..	2
INFECTIOUS AND OTHER DISEASES	20
TUBERCULOSIS	34
DISINFESTATION AND DISINFECTION	52
NATIONAL HEALTH SERVICE ACT, 1946 :	
CARE OF MOTHERS AND YOUNG CHILDREN (S.22) ..	60
MIDWIFERY (S.23)	71
HEALTH VISITING (S.24)	75
HOME NURSING (S.25)	78
VACCINATION AND IMMUNISATION (S.26)	81
AMBULANCE SERVICE (S.27)	89
PREVENTION, CARE AND AFTER-CARE (S.28)	94
HOME HELP SERVICE (S.29)	III
MENTAL HEALTH SERVICES (S.51)	II3
HOUSING	I32
FOOD HYGIENE	I50
GENERAL SANITATION	I76
REPORT OF THE CITY ANALYST	214
INDEX	239

HEALTH COMMITTEE

LORD MAYOR (Alderman Harold Watson, J.P.)

Chairman : Alderman WINIFRED SHUTT

Alderman F. NAYLOR.	Councillor D. W. BRADLEY, LL.B., L.A.M.T.P.I.
Councillor VYVYAN M. CARDNO.	„ St. JOHN BINNS, J.P.
„ L. WALSH, M.B., Ch.B.	„ S. A. CODD.
„ W. M. JONES (Deputy Chairman).	„ B. EMMETT.
„ G. I. ADDLESTONE.	„ W. MERRITT, S.R.N., R.M.N. (to January, 1962).
„ A. CHADWICK.	„ G. R. Lloyd (from Jan., 1962).
„ G. MURRAY.	

EX-OFFICIO MEMBERS :—

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

Dr. J. H. E. MOORE, Deputy :—Dr. W. ADAMS

SUB-COMMITTEES

SUB-HEALTH (MATERNITY AND CHILD WELFARE) COMMITTEE

Chairman : Alderman WINIFRED SHUTT

Councillor VYVYAN M. CARDNO.	Councillor D. W. BRADLEY, LL.B., L.A.M.T.P.I.
„ L. WALSH, M.B., Ch.B.	„ W. M. JONES.

CO-OPTED MEMBERS :—

Mrs. H. BEEVERS Mrs. E. E. BIBBY

SUB-HEALTH (MENTAL HEALTH SERVICES) COMMITTEE

Chairman : Alderman F. NAYLOR

Alderman WINIFRED SHUTT.

Councillor D. W. BRADLEY, LL.B.,
L.A.M.T.P.I.

„ S. A. CODD

Councillor W. MERRITT, S.R.N.,
R.M.N. (to Jan. 1962.)

„ G. R. Lloyd (from Jan.,
1962).

CO-OPTED MEMBERS :—

Mrs. A. R. INCE, M.B.E.

Mrs. S. MURRAY

Mrs. N. BILLINGTON

SUB-HEALTH (SANITATION, FOOD AND DRUGS) COMMITTEE

Chairman : Councillor W. M. JONES

Alderman WINIFRED SHUTT.

Councillor G. I. ADDLESTONE.

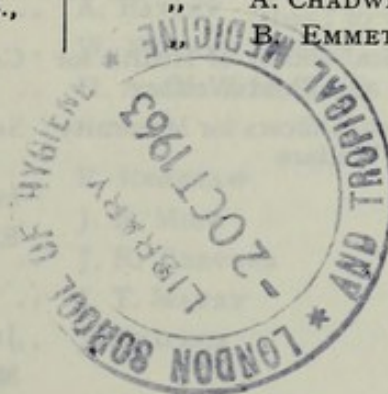
„ D. W. BRADLEY, LL.B.,
L.A.M.T.P.I.

Councillor G. MURRAY.

„ St. JOHN BINNS.

„ A. CHADWICK.

„ B. EMMETT.



PUBLIC HEALTH STAFF

Medical Officer of Health and Principal School Medical Officer	Professor D. B. BRADSHAW, M.A., M.B., B.Ch., B.A.O., D.P.H.
Deputy Medical Officer of Health and Deputy School Medical Officer	G. E. WELCH, M.B., B.S., 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	MARGARET STEANE, M.B., Ch.B.
Honorary Assistant Medical Officer of Health. (By arrangement with the University of Leeds).	A. N. MACPHAIL, M.C., M.D., Ch.B., D.P.H., Lecturer in Public Health, University of Leeds.
Assistant Medical Officer of Health 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.D., M.B., Ch.B., M.R.C.S., L.R.C.P., D.R.C.O.G., D.C.H., JESSIE I. ROSIE, M.B., Ch.B., D.P.H. MOIRA C. ROBERTSON, M.A., B.M., B.Ch. BARBARA M. BROOKE, M.B., Ch.B. FRANCES E. SMITH, M.B., Ch.B., D.P.H. JAMESINA FELGATE, M.B., Ch.B. ETHEL MAY WRIGHT, M.B., Ch.B., D.C.H.
Superintendent Health Visitor and School Nurse	JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London)
Health Visitor Tutor in Sole Charge ..	FLORENCE M. MAWSON, S.R.N., S.C.M., D.N., D.P.A. (to 15.8.62.) MAUREEN CLANCY, S.R.N. H.V. Tutor Cert. (from 16.8.62)
Supervisor of Midwives	EVELYN MANN, S.R.N., S.C.M.,
Superintendent, Part II Midwifery Training School.	PAMELA BIRD, S.R.N., S.C.M., M.T.D.
Superintendent Nurse, Home Nursing Service	KATHLEEN E. WHALLEY, S.R.N., S.C.M.
Superintendent Nurse, Home Nursing Service. (Medical Requisites)	ELSIE BOULTON, S.R.N., S.C.M., Q.N. (to 31.12.62.)

Chief Public Health Inspector and Deputy

Chief Public Health Inspector..	..	J. GOODFELLOW, F.R.S.H., M.A.P.H.I.
Deputy Chief Public Health Inspector		J. H. WYATT, M.A.P.H.I.

City Analyst and Deputy

City Analyst	R. A. DALLEY, F.R.I.C.
Deputy City Analyst	L. A. PERKIN, B.Sc., F.R.I.C.

Administrative Staff

Chief Administrative Assistant	..	A. BATLEY
Assistant Administrative Officer	..	W. WILSON, A.C.I.S.
Accountant	..	H. A. CORLETT, F.C.A.
Principal Clerks:—		
Statistics	..	E. RENSHAW
General Sanitation	..	J. R. MOIR
Infectious Diseases	..	J. K. BEEVERS
Food and Drugs.. ..	..	J. T. MAURY
Finance	..	J. PEACOCK

Disinfestation Officer	C. W. LAMB, M.R.S.H., F.R.E.S.
Chief Ambulance Officer	J. H. DAYKIN, F.I.A.O.
Home Help Organiser	Mrs. DOROTHY W. ALFORD

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. A. H. WILSON, M.B., Ch.B., D.P.M
Consultant Adviser in Venereal Diseases	R. D. CATTERALL, M.R.C.P.

PUBLIC HEALTH DEPARTMENT

STAFF

<i>Class of Employees</i>	<i>No. employed at 31/12/62</i>
Public Health Inspectors	50
Female Public Health Inspector	1
Student Probationer Public Health Inspectors	16
Condemned Meat Room Attendant	1
Assistant Analysts	5
Health Visitors	64
Student Health Visitors	11
Midwives (including part-time)	53
Dispensers (including part-time)	16
Physiotherapists (including part-time)	5
Immunisation Nurses (including part-time)	3
Chiropodists (including part-time)	6
Social Workers	3
Day Nurseries	114
District Nurses (including part-time)	76
B.C.G. Nurse	1
Infectious Diseases Visitors	2
Clerical Staff	106
Welfare Foods	5
Red Court Hostel (Midwifery Training)	30
Convalescent Home, Southport	4
Mental Health Services	113
Central Ambulance Station Staff	136
General Disinfection and Disinfestation	24
Personal Disinfection and Disinfestation	6
Flushing Staff	11
Public Convenience Lighting	1
Mortuary Service	7
Rodent Operatives	7
Lavatory Attendants	27
Lavatory Cleaner	1
Caretakers and Cleaners	42
Home Helps (including part-time)	319

City of Leeds

PUBLIC HEALTH DEPARTMENT,

25 EAST PARADE,

LEEDS 1.

Tel. No. Leeds 3-0661

September, 1963

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 1962.

The population of the city continued to increase and according to the estimate of the Registrar General was 514,640 at mid-1962 as compared with an estimate of 511,650 at mid-1961. **Vital Statistics**

The number of births registered in 1962 was 9,458 as compared with 8,921 in the previous year. The birth-rate for 1962 was 18.4 as compared with 17.4 in 1961 and an average of 16.7 for the five years 1957-61.

There were 222 deaths of infants under one year of age as against 206 in the previous year. The Infant Mortality Rate was 23 for the third year in succession and compared with an average of 24 during the previous five years. The number of deaths of infants aged under one month was 160 as compared with 132 in the previous year and a five-year average of 143. The neo-natal mortality rate was therefore 16.9 in 1962 as compared with 14.8 in 1961. Peri-natal deaths were 328 giving a peri-natal mortality rate of 34 as compared with 293 and 32 respectively last year. Stillbirths totalled 181 as compared with 170 in 1961, giving rates of 18.8 and 18.7 respectively per thousand total births.

There were 6 maternal deaths giving a maternal mortality rate of 0.62 per thousand total births. The general death-rate for the city was 12.0 as against 12.5 in 1961. The death-rates for the principal causes of death were as follows, the figures in brackets being the rates for 1961:—

Cancer (all sites)	..	..	..	..	2.18	(2.21)
Cancer of lung and bronchus	..	..	..	..	0.65	(0.57)
Coronary disease	..	..	..	..	2.62	(2.63)
Other heart disease	..	..	..	..	1.20	(1.29)
Cerebral haemorrhage, etc.	..	..	..	..	1.47	(1.70)
Bronchitis	..	..	..	..	0.95	(0.93)
Pneumonia	..	..	..	..	0.85	(0.95)

Infectious Disease

The Public Health Act, 1961, contains an important new provision, authorising payment of compensation to persons who suffer loss because they have been excluded from work to prevent spread of infection. This is a welcome provision which makes it much easier to secure the co-operation of carriers.

The occurrence of smallpox in the Bradford area led to much public anxiety. The number of contacts in Leeds was small, but their surveillance called for much careful work and there was a steep increase in the number of persons vaccinated. Particulars are to be found in the sections of the Report dealing with Infectious and Other Diseases and Vaccination and Immunisation.

There was a welcome fall in notification of both respiratory and non-respiratory tuberculosis and deaths were also substantially fewer. Nonetheless, tuberculosis is still an important disease and efforts to control it must not slacken. We are now at the stage when complete control, or even eradication of tuberculosis is a possibility, provided the disease is vigorously tackled.

Venereal Disease

There was again a rise in the number of cases of venereal disease, particularly gonorrhœa. Dr. Catterall makes a number of interesting comments in his section of the Report.

The event of the year was the introduction of the Sabin oral vaccine—the widely publicised “Sugar Lump”. This has been in use since March and has proved fully satisfactory.

**Vaccination
and
Immunisa-
tion**

We are still short of chiropodists, but it is hoped that when the National Register of Chiropodists has been completed the situation may be easier.

Chiropody

The Chief Public Health Inspector refers in his section to the severe gale in the early part of the year. This caused damage to roofs and chimneys of about 25,000 houses. The situation was dealt with by the City Council as a major emergency.

**Gale
Damage**

During the year two courses were held for the National Certificate in District Nursing. Eight candidates attended the first course and seven the second. All were successful in obtaining the National Certificate.

**Home
Nursing**

It is sad to record the death on 20th September of Mr. Harry Drake, L.D.S., R.C.S., Barrister-at-Law. Mr. Drake joined the City Council in June, 1949, and held office until May, 1961, when he retired mainly on health grounds, though he still continued almost up to the date of his death to take an active interest in a number of aspects of the health services. Mr. Drake was a prominent member of the Health Committee and was for a period “Shadow” Chairman. His kindly personality will be much missed in the city.

Obituary

In August Miss F. M. Mawson retired, having been a member of the health visiting staff since 1929. In 1947 Miss Mawson became the first tutor in the training course for health visitors at Leeds University to which she was seconded by the Health Committee. Miss Mawson's encyclopaedic knowledge of health visiting was of the greatest value to the Department. In retirement she continues to take an active interest in many aspects of this field.

Staff

Acknowledgements

I wish to record my gratitude for the ready help which I have received from my colleagues in other Departments of the Corporation particularly the Town Clerk, City Treasurer, City Engineer, Chief Education Officer, City Architect, Director of Housing, Director of Works, Welfare Services Officer and Children's Officer.

It is also my pleasant duty to offer my sincere thanks to the Chairman, Deputy Chairman and Members of the Health Committee for their courtesy, support and understanding throughout the year.

I am,

Ladies and Gentlemen,

Your obedient Servant,

D. B. BRADSHAW.

SUMMARY OF VITAL STATISTICS

1962

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

AVERAGE HEIGHT ABOVE SEA LEVEL 250 feet.

AREA OF CITY 40,613.5 Acres

HOME POPULATION (Registrar General's Estimate) .. 514,640

ESTIMATED NUMBER OF HOUSES 175,753

RATEABLE VALUE £19,716,432

SUM REPRESENTED BY A PENNY RATE £80,175

						Average
					1962.	1952-61
BIRTH RATE (births per 1,000 living)	..	..	..	..	18.4	16.1
DEATH RATE (deaths per 1,000 living)	..	..	..	..	12.0	11.7
NATURAL INCREASE OF POPULATION (Excess of births over deaths in the year)	..	..	..	..	3,285	2,219
INFANT MORTALITY RATE (Deaths under 1 year per 1,000 births)	..	..	..	..	23	26
DEATH RATE from Pneumonia and Bronchitis	..	..	..	..	1.80	1.23
DEATH RATE from Cancer	..	..	..	..	2.19	2.09
DEATH RATE from Diarrhoea and Enteritis (under 2 years) per 1,000 births	..	..	..	..	0.21	0.87

					Cases	Case- rate	Deaths	Death rate
SCARLET FEVER	..	..	..	..	183	0.36	..	..
DIPHTHERIA	..	..	..	..	2	0.00	..	..
POLIOMYELITIS	..	..	..	..	12	0.02	..	..
MEASLES	..	..	..	..	2,436	4.73	..	..
WHOOPING COUGH	..	..	..	..	81	0.16	..	..
RESPIRATORY TUBERCULOSIS	..	..	..	..	337	0.65	24	0.05
OTHER FORMS OF TUBERCULOSIS	..	..	..	..	27	0.05	2	0.00

VITAL STATISTICS
RELATING TO MOTHERS AND INFANTS
(in accordance with Ministry of Health Circular 1/60)

	1962	1961	Average 1957-61
LIVE BIRTHS—			
Number	9,458	8,921	8,574
Rate per 1,000 population	18.4	17.4	16.7
ILLEGITIMATE LIVE BIRTHS PER CENT. OF TOTAL LIVE BIRTHS ..	8.8	7.8	6.7
STILL BIRTHS—			
Number	181	170	177
Rate per 1,000 total births (live and still) ..	18.8	18.7	20.2
TOTAL BIRTHS (live and still)	9,639	9,091	8,751
INFANT MORTALITY—			
Number of deaths under 1 year of age ..	222	206	209
Infant mortality rate per 1,000 live births	23.4	23.1	24.3
Legitimate infant mortality rate	23.4	21.8	23.7
Illegitimate	23.9	38.8	33.6
NEO-NATAL MORTALITY RATE			
(First four weeks) per 1,000 live births	16.9	14.8	16.7
EARLY NEO-NATAL MORTALITY RATE (Deaths under 1 week per 1,000 live births)	15.5	13.8	14.4
PERI-NATAL MORTALITY RATE (Stillbirths and deaths under 1 week com- bined per 1,000 <u>total</u> births)	34.0	32.2	34.3
MATERNAL MORTALITY—			
Number of maternal deaths (including abortion)	6	3	4
Maternal mortality rate per 1,000 <u>total</u> births	0.62	0.33	0.43

Natural and Social Conditions

Vital Statistics

NATURAL AND SOCIAL CONDITIONS

Area.—The area of the city is 40,613·5 acres.

Population.—The Registrar General's estimate of the home population of the city at mid-1962 was 514,640.

Dwelling-houses.—The total number of dwelling-houses in the city at December, 1962, was 175,753.

Rateable Value.—The rateable value of the city at 1st April, 1963, was £19,716,432 and the estimated sum represented by a penny rate was £80,175.

Principal Industries.—Engineering, wholesale clothing, woollen and worsted manufacture, and printing continue to be the city's principal industries. Approximate numbers of persons employed in these industries are as follows:— engineering (including metal manufacture, vehicle manufacture, metal goods and precision instruments) 50,000, wholesale clothing 43,000, woollen and worsted manufacture 13,000 and printing 10,000. Approximately 37,000 persons are employed in distributive trades. These figures are not strictly related to the population of the city as, of course, they include persons not resident in the city.

The average level of unemployment during the year was 1·2 per cent.

Meteorology.—The number of hours of bright sunshine recorded during the year was 1,184·35. The sunniest month was June with a daily average of 6·50 hours and the month with the least sunshine was January with a daily average of 0·89 hours. The sunniest days of the year were June 1st and 7th, each with 14·50 hours, and the daily average for the whole year was 3·24 hours.

The total rainfall for the year was 18·80 inches. The month with the least rain was June with a total of 0·31 inches; the month with the most rain was August with 3·15 inches. Taking the four quarters of the year, the rainfall in the first quarter was 3·96 inches; in the second 4·11; in the third 7·78 and in the fourth 2·95 inches.

The month with the highest average temperature was August with 60·12°F and the lowest December with 37·56°F.

VITAL STATISTICS

BIRTHS

The births registered in the city during the year numbered 10,424, comprising 5,377 males and 5,047 females. Of these, 597 males and 527 females born to parents not residing in Leeds were transferred to the areas in which the home addresses were situated, whilst 87 males and 71 females, born outside the city to Leeds parents, were transferred in, making a nett total of 9,458 births, comprising 4,867 males and 4,591 females.

The birth-rate was 18·4 per thousand of the home population, as compared with 17·4 for the previous year and an average of 16·7 for the previous five years. The birth-rate for the city was higher than that for England and Wales which was provisionally 18·0 per thousand of the population.

The birth-rate as adjusted by the Area Comparability Factor (Births) is given in the table on page 5.

Excess of Births over Deaths.—The excess of births over deaths or the “natural increase of population” was 3,285 as compared with 2,508 for the previous year and an average of 2,219 for the previous ten years.

Illegitimate Births.—Of the 9,458 (nett) births registered, 836 or 8·8 per cent. were illegitimate as compared with 695 or 7·8 per cent. for the previous year and an average of 577 or 6·7 per cent. for the previous five years.

Stillbirths.—The nett number of stillbirths registered during the year was 181, comprising 93 males and 88 females. The rate per thousand of the population was 0·35 as compared with 0·33 for the previous year. Expressed as a percentage of the total births (live and still), the rate was 1·9 as compared with 1·9 for the previous year. Of the 181 (nett) stillbirths registered, 23 or 1·9 per cent. were illegitimate. The ratio of registered "still" to registered "live" births was 1 to 52, the same as in the previous year.

DEATHS

The gross number of deaths registered in the city was 6,648, comprising 3,386 males and 3,262 females, giving a gross death-rate of 12·9 as compared with 13·4 for the previous year and an average of 12·6 for the previous five years. The inward transferable deaths numbered 430 (203 males and 227 females) and outward transferable deaths 905 (471 males and 434 females) which, after adjustment, leaves a nett total of 6,173 deaths debitable to the city, made up of 3,118 males and 3,055 females.

The corresponding death-rate was 12·0 as compared with 12·5 for the previous year and an average of 11·7 for the previous five years. The provisional death-rate for England and Wales was 11·9.

Area Comparability Factor.—The Registrar General supplies an Area Comparability Factor (A.C.F.) and this, when multiplied by the crude death-rate, gives an adjusted death-rate which is comparable with a similarly adjusted death-rate for any other area. An adjusted death-rate makes allowance for any difference in the population structure of the area, by sex and age, from that of England and Wales as a whole. An A.C.F. is also supplied for the adjustment of the crude birth-rate.

The A.C.F. (Deaths) for Leeds was 1·13 and this, when applied to the crude death-rate of 12·0, gave an adjusted death-rate of 13·5.

The following table gives the crude and adjusted rates of London Administrative County and the twelve principal cities of England and Wales.

	Population	Birth-rate		Death-rate		Death-rate from		Infant Mortality Rate
		Crude	Adjusted	Crude	Adjusted	Resp. Tub.	Other Tub.	
London Admin. County ..	3,185,770	19·6	17·6	12·0	11·7	0·08	0·01	21
Birmingham	1,115,080	20·0	19·0	11·2	12·9	0·07	0·01	23
Liverpool	745,230	22·1	20·6	12·3	15·0	0·10	0·01	28
Manchester	659,170	20·6	19·8	13·3	15·6	0·11	0·01	30
Leeds	514,640	18·4	18·0	12·0	13·5	0·05	0·00	23
Sheffield	495,240	17·4	17·6	12·7	14·0	0·11	0·01	20
Bristol	434,260	16·7	16·7	12·7	12·3	0·05	0·01	21
Nottingham	314,360	19·9	19·5	12·1	13·6	0·08	0·01	25
Hull	301,640	19·9	19·1	11·0	13·5	0·06	0·01	28
Bradford	296,220	19·6	19·6	14·1	13·8	0·09	0·01	27
Leicester	272,500	18·7	18·9	12·8	12·8	0·06	0·01	23
Newcastle-upon-Tyne ..	267,090	17·9	17·3	12·5	14·0	0·09	0·01	22
Stoke-on-Trent	266,130	16·7	15·7	11·6	14·9	0·16	0·01	25

Causes of death.—The principal causes of death during 1962 are given below (International List numbers in brackets).

Coronary disease (420)	1,347
Malignant and lymphatic neoplasms (140-205) ..	1,124
Cerebral hæmorrhage, etc. (330-334)	755
Heart disease (410-416, 421-443)	620
Bronchitis (500-502)	488
Pneumonia (490-493, 763) ;	436
Other circulatory diseases (444-468)	262

The above group of diseases accounted for 5,032 or 81·5 per cent. of the total deaths as compared with 5,251 or 81·7 per cent. last year.

The table on page 9 sets 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 -1, 1-2 and 2-5 was 259 or 4.2 per cent. of the total deaths, as compared with 236 or 3.7 per cent. in the previous year and an average of 239 or 4.0 per cent. for the previous five years. The number of deaths in all the age groups under 45 years was 579 or 9.4 per cent. as compared with 554 or 8.6 per cent. in the previous year. In the remaining age groups over 45 years the deaths numbered 5,594 or 90.6 per cent. as compared with 5,839 or 91.4 per cent. in the previous year.

Cremations.—Out of a total of 6,173 Leeds deaths during the year, the number of bodies disposed of by cremation was 3,016 or 48.9 per cent. as compared with 3,114 or 48.6 per cent. in 1961. Of this number, 2,223 were cremated at Lawnswood and the remainder, 793, at Cottingley. The total number of cremations represents a decrease of 98 on the figure for the previous year and an increase of 216 on the average number of cremations for the previous five years.

Public Mortuary.—The number of bodies received into the public mortuary during 1962 was 818 as compared with 830 in 1961. The number of autopsies performed was 704. Arrangements were made by relatives or friends for the disposal of 772 bodies and by the Welfare Services Department for 52; 11 bodies were to be disposed of during 1963.

INFANT MORTALITY

The number of deaths of children under one year of age during 1962 was 222 (males 131, females 91) as compared with 206 (males 122, females 84) in 1961. The infant mortality rate was 23 as compared with 23 for the previous year and an average of 24 for the previous five years. The provisional infant mortality rate for England and Wales was 21.

Illegitimate Infant Mortality.—Of the 836 illegitimate births, 20 died before reaching the age of one year, which is equal to an infant mortality rate of 24 as compared with 39 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 53 (23.9 per cent.), post-natal asphyxia and atelectasis 43 (19.4 per cent.), congenital malformations 37 (16.7 per cent.), pneumonia 36 (16.2 per cent.) and birth injuries 19 (8.6 per cent.).

Respiratory diseases were responsible for 35 or 15.8 per cent. of the total deaths under one year of age; in 1961 the number was 42 or 20.4 per cent. and the average for the previous five years was 34 or 16.2 per cent. For further details of causes of death of infants under one year of age, see the tables on pages 12 and 13.

Prematurity.—The number of deaths from prematurity was 53. The death-rate from prematurity per thousand live births was 5.6 as compared with 4.5 for the previous year and an average of 6.4 for the previous five years. There were 34 deaths assigned to other diseases of early infancy in which prematurity was mentioned on the death certificate.

Deaths in Age Groups.—Of the total (222) infant deaths, 91 or 41.0 per cent. took place on the first day; 147 or 66.2 per cent. in the first week; 160 or 72.1 per cent. in the first month; 19 or 8.6 per cent. between one and three months; 27 or 12.2 per cent. between three and six months; 12 or 5.4 per cent. between six and nine months and 4 or 1.8 per cent. between nine and twelve months.

Neo-Natal Mortality.—The number of deaths occurring in the first month of life was 160 or 28 more than in the previous year, the corresponding neo-natal mortality rate being 16.9 as compared with 14.8 in 1961.

Of the total deaths under one year of age, 72.1 per cent. occurred in the first month and of deaths in the first month 56.9 per cent. occurred on the first day, 91.9 per cent. in the first week and 95.0 per cent. in the first two weeks.

Peri-Natal Mortality.—The term “peri-natal mortality” has been introduced to measure infant mortality due to causes operating before, during and immediately after birth and includes stillbirths and deaths of infants in the first week of life. The peri-natal mortality rate is calculated per thousand total births (live and still). The rate for 1962 was 34 as compared with 32 for the previous year and an average of 34 for the previous five years.

MATERNAL MORTALITY

The number of mothers who lost their lives in childbirth during the year was 6 as compared with 3 in the previous year. The corresponding maternal mortality rate per thousand total births (live and still) was 0·62 as compared with 0·33 for the previous year and an average of 0·43 for the previous five years.

The causes of death were as follows:—

- (1) 1a. Cerebral infarction
 - b. Thrombosis of carotid artery
 - c. Pregnancy
- (2) 1a. Eclampsia
 - b. Recent pregnancy
- (3) 1a. Cerebral hæmorrhage
 - b. Eclampsia
 - c. Toxæmia of pregnancy
 2. Diabetes mellitus
- (4) 1a. Acute left ventricular failure
 - b. Eclampsia
- (5) 1a. Amniotic embolism
 - b. Placenta prævia
 - c. Pregnancy
 2. Bronchitis
- (6) 1a. Hepatic failure
 - b. Acute yellow atrophy
 - c. Toxæmia of pregnancy

PRINCIPAL CAUSES OF DEATH

International List Nos.	Diseases	No. of deaths in 1962 (nett)	No. of deaths in 1961 (nett)	Death rate 1962
001-008	Tuberculosis, respiratory	24	28	0.05
010-019	Tuberculosis, other forms	2	5	0.00
020-029	Syphilitic disease	8	4	0.02
055	Diphtheria	..	..	..
056	Whooping Cough	..	..	..
057	Meningococcal infections	..	3	..
080	Acute poliomyelitis	..	..	..
085	Measles	..	2	..
Remainder of 001-138	Other infective and parasitic diseases	7	12	0.01
151	Malignant neoplasms: Stomach	126	138	0.24
162, 163	Lung, bronchus	333	290	0.65
170	Breast	109	115	0.21
171-174	Uterus	41	62	0.08
Remainder of 140-203	Other malignant and lymphatic neoplasms ..	448	498	0.95
205	Leukaemia, aleukaemia	28	29	0.05
204	Diabetes	40	25	0.08
260	Vascular lesions of central nervous system	755	870	1.47
330-334	Coronary disease, angina	1,347	1,347	2.62
420	Hypertension with heart disease	78	91	0.15
440-443	Other heart disease	542	576	1.05
444-468	Other circulatory disease	262	274	0.51
480-488	Influenza	14	57	0.03
490-493 } 763 }	Pneumonia	436	487	0.85
500-502 } 470-475 }	Bronchitis	488	474	0.95
510-527 }	Other diseases of the respiratory system	24	32	0.05
540, 541 } 543, 571 }	Ulcer of stomach and duodenum	61	47	0.12
572, 764 }	Gastritis, enteritis and diarrhoea	21	37	0.04
590-594	Nephritis and nephrosis	38	33	0.07
610	Hyperplasia of prostate	11	17	0.02
640-689	Pregnancy, childbirth and abortion	6	3	0.01
750-759	Congenital malformations	63	50	0.12
Residual	Other defined and ill-defined diseases	530	530	1.03
E810-E835 } E800-E802 } E840-E962 }	Motor vehicle accidents	67	104	0.13
E963 } E970-E979 }	All other accidents	128	107	0.25
E964, E965 } E980-E999 }	Suicide	86	60	0.17
	Homicide and operations of war	10	6	0.02
	Totals	6,173	6,413	11.98

CAUSES OF AND AGES AT DEATH DURING THE CALENDAR YEAR, 1962.

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 ..	24	..	..	..	..	1	3	12	7	1	17
010-019	Tuberculosis, other forms ..	2	..	..	..	..	2	..	..	..	..	2
020-029	Syphilitic disease ..	8	..	..	..	..	..	..	2	3	3	10
055	Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..
057	Meningococcal infections ..	..	..	..	..	..	..	..	..	..	..	..
080	Acute poliomyelitis ..	..	..	..	..	..	..	..	..	..	..	1
085	Measles ..	..	..	..	..	..	..	..	..	..	..	..
Remainder of 001-138	Other infective and parasitic diseases ..	7	1	..	..	..	..	..	1	3	2	6
	Malignant neoplasms :											
151	Stomach ..	126	..	..	..	..	..	6	48	37	35	79
162, 163	Lung, bronchus ..	333	..	..	..	..	2	10	149	113	59	240
170	Breast ..	109	..	..	..	..	..	7	49	26	27	86
171-174	Uterus ..	41	..	..	..	..	..	5	21	9	6	43
Remainder of 140-203, 205	Other malignant and lymphatic neoplasms ..	488	..	1	1	2	6	26	169	138	145	413
204	Leukaemia, aleukaemia ..	28	..	..	4	1	2	2	8	4	7	33
260	Diabetes ..	40	..	..	..	1	..	2	12	9	16	31
330-334	Vascular lesions of central nervous system ..	755	..	..	..	..	2	16	147	210	380	544
420	Coronary disease, angina ..	1,347	..	..	..	..	..	27	378	462	480	588
440-443	Hypertension with heart disease ..	78	..	..	..	..	..	1	16	20	41	33
Remainder of 410-443	Other heart disease ..	542	..	..	..	..	2	24	96	115	305	293
444-468	Other circulatory disease ..	262	..	..	..	..	1	6	48	71	136	191
480-483	Influenza ..	14	2	..	..	..	..	..	4	4	4	7
490-493, 763	Pneumonia ..	436	36	4	2	..	1	9	40	92	252	327
500-502	Bronchitis ..	488	5	1	1	..	1	8	128	159	185	283
470-475 } 510-527 }	Other diseases of the respiratory system ..	24	..	..	1	..	..	1	10	6	6	22
540, 541	Ulcer of stomach and duodenum ..	61	..	..	..	..	..	..	22	23	16	64
543, 571 } 572, 764 }	Gastritis, enteritis and diarrhoea ..	21	2	..	..	..	1	1	4	4	9	24
590-594	Nephritis and nephrosis ..	38	..	..	..	2	2	3	12	8	11	43
610	Hyperplasia of prostate ..	11	..	..	..	..	..	..	..	2	9	14
640-689	Pregnancy, childbirth and abortion ..	6	..	..	..	..	1	5	..	..	..	6
750-759	Congenital malformations ..	63	37	6	2	3	3	5	4	3	..	74
Residual	Other defined and ill-defined diseases ..	530	136	1	1	3	2	25	92	79	191	539
E810-E835	Motor vehicle accidents ..	67	..	1	5	5	17	16	11	8	4	62
E800-E802 } E840-E962 }	All other accidents ..	128	3	2	3	2	8	13	16	21	60	96
E963 } E970-E979 }	Suicide ..	86	..	..	..	..	5	19	36	17	9	11
E964, E965 } E980-E999 }	Homicide and operations of War ..	10	..	..	1	..	..	2	..	6	1	7
	Totals ..	6,173	222	16	21	19	59	242	1,535	1,659	2,400	4,189

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

DEATHS IN AGE GROUPS (NETT), 1952-1962

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
1952	231 3.7%	20 0.3%	32 0.5%	25 0.4%	38 0.6%	327 5.2%	1,560 24.8%	4,059 64.5%	6,292
1953	261 4.4%	11 0.2%	22 0.4%	30 0.5%	48 0.8%	267 4.5%	1,558 26.4%	3,700 62.7%	5,897
1954	198 3.4%	13 0.2%	19 0.3%	28 0.5%	30 0.5%	273 4.7%	1,546 26.9%	3,648 63.4%	5,755
1955	194 3.3%	17 0.3%	11 0.2%	39 0.7%	48 0.8%	273 4.7%	1,507 25.9%	3,727 64.1%	5,816
1956	216 3.7%	17 0.3%	17 0.3%	22 0.4%	39 0.7%	263 4.6%	1,488 25.8%	3,700 64.2%	5,762
1957	207 3.6%	9 0.1%	14 0.2%	34 0.6%	44 0.7%	244 4.2%	1,558 26.8%	3,711 63.8%	5,821
1958	218 3.6%	11 0.2%	16 0.3%	26 0.4%	38 0.6%	249 4.2%	1,512 25.5%	3,862 65.1%	5,932
1959	213 3.5%	17 0.3%	20 0.3%	29 0.5%	47 0.8%	227 3.7%	1,600 26.1%	3,967 64.8%	6,120
1960	199 3.4%	11 0.2%	26 0.4%	30 0.5%	44 0.8%	221 3.8%	1,517 26.2%	3,743 64.6%	5,791
1961	206 3.2%	12 0.2%	18 0.3%	35 0.5%	48 0.7%	235 3.7%	1,619 25.2%	4,240 66.1%	6,413
1962	222 3.6%	16 0.3%	21 0.3%	19 0.3%	59 1.0%	242 3.9%	1,535 24.9%	4,059 65.8%	6,173

DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE

International List Nos.	Cause of Death	1961	1962	% of total deaths under one
010	Tuberculosis of meninges and central nervous system	..	..	..
Rest of 001-019	Tuberculosis, other forms	..	..	..
020	Syphilis	..	..	..
050	Scarlet fever	..	..	..
055	Diphtheria	..	..	..
056	Whooping Cough	..	..	..
057	Meningococcal infections	2	..	..
085	Measles	1	..	..
340	Meningitis (non-meningococcal) ..	2	1	0.5
480-483	Influenza	..	2	0.9
490-493	Pneumonia (4 weeks—I year) ..	30	28	12.6
500-502	Bronchitis	5	5	2.3
560, 561, 570	Intestinal obstruction, hernia ..	3	3	1.4
571, 572	Gastro-enteritis (4 weeks—I year)	5	2	0.9
751	Spina bifida and meningocele ..	13	11	5.0
754	Congenital malformations of circulatory system	8	11	5.0
750, 752, 753 } 755-759 }	All other congenital malformations	10	15	6.8
760-761	Birth injuries	18	19	8.6
762	Post-natal asphyxia, atelectasis ..	30	43	19.4
763	Pneumonia of newborn (—4 weeks)	6	8	3.6
764	Diarrhoea of newborn (—4 weeks)	1	..	..
765-768	Other infections of newborn ..	..	1	0.5
770	Hæmolytic disease of newborn ..	5	3	1.4
769 } 771-773 }	Other diseases peculiar to early infancy	11	4	1.8
774-776	Prematurity	40	53	23.9
E924	Accidental mechanical suffocation	2	1	0.5
Rem. of E800-999	Other violent causes	3	2	0.9
Residual	All other causes	11	10	4.5
	Totals	206	222	..

INFANT MORTALITY 1962. 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	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
020	Syphilis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
050	Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
055	Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
056	Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
057	Meningococcal infections	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
085	Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
340	Meningitis (non-meningococcal or tuberculous)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
480-483	Influenza	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
490-493	Pneumonia (4 weeks-1 year)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
500-502	Bronchitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
560, 561, 570	Intestinal obstruction, hernia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
571, 572	Gastro-enteritis (4 weeks-1 year)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
751	Spina bifida and meningocele	2	1	1	..	1	..	..	..	..	2	7	2	2	..	..	11
754	Congenital malformations of circulatory system	..	1	..	1	..	1	..	3	1	..	7	2	2	..	..	11
Rest of 750-759	All other congenital malformations	5	1	2	..	2	..	..	..	..	..	10	1	..	3	1	15
760, 761	Birth injuries	5	3	7	2	1	1	..	..	..	..	19	..	..	..	..	19
762	Post-natal asphyxia, atelectasis	34	6	3	..	..	..	..	..	..	..	43	..	..	..	..	43
763	Pneumonia of newborn (-4 weeks)	1	..	..	1	1	..	..	1	4	..	8	..	..	..	..	8
764	Diarrhoea of newborn (-4 weeks)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
765-768	Other infections of newborn	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	1
770	Haemolytic disease of newborn	1	..	2	..	..	..	..	..	..	..	3	..	..	..	..	3
769, 771-773	Other diseases peculiar to early infancy	2	1	..	..	..	1	..	..	..	..	4	..	..	..	..	4
774-776	Prematurity	39	5	3	3	1	1	1	..	..	..	53	..	..	..	..	53
E924	Accidental mechanical suffocation	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Rest of E800-999	Other violent causes	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	2
Residual	All other causes	..	..	..	..	..	..	..	..	..	..	..	4	3	2	1	10
	Totals	91	18	19	7	6	5	1	5	6	2	160	19	27	12	4	222

INFANT MORTALITY DURING THE FOURTEEN YEARS 1949-1962 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
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
1956	8,033	131	16.3	153	19.0	28	3.5	21	2.6	9	1.1	5	0.6	216	27
1957	8,429	124	14.7	150	17.8	18	2.1	23	2.7	10	1.2	6	0.7	207	25
1958	8,379	130	15.5	152	18.1	19	2.3	30	3.6	8	1.0	9	1.1	218	26
1959	8,353	130	15.6	149	17.8	22	2.6	24	2.9	7	0.8	11	1.3	213	25
1960	8,789	108	12.3	131	14.9	30	3.4	21	2.4	12	1.4	5	0.6	199	23
1961	8,921	123	13.8	132	14.8	30	3.4	26	2.9	8	0.9	10	1.1	206	23
1962	9,458	147	15.5	160	16.9	19	2.0	27	2.9	12	1.3	4	0.4	222	23

MINISTRY OF HEALTH TABLES.

TABLE I.

VITAL STATISTICS OF LEEDS C.B. FOR 1962 AND PREVIOUS YEARS.

YEAR	Population estimated to Middle of each Year	BIRTHS		TOTAL DEATHS REGISTERED IN THE AREA		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE AREA				
		Un-corrected Number	Nett.		Number	Rate	Of Non-residents registered in the Area	Of Residents not registered in the Area	Under 1 Year of Age		At all Ages	
			Number	Rate					Number	Rate per 1,000 Births	Number	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
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
1956	508,600	8,640	8,033	15.8	6,270	12.3	693	185	216	27	5,762	11.3
1957	509,790*											
1957	510,100†	9,023	8,429	16.5	6,309	12.4	695	207	207	25	5,821	11.4
1958	511,600	8,995	8,379	16.4	6,393	12.5	778	317	218	26	5,932	11.6
1959	513,300	9,045	8,353	16.3	6,481	12.6	787	426	213	25	6,120	11.9
1960	514,760	9,483	8,789	17.1	6,205	12.1	863	449	199	23	5,791	11.2
1961	511,650	9,769	8,921	17.4	6,835	13.4	919	497	206	23	6,413	12.5
1962	514,640	10,424	9,458	18.4	6,648	12.9	905	430	222	23	6,173	12.0

Area of Leeds C.B. } Total population at all ages at the 1961 Census 510,597 (preliminary)
in acres (land and inland water) } 40,613.5

* Population used for calculating vital statistics to allow for change in boundary.

† Mid-year population after change in boundary

TABLE IIA. ACCEPTED CASES OF INFECTIOUS DISEASES (AFTER CORRECTION OF DIAGNOSIS) DURING THE
CALENDAR YEAR 1962.

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.	
Anthrax	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	2	..	..	1	..	..	1	..	..	..	..	..	..	..	2	..	..
Dysentery	851	898	74	384	159	174	41	107	134	193	45	71	14	28	62	56	..
Encephalitis, acute { Infective	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Post-infectious	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Erysipelas	17	27	..	..	2	..	..	3	5	2	5	16	5	6	2	5	..
Food poisoning	82	86	4	19	15	14	8	15	25	17	8	15	3	4	19	6	..
Malaria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	1,237	1,199	56	671	504	434	4	12	1	4	1	1	..	..	..	16	..
Meningococcal infections	4	2	2	2	..	..	..	..	..	..	..	..	..	..	2	2	..
Ophthalmia neonatorum	9	12	9	12	..	..	..	..	..	..	..	..	..	..	1	1	..
Paratyphoid fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia (acute primary)	309	275	39	41	13	14	10	8	29	42	97	65	80	105	191	152	..
(acute influenza)	20	27	2	1	..	1	2	1	2	3	7	10	6	8	1	1	..
Poliomyelitis	7	5	..	2	3	..	1	..	2	1	..	..	..	..	5	5	..
Puerperal pyrexia	..	140	..	..	..	..	..	74	..	65	..	1	..	..	..	4	..
Scarlet fever	101	82	1	33	53	56	11	..	2	1	1	1	..	..	8	3	..
Typhoid fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough	45	36	3	6	16	11	..	..	1	..	..	..	..	..	..	..	..
Smallpox	..	..	..	25	19	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases	344	320	59	74	54	44	28	47	35	50	48	37	46	49	343	321	..
Totals	3,029	3,109	249	1,252	819	748	107	267	236	378	212	217	154	200	658	572	..
Respiratory tuberculosis	222(18)	115(19)	2	7	11	16(3)	27(3)	24(2)	71(9)	48(13)	80(6)	19(1)	24	4	133	55	..
Other forms of tuberculosis	12(1)	15	..	1	2	2	3(1)	4	6	3	..	1	..	4	4	8	..

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
Anthrax ..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery ..	51	116	25	4	19	60	15	68	105	75	54	53	94	118	82	68	116	25	87	18	45	33	93	134	58	21	87	25	1,749
Encephalitis, ac. } Inf.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas ..	2	3	2	..	1	..	1	3	4	3	3	2	..	1	2	..	1	..	8	2	2	1	..	2	2	..	1	..	44
Food poisoning ..	14	11	1	1	4	4	3	1	..	7	5	7	6	10	14	6	2	3	11	9	10	7	9	17	..	2	1	3	168
Malaria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	72	104	41	58	53	293	255	26	92	88	172	91	73	109	147	2,436
Measles ..	20	42	62	54	105	85	101	51	102	28	34	40	38	72	104	41	58	53	293	255	26	92	88	172	91	73	109	147	2,436
Meningococcal infections ..	..	..	..	..	..	..	1	..	2	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	..	..	..	..	6
Ophthalmia neonatorum ..	..	..	..	..	..	..	1	..	3	..	..	1	2	3	..	..	..	..	..	..	..	..	..	..	2	..	..	9	21
Paratyphoid fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia (ac. primary)	13	15	20	25	14	25	9	25	20	9	16	21	21	27	11	19	14	41	66	23	13	12	15	24	33	19	25	9	584
" (ac. influenzal)	..	..	..	2	..	..	..	1	1	1	1	1	2	1	..	5	..	8	7	6	..	..	..	1	8	3	..	..	47
Polio-myelitis ..	..	..	1	1	..	1	..	..	1	1	1	..	..	2	..	..	..	1	..	..	..	1	..	..	..	..	1	1	12
Puerperal pyrexia..	..	..	17	..	..	..	1	..	2	1	1	..	69	1	..	1	..	1	1	..	..	1	..	1	..	..	43	..	140
Scarlet fever ..	2	2	2	..	1	18	5	3	4	5	7	7	4	1	..	2	2	7	11	12	7	7	9	5	16	6	28	10	183
Typhoid fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough ..	1	2	2	1	..	..	2	..	14	7	..	2	..	7	2	1	10	..	..	2	4	6	13	3	..	2	..	..	81
Smallpox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Non-notifiable diseases ..	25	34	30	7	27	23	17	9	29	30	21	32	26	43	11	19	14	19	101	24	8	27	23	21	13	5	17	9	664
Totals ..	29	225	162	95	171	216	156	161	287	166	143	166	262	288	226	162	217	158	586	351	113	187	251	381	223	131	321	204	6,188
Respiratory tuberculosis ..	11	25(3)	19(2)	14(3)	7(1)	8	10(2)	5	14(4)	6(2)	7	24(5)	12	29(3)	11	16	3	13	8(1)	18(1)	7(1)	8(2)	15(2)	19(2)	7	8(1)	10(1)	9(1)	337(37)
Other forms of tuberculosis	..	5	2	..	3	1	2	1	..	..	..	3	..	2(1)	1	2	..	1	1	1	..	..	..	2	..	..	..	..	27(1)

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

CITY OF LEEDS VITAL STATISTICS 1920 - 1962

VITAL STATISTICS 1920-1962																																			
Year	POPULATION					INFANT MORTALITY				STILL-BORN				MATERNAL MORTALITY				DIARRHEA AND ENTERITIS		TUBERCULOSIS (All Forms)		CANCER		DEATHS FROM RESPIRATORY DISEASE (Influenza not incl. Tub.)		DIPHTHERIA		SCARLET FEVER		MEASLES		WHOOPING COUGH		Year	
	Population	Live Births	Birth-Rate	Deaths	Death-Rate	Deaths - 1 year	Rate per 1,000 live births	Non-Natal Mortality Rate	No.	Rate per 1,000 total births	Peri-Natal Mortality Rate	Deaths from Septic	Deaths from other causes	Total Deaths	Rate per 1,000 live births	Deaths under 5 years	Death-Rate per 1,000 births	Deaths	Death-Rate	Deaths	Death-Rate	Deaths	Death-Rate	Deaths	Death-Rate	Cases	Deaths	No. of persons employed	Cases	Deaths	Cases	Deaths	Cases		Deaths
1920	445,913	11,220	25.0	5,391	14.7	1,232	110	46.3	..	..	..	29	28	57	5.07	140	12.5	698	1.56	492	1.10	1,313	583	64	..	1,363	17	5,459	148	..	200	1920			
1	445,300	10,144	21.8	6,285	13.5	997	98	41.3	..	..	..	8	30	38	3.75	184	18.1	641	1.37	554	1.19	1,300	665	38	..	1,322	14	5,499	151	..	72	1			
2	446,700	9,333	20.8	6,479	13.9	935	101	43.3	..	..	..	14	18	32	3.40	92	9.9	653	1.40	595	1.27	1,337	470	28	..	1,322	33	9,931	151	..	115	3			
3	446,800	8,684	18.5	5,980	12.7	773	80	44.8	..	..	..	10	35	45	5.18	118	13.6	637	1.36	574	1.22	1,179	368	20	..	1,234	31	4,683	30	..	34	2			
4	447,800	8,338	17.3	5,747	14.3	921	108	38.7	..	..	..	9	24	33	3.86	103	12.0	657	1.40	639	1.35	1,277	286	27	..	1,256	20	6,554	46	..	87	4			
5	447,900	8,065	17.0	6,062	12.8	748	91	37.8	..	..	..	24	21	45	5.50	149	18.0	599	1.27	606	1.28	1,262	422	39	..	1,166	15	5,100	39	..	47	5			
6	447,900	7,790	16.3	6,198	13.0	609	81	35.2	..	..	..	14	27	41	5.08	147	18.2	558	1.17	649	1.36	1,070	439	28	..	771	5	7,070	39	..	119	6			
7	447,900	7,865	16.1	6,133	12.9	606	79	37.3	..	..	..	14	24	38	4.88	88	11.3	558	1.17	649	1.36	1,099	374	20	..	1,166	15	5,100	39	..	47	5			
8	447,900	7,446	15.5	7,898	16.5	722	97	42.3	1369	47	74	10	33	35	17.05	105	13.7	542	1.14	668	1.47	976	634	16	107	3,473	20	9,486	102	..	107	8			
9	447,900	7,508	15.8	5,930	12.4	512	68	38.5	332	47	68	10	33	33	4.05	34	4.5	533	1.11	728	1.52	798	889	48	80	1,154	931	8	3,073	92	..	36	8		
10	448,200	7,004	14.4	6,469	13.3	617	88	36.4	334	45	71	8	13	21	2.86	106	15.1	493	1.02	790	1.57	966	889	48	80	1,154	931	8	3,073	92	..	36	8		
11	448,200	6,843	13.7	6,574	13.6	537	81	36.6	333	48	73	15	12	27	3.87	104	12.7	499	1.03	796	1.46	1,148	1,037	88	726	1,606	9	3,073	92	..	36	8			
12	448,200	7,190	14.8	6,201	12.9	513	71	35.0	330	43	67	15	14	29	3.86	76	10.6	462	0.95	801	1.65	772	1,335	60	30,662	2,682	5	1,341	4	..	25	4			
13	448,800	7,340	15.0	6,666	13.6	479	65	30.0	330	44	68	8	10	24	3.18	62	8.6	435	0.89	803	1.65	772	1,335	60	30,662	2,682	5	1,341	4	..	25	4			
14	448,800	7,279	14.8	6,573	13.4	491	67	33.2	333	41	66	6	11	17	2.24	65	8.9	408	0.83	843	1.72	803	799	36	1,937	1,868	12	8,744	49	..	48	5			
15	449,000	7,014	15.4	6,255	12.7	490	64	33.1	339	41	63	2	12	14	1.76	94	12.3	397	0.80	879	1.78	825	948	33	11,172	1,717	8	6,797	18	..	19	7			
16	449,000	7,079	14.2	6,535	13.4	491	57	30.2	307	42	62	6	13	19	2.60	54	7.7	413	0.85	847	1.74	862	947	20	894	960	2	1,673	3	134	18	9			
17	449,000	6,946	14.9	6,918	14.9	393	57	30.8	282	39	61	2	13	15	2.09	44	6.4	467	1.00	778	1.67	930	311	11	1,107	643	..	4,364	8	128	2	1940			
18	449,000	6,667	14.1	6,456	13.7	407	61	26.7	259	39	55	7	9	16	2.32	40	6.0	408	0.86	849	1.80	740	376	22	1,107	643	..	7,006	21	2,103	25	1			
19	449,000	7,204	15.6	6,090	13.2	369	51	29.7	278	37	58	5	13	19	2.54	34	4.4	357	0.77	888	1.92	580	707	35	15,101	1,396	3	7,810	10	1,554	32	2			
20	449,000	7,547	16.6	6,358	14.0	356	47	23.7	250	32	50	4	15	19	2.44	40	5.3	378	0.83	906	2.00	808	334	11	19,415	1,968	3	2,446	14	1,284	14	3			
21	449,000	8,318	18.0	6,114	13.6	429	50	28.4	262	39	50	..	12	12	1.37	76	8.9	316	0.70	915	2.03	608	234	9	7,483	1,913	3	678	..	1,213	6	4			
22	449,000	7,760	17.3	6,410	14.2	435	56	28.6	248	31	50	..	12	12	1.37	76	8.9	316	0.70	915	2.03	608	234	9	7,483	1,913	3	678	..	1,213	6	4			
23	449,000	8,875	22.1	6,793	13.8	552	51	25.6	306	27	43	1	8	12	1.18	53	5.4	288	0.60	960	2.15	740	149	2	7,510	1,190	..	9,450	21	590	10	5			
24	449,000	8,275	20.5	6,614	13.7	401	41	23.8	299	29	43	1	8	12	1.18	53	5.4	288	0.60	960	2.15	740	149	2	7,510	1,190	..	9,450	21	590	10	5			
25	449,000	8,754	18.4	5,902	11.8	321	35	17.5	219	23	36	..	2	2	0.22	61	6.6	277	0.55	950	1.91	714	29	1	8,773	1,372	1	6,794	19	1,311	19	7			
26	449,000	8,447	18.7	5,451	12.5	254	30	18.5	200	23	38	1	4	5	0.61	7	0.9	182	0.36	1,021	2.00	1,272	2	..	8,665	786	1	3,097	4	1,556	6	8			
27	449,000	8,113	15.9	6,554	12.1	250	31	18.2	189	23	38	1	4	5	0.60	13	1.6	193	0.38	1,062	2.08	763	20	1	7,454	566	..	5,663	2	2,499	6	1950			
28	449,000	8,044	16.0	6,797	13.5	247	31	17.5	194	24	39	1	4	5	0.60	13	1.6	193	0.38	1,062	2.08	763	20	1	7,454	566	..	5,663	2	2,499	6	1950			
29	449,000	7,740	15.3	5,897	11.7	201	33	22.9	167	21	40	2	3	3	0.62	13	1.6	180	0.24	991	1.99	1,023	1	..	7,450	794	..	4,915	3	1,637	..	2			
30	449,000	7,384	15.0	5,755	11.3	198	26	17.8	188	24	39	1	4	5	0.64	8	1.1	87	0.17	1,030	2.03	808	..	..	6,510	699	..	6,825	4	1,769	1	3			
31	449,000	7,030	15.0	5,816	11.3	195	27	19.0	177	22	38	..	4	4	0.51	9	1.2	20	0.14	1,072	2.11	756	..	..	6,817	622	1	701	..	812	..	4			
32	449,000	6,833	15.8	5,262	11.3	215	27	19.0	177	22	38	..	4	4	0.51	11	1.4	64	0.13	1,036	2.11	768	..	..	6,189	603	..	11,243	3	1,383	2	6			
33	449,000	8,479	16.5	5,821	11.4	207	25	17.6	181	21	35	..	3	3	0.35	2	0.2	52	0.10	1,069	2.10	768	..	..	6,660	420	..	983	..	1,383	2	6			
34	449,000	8,379	16.4	5,932	11.6	118	26	18.1	202	24	39	2	5	7.0	0.82	2	0.2	30	0.11	1,066	2.08	867	1	..	5,808	678	..	806	..	698	1	8			
35	449,000	8,353	16.3	6,160	11.9	233	25	17.8	170	20	35	1	3	4	0.47	4	0.5	30	0.10	1,173	2.29	1,006	1	..	5,820	620	..	8,901	1	642	1	9			
36	449,000	8,259	17.1	5,791	11.2	199	23	14.9	153	15	30	1	1	2	0.22	5	0.6	4	0.08	1,053	2.05	822	..	..	6,607	415	..	2,449	..	898	..	1960			
37	449,000	8,921	17.4	6,413	12.5	205	23	14.5	170	19	32	1	2	3	0.33	7	0.8	33	0.06	1,132	2.21	1,050	..	..	9,327	215	..	8,106	2	413	..	1			
38	449,000	8,438	18.4	6,173	12.0	222	23	16.0	181	19	34	..	6	6	0.62	2	0.2	25	0.05	1,125	2.19	962	2	..	9,360	183	..	2,436	..	81	..	2			

For calculation of birth-rate
the population of Leeds is
the population of the city.

Registration of still-births
in force 1909

Deaths and burials per 1,000
total births (live and still)
Excludes non-residents not traceable

Whopping Cough made notifiable by Measles
and Whooping Cough Regulations, 1920
(in force 23rd October 1920)

VITAL STATISTICS 1910-1911

No.	Municipal Statistics			County Statistics			State Statistics	
	Age	Sex	Color	Age	Sex	Color	Age	Sex
1	10-14	M	W	10-14	M	W	10-14	M
2	15-19	M	W	15-19	M	W	15-19	M
3	20-24	M	W	20-24	M	W	20-24	M
4	25-29	M	W	25-29	M	W	25-29	M
5	30-34	M	W	30-34	M	W	30-34	M
6	35-39	M	W	35-39	M	W	35-39	M
7	40-44	M	W	40-44	M	W	40-44	M
8	45-49	M	W	45-49	M	W	45-49	M
9	50-54	M	W	50-54	M	W	50-54	M
10	55-59	M	W	55-59	M	W	55-59	M
11	60-64	M	W	60-64	M	W	60-64	M
12	65-69	M	W	65-69	M	W	65-69	M
13	70-74	M	W	70-74	M	W	70-74	M
14	75-79	M	W	75-79	M	W	75-79	M
15	80-84	M	W	80-84	M	W	80-84	M
16	85-89	M	W	85-89	M	W	85-89	M
17	90-94	M	W	90-94	M	W	90-94	M
18	95-99	M	W	95-99	M	W	95-99	M
19	100+	M	W	100+	M	W	100+	M
20	10-14	F	W	10-14	F	W	10-14	F
21	15-19	F	W	15-19	F	W	15-19	F
22	20-24	F	W	20-24	F	W	20-24	F
23	25-29	F	W	25-29	F	W	25-29	F
24	30-34	F	W	30-34	F	W	30-34	F
25	35-39	F	W	35-39	F	W	35-39	F
26	40-44	F	W	40-44	F	W	40-44	F
27	45-49	F	W	45-49	F	W	45-49	F
28	50-54	F	W	50-54	F	W	50-54	F
29	55-59	F	W	55-59	F	W	55-59	F
30	60-64	F	W	60-64	F	W	60-64	F
31	65-69	F	W	65-69	F	W	65-69	F
32	70-74	F	W	70-74	F	W	70-74	F
33	75-79	F	W	75-79	F	W	75-79	F
34	80-84	F	W	80-84	F	W	80-84	F
35	85-89	F	W	85-89	F	W	85-89	F
36	90-94	F	W	90-94	F	W	90-94	F
37	95-99	F	W	95-99	F	W	95-99	F
38	100+	F	W	100+	F	W	100+	F
39	10-14	M	B	10-14	M	B	10-14	M
40	15-19	M	B	15-19	M	B	15-19	M
41	20-24	M	B	20-24	M	B	20-24	M
42	25-29	M	B	25-29	M	B	25-29	M
43	30-34	M	B	30-34	M	B	30-34	M
44	35-39	M	B	35-39	M	B	35-39	M
45	40-44	M	B	40-44	M	B	40-44	M
46	45-49	M	B	45-49	M	B	45-49	M
47	50-54	M	B	50-54	M	B	50-54	M
48	55-59	M	B	55-59	M	B	55-59	M
49	60-64	M	B	60-64	M	B	60-64	M
50	65-69	M	B	65-69	M	B	65-69	M
51	70-74	M	B	70-74	M	B	70-74	M
52	75-79	M	B	75-79	M	B	75-79	M
53	80-84	M	B	80-84	M	B	80-84	M
54	85-89	M	B	85-89	M	B	85-89	M
55	90-94	M	B	90-94	M	B	90-94	M
56	95-99	M	B	95-99	M	B	95-99	M
57	100+	M	B	100+	M	B	100+	M
58	10-14	F	B	10-14	F	B	10-14	F
59	15-19	F	B	15-19	F	B	15-19	F
60	20-24	F	B	20-24	F	B	20-24	F
61	25-29	F	B	25-29	F	B	25-29	F
62	30-34	F	B	30-34	F	B	30-34	F
63	35-39	F	B	35-39	F	B	35-39	F
64	40-44	F	B	40-44	F	B	40-44	F
65	45-49	F	B	45-49	F	B	45-49	F
66	50-54	F	B	50-54	F	B	50-54	F
67	55-59	F	B	55-59	F	B	55-59	F
68	60-64	F	B	60-64	F	B	60-64	F
69	65-69	F	B	65-69	F	B	65-69	F
70	70-74	F	B	70-74	F	B	70-74	F
71	75-79	F	B	75-79	F	B	75-79	F
72	80-84	F	B	80-84	F	B	80-84	F
73	85-89	F	B	85-89	F	B	85-89	F
74	90-94	F	B	90-94	F	B	90-94	F
75	95-99	F	B	95-99	F	B	95-99	F
76	100+	F	B	100+	F	B	100+	F
77	10-14	M	O	10-14	M	O	10-14	M
78	15-19	M	O	15-19	M	O	15-19	M
79	20-24	M	O	20-24	M	O	20-24	M
80	25-29	M	O	25-29	M	O	25-29	M
81	30-34	M	O	30-34	M	O	30-34	M
82	35-39	M	O	35-39	M	O	35-39	M
83	40-44	M	O	40-44	M	O	40-44	M
84	45-49	M	O	45-49	M	O	45-49	M
85	50-54	M	O	50-54	M	O	50-54	M
86	55-59	M	O	55-59	M	O	55-59	M
87	60-64	M	O	60-64	M	O	60-64	M
88	65-69	M	O	65-69	M	O	65-69	M
89	70-74	M	O	70-74	M	O	70-74	M
90	75-79	M	O	75-79	M	O	75-79	M
91	80-84	M	O	80-84	M	O	80-84	M
92	85-89	M	O	85-89	M	O	85-89	M
93	90-94	M	O	90-94	M	O	90-94	M
94	95-99	M	O	95-99	M	O	95-99	M
95	100+	M	O	100+	M	O	100+	M
96	10-14	F	O	10-14	F	O	10-14	F
97	15-19	F	O	15-19	F	O	15-19	F
98	20-24	F	O	20-24	F	O	20-24	F
99	25-29	F	O	25-29	F	O	25-29	F
100	30-34	F	O	30-34	F	O	30-34	F
101	35-39	F	O	35-39	F	O	35-39	F
102	40-44	F	O	40-44	F	O	40-44	F
103	45-49	F	O	45-49	F	O	45-49	F
104	50-54	F	O	50-54	F	O	50-54	F
105	55-59	F	O	55-59	F	O	55-59	F
106	60-64	F	O	60-64	F	O	60-64	F
107	65-69	F	O	65-69	F	O	65-69	F
108	70-74	F	O	70-74	F	O	70-74	F
109	75-79	F	O	75-79	F	O	75-79	F
110	80-84	F	O	80-84	F	O	80-84	F
111	85-89	F	O	85-89	F	O	85-89	F
112	90-94	F	O	90-94	F	O	90-94	F
113	95-99	F	O	95-99	F	O	95-99	F
114	100+	F	O	100+	F	O	100+	F

Infectious and other Diseases

INFECTIOUS AND OTHER DISEASES

BY

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Although two cases of diphtheria were recorded during the year, only one was actually a Leeds case, the other being a non-resident or "out-of-city" case diagnosed in Leeds. The actual Leeds case was the first to occur in the city since 1959. Poliomyelitis was more prevalent than in some recent years with 12 cases. Notifications of dysentery (1,749) were the highest on record. The incidence of whooping cough and scarlet fever both reached new low levels, the number of cases (81 and 183 respectively) were the lowest ever recorded.

It is again a pleasure to record thanks to Dr. G. B. Ludlam and Dr. B. P. Marmion and their staff at the Public Health Laboratory for much help and advice, and also thanks to Dr. E. C. Benn and his staff at Seacroft Hospital.

Public Health Act, 1961.—Under Section 41 of Part III of this Act, provision is made for compensation for stopping employment to prevent the spread of (a) a notifiable disease, or (b) a disease to which Subsection (1) of Section 23 of the Food and Drugs Act, 1955, applies. The Medical Officer of Health for any district may, under this Section, request any person to discontinue his work and the Local Authority shall compensate a person who has suffered any loss in complying with such a request. During the year 15 persons were excluded from work and paid compensation for loss of earnings, including 8 who were contacts of smallpox during the outbreak at Bradford.

Diphtheria.—There were two accepted cases of diphtheria (both bacteriologically confirmed) during the year. Only one, however, was a Leeds case, the other being a non-resident or "out-of-city" case diagnosed in Seacroft Hospital. This patient was a male aged 18 years whose home address was in Huddersfield. He had been admitted from there to the Leeds General Infirmary and was later transferred to Seacroft Hospital as a suspected case of diphtheria. The case was subsequently diagnosed as faucial diphtheria (atypical strain). The Leeds case was the first to occur in the city since 1959. The details of this case are as follows:— The patient was a little boy aged 3 years. The diagnosis was confirmed in Seacroft Hospital on a positive throat swab (mitis type). He had not been immunised. Following confirmation of the case, nasal and throat swabs were taken from the other members of the family (7) and four of them (the father aged 33 years and three children aged 9 years, 8 years and 4 years respectively) were found to be "carriers" of the disease; the father positive nasal swab, the three children all positive throat swabs (all mitis type). None of them had been immunised. Nasal and throat swabs were also taken from 58 children at the school where two of the child "carriers" attended; all these proved negative. Three consecutive negative cultures from swabbings of both nose and throat were obtained in each case before discharge from hospital. One of the three children found to be carriers had come to this country fairly recently and it is thought that the infection may have been imported in this way.

Scarlet Fever.—There was again a decrease in the number of accepted cases of scarlet fever during the year, 183 as compared with 215 last year and 415 in 1960. This was 32 fewer than last year's lowest-ever figure of 215. Of the 183 cases, 11 (6.0 per cent.) were treated in Seacroft Hospital. The case-rate was 0.36 as compared with 0.42 in 1961. 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, paratyphoid fever, typhus, plague or cholera occurred during the year.

At the beginning of the year a severe smallpox epidemic in Pakistan resulted in the introduction of cases of smallpox into this country and by the second week of January there had been six such importations. One of these was in a child who died in a Bradford hospital and, as a result, eleven cases of smallpox occurred and the infection was introduced into five hospitals. In spite of the closeness of the two authorities, the number of direct contacts of the infection in Leeds was fairly small, largely because the two cities are served by different hospital groups; none of these contacts developed smallpox. There were, however, many casual and slight contacts and further contacts of importations to other parts of the country were notified.

The investigation and surveillance of these contacts and the examination of suspected cases of smallpox referred by general practitioners for a second opinion involved a very large amount of work over a period of several weeks. The organisation and carrying-out of vaccination and the reception and answering of enquiries and messages from Press, public and other authorities threw an additional burden on the Department which was shared by all members of the staff.

During the month of August, 17 contacts from S.S. "Oronsay", which arrived at Gravesend from Bombay with a case of smallpox aboard (an Asian boy aged 3 years), were kept under surveillance as were 9 contacts from another ship arriving in this country during October from which a suspected case of smallpox had been landed at Suez. None of the contacts developed the disease.

Two symptomless excretors of Paratyphoid B Fever (one phage type Scarborough and one phage type Dundee) were discovered during the year. Both were female children aged one year and 4 months respectively. The former was found on faecal examination prior to admission to a day nursery and the latter on faecal examination at a Children's Home (nursery section). Both children were removed to Seacroft Hospital. The younger child, who was discharged from hospital on 29th September after giving a series of consecutive negative specimens, was re-admitted to Seacroft Hospital on 8th December when Paratyphi B was again isolated in a

specimen of her faeces taken at the Children's Home. Further faeces specimens (6) taken after her re-admission to hospital were all negative. 6 urine specimens, however, were found positive for Paratyphi B. The child was discharged from hospital again on 19th January, 1963, after 6 consecutive negative urine specimens had been obtained but three days later she was again admitted to Seacroft Hospital when a positive result was reported on a faeces specimen taken at the Children's Home following discharge from hospital. Faeces and urine specimens taken from the immediate contacts of both children all gave negative results.

During the year 4 typhoid fever contacts were kept under observation as were 7 chronic typhoid carriers.

During the year 28 "other" cases were referred to the Department by medical practitioners for second opinions; the majority of these were reported during the Bradford smallpox outbreak. All were visited and diagnosed as follows:— chickenpox (12), rubella (5), urticaria (2), allergic rash (2), psoriasis (1), scabies (1), respiratory infection (1), influenza (1), anxiety neurosis (1), allergic reaction to primary vaccination (1), and generalised urticarial reaction to poliomyelitis vaccination (1).

Measles.—The number of accepted cases of measles was 2,436 as compared with 8,106 last year (an epidemic year for measles). Of the total cases 38 were treated in Seacroft Hospital. There were no deaths.

Whooping Cough.—There was a marked fall in the number of accepted cases of whooping cough during the year, 81 as compared with 413 last year and 898 in 1960. This is the lowest number of cases recorded since the disease became notifiable in 1939. No case required treatment in Seacroft Hospital. There were no deaths.

Puerperal Pyrexia.—There were 140 accepted cases of puerperal pyrexia during the year as compared with 170 last year and 185 in 1960. Of the total, 127 (90.7 per cent.) occurred in hospitals, 2 (1.4 per cent.) in nursing homes and 11 (1.4 per cent.) in the practices of general medical practitioners and midwives. 4 cases were treated in Seacroft Hospital. There were no deaths.

Ophthalmia Neonatorum.—The number of accepted cases of ophthalmia neonatorum during the year was 21 as compared with 36 in 1961 and 18 in 1960. 2 cases were treated in Seacroft Hospital. All cases recovered.

Erysipelas.—Accepted cases of this disease numbered 44 as compared with 46 last year. Of these, 7 (16.0 per cent.) were treated in Seacroft Hospital. There were no deaths.

Malaria.—No case of this disease was notified during the year. Last year one case was notified.

Anthrax.—No case of anthrax was notified during the year as compared with one case in 1961.

Dysentery.—There was a considerable increase in the number of accepted cases of dysentery during the year. Total cases numbered 1,749 as compared with 1,238 last year and 1,180 in 1960. This is an increase of 23 on the previous highest-ever figure of 1,726 in 1959. There were no deaths. Of the 1,749 cases, 1,520 occurred at home, 57 in hospital and institutions and 172 in day nurseries. The number treated in Seacroft Hospital was 118, or 6.7 per cent. of the total. Of the cases, 779 were *Sonne* and 5 *Flexner*, whilst the remaining 965 were not typed. During the year outbreaks of *Sonne* dysentery occurred in six day nurseries accounting for 170 cases (155 children and 15 staff). Four of the children were admitted to Seacroft Hospital. In the course of routine faecal testing during these outbreaks 3 symptomless excretors of *Salmonella* organisms were discovered (2 *Salmonella typhi-murium* and one *Salmonella westerdede*); one of them was a member of the staff at a day nursery and the other two were in the homes of children attending day nurseries. Sporadic cases of *Sonne* dysentery and one case of *Salmonella typhi-murium* also occurred during the year at day nurseries. The latter case was admitted to Seacroft Hospital. Outbreaks of *Sonne* dysentery occurred during the year at three hospitals in the city. These were as follows:—

1. Leeds General Infirmary in March/April; 25 cases (18 patients and 7 staff). The 18 patients were removed to Seacroft Hospital.
2. The Non-Infectious Disease side of Seacroft Hospital in October; 6 cases (all patients). All were transferred to the Infectious Disease side of this hospital.
3. Killingbeck Hospital in November; 5 cases (all patients). All isolated and treated in Killingbeck Hospital.

During the month of November, one case of *Salmonella typhimurium*, 2 cases of *Flexner* dysentery and 2 cases of *Sonne* dysentery were removed from St. James's Hospital to Seacroft Hospital. All the above cases were bacteriologically confirmed and all recovered.

Once again cases of diarrhoea and vomiting occurred at various times of the year, especially amongst schoolchildren, and on investigation no causal organisms could be isolated. The outbreaks are presumed to be due to viruses and the condition is being investigated by the Public Health Laboratory Service.

Acute Poliomyelitis (including Polioencephalitis).—Although the total number of cases of poliomyelitis for the country as a whole was the lowest this year for over 40 years, the incidence in Leeds was higher than in some recent years. There were 12 accepted cases (11 paralytic and one non-paralytic) during the year as compared with 2 in 1961 and one in 1960. Of the 12 cases, 10 (83.3 per cent.) were admitted to Seacroft Hospital and 2 (16.7 per cent.) to the Leeds General Infirmary. There were no deaths, in 9 cases the virological tests gave positive results, all Type 1; the other 3 were negative. In 2 of the 12 cases (both paralytic), the patients had received poliomyelitis vaccine as follows:—

- (a) Female aged 26 years. Onset 12.8.62. Removed to Seacroft Hospital 20.8.62. 3 injections in 1960/61.
- (b) Male aged 12 years. Onset ? 7.11.62. Removed to Seacroft Hospital 28.11.62. 3 injections in 1958/59. Booster injection in 1961.

In both of the above cases there was complete recovery.

At the end of the year 5 cases had recovered completely, 3 were left with severe paralysis or weakness and 4 with slight paralysis or weakness. Of the 28 wards in the city 11 contributed to the number of cases as follows:— Westfield (1), Wellington (1), Kirkstall (1), Woodhouse (1), Moortown (1), Allerton (1), Potternewton (2), Osmondthorpe (1), Holbeck (1), Bramley (1) and Stanningley (1).

The monthly incidence of cases is as follows:—

January	1
February	—
March	1
April	2
May	2
June	1
July	2
August	2
September	—
October	—
November	1
December	—
	—
	12
	==

AGE AND SEX INCIDENCE AND TYPE OF DISEASE.

Age (years)	0-4	5-9	10-14	15-24	25-34	35-44	Over 45	Totals
Paralytic:								
Males ..	1	1	1	1	1	1	..	6
Females ..	4	..	..	..	1	..	..	5
Non-paralytic:								
Males ..	..	..	1	..	..	..	..	1
Females ..	..	..	..	..	..	..	..	..
TOTALS ..	5	1	2	1	2	1	..	12

Cases and deaths for the past five years are as follows:—

Year	Cases	Deaths
1961	2	—
1960	1	—
1959	11	—
1958	95	3
1957	41	1

Individual case record cards on all notified cases of poliomyelitis were again forwarded to the Epidemiological Research Laboratory in London.

Acute Encephalitis.—No case of acute infectious encephalitis was notified during the year. There was one case of post-infectious encephalitis notified by a general practitioner. One death was recorded from acute meningo-encephalitis, this was a male aged 59 years (certified by the Coroner after a post-mortem). The death, an inward transfer, occurred in Pinderfields Hospital, Wakefield.

Meningococcal Infection.—There were 6 accepted cases of meningococcal infection during the year as compared with 7 last year. 4 of the cases were treated in Seacroft Hospital. There were no deaths.

Food Poisoning.—The number of accepted cases of food poisoning or suspected food poisoning during the year was 168 as compared with 178 in 1961 and 209 in 1960. Of the total, 33 proved to be *Salmonella* infections; of these, 16 were admitted to Seacroft Hospital. There were no deaths. The *Salmonella* organisms isolated were as follows:—

* <i>Salmonella</i> typhi-murium	..	..	29
„ anatum	..	..	1
„ heidelberg	..	..	1
„ manhattan	..	..	1
„ thompson	..	..	1
			—
	Total		33
			—

*The phage type in 7 of these cases (3 separate families and a single case) was U125, the same type as identified in outbreaks of food poisoning in Sussex believed to be due to Australian frozen egg used in the manufacture of cream confectionery. In these 7 cases the families had all purchased food manufactured by a bakery outside the city using this type of egg. Samples of frozen egg taken at the bakery and from the Cold Stores (none of the particular batch involved in Sussex were present in the Cold Stores at the time of visiting) all gave negative results for *Salmonella typhi-murium* as also did samples of some of the foodstuffs taken at the bakery.

During the year 8 persons were found on faecal testing to be symptomless excretors of *Salmonella* organisms, whilst 25 other persons gave faeces which were positive for *Salmonellae* not considered to be food-borne.

Included in the total cases of actual or suspected food poisoning are 126 cases which occurred in different households and which were bacteriologically negative. None of these cases required admission to hospital and there were no deaths. Also included in the total cases are 9 notified cases of staphylococcal food poisoning which occurred as follows:— At about 8 p.m. on Saturday 7th July, 9 persons were admitted to Seacroft Hospital, Leeds, with symptoms of food poisoning. They were a party of people from outside Leeds who had attended the Test Match at Headingley Cricket Ground, Leeds, on that day. They had a picnic meal (cold turkey etc.) during the day from a food hamper brought by a member of the party. This hamper had been prepared by a catering firm outside the city the previous day and had been stored in the boot of a car overnight. *Staph. aureus* was isolated in the faeces of all those affected and in some specimens of vomit. Examination of some of the turkey left over revealed a heavy growth of *staph. aureus* and coliform bacilli. No salmonellae or *Cl. welchii* were isolated in any of these specimens. The Medical Officer of Health of the district where the food hamper was prepared was informed of the outbreak. All the patients soon recovered and were discharged from hospital within two days of admission.

Diarrhoea and Enteritis.—The number of deaths of children under two years of age from diarrhoea and enteritis during the year was 2 as compared with 7 in 1961. The death-rates per thousand live births were 0.21 and 0.78 respectively.

Venereal Diseases.—The number of deaths assigned as due to venereal diseases was 8 which is equal to a death-rate of 0.02 per thousand of the population. The corresponding figures for 1961 were 4 and 0.008 respectively. For details of the work of the Treatment Centre at Leeds General Infirmary, see page 97.

Incidence of Blindness.—I am indebted to the Welfare Services Officer for the following statistical information regarding the admission of persons to the Register of Blind and 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:— (a) No treatment (b) Treatment (medical, surgical or optical) ..	CAUSE OF DISABILITY			
	Cataract	Glaucoma	Retrolental Fibroplasia	Others
(a) No treatment	13	5	..	69
(b) Treatment (medical, surgical or optical) ..	39	29	..	33
(ii) Number of cases at (i)(b) above which on follow-up action have received treatment ..	22	23	..	25

B. OPHTHALMIA NEONATORUM

(i) Total number of cases notified during the year	21
(ii) Number of cases in which :—	
(a) Vision lost	..
(b) Vision impaired	..
(c) Treatment continuing at end of year	..

Malignant and Lymphatic Neoplasms (Cancer).—The appended table gives details of deaths assigned to malignant and lymphatic neoplasms during 1962. The total of 1,125 deaths in this group of diseases is seven less than last year's total. The corresponding death-rate was 2.19 per thousand of the population.

1962 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)	..	..	..	..	..	..	..	..	..	..	..	..	4	3	6	2	2	3	12	8	20
Oesophagus (150)	..	..	..	..	..	..	..	..	..	..	1	..	3	3	4	2	4	5	12	10	22
Stomach (151)	..	..	..	..	..	..	..	..	..	..	1	5	34	14	23	14	14	21	72	54	126
Other digestive organs (152-159)	..	..	..	..	..	..	..	..	..	..	4	4	37	34	27	32	23	43	91	113	204
Trachea, lung and bronchus (162-163)	..	..	..	..	..	..	..	..	1	1	8	2	130	19	98	15	42	17	279	54	333
Other respiratory organs (160, 161, 164, 165)	..	..	..	..	..	..	..	..	..	..	..	1	2	..	6	2	1	2	9	5	14
Breast (170)	..	..	..	..	..	..	..	..	..	..	1	6	..	49	..	26	2	25	3	106	109
Cervix uteri (171)	..	..	..	..	..	..	..	..	..	..	..	3	..	15	..	6	..	4	..	28	28
Other parts of uterus (172-174) ..	..	..	..	..	..	..	..	..	..	..	..	2	..	6	..	3	..	2	..	13	13
Male genital organs (177-179) ..	..	..	..	..	..	..	..	..	..	..	1	..	5	..	11	..	23	..	40	..	40
Skin (190-191)	..	..	..	..	..	..	..	..	..	..	..	1	2	..	2	1	..	..	4	2	6
Bone and connective tissue (196-197)	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	3	2	3	5
All other sites (Rem. of 140-199)	..	..	1	..	1	..	1	1	2	..	5	7	39	24	19	19	9	23	77	74	151
Neoplasms of lymphatic tissues (200-203)	..	..	..	..	..	..	..	..	3	1	2	..	5	5	4	1	1	3	15	10	25
Leukaemia and aleukaemia (204)	..	..	..	..	1	3	..	1	1	1	1	1	5	3	2	2	4	3	14	14	28
Mycosis fungoides (205)	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	
Total	..	..	1	..	2	3	1	2	7	3	24	32	269	175	202	125	125	154	631	494	1,125

*International List Numbers are shown in brackets.

Influenza.—There were 14 deaths from influenza during the year as compared with 57 in 1961. The death-rates per thousand of the population were 0.03 and 0.11 respectively.

Pneumonia.—Accepted cases during the year numbered 631, of which 584 (92.6 per cent.) were primary and 47 (7.4 per cent.) influenzal. The corresponding figures for 1961 were 613, of which 540 (88.0 per cent.) were primary and 73 (12.0 per cent.) influenzal. Of the 631 cases, 345 were treated in Seacroft Hospital. There were 436 deaths from all forms of pneumonia (including 8 deaths from pneumonia of the newborn) as compared with 487 last year. The mortality rates were 0.85 and 0.95 respectively.

Bronchitis.—There were 488 deaths assigned to this disease as compared with 474 in the previous year. The death-rates were 0.95 and 0.93 respectively.

Tuberculosis

TUBERCULOSIS STATISTICS

The number of cases on the register at the end of 1962 was 2,694, as compared with 2,693 at the end of 1961, an increase of one case.

Notification.—During the year 337 cases of respiratory tuberculosis (of which 37 were transfers from other areas) and 27 non-respiratory (of which one was a transfer from another area) were notified, making a total of 364 cases of which 38 were transfers. Compared with the previous year there were decreases of 34 in the respiratory notifications and 6 in the non-respiratory notifications. Compared with the average of the previous five years there were decreases of 38 in the respiratory notifications and 7 in the non-respiratory notifications.

The case-rate of respiratory tuberculosis was 0.65, of non-respiratory 0.05 and of all forms of the disease 0.70 as compared with 0.73, 0.06 and 0.79 respectively for the previous year.

Of the total cases of respiratory tuberculosis, 11.9 per cent. were children under the age of 15 years, 15.1 per cent. persons between 15 and 25 years and 73.0 per cent. were in the remaining age groups. The corresponding figures for the previous year were 7.8 per cent., 12.9 per cent. and 79.2 per cent. respectively.

With regard to the non-respiratory type of disease, 22.2 per cent. were children under 15 years and 77.8 per cent. were persons over 15 years. The corresponding figures for the previous year were 9.1 per cent. and 90.9 per cent. respectively.

Of the total cases, 218 were notified by the Senior Chest Physician, 10 were notified by general medical practitioners, 98 came from hospitals and 38 were transfers from other areas.

The number of cases of respiratory tuberculosis not heard of until time of death was 7 (including 2 posthumous notifications) and the number of non-respiratory 2, making a total of 9, a decrease of 11 as compared with the figure for the previous year.

Out of a total of 26 deaths from tuberculosis of all forms, 4 died within 7 days of notification, 3 died between 7 and 28 days after notification and one 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..	2	7	11	27 (3)	34 (2)	37 (7)	43 (4)	37 (2)	24	222 (18)
Females	1	3	16 (3)	24 (2)	27 (9)	21 (4)	12 (1)	7	4	115 (19)
Totals	3	10	27 (3)	51 (5)	61 (11)	58 (11)	55 (5)	44 (2)	28	337 (37)

NON-RESPIRATORY

Ages	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males..	..	1	2	3 (1)	5	1	..	..	..	12 (1)
Females	..	1	2	4	2	1	1	..	4	15
Totals	..	2	4	7 (1)	7	2	1	..	4	27 (1)

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

Site	Males	Females	Total
Central nervous system	4	1	5
Abdominal	..	..	..
Spine	1	..	1
Bones and joints	1	..	1
Skin	..	..	..
Lymphatic system	6	9	15
Genito-urinary system	..	5	5
Other sites	..	..	..
Totals	12	15	27

Deaths.—Deaths from all forms of tuberculosis during the year numbered 26 of which 22 were males and 4 females. In the previous year the total was 33 of which 27 were males and 6 females. Of the total, respiratory tuberculosis accounted for 24 or 92·3 per cent. and non-respiratory 2 or 7·7 per cent. The death-rate from respiratory tuberculosis was 0·05, from non-respiratory 0·004 and from all forms of the disease 0·05 as compared with 0·05, 0·01 and 0·06 respectively for the previous year.

Set against the average rates for the previous five years, the figures represent a decrease of 0.03 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 0.04.

RESPIRATORY TUBERCULOSIS

AGES AT DEATH

1962	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males	..	..	..	1	..	1	3	8	8	21
Females	..	..	..	..	2	..	1	..	..	3
Totals	..	..	..	1	2	1	4	8	8	24
Average 10 years 1952-1961	..	..	..	2	6	10	14	15	17	64

NON-RESPIRATORY TUBERCULOSIS. DEATHS

1962	Tubercular meningitis	Abdomin- al	Bones and Joints	Other tuber- culosis	Total
Males	..	..	..	1	1
Females	..	1	..	..	1
Totals	..	1	..	1	2

AGES AT DEATH

1962	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total
Males	..	..	..	1	..	..	..	..	..	1
Females	..	..	..	1	..	..	..	..	..	1
Totals	..	..	..	2	..	..	..	..	..	2
Average 10 years 1952-1961	..	1	..	1	..	1	..	1	1	5

The following table gives details of notifications of and deaths from tuberculosis during the years 1940-1962 :—

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
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
1956	56	0·11	8	0·02	64	0·13	484	0·95	62	0·12	546	1·07
1957	47	0·09	5	0·01	52	0·10	397	0·78	41	0·08	438	0·86
1958	54	0·11	2	0·00	56	0·11	365	0·71	21	0·04	386	0·75
1959	45	0·09	5	0·01	50	0·10	380	0·74	39	0·08	419	0·82
1960	35	0·07	3	0·01	38	0·08	360	0·70	37	0·07	397	0·77
1961	28	0·05	5	0·01	33	0·06	371	0·73	33	0·06	404	0·79
1962	24	0·05	2	0·00	26	0·05	337	0·65	27	0·05	364	0·70

REPORT ON THE WORK OF THE TUBERCULOSIS DEPARTMENT OF THE LEEDS CHEST CLINIC

BY

GORDON F. EDWARDS, M.B.E., M.B., B.S., M.R.C.P.
Senior Consultant Chest Physician

Epidemiology.—General.—The statistical section shows that deaths from respiratory tuberculosis again fell by 14 per cent. as compared to the previous year. 7 males died for each female, and this discrepancy is due to the large number of deaths in the elderly. 66 per cent. of all deaths occurred in those over 55 years of age, all of them men. Non-respiratory deaths also fell from 5 to 2. Similarly, twice as many men as women were notified as suffering from tuberculosis. Only in the 5-14 age group do female notifications exceed male. For several decades the female peak has been constant in the 15-34 age group, whilst the male peak occurs between 45-54. However, half the male cases of tuberculosis occur after age 45; tuberculosis is thus a disease of middle aged and elderly males, and of adolescent females and young women of child bearing age. Respiratory notifications are reduced by 9 per cent. and non-respiratory by 18 per cent. compared to the previous year.

Mortality of Tuberculosis.—The death-rate in each quinquennium during the last 20 years shows a progressive reduction, the greatest fall (66 per cent.) occurring in the period 1947-1952, since when in each 5 yearly period the reduction has tended to decline:—

Period	Mortality Rate		Reduction
	From	To	
1942-1947	0.77	0.70	9%
1947-1952	0.70	0.24	66%
1952-1957	0.24	0.10	58%
1957-1962	0.10	0.05	50%

It has been suggested that the appreciable reduction between 1947 and 1952 may be due to the introduction of anti-tuberculosis drugs in 1950. But their use was by no means general much before 1952 or 1953. But if the death-rates from all forms of tuberculosis during successive quinquennia are considered, it is apparent that a significant fall in the death-rate was already manifest before the introduction of the drugs:—

Period		Mortality Rate			Reduction
		From	To		
1945-1950	..	0.70	0.38	..	46%
1950-1955	..	0.38	0.14	..	63%
1955-1960	..	0.14	0.08	..	43%

The effect of the introduction of the drugs on the death-rates was maximal between 1950 and 1955, and since then the rate of reduction of the mortality rate is even less now than it was in the pre-drug era.

Notifications of Tuberculosis.—The case-rate of notification of all forms of tuberculosis was 1.42 in 1939, showed a 23 per cent. increase by 1944, and returned to the pre-war level of 1.45 in 1946. Since then notifications have fallen by about 15-25 per cent. in each quinquennium, save only for the 5 year period during which the anti-tuberculous drugs were introduced:—

Period		Notification Rate			Variation
		From	To		
1939-1944	..	1.42	1.75	..	+23%
1944-1946	..	1.75	1.45	..	—17%
1946-1951	..	1.45	1.15	..	—21%
1951-1956	..	1.15	1.07	..	—7%
1956-1961	..	1.07	0.79	..	—26%

Tuberculosis Register.—The total number of cases on the Register at the end of the year is almost the same as at the start (see Table 1). Compared with 1961, fewer cases were added in 1962, and many more were removed in 1961, due to the large number of cases re-assessed and classified as "Recovered". This variation is therefore almost certainly an artificial one, so that the chances are that the reduction of the total known tuberculous population in Leeds observed in 1961 is probably continuing in 1962.

Posthumous Tuberculosis Deaths.—The number of cases of tuberculosis not heard of until they died, has shown a considerable reduction in 1962 (see Table 2). This is amplified by the note to Table 2.

Principal Thoracic Causes of Death.—There has been an increase in the number of deaths from all thoracic causes and from accidents (see Table 3), but the number of tuberculosis deaths continues to fall and tuberculosis is now an unimportant cause of death.

Primary Tuberculous Disease.—The proportion of notified cases of tuberculosis (excluding cases transferred-in) due to primary tuberculous pulmonary disease, is unchanged at about 9 per cent (see Table 4). There has been no significant variation in recent years. The comments made on this subject in previous years still apply.

Case Finding Methods.—The value of the various case finding methods remains reasonably constant. The pick-up rate of the Exclusion X-ray Service (see Table 6) remains unchanged at about 10 per 1,000 examinations, whilst examination of the elderly entrant to the Welfare Service Old People's Homes (see Table 7) is clearly a most effective form of discovering cases of tuberculosis, with a pick-up rate of the order of 40 per 1,000 examinations. This again underlines the present geriatric nature of pulmonary tuberculous disease. Conversely, Tables 5 and 8 show the relative ineffectiveness of routine M.M.R.

Tuberculosis Contact Service.—The work in the Contact Department is shown in Table 9 and 10, and reflects a situation comparable to that existing in previous years. The relative ineffectiveness of prolonged follow-up after the initial surveys and assessments is shown by the following abstract from Table 10:—

	All Contacts	New Only	Old Only
Nos. of Contacts seen	3,364	1,904	1,460
Nos. with Pul. Tub.	39	37	2
Incidence per 1,000..	11.5	20.5	1.37

An even bigger discrepancy was observed in 1961.

Tuberculin Surveys.—Table 10 shows that of 1,904 new contacts seen in the year, 964, i.e. about 50 per cent., were tuberculin negative of whom the greater part were children and adolescents. Virtually all these accepted B.C.G. vaccination.

The percentage of Mantoux-negative school children and adolescents (see Table 11) increases year by year, but between leaving school and entering college a dramatic change in tuberculin status occurs. This change is also seen in the University Undergraduate on entry to University (see Table 12) where again only about 24 per cent. of new entrants are tuberculin negative. However, about 50 per cent. of the students had received B.C.G. and this is probably the explanation of the considerable difference between the schools and the colleges. Moreover, of those who had received B.C.G. in the past, only 4 per cent. were now found to be tuberculin negative.

TUBERCULOSIS REGISTER

	Respiratory			Non-Respiratory			Total M. & F.
	M.	F.	Total	M.	F.	Total	
ON REGISTER AT 31.12.61 ..	1,426	969	2,395	125	173	298	2,693
ADDED TO REGISTER:							
Cases notified in 1962 ..	204	96	300	11	15	26	326
Transfer-in Cases	18	19	37	1	..	1	38
Cases returned	8	4	12	..	..	..	12
Totals	230	119	349	12	15	27	376
TAKEN OFF REGISTER:							
Diganosis not confirmed ..	6	4	10	1	..	1	11
Re-diagnosed N.R. to R. ..	..	..	..	..	..	..	..
Recovered	124	88	212	14	6	20	232
Transferred-out	22	8	30	1	1	2	32
Lost sight of	16	10	26	1	1	2	28
Deaths from tuberculosis ..	17	3	20	..	1	1	21
Deaths from other causes ..	36	11	47	2	1	3	50
Register Revision	1	..	1	..	..	..	1
Totals	222	124	346	19	10	29	375
Cases on register at 31.12.61 plus cases added in 1962 ..	1,656	1,088	2,744	137	188	325	3,069
Minus cases taken off 1962 ..	222	124	346	19	10	29	375
Plus N.R. to R.	..	..	..	..	..	..	..
CASES ON REGISTER AT 31.12.62	1,434	964	2,398	118	178	296	2,694

(Table 1)

DEATHS OF CASES NOTIFIED IN 1962

No. of tuberculosis cases not heard of until time of death	Posthumous notifications .. 2	Registrars' Returns .. 7	.. 9
No. of deaths within 28 days of notification	..	..	7
.. .. deaths in other patients notified in 1962	..	..	1
.. .. deaths in patients notified before 1962	..	..	14

(Table 2)

(N.B.—*Cases not heard of until time of death—Registrars' Returns:* This figure (7) includes deaths where tuberculosis was mentioned in Part II of the death certificate, the deaths being assigned to causes other than tuberculosis. It is, therefore, not possible to strike a balance between this figure plus the 22 deaths listed below it and the number of tuberculosis deaths (26). The figures of 22 and 26 relate to deaths assigned to tuberculosis.)

PRINCIPAL THORACIC CAUSES OF DEATH

	1958	1960	1962	
			All deaths	Men 45+
Pulmonary tuberculosis ..	54	35	24	19
Cancer of lung	270	266	333	270
Bronchitis	430	381	488	320
Coronary artery disease ..	1,075	1,206	1,347	736
Pneumonia	383	359	436	170
Totals	2,212	2,247	2,628	1,515
All accidents (for comparison)	156	174	195	47

(Table 3)

INCIDENCE OF PRIMARY TUBERCULOUS DISEASE

Type of Tuberculosis	1959	1960	1961	1962
Respiratory (Total)	341	324	325	300
Primary pulmonary tuberculosis ..	26	30	22	28
Primary pul. tub. as % of total ..	7.6	9.3	6.8	9.3

(Table 4)

CASE FINDING METHODS

Method	No. of new patients so investigated	No. of new cases of pulmonary tuberculosis found	Ratio per 1,000 examinations		
			1962	1961	1960
G.P. Letters	1,622	71	44	53	45
Exclusion X-ray Service	5,766	60	10	12	13
Routine X-Ray for other purposes	342	..	..	..	3
Contact examinations ..	3,364	39	11	8	11
M.M.R.	20,056	20	1.0	1.2	1.3
Total	31,150	190	6.1	7.2	6.7

(Table 5)

EXCLUSION X-RAY SERVICE DISCOVERY RATE

	1962	1960	1958
Total attendances ..	5,766	5,360	5,077
New cases of pulmonary tuberculosis	60	70	45
Ratio per 1,000 examinations	10	13	9

(Table 6)

WELFARE SERVICES GERIATRIC X-RAYS

Age-Groups	Nos. X-Rayed	Abnormal Films
40-59	8	1
60-69	13	..
70-79	81	4
80+	65	2
Totals	167	7

(Table 7)

MASS MINIATURE X-RAY SERVICE

Age-Groups	Nos. examined		Nos. with presumed inactive pulmonary tub.		Nos. with presumed active pulmonary tub.	
	M.	F.	M.	F.	M.	F.
0-14	↓	↓	..	..	..	..
15-24	↓	↓	1	3	4	3
25-34	↓	↓	3	1	7	..
35-44	↓	↓	3	2	1	..
45-59	↓	↓	11	5	2	..
60+	↓	↓	4	1	5	..
Total by sexes	12,207	7,849	22	12	19	3
Grand total	20,056		34		22	

(Table 8)

NEW CONTACTS SEEN IN 1962

New Contacts seen	1,904
Tuberculin negative	964
Tuberculin negative given B.C.G.	958
Tuberculin positive	940
Tuberculin positive found with pul. tub.	37
Tuberculin positive found with pul. tub. with primary disease	17
Tuberculin positive found with pul. tub. with adult disease	20
Cases of pul. tub. found in all previous old contact cases	2

(Table 9)

WORK DONE IN CONTACT DEPARTMENT

	1961	1962
1. Nos. of contacts examined :	3,664	3,364
(a) No. of new contacts seen	1,917	1,904
(b) No. of old contacts seen	1,747	1,460
2. Nos. of tuberculin positive contacts :	3,106	2,807
(a) followed-up in Chest Clinic	2,682	2,400
(b) followed-up by M.M.R. Unit	424	407
3. Nos. of tuberculin negative contacts :	982	964
(a) No. given B.C.G. vaccination	968	958
(b) No. refused B.C.G. vaccination	14	6
4. Nos. of cases of pulmonary tuberculosis discovered :	28	39
(a) among new contacts seen for first time	27	37
(b) among old contacts under review	1	2
5. Ratio per 1,000 of new cases of pulmonary tuberculosis discovered :	7.6	11.5
(a) among new contacts	14.6	20.5
(b) among total contacts under review	7.6	11.5

(Table 10)

B.C.G. SCHEME 1962

Type of School	No. tuber- culin tested	No. read	No. tuber- culin positive	No. tuber- culin negative	No. given B.C.G.
Primary	397	364	26% 96	74% 268	268
County Secondary and Comprehensive ..	3,071	2,851	20% 578	80% 2,273	2,273
Secondary Modern and Technical	2,189	2,086	26% 543	74% 1,543	1,543
Colleges	180	167	71% 119	29% 48	48
Totals	5,837	5,468	24% 1,336	76% 4,132	4,132

(Table 11)

TUBERCULIN SENSITIVITY OF MEMBERS OF THE UNIVERSITY OF
LEEDS (With acknowledgments to Dr. R. J. Still)

	Males	Females	Total
(1) No. of persons receiving Heaf Test ..	1,164	464	1,628
(2) No. of persons returning for Test reading	972	409	1,381
(3) No. of (2) Heaf Positive	727	317	1,044
(4) No. of (2) Heaf Negative	245	92	337
(5) Percentage of (2) Heaf Positive ..	75%	77%	76%
(6) Percentage of (2) Heaf Negative ..	25%	23%	24%
(7) No. given B.C.G.	204	48	252
(8) Percentage of (4) given B.C.G. ..	83%	52%	75%
(9) Percentage of (2) previously given B.C.G.	48%	53%	49%
(10) Percentage of (9) Heaf Negative ..	3%	5%	4%

(Table 12)

TUBERCULOSIS—SOCIAL WORK

BY

BARBARA M. R. NORTHROP, M.A.

Senior Tuberculosis Almoner

During 1962, all the varied activities of the Almoner's Department were continued for the benefit of patients of the Clinic. Many tuberculous patients are now short term cases where social help is concerned, as modern methods of treatment and the continuing advances in chemotherapy enable them to return to work quite soon, with a corresponding cessation or reduction of their problems. Some, however, including chronic patients from an earlier period, are still off work for a number of years and all the services of the Welfare State are utilised to help them to maintain themselves and their families.

During the year 1,698 patients and their relatives were interviewed at the Clinic, an increase of 250 on last year; 617 applications for help were made to the Special Services Committee. One pint of milk a day free of charge was supplied to 133 patients.

Now that the bed situation in chest hospitals is so much easier and patients are admitted quickly and discharged when they are non-infectious, there is not the same need for patients to sleep in a separate bed; only 2 beds complete with bedding were loaned to patients during the year. Mattresses and bedsteads were loaned to 4 patients and a mattress to another. A cot was provided for a patient with a young baby. Bedding was loaned as required to 21 patients.

Clothing is a constant need for the patient who has put on weight in sanatorium and has little to fit him, also for the patient returning to work and for the chronic patient who cannot afford necessary replacements as years go by. To preserve the health of members of the patient's family and to help protect them from possible infection by keeping them well and warmly clad, it is necessary to provide clothing from time to time for them too. During 1962, 238 grants of clothing were made to patients and their families.

Gifts from well-wishers enabled 11 grants of second-hand furniture and curtaining to be made to patients, and a pram was provided for a baby.

A new departure at the end of the year was the decision to continue the free milk grant and loans of bedding to patients who are technically recovered but remain permanently disabled owing to their previous tuberculosis. Only one patient was affected during 1962.

Co-operation with Other Departments.—Without the constant help and information provided by other Departments, patients would not surmount the difficulties of their illness, and warm thanks are due to all those which co-operate so readily with the Almoner at all times. Statutory sources approached included the Convalescence and Home Help Sections of the Public Health Department, the Care of Children, Welfare Services, Education, Probation and Cleansing Departments, the Ministries of Health and Labour, the Yorkshire Electricity Board, and the Income Tax Authorities. As always, the National Assistance Board provided help for a large number of patients; 214 patients and their relatives were referred to the Board for allowances and 25 for help in kind.

Voluntary Organisations.—Our grateful thanks are once more due to the Leeds Chest and Heart Association for its tireless efforts to assist our patients in any way which will promote their bodily comfort or ease of mind. During 1962, 379 applications were made to the Case Committee.

Warm thanks are once again offered to the Leeds District Aid in Sickness Fund which has helped patients steadily throughout the year with a variety of problems. 51 grants were made.

Owing to the generous and varied help given by these two local organisations, it has hardly been necessary to approach any other voluntary charitable bodies during 1962 for monetary grants to meet patients' needs. The R.E.M.E., R.A.O.C. and R.A. Benevolent

Funds helped with patients and the W.V.S. responded readily to 12 requests for clothing. Other bodies providing help included the Crypt, the Jewish Board of Guardians, Browning House, the British Red Cross Society, the International Voluntary Service and the Leeds Lions.

Non-Tuberculous Patients.—It is apparently not always fully realised that non-tuberculous patients of the Clinic can also be offered help and advice by the Almoner. Although the number of those referred to her is always considerably less than the number of tuberculous patients, it is gradually increasing and all possible help is given to these other patients who may well be more seriously ill (and for a longer time) than some of those suffering from tuberculosis.

During 1962, 35 non-tuberculous patients were referred for grants from the Leeds Chest and Heart Association and 38 for grants from other voluntary organisations. 21 of these were from the National Society for Cancer Relief. The prompt and ready help of the N.S.C.R. eases the last months of any cancer patient whose needs are brought to the Almoner's notice. 23 patients were referred to the Ministry of Labour for help in finding employment and 15 to the Convalescence Section of the Health Department for holidays.

One child patient was recommended for treatment in Switzerland at the Pro Juventute Home in Davos. The practical arrangements for the children to go to this Home are made by the British Red Cross Society and the administrative work is done by the Chest and Heart Association. Half the cost of treatment for the child is paid, but the other half, the cost of the fare, clothing and other incidentals, have to be found by the parents. In this case, an application was made to the Education Committee, who agreed to meet the cost which would otherwise have fallen on the parents.

The Welfare Services Department and the Ministry of Pensions were approached for help for other non-tuberculous patients,

General.—The Almoner lectured as usual to health visitor students, district nursing students and nurses at Killingbeck Hospital; she also attended a meeting to discuss the lectures in the health visitors' training course. She spoke to a Townswomen's Guild and a women's church group on the work of the Department. An officer from the Regional Office of the National Assistance Board visited the Almoner's Department, and the Almoner visited the Deputy Regional Controller of the National Assistance Board at Lawnswood. She attended a half-day conference on Stroke Rehabilitation at the Medical School, and meetings for Social Workers on the work of the Women Police and on the new scheme for social work training following the Younghusband Report.

Generous grants from the "Yorkshire Evening Post" and the Leeds Workpeople's Hospital Fund enabled gifts of toys and books to be made to 208 children from 53 families at Christmas. The Leeds Chest and Heart Association gave bags of coal to 100 aged and infirm patients, and the Leeds District Aid in Sickness Fund provided food parcels for 8 more. Two Townswomen's Guilds gave beautiful hand-knitted blankets, which went to elderly patients living alone, and the Atkinson Trust provided blankets for 5 others. It was good to know that the kind thoughts of their fellow citizens in more prosperous circumstances enabled so many patients to enjoy something of the special happiness of Christmas.

Disinfestation and Disinfection

DISINFESTATION AND DISINFECTION

BY

C. W. LAMB, M.R.S.H., F.R.E.S.

Disinfestation Officer

The Disinfestation and Disinfection Section is at Stanley Road, Harehills. The Disinfestation Officer has an Assistant and 3 Charge Officers, each responsible for a Sub-Section, viz. (a) General Disinfestation, (b) General Disinfection, (c) Maintenance and Cleansing of Public Conveniences, and (d) Drainage and Public Sewer Flushing.

Personal Disinfestation.—This Section, housed in the Clinic block, is supervised by a State Registered Nurse who is assisted by one male and two female attendants. At one end of the Clinic building is a section for the treatment of *pediculus capitis*. During 1962, 1,851 (1961—1,769) persons were given 1,876 treatments, 1,701 being children of school age and below. In connection with these cases 1,711 homes were visited, advice given and arrangements made by the two visitors, both of whom are qualified nurses. Close collaboration was maintained with the School Health Service.

The other end of the Clinic building is designed for the treatment of *pediculus corporis*, *phthirus pubis* and scabies cases. Cases of *pediculus corporis* numbered 496 (472 in 1961), mainly vagrants. A number of persons being dealt with under the National Assistance Act, 1948, Section 47, were cleansed and disinfested before admission to a home or hospital.

During the year 594 persons (459 in 1961) were treated for scabies, of whom 209 were of school age and under, 301 contacts received prophylactic treatment and 432 houses were visited. These cases are referred for treatment by the Skin Department of the Leeds General Infirmary and by general practitioners. There were 13 cases of *phthirus pubis*.

General Disinfestation.—In collaboration with the Housing Department, 960 (1,102 in 1961) dwellings were subjected to insecticidal spray treatment; half of this number, i.e. 480 dwellings, were bug-infested slum properties with their contents, and the other half Corporation houses sprayed prophylactically to receive the slum dweller, whilst 8,137 articles were disinfested by steam. In this connection 1,705 (1,203 in 1961) visits were made, the houses inspected and, where verminous, disinfested before removal of the tenant.

40 Corporation houses, not so sprayed during the previous twelve months, became infested or re-infested by bed bug, usually introduced by some second-hand verminous article of furniture or bedding.

Woodworm infestations are important. It is now practice when inspecting houses prior to the transfer of the tenants to the Corporation houses to look for woodworm in the structure, or more important, in the furniture. 231 articles of furniture were fumigated by hydrogen cyanide and 13 removals were carried out in this connection.

A further 85 (72 in 1961) woodworm infestations were reported by Estate Offices, in addition to infestations by cockroaches, steam-fly, clover mite, golden spider beetle, etc. Treatments were arranged to coincide with works of maintenance and 101 visits of inspection were made.

In addition to the regular disinfestation programme carried out for the Housing Department, other Corporation Departments took advantage of the facilities offered by the Disinfestation Section. Woodworm infestations in properties owned by the Waterworks Department, general disinfestation in schools for the Education Department, the treatment of geriatric patients and their homes for the Welfare Services Department, fly nuisances from the river for the Transport Department, sewage flies from the Knostrop Filter Beds for the City Engineer's Department, all were fitted in the heavy programme of the Centre.

The Leeds Hospital Groups and the United Leeds Hospitals continued to entrust their disinfestation problems to the Disinfestation Section, and a number of local authorities were given assistance, mainly in relation to woodworm control and bed bug eradication,

Methods of disinfestation vary according to the type and degree of infestation. Synthetic insecticides, mainly in solution, some in powder form, are in use. Low pressure steam is employed for the disinfestation of clothing, bedding and textiles generally. The volume of work is quite heavy—in connection with the re-housing programme 8,137 articles were disinfested, in connection with occupied Corporation properties 598 articles were disinfested. 2,996 miscellaneous articles were disinfested.

General Disinfection.—Disinfection carried out was mainly in connection with cases of tuberculosis, acute anterior poliomyelitis and diseases of the enteric group.

Assistance was given to Ilkley Urban District Council (at the Wharfedale Children's Hospital) in relation to the smallpox outbreak early in the year.

During the year 206 houses were visited, 364 rooms were disinfected by formaldehyde aerosol, 446 beds and 17,430 articles were disinfected by steam.

Steam is provided by a modern oil-fired and fully automatic plant which produces on an average 26,000 lbs. of steam per week. Only one high pressure steam disinfector for bacteriological disinfection is in use.

For all other purposes, formaldehyde disinfection is used. Produced by special apparatus, the aerosol form of this disinfectant has given excellent results and only when found to be too severe in its use, propylene glycol has taken its place for air disinfection. Chlorinated phenol, white and black disinfectant fluids complete a formidable array of disinfectants used at the Centre.

Medical Loan Requisites were distributed in collaboration with the Chest Clinic and disinfected on return. The articles loaned included blankets, sheets, pillow-cases, bedsteads and mattresses. 109 homes were visited, 210 articles delivered involving 653 miles of transport.

Transport.—The distribution of food supplements and stores to Infant Welfare Centres and Day Nurseries continued during the year. One stores van was maintained for this purpose and completed 10,025 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. 374 visits involving a total of 2,123 miles were made and each chair and carriage was thoroughly cleansed, disinfected and repaired, where necessary, before distribution.

Incontinent Laundry Service.—This is now well established and serves a maximum number of 40 patients per day. The service has been found to be a great help in home nursing patients suffering from incontinencies. They are visited daily and four clean draw sheets per patient exchanged for the previous day's soiled linen. The specially designed laundry van used for this purpose made 9,916 visits involving 18,749 miles.

The laundering was carried out at the South Lodge Laundry by arrangement with the Welfare Services Committee and included the repair of the sheets. The excellent co-operation of the Laundry Manager ensured a smooth running of the service, not always easy when the number of sheets fluctuated, especially at holiday periods.

Public Conveniences.—Three new public conveniences were added during the year, at Lincoln Green, Moortown and Kirkstall. Two public conveniences, both urinals, were closed.

The three squads are responsible for the general maintenance and cleanliness of the city's 55 conveniences. Only 5 conveniences in the centre of the city have attendants (one for males, one for females and three serving both sexes). The Crossgates convenience, for males and females, has attendants at certain hours of the day only.

During the year 22,096 visits were paid to the unattended conveniences for cleansing purposes. At the same time, defects and structural damage were reported to the Charge Officer. Wilful damage, which must be deplored, amounted to £607 3s. 4d. in unattended public conveniences, an increase of £206 on the previous year.

The maintenance of automatic electrical switches and emergency repairs are done by two men, trained by the City Lighting Department. Inspections are carried out daily and this service prevents accidents when lighting fails, especially important when a public convenience is below ground level and reached by a flight of steps. During 18,755 visits paid, 550 lighting repairs were effected.

Public Sewer Flushing.—This sub-section is equipped with motor vehicles and the necessary appliances such as flushing drain rods, drain plugs, smoke machine and a Mono Sludge Pump mounted on a trailer. The two squads work under the direction of public health inspectors in connection with (i) the cleansing of public sewers under the Public Health Act, 1936, Section 23, (ii) the testing of drains in the investigation of unsatisfactory drainage conditions of a building as required under the Public Health Act, 1936, Section 39, (iii) the removal of stoppages from drains, and (iv) the pumping-out of flooded cellars, inspection chambers, etc.

This service is used by other Corporation Departments, especially the Housing Department, City Engineer's Department, Markets Committee, Parks and Cemeteries Department, and also by private contractors and property owners. Contract work for the regular cleansing of drainage systems of private schools, 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 is recovered from the ordering body.

The demand for this specialised work is on the increase and at times the two squads are fully booked for several days ahead. During the year 1,161 (1,076 in 1961) public sewers were cleansed; private drains tested and/or cleansed numbered 35,923 (34,071 in 1961).

By the establishment of this service the Health and Housing Committees have effected a substantial saving in the cost of public sewer cleansing and drainage investigations; there has also been a saving in time, stoppages being cleared in most instances on the day that they are reported.

DISINFESTATION CENTRE
REPORT OF WORK DONE FOR YEAR 1962.

I. DISINFESTATION

A. WORK CARRIED OUT AT REQUEST OF HOUSING DEPARTMENT

(a) *Re-Housing*

	Bed Bugs	Wood-Worm	Niptus	Others	Total
No. of visits of inspection	1,705				
No. of dwellings disinfested by insecticide.. .. .	960	13	1	—	974
No. of articles disinfested by steam	8,137	—	—	—	8,137
No. of articles disinfested by HCN	—	231	25	—	256

(b) *General*

No. of visits of inspection	101				
No. of dwellings disinfested by insecticide.. .. .	40	85	7	122	254
No. of articles disinfested by steam	458	—	—	135	598
No. of articles disinfested by HCN	—	3	—	—	3

B. WORK CARRIED OUT FOR OTHER SOURCES

No. of visits of inspection	141				
*No. of premises disinfested by insecticide.. .. .	86	47	2	640	775
No. of articles disinfested by steam	907	—	—	2,089	2,996
No. of articles disinfested by HCN	—	81	37	78	196

*For Outside Authorities 1 *For Leeds 774 No. of wet articles dried 660

2. TREATMENT OF VERMINOUS PERSONS

	School Age	Others	Total
(a) <i>Pediculus Corporis</i>			
No. of homes visited	—	—	27
No. of persons treated	26	470	496
(b) <i>Pediculus Capitis</i>			
No. of homes visited.. .. .	—	—	1,711
No. of persons treated	1,701	150	1,851
No. of treatments involved	1,707	169	1,876
(c) <i>Scabies</i>			
No. of homes visited	—	—	432
No. of persons treated	209	385	594
No. of contacts treated	101	200	301
No. of re-infections	16	28	44

(Continued)

3. DISINFECTION							City	Outside Authorities	
No. of houses visited	..	..	..	..	..	..	205	1	Wharfedale Hospital
No. of rooms disinfected	..	..	..	..	..	..	360	1	4 Wards—Smallpox
No. of beds disinfected	..	..	..	..	..	..	420	1	26 „
No. of school toilets disinfected	..	..	..	..	..	..	—	—	—
No. of articles disinfected	..	..	..	..	..	..	17,163	—	267 Wards—Smallpox
4. PUBLIC CONVENIENCES							No. of Visits	No. of flushings	
								Drains	W.C.s.
Visits paid for cleansing purposes	..	..	..	..	..	..	22,096	32,482	28,834
							Total	Lighting	Repairs
Visits paid for inspection of lighting and emergency repairs	..	..	..	..	..	..	18,755	550	—
5. PUBLIC SEWERS									
No. of public sewers cleansed	..	..	..	..	..	..	..	..	1,161
No. of private drains tested and cleansed	..	..	..	..	..	..	..	..	35,923
6. TRANSPORT									
(a) Medical Loan Scheme									
No. of houses visited	..	..	..	..	..	..	..	..	374
No. of miles involved	..	..	..	..	..	..	..	..	2,123
(b) Chest Clinic									
No. of houses visited	..	..	..	..	..	..	..	..	109
No. of articles delivered	..	..	..	..	..	..	..	..	210
No. of miles involved	..	..	..	..	..	..	..	..	653
(c) Delivery Service									
Miles run for Babies' Welcomes and Day Nurseries in connection with deliveries of stores	..	..	..	..	..	..	..	..	10,025
7. INCONTINENT LAUNDRY SERVICE									
No. of visits paid	..	..	..	..	..	..	..	..	9,916
No. of miles involved	..	..	..	..	..	..	..	..	18,749
Average No. of pateints	..	..	..	..	..	..	..	..	40 per day

National Health Service Act 1946

- Section 22 CARE OF MOTHERS AND YOUNG CHILDREN
 - Section 23 MIDWIFERY
 - Section 24 HEALTH VISITING
 - 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 51 MENTAL HEALTH SERVICES
-

SECTION 22

CARE OF MOTHERS AND YOUNG CHILDREN

BY

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Maternity and Child Welfare Centres.—There has been a further decrease in the number of expectant mothers attending the ante-natal clinics and the number of children under five years attending infant clinics has also decreased during 1962. This slight downward trend may be due to the gradual expansion of the family doctor service. More general practitioners are accepting full responsibility for the ante-natal care of their patients; they are also, in some instances, arranging well-baby clinics for their own patients and the mothers tend to seek the advice of the family doctor where formerly they took the child to the infant welfare clinic.

The Leeds Health Authority continues to act as a central booking agency for maternity hospitals in the city and this encourages early attendance at the ante-natal clinics where medical supervision of the patient can be carried out until the last six weeks of pregnancy, if this is not undertaken by the general practitioner. It is an advantage to the mother to be able to attend her local clinic and this also helps to prevent overcrowding of the hospital clinics. There is, however, an increasing tendency for general practitioners to refer their patients direct to hospital and to undertake the ante-natal care of their patients booked for hospital confinement. In such cases the assessment of social need for hospital confinement is made by the Local Health Authority.

Welfare Foods.—National dried milk for infants and vitamin preparations for expectant and nursing mothers and children under five years were still sold at the clinics. There has been a lessening demand since the increase in price of dried milk and since cod liver oil and vitamin tablets are no longer supplied free of charge. This downward trend has unfortunately continued. Where the diet is

inadequate, particularly in the case of some coloured children, the lack of sufficient additional vitamins, especially Vitamin D, may be serious. There have already been one or two cases of mild rickets detected in young children.

Educational Work.—A certain amount of health education in the clinics has been carried out by the health visitors and midwives, with organised discussion groups and demonstrations. Dental hygienists have continued to visit the clinics in rotation to advise mothers in the proper care of their own and their children's teeth.

Demonstrations on foot health for children were held at a number of clinics through the courtesy of a firm of manufacturers of children's shoes.

A series of practical demonstrations of weaning diet of infants was also given and appreciated by the mothers.

Leeds Babies' Welcome Association.—Members have continued to give their regular and valuable help in the clinics as voluntary workers. They assist with routine clerical work, in some clinics undertake the weighing of the children and organise play corners for toddlers, are responsible for the sale of knitting wool, baby clothes and fireguards, and at all times they help to maintain a friendly atmosphere in the clinics. Members have also continued their efforts for "Safety in the Home" and guarding against accidents, particularly burns and scalds of young children. Special efforts have been made by the Association to facilitate the purchase of flameproof material for children's garments and to urge mothers to procure this material. The main obstacle to its wider use is the material's high cost.

Ante-Natal Clinics.—By 31st December, 1962, there were 186 ante-natal sessions held per month at 22 clinics. The number of expectant mothers attending the clinics during the year was 7,392, a decrease of 661; of this total 5,014 were new cases. The total number of attendances at all clinics was 27,076, a decrease of 2,038. In addition to the ante-natal sessions at which the clinic doctor was in attendance, there were 108 sessions per month carried out by municipal midwives, in some instances along with the general practitioner, for their patients booked for home confinement.

Post-Natal Clinics.—There have been 17 post-natal sessions per month held at 9 clinics. The number of mothers who attended was 666 with a total number of attendances of 729. The majority of mothers 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 244 sessions were held per month. One clinic at Farnley had to be closed during the year owing to the premises becoming unuseable. An additional clinic commenced at Cookridge in November, 1962, with one session per week. The number of infants under one year attending the clinics for the first time was 6,206, an increase of 160. During the year 3,969 children between one and two years attended and 3,369 children between two and five years, decreases of 268 and 185 respectively, making the total number of children attending 13,384 with 78,349 attendances made, a decrease of 453 in the total number of children and a decrease of 2,105 in the total attendances.

Consultative Infant Clinics.—The arrangements with the University Department of Pædiatrics and Child Health continued, and three consultative infant clinics were held each month. The total number of attendances of children under five years was 92.

Physiotherapy.—The number of children referred during the year for examination by the Orthopædic Consultant was 177, a decrease of 6 on the number referred in 1961.

Artificial Sunlight.—This was given to 339 children during the year and the total number of attendances at six infant welfare centres was 4,578. These figures show a decrease of 4 in the number of children attending but an increase of 207 attendances compared with those for 1961.

Remedial Exercises.—A total of 201 children attended for exercises with 2,289 attendances, a decrease of 17 in the number of children in 1961.

Ante-Natal and Post-Natal Classes.—These exercise classes for expectant and nursing mothers were held at 8 welfare centres. These classes and the group discussions on pregnancy and childbirth with the physiotherapist and in some instances along with the midwife are much appreciated by the mothers who attend. There were 578 mothers who attended ante-natal classes and the total number of attendances was 2,889. These figures show an increase for 1962 of 186 and 857 respectively.

Eye Defects.—*Children classified as Blind or Partially Blind.*—There were 6 blind children and one partially sighted child, under five years, on the register on 31st December, 1961. There were 2 children notified as possibly blind during 1962 but not so far registered. Of these, one was removed from the register on reaching five years of age, leaving 5 children registered as blind, 2 possibly blind and one partially sighted, on 31st December, 1962. All children remained in their own homes except one who is in a residential nursery. There were no admissions to Sunshine Homes.

Any child under five years attending the infant welfare clinics who is found to have a squint or other eye defect is referred to the ophthalmic consultant at the school clinic, thus providing continuity of supervision and treatment for such cases.

During 1962 the number of children seen by the consultant for the first time was 147; in addition, 84 children re-attended for further consultation, making a total of 231 children examined. This is a decrease of 14 on the number seen in 1961.

Hearing Defects.—After screening tests for deafness had been carried out by the health visitors, 11 children were referred for ascertainment of deafness to the School Medical Service Deaf Clinic.

Congenital Abnormalities associated with Thalidomide.—At the request of the Ministry of Health, an investigation was made of children born during 1960, 1961 and up to 31st August, 1962, who were known to have certain congenital deformities or abnormalities, to ascertain, if possible, whether the mother had taken any drug containing Thalidomide during pregnancy.

It was found that 12 children had reduction deformities of the limbs to a greater or lesser degree and 3 had microtia. In only 2 cases had the mother certainly taken Thalidomide during pregnancy. Both these children had major deformities of the limbs.

Care of Premature Infants.—Between 1st January and 31st December, 1962, there were 685 live births notified of infants weighing $5\frac{1}{2}$ lbs or less at birth. Of these, 570 were born in hospital or nursing home in the city and 115 were born at home. Of those born at home, 47 were removed to hospital and the remaining 68 nursed at home.

The number of infants who died within 24 hours of birth was 69; of these 64 were born in hospital. Of the 5 born at home, 4 were transferred to hospital and one died at home.

Of the 68 infants nursed at home, 63 received special nursing care by the premature baby midwives, with a total of 1,277 home visits.

As well as nursing infants born at home, the premature baby midwives undertook the after-care of 511 infants requiring further nursing care after discharge from Leeds Maternity Hospital, St. James's and St. Mary's Hospitals. Home visits to these cases totalled 6,463. These figures show increases of 18 and 1,249 respectively as compared with 1961.

In October, 1962, an "Oxygenaire" portable incubator was purchased to provide better means of transport of premature babies to hospital.

Provision for the Care of the Unmarried Mother and her Child.—The three homes in the city run by voluntary organisations continued to admit Leeds cases recommended by the Health Committee and for whom the Committee accept financial responsibility for a period of three to four months. In exceptional circumstances Leeds cases may be admitted to voluntary homes outside Leeds, or to Bradford Local Health Authority Home. During 1962 admissions to these homes decreased by 12 compared with 1961. There is increasing reluctance of some girls to stay in the Home for the recommended period of three to four months,

Mother and Baby Home	No. of mothers admitted
Mount Cross Salvation Army Home, Leeds	20
St. Margaret's Roman Catholic Home, Leeds	15
Browning House, Church of England Home, Leeds	18
Bradford Local Authority Home ..	..
Other homes	1
	—
Total	54
	—

Day Nurseries.—There was rather less demand for admission of children to the day nurseries and only one nursery had a waiting list. Priority was still given to children where social or economic circumstances necessitated the mother going to work, or, in a few cases, where the mother was dead or had deserted the family. Except in the special cases mentioned above, no child attended a nursery unless the mother was in regular employment. All the nurseries are approved training nurseries for the National Nursery Examination Board Certificate.

Infections in the nurseries, while not serious, still prove troublesome, particularly Sonne dysentery. There were slight outbreaks of this in six nurseries during the year.

PLACES AND ATTENDANCES AT DAY NURSERIES

	No. of Places	Daily Attendance per 5 day week	Total Number of Attendances
DAY NURSERIES			
Quarry Hill	50	36·8	9,387
Blenheim Lodge ..	50	35·3	8,899
Harehills	50	35·7	9,017
Hunslet Hall	50	38·9	9,979
Armley	55	36·0	9,116
Meanwood	55	34·2	8,865
Burley Park	75	41·1	10,413
Totals	385	258·0	65,676
% attendance		67·0%	

Convalescence.—During 1962, 41 mothers and 45 children under five years were referred by the Maternity and Child Welfare Clinics for convalescence at the Leeds Health Authority's Southport Home.

Adoption Act, 1950.—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 or by the private doctor and blood tests are taken prior to the child being placed for adoption. In this connection 69 mothers and 120 children had blood tests carried out. The comparative figures for 1961 were 68 and 126 respectively.

Nurseries and Child Minders Act, 1948.—During the year 32 applications were received for registration as child minders; no additional day nurseries were registered.

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

	Child Minders	Nurseries
No. on register at 31st December, 1961	47	13
Permitted No. of children at 31st December, 1961	287	475
No. registered during the year ..	32	..
No. of applications refused	..	..
No. of registrations cancelled	10	..
No. on register at 31st December, 1962 ..	69	13
Permitted No. of children at 31st December, 1962	395	480

Registered Nursing Homes.—The following table gives particulars of registered nursing homes in the city:—

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., 1961 ..	3	65	..	..	..	6	86	9	65	86
Registration approved during 1962	..	..	..	..	..	..	..	..	..	..
Registration cancelled or surrendered during 1962 ..	..	..	..	..	..	..	..	..	..	..
Existing at 31st Dec., 1962 ..	3	*	..	..	..	6	86	9	65	86

* Figure includes ante-natal and post-natal beds in two mother and baby homes (Mount Cross and St. Margaret's). Actual number of lying-in maternity beds is 25.

Nursing Agencies Act, 1957.—The licence of one nursing agency was renewed. One new agency was registered subject to certain requirements being met. One registration was cancelled as the agency ceased to function.

Children Neglected or Ill-Treated in their Homes.—The Co-ordinating Committee comprised of representatives of the Public Health, Education, Housing, Welfare Services, Probation, Police, Mental Health and Care of Children Departments, Inspectors of the N.S.P.C.C. and a representative of the recently established Family Service Unit, has met regularly each month to consider significant cases of children neglected or ill-treated in their own homes. In each case the needs of the family as a whole are considered and agreement reached as to how local services, both statutory and voluntary, can best be applied to meet these needs.

During 1962, 36 new cases involving 141 children were considered and each case referred to the statutory or voluntary body best fitted to deal with the problems. In addition, 11 cases previously notified were re-considered.

The following table shows some of the contributory factors affecting the cases considered and emphasises the complexity of the problems confronting the case workers.

PARENTAL FACTORS NOTED IN THE 36 CASES OF NEGLECT
CONSIDERED DURING 1962.

Case	Broken homes	Incomplete homes	Cohabiting	Low intelligence	Selfish and Indifferent	Shiftless and feckless	Household mis-management	Housing problems	Dirty homes	Abandoned	Ill-treatment	Unwanted child	Ill health (M = Mental)	Total
1	..	..	1	..	1	..	..	..	1	..	..	..	..	3
2	..	..	..	..	..	1	..	1	..	..	..	..	..	2
3	..	..	..	..	..	..	1	..	1	..	..	..	..	2
4	..	..	..	..	1	1	1	..	..	..	..	..	..	3
5	..	..	..	1	..	..	..	..	..	..	..	..	..	1
6	..	1	..	..	..	..	..	1	1	..	..	..	..	4
7	..	..	..	1	..	..	1	..	..	..	..	..	1	3
8	..	..	..	..	1	1	1	..	1	..	..	..	..	4
9	..	1	..	..	1	..	..	..	..	..	..	1	..	3
10	..	..	..	..	..	..	..	..	..	..	..	..	1	1
11	..	..	..	..	1	1	1	..	..	..	..	..	..	3
12	..	..	..	..	..	..	..	..	..	..	..	1	..	1
13	..	1	..	1	..	..	..	..	..	..	..	..	..	2
14	1	..	..	1	..	1	1	..	1	..	..	..	..	5
15	..	..	..	..	..	..	..	..	..	..	..	..	1	1
16	..	1	..	..	..	..	1	..	..	..	..	..	..	2
17	..	..	..	1	..	..	1	..	1	..	..	..	..	3
18	..	1	..	..	1	..	..	..	..	..	..	..	..	2
19	1	..	..	..	..	..	1	..	..	..	..	..	..	2
20	..	..	..	..	1	1	..	1	..	..	..	..	..	3
21	..	..	..	..	1	1	1	..	1	..	..	..	..	4
22	..	..	..	..	..	1	1	1	1	..	..	..	..	4
23	..	1	..	..	..	..	1	..	1	..	..	..	..	3
24	..	..	..	1	..	..	..	..	..	..	1	..	..	2
25	..	..	..	..	1	..	..	1	..	..	..	..	..	2
26	..	..	..	..	1	1	..	..	..	..	..	..	..	3
27	..	..	1	..	1	1	1	..	1	..	..	..	..	5
28	1	..	..	1	..	..	1	..	1	..	..	..	..	4
29	..	..	..	..	..	..	..	..	..	..	..	1	..	1
30	..	..	..	..	..	..	1	1	1	..	..	..	..	3
31	..	..	1	..	1	1	1	..	..	..	..	..	..	4
32	..	..	..	..	..	..	1	1	..	..	..	..	..	2
33	..	..	..	..	1	1	..	..	..	..	..	..	1	3
34	..	..	..	..	1	1	1	1	..	..	..	..	..	4
35	..	..	..	1	..	..	1	..	..	..	..	..	..	2
36	..	1	..	..	1	..	..	..	..	..	..	..	..	2
Totals ..	3	7	3	9	15	12	20	8	12	..	1	3	5	98

The following table shows the number of cases notified and the notifying agencies:—

NUMBER OF CASES

	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Probation ..	2	..	1	2	2	2	..	1	2	2	4	..
N.S.P.C.C. ..	44	21	6	10	4	3	3	2	5	3	6	6
Police ..	24	5	8	2	6	7	1	10	2	9	4	5
Health ..	11	12	4	6	..	6	21	10	12	9	4	12
Housing ..	7	5	2	2	2	2	2	1	2	3	5	5
Care of												
Children ..	1	5	5	11	1	10	2	4	1	5	2	2
Education ..	7	3	4	4	3	2	1	..	..	2	2	3
Welfare												
Services ..	1	..	..	..	1	..	1	1	7	..	1	..
Miscellaneous	7	1	2	1	..	..	4	4	..	4	2	3
F.S.U. ..	..	..	..	..	..	..	..	..	..	..	1	..
Mental Health	..	..	..	..	..	..	..	..	..	..	1	..
	104	52	32	38	19	32	35	33	31	37	32	36*

*Plus 11 cases re-considered.

NOTE: Total cases in twelve years=481.

Dental Care of Mothers and Young Children (Report of Mr. J. Miller, L.D.S., Senior Dental Officer).—The following tables show the work carried out during 1962:—

WORK OF DENTAL OFFICERS

	Expectant Mothers	Nursing Mothers
No. of inspection invitations	858	15
No. of inspection attendances	405	5
No. found dentally fit	22	..
No. accepted treatment	320	..
No. refused treatment	63	..
Total No. of teeth filled	243	5
Type of filling given :—		
Synthetic porcelain	39	3
Cement	1	..
Amalgam	41	2
Lined Amalgam	163	1
Total fillings given	244	6
Total No. of teeth extracted	506	95
" " " persons fitted with dentures ..	28	65
" " " other treatments	23	7
" " " local anæsthetics	207	3
" " " general anæsthetics	76	21
" " " treatment sessions		179
" " " inspection sessions		22
" " " attendances for treatment ..	525	229
" " " persons made dentally fit ..	25	54

NUMBERS PROVIDED WITH DENTAL CARE

	Number examined	Number found to need treatment	Number treated	Number made dentally fit
Expectant and Nursing Mothers	405	383	380	79
Children under 5 years ..	252	130	100	33

FORMS OF DENTAL TREATMENT PROVIDED

	Expectant and Nursing Mothers	Children under 5 years
Extractions	601	175
Anæsthetics :—		
Local	210	..
General	97	96
Fillings	260	61
Scalings or scaling and Gum Treatment ..	243	..
Radiographs	6	..
Dentures provided :—		
Complete	90	..
Partial	53	..

PRE-SCHOOL CLINIC

Number examined	141
" free from caries	74
" treated by fillings	44
" " " extraction	15
" defective but not treated	21

WORK OF ORAL HYGIENISTS

	Expectant Mothers	Nursing Mothers
No. of attendances	243	..
" " scalings	243	..
" " treatment sessions	70½	
" " hygiene lecture sessions	107	
" " individuals treated	117	..
" made dentally fit	117	..

SECTION 23

MIDWIFERY

BY

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

Assistant Medical Officer of Health for Maternity and Child Welfare

AND

ELSIE L. MANN, S.R.N., S.C.M.,

Supervisor of Midwives

The Maternity Liaison Committee, established in March, 1961, has continued to meet and proved valuable in co-ordinating the three parts of the Maternity Services. The Cranbrook Committee thought that there should be sufficient maternity beds to allow 70 per cent. of confinements to take place in hospital. Although the number of beds in the three city maternity units almost satisfy this recommendation, requests for hospital confinement outnumber the available beds but no mother is refused a hospital bed if there is any medical, obstetric or social reason necessitating hospital confinement. Home circumstances are always investigated and reported on by a midwife before any mother is asked to arrange a home confinement. There is an increasing tendency towards early discharge from hospital, partly to relieve the bed situation and partly as a definite policy in suitable cases for planned 48-hour discharge.

The importance of the follow-up of defaulters from the antenatal clinics is stressed and the domiciliary midwives assist the hospital service by home visits to patients who have failed to attend the clinics.

In the domiciliary service there is good co-operation between the family doctor and the midwife. The midwife ensures that the patient books a doctor for maternity medical services. This arrangement prevents the doctor being called in emergency knowing nothing of the patient, and such cases now rarely occur. Unfortunately many patients in the "at risk" groups insist on home confinement in spite of advice by the midwife. This particularly applies to the multipara over 35 years of age who has already had four or more children.

When the family doctor undertakes the ante-natal supervision of his patient, he frequently uses the local health authority clinics for blood tests, chest X-rays and other facilities such as ante-natal exercise classes.

Midwifery Training—Part II.—The training school at Redcourt Hostel continues to attract 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. Training is under the supervision of the midwifery tutor who is superintendent of the training school. 26 domiciliary midwives are approved by the Central Midwives' Board as teachers of pupil midwives; 3 of these were approved during the year. 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 41 pupil midwives completed their training, 5 more than in 1961. Of these, 37 passed the Part II examination of the Central Midwives' Board at the first attempt, and 3 at the second attempt. On 31st December, 1962, there were 21 pupil midwives in training.

Notified Births.—During the year 9,769 births were notified. Of these 6,710 (68.6 per cent.) took place in hospitals or nursing homes and 3,059 (31.3 per cent.) were domiciliary cases. The comparative figures for 1961 were:—hospital cases 67.2 per cent. and home confinements 32.8 per cent. 3,058 (99.9 per cent.) of the domiciliary births were notified by midwives.

Notification of Intention to Practise.—203 midwives notified their intention to practise during the year. Of these, 113 were employed in hospitals, 19 in nursing homes, 6 as private midwives and 65 were employed by the local authority. By 31st December, 1962, there were 160 midwives practising in the city; 42 of the total number who had notified their intention to practise had left the service or moved elsewhere and one midwife died.

Domiciliary Midwifery Service.—The average number of midwives employed by the Local Health Authority in domiciliary work throughout the year was 47 full-time and 7 part-time. During the year 2 midwives retired, 7 resigned, one died and 8 new appointments were made. On 31st December, 1962, there were 47 domiciliary midwives working full-time including the four midwives undertaking the nursing care of premature babies. The 7 part-time midwives were employed principally in the nursing care of patients discharged from hospital before the tenth day of the puerperium and also in home visits to assess social need for hospital booking, or suitability for early discharge from hospital. The number of domiciliary births attended by municipal midwives during the year was 3,058 or 31.3 per cent. of the total births notified. The comparative figures for 1961 were 3,053 or 32.6 per cent.

To comply with statutory requirements, 8 midwives attended approved refresher courses. In addition, 2 midwives attended a special course in relaxation, parent-craft and group teaching. One midwife obtained the Midwife Teacher's Diploma.

The following table is a summary of work done by the domiciliary midwives during 1961 and 1962:—

	1961	1962
Ante-natal visits	23,740	20,931
Attendance at birth	3,053	3,058
Post-natal visits	43,959	47,488
Bookings	2,930	3,934
Attendance by patients at midwife's clinics	26,814	26,297
No. of patients who had Gas/Air or Trilene analgesia	2,818 or 92.3%	2,394 or 90.8%
Social investigations	..	2,042

Of the 47,488 post-natal visits paid by the midwives in 1962, 5,211 were to patients discharged from hospital before the tenth day of the puerperium.

Analgesia.—All municipal midwives are qualified to administer Gas/Air and Trilene analgesia and each midwife is provided with the approved apparatus. Every expectant mother who books a municipal midwife is given the opportunity of having analgesia at her confinement unless her doctor certifies her as medically unfit. Of the 3,058 patients attended by municipal midwives 2,776 or 90·8 per cent. were given either Trilene and/or Gas/Air analgesia. In 19 cases only, Gas/Air analgesia was used. Pethidine is also given by the midwife when advisable and was given to 1,072 patients.

Maternity Outfits.—A sterilised and sealed outfit 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 for Leeds cases in mother and baby homes; in two private maternity homes they can be obtained for Leeds patients. During 1962, 392 outfits were supplied through Maternity and Child Welfare Clinics for such patients.

Medical Assistance.—Medical assistance was called for in 914 domiciliary cases where a doctor had been booked. There were 6 notifications of emergencies under Section 14 of the Midwives Act, 1951, compared with 13 for the previous year and 7 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 non-medical Supervisor of Midwives. She made 117 visits to see the midwives in their homes and at their cases, and, in addition, paid 210 special visits.

SECTION 24

HEALTH VISITING

BY

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

Assistant Medical Officer of Health for Maternity and Child Welfare

AND

JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London),

Superintendent Health Visitor

The health visitors made 160,570 visits in 1962. The following table gives comparable figures of the work done in 1961 and 1962.

	1961	1962
Notified births, and children under 5 years	115,041	121,670
Children over 5 years	549	583
Stillbirths	120	117
Deaths of children under 5 years ..	103	183
Ophthalmia Neonatorum	12*	8*
Expectant Mothers	3,297	3,357
Adoption visits	100*	83*
Child Minders	349*	417*
Day Nursery admissions and absentees	74*	44*
Tuberculous households	6,464	5,879
Housing reports	849	869
Research Enquiries and adults not classified	3,245	3,890
Cases discharged from hospital ..	..	..
Home Help investigations	17	10
Ineffectual visits	22,406	23,460
Total visits for the year	152,091	160,570

*included in visits to children under 5 years.

The total number of visits paid by the health visitors in 1962 was 8,479 higher than the total for 1961. There was an increase of 6,629 visits to children under 5 years. Unfortunately the number of ineffectual or "no access" visits has also increased by 954 as compared with those for 1961.

There were no vacancies on the staff during the year; three additional appointments were made but demands on the service were only met because the health visitors have developed a highly selective system of visiting and have been very careful to avoid unnecessary visits. There was a slight increase in the number of expectant mothers visited. An increasing number of registered child minders in the city necessitated more supervisory visits in this category; there were 417 visits in 1962 compared with 349 in 1961 and 269 in 1960. Health visitors continued to assist with the practical training of health visitor and other students, on the district and in the clinics.

Further information about the work of the health visitors is given in the sections of the Report relating to Health Education and Care and After-Care.

HEALTH VISITOR TRAINING

BY

MAUREEN CLANCY, S.R.N.,
Health Visitor Tutor

During the academic year 1961-62, 48 students took part in the Health Visitors' Training Course at the University of Leeds. Of these, 13 were Leeds assisted students who had been carefully selected from the many applications received.

For various reasons it had been decided that, this year, the organisation of the course should revert to the system whereby theoretical and practical work are undertaken concurrently and therefore two days of each week were reserved for practical instruction.

The aim of the first term's work was to introduce students to the normal aspects of health visiting and this purpose was fulfilled both in theoretical teaching and field work. The two days allocated each week to practical tuition were spent with experienced health visitors and school nurses, both in Leeds and in nearby local authorities who willingly co-operated in instructing the students.

In the second term consideration was given to deviations from the normal whilst still maintaining a lively concern for those facets of life which make for everyday healthy living. Practical work still included health visiting but was widened to give an insight into the work of Child Care Officers, Mental Health Workers and Welfare Officers. Members of the local authority departments concerned were most helpful in assisting with these aspects of training and the instruction enabled students to apply the knowledge gained from theoretical teaching.

The third term, culminating in the examination in July, was spent consolidating and integrating the work of the two previous terms with the addition of some new material which completed the overall comprehensive pattern. At the same time, students undertook teaching practice on selected topics and made many group visits of observation.

In the examination 46 students passed at the first attempt, all the Leeds students being successful.

In August Miss F. M. Mawson retired after fourteen years as Health Visitor Tutor. She received many tributes from past and present students who owe much to her expert guidance and teaching.

SECTION 25

HOME NURSING

BY

KATHLEEN E. WHALLEY, S.R.N., S.C.M.,

Superintendent Home Nurse

The following tables give the sources and classification of new cases treated during 1962, with comparative figures for 1960 and 1961. It will be seen that there has been a decrease of 654 new patients and 2,226 visits as compared with 1961.

SOURCES OF CASES 1960-62

	1960	1961	1962
General practitioners	5,268	4,989	4,739
Hospitals	2,070	2,292	1,871
Direct application and/or relatives, etc.	139	139	156
Totals	7,477	7,420	6,766

CLASSIFICATION OF CASES 1960-62

Classification	1960		1961		1962	
	New Cases	Visits	New Cases	Visits	New Cases	Visits
Medical ..	5,191	188,981	5,038	180,831	4,619	179,536
Surgical ..	1,635	33,279	1,811	37,877	1,590	37,857
Children under 5 years ..	528	4,724	458	4,095	446	3,959
Pneumonia ..	57	672	42	493	30	284
Tuberculosis ..	27	1,747	25	1,299	18	598
Maternal complications ..	36	317	39	393	57	545
Ophthalmia neonatorum ..	1	2	1	3	..	..
Infectious diseases ..	2	12	6	59	6	45
Totals ..	7,477	229,734	7,420	225,050	6,766	222,824

Of the 6,766 patients, 2,578 have received injection treatment of various types necessitating 104,583 visits.

During the year 3,051 patients aged 65 years and over have been nursed and received 138,568 visits as compared with 3,191 patients and 136,234 visits during 1961.

The following tables give the number of patients nursed aged 65 and over and tuberculous patients nursed:—

		Patients	Visits
1960 ..	..	3,290	138,846
1961 ..	..	3,191	136,234
1962 ..	..	3,051	138,568

		Tuberculous Patients Nursed	
		Patients	Visits
1960 ..	..	27	1,747
1961 ..	..	25	1,299
1962 ..	..	18	598

Staff.—The nursing staff is as follows:—

		Full-time	Part-time	Staff in terms of full-time
December, 1960 ..	..	54	10	59
„ 1961 ..	..	63	14	70
„ 1962 ..	..	64	11	69½

There are 14 motor cars available for use in the more distant areas of the city.

Training.—Training for the National Certificate in District Nursing continued during the year. A course was held from January to April for 8 students, all of whom were successful in the examination. A further course with 7 students started in September.

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. During the year 2,448 articles were loaned as compared with 2,668 in the previous year, and 2,388 returned as against 2,567. There were 4,380 applications for extensions of loan periods and 458 persons defaulted with regard to the conditions of loan.

CLASSIFICATION OF MEDICAL REQUISITES

Articles	Loaned	Returned
Air rings	424	424
Bed pans	582	579
Mackintosh sheets	591	576
Back rests	323	324
Urinals	199	205
Cradles	118	119
Commodes	87	70
Crutches	10	7
Douche outfits	1	1
Polystrene blocks	3	..
Rubber bed pans	6	5
Bed trays and tables	1	..
Dunlopillo mattress and cover	10	4
Wheel chairs	40	37
Bedstead with chain and pulley	10	4
Dietary scales	1	..
Hydraulic hoist	4	3
Stand pulleys	13	7
Sani-chair	..	1
Single bed	5	5
Mattress	7	5
Bed with cot sides	1	1
Walking sticks	2	1
Ripple bed on hire	2	4
Walking aid	6	4
Sputum mugs	2	2
Totals	2,448	2,388

SECTION 26

VACCINATION AND IMMUNISATION

BY

MARGARET STEANE, M.B., Ch.B.

Assistant Medical Officer of Health for Immunisation

In February of this year the Minister of Health made oral poliomyelitis vaccine available to local health authorities for use in the routine vaccination of all persons over six months and under 40 years of age and certain others at special risk. The recommended course of this vaccine consists of three doses, each of three drops, given at intervals of four to eight weeks. The vaccine can be administered on a lump of sugar or in syrup (B.P.). It can also be used as a third dose for persons who have had two injections of "Salk" vaccine and as a reinforcing dose for children aged 5 to 12 years who have had three injections of "Salk" vaccine. The issue and use of the vaccine commenced on 1st March, 1962.

The number of doses of oral vaccine given up to the end of the year was 55,269, of which 35,052 were given by general practitioners.

The number of injections against diphtheria, whooping cough, tetanus, poliomyelitis, smallpox, etc., given during the year was 119,735, of which 29,062 were given by the Public Health Department staff, 18,656 by the School Health Service staff and 72,017 by general practitioners.

Nearly 10,000 persons queued outside the Central Clinic and the Central Clinic Annexe in Park Square for smallpox vaccination on the two days 15th and 16th January, following the start of the smallpox epidemic in Bradford. Doctors and staff had to be augmented to cope with the rush.

Poliomyelitis Vaccination.—The following table shows the progress of the vaccination scheme since 1956 ("Salk" vaccine only).

Year of Birth	Number of persons vaccinated with 2 injections							Total
	1956	1957	1958	1959	1960	1961	1962	
1920-32 ..	..	..	..	..	6,641	8,080	716	15,437
1933-42 ..	..	27	1,445	19,738	3,861	4,299	488	29,858
1943.. ..	..	21	3,063	743	122	209	30	4,188
1944.. ..	..	21	4,379	889	91	189	19	5,588
1945.. ..	..	27	4,155	836	61	136	11	5,226
1946.. ..	..	37	5,419	1,197	74	126	20	6,873
1947.. ..	345	2,573	3,376	1,096	83	199	34	7,706
1948.. ..	339	2,315	2,989	968	95	175	29	6,910
1949.. ..	311	1,980	2,957	872	90	215	21	6,446
1950.. ..	302	1,835	3,002	867	109	209	26	6,350
1951.. ..	216	879	3,899	897	95	224	27	6,237
1952.. ..	53	514	4,067	1,007	125	231	28	6,025
1953.. ..	61	559	2,337	1,653	297	494	40	5,441
1954.. ..	27	431	2,193	1,791	324	546	50	5,362
1955.. ..	..	538	2,224	1,845	314	501	55	5,477
1956.. ..	..	407	2,393	2,058	353	552	57	5,820
1957.. ..	..	7	2,516	2,724	470	616	54	6,387
1958.. ..	..	..	385	4,043	1,023	799	65	6,315
1959.. ..	..	..	..	518	3,445	1,472	97	5,532
1960.. ..	..	..	..	..	544	4,540	342	5,426
1961.. ..	..	..	..	..	..	666	727	1,393
1962.. ..	..	..	..	..	..	..	19	19
Expectant mothers ..	..	4	988	2,749	*	*	*	3,741
Other groups ..	..	..	405	394	16	51	1	867
Totals ..	1,654	12,175	52,192	46,885	18,233	24,529	2,956	158,624

*Expectant mothers included in the respective years of birth.

The total for 1962 includes 2,375 by general practitioners. 3,371 third injections were given, including 2,875 by general practitioners. The number of children given fourth injections was 135, of which 128 were given by general practitioners.

Oral Vaccine.—The following table gives the number of persons who have received 3 doses of oral vaccine since 1st March, 1962:—

ORAL VACCINE

Year of birth	No. of persons vaccinated with 3 doses (since 1.3.62)			
1922-32	..	..	..	2,694
1933-42	..	..	..	1,699
1943-60	..	..	..	4,375
1961	..	..	..	2,755
1962	..	..	..	536
Total	..	..	..	12,059

(Expectant mothers are now included in respective age groups.)

The total includes 7,945 by general practitioners. 14,133 third doses of oral vaccine were given to complete treatment after two "Salk" injections, including 8,716 by general practitioners. The number of children given reinforcing doses of oral vaccine after three "Salk" injections was 4,959 of which 2,501 were given by general practitioners.

PERCENTAGES OF PERSONS UNDER 20 YEARS OF AGE
VACCINATED AGAINST POLIOMYELITIS

Year of birth	1962	1961	1943-60	1943-62
Percentage vaccinated	5.8	46.6	76.7	71.0

Smallpox 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	1962 Total	1961 Total
Vaccinated (a)	262	967	586	2,954	4,769	1,719
(b)	2,993	3,459	4,747	6,176	17,375	2,852
Re-vaccinated						
(a)	4	136	659	7,832	8,631	767
(b)	..	1,170	8,423	23,112	32,705	865
Totals	3,259	5,732	14,415	40,074	63,480	6,203

(a) by clinic staff.

(b) by general practitioners.

The smallpox outbreak in Bradford during January was responsible for the increase in the numbers done this year. During that month alone, 17,748 primary vaccinations and 37,148 re-vaccinations were performed; 45,279 of them were done by general practitioners and 9,617 by the Central Clinic staff. Although the policy now is to vaccinate during the second year of life, many babies were vaccinated from the age of three months onward because of the occurrence of smallpox.

From the returns of primary vaccinations in infants, it is estimated that approximately 35.4 per cent. of the infant population born between July, 1961, and June, 1962, has been protected.

Six cases of eczema vaccinatum or generalised vaccinia were reported during the year, together with one case of post-vaccinal encephalitis, all during the period when large numbers of vaccinations were being carried out following the smallpox outbreak. Four of the cases of eczema vaccinatum occurred in persons with a history of eczema and followed primary vaccination or accidental cross-infection from a vaccinated person. All seven cases recovered from the complications of vaccination, although one subsequently died from another condition from which she was suffering.

ISSUE OF PROPHYLACTIC MATERIAL TO PRACTITIONERS

Material	1961	1962
Diphtheria (T.A.F.)	1,366 doses	627 doses
Diphtheria (F.T.)	1,547 ..	415 ..
Combined diphtheria and whooping cough	1,941 ..	333 ..
Whooping cough vaccine ..	1,043 ..	1,104 ..
Diphtheria/Tetanus/Pertussis	14,574 ..	11,656 ..
Combined diphtheria and tetanus	1,877 ..	1,073 ..
Combined whooping cough and tetanus	378 ..	42 ..
Tetanus only	2,685 ..	3,467 ..
Polio vaccine—"Salk" ..	50,598 ..	6,777 ..
Polio vaccine—oral	..	72,115 ..

Diphtheria Immunisation.—The percentage of children under 5 years immunised against diphtheria was 64·2 as compared with last year's figure of 64·8 per cent.

During the year a diphtheria immunisation campaign was launched in schools in order to bring up-to-date the immunisation state of school children. As a result 2,986 young children were given the full course of injections for protection against diphtheria and tetanus and 8,981 diphtheria booster doses and 717 diphtheria/tetanus boosters were also given. All these injections were given by the staff of the School Health Service and the large amount of preliminary sorting of cards was also carried out by the School Health Service.

The following table shows the extent of diphtheria immunisation work during the year.

Prophylactic	Clinic doctors:—		General Practnrs.	Total
	I.W.C.'s	Schools		
Diphtheria only ..	10	..	110	120
Diphtheria/Tetanus ..	1,122	2,986	113	4,221
Diphtheria/Whooping Cough ..	1	..	121	122
Whooping Cough/Tetanus ..	4	..	32	36
Triple Antigen ..	2,242	..	3,155	5,397
Whooping Cough only ..	1	..	85	86
Tetanus only ..	300	..	720	1,020
Total protected against Diphtheria ..	3,375	2,986	3,499	9,860
Total protected against Whooping Cough ..	2,248	..	3,393	5,641
Total protected against Tetanus ..	3,668	2,986	4,020	10,674
Refresher Doses :—				
Diphtheria only ..	110	8,981	657	9,748
Diphtheria/Tetanus ..	84	717	204	1,005
Diphtheria/Whooping Cough ..	..	..	81	81
Triple Antigen ..	756	..	320	1,076
Whooping Cough/Tetanus ..	..	..	..	..
Whooping Cough only ..	..	..	..	..
Tetanus only ..	208	..	378	586

Estimates of the Child Population immunised against Diphtheria.—Estimates of the child population immunised against diphtheria at 31st December, 1962, and in previous years are shown in the following table.

Year	Percentage in age group			
	0-4 years	1-4 years	5-14 years	0-14 years
1952	72.5	79.3	94.5	86.4
1953	70.5	78.0	94.0	85.8
1954	67.1	73.3	96.1	86.1
1955	65.2	72.2	95.0	85.0
1956	64.0	70.6	94.3	84.2
1957	61.0	66.9	94.5	83.3
1958	59.6	65.0	93.6	82.1
1959	58.8	62.7	91.5	80.4
1960	59.3	62.8	90.6	79.7
1961	64.8	76.9	89.8	81.0
1962	64.2	75.8	94.9	83.7

The table on page 88 shows the progress of the diphtheria immunisation scheme since its inception.

Whooping Cough Immunisation.—The following table shows the progress of whooping cough immunisation since 1947. The percentage of children under 5 years protected is approximately 70 per cent.

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		
1956	5,238		
1957	4,894		
1958	6,504		
1959	6,102		
1960	6,099		
1961	8,269		
1962	5,641		

Inoculations for Travellers going Overseas.—The number and type of inoculations are shown below (for completed courses).

Smallpox vaccination	..	2,604	
T.A.B.	.. ..	251	(and 6 refreshers)
Cholera	.. ..	206	(and 8 refreshers)
Tetanus	.. ..	165	(and 14 refreshers)
Typhus	.. ..	13	(and 1 refresher)
Yellow Fever	.. ..	726	

After the smallpox outbreaks which occurred in this country in the early part of the year, many countries laid down requirements for vaccination for travellers which they do not usually impose. As a result a large number of smallpox vaccinations were needed by Leeds residents going abroad on business or pleasure and at one time special extra clinics had to be held.

Other Work undertaken by the Department.—During November, 81 anti-influenza injections were given to certain members of the staff.

Examination of Convalescents.—During the year 516 applicants for convalescence, including 408 children, were medically examined.

Voluntary Workers.—We are grateful to the Ladies of the Leeds Babies' Welcome Association for assistance at 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	1928-1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	Total
Under 1 year ..	1,174	..	..	..	..	788	3,127	3,301	2,561	3,479	3,450	3,143	3,241	2,678	3,077	3,177	3,247	3,669	3,815	2,202	1,925	Total
1-2 years ..	8,121	3,990	4,412	5,110	5,137	5,304	4,923	3,078	2,931	2,714	2,056	1,757	1,898	1,658	1,857	1,413	1,506	1,277	1,325	4,206	3,132	under 5 years at end of 1962
2-3 "	5,835	1,024	469	240	777	418	455	438	457	514	391	234	295	247	266	208	211	285	274	785	487	
3-4 "	6,101	1,063	463	220	557	327	220	231	249	277	212	137	144	128	142	111	103	135	189	356	150	
4-5 "	6,489	1,043	381	257	463	288	260	196	147	193	152	111	146	102	102	70	64	86	130	272	121	
5-6 "	8,042	1,607	451	359	556	366	323	328	290	263	321	274	270	338	301	288	195	59	150	339	264	Total
6-7 "	7,583	1,622	302	233	467	296	229	286	215	234	320	348	315	393	387	262	194	96	207	343	870	
7-8 "	6,110	1,482	197	185	392	225	165	143	141	108	144	147	191	217	174	117	90	90	208	342	803	
8-9 "	4,949	1,357	164	188	275	153	126	132	95	72	71	109	99	133	101	68	43	35	118	297	718	
9-10 "	4,596	1,271	157	142	259	142	110	119	70	51	65	68	70	82	79	62	34	18	69	193	700	
10-11 "	4,796	1,197	130	152	250	100	90	108	79	64	61	71	63	57	55	41	13	23	40	98	511	
11-12 "	4,530	1,089	109	128	249	113	67	73	60	55	37	31	42	40	26	27	18	9	34	52	158	Total
12-13 "	4,404	1,193	96	109	185	97	80	69	55	40	48	28	26	43	33	6	14	5	19	19	9	
13-14 "	3,923	1,035	78	79	138	100	61	55	35	40	48	25	29	24	21	23	12	6	13	13	4	
14-15 "	886	382	8	29	34	13	49	54	31	27	38	23	20	41	29	23	24	11	8	5	3	
15 years and over	1,680	..	55	79	83	43	53	54	48	23	42	4	8	8	10	8	13	10	8	5	5	Total
Age not known	947	..	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15 years & over 147,866 Total age not known 958
Totals ..	80,076	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	6,660	5,904	5,808	5,820	6,007	9,527	9,860	244,898

SECTION 27

AMBULANCE SERVICE

BY

J. H. DAYKIN, F.I.A.O.

Chief Ambulance Officer

Although the number of cases carried has fallen slightly, the decrease is extremely small and represents barely ten patients per week. The rise in mileage continues and is accounted for by the admission of acute cases to periphery hospitals and subsequent follow-up treatment after discharge. The following table indicates cases carried, by types. In addition to these figures, 4,865 cases were removed from Leeds under co-ordination arrangements.

CASES REMOVED IN 1962

Type of Case	Number	Mileage
By Ambulance :—		
Road accidents	2,537	} 414,165
Other accidents	3,142	
Emergency calls for illness	6,421	
Maternity	4,662	
Infectious diseases	779	
Mental	360	
Hospital admissions and discharges	20,737	
Special treatment and out-patients	33,912	
Others (incl. fruitless journeys)	4,521	
Total	77,071	
By Sitting Case vehicles :—		
Maternity and Child Welfare	24	} 639,882
Special treatment and out-patients	174,288	
Doctors and Midwives	2,825	
Others (incl. fruitless journeys)	526	
Total	177,663	
Mortuary Service :—		
Bodies removed	910	4,613
Totals	255,644	1,058,660
Hospital Car Pool :—		
Special treatment	4,600	25,425
Grand Totals	260,244	1,084,085

COMPARATIVE TABLE

	1957	1958	1959	1960	1961	1962
Cases :—						
Ambulance ..	66,442	68,690	73,460	75,720	77,108	77,071
S.C. vehicles ..	155,015	155,939	163,265	176,642	175,704	177,663
Total ..	221,457	224,629	236,725	252,362	252,812	254,734
Mileage :—						
Ambulance ..	348,715	350,394	366,698	389,221	411,912	414,165
S.C. vehicles ..	483,427	479,757	486,804	535,220	574,294	639,882
Total ..	832,142	830,151	853,502	924,441	986,206	1,054,047
Hospital Car Service :—						
Cases ..	8,572	5,145	4,671	6,188	7,071	4,600
Mileage ..	59,509	34,490	25,678	32,613	33,320	25,425

“999” Calls.—During 1962, 9,664 emergency calls were received. This represents an increase of 18 per cent. on the 1961 figures. There appears to be no significant increase in any particular type of emergency but there has been no decrease in the number of false calls. A blue flashing light was fixed to each ambulance early in the year and has proved of considerable success in assisting vehicles to answer emergency calls with less delay. In November, legislation was introduced allowing sirens to be fitted to vehicles to give audible warning of approach to accidents. A small number have been fitted and their effectiveness is being assessed by ambulance drivers and the police.

Staff.—There has been no change in the official establishment which remains as follows:—

Chief Ambulance Officer	1
Deputy Ambulance Officer	1
Control Officers	4
Clerk, Leeds General Infirmary (Hospital Sub- Control Officer)	1
Clerk, general duties	1
Clerk, statistics	1
Car control clerks	2
Clerk/telephonists	3

— 14

Continued on next page

Shift leaders	..	..	..	..	..	5
Driver/attendants (male and female)	..	..	..	..	..	109
Mortuary Service drivers	..	..	..	..	..	2
Charge hand mechanic	..	..	..	..	..	1
Mechanic	..	..	..	..	..	1
Semi-skilled hands	..	..	..	..	..	2
Apprentice	..	..	..	..	..	1
Garage attendants	..	..	..	..	..	2
Vehicle washers	..	..	..	..	..	2
Cleaners	..	..	..	..	..	2
Storeman	..	..	..	..	..	1
					—	128
						—
Total staff	..					142
						—

Vehicles.—Some difficulty is being experienced in operating the vehicle replacement programme authorised by the Health Committee in January, 1961. The replacement of three sitting-case ambulances was withdrawn from Estimates and they had to be retained for a further year of use. The arrangements for the yearly replacement of sitting-case cars and district nurses' cars have operated satisfactorily. No increase in vehicle establishment took place in 1962 and vehicle holdings remain as follows:—

	Authorised and held					
Ambulances	..	..	..	..	..	31
Sitting-case ambulances	..	..	..	..	..	22
Sitting-case cars	..	..	..	..	..	8
Mortuary Service vehicles	..	..	..	..	..	2

Accidents.—There were 69 accidents in which Ambulance Service vehicles were involved.

Equipment.—Once again there have been very few losses and much credit is due to shift leaders and driving staff for care of equipment. A simple enumerating check system is operated which has the effect of each item of equipment remaining under review. New pattern carrying sheets are being provided and three further vehicles with light alloy trolleys were added to the fleet, replacing older types.

Radio Telephony.—The frequency modulated system of radio-telephony installed last year continues to operate very successfully. Signal strength in all parts of the city is well up and efficiency of control greatly improved.

Buildings.—The approach roads to the Station have now been repaired and a low fence installed to completely surround the Station. It is hoped to plant bushes along the line of low fencing.

Vehicle Maintenance.—All Daimler ambulances have now been overhauled and the fleet presents a uniform appearance. Authority has now been given for the purchase of a hydraulic/electric ramp and installation is expected early in 1963. The ramp, together with the additional staff authorised, will enable the intensive vehicle servicing scheme approved by the Health Committee to be implemented. It is hoped that considerable reduction in expenditure on vehicle maintenance can be achieved by this measure.

Civil Defence Training.—Civil Defence training of volunteers proceeded reasonably well during 1962. Five officers attended Officer Courses at Home Office Civil Defence Schools. A large exercise involving a full Column and some 500 casualties was held in Leeds in May and, despite many mishaps, much was learned by all concerned. A further Civil Defence ambulance has now been delivered and intimation received that yet a further allocation will be made.

Co-operation with other Authorities.—It was found necessary in December to hold a meeting of the Local Authorities subscribing to the Leeds Agreement, to decide on the necessity of an increase in reciprocal charges. A decision was deferred pending further consideration by one authority. Outside this, however, co-ordination arrangements have worked at the well-established level of efficiency.

Liaison with Hospitals.—Liaison remains excellent and it was found necessary to call only one meeting of each of the two Committees during the year. The Ambulance Service continues to be consulted by the Hospital Authorities whenever major alterations in arrangements appear necessary. Complaints have been few and in all cases have proved to be the result of human error rather than non-co-operation.

Major Accidents.—There were no major accidents in the city during the year. The plan for dealing with major accidents has been revised and it is felt will provide the necessary guide, should an accident involving many casualties occur.

Hospital Car Service.—The use made of the Hospital Car Service during the year has decreased considerably. It would appear that volunteers for this Service are not readily forthcoming. It has been found possible to accommodate patients hitherto carried by the Hospital Car Service in the normal runs made by sitting-case ambulances and cars.

Competitions.—A Service Competition was held in 1962 at which no less than seven teams competed. The winning team represented Leeds in the Regional Competition sponsored by the National Association of Ambulance Officers at Derby. Although excellent efforts were made by our team, they were beaten by Lincolnshire (Lindsey) and Leicester County. A further entry will be made in the 1963 Competition.

Staff Training.—A further course was held at the University of Leeds Medical School which was attended by representatives of most Ambulance Services in Yorkshire. Once again appreciation of this course was most marked.

Certain instructions issued by the Ministry of Health and the Home Office called for the training of all ambulance operational staff in their civil defence role. It was not possible to commence this training in 1962 but plans are going ahead for courses to be held in 1963.

SECTION 28

PREVENTION CARE AND AFTER-CARE

INCLUDING

HEALTH EDUCATION AND PUBLICITY

VENEREAL DISEASES

MEDICAL-SOCIAL WORK (GENERAL)

CONVALESCENT TREATMENT

CARE AND AFTER-CARE (HEALTH VISITING)

CHIROPODY

Other aspects are dealt with on pages 40 and 47 (TUBERCULOSIS) and page 122 (MENTAL HEALTH)

HEALTH EDUCATION AND PUBLICITY

Local Activities.—*Lectures.*—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.

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.

Smoking and Health.—Following the receipt of Circular 6/62 and the Report of the Royal College of Physicians on Smoking and Health, the Health Committee agreed to the purchase and distribution of publicity material and also to the use of the mobile unit of the Central Council for Health Education. Posters were distributed to all general practitioners, hospitals, post offices, offices of the Ministries of Labour, Pensions and National Insurance, Libraries and Corporation Departments. Film strips were made available and demonstrated to Health Education Officers of the Education Committee, and to some representatives of youth movements. Plans were made for a campaign in schools in June, 1963, by the mobile unit of the Central Council for Health Education and a leaflet and selection of material for distribution to all school teachers was proposed.

The Health Visitors' Part in Health Education.—The health visitors continued to organise discussions in the clinics whenever possible and also gave talks to a variety of outside groups. Regular discussion groups were held in connection with relaxation classes and ante-natal sessions at five clinics.

It has, however, become increasingly obvious that any extension of this work depends on better clinic facilities, more staff and a reduction in some present duties. Office accommodation, equipment and clerical help are also necessary for the efficient central organisation of health education activities.

In the present circumstances, the emphasis on individual teaching continues. However, most of the health visitors now like to undertake group teaching and some have had considerable experience of public speaking, so the need for someone to have special responsibility for health education in the clinics has been less apparent.

Miss J. Hahnel, who held the appointment of Group Adviser for Health Education for two years, resigned on 1st November and the vacancy had not been filled at the end of the year.

One health visitor continued to spend one session per week on maintaining, and adding to, the stock of visual aids.

Lectures to Students.—Arrangements for the Health Visitor Tutor and the Superintendent Health Visitor to give lectures to student nurses at Leeds General Infirmary and St. James's Hospital were continued, and two health visitors attended St. James's Hospital to discuss home visiting with senior student nurses.

Talks and demonstrations on Hearing testing and testing young children for deafness were also given by members of the staff to student health visitors.

VENEREAL DISEASES

BY

R. D. CATTERALL, M.R.C.P.,

Physician in Charge,

Department of Venereology,

The General Infirmary, Leeds

During 1962 there was a considerable increase in the incidence of all the venereal diseases. This increase was most marked in cases of gonorrhœa but non-specific genital infection has also been diagnosed with greater frequency and there was a small but persistent rise in the number of cases of syphilis. The so-called tropical venereal diseases have also been seen sporadically and this may well be due to immigration from tropical areas and to the increasing use of air travel by all sections of the community. It is important to remember that the statistics upon which our knowledge of the incidence of venereally acquired infection is based come from patients who attend the clinics under the National Health Service. They do not include those patients who are treated in private consultant practice nor those who are treated by general practitioners. They cannot, therefore, provide an accurate estimate of the total incidence of these diseases, but they do indicate the main trends of incidence from year to year. The true incidence is, of course, considerably higher than the figures suggest.

The total number of new cases of gonorrhœa rose from 861 in 1961 to 1,000 in 1962, an increase of 16 per cent. There was a further increase in the amount of infection amongst adolescents and young people of both sexes under 20 years. The continuing rise in the number of infected young people is disquieting. The remedy probably involves social rather than medical factors but it is important that a high standard of medical care should be readily available so that early diagnosis and efficient treatment may prevent

the development of serious complications. Immigrants and prostitutes continue to contribute substantially to the number of patients infected with gonorrhœa. Contrary to the opinion sometimes expressed, immigrants usually contract the disease after their arrival in this country and most frequently from prostitutes, amongst whom the incidence of infection is high. Despite the Street Offences Act of 1959, prostitution continues to thrive and the "call-girl" system is spreading. Other important factors in the present situation are multiple infections in the same patient, strains of gonococci which are relatively resistant to penicillin, undiagnosed infection in women without symptoms and casual sexual promiscuity.

Non-specific genital infection was diagnosed more frequently in both sexes and cases of non-specific urethritis in men increased from 333 in 1961 to 376 in 1962. Diagnosis of this condition in women remains difficult and the disease is usually identified in them by evidence of infection in their sexual partners. Despite much research, the cause of this condition has not been identified and progress in its control may well be slow until this is achieved.

There was a small rise in the number of cases of early syphilis. The total is still small by the standards of other areas and countries, but it is in keeping with the world-wide increase in the incidence of early syphilis which has continued steadily since 1958. A considerable proportion of the cases of infectious syphilis has been found amongst homosexual men. It is probable that several cases are not diagnosed each year due to the suppression of the signs of infection as a result of the widespread use of antibiotics for other conditions. There was a slight rise in the number of cases of late syphilis, including both cardiovascular and neuro-syphilis. Latent syphilis and yaws also increased in frequency. There were no new cases of congenital syphilis in infants but there was a slight rise in the number of cases of late congenital syphilis diagnosed. The nationwide increase in infectious syphilis makes sustained vigilance at ante-natal clinics of great importance if the substantial gains in reduction of cases of congenital syphilis are to be maintained. Total eradication of this tragic condition will be within our grasp when all practitioners regard routine serological tests for syphilis as an essential part of ante-natal care.

Patients who attend with other conditions form a considerable part of the work of the clinics. These patients may have a variety of diseases or genital conditions which may or may not have been sexually acquired. Many patients seek advice and reassurance because they are worried about the possibility of infection. All of them require sympathetic consideration of their problems, detailed examination and tests. The increase in the number of patients in this group indicates that the public has confidence in the efficiency of the service and full advantage is taken of it under conditions of secrecy. The importance of this aspect of the work in preventing mental and psychological illness should not be underestimated.

The increasing quantity of work has been carried out cheerfully and efficiently by the medical and nursing staff of the clinic. Great assistance in case finding and case holding has been provided by the health visitors and our almoner has given substantial help and advice to many patients.

The control of an infectious disease depends upon tracing the sources of infection, examining and treating them. Contact tracing forms an important and time consuming part of the activities of every well run clinic and much help is obtained from the local health authorities. Nevertheless, there are many difficulties in persuading some patients to see their contacts and request them to attend the hospital for investigation. There is an emotional rejection by a large part of the public of the fact that these diseases occur at all levels of society and an unwillingness to face the facts objectively. Education and keeping the public informed are important steps in the right direction. Young people should be told of the risks of infection, of the facilities that are available for advice and treatment and of the many other dangers arising from promiscuous sexual activity. These infections can be controlled even though the behaviour by which they spread is outside the field of medical and public health control. In order to achieve this public enlightenment, understanding and assistance are essential.

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

	Year 1962		Year 1961		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis	56	40	51	30	+5	+10
Yaws	6	3	3	1	+3	+2
Gonorrhœa	766	234	636	225	+130	+9
Non-gonococcal urethritis ..	376	..	336	..	+40	..
Other conditions	926	620	907	609	+19	+11
Total	2,130	897	1,933	865	+197	+32
Total attendances	12,354		11,820		+534	
Total No. of In-patient days ..	3,708		3,226		+482	

Details of new patients resident in Leeds registered during 1962 are given in the following table:—

LEEDS PATIENTS

	Year 1962		Year 1961		Increase or Decrease	
	M.	F.	M.	F.	M.	F.
Syphilis, acquired						
Early	7	2	1	..	+6	+2
Late	38	29	39	26	—1	+3
Syphilis, congenital						
Under 1 year old	..	..	..	..	..	..
Over 1 year old	..	2	1	..	—1	+2
Yaws	6	3	3	1	+3	+2
Gonorrhœa	697	215	552	191	+145	+24
Non-gonococcal urethritis ..	292	..	264	..	+28	..
Other conditions	675	540	662	496	+13	+44
Total	1,715	791	1,522	714	+193	+77
Total attendances	10,601		10,379		+222	

Patients suffering from a condition for which they have already received attention at a V.D. Centre are excluded from these tables.

Number of Leeds patients under treatment or observation at
31st December, 1962:—

	Males	Females	Total
Syphilis	300	226	526
Yaws	18	10	28
Gonorrhœa	280	99	379
Non-gonococcal urethritis	110	..	110
Other conditions ..	205	101	306
Total ..	913	436	1,349

MEDICAL SOCIAL WORK (General)

BY

ISOBEL B. PATON

Medical Social Worker

Type of Case dealt with.—During the year 174 cases were referred to the Social Workers by medical practitioners, National Assistance Board officials, probation officers and other social agencies. Letters to the Medical Officer of Health brought several cases. Pre-admission visits for patients to the Geriatric Unit of St. James's Hospital were made. After-care patients re-admitted to hospital are not included in the new cases.

After-Care of Patients discharged from Hospital.—These patients are visited regularly and the Almoners informed as to their progress or otherwise. Their requests for home help, chiropody, spectacles, clothing, bedding, hearing aids, etc., are attended to. Where possible "Meals on Wheels" are arranged and information given regarding social clubs, competitions, outings and wireless for the bedridden.

During the year 910 patients awaiting admission to the Geriatric Unit at St. James's Hospital were visited. Patients and their families are advised by their family doctor that they will be visited by a social worker. As well as a social history being obtained for the Geriatric Consultant, the social workers are able to re-assure the patient and his family regarding pension books, personal belongings and other requirements in hospital. Advice is given about National Assistance, the loan of medical requisites, rent books, etc.

From January onwards, requests are made by families for temporary admission of chronic patients to hospital to enable these families to arrange for a holiday or rest. This is greatly appreciated by families who have been nursing a chronic sick patient for a long spell. Not only does it allow the family to have a holiday but it affords an opportunity to have the patient's room cleansed and often redecorated.

During the year 561 visits were made to new cases, 1,713 to old cases; 127 visits were received from new cases and 61 from old cases. 467 visits were paid to hospitals, the Magistrates' Court and other social agencies in the city, and 71 visits were made for the Home Help Assessor.

Social Care of the Unmarried Mother.—During 1962, 175 women and girls having an illegitimate child were interviewed. In 135 cases it was the first child, in 27 the second, in 8 the third and in one the fourth. Four married women having an illegitimate child were referred for help.

Of the 175 cases referred, 33 girls were to be married; 30 were returning home from hospital, 32 to lodgings, 8 to relations and one to friends. Ten girls were referred to the Roman Catholic Social Worker and 7 to the Church of England Social Worker. Fourteen girls were returning to live with the putative father and five girls hoped to marry later. Nine girls booked for a home confinement, 13 applied for admission to Mount Cross Home and 8 applied for Browning House. Three girls went into private nursing homes, 2 left the district and four were not traced. One girl went to St. Margaret's Home.

All the girls attended the Department's Infant Welfare Centre in the district where they resided. Thirteen girls were helped to obtain affiliation orders.

After-Care.—The after-care of girls who are admitted to a Mother and Baby Home is mostly done by the Matron and staff of the Home. Where possible the Senior Social Worker helps with lodgings for girls who cannot return to their own homes.

General.—During the year the Senior Social Worker has attended the monthly meetings of St. Margaret's Committee and Mount Cross Mother and Baby Home. She has attended the quarterly meetings of the Leeds Council of Social Service Old People's Welfare Committee and some meetings of the voluntary workers. When possible she has attended the Epilepsy Association meetings. Both social workers attended meetings of the Social Workers' Club.

The "Yorkshire Evening News" donated 92 Christmas food parcels which were taken to housebound old people. These parcels are greatly appreciated by the recipients, most of whom are ex-patients from the Geriatric Unit at St. James's Hospital.

The Social Workers would like to thank friends who have donated clothing, furniture, food and books; these gifts were all greatly appreciated by the recipients.

CONVALESCENT TREATMENT

During 1962, 1,612 applications for convalescent treatment were received and 11 were brought forward from 1961, making a total of 1,623 as compared with 1,973 for the previous year. Of this number 1,220 were sent to convalescent homes, 394 applications were withdrawn or refused and 9 were held over until 1963.

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

	Adults	Children
Number sent for convalescence	773	447
Weeks away	1,546	910
Extensions (weeks)	..	4
Total number of weeks away	1,546	914
Average number of weeks per stay	2	2

The number of applications for convalescence has been reduced, due most likely to the inclement weather and the pause necessitated by smallpox precautions in January. The Craig Home for Children at Morecambe, which is operated from a Bradford office, was closed for some time as a precaution against smallpox contacts.

Provision for the health and welfare of patients at all the Homes now in use is of a very high standard. It is pleasing to see patients who are recovering from a great variety of illnesses returning from a seaside convalescence greatly improved in health and morale and, in many cases, ready to resume their normal work.

Several children and adults have been referred to the W.V.S. for help with clothing prior to going away for convalescence. The W.V.S. have also given valuable help throughout the year with the escorting of children to the convalescent homes.

During the year 151 women, 4 teenage girls and 112 babies were sent to the Local Authority's own Convalescent Home at Southport. The Ambulance Service has continued to provide transport for children and mothers with babies. 516 patients attended the Central Clinic for medical inspection prior to admission to convalescent homes.

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

Home	Adults	Babies	Children	Total
Southport (Mother and Baby Home) ..	151	112	4	267
Blackpool (Horncliffe)	233	..	19	252
Blackpool (Westwood)	89	..	18	107
Bridlington (Yorkshire Foresters) ..	101	..	..	101
St. Annes (Ormerod)	..	..	98	98
St. Annes (Blackburn)	99	..	..	99
St. Annes (Seabright)	95	..	..	95
Morecambe (Craig)	..	..	117	117
Southport (Milne)	..	..	..	..
St. Annes (Rochdale Home)	..	..	79	79
Southport (Jewish Home)	..	..	..	..
Harrogate (Metcalfe Smith)	5	..	..	5
Totals	773	112	335	1,220

The following table gives monthly statistics of cases sent for convalescence:—

	Adults	Mothers and Babies		Children	Total
		(M)	(B)		
January ..	9	..	..	5	14
February ..	23	..	..	..	23
March ..	28	3	3	18	52
April ..	44	10	10	30	94
May ..	80	16	16	39	151
June ..	109	10	10	46	175
July ..	92	14	14	51	171
August ..	110	27	28	28	193
September ..	77	15	17	42	151
October ..	66	13	14	33	126
November ..	24	..	..	23	47
December ..	3	..	..	20	23
Total ..	665	108	112	335	1,220

CARE AND AFTER-CARE (HEALTH VISITING)

BY

JOYCE M. AKESTER, S.R.N., S.C.M., D.N. (London)

Superintendent Health Visitor

The number of visits to the sick, aged and handicapped in 1962 increased to 5,352 from 4,660 in 1961 and 4,601 in 1960. The number of visits in connection with rehousing on medical grounds was 869.

Tuberculosis Visiting.—All newly notified cases were visited and arrangements made for the examination of contacts. The decrease in the number of households visited, which was noted in 1960 and 1961, was more marked and the downward trend is shown by the figures for the past four years:—

Year		Total		Decrease
1959	..	6,739	..	—
1960	..	6,605	..	134
1961	..	6,464	..	141
1962	..	5,878	..	586

The eight health visitors attached to the Leeds Chest Clinic spent more time visiting patients suffering from bronchitis and lung cancer, and these cases are included in the number of "sick, aged and handicapped persons" shown above.

The total number of contacts skin tested during the year was 1,451, 297 less than in 1961.

Mental Health.—The health visitor's chief concern is to notice the early signs of mental illness and to give general help to the families of mentally sick and subnormal patients. Contact with the Psychiatric Social Worker and Mental Welfare Officers was made easier by their presence in the same building and there were frequent referrals and requests for help.

Venereal Diseases.—Three health visitors continued to undertake part-time venereal disease visiting.

These visits, although not numerically important, are often very time consuming and are sometimes complicated by language difficulties. Personal contact with the patients is essential and they seldom can be seen during normal working hours. As they work during the day and often go out in the evenings, a number of ineffectual visits may be made before they are finally traced.

The total number of visits was 454 including 94 ineffectual visits, compared with 492 of which 139 were ineffectual in 1961.

Special Surveys.—Work continued on the survey of health visiting which was held in the autumn of 1961. The analysis of the results was received from the Hollerith Section of the City Treasury in the early spring and these showed that the report would include much information which had never been available before. Meetings were held with the health visitors at each stage, in order to assess the findings and obtain additional information from them. Research into the origin of health visiting in Leeds was also carried out and case histories were collected from the health visitors. The whole project was completed at the end of October, but there followed some delay in arranging for the publication of the report, which is lengthy. It is now known that this should appear in 1963 under the title "Health Visiting in Leeds".

The Medical Research Council survey of enteroviruses and pathogenic bacteria in the faeces of normal children was completed in May.

The health visitors were not involved in any other important research project during the year.

CHIROPODY

During the year 981 applications for treatment were received. Of these applications, 41 were cancelled before treatment was arranged and 211 patients were awaiting an appointment at 31st December, 1962.

Two more part-time chiropodists were employed and one part-time chiropodist commenced full-time duties. This brought the total of chiropodists employed to three full-time and five part-time, providing 46 clinic sessions per week and 12 home treatment sessions per week. 2,628 patients received treatment; a total of 2,326 sessions was worked during the year, providing 14,340 treatments. 2,194 of these treatments were in the patients' own homes and 2,219 treatments were given to patients transported to the clinics.

Sessions were started at three more Maternity and Child Welfare Clinics, bringing the number of chiropody centres to nine. In June, one of the chiropodists commenced working at the Deaf and Dumb Institute, Albion Street, on one half-day per fortnight; 141 treatments were provided during 1962.

Voluntary workers from the Leeds Council of Social Service carried out reception duties at several clinics and their help was much appreciated.

The service is still restricted to the three priority groups, viz. old people, the physically handicapped and expectant mothers on recommendation from their family doctor.

In the following table details are given of the applications received during 1962 and how they were dealt with.

No. of patients receiving treatment at 31.12.61 ..	1,879
--	-------

No. awaiting appointment at 31.12.61 ..	339
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2,218

Continued next page

Applications received during year

Pensioners referred by general practitioners ..	930
Physically handicapped under pensionable age referred by general practitioners	37
Expectant mothers referred by Maternity and Child Welfare doctors	3
Expectant mothers referred by general practitioners	7
Referred by War Pensioners Welfare	4
	981
Total	3,199

Disposal

Attending clinics by own means of transport ..	1,912
Attending clinics by transport provided ..	370
Receiving domiciliary treatment.. ..	346
Number awaiting appointment	211
Died or withdrawn	360
	3,199

Chiropody treatment is provided at the following centres:—

Central Clinic Annexe, Park Square, Leeds, 1.

Holbeck Maternity and Child Welfare Clinic, Nineveh Road, Leeds, 11.

Welfare Services Centre, 79, Roundhay Road, Leeds, 7.

Leafield Maternity and Child Welfare Clinic, King Lane, Leeds, 17.

Middleton Maternity and Child Welfare Clinic, Middleton Park Avenue, Leeds, 10.

Balks House Maternity and Child Welfare Clinic, Walkers Lane, Dixon Lane, Leeds, 12.

Bramley Maternity and Child Welfare Clinic, Town Street, Leeds, 13.

Armley Maternity and Child Welfare Clinic, Theaker Lane, Leeds, 12.

East Leeds Maternity and Child Welfare Clinic, Harehills Lane, Leeds, 9.

SECTION 29

HOME HELP SERVICE

BY

Mrs. DOROTHY W. ALFORD

Organiser

During 1962, 2,841 cases received help. They were brought to the notice of the Home Help Service by the following:—

Welfare Services Department	..	265	(9 $\frac{1}{4}$ %)
Blind Welfare Department	..	66	(2 $\frac{1}{4}$ %)
Hospitals	.. .. .	333	(11 $\frac{3}{4}$ %)
District nurses, midwives, etc.	..	134	(4 $\frac{3}{4}$ %)
General medical practitioners	..	466	(16 $\frac{1}{2}$ %)
Miscellaneous (relatives, etc.)	..	1,569	(55 $\frac{1}{4}$ %)
Chest Clinic	.. .. .	8	($\frac{1}{4}$ %)

N.B. Each case is only counted once, although help may have been provided intermittently from January to December.

HOURS GIVEN TO CASES HELPED DURING 1962

MONTH	TYPE OF CASE								Total
	Maternity	Old Age Pensioners	Blind	Emergency Illness	Hospital Discharge	Chronic Sick	Tuberculosis	Nights	
Jan. ..	1,592	14,193	980	2,008	1,868	7,076	732	96	28,545
Feb. ..	1,956	15,184	1,012	1,512	1,956	7,276	704	48	29,648
March ..	2,550	19,077	1,175	2,100	2,395	8,875	920	10	37,102
April ..	1,876	14,410	936	1,368	1,784	6,572	664	104	27,714
May ..	2,820	20,417	1,580	1,415	2,405	9,950	905	..	39,492
June ..	2,360	14,868	912	1,156	1,524	7,009	652	..	28,481
July ..	1,812	15,216	1,024	1,276	1,820	7,762	788	..	29,698
August ..	1,225	15,711	855	1,370	1,485	7,010	805	..	28,461
Sept. ..	1,736	15,400	1,116	1,412	1,980	6,824	764	..	29,232
Oct. ..	1,896	16,384	920	1,140	1,848	6,640	636	..	29,464
Nov. ..	2,310	20,771	1,160	880	2,565	8,230	645	..	36,561
Dec. ..	1,288	15,472	696	728	1,472	6,844	460	..	26,960
Totals	23,421	197,103	12,366	16,365	23,102	90,068	8,675	258	371,358

The majority of the cases receiving help come under the heading of chronic sick, aged or infirm. The number of people requiring help in the 80-90 age group has increased and help has been, and is being, given to two people of over 100 years of age.

A great number of the aged prefer living in their own homes and are enabled to do so by the continued assistance of a home help.

It must be appreciated that a home help is more than a domestic worker and helps with personal hygiene, boosts morale and does many tasks which could be performed by near and dear relatives if they were available.

Some home helps are employed on a "good neighbour" basis. They are chosen because of their close proximity to patients. Early morning and nightly visits can be made and the aged man or woman feels cared for. Fires are damped down—or made up—according to necessity and doors secured. Cards are sometimes displayed in windows when a "good neighbour" is required. This side of the service is very much appreciated, especially when an aged person is ill and alone.

Care is taken to prepare meals suitable for patients on special diet, to arrange meals for days when a home help is not there, and to provide a helper to collect the pension and/or visit the launderette on the special days when cheap facilities for pensioners are granted.

Maternity Cases.—The trend is still for maternity cases to decrease and the aged and chronic cases to increase.

Tuberculosis.—These cases continue to decrease.

Mentally Disturbed Patients and Problem Families.—Not every home help is willing, or the right type, to help in these homes, and the home helps are to be congratulated on the forbearance and sympathy so freely given in these cases. During the period under review, 19 cases received help weekly (of from 4 to 40 hours' help) depending on the type of case.

SECTION 51

MENTAL HEALTH SERVICES

BY

J. M. McALPIN, M.B., Ch.B.,

Medical Officer of the Mental Health Services

AND

R. PERRY

Mental Health Officer

INTRODUCTION

The service is administered by a Mental Health Sub-Committee consisting of five elected representatives and three co-opted members having experience of the work. Meetings are held monthly.

The Mental Health Section is accommodated at East Parade, but accommodation at the Psychiatric Unit at St. James's Hospital will be available early next year, and it is proposed to transfer the part of the Section concerned with psychiatric after-care and the admission of acute cases to hospital, to St. James's. As the bulk of the after-care and admission work is centred on St. James's Hospital, and the Psychiatric Social Worker and Mental Welfare Officers are seconded to the hospital for a considerable part of their time, the proposed arrangement will bring about a closer co-operation with the hospital staff and should facilitate the team-work which is necessary in order to provide good community care. As the "run-down" of the larger mental hospitals proceeds, it is expected that the work of the section will be still more closely associated with St. James's Hospital.

A detailed account of the work of the Section is presented under the headings of Mental Subnormality and Mental Illness,

MENTAL SUBNORMALITY

Ascertainment.—The number of subnormal and severely subnormal patients reported during the year, and the numbers on the registers at the close of the year are shown in Tables II and III of the Appendix.

Supervision.—The duty of supervising the mentally handicapped children and adults living in the community has continued to be carried out by the Committee's Mental Health Workers. This is regarded as an important part of the service, as effective supervision, coupled with attendance at a training centre, aims at keeping the patient within the community. The Mental Health Workers also assist in many cases in placing patients in suitable employment and close co-operation is maintained with the Rehabilitation Officers of the Ministry of Labour and the Youth Employment Bureau. The number of patients receiving informal supervision at the end of the year was 434 males and 303 females; of that number 275 males and 166 females were attending training centres.

Training Centres.—There are four training centres established in the City, two for juniors up to 16 years of age for both sexes, one for adult male patients and one for adult female patients over the age of 16 years. In addition, there is also a laundry centre for females and a sheltered workshop for male patients. The centres provide accommodation for 475 patients. The numbers attending training centres are shown in Table IV of the Appendix.

Patients in Hospital.—The number of patients in hospitals for the mentally subnormal at the end of the year was 455 males and 415 females, a total of 870.

At the end of the year there were 14 males and 11 females awaiting admission to hospital. The majority of these cases are severely subnormal children, and due to the acute shortage of beds for this type of case, the prospect of early admission is somewhat remote. Short stay accommodation is, however, provided from time to time to alleviate distress and tension in the home. We were unfortunate in having extensive damage to the roof of Nowell House during the gales in the early part of the year, and other accommodation had to be found for the children at short notice.

Guardianship.—The number of subnormals under guardianship is kept to a minimum and no new cases have been admitted during the year. The total number under this form of care at the end of the year was 4 males and one female.

A number of male patients have continued to reside in private accommodation at various addresses in the city. A number of these patients are unable to handle their own financial affairs, and a Mental Health Worker visits the premises each week to assist them in the payment of board, pocket money and other expenses, any balance being placed to their credit in their savings account.

Holidays.—A party of youths and men were again able to enjoy a week's holiday at Scarborough in June.

A day excursion to the seaside was also provided for all the patients attending training centres.

Film.—The film "Towards a Happier Life" has again been in demand throughout the year, and a total of 51 bookings have been made, including one from the Hopeland Trust, a Society dealing with the care of the mentally subnormal in Southern Rhodesia.

TRAINING CENTRES AND SHELTERED WORKSHOPS FOR THE MENTALLY SUBNORMAL

East Leeds Training Centre (*Mrs. G. Jones*).—The total number on roll at the year end was 116. This figure includes one boy over 16 years and three West Riding cases. During the year 18 children left and 18 were admitted; three of the 18 children who left went on to an Educationally Subnormal School.

The Ladies' Section of the Licensed Victuallers' Association again took a party of children to Scarborough for a day's outing. The children had a very enjoyable day and our thanks are tendered to these ladies for their interest and generosity.

Open Days and a display of country dancing and a concert were held; parents and friends were invited.

At the children's Christmas Party, Father Christmas gave each child gifts which were generously donated by the "Yorkshire Evening Post", Car Drivers and the Parents' Association. A dancing display was given by the pupils of the Patrice Dancing Academy, which the children enjoyed immensely.

Our grateful thanks are tendered to the Parents' Association for their co-operation and assistance during the year.

Stanningley Junior Training Centre (*Miss I. Bye*).—At the conclusion of 1962 there were 106 children on the roll. Of the 10 West Riding children on the roll at the beginning of the year, 8 left to go to Centres which were opened in the West Riding area. Of the Leeds children, 4 were transferred to North Leeds, one boy left the district, one girl and 3 boys were transferred to E.S.N. Schools, one boy was given a trial at Bridge House School for the Deaf but has now returned to us, one boy was transferred to Meanwood Park Hospital and one boy has died.

As the intake in the main has been little ones, the nursery section has become very crowded. The health of the children has been good, apart from the usual and seasonal illnesses.

Several members of the staff attended the Conference for Remedial Music held at Leeds University, and one member of the staff attended the Refresher Course held in Staffordshire.

The annual activities of the Centre have been enjoyed, although the outing to Filey was marred by atrocious weather. Staff sickness unfortunately compelled us to cancel the Garden Party.

We would like to record our thanks to many outside groups who take such an interest in this Centre, Woolworths of Pudsey for a gift of a large display Easter Egg, Pudsey Ladies' Circle, Inner Wheel, for individual Easter Eggs for each child and the entertainment for the Christmas Party, the Licensed Victuallers' Association for an outing to Scarborough for 12 of the children, the "Yorkshire Evening Post" for their generous gift of toys.

The Parents' Association, too, have worked with a will and organised a highly successful dance—a new venture—and the Christmas Sale of Work, an enjoyable and successful effort.

It is with deep regret that we record the death of Mrs. Esam, our Deputy Head—a loss to the Centre which is keenly felt.

Medical Care of Children in the Training Centres (*Dr. I. M. Holoran*).—Like the children who attend the special schools in Leeds, the children who attend these training centres have a routine medical inspection every two years. They are also seen in the interval at least once a year if any physical defect is found. Parents are invited so that doctor, staff and parent can discuss together matters relevant to the child's physical and mental progress. Repeated efforts are made with every child to get a response to tests of vision and hearing.

In addition to the above arrangements, the School Health Service, through the Orthopædic team, continues to advise on the management and treatment of the cerebral palsied children who attend the centres. A few other children who have orthopædic defects are also seen at the same sessions for this purpose.

Dr. Holoran has paid two visits to East Leeds Centre and three to the Stanningley Centre during the year. Dr. Lewis, the pædiatric member of the team, has sometimes attended as well. Mr. J. M. P. Clark, F.R.C.S., who visited the Stanningley Centre in 1961, postponed his 1962 visit until January, 1963. His advice has, however, been available in cases of urgency at his orthopædic clinic at the Education Offices. The most heavily physically handicapped children are generally placed in the Stanningley Centre.

Mr. Clark's operative recommendations for some of the older chairbound children have been designed:—

- (a) to correct muscle imbalance and so arrest the development of gross scoliosis or prevent dislocation of a hip,
- (b) to reduce gross adductor spasm, particularly in girls and so facilitate personal hygiene.

The following table shows the distribution of these doubly handicapped children.

	Children suffering from Severe Cerebral Palsy	Children suffering from Cerebral Palsy	Children suffering from other orthopædic defects	Total
Stanningley Centre	14	14	4	32
East Leeds Centre	1	14	7	22
Receiving therapy at home	4	—	—	4
	19	28	11	58

Of the cerebral palsied children attending the Stanningley Centre, 15 are chairbound. All these children require help with toileting, while six of them and one ambulant child are incontinent.

Mr. Hunt continued as a full-time remedial gymnast, and will be much missed when he leaves for Australia. This year he has visited East Leeds Centre for one session a week. Five children were given regular treatment there, in addition to those treated at Stanningley. Four were treated at home and six others were visited occasionally.

North Leeds Training Centre and Sheltered Workshop (*Mr. H. Wardman*).—The Centre opened the year with 108 Leeds cases and 22 West Riding cases. Twenty-three new Leeds cases were admitted and one West Riding case, six Leeds cases were re-admitted and one West Riding. Two of the new admissions went out to work, and two re-admissions also went out to work. Unfortunately, after working for some weeks three of them were re-admitted. Twelve of the West Riding cases were transferred to the new Horsforth Centre which opened in September.

The Sheltered Workshop (where weighing machine components are fettled and assembled) still maintains its output, but owing to the trade recession we have had to reduce the working hours. However, the income derived was still over £4,000 and just short of 500,000 component parts were handled.

In the concrete section, production was kept up to the maximum, providing concrete covers for the Parks and Cemeteries Department as well as two foot square slabs and edging stones for private sale. We have also made the slabs and built a concrete garage.

The Centre is still carrying on with all forms of handcrafts and we have acquired a ladder boring machine which has distinct possibilities, as it enables the trainees to bore holes with precision and correct spacing. The making of rungs has also been simplified, a hand shaper for the ends being used after the rungs have been sawn to length.

This year we have also introduced the sharpening and renovation of scissors, lawn mowers and garden shears.

We are receiving a little more work from the Funeral Director's supplies, including knotting, counting and assembly work, and the making of metal figures and wreath holders.

In the woodwork shop, toys for the Health Department Nurseries are being repaired and renovated. The other sections of the Centre are still producing various handcraft work and sales are being maintained.

In the Transitional Class the junior boys are still being taught the handcrafts they will encounter when transferred to the adult centre, and simple Three " R " work is given throughout the term.

Our Christmas entertainment this year, a Nativity Play and a Minstrel Show, was well received by an enthusiastic audience. The Centre's football team is still going strong and is improving. Our annual trip to Filey was enjoyed by all, and a visit to the Circus for some of the boys was arranged by the Parents' Association, whom we have also to thank for a Christmas Gift to each boy. Our thanks are also tendered to the Ladies' Section of the Licensed Victuallers' Association for arranging a day's excursion to Scarborough for the junior boys.

Armley Grange Senior Training Centre (*Mrs. K. Taylor*).—1962 was quite a successful year. All patients were trained to help with the domestic duties at the Centre, and no outside help was employed.

£250 worth of handcrafts were sold and this is an increase of £100 on the previous year. Considering that 92 per cent. of the patients are severely subnormal this is a remarkable achievement and speaks well for the efforts and patience of the staff, as all work sold is of a high standard.

A singing and dancing display was given for the National Association of Teachers of the Mentally Handicapped, and all were impressed by the very high standard.

46 of the 52 girls are incapable of making their own way to the centre and are transported by car and minibus with a staff escort. There have been six new admissions, but six withdrawals have kept the number on roll static at 52.

We had a most enjoyable day at Bridlington in June, and in September we visited the Blackpool Illuminations. We had our annual "Open Night" for parents on 19th December, and ended the term with the usual Christmas Dinner Party.

Pioneer Laundry (*Mrs. Wager*).—There are now 28 girls and one male fully employed at this centre. Each is paid according to ability, and are, therefore, able to contribute to their own support. In addition, they receive a mid-day meal and travelling tokens.

Three girls progressed so favourably that they were able to take up positions in commercial laundries.

During the summer holiday four of the girls were taken to Bridlington for a week under the supervision of Mrs. Petty, and in January, once again, they enjoyed a visit to the pantomime. The annual trip to Scarborough for the girls and staff was marred by pouring rain, but in spite of this everybody had a happy day.

Attendance has been good, and there has been very little absenteeism through illness. Unfortunately, one of the girls died this year.

Approximately 10,000 articles are laundered each week, and a good standard of work is maintained.

HOSTELS FOR THE MENTALLY SUBNORMAL

Armley Grange Hostel (*Mrs. Petty*).—There are twenty patients living in this hostel, eight go out to work and four help with small jobs in the hostel.

In August last year five were taken to Rhyl for a week's holiday and nine went to Bridlington for a week in September. Our grateful thanks are tendered to the Leeds Branch of the Society for Mentally Handicapped Children for the free use of their Holiday Home at Bridlington.

During the year we have had five short stay cases. Most of the women seem to be happy and content to stay at the hostel. We are hoping to take all the patients away for a week this year. Some save a little each week from their spending money for holidays.

The incidence of sickness during the year has been very small.

Nowell House Short Stay Home (*Mrs. G. Jones*).—During the year 130 children were admitted; included in this number were 2 children from other authorities.

MENTAL ILLNESS

Admissions to Hospital (*Mr. T. S. Hawkesworth*).—The number of cases admitted to hospital with which the Mental Welfare Officers have been concerned during the second full year of the Mental Health Act shows an increase of 80, all of whom were accommodated at High Royds Hospital (formerly Menston Hospital).

Compulsory Orders have been necessary in 413 cases comprised as follows; 331 Observation Orders, Sections 25 and 29, an increase of 23 on 1961, and 82 Treatment Orders, a decrease of 12. These figures show little change from the two previous years.

Senile patients continue to be a great problem, and I regret to report that during the year it was necessary to admit 145 patients aged 65 and over into hospitals. Of these 73 were admitted to High Royds Hospital, 58 to St. James's Hospital and 14 to other hospitals.

During the year we have been called upon to escort patients from H.M. Prison and the Courts under Sections 60 and 72 of the Mental Health Act. This has involved journeys to Broadmoor, Rampton, Sleaford, York and Beverley, in addition to local hospitals.

Fewer locked wards in the various mental hospitals has resulted in more patients being absent without leave, and this has involved the Mental Welfare Officers being called upon to visit, and in some cases, return patients to hospital.

Calls after ordinary office hours show no sign of decreasing, and with the shortage of beds at St. James's Hospital the major portion of admissions at night and weekends have been to High Royds Hospital; one such case on a foggy day occupying an officer for seven hours.

The increase in the number of cases reported and staff changes have tended to make difficulties, and it is hoped that 1963 will see a more stable staff, and that the move to St. James's Hospital, with its better accommodation, will make for an improvement all round.

Psychiatric Care and After-Care (*Mr. V. J. G. Bosworth*).—The Senior Psychiatric Social Worker and seven Mental Welfare Officers were undertaking the work of the section at the year end.

Since five Mental Welfare Officers also have duties either on admission procedures or with subnormals or both, the total Mental Welfare Officer strength of the section should be reckoned at five.

The staff undertakes the after-care of patients discharged from mental hospitals and the out-patient work at the Psychiatric Unit, St. James's Hospital. Duties at this Unit were shared with the Psychiatric Social Worker employed by the Regional Hospital Board until her resignation in November to take up a research project. Loss of working capacity through sickness was, this year, very low (1/35).

The suggestion that mental health workers be attached to each of the three "firms" of psychiatrists at the Psychiatric Unit has been implemented, though its smooth functioning has been affected by changes in staff. Workers attend ward rounds and clinical discussions, once or twice a week. Quick referral of cases is made at these meetings, when the worker has opportunity to discuss new matters and report back on progress of cases. From the section standpoint, though a certain tidiness of administration is lost by this procedure, it is felt that liaison is nevertheless improved. The procedure will prepare the way towards the section's occupying premises in the new wing of the Unit early in the New Year. The number of interviews taking place at the hospital compare with last year's (1962, 425; 1961, 428). Next year it will hardly be possible to enumerate such interviews separately. Social histories prepared as an aid to diagnosis show a slight increase, (1962, 104; 1961, 92), and shorter reports dealing with specific problems of the social situation have increased by nearly a half, (1962, 104; 1961, 76). The psychiatrists extend invitation to their Tuesday clinical meetings at the Unit and there is usually more than one local authority worker present. At these meetings cases are discussed, films relating to mental and social problems presented, and talks are given by the doctors. Visiting psychiatrists in gradually increasing numbers from the three mental hospitals that serve Leeds have Out-Patient Clinics at the Unit. This factor, together with an increase in the number of referrals from mental hospitals, especially Menston, reflects the increasing accent on community care. As in the past, duplicate reports on interviews have been sent to psychiatrists at St. James's Psychiatric Unit, and this service has been extended this year to psychiatrists at Menston Hospital not having clinics in Leeds, at their request. Furthermore, at the turn of the year, it is suggested that a fortnightly visit to Menston Hospital by a member of the staff be arranged to discuss particular cases, on similar lines to the arrangement at St. James's.

The number of cases dealt with this year, (see Appendix, Table V) shows a drop on last (1962, 860; 1961, 1,009), but compares favourably with 1960, (825). However, the number of interviews and visits for the year has reached an "all time high" (1962, 5,440; 1961, 4,816). The preventive aspect of the work, regular visiting, has recovered after last year's having to be curtailed slightly, (average number of interviews per patient 1962, 6.4; 1961, 4.8). There were 324 cases brought forward from 1961; 209 cases previously known to the section were re-referred after hospitalisation or attendance at the Out-Patient Clinics; 327 entirely new cases were similarly referred, making a total of 536 cases referred during the year; 307 cases were carried forward to 1963. Therefore, 553 cases were closed after varying terms of contact. Of the total number of patients seen during the year, there were five women to every three men. This ratio varies between 5.5 to 3 for re-referred cases and 4.5 to 3 among new cases. This would appear to indicate that there is a higher proportion of women referred for support after a long-term illness than after a first breakdown. Source of referrals was as follows:—

	NEW REFERRALS			RE-REFERRALS			TOTAL REFERRALS
	M.	F.	T.	M.	F.	T.	
St. James's	47	106	153	28	63	91	244
Menston Hospital ..	36	51	87	31	46	77	164
Stanley Royd	13	5	18	5	10	15	33
Scalebor Park	2	12	14	..	4	4	18
G.P.'s	7	10	17	1	6	7	24
Other Corporation Departments	8	4	12	4	3	7	19
Miscellaneous	15	11	26	6	2	8	34
TOTALS	128	199	327	75	134	209	536

As in 1961, a tentative assessment has been made of the type of work and patient the section is concerned with. For 491 cases a diagnosis had been given. Of these 153 were thought to have a schizophrenic illness and 174 showed depressive features, 49 suffered from a neurotic disorder, and 24 were psychopathic.

Leeds Mental Health Workers have continued to attend case conferences organised for mental welfare officers at Menston and Scalebor Park Hospitals, and have supported the conferences at Stanley Royd Hospital organised for the first time this year. Because of the commitments to attend case conferences, etc., no special meetings have been organised in the department for members of staff, though discussion of cases on an informal basis is encouraged. Similarly the meetings with the Leeds Voluntary Bodies have lapsed because of work pressures on both sides. Discussions at the Maternity and Child Welfare Centre ceased after August, although it had been hoped to extend these discussions to other Centres. In the New Year the section will be committed to taking two students from the Younghusband Course. The Senior Psychiatric Social Worker visits Rutland Lodge Hostel weekly and arranges discharges and admissions. Where necessary a referral to the Out-patient Clinic is made with the co-operation of the Warden, who supervises the employment prospects of the patients.

The Therapeutic Social Club continues to meet on Monday and Thursday evenings in Hanover Square Handicapped Persons Centre. Between 12 and 25 members attend each evening.

The Section represents the service on the Committee for Children Neglected or Maltreated in their Own Homes and on the Policy Committee of the Leeds Council of Social Service.

Talks have been given to Health Visitor Students, and students in Blind Welfare, to a Friendly Society, Old Age Pensioner's Group and a Men's Fellowship; also to District Nurses, etc., at Market Buildings. A discussion on mental health was arranged for a student from Trinidad who was at the Industrial Rehabilitation Unit as part of her social work training; a Psychiatric Social Worker student from the London School of Economics Course came to the department for a week; and practical work was arranged for a student in Social Studies from Belfast University, over a period of four weeks. Time was also given to the trainee at the L.C.S.S. once a week for three months at the end of the year, when the Senior Caseworker was unable to supervise, owing to illness.

Rutland Lodge Hostel (*Mr. Round, Warden*).—There were 28 patients in residence at the end of the year, of whom 13 were in regular employment. Trade recession during the winter months had resulted in a number of the residents being laid off. Those who retained their jobs appear to be settling down and working well.

The majority of the residents have had prolonged in-patient treatment in mental hospitals. Three high grade subnormal men have been admitted in the absence of other suitable accommodation and have fitted in quite well. Two subnormal men were admitted from their own homes as short stay cases due to illness in the family. While this is not an ideal arrangement, their presence appeared to cause no difficulties with the other residents.

Twenty-six patients were admitted and 26 discharged during the year. Details are shown in tables below.

ADMISSIONS 1962

From Mental Hospital	..	..	..	17
From General Hospital	..	..	..	1
From Hostels, Lodgings or own home	..			8
				—
				26
				—

DISCHARGES 1962

To own Home	..	..	..	9
To Lodgings or other Hostels	..	..		10
Returned to Mental Hospital	..	..		6
To Mental Subnormality Hospital	..	..		1
				—
				26
				—

Mr. James was appointed Assistant Warden in August, 1962, and the full time staff now consists of Warden, Assistant Warden and Cook.

TRAINING AND EDUCATION

Following publication of the report of the Scott Committee on the Training of Teachers of the Mentally Handicapped, the staffing position at the training centres was reviewed. As it proved impossible to recruit teachers with the Diploma of The National Association for Mental Health, which is the sole qualification in existence at the present time, it was decided to recruit trainees of suitable educational standard with a view to seconding them on the two-year training course envisaged in the Scott Report, after a period of preliminary training in the centres. Five of these appointments have been made, and it is hoped that the first course will commence in Leeds in September, 1963.

Three newly appointed Mental Welfare Officers are being trained in the Department, and one Mental Welfare Officer who was appointed last year has been seconded to the first Younghusband Course which commenced in September, 1962, and is making satisfactory progress. Two other students of this course have been attached to the Section for practical work.

Throughout the year, the usual lectures and visits were arranged for medical and social science students, student health visitors, and home nurses. Three students of the National Association for Mental Health course for teachers of the Mentally Handicapped attended at the training centres for practical work. A party of students from the Association's course for teachers in adult centres visited Rutland Lodge and the Pioneer Laundry.

A number of requests for speakers on mental health topics were received, and the film continues to have heavy bookings.

APPENDIX

TABLE I

CASES DEALT WITH BY MENTAL WELFARE OFFICERS

	Males	Females	Total
1. Calls received	632	853	1,485
2. Visits paid	681	1,128	1,809
3. Informal admissions :—			
St. James's Hospital	64	125	189
High Royds Hospital	94	105	199
Stanley Royd	43	27	70
Scalebor Park	12	48	60
Other Hospitals	6	11	17
Total informal admissions dealt with by Mental Welfare Officers.. ..	219	316	535
4. Patients admitted under Compulsory Orders, Sections 25 and 29 :—			
St. James's Hospital	51	96	147
High Royds Hospital	49	74	123
Stanley Royd Hospital	22	22	44
Scalebor Park Hospital	2	5	7
Other Hospitals	1	9	10
Total	125	206	331
5. Patients admitted under Treatment Orders, Section 26 :—			
High Royds Hospital	17	24	41
Stanley Royd Hospital	10	10	20
Scalebor Park Hospital	1	3	4
Other Hospitals	12	5	17
Total	40	42	82

TABLE II

PARTICULARS OF SUBNORMAL AND SEVERELY SUBNORMAL PATIENTS
ASCERTAINED DURING 1962.

	Males	Females	Total
1. (a) Cases reported by Local Education Authority :—			
(i) Ineducable children ..	16	9	25
(ii) At 15 years—on leaving school	18	8	26
(b) Other cases reported during 1962..	13	14	27
Total number of cases reported during the year	47	31	78
2. Disposal of cases reported during the year :—			
(i) Placed under informal supervision	46	28	74
(ii) Placed under guardianship ..	..	..	..
(iii) Admitted to hospital	1	1	2
(iv) Died or removed	..	2	2
Totals	47	31	78

TABLE III

PARTICULARS OF SUBNORMALS ON 31st DECEMBER, 1962

	Males	Females	Total
(a) Under Informal Supervision ..	434	303	737
(b) Under Guardianship	4	1	5
(c) In Hospitals	455	415	870
(d) In Hostels	4	19	23
Totals	897	738	1,635

TABLE IV
TRAINING CENTRES

Centre	Male		Female		Totals
	Under 16	Over 16	Under 16	Over 16	
Training Centres					
Stanningley	57	3	43	3	106
East Leeds	75	1	40	..	116
Armley Grange	..	..	2	48	50
North Leeds	12	117	..	..	129
	144	121	85	51	401*
Sheltered Workshops					
North Leeds	..	9	..	..	9
Pioneer Laundry	..	1	..	30	31
	..	10	..	30	40
Totals	144	131	85	81	441

* Includes 17 West Riding cases.

TABLE V
PSYCHIATRIC CARE AND AFTER-CARE

	Males	Females	Total
1. Hospital cases (St. James's)	94	139	233
2. After-care cases (Local Authority) ..	233	394	627
3. Total cases dealt with	327	533	860
4. New cases referred	128	199	327
5. Hospital Interviews	55	370	425
After-care visits	1,285	2,989	4,274
After-care Office Interviews	254	487	741
Total visits and interviews	1,594	3,846	5,440
6. Social Reports	43	61	104
Other Reports	41	63	104
Total	84	124	208

Housing

HOUSING ACTS, 1936-1961

Repair, Individual Demolition, Clearance and Overcrowding

BY

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.

Chief Public Health Inspector

AND

A. O. WHEATLEY

*Supervisory Public Health Inspector,
Housing Section*

Number of Houses.—The total number of houses and flats in the city on 31st December, 1962, was 175,753 made up of 49,181 back-to-back houses and 126,572 through houses and flats.

New Houses.—The number of permanent new houses and flats completed during the year was 2,946; of these 1,478 were built by the Corporation and 1,468 were erected by other bodies and persons. The Local Authority converted 37 houses into 86 flats; 36 houses were converted into 81 self-contained flats by private owners.

Housing Shortage.—The number of applications for houses on the registers at the Housing Department on 31st December, 1962, was 18,030 of which 16,100 were regarded as inadequately housed.

Overcrowding.—There is a further slight improvement, the percentage on Corporation Estates falling from 0.21 to 0.17. There are 47,729 occupied dwellings on the municipal estates in the city and the average percentage of overcrowding during the year was 0.17. 46 families who were living in overcrowded privately owned houses were rehoused in municipal dwellings. There were no applications for licences to permit temporary overcrowding.

The number of certificates of permitted numbers issued was 53.

Housing Repairs and Rents Act, 1954, and Housing Act, 1957.—No houses in Clearance Areas were considered to be of a sufficiently good standard to be retained as providing accommodation of a standard adequate for the time being.

HOUSING ACT, 1957, PART IV.—OVERCROWDING
January 1st to December 31st, 1962.

	1962
Number of new cases of overcrowding discovered in houses owned by the Corporation	32
Number of cases of overcrowding in houses owned by the Corporation which have been relieved	47
Number of overcrowding cases relieved during the year in course of slum clearance operations	14
A. No. of applications for Municipal dwellings known to be statutorily overcrowded	270
B. No. of Municipal Estate dwellings provided to relieve statutory overcrowding	46

Gale Damage.—The year 1956 is memorable for a devastating gale which struck the city on the last night of February, causing widespread damage to buildings. February, 1962, produced two unprecedented gales within a period of five days, each lasting several hours. They occurred on Monday and Friday, February 12th and 16th, and were most severe in the early hours. Wind velocities up to 60 m.p.h. were recorded in the comparatively sheltered City Centre; in the suburbs, velocity must have been considerably greater. Whole houses were demolished, a church steeple and hundreds of domestic chimney stacks were blown down, and a pattern of damage appeared across the city such as one might expect in a tropical tornado. Damage affected new and old structures and there was extraordinary variation in the effect on apparently identical structures as though the gale had played tricks.

Hundreds of chimney stacks fell through house roofs when the inhabitants were in bed and that there should have been only one fatal casualty (due to a falling roof and chimney stack) is little short of miraculous.

It later transpired that the freak winds had come down a line on the East side of the Pennines and taken a turn into the West Riding industrial areas and that damage had been concentrated in this region, causing Leeds and other towns in the County severe damage. The Government recognised the severity of the damage and made a special financial contribution.

An Emergency Committee, comprising local authority chief officials, representatives of the Ministry of Housing and Local Government and insurance companies, was set up to assess damage, provide remedies and co-ordinate action, rather in the manner of action in time of air raids. The immediate priorities were :— temporary shelter and food for those displaced, rehousing of persons whose dwellings had become uninhabitable, drying of bedding and furniture wetted by absence of roofs, demolition of dangerous structures, clearing of debris, providing temporary cover to roofs, making a census of damage to assess its full extent and later carrying out permanent repairs.

Damage was greatest in the still-standing represented slum clearance areas. Certain proposed slum clearance areas suffered notably and were therefore brought forward in the Clearance Programme to ensure representation not later than next year.

There was appreciable gale damage to at least 25,000 houses (10,000 municipally owned and upwards of 15,000 privately owned), i.e. about one seventh of the city's dwellings. Some were so severely damaged as to be beyond repair; these were mainly in slum clearance areas and were dealt with by rehousing the occupiers, closing the properties and demolishing somewhat earlier than intended. Priority in rehousing gale victims was promptly introduced as temporary local authority policy. The most general damage was to roofs, chimney pots and stacks, causing considerable hardship in winter weather.

The City's Works Department took a lead in providing temporary first-aid repairs and the help of the Military and Civil Defence authorities in this work was sought and was forthcoming. Tarpaulins were fixed over gaping roofs; felt and battens were also largely used. Slates were replaced when possible but reslating was generally left for the second stage of proper permanent repairs to be executed by the owners' contractors.

The phase of first-aid repair covered six or eight weeks and was followed by work on permanent repairs which extended through the late spring and summer period. Apart from isolated cases, permanent repairs were completed before the following winter.

The Health Department acted as a clearing house for reports of damage. The public are accustomed to reporting disrepair to the public health inspector. From so much damage, reports were overwhelming at the very first but, quickly, inspection of properties led to an ordering of priorities.

Insurance was a potent matter. Those who had cover for storm damage were willing to face full repairs. On the other hand, many inexperienced owners of property which was quite worthy of repair had not the means to pay for it. The anticipated life of properties under the slum clearance programme was important in determining whether repairs on a large scale were justifiable.

The local authority quickly completed repairs to its own houses. Almost all private owners in areas unaffected by slum clearance did likewise. Informal notices were sent to all house owners as soon as damage was inspected, not for the purpose of applying legal pressure on them at such a difficult time, but to apprise them of the damage so that they could, as soon as may be, assess what needed to be done.

The houses in heavily damaged slum clearance areas presented difficulty. Action may be summarised thus:—

- (i) Where areas had been represented and confirmed; liaison with the Housing Department to expedite rehousing for really urgent cases.
- (ii) Where areas had been represented and Compulsory Purchase Orders made but Public Inquiries and/or "Confirmation" were awaited: liaison with owners and with the Housing Department to obtain "Undertakings" from the owners agreeing to earlier closure and thereby expediting rehousing of urgent cases.
- (iii) Where slum areas had not been represented: in urgent cases "Undertakings" not to relet were sought from owners, then rehousing by the local authority, followed by "Closing Orders" on the property.

GALE DAMAGE—ACTION TAKEN BY THE PUBLIC HEALTH DEPARTMENT

Action under the Housing Act, 1956

Gale damaged houses represented for Demolition Orders..	4
Gale damaged houses represented for Closing Orders ..	92
Undertakings not to relet passed to Housing Department in respect of gale damaged properties in Clearance Areas..	514
Houses owned by the Corporation certified unfit as a result of gale damage	38

Action taken under Section 122, Leeds Corporation Act

Total number seven days' notice to repair house roofs ..	39
Number of house roofs repaired by owners	32
Number of house roofs repaired by local authority in owners' default	5
Number of houses—work in hand	1
Number of notices cancelled and changed to Closing Order..	1

Action taken under the Public Health Acts

Number of notices served for gale damaged properties ..	1,791
Number of notices complied with	1,518
Number of notices withdrawn*	29
Number of notices—work in hand	61
Number of notices not yet complied with	183

* These notices were withdrawn because either the houses were vacated or undertakings not to relet were received.

Unfit Houses.—During the year 19,695 dwelling-houses were surveyed and examined and 9,351 nuisances and housing defects remedied. Houses numbering 1,849 found to be defective in one respect or another were repaired in response to notices served under the Public Health 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 9 houses under the Public Health Act at a cost of £23 11s. 11d., this amount being recovered from the owners.

Demolition of Individual Unfit Houses.—The number of Demolition Orders made was 33. In 135 houses, the demolition of which was inexpedient because of structural considerations, Closing Orders were made under Section 17, Proviso to Sub-Section 1 of the Housing Act, 1957.

The number of houses demolished was 42. 99 families consisting of 332 persons affected by either Demolition Orders or Closing Orders were rehoused by the City Council, while 9 families found their own accommodation; a further 23 houses were demolished by other Corporation Departments.

Clearance Areas.—During the year 5 areas comprising 25 houses were officially represented to the City Council; the occupants totalled 48. These figures are considerably less than the annual average. This temporary pause in representations was made because, at the beginning of the year, a long list of representations made in the previous year still awaited the making of Orders.

4 Public Inquiries were held in respect of 19 areas comprising 830 houses.

No. of houses	Clearance Areas	Date of Inquiry
184	Beecroft Street (Kirkstall) Nos. 1 to 5 ..	16.1.62
170	Park Row (Kirkstall) Nos. 1 to 5	16.1.62
21	Leathley Road No. 1 Part and No. 2 ..	16.1.62
3	Leathley Road No. 1 Part	1.5.62
53	Byron Street (North Street) Nos. 2 to 4 ..	1.5.62
5	Robinsons Row (Seacroft)	1.5.62
394	Leek Street (Hunslet)	11.9.62

The Ministry of Housing and Local Government has "confirmed" 41 areas comprising 1,196 houses as compared with 28 areas involving 1,613 in the previous year.

The average number of persons per house in all areas represented during the year was 2.67. The number of houses demolished in confirmed Clearance Areas was 1,896.

23,768 enquiries about the position of houses in relation to the City Council's Slum Clearance Programme were answered,

The following table shows the number of houses examined by the Medical Officer of Health as part of the general survey of the City during the year ended 31st December, 1962, and the numbers represented or otherwise dealt with, pursuant to the Public Health Act and Housing Acts.

	1960	1961	1962
Number of new houses erected during the year	4,179	2,974	2,946
(i) By the Local Authority	2,966	1,545	1,478
(ii) By other bodies and persons	1,213	1,429	1,468
1. <i>Inspection of dwelling-houses during the year.</i>			
(1) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts and the number of inspections made	23,552	14,898	19,695
(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	3,006	5,642	9,351
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	3,290	3,041	219
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	2,572	1,990	3,579
2. <i>Remedy of Defects during the year without Service of Formal Notices.</i>			
Number of defective dwelling-houses rendered fit in consequence of informal action	2,551	1,877	1,885
3. <i>Action under Statutory Powers during the year.</i>			
A.—Proceedings under Section 9 of the Housing Acts, 1936 and 1957.			
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	..	..	..
(2) Number of dwelling-houses which were rendered fit after service of Formal Notices :—			
(a) By owners	..	..	..
(b) By Local Authority in default of owners	..	..	..
B.—Proceedings under the Public Health Acts.			
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	1,084	1,046	1,849
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—			
(a) By owners	1,503	1,481	1,338
(b) By Local Authority in default of owners	26	18	9
C.—Proceedings under Sections 17 and 18 of the Housing Act, 1957.			
(1) Number of dwelling-houses in respect of which			
(a) Demolition Orders were made	52	11	33
(b) Closing Orders were made :—			
(i) S. 18, H.A., 1957	9	5	..
(ii) S. 17(1), H.A., 1957	44	34	135
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	128	33	42

The table below gives a summary of action under the Demolition, Closing and Clearance Sections of the Housing Act, 1957.

	1960	1961	1962
SECTION 17—HOUSING ACT, 1957:—			
No. of houses represented for demolition ..	59	7	46
No. of Demolition Orders made	52	11	33
No. of families concerned	47	10	28
No. of persons concerned	126	25	87
SECTION 17 (1).—HOUSING ACT, 1957:—			
No. of dwellings represented for closing ..	37	38	145
No. of Closing Orders made	44	34	135
No. of families concerned	52	34	131
No. of persons concerned	181	105	410
SECTION 18—HOUSING ACT, 1957 (Parts of Buildings):—			
No. of dwellings represented for closing ..	9	5	3
No. of Closing Orders made	9	5	..
No. of families concerned	9	5	..
No. of persons concerned	34	26	..
No. of undertakings accepted from owners ..	22	11	64
No. of houses demolished	1,269	2,106	1,938
No. of houses (Parts of Buildings) closed ..	9	4	1
No. of houses closed	44	29	101
No. of families re-housed by Corporation at 31.12.62 (S.S. 17, 17(1) and 18, H.A., 1957) ..	113	52	99
No. of families awaiting re-housing at 31.12.62 (S.S. 17, 17(1) and 18, H.A., 1957) ..	40	21	66
No. of families who found own accommodation at 31.12.62 (S.S. 17, 17(1) and 18 H.A., 1957) ..	21	15	9
No. of families re-housed at 31.12.62 (S.42, H.A., 1957)	2,168	1,549	2,012
No. of families who found own accommodation (S.42, H.A., 1957)	188	197	378
No. of houses referred for opinion but not represented	201	183	178
No. of dwellings represented (S. 17, 17(1) and 18 H.A., 1957) which stood in Slum Areas ..	67	35	152

Housing (Financial Provisions) Act, 1958—Section 3 (2) (a).—Certificates of unfitness were furnished in respect of 59 houses owned by the City Council, and 23 demolished.

Certificates of Disrepair.—Details of the numbers of applications for Certificates of Disrepair and applications for cancellations of Certificates of Disrepair which have been dealt with since the Rent Act, 1957, came into force on 6th July, 1957, until 31st December, 1962, are given in the following table.

RENT ACT, 1957. First Schedule

APPLICATIONS FOR CERTIFICATES OF DISREPAIR	
(1) No. of applications for certificates	1,341
(2) No. of decisions not to issue certificates	31
(3) No. of decisions to issue certificates :—	
(a) in respect of some but not all defects	1,033
(b) in respect of all defects	248
(4) No. of undertakings given by landlords under Paragraph 5 of the First Schedule	992
(5) No. of undertakings refused by Local Authority under proviso to Paragraph 5 of the First Schedule	4
(6) No. of certificates issued	249
APPLICATIONS FOR CANCELLATION OF CERTIFICATES OF DISREPAIR	
(7) Applications by landlords to Local Authority for cancellation of certificates	176
(8) Objections by tenants to cancellation of certificates	76
(9) Decisions by Local Authority to cancel in spite of tenant's objections	35
(10) Certificates cancelled by Local Authority	135

Improvement Grants and Standard Grants.—The position from the commencement of the scheme for both improvement grants and standard grants is as follows:—

	Total from 16.7.53 to 31.3.62	Total from 16.7.53 to 31.3.63
Preliminary applications for Improvement Grant and/or Standard Grant received	5,647	6,977
Number of applications for Improvement Grant and/or Standard Grant withdrawn	780	901
Number of applications for Standard Grant refused	54	79
Number of houses not suitable for Improvement Grant	1,183	1,558
Formal applications for Standard Grant received ..	365	507
Formal applications for Improvement Grant received	2,037	2,523
Formal applications for Standard Grant approved by Local Authority	326	463
Formal applications for Improvement Grant approved by Local Authority	1,857	2,257
Number of houses improved—Standard Grants ..	206	299
Number of houses improved—Improvement Grants	1,443	1,822

A brochure obtainable at the Health Department gives full particulars of Improvement Grants and Standard Grants and of loans obtainable from the City Council for improvement purposes.

Improvement by Area Procedure.—Since 1955 Leeds Corporation as continually encouraged the improvement of privately owned houses in certain areas by means of Improvement Grants and, as a result, the improvement of areas of well-built, though sub-standard, houses is now an important public health activity. 18 areas comprising 2,226 houses had been approved up to the end of 1962 and it is intended to report regularly further areas for improvement to the Housing Committee until all suitable sub-standard houses have been improved.

At first nearly all the applications for Improvement Grants were from owner-occupiers but since the improvement of houses by area procedure became established, applications for grants from owners of rented houses have come in faster and now nearly equal those from owner-occupiers. Of 2,537 formal applications from owners of private houses for Improvement Grants approved by the Leeds authority, 1,422 were for owner-occupied houses and 1,115 for rented houses.

The Leeds method of improvement of houses by area procedure aims at the comprehensive improvement of every house in an area and is intended to secure the provision of all twelve requirements of a discretionary improvement grant. This policy has three objects; firstly to secure greater use of improvement grants among properties of a suitable type; secondly, to avoid the difficulties which arise when some houses are allowed to decay close to or adjoining houses which have been improved, and thirdly, to obtain the complete improvement of sizeable groups of adjacent houses which are sufficiently well-built to justify improvement.

Areas of well-built houses, say 50 or 60 years old, of homogeneous type, are surveyed and, if judged suitable for improvement are defined on a map. A public health inspector makes a preliminary survey of all the houses in the area and notes the following particulars:—

Address, ownership, type of house, rent, occupants according to age, sex and relationship;

Number and type of rooms, existing amenities as regards W.C.s, baths, lavatory basins, hot water supply, foodstore, etc.

The map and a report of the survey is submitted to the Housing Committee for approval as an improvement area.

The Town Clerk then writes to the owners of houses in the area needing improvement, drawing attention to loans and grants available and indicating that if the owners do not wish to carry out works themselves with this help, the Council will be glad to negotiate purchase and do the improvement works. Ultimately, if such invitations do not bring the desired improvement, the Council proceeds to acquire the houses by Compulsory Purchase Order made under Sections 96 and 97 of the Housing Act, 1957, and has done so in respect of two areas already; both Compulsory Purchase Orders have been confirmed.

Every help is given by the staff of public health inspectors to owners in explaining and persuading, and generally facilitating such improvement grant work. If improvement of houses reduces living accommodation and overcrowding would result, the Council is willing to rehouse the occupiers on the understanding that the owner accepts tenants nominated from the Council's waiting list. Temporary rehousing, whilst works were being carried out, would also be arranged. Sometimes a tenant does not wish to accept the improvement but would be willing to be rehoused by the Council. Rehousing would be provided, subject to the Council nominating the new tenant for the improved house.

Compulsory Purchase Orders are not made where:—

- (a) Owner-occupied houses are in a satisfactory state of repair,
- (b) The owner gives an undertaking to "improve" within a reasonable time, and
- (c) Age or ill-health of occupants makes it undesirable to disturb them.

Some of our improvement areas have almost reached completion without the necessity for any Compulsory Purchase Orders as a result of personal interviewing of the owners by public health inspectors, followed by confirmatory letter from the Chief Public Health Inspector. This personal interviewing has been of very great assistance in helping owners to see the advantages that will accrue from the improvement of houses. The Improvement Grant Scheme is administered by the Public Health Department and all personal negotiations are carried out by the Chief Public Health Inspector or his staff.

The response of landlords of tenanted property has been quite good and compulsory powers have been exercised in only a small minority of cases.

Conversion Areas.—The City Council has continued its interest in the conversion into flats and maisonettes of houses which are, by present-day standards, too large for occupation by single families and which are the subject of a number of lettings without the provision of adequate facilities. Such houses should be properly converted into flats and maisonettes so that each occupier enjoys satisfactory self-contained accommodation.

Generally, such houses tend to be grouped in neighbourhoods and it is convenient to deal with them on an "area" basis after full preliminary surveys. Following survey, an initial approach is made to owners informing them that improvement grants and loans are available to meet the cost of conversion of houses into self-contained flats and maisonettes and that if they do not wish themselves to convert the houses, the City Council would be glad to acquire the houses and convert them.

Where owners are not willing either to improve their houses or to sell them to the Corporation, the City Council usually makes Compulsory Purchase Orders. The Ministry held Public Inquiries during the year in connection with such Compulsory Purchase Orders as follows:—

Name of Area	No. of houses	Date
Studley Grange C.P.O. No. 3	26	19th June, 1962
Belle Vue Road (Part) C.P.O.	2	19th June, 1962
Reginald Terrace/Sholebroke Avenue C.P.O.	8	25th September, 1962

Since 1954, 22 such compulsory purchase orders in connection with 165 houses in multiple occupation have been made and confirmed as follows:

Studley Grange	..	..	..	..	..	105
Sholebroke Avenue	..	..	..	..	..	42
Hyde Park	..	..	..	..	..	1
Belle Vue Road	..	..	..	..	..	6
Miscellaneous Areas	..	..	..	..	..	11

IMPROVEMENT OF HOUSES BY AREA PROCEDURE

144

STATE OF HOUSES IN AREA AT 31.12.62

No.	NAME OF AREA	Date of Approval of Area	Total Number of Houses in Area	Private Owners Number of Houses which have been improved or with amenities or in course of improvement	Local Authority Number of Houses acquired or in course of acquisition by Local Authority	Number of Houses occupied by Aged and Infirm Persons where no action recommended	Number of Houses where no action taken by Owner: Re-commended for C.P.O.	Date of Report to Committee for C.P.O.
1	Hill Street and Lincoln Road	14.7.1955	197	22	137	—	13	5.7.1960
2	Noster Road, Beeston	18.7.1957	190	176	13	—	—	
3	Compton Road	19.9.1957	144	84	34	—	—	
4	Colton Road, Armley	18.9.1958	146	92	51	—	—	
5	Crosby Road, No. 1	20.11.1958	80	29	1	—	—	
6	Crosby Road, No. 2	18.12.1958	84	49	15	—	—	
7	East Park Road, No. 1	19.2.1959	125	57	34	—	—	
8	East Park Road, No. 2	15.3.1959	98	17	25	—	—	
9	Crosby Road, No. 3	16.4.1959	78	38	14	—	—	
10	East Park Road, No. 3	21.5.1959	107	35	20	—	—	
11	Royal Park Road, No. 1	16.7.1959	114	93	10	—	—	
12	Sutherland Road, No. 1	16.7.1959	171	46	13	—	—	
13	Sutherland Road, No. 2	24.9.1959	172	48	4	—	—	
14	Sutherland Road, No. 3	15.10.1959	128	30	6	—	—	
15	Crosby Road, No. 4	19.11.1959	84	45	22	—	—	
16	Thornville Road, No. 1	20.7.1962	110	87	3	—	—	
17	Sutherland Road, No. 4	19.9.1962	129	35	5	—	—	
18	Armley Lodge Road, No. 1	13.12.1962	69	33	7	—	—	
	TOTALS	..	2,226	1,016	414	—	13	

SUMMARY OF ACTION UNDER SECTION 42 OF THE HOUSING ACT, 1957

AREA	Date of Repre- sentation	Type of Order	No. of Houses	Popula- tion	Date of making C.P.O. or C.O.	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demol- ished
Balm Road (Hunslet) Areas 1, 2, 3, 4 New Princess Street (Elland Road) Areas 1, 2, 3	16.4.59	C.P.O.	159	431	Pt. 25.10.61	Visit 25.11.59	25.10.61	143	..
Clowes Street (Jack Lane) Area ..	16.4.59	C.P.O.	107	281	29.7.59	9.2.60	15.6.60	107	83
Dickinson's Yard, Armley, Area ..	16.4.59	C.P.O.	51	115	29.7.59	..	5.1.60	51	51
Benson Street (Sheepscar) Area No. 2	16.4.59	C.O.	3	15	6.5.59	..	29.2.60	3	3
Elland Street (Elland Road) Area ..	21.5.59	C.P.O.	74	188	29.7.59	9.2.60	15.6.60	..	56
Wortley Road Clearance Areas 1, 2, 3, 4, 5	21.5.59	C.P.O.	86	176	7.10.59	16.2.60	15.6.60	86	74
Wellington Road Areas 1, 2, 3 ..	18.6.59	C.P.O.	81	166	1.2.61	13.6.61	5.2.62	81	..
Red Lion Yard (Thwaite Gate) Areas 1, 2, 3, 4	16.7.59	C.P.O.	554	1,500	6.4.60	27.9.60	29.12.60	552	419
Pitfield Street (Hunslet) Areas 1 and 2	16.7.59	C.P.O.	47	113	6.1.60	3.5.60	17.8.60	47	47
Great Wilson Street Areas 1, 2, 3 ..	16.7.59	C.P.O.	137	377	6.1.60	3.5.60	16.9.60	135	93
Park Row (Kirkstall) Areas 1, 2, 3, 4	16.7.59	C.P.O.	33	105	6.1.60	3.5.60	14.9.60	33	21
Wyther Lane Area	16.7.59	C.P.O.	165	373	7.6.61	16.1.62	15.8.62	162	..
Beeston Royds Areas 1 and 2	16.7.59	C.P.O.	22	63	27.7.60	1.3.61	11.4.61	22	22
Leathley Road Areas 1 and 2	16.7.59	C.P.O.	25	52	6.4.60	..	28.9.60	25	25
Johnston Street Area	17.9.59	C.P.O.	24	64	1 = 3.1.62 2 = 17.6.61	16.1.62	30.8.62	..	7
Upper North Street Area	17.9.59	C.P.O.	45	113	6.4.60	27.9.60	18.1.61	..	38
Scotland Mill Cottages Areas 1 and 2	17.9.59	C.P.O.	125	313	6.4.60	27.9.60	8.2.61	..	106
Hanover Street (Park Lane) Areas 1 and 2	17.9.59	C.P.O.	6	14	4.5.60	10.1.61	27.4.61	..	6
Kendal Terrace (Kendal Lane) Area ..	17.9.59	C.P.O.	45	158	7.6.61	13.12.61	22.2.62	..	2
Bedford Place (Park Lane) Areas 1, 2, 3, 4	17.9.59	C.P.O.	75	197	3.5.61	19.9.61	13.11.61	..	14
Park Row (Kirkstall) Area No. 5 ..	15.10.59	C.P.O.	53	135	1.2.61	13.6.61	13.11.61	..	28
Woodhouse Cliff Areas 1, 2, 3, 4 ..	15.10.59	C.P.O.	5	12	7.6.61	16.1.62	15.8.62	..	..
Chapel Allerton (Town Street) Areas 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 ..	15.10.59	C.P.O.	60	159	1.3.61	22.8.61	13.12.61	..	7
		Pt.C.P.O.	120	232	5.4.61	22.8.61	2.2.62	..	..
		Pt. C.O.							

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order.

SUMMARY OF ACTION UNDER SECTION 42 OF THE HOUSING ACT, 1957—continued

Area	Date of Representation	Type of Order	No. of Houses	Population	Date of making C.P.O. or C.O.	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Byron Street (North Street) Areas 2, 3, 4	15.10.59	C.P.O.	53	50	3.1.62	1.5.62	7.9.62	..	53
Belgrave Street (Wade Lane) Areas 1 and 2	15.10.59	C.P.O.	23	31	4.4.62	..	9.10.62	..	..
Cross Stamford Street (Newtown) Areas 1 and 2	15.10.59	C.P.O.	68	188	4.5.60	10.1.61	9.5.61	..	65
Melbourne Street (North Street) Area	15.10.59	C.O.	32	88	1.11.61	..	1.2.62	..	..
Kirkstall Road (West) Areas 1 and 2	19.11.59	C.P.O.	689	1,932	3.10.60	31.1.61	1.6.61	..	154
Beecroft Street (Kirkstall) Areas 1, 2, 3, 4 and 5	19.11.59	C.P.O.	184	384	7.6.61	16.1.62	2.11.62	..	4
Town Street (Bramley) Clearance Areas Nos. 1 to 34	18.2.60	C.P.O.	393	878	..	..	..	..	..
Hugh Street (Tong Road) Clearance Areas Nos. 1 and 2	17.3.60	C.P.O.	193	537	4.1.61	30.5.61	21.11.61	..	27
Radnor Street (Wellington Road) Clearance Area	17.3.60	C.P.O.	86	211	1.2.61	30.5.61	11.9.61	..	55
Burmantofts (Burns Street) C.A.	21.4.60	C.P.O.	509	1,348	1.2.61	13.6.61	11.1.62	..	53
Oban Square (Armley) Clearance Areas Nos. 1 and 2	19.5.60	C.P.O.	50	90	3.5.61	19.9.61	12.12.61	..	..
Bedford Terrace (Sheepscar) Clearance Areas Nos. 1 and 2	19.5.60	C.P.O.	60	165	..	..	..	..	8
Springfield Place (Little Woodhouse) C. Areas. Nos. 1 to 6	14.7.60	C.P.O.	203	965	2.8.61	10.10.61	8.3.62	..	..
Rothsay Street (Elland Road) C. Areas Nos. 1 to 5	15.9.60	C.P.O.	99	242	..	..	..	..	..
Springfield Place (Little Woodhouse) C. Areas Nos. 7 to 9	15.9.60	C.P.O.	302	1,212	2.8.61	10.10.61	8.3.62	..	..
Leek Street (Hunslet) C. Areas Nos. 1, 2, and 3	14.11.60	C.P.O.	394	1,048	4.4.62	..	..	..	..
Sackville Street (Sheepscar) C. Areas Nos. 1 to 4	14.11.60	C.P.O.	294	758	..	..	..	..	..

AREA	Date of Representation	Type of Order	No. of Houses	Population	Date of making C.P.O. or C.O.	Date of Inquiry	Date when Order Confirmed	Houses	No. of houses Demolished
Woodbine Square (Little Woodhouse Street) Clearance Area ..	14.11.60	C.P.O.	23	57	2.8.61	..	13.11.61	23	..
Grove Road (Hunslet) C.A. ..	14.12.60	C.P.O.	264	790	..	..	..	..	..
St. George's Terrace (Camp Road) C. Areas Nos. 1 to 4 ..	14.12.60	C.P.O.	41	183	..	..	..	..	..
Enfield Road (Roundhay Rd.) C. Areas Nos. 1 to 5 ..	19.1.61	C.P.O.	171	389	..	..	..	..	..
Dunkirk Hill (Canal Road) C. Areas Nos. 1 and 2 ..	16.2.61	C.P.O.	14	32	3.5.61	17.10.61	..	..	..
Hunslet Lane Clearance Area ..	16.2.61	C.P.O.	6	13	3.5.61	15.11.61	..	..	..
Robinson's Row (Seacroft) Clearance Area ..	16.3.61	C.P.O.	5	10	3.1.62	1.5.62	..	..	..
Burmantofts (Shakespeare St.) Clearance Areas Nos. 1 to 3 ..	16.3.61	C.P.O.	534	1,486	..	..	..	..	2
Holdforth Street (Wellington Road) C. Areas Nos. 1 to 7 ..	18.5.61	C.P.O.	774	2,270	..	..	..	..	..
Millshaw (Beeston) Clearance Areas Nos. 1 to 5 ..	15.6.61	C.P.O.	52	108	..	..	..	..	..
Beza Street (Hunslet) C. Area ..	15.6.61	C.P.O.	92	240	..	..	..	..	..
Goodwin Road (Tong Road) Clearance Areas Nos. 1 to 3 ..	20.6.61	C.P.O.	79	219	..	..	..	..	..
Albury Terrace (Hunslet) Clearance Area ..	20.6.61	C.P.O.	95	261	..	..	..	..	..
West End Terrace (Hyde Park) C. Areas Nos. 5 to 8 ..	15.9.61	C.P.O.	19	38	..	..	..	..	..
Whingate C. Areas Nos. 1 and 2 ..	15.9.61	C.P.O.	17	24	..	..	..	..	..
Amen Corner (Kirkstall) C. Area ..	19.9.62	C.P.O.	7	17	..	..	..	..	..
Meanwood Road (Buslingthorpe Lane) Clearance Area ..	19.9.62	C.P.O.	2	8	..	..	..	..	..
Somers Street (Westgate) C. Areas Nos. 1 and 2 ..	19.9.62	C.P.O.	14	21	..	..	..	..	..
North Park Road (Roundhay) C. Area ..	17.10.62	C.P.O.	2	2	..	..	..	..	..

C.O.—Clearance Order. C.P.O.—Compulsory Purchase Order.

Table 1. Summary of the results of the 1998-1999 survey of the Great Lakes fishery for the American salmon.

Survey area	Number of fish	Weight (kg)	Length (cm)	Age	Sex	Year of capture	Number of fish	Weight (kg)	Length (cm)	Age	Sex	Year of capture
1. Lake Superior	100	10.0	100	1	M	1998	100	10.0	100	1	M	1998
2. Lake Michigan	200	20.0	200	2	F	1999	200	20.0	200	2	F	1999
3. Lake Huron	300	30.0	300	3	M	2000	300	30.0	300	3	M	2000
4. Lake Erie	400	40.0	400	4	F	2001	400	40.0	400	4	F	2001
5. Lake Ontario	500	50.0	500	5	M	2002	500	50.0	500	5	M	2002
6. Lake St. Clair	600	60.0	600	6	F	2003	600	60.0	600	6	F	2003
7. Lake St. Lawrence	700	70.0	700	7	M	2004	700	70.0	700	7	M	2004
8. Lake Ontario	800	80.0	800	8	F	2005	800	80.0	800	8	F	2005
9. Lake Erie	900	90.0	900	9	M	2006	900	90.0	900	9	M	2006
10. Lake Huron	1000	100.0	1000	10	F	2007	1000	100.0	1000	10	F	2007
11. Lake Michigan	1100	110.0	1100	11	M	2008	1100	110.0	1100	11	M	2008
12. Lake Superior	1200	120.0	1200	12	F	2009	1200	120.0	1200	12	F	2009
13. Lake Ontario	1300	130.0	1300	13	M	2010	1300	130.0	1300	13	M	2010
14. Lake Erie	1400	140.0	1400	14	F	2011	1400	140.0	1400	14	F	2011
15. Lake Huron	1500	150.0	1500	15	M	2012	1500	150.0	1500	15	M	2012
16. Lake Michigan	1600	160.0	1600	16	F	2013	1600	160.0	1600	16	F	2013
17. Lake Superior	1700	170.0	1700	17	M	2014	1700	170.0	1700	17	M	2014
18. Lake Ontario	1800	180.0	1800	18	F	2015	1800	180.0	1800	18	F	2015
19. Lake Erie	1900	190.0	1900	19	M	2016	1900	190.0	1900	19	M	2016
20. Lake Huron	2000	200.0	2000	20	F	2017	2000	200.0	2000	20	F	2017
21. Lake Michigan	2100	210.0	2100	21	M	2018	2100	210.0	2100	21	M	2018
22. Lake Superior	2200	220.0	2200	22	F	2019	2200	220.0	2200	22	F	2019
23. Lake Ontario	2300	230.0	2300	23	M	2020	2300	230.0	2300	23	M	2020
24. Lake Erie	2400	240.0	2400	24	F	2021	2400	240.0	2400	24	F	2021
25. Lake Huron	2500	250.0	2500	25	M	2022	2500	250.0	2500	25	M	2022
26. Lake Michigan	2600	260.0	2600	26	F	2023	2600	260.0	2600	26	F	2023
27. Lake Superior	2700	270.0	2700	27	M	2024	2700	270.0	2700	27	M	2024
28. Lake Ontario	2800	280.0	2800	28	F	2025	2800	280.0	2800	28	F	2025
29. Lake Erie	2900	290.0	2900	29	M	2026	2900	290.0	2900	29	M	2026
30. Lake Huron	3000	300.0	3000	30	F	2027	3000	300.0	3000	30	F	2027
31. Lake Michigan	3100	310.0	3100	31	M	2028	3100	310.0	3100	31	M	2028
32. Lake Superior	3200	320.0	3200	32	F	2029	3200	320.0	3200	32	F	2029
33. Lake Ontario	3300	330.0	3300	33	M	2030	3300	330.0	3300	33	M	2030
34. Lake Erie	3400	340.0	3400	34	F	2031	3400	340.0	3400	34	F	2031
35. Lake Huron	3500	350.0	3500	35	M	2032	3500	350.0	3500	35	M	2032
36. Lake Michigan	3600	360.0	3600	36	F	2033	3600	360.0	3600	36	F	2033
37. Lake Superior	3700	370.0	3700	37	M	2034	3700	370.0	3700	37	M	2034
38. Lake Ontario	3800	380.0	3800	38	F	2035	3800	380.0	3800	38	F	2035
39. Lake Erie	3900	390.0	3900	39	M	2036	3900	390.0	3900	39	M	2036
40. Lake Huron	4000	400.0	4000	40	F	2037	4000	400.0	4000	40	F	2037
41. Lake Michigan	4100	410.0	4100	41	M	2038	4100	410.0	4100	41	M	2038
42. Lake Superior	4200	420.0	4200	42	F	2039	4200	420.0	4200	42	F	2039
43. Lake Ontario	4300	430.0	4300	43	M	2040	4300	430.0	4300	43	M	2040
44. Lake Erie	4400	440.0	4400	44	F	2041	4400	440.0	4400	44	F	2041
45. Lake Huron	4500	450.0	4500	45	M	2042	4500	450.0	4500	45	M	2042
46. Lake Michigan	4600	460.0	4600	46	F	2043	4600	460.0	4600	46	F	2043
47. Lake Superior	4700	470.0	4700	47	M	2044	4700	470.0	4700	47	M	2044
48. Lake Ontario	4800	480.0	4800	48	F	2045	4800	480.0	4800	48	F	2045
49. Lake Erie	4900	490.0	4900	49	M	2046	4900	490.0	4900	49	M	2046
50. Lake Huron	5000	500.0	5000	50	F	2047	5000	500.0	5000	50	F	2047
51. Lake Michigan	5100	510.0	5100	51	M	2048	5100	510.0	5100	51	M	2048
52. Lake Superior	5200	520.0	5200	52	F	2049	5200	520.0	5200	52	F	2049
53. Lake Ontario	5300	530.0	5300	53	M	2050	5300	530.0	5300	53	M	2050
54. Lake Erie	5400	540.0	5400	54	F	2051	5400	540.0	5400	54	F	2051
55. Lake Huron	5500	550.0	5500	55	M	2052	5500	550.0	5500	55	M	2052
56. Lake Michigan	5600	560.0	5600	56	F	2053	5600	560.0	5600	56	F	2053
57. Lake Superior	5700	570.0	5700	57	M	2054	5700	570.0	5700	57	M	2054
58. Lake Ontario	5800	580.0	5800	58	F	2055	5800	580.0	5800	58	F	2055
59. Lake Erie	5900	590.0	5900	59	M	2056	5900	590.0	5900	59	M	2056
60. Lake Huron	6000	600.0	6000	60	F	2057	6000	600.0	6000	60	F	2057
61. Lake Michigan	6100	610.0	6100	61	M	2058	6100	610.0	6100	61	M	2058
62. Lake Superior	6200	620.0	6200	62	F	2059	6200	620.0	6200	62	F	2059
63. Lake Ontario	6300	630.0	6300	63	M	2060	6300	630.0	6300	63	M	2060
64. Lake Erie	6400	640.0	6400	64	F	2061	6400	640.0	6400	64	F	2061
65. Lake Huron	6500	650.0	6500	65	M	2062	6500	650.0	6500	65	M	2062
66. Lake Michigan	6600	660.0	6600	66	F	2063	6600	660.0	6600	66	F	2063
67. Lake Superior	6700	670.0	6700	67	M	2064	6700	670.0	6700	67	M	2064
68. Lake Ontario	6800	680.0	6800	68	F	2065	6800	680.0	6800	68	F	2065
69. Lake Erie	6900	690.0	6900	69	M	2066	6900	690.0	6900	69	M	2066
70. Lake Huron	7000	700.0	7000	70	F	2067	7000	700.0	7000	70	F	2067
71. Lake Michigan	7100	710.0	7100	71	M	2068	7100	710.0	7100	71	M	2068
72. Lake Superior	7200	720.0	7200	72	F	2069	7200	720.0	7200	72	F	2069
73. Lake Ontario	7300	730.0	7300	73	M	2070	7300	730.0	7300	73	M	2070
74. Lake Erie	7400	740.0	7400	74	F	2071	7400	740.0	7400	74	F	2071
75. Lake Huron	7500	750.0	7500	75	M	2072	7500	750.0	7500	75	M	2072
76. Lake Michigan	7600	760.0	7600	76	F	2073	7600	760.0	7600	76	F	2073
77. Lake Superior	7700	770.0	7700	77	M	2074	7700	770.0	7700	77	M	2074
78. Lake Ontario	7800	780.0	7800	78	F	2075	7800	780.0	7800	78	F	2075
79. Lake Erie	7900	790.0	7900	79	M	2076	7900	790.0	7900	79	M	2076
80. Lake Huron	8000	800.0	8000	80	F	2077	8000	800.0	8000	80	F	2077
81. Lake Michigan	8100	810.0	8100	81	M	2078	8100	810.0	8100	81	M	2078
82. Lake Superior	8200	820.0	8200	82	F	2079	8200	820.0	8200	82	F	2079
83. Lake Ontario	8300	830.0	8300	83	M	2080	8300	830.0	8300	83	M	2080
84. Lake Erie	8400	840.0	8400	84	F	2081	8400	840.0	8400	84	F	2081
85. Lake Huron	8500	850.0	8500	85	M	2082	8500	850.0	8500	85	M	2082
86. Lake Michigan	8600	860.0	8600	86	F	2083	8600	860.0	8600	86	F	2083
87. Lake Superior	8700	870.0	8700	87	M	2084	8700	870.0	8700	87	M	2084
88. Lake Ontario	8800	880.0	8800	88	F	2085	8800	880.0	8800	88	F	2085
89. Lake Erie	8900	890.0	8900	89	M	2086	8900	890.0	8900	89	M	2086
90. Lake Huron	9000	900.0	9000	90	F	2087	9000	900.0	9000	90	F	2087
91. Lake Michigan	9100	910.0	9100	91	M	2088	9100	910.0	9100	91	M	2088
92. Lake Superior	9200	920.0	9200	92	F	2089	9200	920.0	9200	92	F	2089
93. Lake Ontario	9300	930.0	9300	93	M	2090	9300	930.0	9300	93	M	2090
94. Lake Erie	9400	940.0	9400	94	F	2091	9400	940.0	9400	94	F	2091
95. Lake Huron	9500	950.0	9500	95	M	2092	9500	950.0	9500	95	M	2092
96. Lake Michigan	9600	960.0	9600	96	F	2093	9600	960.0	9600	96	F	2093
97. Lake Superior	9700	970.0	9700	97	M	2094	9700	970.0	9700	97	M	2094
98. Lake Ontario	9800	980.0	9800	98	F	2095	9800	980.0	9800	98	F	2095
99. Lake Erie	9900	990.0	9900	99	M	2096	9900	990.0	9900	99	M	2096
100. Lake Huron	10000	1000.0	10000	100	F	2097	10000	1000.0	10000	100	F	2097

Food Hygiene

FOOD INSPECTION

BY

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.

Chief Public Health Inspector

During 1962, 3,676 visits were paid by public health inspectors to premises in which foodstuffs intended for human consumption were prepared, stored or sold. 708 of these were to premises registered with the Local Authority under Section 16 of the Food and Drugs Act, 1955, i.e. premises used for the sale or manufacture or storage of sausages or potted, pressed, pickled or preserved food intended for sale; the remaining 2,968 visits were to places not so registered, e.g. bakehouses, restaurants, cafes, canteens, butchers' shops, provision merchants, etc.

A considerable amount of work was done under the Food Hygiene (General) Regulations, 1960, in respect of food premises. 76 warning letters were issued pointing out contraventions of the Regulations or to require alterations to premises to bring them into line with modern standards. These letters and other action taken by public health inspectors have resulted in a large number of improvements to food premises of all types. Details of this work are contained in the table on page 195.

Restaurants and Cafes.—1,173 visits were paid to cafes and restaurants. The general standard of hygiene was found to be reasonably satisfactory. Offences not thought to warrant the institution of legal proceedings were dealt with by immediate contact with the proprietors of the premises concerned.

The public health inspectors who visit factories and workplaces inspect also, as a matter of routine, the canteens and messrooms provided for these places,

An analysis of the work done under the provisions of the Food Hygiene (General) Regulations, 1960, is given below:—

Walls, ceilings, floors, etc. improved..	..	..	18
Walls, ceilings, floors, etc. cleansed ..	..	..	39
Ventilation provided or improved ..	..	..	5
Articles, apparatus, clothing cleansed	..	..	11
Personal washing facilities provided	..	..	6
Other washing facilities provided ..	..	..	3
Hot water supply provided ..	..	..	2
Accommodation for clothing provided	..	..	4
First aid equipment provided ..	..	..	19
Food storage accommodation provided or improved			3
Sanitary accommodation provided or improved ..			3
Artificial lighting improved ..	..	..	1
Other improvements ..	..	..	10

Ice-Cream Premises.—During the year 247 visits were made to premises in the city used for the manufacture or sale of ice-cream.

Fish-Frying Premises.—One application for registration was approved during the year and 299 visits paid to registered premises.

Other Registered Food Preparing Premises.—During the year 262 visits were made to other registered food preparing premises such as those used for the manufacture of sausage or preparation of pork products, meat pies, jams, pickles and sauces. Eight applications for registration of premises used for one or other of such purposes were granted subject in one case to alterations to the premises.

Statistics with regard to the registration of premises under Section 16 of the Food and Drugs Act, 1955, are set out in the following table.

REGISTRATION

Number of premises registered for the manufacture of ice-cream during 1962	3
Number of premises registered for storage of ice-cream during 1962	..
Number of premises registered for the sale of ice-cream during 1962	19
Number of premises registered for the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale (1 fried fish shop, 8 manufacturers of sausages, potted meat, meat pies, etc.)	9
Number of notifications of change of occupier received:—	
ice-cream premises	21
food-preparing premises	18
Number of premises removed from register:—	
Ice-cream premises (manufacture)	16
Ice-cream premises (storage)	..
Ice-cream premises (sale)	22
Food preparing premises	15
Number of premises on the register 31st December, 1962:—	
(a) used for manufacture of ice-cream	29
(b) used for the sale of ice-cream	1,825
(c) used for the storage of ice-cream intended for sale ..	10
(d) used for the manufacture of sausages, or preparation of preserved food	775

Legal Proceedings—Food Hygiene (General) Regulations, 1960.—

(a) A butcher was prosecuted for smoking in a food room in which there was open food—found guilty and given a conditional discharge on payment of 4s. costs.

(b) The occupier of a wet fish shop was prosecuted for smoking in a food room in which there was open food—a fine of £10 was imposed.

(c) A stallholder in the open market (adjoining the main Kirkgate Market) was prosecuted in respect of the exposure for sale of unsound grape-fruit and the absence of name and address of the owner of the stall itself. His assistant was charged with aiding and abetting the first offence. A fine of £5 was imposed on the stallholder in respect of the exposure of the unsound grape-fruit, the assistant being granted an absolute discharge. A conditional discharge was granted in relation to the omission of name and address of the owner on payment of 4s. costs.

Food Sampling.—Supervisory Inspector H. Long reports that the inspectors in the Food and Dairies Section took 189 formal and 607 informal samples of food and 3 formal and 30 informal samples of drugs during the year for the purpose of chemical analysis. Legal proceedings were instituted in two cases in accordance with details set out on page 157. Offences other than those subject to legal action were taken up with the manufacturers or other persons concerned.

The results of sampling show that adulteration of food is now almost extinct and that the majority of complaints relate to extraneous matter in food. This, together with the labelling of food and misleading food advertisements, is now the chief concern of the sampling officer. It was necessary to institute legal proceedings in only a few of the cases listed on page 156. There have, however, been several complaints to the Department by members of the public which have called for enquiries by the inspectors.

In January a bag of flour submitted by a complainant was found to contain a piece of raw liver and a piece of raw steak; tests proved both of these to be of bovine origin. The complainant, not being aware of the nature of the extraneous matter, was quite adamant that this could not have got into the flour at her home. The inspectors' investigations showed that the liver and steak could not have been in the flour when it left the manufacturers' premises, and a further visit to the complainant's home revealed that members of the household often coated raw liver and steak with flour before cooking. It was, therefore, almost certain that the contamination of the flour was of domestic origin.

Another complaint received by the Department related to a bag of rice containing 77 mouse droppings. A visit paid to the shop premises revealed a major mouse infestation. The practice was to fill the bags of rice in a small store at the rear of the shop; this store was found to be neglected and the equipment and tables badly situated. As a result of this visit the whole of the shop premises were reconstructed and brought up to the standards required by the Food Hygiene Regulations.

Another of the complaints received related to a bottle of lemonade which had been taken to a patient in a Leeds hospital. The lemonade had a strange burning taste, and on examination it was found to be contaminated with 26 parts per million of phenol. Subsequent investigations were made but the facts did not justify legal proceedings.

Two formal samples of Rose Hip Syrup from different manufacturers were submitted for analysis. In both cases artificial colouring matter was present. There was no declaration of this on the labels and on taking up the matter with the manufacturers concerned, both agreed to amend their labels.

A packet of sweets sold under the name "Life Savers" contained sweets of four colours. The red, orange and yellow sweets contained permitted colours, but the green sweets contained Brilliant Blue FCF and Tartrazine. Brilliant Blue FCF is not a permitted colour in this country but is permitted in the United States of America. It was found that the wholesaler had purchased the sweets from the U.S.A. in order to supplement British produced stock. The manufacturer undertook to withdraw from sale all stocks containing non-permitted colouring matter and to see that they were not used in future.

Two samples of drugs have been the subject of prolonged investigation. The first, Essence of Pennyroyal, was sold in a bottle labelled "Glycerinated Essence of Pennyroyal B.P.C.". This title does not constitute an appropriate designation within the meaning of the Pharmacy and Medicines Act, 1941, and it is not included in either the British Pharmacopoeia or the British Pharmaceutical Codex. A further objection was the large quantity (3 ozs.) that had been sold without any enquiries as to intended use. The firm concerned undertook to be more careful in the sale of this article and to amend the label, omitting "B.P.C.".

A sample sold under the designation "Bronchials" had a statement on the label "For coughs and colds". This statement, in conjunction with the name, was considered to constitute a recommendation as a medicine. The label should have given the quantities of the active constituents as required by Section II of the Pharmacy and Medicines Act, 1941. On representations being made, the manufacturer agreed that the label should be amended omitting the words "For coughs and colds".

Ice-Cream Sampling.—During the year 94 samples of ice-cream were taken from the places of manufacture and from local vendors for bacteriological examination. Of this number, 8 were classified as unsatisfactory and 11 as very unsatisfactory. All results were notified to vendors and manufacturers. Where samples were unsatisfactory, visits were paid to the premises of production for the purpose of advising the manufacturers on improved methods.

Details of the bacteriological results are as follows:—

METHYLENE BLUE TEST

Grade	No. of Samples	Percentage	Remarks
1	61	65.0	Good
2	14	15.0	Satisfactory
3	8	8.0	Unsatisfactory
4	11	12.0	Very unsatisfactory

Bacteriological Examination of Food.—36 samples of foods were submitted to the Public Health Laboratory Service for bacteriological examination as follows:—

Article of food	No. of Samples Submitted
Toffee	13
Tinned shrimps	1
Cream cake	1
Imitation cream	1
Buttered cream	1
Vegetable salad (tinned)	1
Mushroom Pattie	1

Continued on next page

Ice-cream	..	..	..	..	2
Cooked mussels in jar	..	..	..	..	I
Pork pie	..	..	..	..	2
Frozen whole hen egg	..	..	..	..	7
Savoury	..	..	..	..	I
Cream doughnut	..	..	..	..	I
Apple and cream pie..	..	..	..	..	I
Calves' liver sausage ..	..	..	..	..	I
Sausage	..	..	..	..	I

Extraneous Matter in Food.—The following complaints of foreign matter in food were received by the Department during the year:—

Hairpin in sponge cake
Maggots in chocolate bar
Charred bread in loaf
Raw liver and pieces of steak in bag of flour
Beetle in bread roll
Dirt in milk bottles
Vegetable debris and dust in a "Frozen Dinner for One"
Metal nut and washer in packet of sausages
Splinter of wood in cream cake
Beetle and brush hairs in loaf
Insect baked in crust of loaf
Metal ball-bearing in slice of bread
String in cake
Rodent droppings alleged to be in loaf (proved to be carraway seeds)
Charred pastry in cream cake
Large piece of metal in filling to éclair
Disinfectant in lemonade
Hessian on base of cake
Pastry brush bristles in plum pie
Small stone in tin of peas
Foreign matter in bottle of stout (proved to be charred malt)
Metal nut in corned beef
Insect in jar of pickled herrings

Continued on next page

Mould in cream puff
 Mould in steak and kidney pie
 Mould in pork pie
 Rust inside tin of vegetable salad
 1" nail in sponge cake
 Bandage in tin of luncheon meat
 $\frac{1}{4}$ " screw in teacake
 Glass in tomato sandwich
 Cigarette end in walnut and date loaf

Legal Proceedings.—Prosecutions were taken in connection with the last five complaints listed above with the following results:—

Article	Extraneous Matter	Result of Hearing
Spongecake ..	Contained metal nail ..	Fined £20 with £1 14s. 6d. costs. Manufacturer.
Tin of luncheon meat	Contained finger bandage	Fined £20. Manufacturer.
Teacake	Contained metal screw..	Fined £5. Baker.
Tomato sandwich	Contained a piece of glass	Fined £5 with £5 13s. 10d. costs. Retailer.
Walnut and date loaf	Contained cigarette end..	Fined £10. Manufacturer.

The following table sets out details of prosecutions taken during the year in connection with samples of food found to be unsatisfactory by reason of adulteration or deficiency.

No. of sample	Article	Adulteration or deficiency	Result of Hearing
945/R ..	Pork sausage	13·8% deficient in meat	Granted a Conditional Discharge and ordered to pay £3 5s. costs. Manufacturer.
855/S ..	Pork sausage	30·0% deficient in meat	Fined £10 and ordered to pay £3 5s. costs. Manufacturer.

Rag Flock and Other Filling Materials Act, 1951.—The licences of three premises used for the manufacture of rag flock and one for the storage of rag flock were renewed. The total number of registered premises in the city remains at 55. Three samples, consisting of rag flock, woollen mixture felt and cotton felt, were taken during 1962. All proved satisfactory and the manufacturers were notified accordingly.

Pharmacy and Poisons Act, 1933 (Part II).—The administrative year for the purpose of the above Act extends from May 1st to April 30th. The work done during the year ended 30th April, 1963, is set out in the following table:—

Persons on the List on 30th April, 1962	302
Persons added to the List during the year	16
Persons removed from the List during the year	39
Persons on the List on 30th April, 1963	279
Premises on the List on 30th April, 1962	406
Premises added to the List during the year	22
Premises removed from the List during the year	42
Premises on the List on 30th April, 1963	386
Visits paid to:—	
1. Listed premises in connection with new applications	..
2. Listed premises in connection with unpaid fees	9
3. Listed premises for routine inspection	..
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	..

Legal Proceedings.—It was not found necessary to institute legal proceedings under the Pharmacy and Poisons Act during the year.

Pharmacy and Medicines Act, 1941.—No contraventions of this Act came to the notice of the Department during the year.

Fertiliser and Feeding Stuffs Act, 1926.—25 informal samples of fertilisers were taken under the Fertilisers and Feeding Stuffs Act, 22 of these samples being classified as satisfactory and 3 unsatisfactory. The unsatisfactory samples were as follows:—

Article	Irregularity	Action taken
Liquid Manure (Concentrated)	Potash 2.04% in excess of stated amount	Letter to manufacturers.
Organic Tomato Fertiliser	Soluble phosphoric acid 0.9% less than stated amount, insol. phosphoric acid 0.9% in excess of stated amount. Potash 1.4% below stated amount.	Letter to manufacturers.
Garden Fertiliser	Soluble phosphoric acid 1.7% less than stated amount, insol. phosphoric acid 1.7% in excess of stated amount. Potash 3.4% below stated amount.	Letter to manufacturers.

SAMPLING OF MILK

BY

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.

Chief Public Health Inspector

AND

H. LONG

Supervisory Public Health Inspector,

Food and Dairies Section

The sampling officers in the Food and Dairies Section took, in all, 3,257 samples of milk for examination. This figure is made up of 2,474 chemical samples, 608 bacteriological samples and 175 biological samples. The chemical samples included 68 Channel Island milks.

The average composition of milk brought into the city shows a total solids content of 12.53 per cent., made up of 3.78 per cent. fat and 8.76 per cent. solids-not-fat. Out of the 2,474 samples submitted for chemical analysis there were, however, 254 samples (or 10.26 per cent.) which showed solids-not-fat of less than 8.5 per cent.

There is little doubt that the milk quality scheme introduced by the Milk Marketing Board is now showing an effect on the compositional quality of milk arriving at the large dairies. From the results kept by the laboratory staff of the dairy companies and the final results obtained through Departmental sampling, it would appear that perhaps the time has now arrived when sampling procedure at the larger dairies can be modified and more attention paid to the Farm Bottled Milks which are on sale in this city. A surprising feature of the new scheme of the Milk Marketing Board is that it allows for a lower solids-not-fat content than that laid down in the Sale of Milk Regulations.

During the year one large dairy company introduced cartons for milk distribution on a fairly substantial scale. The carton of milk is undoubtedly the method of distribution which the public will demand in future years.

Adulterated Milk.—Of the samples chemically analysed 8 were reported unsatisfactory; 7 of them contained added water and one showed fat deficiency. In no case, however, was the analytical result such as to warrant the institution of legal proceedings.

Radioactivity in Milk.—Samples were again submitted for radioactivity tests but the results did not show any significant rise in the levels of Iodine-131. These samples were discontinued at the end of the nuclear test period.

Dairy Inspection and Milk Sampling.—The following visits were paid by the Food and Drugs Inspectors:—

To pasteurising and sterilising plants	649
Other visits of enquiry	426
Attendance at Court	12
Visits in connection with adulterated samples ..	82

During the year 608 samples of designated milks were submitted to the City Analyst for bacteriological examination. The samples were taken from dairies and, in a few cases, from retailers in the street. Samples taken were:—

" Pasteurised "	171
" Tuberculin Tested " (Pasteurised)	149
" Sterilised "	96
" Tuberculin Tested " (Farm Bottled) ..	192

Bacteriological Examination of Milk.—None of the 608 samples submitted to the City Analyst for bacteriological examination failed to pass the methylene blue test.

METHYLENE BLUE (REDUCTION) TEST

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent-age	No.	Percent-age
Pasteurised { Dairies ..	96	96	100.0	..	..
Schools ..	75	75	100.0	..	..
Tuberculin Tested (Pasteurised) Dairies ..	149	149	100.0	..	..
Tuberculin Tested (Farm bottled) Dairies ..	192	192	100.0	..	..

PHOSPHATASE TEST

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent-age	No.	Percent-age
Pasteurised { Dairies ..	96	96	100.0	..	..
Schools ..	75	75	100.0	..	..
Tuberculin Tested (Pasteurised) Dairies ..	149	149	100.0	..	..

TURBIDITY TEST

Designation	Total Samples Taken	Result of Test			
		Satisfactory		Unsatisfactory	
		No.	Percent-age	No.	Percent-age
Sterilised	96	96	100.0	..	..

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, 1961	23	27
No. added to the register during the year	..	..
No. removed from the register during the year	1	1
No. on the register on 31st December, 1962	22	26

DISTRIBUTORS OF BOTTLED MILK ONLY

No. of distributors of milk on the register on 31st December, 1961	832
No. added to the register during the year	60
No. removed from the register during the year	32
No. of distributors of milk on the register on 31st December, 1962	860
No. of shops, etc., from which bottled milk only is sold, on 31st December, 1962	1,119

LICENCES ISSUED UNDER THE MILK (SPECIAL DESIGNATION) REGULATIONS, 1960

Description	Number in force on 31st December		
	1960	1961	1962
To use the designation " Tuberculin Tested "			
1. To sell by retail	150	153	154
To use the designation " Pasteurised "—			
1. Pasteurisers' Licences	3	3	2
2. To sell by retail	159	161	168
To use the designation " Sterilised "—			
1. Sterilisers' Licences	2	2	2
2. To sell by retail	1,073	1,031	1,094

Biological Examination of Milk.—During the year 77 samples of milk were submitted to the Public Health Laboratory Service at Leeds 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.	Percent-age	No.	Percent-age
Tuberculin Tested ..	73	..	..	73	100·0
Pasteurised	..	..	..	..	..
Tuberculin Tested (Pasteurised) ..	..	..	..	..	..
Ungraded	4	..	..	4	100·0
Total	77	..	..	77	100·0

Brucella Abortus Samples.—80 samples of Tuberculin Tested milk were submitted to the Public Health Laboratory Service for examination for the above organism. 18 proved positive. All these samples were taken from the herd mentioned in the report on an outbreak of brucellosis set out below.

Milk and Dairies (General) Regulations, 1959—Regulation 20.—One Regulation 20 notice was served during the year, this being in the case of the herd infected with brucella abortus mentioned in the report below. The notice was withdrawn following the isolation and subsequent slaughter of five affected animals, after having been in force for ten days.

Brucella Abortus.—The investigation into milk affected with brucellosis followed upon notification from a neighbouring authority that a milk sample taken in their area had been found positive.

The milk came from a dairy herd on premises within the city. The farm was visited and the herd divided into small groups. Samples were taken from each group and two of the groups proved positive on the ring test. Without waiting for cream culture results, the two groups were then sampled individually, a total of 15 beasts being involved. From these samples it was found that five cows were positive on the ring test and later it was reported that four of the five cows showed a positive result on the cream culture test. As a result of these findings it was decided that a notice for compulsory heat treatment should be served on the farmer under Regulation 20 of the Milk and Dairies (General) Regulations, 1959. On receipt of this Notice, the farmer decided that he did not wish to retain the infected animals and arrangements were made for their slaughter.

Within a short time of the first outbreak, it was also found that a further sample of milk from the same herd contained brucella organisms. The same procedure was again adopted and on this occasion two cows were reported positive on the initial ring tests. Although both these animals proved negative to the cream culture tests, subsequent guinea pig inoculation tests demonstrated that one animal was positive for brucella. This animal was also sent for immediate slaughter.

Perhaps the most surprising feature of this outbreak was that every animal on the farm had been inoculated against brucellosis and the farmer would not allow any animal to be added to his herd until inoculation had taken place.

MEAT INSPECTION

BY

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.

Chief Public Health Inspector

AND

J. S. SEWELL

Supervisory Public Health Inspector

for Meat and Other Foods

Animals Slaughtered.—During the year 298,773 animals were slaughtered for human consumption at the Public Abattoir and the private slaughterhouses in the city, a decrease of 11,320 on the figure for 1961. The following table gives an analysis of the animals slaughtered.

ANIMALS SLAUGHTERED AT THE PUBLIC ABATTOIR AND PRIVATE SLAUGHTERHOUSES

	Year	Cattle ex. Cows	Cows	Calves	Sheep	Pigs	Total
Public Abattoir ..	{ 1961	28,664	9,149	23,309	165,435	24,936	251,493
	{ 1962	27,979	11,145	18,667	152,327	26,431	236,549
Danube Road ..	{ 1961	3,663	..	..	10,700	9,196	23,559
	{ 1962	3,462	..	..	10,271	8,635	22,368
16 Gelderd Road ..	{ 1961	1,370	..	1,062	6,776	17,995	27,203
	{ 1962	1,197	405	752	10,878	18,430	31,662
Marshall Street, Cross Gates ..	{ 1961	221	..	2	1,154	1,387	2,764
	{ 1962	304	..	..	1,262	1,802	3,368
Cross Lane, Wortley	{ 1961	321	34	..	1,269	..	1,624
	{ 1962	369	15	..	1,238	..	1,622
Harrison's Yard Bramley	{ 1961	..	..	..	..	3,450	3,450
	{ 1962	..	..	..	..	3,204	3,204

Private Slaughterhouses.—The licences of the following five private slaughterhouses were renewed during the year:—Leeds Industrial Co-operative Society, Ltd., Danube Road, Leeds; Messrs. T. Adamson and Sons, 16, Gelderd Road, Leeds; Mrs. S. U. Wilson and H. Lunn (trading as Wilson's), Marshall Street, Cross-gates, Leeds; Messrs. C. H. and J. W. Ellison, Cross Lane, Wortley, Leeds; and Mr. E. Taylor, Harrison's Yard, Bramley, Leeds. All have been conducted satisfactorily throughout the year.

Licensing of Premises for the Confinement of Animals awaiting Slaughter.—In accordance with Section 63(2) of the Food and Drugs Act, 1955, applications were granted or renewed for the confinement of animals awaiting slaughter at a slaughterhouse, namely, Leeds Industrial Co-operative Society, Leeds., (lairages in Geldered Road) and fields in York Road in the occupation of Messrs. Wilson.

Knacker's Yard.—There is only one knacker's yard in the city. This is Mr. J. R. C. Wilkinson's yard at 133, Carr Moor Side, Hunslet. The premises were well maintained and conducted during the year. Accordingly, the licence to use these premises for the slaughter of animals not intended for human consumption was renewed. The return required under the Slaughter of Animals (Prevention of Cruelty) Regulations, 1958, showed the number of horses dealt with to be:—

	1961	1962
Horses slaughtered at the knacker's yard	7	..
Horses slaughtered at collieries.. ..	18	17
Horses slaughtered at farms and customers' own premises	12	11
Horse carcasses received	30	42

Slaughter of Animals Act, 1958.—During the year 15 new licences to slaughter or stun animals were granted by the City Council and 124 were renewed.

Whole and Part Carcasses Condemned.—The following table shows the different species of animal and the number of whole carcasses or parts condemned for tuberculosis, cysticercosis and other diseases.

CARCASSES INSPECTED AND CONDEMNED

	Cattle (exclud- ing cows)	Cows	Calves	Sheep and Lambs	Pigs
NUMBER KILLED	33,311	11,565	19,419	175,976	58,502
NUMBER INSPECTED	33,311	11,565	19,419	175,976	58,502
ALL DISEASES EXCEPT TUBERCULOSIS AND CYSTICERCOSIS					
Whole carcasses condemned ..	7	50	203	331	123
Carcasses of which some part or organ was condemned ..	2,551	839	6	8,406	4,273
Percentage of numbers inspected affected with diseases other than Tuberculosis and Cysticerci	7.68	7.68	1.08	4.96	7.51
TUBERCULOSIS ONLY					
Whole carcasses condemned ..	2	1	..	..	11
Carcasses of which some part or organ was condemned ..	41	9	1	..	110
Percentage of numbers inspected affected with tuberculosis ..	0.13	0.08	..	..	0.21
CYSTICERCOSIS					
Carcasses of which some part or organ was condemned ..	26	2	..	..	..
Carcasses submitted to treatment by refrigeration	2	..	..	..	..
Generalised and totally condemned	..	..	..	..	..

Tuberculosis.—The incidence of tuberculosis in cattle continues to decline. Cases of bovine tuberculosis discovered at the city slaughterhouses are reported to the Ministry of Agriculture, Fisheries and Food for veterinary investigation at the premises of origin. A number of animals which were tubercular reactors were received at the Public Abattoir during the year, having been moved under licence for slaughter.

Cysticercus Bovis and Ovis.—Inspection continued during the year in the prescribed manner for the detection of these conditions. 26 bullocks and 2 cows were found to be infested with *Cysticercus Bovis*. 2 beast carcasses were subjected to treatment by refrigeration. Animals infested with this parasite emanated from premises scattered over a wide area; the areas from which they originated were those associated with the activities of hikers and anglers.

The Slaughterhouse (Meat Inspection Grant) Regulations, 1958.—The number of animals slaughtered in Leeds exceeds the city's requirements. This fact is indicated in the following table, which sets out the statistics upon which an application for a meat inspection grant was based:—

	1959-60	1960-61	1961-62	1962-63
Total units inspected	909,150	966,322	1,070,741	1,014,796
*Datum figure	769,950	772,140	767,475	771,960
Export figure	139,200	194,182	303,266	242,836

*Datum figure based upon population $\times$ 1.5 caput figure.

Disposal of Condemned Food.—The wholesale butchers themselves undertook the disposal of condemned carcasses in their ownership, this material being consigned to the firm of A. Bryant and Co., Jerusalem Farm, Thornton, Bradford. Condemned offal is consigned to Messrs. A. Schofield (Pontefract) Ltd., all such material being stained with vegetable dye before its removal from the slaughterhouse premises for sterilisation and conversion into meat meal for animal feeding purposes and for manufacture into fertilisers.

Other condemned food is disposed of by incineration at the Corporation Destructors.

Disposal of Bones, Sheep and Calf Heads.—This material is also disposed of to Messrs. A. Schofield (Pontefract) Ltd., for conversion into fertilisers and animal feeding meal.

Meat and Other Foods Condemned as Unsound.—The total weight of food destroyed by consent during the year was 272,399 lbs. as compared with 294,263 lbs. in the previous year. Details of food destroyed are given in the table which follows.

MEAT, ETC., DESTROYED BY CONSENT

	1962	1961	1960	1959
Beef	30,563 lbs.	40,788 lbs.	66,438 lbs.	94,203 lbs.
Veal	7,616 "	9,514 "	6,045 "	5,649 "
Mutton	15,896 "	18,073 "	16,730 "	25,701 "
Pork	16,017 "	14,911 "	18,524 "	18,973 "
Offals.. ..	89,249 "	78,028 "	109,739 "	145,669 "
Bacon and Ham ..	391 "	907 "	773 "	313 "
Rabbits	1,073 "	699 "	282 "	1,467 "
Poultry	510 "	782 "	715 "	1,476 "
Game.. ..	4 "	151 "	84 "	509 "
Fish	5,405 "	9,049 "	9,905 "	16,123 "
Shellfish	1,524 "	2,050 "	6,596 "	714 "
Vegetables	50,079 "	57,609 "	117,780 "	96,938 "
Fruit	5,737 "	11,774 "	23,065 "	16,787 "
Tinned goods ..	46,105 "	45,769 "	50,835 "	46,363 "
Cheese	481 "	292 "	223 "	70 "
Edible fungi ..	33 "	116 "	74 "	304 "
Bread and Cereals ..	..	..	..	479 "
Flour	..	..	1,605 lbs.	140 "
Confectionery ..	151 lbs.	..	51 "	..
Sundries	1,565 "	3,751 lbs.	4,273 "	3,989 lbs.
Totals	272,399 lbs.	294,263 lbs.	433,737 lbs.	475,867 lbs.

Shellfish.—Fifteen samples of mussels were taken during the year for the purpose of bacteriological examination. Twelve of these samples came from layings in Wales and three from Denmark. The number of faecal coli reported to have been present and the relevant number of samples are indicated in the table below.

No. of samples	Faecal coli per ml. present	Grade
7	less than 1	1
3	1	1
2	2	1
1	3	1
1	16	3
1	more than 18	3

During the year a survey was undertaken by the Meat and Other Foods Inspectors with a view to establishing the principal origins of shellfish coming into the city. These were found to be consigned mainly from Welsh and Danish layings, with smaller quantities from Ireland.

The two samples (both from the same source) classified as Grade 3 were reported to the Sub-Health (Sanitation, Food and Drugs) Committee and details of the samples were forwarded to the appropriate Local Authority in accordance with Section 4 of the Public Health (Shellfish) Regulations, 1934.

During the year a copy of an Order issued by a Local Authority on the East Coast was received. The Order was made as a result of action initiated by this Department and specified that all mussels sold from this source were to be cleansed at an approved establishment or relaid in pure water or, alternatively, sterilised by steam in an approved manner.

Salmon and Freshwater Fisheries Act, 1923.—Three infringements were noted by the inspectors during the year. These were reported to the local officer of the Fishmongers' Company with a view to action by the Company.

Fruit and Vegetables.—The quality and grading of these commodities has improved over the past year. In the case of fruit, this is due in part to the influence of the Home Grown Fruit Association and the increasing use of non-returnable boxes. The improvement of vegetables can be traced to the greater use of crates in substitution for nets.

Rabbits.—A further increase in the weights of rabbits condemned during the year was recorded. The numbers originating from British sources declined, most of the rabbits being imported from Australia and China.

Fish.—The introduction of frozen fish into the market has adversely affected the wet fish trade. Good fish is, however, still expensive. A further increase in the use of non-returnable containers has affected an improvement in the standard of hygiene in this field.

Salmonella Research Samples.—The Department was again requested by the Public Health Laboratory Service to insert swabs in the drainage system of the Public Abattoir and one other slaughterhouse in the city. The swabs were later submitted to bacteriological examination and typing in connection with a programme of research into human food-borne infections.

DISEASES OF ANIMALS

BY

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.
Chief Public Health Inspector

Tuberculosis Order, 1938.—No cases of bovine tuberculosis were reported during the year but a number of tuberculin reactors were received at the Public Abattoir, having been moved from the premises of origin under licence.

Swine Fever Order, 1938.—Eighteen cases of suspected swine fever occurred at premises in Leeds; six of them were at piggeries, the remainder being reported from the city slaughterhouses. Carcases from infected places were disposed of by incineration at a Corporation Destructor under letter of authority from the Chief Public Health Inspector. In the cases diagnosed at the city slaughterhouses, the appropriate portion of the premises was declared to be an "Infected Place" under the Diseases of Animals Act, pending completion of cleansing and disinfection under Departmental supervision.

Regulation of Movement of Swine Order, 1959.—Swine Fever (Infected Areas Restrictions) Order, 1956-58.—During times when swine fever shows no special prevalence, the movement of swine is controlled by the Regulation of Movement of Swine Order, but at times when the disease shows a tendency to become widespread more specific powers are conferred on the Local Authority by the declaration of Swine Fever Infected Areas. Two such Infected Area Orders made during 1962 included parts of the city and the Leeds area was subject to restrictions for several months. During these times the movement of all swine was controlled by licence and the Whitkirk Auction Mart was permitted to operate in respect of animals for immediate slaughter only.

During 1962, 7,595 licences were issued to personal applicants at Market Buildings, and 197 licences were granted at the Whitkirk Auction Mart for animals being moved to slaughterhouses and bacon factories.

One warning letter was despatched to a pig-keeper who had failed to isolate his animals for the requisite number of days on completion of a movement.

Foot-and-Mouth Disease.—No outbreaks of this disease occurred within the city during the year and the city was not directly affected by any restrictions imposed under the Foot-and-Mouth Disease Order.

Fowl Pest Order of 1936.—Three suspected cases of fowl pest were reported during the year at farms or other premises in the city. Form A, declaring the premises to be an "Infected Place" for the purposes of the Diseases of Animals Act, was served in each case. The disease was confirmed in all three cases. Carcases of infected flocks are disposed of by incineration by arrangement with the Ministry of Agriculture, Fisheries and Food.

The Poultry Pens, Fittings and Receptacles (Disinfection) Order, 1952.—**The Poultry Premises and Vehicles (Disinfection) Order, 1956.**—During the year 32 inspectional visits were paid to poultry slaughterers in the city under the first-named Order and 29 under the latter, for the purpose of inspecting premises, vehicles and equipment. No contraventions warranting legal action were found.

The Warble Fly (Dressing of Cattle) Order, 1948.—Copies of the relevant statutory provisions were again delivered to cattle-owners throughout the city, together with pre-paid postcards for return to the Department in the event of the discovery of infestation. Ministry posters were displayed at various points in the city. 82 visits were paid to farms to inspect animals and 968 non-infested cattle were treated voluntarily by the farmers, a figure which is indicative of the continued co-operation of the farmers concerned. Infested animals were inspected by the Department's officers, as were animals consigned to farms in the city on importation licences. The number of infested cattle found showed a considerable decrease (62 as compared with 112 for the previous year).

The following table shows the work for the last three years:—

	1960	1961	1962
Visits paid to farms	82	112	70
Cattle inspected on farms	591	544	1,103
Leaflets and post-cards distributed	45	57	45
Cattle infested	133	112	62
Infested cattle treated	133	112	62
Non-infested cattle treated voluntarily..	701	573	968

Animals (Landing from the Channel Islands, Isle of Man, Northern Ireland and the Republic of Ireland) Order, 1955.—During the year, 3,484 Irish sheep and pigs were received under licence for immediate slaughter at the Public Abattoir and the L.I.C.S. Ltd. Slaughterhouse, Gelderd Road, a decrease of 2,153 as compared with the previous year.

Diseases of Animals Act, 1950 (Second Schedule).—6,444 bovine animals were imported under licence from Ireland for immediate slaughter, a decrease of 2,245 as compared with the previous year. 549 Irish store cattle were consigned from the ports of landing to farms in the city, an increase of 449 as compared with the previous year.

Diseases of Animals (Waste Foods) Order, 1957.—One new application for a licence from a boiling plant operator was granted after the plant and equipment had been inspected and certain works had been carried out. 27 visits were paid in connection with the Order; the number of licensed operators is now 117.

Legal Proceedings.—The case of a vehicle transporting pigs from Buckinghamshire to Wetherby via Leeds during the operation of a Swine Fever Infected Areas Restriction Order was referred to the Town Clerk with a view to legal proceedings because the animals were being moved without a licence. The vehicle had been involved in a slight mishap within the city boundary which had necessitated de-trucking the animals in order that casualties could be consigned for immediate slaughter. It was decided that the matter be dealt with by sending a warning letter. There were no other contraventions necessitating legal proceedings.

General Sanitation

INSPECTION OF FACTORIES

BY

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.

Chief Public Health Inspector

AND

J. NORTON

*Supervisory Public Health Inspector,**Factories Section*

The Factories Act, 1961, requires the Medical Officer of Health to report in his Annual Report upon the administration of Part I (Health—General Provisions) and Part VIII (Home Work) of the Act.

The Factories Section of the Department deals with the inspection of factories and offices and with the administration of the Clean Air Act, 1956, particularly with the making of Smoke Control Orders. The inspection of shops is now carried out by district public health inspectors.

Factories.—The work done by the Factories Section under the Factories Act, 1961, is shown in the four tables on pages 179 to 181. The inspections were fewer than last year owing to the great amount of work done in connection with smoke control.

The tables which deal with outwork are compiled from inspections made by district public health inspectors, to whom this duty was transferred at the beginning of the year.

The Register of Factories contains the addresses of 160 non-mechanical and 2,791 mechanical factories. In addition, there were 69 premises to which Section 7 of the Factories Act, 1961 (provision and maintenance of sanitary accommodation) applies; these are mainly places where works of building and engineering construction are in progress.

25 visits were paid to sites on which works of building or engineering construction were in progress. The works on many of these sites began before the current year. Several verbal requests were made that satisfactory sanitary accommodation be provided or that existing accommodation be improved, and all were complied with. The larger sites where work is likely to continue for a long period are generally provided with water-closets and urinals, but the smaller sites often can accommodate only chemical closets in temporary structures. The disposal of the contents of these conveniences is a matter for arrangement with the Cleansing Department.

1,240 inspections of factories, both mechanical and non-mechanical, were made and 165 contraventions of the Act and other defects were found; 123 of these were remedied by the end of the year. Most defects were remedied immediately by the occupiers of factories following verbal intimation by the inspector, but 86 letters were sent out pointing out that contraventions existed. There has been no necessity during the year to institute proceedings to enforce compliance.

The table listing contraventions of the Factories Act on page 179 includes 50 reports received from H.M. Inspectors. 47 of these referred to unsuitable or insufficient sanitary conveniences for employees, and 3 to the lack of cleanliness in workrooms. All of these complaints have been dealt with. Three factories where no Abstract of the Act were displayed were referred to H.M. Inspectors for their attention as were reports of a defective and dangerous floor in a mechanical factory, of petrol fumes from a transport truck causing a nuisance in a factory, and fumes from a chemical process carried on in a factory.

The table which is headed "Other Matters" lists 146 bakehouses, of which 145 are mechanical bakehouses. There are also several small family bakehouses which H.M. Inspectors do not regard as registrable under the Factories Act. There are no basement bakehouses in the city certified as suitable under the Factories Act.

General.—Inspectors paid many visits to factories to deal with matters outside the scope of the Factories Act. For example, nuisances in factories are dealt with under the Public Health Act, smoke observations and inspection of boiler plant are carried out under the Clean Air Act, and factories in which food is prepared or handled are regularly inspected to ensure that the provisions of the Food and Drugs Act, 1955, and the Food Hygiene (General) Regulations, 1960, are complied with. Details of this work are to be found in the general table printed on page 193 and include 50 visits to canteens and other food manufacturing premises. 32 contraventions of the Food Hygiene (General) Regulations were discovered and dealt with. Under the Public Health Act, an investigation was made into fumes causing a nuisance from a patent machine for the colour printing of fabrics. Many other types of complaints are received, some of which concern factories registered under the Alkali, etc. Works Regulations Act, 1906. Close liaison exists with the District Inspector of Alkali Works and all complaints about registered factories are referred to him after the initial investigation by public health inspectors.

Defects in the structure of factory buildings may affect the health and comfort of workpeople and must be remedied. Such nuisances include leaking roofs, dampness due to defective and leaking rain-water fallpipes and eaves-spouts. Details of this work are included in the table of general work on page 195.

There is an arrangement between the City Engineer's Department and the Health Department whereby plans of new factories and offices submitted for planning and byelaw approval are referred to this Department for comment upon any aspect which may affect the health, safety and welfare of persons employed therein. Similar arrangements ensure that new food-preparing factories, factory canteens and kitchens, are so constructed as to comply with the Food Hygiene (General) Regulations.

Outworkers.—The number of outworkers on the August list was 815. 722 of these were concerned with the making of wearing apparel, 3 with the making or repair of umbrellas, one with the making of boxes, and 89 with textile weaving. 205 addresses of outworkers were received from other authorities and 272 sent from Leeds to other authorities.

Workplaces.—276 visits were paid to workplaces, including offices. In 4 cases only was it necessary to serve Notice requiring defects to be remedied.

Shops.—Under Section 38 of the Shops Act, 1950, 185 visits were made by public health inspectors, and in one case only was it necessary to require the provision of additional sanitary accommodation; otherwise conditions generally were found satisfactory.

INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH
(INCLUDING INSPECTIONS MADE BY PUBLIC HEALTH 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	160	17	2	..
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	2,791	1,223	84	..
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	69	25	..	..
Total	3,020	1,265	86	..

CASES IN WHICH DEFECTS WERE FOUND

Particulars	No. of Cases in which defects were found				No. of cases in which prosecutions were instituted
	Found	Remedied	Referred		
			To H.M. Inspector	By H.M. Inspector	
Want of cleanliness (S. 1) ..	3	3	..	3	..
Overcrowding (S. 2)	..	..	..	..	..
Unreasonable Temperature (S. 3)	..	..	..	..	..
Inadequate Ventilation (S. 4) ..	..	..	..	..	..
Ineffective drainage of floors (S. 6)	..	..	..	..	..
Sanitary Conveniences (S. 7)—					
(a) Insufficient	7	3	..	5	..
(b) Unsuitable or defective ..	153	111	..	40	..
(c) Not separate for sexes ..	2	3	..	2	..
Other offences against the Act (not including offences relating to Outwork)	..	..	3	..	..
Total	165	120	3	50	..

Noise.—The number of complaints of nuisance from noise and vibration is increasing. During the year 23 complaints were received of which 5 only were unjustified. 14 complaints were satisfactorily dealt with either by removal of machinery to new sites or by fitting silencing devices. 4 cases were still under investigation at the end of the year and these are proving particularly intractable; they all concern works in which sheet metal is reformed and shaped by hammering. There is no easy remedy for this type of nuisance. A difficulty in these cases is the gradual change of use of factories from one type of work to another. It is possible in collaboration with the Town Planning Section of the City Engineer's office to secure the siting of new factories in which noise may be produced in a position where no nuisance will be caused, but it is difficult to deal with a gradual change of user.

Notices requiring the abatement of noise nuisances have been served during the year but it was not necessary to institute legal proceedings against any offender; in general managements are ready to co-operate, and in some instances have spent considerable sums of money on re-organising their production lines and installing silencing equipment.

OUTWORK

Sections 133 and 134

Nature of Work	SECTION 133			SECTION 134		
	No. of out-workers in August list required by Sect. 133(1)(c)	No. of cases of default in sending lists to the Council	No. of prosecutions for failure to supply lists	No. of instances of work in unwholesome premises	Notices served	Prosecutions
Wearing apparel:—						
Making, etc., Cleaning and Washing ..	722	..	..	..	..	..
Umbrellas	3	..	..	..	..	..
The making of boxes or other receptacles or parts thereof made wholly or partially of paper	1	..	..	..	..	..
Textile weaving ..	89	..	..	..	..	..
Total	815	..	..	..	..	..

OTHER MATTERS

	February	August
LISTS OF OUTWORKERS RECEIVED FROM OCCUPIERS OF PREMISES IN THE CITY	149	149
(a) (i) Number of 'Contractors' in the City included in the above lists	211	201
(ii) Number of 'Contractors' outside the City included in the above lists	28	26
(b) (i) Number of 'Outworkers' in the City included in the above lists	742	614
(ii) Number of 'Outworkers' outside the City included in the above lists	127	91
Details of (a) (ii) and (b) (ii) subsequently forwarded to other local authorities		
LISTS OF OUTWORKERS RECEIVED FROM OTHER AUTHORITIES	13	12
(c) (i) Number of 'Contractors' in the City included in the above lists	82	92
(ii) Number of 'Outworkers' in the City included in the above lists	17	14
	Yearly Total	
Reminders to occupiers as to returns of Outworkers	353	
Visits of Inspectors to Homeworkers premises ..	301	
HOMWORK IN UNWHOLESOME PREMISES:		
Instances	..	
Notices (S. 134)	..	
Prosecutions	..	
Matters notified to H.M. Inspectors of Factories:—		
Failure to affix Abstract of the Factories Act, 1937, (S. 128)	3	
Action taken in matters referred by H.M. Inspectors:		
Notified by H.M. Inspectors	50	
Reports (of action taken) sent to H.M. Inspectors ..	47	
Total number of factories on Register	2,951	
The above includes 146 bakehouses		

SANITATION

BY

J. GOODFELLOW, F.R.S.H., M.A.P.H.I.

Chief Public Health Inspector

Water.—During the year 414 samples of drinking water were taken by the Department for bacteriological examination. Of these, 394 were taken from the Corporation's mains supply, 17 from springs, 2 from bore holes and one from a well. 15 samples of town's water were unsatisfactory but subsequent samples taken from the same domestic taps proved satisfactory. 10 samples taken from springs were unsatisfactory.

Sewage Disposal.—(Report of Mr. D. Currie, City Engineer).—During 1962, 6 per cent. of the bacteria beds were out of action while repairs were in progress. The corresponding figure for 1961 was 6 per cent. The average analyses of final effluent at Knostrop Sewage Works from January 1st to December 31st, 1962, were:—

Oxygen absorbed in 4 hours	..	2.84 parts per 100,000
Suspended solids ..	..	6.3 parts per 100,000

Extensive experimental work is still being carried out at Knostrop Sewage Works with a view to determining the best method of achieving the standard of effluent which will be required by the River Board. Consideration of the design for extensions as are envisaged is proceeding and it is anticipated that a programme of construction will commence in the comparatively near future.

Public Cleansing.—(Report of Mr. G. F. Mellor, Director of Public Cleansing).—Particulars of refuse collection and disposal during 1962 are as follows:—

	<i>Tons</i>
Household refuse and nightsoil collected ..	167,989
(a) dealt with at destructors	70,120
(b) disposed of at tips and for agricultural purposes	82,638
(c) Number of tons of cesspool contents discharged into Corporation sewers.. ..	15,231

The quantity of screened refuse dust sold as manure to farmers was 5,880 tons.

The number of dustbins provided and delivered to dwelling-houses in Leeds during the year was 7,007. The total number provided since the inception of the scheme in December, 1946, is 186,095.

Water Supply.—(Report of Mr. K. L. Forster, General Manager and Engineer of the Waterworks Department).—Bacteriologically the water was satisfactory during the year. In April there was some deterioration in the taste of the water due to algal growths in the storage reservoir at Eccup. 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. 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
Probable No. of Coliform bacilli in 100 ml. water ..	309	240
Probable No. of B.Coli Type 1 in 100 ml. water ..	309	173
Anaerobes in 40 ml. water (Wilson and Blair's Test) ..	53	3
Agar Plate Count, 48 hours at 37°C. Colonies per ml. ..	51	29

WATER GOING INTO SUPPLY AFTER FILTRATION AND CHLORINATION				
(a) Water entering the Distribution System				
No. of samples Examined	Ministry of Health Classification (1956)			
	Class 1	Class 2	Class 3	Class 4
980	99.2%	0.5%	Nil	0.3%

(b) Samples taken from Service Reservoirs and Consumers' Premises (excluding samples taken by Public Health Dept.)			
No. of Samples	Satisfactory	Suspicious	Unsatisfactory
881	98.7%	0.3%	1.0%

During the year 181 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 CHEMICAL ANALYSES OF THE PUBLIC WATER SUPPLY FOR THE YEAR ENDED DECEMBER 31ST, 1962. SUMMARY BASED ON 181 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	8	Less than 2
*Colour (Hazen Units)	18	48	5
*pH	7.45	8.6	6.9
Free Carbon Dioxide	1.6	2.4	1.2
Alkalinity (Carbonate or temporary hardness) (in terms of CaCO_3)	20.5	27	15
Total Hardness (in terms of CaCO_3)	51.0	56	46
Non-Carbonate (Permanent) Hardness (in terms of CaCO_3)	30.5	38	22
Oxygen absorbed from Permanganate in 4 hours at 27°C.	1.65	3.1	0.7
Ammoniacal Nitrogen (in terms of N)	0.004	0.010	0.002
Albuminoid Nitrogen („ „ „ „)	0.045	0.097	0.015
Nitrite Nitrogen („ „ „ „)	Nil	Nil	Nil
Nitrate Nitrogen („ „ „ „)	0.50	0.65	0.10
Chlorine present as Chloride (in terms of Cl)	16.5	20	14
Silica (in terms of SiO_2)	7	9	6
Iron compounds (in terms of Fe)	0.05	0.4	Nil
Lead „ („ „ „ Pb)	Less than 0.01	0.1	Nil
Total solids dried at 180°C.	100	116	91
*Electrical Conductivity—			
Micro-ohms/ CM_3 at 20°C.	145	155	125
Residual Chlorine (on reaching consumer)	Nil/Trace	—	—

* 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.

Plumbo-Solvency.—Water leaving the storage reservoir at Eccup is treated with lime, at the rate of approximately 5 p.p.m. with the object of producing a water which, after filtration and chlorination, is not plumbo-solvent.

Regular determinations of pH and alkalinity are made on samples of water taken from various points in the distribution system and 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 during 1962 was 0.1 p.p.m.

Action in respect of any form of contamination.—There were no instances of serious pollution during the year. On two occasions unsatisfactory samples were obtained from areas where alterations to the mains had been made. On both occasions, satisfactory samples were obtained after thorough flushing of the affected mains had been carried out.

Particulars of the number of dwelling-houses and the number of the population supplied from the public water mains as at 31st March, 1963.—(a) (i) Number of dwelling-houses and dwelling-houses attached to shops within the City of Leeds Boundary—183,370 (estimated); (b) Population supplied from the public water mains: (i) direct to houses within the City of Leeds Boundary—514,640, (ii) by means of stand-pipes—none.

Keeping of Animals.—The number of pig-keepers in the city increased to 137 and the number of pigs kept was of the order of 3,000.

Closet Accommodation.—A total of 154 statutory notices was served under the provisions of Section 45, Public Health Act, 1936, in connection with closet accommodation. In the owners' default, the water-closets of two houses were repaired at a cost of £3 14s.

Offensive Trades.—The number of premises in the city where offensive trades is carried on is 107. 48 visits of inspection were made.

Common Lodging Houses.—168 visits of inspection were made to the six common lodging houses in the city.

Houses-let-in-Lodgings.—The total number of visits paid to houses of this type was 242.

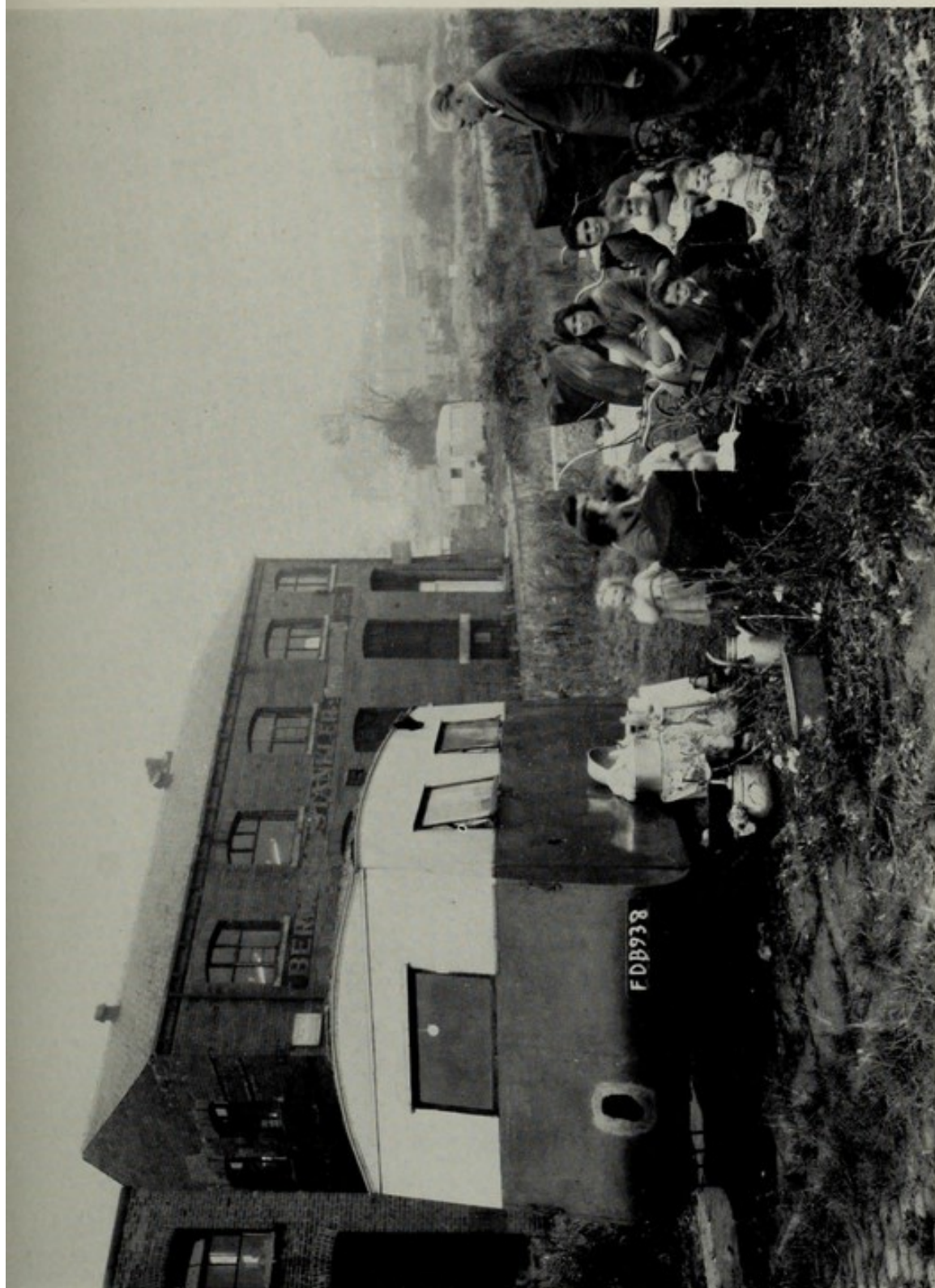
Caravan Sites.—*Wentworth Farm, New Farnley.*—The only licence under the Caravan Sites and Control of Development Act, 1960, continued in force, subject to conditions given in detail in last year's report.

Sites used by Showmen.—Sites in various parts of the city have been used for many years by *bona fide* showmen, mainly as winter quarters, and give rise to few complaints because of the reasonable conduct of the occupiers. Amenities are not as good as could be desired but in response to an approach by the Showmen's Guild, consideration has been given to setting apart a unified, more well-ordered site for this purpose. This would be a welcome development but, as yet, no suitable site has been found.

Unauthorised Camping by Vagrants.—This has always been a problem and has generally been met by vigilant inspection, speedy discovery and pressure to quit which has usually been effective and such people have been on their way again at least in a few days. Police, together with public and private owners of land, have acted in co-operation with public health inspectors and the problem has, in the past, been under reasonable control.

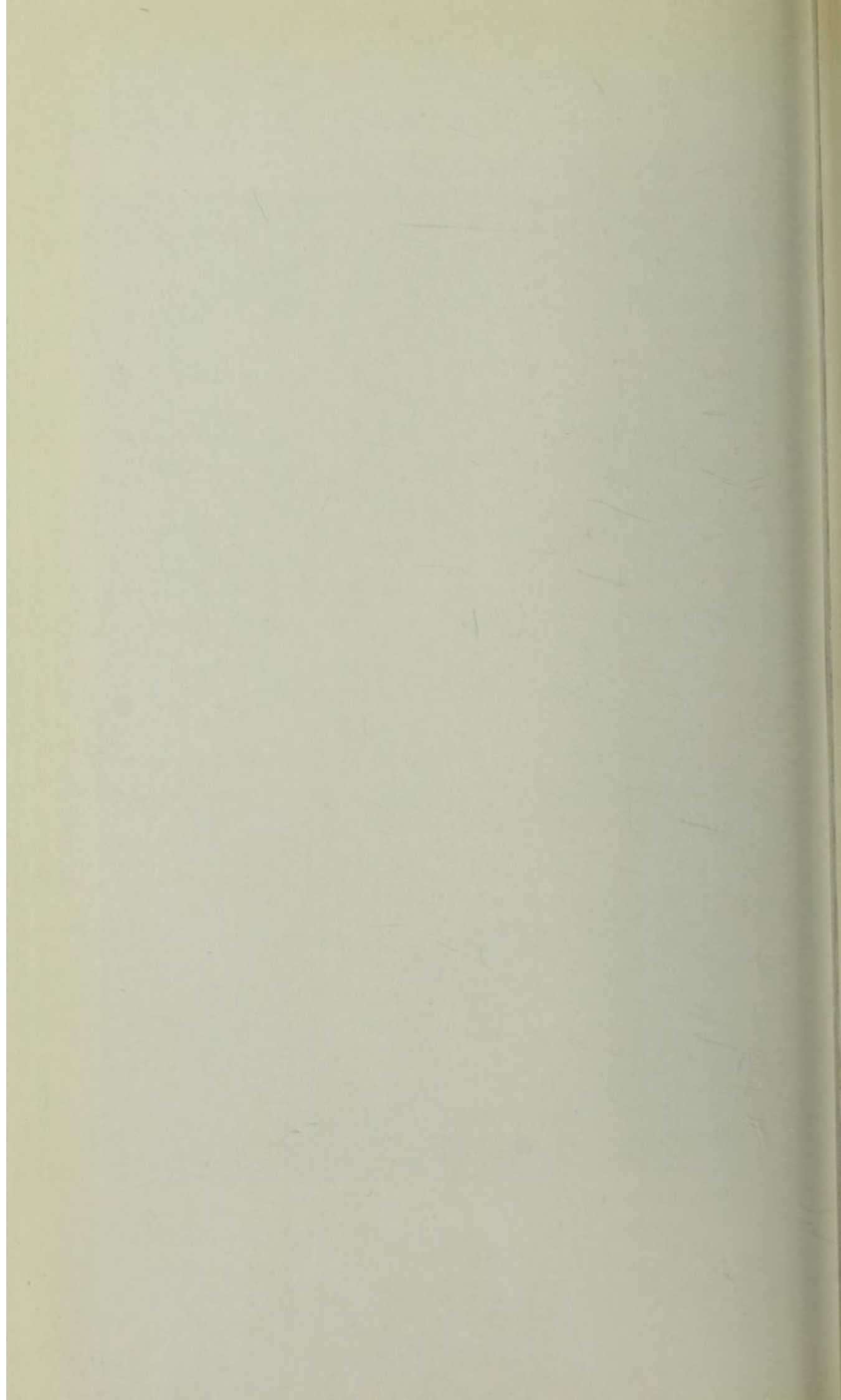
This year the problem grew to much larger proportions. In a large city there are always areas of derelict land resulting from slum clearance, and also other tracts of undeveloped land. Such open spaces may be in local authority ownership but some are privately owned.

Unauthorised campers include "tinker" types and alleged "scrap dealers" and this year there was a large influx of "Irish gypsies" of these types. The accommodation of these folk varied from modern trailer caravans to the old bow type horse-drawn caravan and even tents. Groups squatted on any available waste land, even near the busy City Centre. Verbal remonstrances were ineffective. Movement, if it did result, was often movement from one unauthorised site to another which was no remedy and made tracing more difficult. Scrap dealing by such persons resulted in discarded waste being strewn about the sites. Sanitary accommodation was non-existent, nor were there any bins for waste, so that conduct offensive to public decency and hygiene resulted. The man in the family might be temporarily missing, or even in prison, leaving a family ostensibly living on public allowances. Theft or metal pilfering in houses nearby, whether occupied or unoccupied, was alleged and fear of violence worried local residents so that they provided necessities such as water even though they had no desire to facilitate the stay of these new neighbours.



UNAUTHORISED CAMPING BY VAGRANTS

Three caravans which appeared on the Albert Grove (Camp Road) Clearance Area in September, 1962, and removed after legal proceedings. This area is awaiting residential redevelopment by the Corporation.



It was decided that Court proceedings should be taken in all possible cases under the Leeds Corporation Act, 1956, which prohibits casual stationing of movable dwellings on unauthorised sites for any period longer than 14 consecutive days, or longer than 28 days in any consecutive period of 12 months. The penalty for offences is a £10 maximum fine plus a daily penalty of £5.

Time until the squatting is discovered, plus at least 14 days, must elapse before an offence can be reported for legal proceedings. Unavoidable delays before a Court hearing amounted to one, two or three months. The offenders were thus at liberty to remain for a month or two and to disappear either before or after receiving the summons. In some cases they attended Court. Their appearance there was abject; ignorance and apparent poverty alone were powerful influences against any severe penalty. A little native wit and an apparent willingness to go, albeit belatedly, because the Court required it, appeared to mitigate their offences. Penalties were imposed, often amounting to the equivalent of a modest ground rent for the stay. Prosecution had one salutary effect—a second appearance at Court would obviously be inadvisable and so the offence ceased.

The time involved on such cases was very heavy. Regular observation of all offenders had to be kept, if effective evidence was to be given in Court. Legal action had useful results where semi-permanent squatters had intended to remain for long periods and whose identity was known. With more mobile "invaders" about whom little was known, legal proceedings were less effective.

The first hearings were in July with others in October and November. The maximum fine of £10 was imposed in two cases, £5 in one case, £2 in two cases and £1 in one case. No daily penalties were imposed. Several cases were still pending at the year's end.

Canal Boats.—During the year the registrations of two canal boats no longer based on Leeds were cancelled. The number of canal boats on the register at the end of the year was 118. Periodical visits of inspection were made to wharves and locks and 239 boats inspected.

Public Sewers.—1,113 public sewers affecting 3,432 houses or other premises were cleansed at a cost to the Department of £2,393 4s. 6d. Works of repair or maintenance were carried out to 87 defective public sewers and the cost, amounting to £820 13s. 8d., was recovered from the owners of the premises served by the sewers.

Drains.—It was necessary to carry out 3,490 drain tests, 84 on new drains relaid in place of those found defective. A large number of informal notices for drainage repairs was served on owners of property and in 330 cases it was necessary to serve statutory notices under Section 39 of the Public Health Act, 1936. The drains of 7 houses were repaired or renewed by the Department in default as a matter of urgency at a cost of £19 17s. 11d. which was recovered from the owners of the premises concerned.

220 statutory notices were served under Section 17, Public Health Act, 1961, requiring the removal of stoppages from drains within 48 hours. 93 such drains were cleansed by the Department in default at a cost of £80 2s. 5d. which was recovered from the owners concerned. The drains of 1,026 houses or other premises belonging to Corporation Departments were cleansed, repaired or renewed at a cost of £2,091 7s. 10d. to the Departments concerned.

The cleansing and repair of drains serving 548 houses was undertaken by the Department under Section 22, Public Health Act, 1961, at the owners' request and the cost of this work, amounting to £946 14s. 5d., was charged to the owners.

Removal of Persons in need of Care and Attention (Section 47, National Assistance Act, 1948).—6 certificates were issued by the Medical Officer of Health under Section 47 of the National Assistance Act, 1948. The persons concerned, who were living in insanitary surroundings and unable to devote to themselves proper care and attention, were admitted to hospital.

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 has continued during the year. 1,593 such plans were examined and comments made regarding necessary amendments.

District Inspection and Investigation of Complaints.—The total number of houses surveyed and examined was 19,695. 12,660 complaints were investigated and 9,392 nuisances and housing defects remedied. The tables on pages 193 to 196 give details of the work done by public health inspectors.

Notices.—The number of informal notices served in relation to Public Health Act matters was 3,145 and 1,504 statutory notices were served.

Hairdressers and Barbers.—Under Section 244 of the Leeds Corporation Act, 1956, 5 persons carrying on the trade of hairdresser or barber and their premises were registered. The total number on the register at 31st December, 1962, was 479.

Sampling of Swimming Bath Waters.—50 samples of public or school swimming bath water were taken by the public health inspectors and submitted to the Public Health Laboratory Service for bacteriological examination. In addition, 25 samples were submitted to the City Analyst for chemical analysis. Copies of the reports on the samples were forwarded either to the Director of Baths and Wash-houses or the Director of Education for information and action.

Pet Animals Act, 1951.—Under the provisions of Section 1 of the Pet Animals Act, 1951, 5 licences were granted during the year to persons keeping pet shops, and 28 licences were renewed. Visits of inspection were made to all licensed pet shops to ensure that the conditions of the licence were complied with.

Rodent Control.—(Report of Mr. W. Pickles, Public Health Inspector in charge of Rodent Control).—*Complaints.*—During the year 2,766 complaints were received by the Rodent Control Section. Of these, 1,523 referred to rats, 1,134 to mice, 65 to pigeons, 19 to damage by rabbits and 25 miscellaneous which included 9 of nuisance from magpies, rooks, jackdaws and starlings, 5 of sparrows, 4 of squirrels, 4 of cats, 2 of moles and one of bats.

The following table shows the number of complaints of rats and mice analysed according to months and types of premises affected.

1962	Rats					Mice				
	B	D	LA	A	Total	B	D	LA	A	Total
January	19	73	4	2	98	26	54	9	..	89
February	21	68	6	..	95	29	46	13	..	88
March ..	29	103	2	..	134	25	51	6	..	82
April ..	30	95	5	1	131	28	38	4	..	70
May ..	41	133	7	..	181	41	52	13	..	106
June ..	31	89	8	..	128	29	44	6	..	79
July ..	30	104	8	..	142	29	39	9	..	77
August ..	36	89	2	..	127	22	44	6	..	72
Sept. ..	34	81	9	..	124	37	70	11	..	118
October ..	35	109	8	..	152	38	66	16	..	120
Nov. ..	38	96	5	..	139	52	77	8	..	137
Dec. ..	22	47	3	..	72	37	53	6	..	96
Total	366	1087	67	3	1,523	393	634	107	..	1,134

B—Business Premises
D—Dwellings

LA—Local Authority's premises
A—Agricultural or Horticultural Premises

The totals for business premises and dwellings include the following in Corporation ownership:—complaints of rats—22 business premises and 245 houses; complaints of mice—19 business premises and 207 houses.

Inspections—13,481 inspections and visits were made in connection with complaints received and for the servicing of infested premises. 9,709 Corporation sewer manholes were inspected, giving a total of 23,190 inspections.

Sewer Baiting.—The normal procedure for sewer baiting continued until November when, owing to further information from the Ministry regarding tests of fluoracetamide it was agreed that this poison be tried. Accordingly, several areas were selected for treatment where properties had been demolished under slum clearance programmes and where surface and sewer infestation was fairly high. The baiting will be repeated with a 3-month interval, after which test baits will be laid to ascertain the extent of clearance. If this poison proves successful it will be adopted in other areas of the city.

Treatments.—During the year 1,826 premises were serviced for rat or mouse infestation (450 business premises, 1,244 private dwellings, 131 Corporation premises and one agricultural property). 1,415 new infestations were recorded. 751 were mouse infestations and 644 rat infestations. Of the new infestations, 1,397 were treated by the Rodent Control Section. Some very small infestations of mice were treated by the occupier after advice from the Section and in some cases where, owing to young children, poison bait was not suitable, traps were loaned. Semi-permanent baits at business premises, laid after the initial treatment, were inspected monthly, principally as an insurance against re-infestation.

Prevention of Damage by Pests Act, 1949.—69 informal notices were served for structural proofing. Other Corporation Departments co-operated in controlling rodents and their help is much appreciated. Owners and occupiers of premises readily accepted the Section's advice on proofing and treatment.

Warfarin.—At certain premises, immunity of mice to anti-coagulants causes trouble and at one restaurant where treatment was not proving effective the Ministry, after trapping live mice, confirmed that the mice were highly resistant. As it was not practicable in some cases to switch to a direct poison, the Section experimented with a mixture of poison bait and, although at two premises this appeared to be effective, it is too early to be sure that this was a successful alternative to Warfarin.

No estimated kill by poison bait has been made but during the year 2,934 dead rodents (including 12 rabbits) were collected.

Pigeons.—72 complaints were received from occupiers of dwellings and business premises of nuisance from feral pigeons. 1,027 inspections and visits were made and 1,271 birds destroyed by shooting or trapping.

General.—Complaints were received from two hospitals of rooks and magpies being a danger to young babies. As the air rifle used for shooting pigeons was not effective against these birds, the Health Committee purchased a 12-bore shot gun which gave satisfactory results.

One cannot stress too often the importance in rodent control of the proper disposal of waste food and methods of stacking food-stuffs so that the danger of infestation is reduced to a minimum. Furniture, stoves, refrigerators, etc. used in cafes and restaurants should have rollers or castors so that periodically they may be moved away from walls to facilitate proper cleaning; this would be a big step towards the elimination of rodents. Architects and contractors could help in rodent control if they would bear in mind the prevention of infestation when designing new, or altering old, buildings. It is much better to "start right" than to expend money on carrying out proofing works afterwards.

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1962.

ANALYSIS OF INSPECTIONS	North Div.	South Div.	East Div.	West Div.	Factories Div.	Housing Div.	(a) Canal Boats & Common Lodging Houses (b) Rodent	Food and Dairies	Total
DWELLINGS.									
Houses unfit and capable of repair ..	..	..	..	..	..	..	..	..	..
Houses unfit and incapable of repair ..	..	..	..	..	..	52	..	..	52
Houses inspected for Demolition Orders ..	..	..	..	..	..	131	..	..	131
Houses inspected for Closing Orders ..	..	..	..	..	..	277	..	..	277
Houses inspected in Clearance Areas ..	..	..	..	..	..	294	..	..	294
Houses-let-in-lodgings ..	199	..	5	22	..	16	..	..	242
Separate dwellings within houses-let-in-lodgings ..	756	..	8	54	..	1	..	..	819
Houses surveyed for C.P.O. ..	98	..	..	7	..	327	..	..	432
Houses for overcrowding ..	14	16	6	5	..	..	..	..	41
Houses for preferential rehousing ..	52	21	24	29	..	45	..	..	171
Houses for Certificates of Disrepair ..	10	6	12	11	..	..	..	..	39
Houses for complaints and defects ..	4,295	1,854	1,786	2,352	..	..	..	..	10,287
Houses for drainage ..	2,537	2,061	3,289	3,725	16	..	..	..	11,628
Houses for ashes accommodation ..	93	5	36	74	..	..	..	..	208
Houses for closet accommodation ..	402	374	116	211	..	..	..	..	1,103
Houses for infectious diseases ..	110	..	4	4	..	..	..	..	118
Houses for filthy/verminous conditions ..	49	21	78	39	..	..	..	..	187
Housing re-inspections ..	4,502	5,390	2,605	3,451	2	342	..	..	16,292
Common lodging houses ..	..	..	..	..	..	24	(a) 144	..	168
Canal boats ..	..	..	..	..	..	..	(a) 239	..	239
Caravan sites ..	4	2	..	..	..	153	(a) 233	..	392
Tents, vans or sheds ..	5	1	17	..	..	28	(a) 655	..	706
Other visits not included above ..	149	646	254	269	..	5,728	(a) 668	..	7,714
DISCRETIONARY/STANDARD GRANTS.									
Visits to determine "life" ..	..	..	..	..	..	1,037	..	..	1,037
Initial survey for Discretionary Grant ..	90	197	103	225	..	..	..	..	615
Initial survey for Standard Grant ..	31	91	15	46	..	..	..	..	183
Inspection of work in progress ..	157	1,460	99	537	..	1	..	..	2,254
Visits for enquiry ..	150	445	202	616	..	4	..	..	1,417
FOOD AND DRUGS PREMISES.									
Dairies ..	..	..	..	..	..	..	..	} 649	} 649
Pasteurising and sterilising plants ..	..	..	..	..	..	..	..		
Bottled Milk Shops ..	..	..	..	..	..	..	..	..	..
Ice-cream ..	19	101	45	82	..	..	..	..	247
Fried Fish ..	123	112	16	48	..	..	..	..	299
Pickles and sauces ..	..	..	1	2	..	..	..	..	3
Sausages and meat products ..	21	60	29	22	3	..	..	..	135
Other registered premises ..	11	..	3	10	..	..	..	..	24
Bakehouses ..	128	54	43	46	15	..	..	10	296
Private slaughterhouses ..	..	..	..	..	..	..	..	1,227	1,227
Butchers ..	83	85	46	81	..	..	..	45	340
Provision merchants ..	53	13	60	105	7	..	..	309	547
Restaurants, cafes, canteens, kitchens ..	215	40	834	64	20	..	..	34	1,207
Markets ..	..	..	..	..	..	..	..	154	154
Other food premises ..	146	43	36	127	3	..	..	48	403
Food manufacturing premises ..	..	..	..	..	..	..	..	39	39
Visits for enquiry ..	17	23	90	3	3	..	..	465	601
No access visits ..	..	..	..	..	..	..	..	4	4
Attendance at Court ..	..	..	..	..	..	..	..	12	12
Visits re unsatisfactory samples ..	..	..	..	..	..	..	..	82	82
Notices served under Reg. 20 M. & D Regs. ..	..	..	..	..	..	..	..	..	..
PHARMACY AND POISONS ACT.									
Visits paid to premises:—	..	..	..	..	..	..	..	..	..
New applicants for listing ..	..	..	..	..	..	..	..	..	..
Routine inspection ..	..	..	..	..	..	..	..	..	..
Unlisted premises ..	..	..	..	..	..	..	..	..	..
Other visits ..	..	..	..	..	..	..	..	9	9
No access visits ..	..	..	..	..	..	..	..	..	..
FERTILISERS AND FEEDING STUFFS ACT.									
Visits paid to premises:—	..	..	..	..	..	..	..	..	..
Enquiries ..	..	..	..	..	..	..	..	..	..
Other visits ..	..	..	..	..	..	..	..	..	..

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1962.—contd.

ANALYSIS OF INSPECTIONS	North Div.	South Div.	East Div.	West Div.	Factories Div.	Housing Div.	(a) Canal Boats & Common Lodging Houses (b) Rodent Houses	Food and Dairies	To
RAG FLOCK AND OTHER FILLING MATERIALS ACT.									
Visits paid to premises:—									
57. Registration	..	..	..	..	..	..	..	..	
58. Licensing	..	..	..	..	..	..	..	..	
59. Routine inspection of Registered premises ..	..	..	..	..	..	..	..	..	
60. Routine inspection of Licensed premises ..	..	..	..	..	..	..	..	..	
61. Enquiries	..	..	..	..	..	..	..	..	
62. No access visits	..	..	..	..	..	..	..	..	
DISEASES OF ANIMALS ACTS.									
Visits paid to piggeries:—									
63. General inspection	..	..	..	..	..	..	..	63	
64. Inspection of Boiling Plants	..	..	..	..	..	..	..	27	
65. Enquiries	..	..	..	..	..	..	..	190	
Visits paid to farms:—									
66. Warble Fly	..	..	..	..	..	..	..	82	
67. T.B. Order—Disinfection	..	..	..	..	..	..	..	..	
68. Foot and mouth disease	..	..	..	..	..	..	..	..	
69. Anthrax	..	..	..	..	..	..	..	..	
70. Sheep Dipping Regulations	..	..	..	..	..	..	..	1	
Visits paid to:—									
71. Whitkirk Auction Mart	..	..	..	..	..	..	..	36	
72. Poultry Dealers	..	..	..	..	..	..	..	22	
73. Poultry Market and Shows	..	..	..	..	..	..	..	..	
TRADES AND BUSINESSES.									
74. Factories with mechanical power	..	..	..	..	1,223	..	..	..	1,223
75. Factories without mechanical power	..	..	..	..	17	..	..	..	17
76. Other premises, constructional works, etc. ..	1	..	..	..	24	..	..	..	25
77. Offices	3	..	..	..	7	..	..	..	10
78. Workplaces	9	2	7	1	247	..	..	..	266
79. Hairdressers	16	2	8	19	..	..	..	..	45
80. Shops	27	5	93	15	45	..	..	..	180
81. Outworkers	64	102	66	35	34	..	..	..	301
82. Offensive trades	12	11	3	22	..	..	..	..	48
83. Pet Shops	9	6	7	6	..	..	..	..	28
84. Visits for enquiry	7	5	79	9	633	..	..	..	733
SMOKE CONTROL—GENERAL.									
85. Smoke observations	25	6	24	27	219	..	..	..	291
86. Visits for grit emissions	..	..	2	..	2	..	..	..	4
87. Inspection of boiler plant	21	..	4	2	143	..	..	..	170
88. Visits for prior approval of furnaces	..	..	..	..	1	..	..	..	1
89. Visits for height of chimneys	..	..	..	..	35	..	..	..	35
90. Atmospheric pollution records	..	..	..	..	2,527	..	..	..	2,527
91. Visits for enquiry	2	..	13	4	34	..	..	..	53
SMOKE CONTROL AREAS									
92. Preliminary enquiries	..	..	..	..	421	..	..	..	421
93. Inspection of approved appliances installed ..	..	..	..	..	1,171	..	..	..	1,171
94. Smoke observations	2,439	17	36	10	364	..	..	..	2,866
95. Visits for enquiry	148	5	25	..	2,857	..	..	..	3,035
GENERAL.									
96. Rodent infestations	..	..	..	..	..	..	*(b) 23,190	..	23,190
97. Visits <i>re</i> Pigeons	..	1	..	7	..	..	(b) 1,027	..	1,034
98. Farms and agricultural units	1	3	..	..	..	..	..	..	4
99. Stables	2	..	..	3	..	..	..	..	5
100. Pig-styes	15	31	97	15	..	..	..	..	158
101. Poultry and other animals	5	4	..	..	..	..	..	..	9
102. Shellfish	..	..	..	..	..	..	..	18	18
103. Infestations of food	..	..	..	..	..	..	..	..	..
104. Condemnation of food	..	..	..	..	..	..	..	2	2
105. Water supply	222	122	136	181	2	..	..	..	663
106. Infirm and sick persons	3	..	..	..	..	..	..	..	3
107. Watercourses and ditches	2	..	10	7	..	..	..	..	19
108. Culverts	1	..	1	1	1	..	..	..	4
109. Noise nuisances	11	1	10	3	27	..	..	..	52
110. Other nuisances	1	3	18	46	40	..	..	..	109
111. Public conveniences	29	41	13	183	..	..	..	..	266
112. Visits for enquiry	447	566	501	730	18	162	..	..	2,424
113. No access visits	1,280	874	617	1,164	1,529	470	..	..	5,944
114. Other visits (not included in above) ..	35	37	156	19	37	2	..	..	276

* Includes 9,709 for sewer baiting.

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1962.—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.									
Roofs, valley gutters, flashings, etc.	880	930	242	703	..	..	..	..	2,755
Chimney stacks, flues, pots, etc.	194	256	68	155	..	..	..	..	673
Eaves spouts	91	134	52	150	1	..	..	..	428
Fallpipes	47	54	18	53	3	..	..	..	175
Walls, brickwork, pointing ..	26	58	21	83	..	..	..	..	188
Damp-proof courses provided ..	..	2	1	1	..	..	..	..	4
Dampness otherwise remedied ..	6	16	8	19	..	..	..	..	49
Wallplaster	42	39	14	42	..	..	..	..	137
Ceilings	25	56	6	35	..	..	..	..	122
Floors	7	9	11	8	..	..	..	..	35
Windows, frames, cords, etc.	33	72	53	62	..	..	..	..	220
Doors, door-frames	10	18	5	13	..	..	..	..	46
Ovens, fire-ranges, grates, etc.	9	18	9	9	..	..	..	..	45
Washing boilers, setpots, etc.	2	..	..	..	..	..	..	..	2
Sinks, lavatory basins, etc.	12	10	9	15	..	..	..	..	46
Waste pipes	29	26	11	13	..	..	..	..	79
Water supply	42	27	23	19	..	..	..	..	111
Food stores	1	..	3	2	..	..	..	..	6
Pavings, yards and passages ..	10	17	1	17	..	..	..	..	45
Repairs to water closets	94	150	38	104	..	..	..	..	386
New water closets provided ..	3	8	1	6	..	..	..	..	18
New pail closets provided	1	..	..	..	..	..	..	..	1
Trough closets abolished	..	..	..	..	..	..	..	..	..
Privy closets abolished	..	..	..	..	..	..	..	..	..
Pail closets abolished	..	..	..	..	..	..	..	..	..
Dustbins provided	5	1	..	1	..	..	..	..	7
Ashpits repaired	..	..	..	1	..	..	..	..	1
Sunken ashpits abolished	..	..	..	..	..	..	..	..	..
Other ashpits abolished	..	..	..	..	..	..	..	..	..
Other repairs to premises	10	23	5	13	..	..	..	..	51
Vermineous premises disinfested	2	1	..	..	..	..	..	..	3
Dirty premises cleansed	21	9	4	1	..	..	..	..	35
Closets cleansed	10	2	1	1	..	..	..	..	14
Underground dwellings made fit or closed	1	..	..	..	..	..	..	..	1
Improvements to common lodging-houses	..	..	..	..	..	..	(a) 2	..	2
Improvements to houses let in lodgings	2	..	..	..	..	..	..	..	2
Improvements to canal boats ..	..	..	..	..	..	..	..	..	..
Improvements to caravan sites ..	..	..	..	..	..	..	..	..	..
FOOD PREMISES.									
Walls, ceilings, floors, etc., improved	27	18	11	6	1	..	..	..	63
Walls, ceilings, floors, etc., cleansed	18	19	6	89	2	..	..	..	134
Ventilation provided or improved	1	14	4	3	..	..	..	..	22
Articles, apparatus, clothing cleansed	9	..	..	87	1	..	..	..	97
Personal washing facilities provided	5	5	2	10	..	..	..	..	22
Other washing facilities provided	4	4	1	5	1	..	..	..	15
Hot water supply provided	6	3	..	10	1	..	..	..	20
Accommodation for clothing provided	2	1	1	2	..	..	..	..	6
First-Aid equipment provided ..	4	2	..	2	..	..	..	..	8
Other improvements	10	13	14	6	2	..	..	..	45
TRADES AND BUSINESSES.									
FACTORIES.									
Rooms cleansed	..	..	..	..	3	..	..	..	3
Rooms ventilated	..	..	..	..	..	..	..	..	..
Reasonable temperature secured ..	..	..	..	..	..	..	..	..	..
Overcrowding abated	..	..	..	..	..	..	..	..	..
Floors drained	..	..	..	..	..	..	..	..	..
Insufficient conveniences remedied	..	..	..	..	3	..	..	..	3
Unsuitable/defective conveniences remedied	..	..	..	..	111	..	..	..	111
Conveniences made separate for sexes	..	..	..	..	3	..	..	..	3
Other offences remedied	..	..	..	..	3	..	..	..	3
Absence of abstract noted	..	..	..	..	1	..	..	..	1
WORKPLACES.									
Rooms ventilated	..	..	..	..	..	..	..	..	..
Overcrowding abated	..	..	..	..	..	..	..	..	..
Rooms cleansed	..	..	..	..	..	..	..	..	..
Sufficient conveniences provided ..	..	..	..	..	..	..	..	..	..
Other defects remedied	..	..	..	..	4	..	..	..	4

WORK DONE BY PUBLIC HEALTH INSPECTORS, 1962.—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
TRADES AND BUSINESSES (Continued).									
SHOPS									
178. Ventilated	..	..	..	..	..	..	..	..	..
179. Reasonable temperature secured	..	..	..	..	..	..	..	..	..
180. Sufficient conveniences provided	..	..	..	..	1	..	..	..	1
181. Lighting provided	..	..	..	..	..	..	..	..	..
182. Washing facilities provided	..	..	..	..	..	..	..	..	..
183. Meals facilities provided	..	..	..	..	..	..	..	..	..
184. Other defects remedied	..	..	..	..	..	..	..	..	..
HAIRDRESSERS.									
185. Byelaw offences remedied	1	..	..	..	..	..	..	..	1
OFFENSIVE TRADES.									
186. Nuisances abated	..	..	..	1	..	..	..	..	1
187. Improvements secured	..	..	..	..	..	..	..	..	..
PET SHOPS.									
188. Improvements secured	..	..	..	..	..	..	..	..	..
SMOKE CONTROL.									
189. Furnaces newly provided	..	..	..	..	..	..	..	..	..
190. Furnaces altered, repaired or renewed ..	..	..	1	..	2	..	..	..	3
191. Chimneys newly erected	..	..	..	..	..	..	..	..	..
192. Chimneys extended or improved	..	..	..	..	2	..	..	..	2
193. Furnaces provided with mechanical stoking	..	..	1	..	..	..	..	..	1
GENERAL.									
194. Rodents caught, killed or poisoned ..	..	..	..	..	..	..	*(b) 2,934	..	2,934
195. Premises cleared of rodents	..	..	..	..	..	..	(b) 542	..	542
196. Premises rendered rodent-proof	..	..	..	..	..	..	(b) 53	..	53
197. Pigeons killed	..	..	..	..	..	..	(b) 1,271	..	1,271
198. Watercourses cleansed	..	..	..	..	..	..	..	..	..
199. Culverts cleansed or maintained	..	..	..	..	1	..	..	..	1
200. Poultry-house improvements	1	..	..	..	..	..	..	..	1
201. Pig-stye improvements	1	1	..	..	..	..	..	..	2
202. Offensive matter removed	6	9	1	2	3	..	..	..	21
203. Manure removed	1	..	..	..	..	..	..	..	1
204. Manure-steads built or repaired	..	..	..	..	..	..	..	..	..
205. Noise nuisance abated	2	1	..	..	14	..	..	..	17
206. Other nuisances abated	18	7	8	..	16	..	..	..	49
DRAINAGE.									
207. Drains repaired or relaid	79	36	48	56	14	..	..	..	233
208. Drains cleansed	621	247	831	294	75	..	..	..	2,068
209. Private sewers repaired or relaid	3	..	..	2	3	..	..	..	8
210. Private sewers cleansed	27	62	74	64	1	..	..	..	228
211. Public sewers maintained	41	29	19	42	..	..	..	..	131
212. Public sewers cleansed	223	229	291	190	7	..	..	..	940
213. Ball and water tests	17	9	19	34	5	..	..	..	84
214. Other tests	685	220	2,201	260	40	..	..	..	3,406
215. Gullies renewed or provided	2	4	6	2	..	..	..	..	14
216. Soilpipes and ventilating pipes	4	19	3	12	1	..	..	..	39
217. Inspection Chambers provided or maintained	4	4	8	17	5	..	..	..	38
218. Cesspools repaired or provided	..	..	..	5	..	..	..	..	5
219. Cesspools emptied	..	..	..	1	..	..	..	..	1
220. Cesspools abolished	..	..	..	5	..	..	..	..	5
SAMPLES TAKEN.									
By Food and Drugs Inspectors:—									
221. Milk—Chemical analysis	..	..	..	..	..	..	..	2,474	2,474
222. Milk—Bacteriological examination	..	..	..	..	..	..	..	608	608
223. Milk—Biological examination	..	..	..	..	..	..	..	175	175
224. Milk—Radio-activity examination	..	..	..	..	..	..	..	16	16
225. Food and Drugs—Chemical Analysis ..	..	..	..	..	..	..	..	829	829
Food and Drugs—									
226. Bacteriological examination	..	..	..	..	..	..	..	36	36
227. Ice-Cream—Chemical analysis	..	..	..	..	..	..	..	16	16
228. Ice-Cream—Bacteriological examination ..	..	..	..	..	..	..	..	94	94
Fertilisers and Feeding stuffs—									
229. Chemical analysis	..	..	..	..	..	..	..	25	25
230. Rag Flock, etc.—Chemical analysis	..	..	..	..	..	..	..	3	3
By Meat and Other Foods Inspectors:—									
231. Food—Chemical analysis	..	..	..	..	..	..	..	1	1
232. Food—Bacteriological examination	..	..	..	..	..	..	..	25	25
233. Shellfish—Bacteriological examination ..	..	..	..	..	..	..	..	15	15
234. Merchandise Marks Act	..	..	..	..	..	..	..	1	1

* Includes 12 rabbits.

PREVENTION OF ATMOSPHERIC POLLUTION

BY

J. H. WYATT

Deputy Chief Public Health Inspector

Investigation of atmospheric pollution continued in 1962 with the aid of instruments situated at stations in various parts of the city. The sites of these stations were indicated approximately on the map between pages 226 and 227 of last year's Annual Report. The eight standard deposit gauges at Hunslet, Headingley, Temple Newsam, Market Buildings, Armley Park, St. James's Hospital, Burley Park and Roundhay Hall remained in use for the measurement of solid deposits.

In addition to the eight standard deposit gauges, we now have smoke filter and volumetric sulphur dioxide measuring instruments at nine sites in the city. These are at (i) the Public Health Department Annexe, 12 Market Buildings, Leeds, 1, (ii) the Department of Preventive Medicine and Public Health, 32 Hyde Terrace, Leeds, 2, (iii) the Day Nursery, Blackman Lane, Leeds, 2, (iv) the Y.W.C.A. Hostel, Lovell Street, Leeds, 7, (v) the Maternity and Child Welfare Clinic, Park Square, Leeds, 1, (vi) the Meanwood Housing Estate Manager's Office, 207 Potternewton Lane, Leeds, 7, (vii) the Disinfestation Centre, Stanley Road, Leeds, 9, (viii) the Clock Tower in the outbuildings at Temple Newsam Mansion, Leeds, 15, and (ix) the Highways Department Offices, 155 Kirkstall Road, Leeds, 3. The apparatus at Market Buildings has been in operation since October, 1950. The next four, i.e. Nos. (ii) to (v) were installed in August, 1957, at the request of the Fuel Research Station of the Department of Scientific and Industrial Research to record the effect of the City of Leeds No. 2 (Central Area) Smoke Control Order, 1959, which became operative on 1st July, 1962. The remaining four, i.e. Nos. (vi) to (ix) were installed on 1st January, 1962, in connection with the National Survey of Air Pollution instituted by the Ministry of Housing and Local Government and the Fuel Research Station of the Department of Scientific and Industrial Research. They have been specially sited to monitor areas with different characteristics. One is sited in a modern

municipal housing estate, one in a mixed development of older houses and industry, one in a semi-rural area attached to the city and one in Kirkstall Road in the centre of a heavily industrialised area.

The Department also has a spare deposit gauge which is used for experimental purposes only. This has been installed for some years on the roof of a large foundry in the city to assess the local deposits emitted from the foundry.

The stations and equipment above-mentioned are provided and operated by the Health Committee, but in addition the Central Electricity Generating Board has eight stations sited to monitor emissions from the Skelton Grange "A" and "B" Power Stations. Four of these stations have deposit gauges and lead dioxide instruments, the other four lead dioxide instruments only. These instruments have been kept operating so as to provide continuity of records in connection with the Power Station. Four of the stations are outside the Leeds boundary but the results are useful in assessing pollution in the area of the city which adjoins the Power Station.

The examination of material collected by deposit gauges is carried out monthly, and the tests of the smoke filter and volumetric sulphur dioxide instruments daily. The various gauges are attended and the filters for smoke and the absorbent fluids for sulphur emissions are changed by inspectors and pupils in the Factories and Smoke Section of the Department. The testing is done by Mr. R. A. Dalley, the City Analyst, and we again express appreciation of the co-operation and help afforded to us by Mr. Dalley.

Standard Deposit Gauges.—The table on page 206 sets out the monthly deposits in English tons per square mile for 1961 and 1962 at the eight gauges operated by the Council. The records for February are incomplete because the heavy gale in that month damaged five gauges. The Department of Scientific and Industrial Research has indicated that the detailed results from these gauges are not essential and the analysis is now limited to calculation of the total solids deposited both as dissolved and undissolved matter. The highest monthly average deposit this year was 24.10 tons per square mile at Market Buildings. The Station with the lowest monthly average was Roundhay (11.54 tons to the square mile).

The experimental standard deposit gauge on the roof of a foundry continued to record very high deposits; the average for the year was 86.95 tons per square mile, as compared with 61.38 tons per square mile in 1961. The increase may well be due to "teething" troubles in a revised scheme of dust arresting which may take some time to resolve.

The table on page 207 sets out the solid deposits recorded by the standard deposit gauges in the city for the years 1932 to 1962 inclusive.

Estimation of Atmospheric Pollution by the Lead Dioxide Method.—This method has been replaced by the more accurate volumetric method.

Concentration of Smoke and Sulphur Dioxide by the Smoke Filter and Volumetric Method.—Records from our nine instruments are set out in the tables on pages 208 and 209.

Clean Air Act, 1956.—*Dark Smoke Emissions from Chimneys.*—During 1962, 301 smoke observations were taken and 53 Notices were served for contraventions of the Dark Smoke (Permitted Periods) Regulations. In addition, 170 visits were paid to boiler plant and to other fuel burning installations in order to advise on methods to be adopted to comply with the Regulations.

Two prosecutions were taken for contraventions of Section 1 of the Clean Air Act. In one case the firm pleaded "Not Guilty" but changed their plea to "Guilty" during the hearing and were fined £25. During the hearing the firm said that they intended to install new boiler plant before the end of the year. The other prosecution was for contravention of the Dark Smoke (Permitted Periods) Regulations in the Central Smoke Control Area. The firm admitted the offence but pleaded that it was due to the unauthorised action of an employee in that he hand-fired a mechanically-fired boiler plant. The Stipendiary Magistrate considered that in view of the facts an absolute discharge was justified but warned the firm that they must exercise better supervision over their employees at all times.

Section 2 of the Clean Air Act, 1956, provides for exemption from Section 1 of the Act of buildings which it has been found impracticable to alter or equip so as to conform with the Dark Smoke (Permitted Periods) Regulations. Power to give this exemption will lapse on 5th July, 1963, and pressure has been brought to bear the in year by public health inspectors upon the occupiers of premises in which hand-fired coal burning appliances were still being used, to equip furnaces with mechanical stoking equipment.

Three applications were received for exemption under this Section. One hand-fired Lancashire boiler was exempted for six months. The firm has now vacated the premises and the exemption has lapsed. The second exemption was requested for a chimney serving two reheating and annealing furnaces until alternative equipment could be installed and made operative, and again exemption was given for six months. The new equipment is now operating and the exemption has lapsed. The third application came from a firm against whom a prosecution was awaiting hearing and under the circumstances the Health Committee deferred consideration of the application.

The Installation of New Furnaces and Prior Approval of Furnaces.—63 notifications of the installation of new furnaces were received. In addition, 3 applications for prior approval of industrial plant were approved subject to conditions.

Control of Grit and Dust from Furnaces.—No applications were received for approval of apparatus for arresting grit and dust.

Several complaints were received during the year about grit and dust emissions, usually from cupolas operated by iron foundries, and 12 deposit records were taken. The experimental deposit gauge previously mentioned is used in connection with such complaints and in one instance is producing startling evidence of the very serious nuisance which can be caused by emissions from cupolas. The gauge brought to light a defect in a newly installed wet arrestor connected to a number of knock-outs for sand moulds in a foundry. Last year's report included a photograph of an experimental grit and spark arrestor fitted to two large cupolas. This arrestor has now been replaced by two new proprietary type wet arrestors with pH control for the washed liquor (see photograph opposite page 201).



GRIT NUISANCE FROM FOUNDRY

Experimental grit and spark arrestors for two large cupolas fitted with water spray arrangements.



GRIT NUISANCE FROM FOUNDRY

The same cupolas now fitted with new proprietary type wet arrestors with pH control for washing liquor as a result of advice by the Public Health Inspector.

Heights of Chimneys.—Section 10 of the Clean Air Act enables the Local Authority to control heights of chimneys from certain types of new buildings and Section 120 of the Leeds Corporation Act, 1956, extends this control to all types of new buildings. Plans of new buildings are submitted to the Town Planning and Improvements Committee, examined by the Health Department and rejected if below standard. Two weaknesses in the legislation are that it does not control the connection of new fuel burning plant to existing chimneys which are often too short, and cannot under certain circumstances deal with the erection of steel stacks which are integral with the boiler plant.

48 plans of new chimneys were examined and commented upon. In most cases, consultations between public health inspectors and the architects concerned ensure the submission of satisfactory plans, but in 8 instances no such consultations had taken place and extensions of the planned chimneys were required. No plans were rejected although several were deferred by the City Engineer until agreement had been reached between the architect and this Department. The question of chimney heights is extremely difficult and often produces prolonged discussion and it is, therefore, pleasant to report that all difficulties in this connection which arose during the year were satisfactorily resolved.

The relevant section of the Act sets out four points which must be considered when new chimneys are to be approved. They are:—

- (a) the purpose of the chimney,
- (b) the position and description of buildings nearby,
- (c) the levels of the neighbouring ground, and
- (d) any other matters requiring consideration in the circumstances.

Under item (d), Leeds pays particular attention to the probable emission of sulphur fumes from the plant in question. We take the view that a reasonable maximum limit of sulphur dioxide at ground level from any point source is 0.3 part per million in air, and require that the height of any new chimney is such that this concentration will not be exceeded.

Smoke Control Areas.—Section 11 of the Clean Air Act gives Local Authorities power to establish Smoke Control Areas. The process of making Orders is continuous and details of those made up to the end of 1962 are set out in the table on page 210.

In January, 1962, the Minister of Housing and Local Government issued Circular No. 4/62 about smoke control in the black areas. Leeds is in a black area. The Minister reviewed the progress of smoke control in these areas and asked Local Authorities to consider whether the dates originally set for completing their programmes could be brought forward. He also requested them to submit further programmes for establishing smoke control areas in the period 1962 to 1966. The Health Committee decided that the target year for completion of the smoke control programme for the whole city should be changed from 1980 to 1975. The Committee also included a further 39,000 dwellings in smoke control areas in the period 1962 to 1966. A copy of the return requested by the Minister is printed on page 211.

A further Circular simplifies the method of making Smoke Control Orders and of computing the estimated and final costs of adapting and replacing fireplaces in privately owned dwellings. The Circular makes little change in the procedure for dealing with municipally owned properties.

Nineteen Smoke Control Orders had been made by the end of 1961 and during 1962 a further four Orders were made. The table on page 210 sets out the position up to the end of 1962. As well as the four Orders made this year, five Amendment Orders were made to allow for the use of chips and paper for ignition purposes in buildings or parts of buildings separately occupied and which have no gas supply. The Amendment Order for the Central Smoke Control Order also contained a further list of premises exempted under conditions from the original Smoke Control Order. The table shows that fifteen Orders became operative on 1st July, 1962.

Observations taken by inspectors seem to show that in general the Orders are being respected but a number of warnings have been given to householders not burning authorised fuels. Difficulty has been encountered in a few instances where works of adaptation were not completed before the operative date of the Order. These cases are dealt with by the service of Notice, and if necessary by carrying out the works in default of the owner of the property.

Publicity.—The Health Committee collaborated with the Solid Smokeless Fuels Federation in a stand at the "Ideal Homes" Exhibition in the Queens Hall, Leeds, from 28th April to 12th May, 1962. The object of the Exhibition was to publicise the city's programme of Smoke Control Areas, to demonstrate the types of appliances which can be provided by means of grant aid, and also to demonstrate the efficiency of authorised fuels in open fires and closed stoves. The Exhibit proved extremely successful and nearly 7,000 direct enquiries were answered by the public health inspectors on duty on the stand during the Exhibition. In addition to the direct enquiries, a very large number of visitors to the Exhibition stopped to view the stand without making specific comment. One of the most graphic parts of the stand was a mural showing smoke emissions from a densely populated part of the city. This mural was produced from a photograph printed in last year's Annual Report.

The Solid Smokeless Fuels Federation also provided a Mobile Exhibition to demonstrate the burning of authorised fuels and, in particular, the type of coke which is available in the Leeds area. This exhibit came to the city on two occasions, first in the months of February and March when it was sited in eleven different positions in the Central Smoke Control Area, and second in November and December when it was used in the Cow Close, Armley Heights, Tong Road, Stonebridge Lane, Poplar and Silver Royd "A" and "B" Smoke Control Areas.

The Abatement of Smoke Nuisances.—Several complaints of burning of refuse on open land have been dealt with under Section 16 of the Clean Air Act, 1956. One complaint was of the burning of car bodies to recover scrap metal, one of smoke from the burning of insulated cable to recover scrap metal, three complaints of burning of wood waste (two of which were on open land, one in particular during the demolition of the Empire Theatre, Briggate). Formal notification of the contraventions was given within 48 hours. In general, however, these cases were dealt with by verbal representations.

Alkali, etc. Works.—H.M. Inspectors of Alkali, etc. Works are responsible for the control of emissions from chimneys used in connection with processes carried on at premises registrable under the Alkali, etc. Works Regulation Act, 1906. There are 23 such firms in Leeds.

We have close liaison with H.M. Inspectors and complaints from the public and reports from public health inspectors are forwarded to H.M. Inspectors for action. A persistent complaint refers to grit and smoke from two hot-blast cupolas at a foundry controlled by the Alkali Inspector. He has required these to be fitted with the best practicable means for preventing these emissions, which in his opinion consists of cyclone type arrestors and a tall stack some 120 ft. in height. This has not yet been provided.

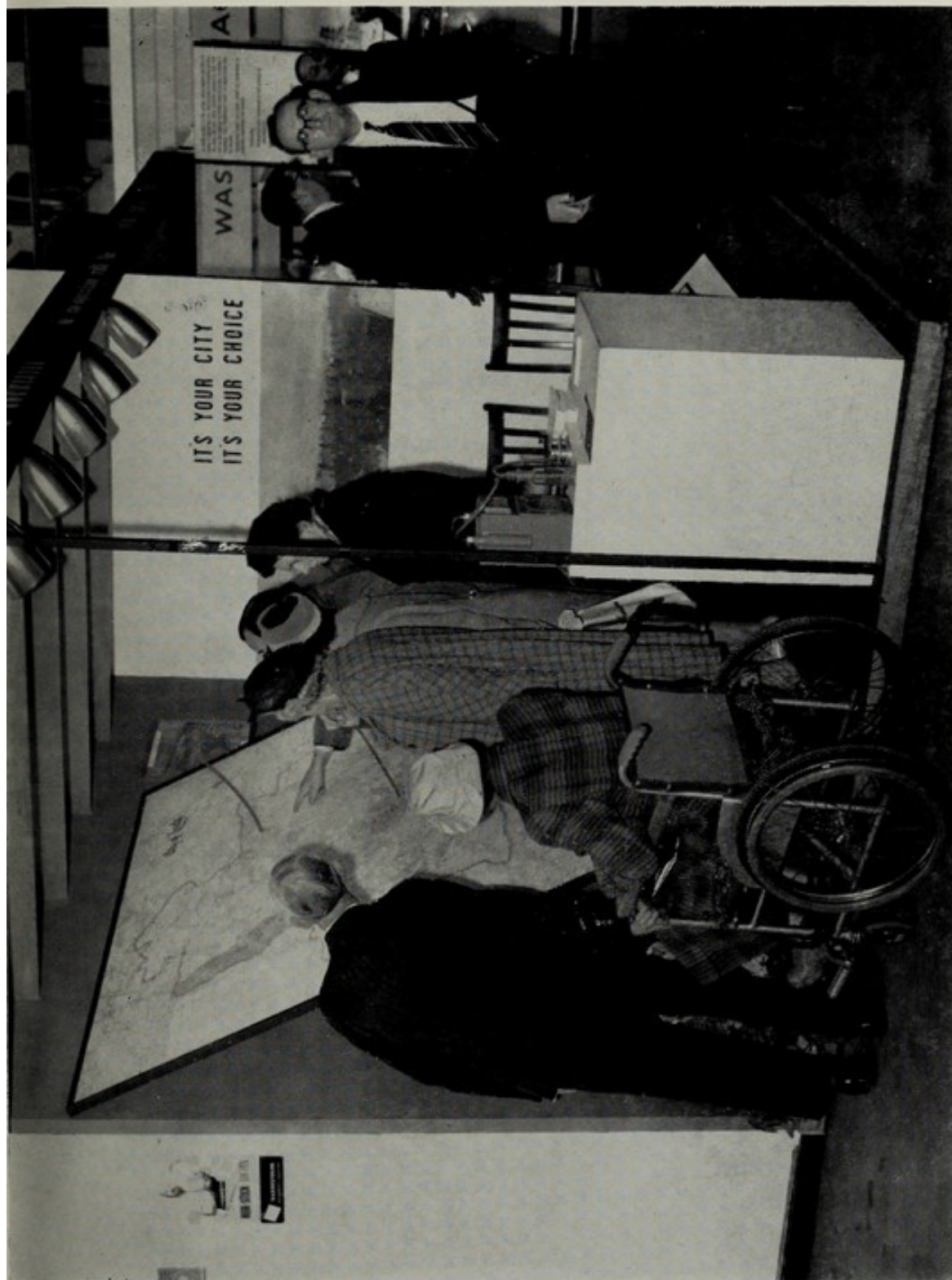
During the year 3 complaints were referred to H.M. Inspector of Alkali, etc. Works for attention.

Colliery Spoilbanks.—A complaint was received about nuisance from a spoilbank which had been disused for a very long period. Efforts to control the fire by ploughing the surface and digging out burning material had partial success and the nuisance has now been abated by the burning out of all the combustible material on the site.

Control of Smoke from Railway Engines.—Coal-fired locomotives pulling long-distance trains out of Leeds still cause a great deal of atmospheric pollution but there were no complaints about smoke from railway engines during the year. The replacement of steam engines by diesel engines has reduced the amount of smoke from this cause.

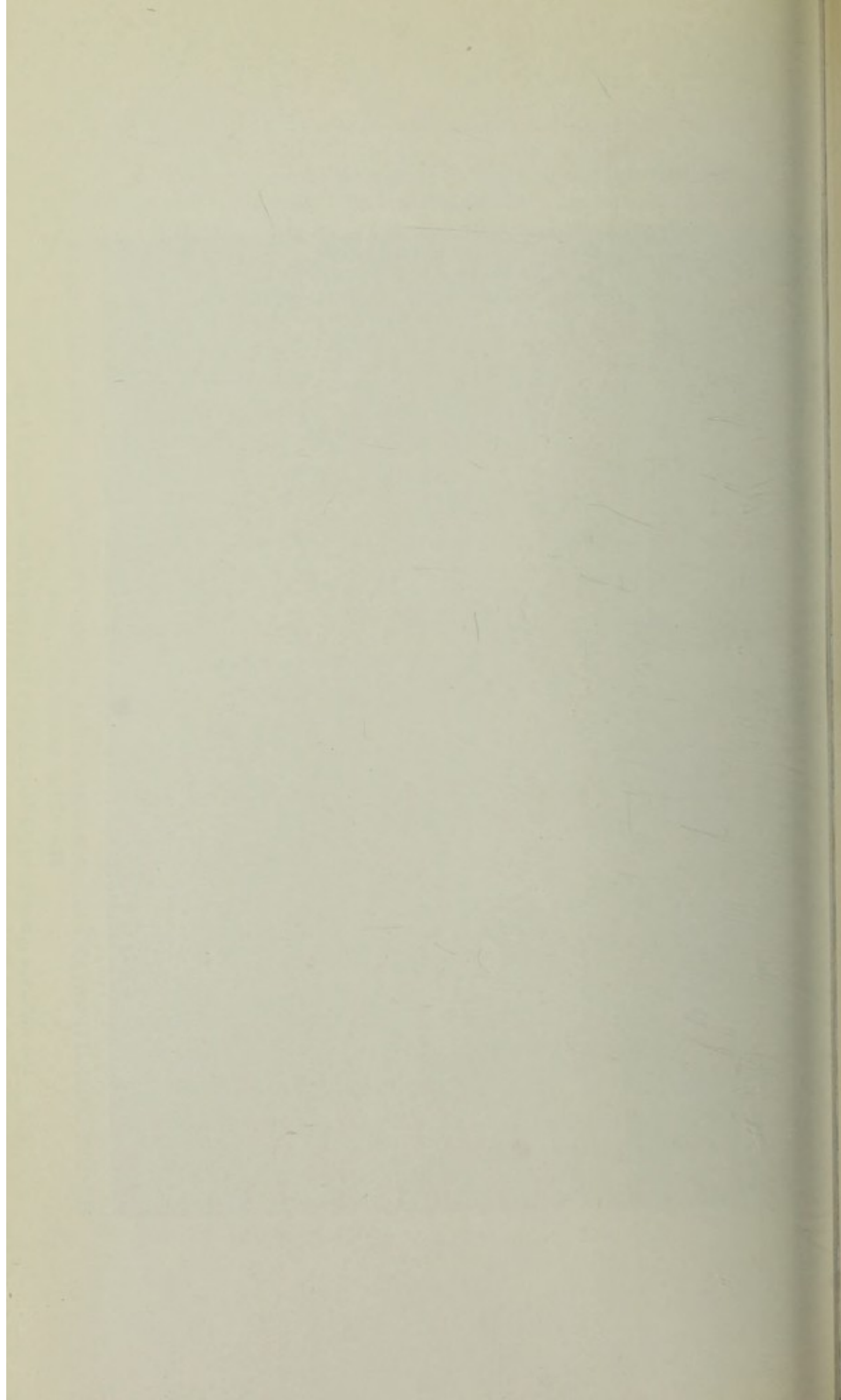
Control of Smoke from Vessels.—No complaints were received about smoke from vessels on the river and canals.

Exemption for the purpose of Investigation and Research.—Section 21 of the Clean Air Act enables the Local Authority to give exemption from the Clean Air Act to chimneys and furnaces while they are being used for research into the problems of air pollution. Two applications for exemption were granted subject to conditions. The first was a renewal of an exemption previously granted to the University of Leeds in respect of a chimney connected to a large coal fired boiler which is used on occasion to experiment into problems of combustion. The second exemption was to a large foundry to carry out research into the melting of swarf and turnings in a mains frequency induction furnace. This exemption was mentioned in last year's report and was continued for a further six months as from 1st February, 1962.



HEALTH COMMITTEE STAND AT NORTHERN "IDEAL HOMES" EXHIBITION, QUEEN'S HALL, LEEDS
28th APRIL to 12th MAY, 1962

This stand was promoted to publicise the City's Programme of Smoke Control Areas.



Building Byelaws.—The Council's Building Byelaws now contain a provision that the arrangements for cooking and heating in new buildings should be such as to be capable of burning gas, electricity, coke or anthracite. The enforcement of this Byelaw is in the hands of the City Engineer.

General.—The work of the public health inspectors on smoke abatement in 1962 can be summarised as follows:—

General:

Smoke observations	301
Visits for grit emissions	4
Inspection of boiler plant	170
Visits for prior approval of furnaces	1
Visits for height of chimneys ..	35
Atmospheric pollution records ..	2,527
Visits for enquiry	53

Smoke Control Areas:

Preliminary enquiries.. .. .	421
Inspection of approved appliances in- stalled	1,171
Smoke observations	2,866
Visits for enquiry	3,035

STANDARD DEPOSIT GAUGES
MONTHLY DEPOSITS IN ENGLISH TONS PER SQUARE MILE
YEARS 1961 AND 1962

Period	STATIONS													
	Headingley		Market Buildings		Hunslet		Temple Newsam		Armley Park		St. James's Hospital		Burley Park	
	1961	1962	1961	1962	1961	1962	1961	1962	1961	1962	1961	1962	1961	1962
January ..	17.67	23.08	33.71	30.14	28.42	†	18.43	41.15	33.53	33.60	25.56	29.60	49.70	15.38
February ..	13.49	†	29.01	28.39	†	22.46	17.51	†	22.26	†	23.92	†	48.42	15.66
March ..	5.34	15.33	15.58	28.05	13.28	37.38	12.65	14.10	7.23	35.10	12.49	†	13.45	8.48
April ..	19.98	†	36.25	21.86	34.67	24.90	18.77	15.88	38.86	17.72	25.50	24.50	38.86	10.10
May ..	6.74	21.49	16.87	24.93	21.06	25.53	17.74	12.66	13.59	20.10	19.37	19.08	15.44	11.12
June ..	5.05	17.68	16.44	17.40	12.95	19.37	10.79	14.43	16.52	14.36	12.09	15.91	15.02	13.61
July ..	18.47	18.94	24.60	17.33	15.34	21.52	13.72	10.88	16.12	16.59	15.10	22.35	32.22	8.38
August ..	8.22	13.63	18.82	18.91	11.95	16.92	14.62	12.93	11.83	14.13	11.49	16.39	15.87	8.72
September ..	13.67	18.72	27.05	23.85	22.09	19.41	15.12	14.20	17.16	16.21	19.58	20.63	38.67	9.53
October ..	14.79	25.96	27.18	23.24	18.71	14.80	14.99	11.08	18.38	14.26	26.00	16.94	33.34	7.40
November ..	10.78	17.34	26.18	22.75	17.78	24.95	15.06	10.27	24.33	14.29	17.16	19.12	19.20	11.12
December ..	13.88	17.77	32.06	32.35	29.97	19.28	22.76	11.19	33.07	21.55	23.78	21.75	31.08	14.53
Total Deposit for Year ..	148.08	189.94	303.75	289.20	226.22	246.52	192.16	168.77	252.88	217.91	232.04	206.27	351.27	126.94
Monthly average ..	12.34	18.99	25.31	24.10	20.57	22.41	16.01	15.34	21.07	19.81	19.34	20.63	29.27	11.54

† Gauge tampered with

SULPHUR DIOXIDE VOLUMETRIC APPARATUS

Sulphur Dioxide in Microgrammes per cubic Metre of Air

1962	AVERAGE DAILY CONCENTRATION										HIGHEST DAILY CONCENTRATION									
	SITE NUMBER										SITE NUMBER									
	3	4	18	19	20	21	24	25	26	3	4	18	19	20	21	24	25	26		
January	..	243	589	579	572	590	583	566	377	419	1,012	1,252	1,512	1,580	1,277	1,471	1,584	1,213	1,310	
February	..	130	353	291	292	348	316	334	161	250	405	707	428	569	695	640	575	413	564	
March	..	179	450	446	408	463	408	471	253	361	493	1,176	1,161	910	864	904	951	566	812	
April	..	*106	*279	*248	*239	*265	*244	*261	*122	*211	299	532	479	423	495	401	467	283	351	
May	..	103	192	206	229	220	177	242	141	189	353	447	513	643	588	456	527	476	499	
June	..	111	156	143	195	164	145	210	100	125	414	252	272	365	288	290	383	207	243	
July	..	71	140	105	148	121	115	162	82	107	276	208	167	224	179	210	359	166	181	
August	..	108	173	138	184	129	147	181	107	154	247	340	210	306	239	233	425	190	221	
September	..	139	259	206	230	231	253	273	173	232	276	419	385	520	373	598	533	435	438	
October	..	182	396	302	363	351	341	373	227	319	485	644	564	665	657	751	816	532	703	
November	..	229	525	450	509	471	489	480	298	459	977	1,284	949	1,377	1,156	1,271	1,349	885	1,543	
December	..	440	857	887	970	908	868	889	579	754	1,972	3,970	3,971	4,698	4,022	4,039	5,196	3,731	3,727	

Site Number	3 = Templenewsam	Site Number	19 = Hyde Terrace	Site Number	24 = Kirkstall Road
"	4 = Market Buildings	"	" 20 = Park Square	"	" 25 = Potternewton Lane
"	18 = Blenheim	"	" 21 = Y.W.C.A.	"	" 26 = Stanley Road

* Stations closed five days—Easter.

SMOKE FILTER APPARATUS

Smoke in Microgrammes per cubic metre

1962	AVERAGE DAILY CONCENTRATION										HIGHEST DAILY CONCENTRATION								
	SITE NUMBER										SITE NUMBER								
	3	4	18	19	20	21	24	25	26	3	4	18	19	20	21	24	25	26	
January	280	399	452	440	402	410	461	423	519	913	932	1,160	1,217	1,098	1,235	1,218	1,173	1,326	
February	111	240	292	262	225	231	332	253	384	493	662	667	629	603	558	693	570	815	
March	207	378	422	365	361	355	467	377	501	616	1,360	1,100	1,100	1,073	1,033	1,115	1,060	1,184	
April	*73	*154	*222	*169	*162	*166	*264	*178	*297	278	344	431	406	360	352	455	390	480	
May	62	121	143	129	127	114	164	132	156	222	316	291	297	302	272	303	286	287	
June	47	103	86	92	93	83	110	85	95	108	160	138	179	165	137	178	124	150	
July	41	92	100	85	79	77	120	83	101	97	183	173	143	146	141	191	147	191	
August	54	131	101	101	101	94	107	103	115	124	233	155	175	179	145	176	158	177	
September	90	178	168	151	147	149	173	153	188	244	373	339	357	321	305	315	277	354	
October	178	302	335	307	334	278	325	287	355	598	671	633	585	824	608	612	502	712	
November	321	386	475	448	425	451	482	412	571	1,239	1,104	1,047	1,277	1,174	1,252	1,208	1,007	1,328	
December	362	440	563	530	536	541	609	504	700	1,655	1,453	1,784	1,861	1,837	1,824	2,250	1,761	2,031	

Site Number	3 = Templenewsam	Site Number	19 = Hyde Terrace	Site Number	24 = Kirkstall Road
"	4 = Market Buildings	"	" 20 = Park Square	"	" 25 = Potternewton Lane
"	18 = Blenheim	"	" 21 = Y.W.C.A.	"	" 26 = Stanley Road

* Stations closed five days—Easter.

CITY OF LEEDS—SMOKE CONTROL AREAS

SMOKE CONTROL ORDERS	CLASSES OF BUILDINGS					Acreage of Area	Date Order Made	Date Order Confirmed	Date Order in Operation
	Domestic	Commercial	Industrial	Other	TOTAL				
No. 1 (Roman Avenue)—1958 (Amendment Smoke Control Order, 1962)	162	..	..	..	162	20	16.5.58	31.3.59	1.10.59
No. 2 (Central Area)—1959 (Amendment Smoke Control Order, 1962)	6,418	3,771	795	1,197	12,151	1,168	20.3.59	29.7.60	1.7.62
No. 3 (Alwoodley)—1959 (Amendment Smoke Control Order, 1962)	144	..	..	..	144	33	19.6.59	11.11.59	1.6.60
No. 4 (Cow Close)—1960 (Amendment Smoke Control Order, 1962)	598	5	1	3	607	68.37	15.7.60	23.12.60	1.6.61
No. 5 (Armley Heights)—1960 (Amendment Smoke Control Order, 1962)	640	8	1	2	651	63.21	15.7.60	23.12.60	1.6.61
No. 6 (Tong Road)—1961	256	4	1	..	261	22	9.6.61	30.10.61	1.7.62
No. 7 (Stonebridge Lane)—1961	110	..	1	..	111	10.54	9.6.61	30.10.61	1.7.62
No. 8 (Gamble Hill)—1961	246	..	..	2	248	38.6	9.6.61	30.10.61	1.7.62
No. 9 (Meynell Street)—1961	180	..	..	..	180	3.53	9.6.61	30.10.61	1.7.62
No. 10 (Silver Royd "A")—1961	24	..	..	..	24	1.5	9.6.61	30.10.61	1.7.62
No. 11 (Silver Royd "B")—1961	46	..	..	..	46	2.89	9.6.61	30.10.61	1.7.62
No. 12 (Sutton)—1961	220	1	1	2	224	19.88	9.6.61	30.10.61	1.7.62
No. 13 (Brackenwood)—1961	871	7	..	..	878	77.5	9.6.61	30.10.61	1.7.62
No. 14 (Armley Ridge Road)—1961	62	1	..	1	64	21	9.6.61	30.10.61	1.7.62
No. 15 (Poplar)—1961	154	..	..	..	154	23	9.6.61	30.10.61	1.7.62
No. 16 (Greenside)—1961	247	..	..	..	247	7.4	9.6.61	30.10.61	1.7.62
No. 17 (Moor Grange)—1961	834	5	1	1	841	54	9.6.61	30.10.61	1.7.62
No. 18 (Kepstorn)—1961	50	..	..	6	56	4.5	9.6.61	30.10.61	1.7.62
No. 19 (Raynville Road)—1961	670	..	..	..	670	71	9.6.61	30.10.61	1.7.62
No. 20 (Moseley Wood)—1962	481	5	..	..	486	67.3	13.4.62	16.8.62	1.7.63
No. 21 (Grove Farm)—1962	209	..	..	3	212	120	11.5.62	7.9.62	1.7.63
No. 22 (Kirkwood)—1962	500	4	..	1	505	56	11.5.62	7.9.62	1.7.63
No. 23 (Cookridge)—1962	461	..	..	1	462	342	8.6.62	5.11.62	1.7.63

PROGRAMME FOR ESTABLISHING SMOKE CONTROL AREAS IN THE FIVE-YEAR PERIOD 1962/66

Name of Local Authority:—LEEDS COUNTY BOROUGH
 Approximate number of premises in the Local Authority area:—211,000
 Acreage of Local Authority area:—40,613·5

Number of premises and acreage of land in smoke control areas

(1)	(2) Covered by Orders made up to 31.12.61	(3) Estimated additions covered by Orders to be made during 1962	(4) Estimated additions covered by Orders to be made during 1963	(5) Estimated additions covered by Orders to be made during 1964	(6) Estimated additions covered by Orders to be made during 1965	(7) Estimated additions covered by Orders to be made during 1966	(8) Final Ob- jective (the total num- bers it is intended ultimately to cover)	(9) Target year for completion of programme
Premises ..	17,788	3,600	6,000	9,600	12,000	15,000	211,000	—
Dwellings ..	12,624	3,000	5,000	8,000	10,000	13,000	174,000	1,975
Acres ..	1,710	750	1,250	2,000	2,500	3,250	40,613	—

NOTE:—"Premises" should be read as including subdivisions of buildings, e.g. separate flats in a block of flats or separate suite of offices in a block of offices. The list of hereditaments for rating purposes, other than land without buildings, may be useful in this connection. The total of premises should include the number of dwellings shown in the line below.

PUBLIC HEALTH INSPECTORIAL STAFF

At the commencement of the year there were five vacancies for public health inspectors and during the year four further vacancies occurred due to the retirement of one inspector and to three inspectors resigning to take up appointments with other authorities. Another vacancy occurred by the death of Mr. John Bellhouse, a district public health inspector in the Department since 1947.

Three student public health inspectors completed their training with the Department during the year, passed the qualifying examination of the Public Health Inspectors' Examination Board and were appointed public health inspectors to fill vacancies. At the end of the year there were seven vacancies.

Four public health inspectors obtained the Diploma for Inspectors of Meat and Other Foods; five obtained Smoke Inspectors' Certificates.

Mr. J. Goodfellow, F.R.S.H., M.A.P.H.I., was re-elected a Deputy Chairman of the National Society for Clean Air.

Six pupil public health inspectors attended the third year of the full-time training course at the Leeds College of Technology, five attended the second year course and four commenced as first year students. Practical training in all aspects of the public health inspector's work was again provided by the Department. It will not be possible to fill the existing vacancies for public health inspectors until these pupils have completed their four year course and passed the Diploma Examination.

Report of the City Analyst

CITY ANALYST'S LABORATORY

BY

R. A. DALLEY, F.R.I.C.,

City Analyst

For the first time the total number of samples received for analysis during the year exceeded 10,000 and at 10,432 was the highest number of samples analysed in any year since the laboratory was established in 1928, the previous highest being 8,946 in 1960.

The increase was mainly accounted for by atmospheric pollution measurements consequent upon the opening of four new stations for the daily determination of smoke and sulphur dioxide in the atmosphere. Other sections of the work to show marked increases were radioactivity measurements, analyses carried out on behalf of H. M. Coroner, and the number of samples submitted by private enquirers.

Two new Regulations affecting the work of the Department came into force during the year, namely, the Preservative in Food Regulations, 1962, and the Emulsifiers & Stabilisers in Food Regulations, 1962.

The existing Preservative Regulations had been in force (with various amendments) since 1925. The principal effect of the new Regulations is to extend considerably the number of permitted preservatives and the number of foods which may contain preservatives.

The Emulsifiers & Stabilisers in Food Regulations prescribe a list of permitted emulsifiers and stabilisers.

Both Regulations reflect the growing awareness of the problem of "chemicals in food". The same is true of the increased number of samples of fresh fruit and vegetables which were examined for the presence of insecticide residues—work which is described in detail in the body of the report.

Many of these determinations of minute traces of chemicals in food involve long and complex analyses and can only be performed with the aid of expensive modern instruments. The provision of such instruments is essential if this laboratory is to carry out its work effectively.

As usual, much time was spent during the year in answering enquiries from industrial firms and members of the public. Lectures on the work of the laboratory were given to many organisations, and the customary visits from groups of students took place throughout the year.

Once again it is a pleasure to express to my Deputy, Mr. L. A. Perkin, and all members of the staff my appreciation of the efficient manner in which they have met the heavy demands placed upon them. I also welcome the opportunity of thanking the Supervisory Sampling Officer, Mr. H. Long, and his assistants for their continued ready co-operation.

The following is a summary of the analyses made during 1962:—

Samples submitted by the Public Health Department

Food and Drug samples	..	..	..	3,332
Milks for Bacteriological examination	..			608
Ice-cream for Bacteriological examination	..			94
Fertilisers	..	..	..	25
Radioactivity measurements	..	..	..	237

ATMOSPHERIC POLLUTION

Deposit Gauges	..	..	..	100
Daily Smoke and Sulphur Dioxide				
determinations	..	..	..	5,386
				5,486
Miscellaneous samples	..	..	..	60
				9,842

Continued on next Page

Samples submitted by Other Departments

Baths & Wash-houses Department	..	..	3
Central Purchasing Department	..	..	15
City Architect's Department	..	..	6
City Coroner	..	..	150
Education Department	..	..	15
Transport Department	..	..	1
Waterworks Department	..	..	12
Works Department	..	..	1
		————	203

Samples submitted from Other Sources

Private samples	..	..	131
Craven District Coroner	..	..	2
Leeds Group "A" Hospital Management Committee	..	..	13
Rothwell Urban District Council	..	..	3
Wakefield Corporation	..	..	238
		————	387
		————	10,432
		=====	

FOOD AND DRUGS

The table on pages 234 to 238 summarises the samples taken under the Food & Drugs Act, 1955.

The percentage of samples found to be adulterated or otherwise unsatisfactory was 2.4 per cent. compared with 3.3 per cent. in 1961 and 3.0 per cent. in 1960.

The table on page 157 lists the results of the summonses issued in respect of those unsatisfactory samples concerning which legal proceedings were instituted.

MILK:—

The average composition of the 2,475 samples submitted is shown in the following table, the corresponding figures for the last two years being given for comparison:—

AVERAGE COMPOSITION OF MILK

	1962	1961	1960	Minimum legal requirement
Number of samples ..	2,475	2,634	2,873	
Solids-not-fat	8.76%	8.69%	8.73%	8.50%
Fat	3.77%	3.74%	3.75%	3.00%
Total solids ..	12.53%	12.43%	12.48%	11.50%

The adulteration rate was 0.36 per cent. compared with 2.1 per cent. in 1961 and 1.8 per cent. in 1960.

Of the 9 unsatisfactory samples 7 contained added water (highest amount 11.0 per cent.), one Channel Island milk was 6 per cent. fat deficient (of 68 samples analysed), and one sample (submitted by a member of the public) contained several pieces of cellulose pulp due to contamination by cardboard or brown paper.

254 milk samples (compared with 335 in 1961) had solids-not-fat of less than 8.50 per cent., and therefore added water was suspected, but in each case the freezing point showed the deficiency to be due to natural causes (that is cows giving poor quality milk), and not to added water.

For the first year since 1928 it was not found necessary to undertake a prosecution for the sale of watered milk.

FOODS OTHER THAN MILK:—

The number of such samples increased for the sixth successive year totalling 823, compared with 769 last year and 135 in 1956. Of these 70 (8.5 per cent.) were unsatisfactory, compared with 6.8 per cent. in 1961.

Details of the more interesting cases of adulteration together with comments upon a few of the genuine samples will be found in the following paragraphs.

Sausages.—Of the 51 samples analysed during the year 10 were reported against. 8 samples contained less meat than the recognised minimum standards of 50 per cent. for beef and 65 per cent. for pork. Legal proceedings were successfully instituted in respect of two of these samples where the meat deficiency was substantial.

A good sausage contains appreciably more lean meat than fat, and two samples in which the fat exceeded the lean meat were classified as unsatisfactory even though the total meat content reached the accepted minimum. One sample of beef sausage, for example, contained a total of 50 per cent. meat, but only 23 per cent. represented lean meat and 27 per cent. was fat.

Two of the ten unsatisfactory samples exhibited a second fault in that they contained sulphur dioxide preservative without declaration of its presence.

The average meat content was 58.8 per cent. for beef sausages (24 samples), and 65.2 per cent. for pork (22 samples).

Potted Meat.—In many parts of the country this commodity is expected to contain not less than 95 per cent. meat. In the West Riding, and some other parts of the North of England, a more easily spreadable product containing about 80 per cent. meat is customary. 70 per cent. is considered by the writer to be the absolute minimum that can be accepted as satisfactory. In all areas it is recognised that potted meat should not contain cereal filler.

Two samples were reported against for containing cereal filler, one of these possessed a satisfactory meat content (80 per cent.) but the other contained only 61 per cent. of meat.

Brawn.—As with potted meat, no nationally agreed standard exists for this commodity, but it is usually found to contain at least 80 per cent. of meat, and again 70 per cent. is considered to be the minimum acceptable.

The sample reported against contained only 63 per cent. meat.

Salmon Cakes contained only 31 per cent. salmon and **Fish Cakes** only 25 per cent. fish, compared with the legal minimum of 35 per cent. for both commodities.

Smoked Salmon Spread.—An informal sample contained only 40 per cent. salmon and a subsequent formal sample 41 per cent., compared with the minimum of 70 per cent. salmon required by the Food Standards (Fish Paste) Order, 1951.

The product had been imported from the Continent and the same importer was responsible for an article described as **Chicken & Ham Slicing Meat** which proved on analysis to be 21 per cent. deficient in meat content.

Although no legal standard exists for this commodity it is accepted in the food industry that such a description should only be applied to a product free from cereal filler and containing not less than 95 per cent. of meat. The product should have been sold as Luncheon Meat for which its 75 per cent. meat content and cereal filling were appropriate.

Minced Meat Loaf (also imported) contained only 60 per cent. of meat instead of the expected 65 per cent.

The efforts of local authorities over many years to deal with the unsatisfactorily low meat content of some canned meat products received considerable encouragement with the publication during the year of a Report on Canned Meat Products by the Food Standards Committee of the Ministry of Food. The Committee recommended the making of legal standards identical in almost every case with those for which Public Analysts have been pressing. Speedy implementation of the report would be a valuable contribution to consumer protection.

Canned Sago Pudding.—An informal sample and a subsequent formal sample of the same brand were stated on the label to have been made from full-cream milk, whereas analysis showed them to have been made either from milk which was seriously fat deficient, or from a mixture of full-cream milk and skimmed milk. The manufacturer admitted that the latter was, in fact, the case.

Rice Pudding with Glucose (Canned) bore the words "Now with Glucose" in large type across the front of the label, but actually contained less than 0.5 per cent. of glucose. It was considered that this quantity of glucose could have no significant nutritional effect and that the claim for its presence was misleading and therefore a contravention of the Food and Drugs Act. The manufacturers immediately agreed to remove the offending words.

Canned Raspberries in Syrup (imported) were 17 per cent. deficient in fruit compared with the minimum prescribed in the Code of Practice with which British Canners comply.

Curds contained 0.3 per cent. of aluminium, indicating that they had been prepared by using Alum to curdle the milk. The use of this chemical is unnecessary and undesirable, and was described by the National Institute of Dairying (who were approached for an opinion) as "not current practice, but of some historical interest relating to the last century". The curds had not been manufactured in Leeds.

A sample of **Cheese & Bacon Spread** was heavily infested with live cheese mites, and a heavy infestation of flour mites was present in a **Parsley Sauce Powder**.

Three samples of **Table Jelly** failed the setting test prescribed by the Food Standards (Table Jellies) Order, 1949. Midway through the year this Order was revoked. Why it should suddenly be decided that standards are no longer necessary for table jellies is not clear, and on the evidence of the above samples, the revocation is to be regretted.

Colouring Matter in Food.—Non-permitted food colours were present in **Sweets, Raspberry Essence, and Canned Cherries**. A **Dehydrated Food** labelled as containing natural colouring actually contained an approved synthetic colour. Three other samples (**Mixed pickles, Raspberry Syrup** and **Blackcurrant Sweets**) contained permitted dyes, but failed to declare their presence. **Rose Hip Syrup** 2 samples (different brands) contravened the requirements of the Labelling of Food Order in that their labels failed to disclose the presence of artificial colouring matter and of Sulphur Dioxide

preservative, both of which were present. It is difficult to see the necessity for adding a coal-tar dye to this very "natural" food, but if it is done the purchaser is at least entitled to be informed of the fact. The manufacturers at first maintained that Rose Hip Syrup was a medicine and therefore exempt from the requirements of the Labelling of Food Order, but later agreed to amend their labels in the manner requested.

Samples of **Raisins** and of **Dried Apricots** (both imported) contained considerably more Sulphur Dioxide preservative than is permitted by the Preservative Regulations of this country.

Members of the public submitted the customary complaint samples. Most of the complaints proved to be fully justified. They included 22 samples of foreign matter in food varying from 77 mouse droppings in a one pound bag of rice, to a vigorous growth of mould in a bottle of beer.

Pesticide Residues.—The dangers attendant upon the use of pesticides receive regular publicity in Parliament and the Press. Whilst some of the fears expressed are exaggerated the problem is one of the most important and difficult that confronts public analysts.

Before World War II the examination of foodstuffs for pesticide residues was relatively simple. The number of pesticides was small and the only one which occasionally gave rise to trouble was lead arsenate.

To-day the position is very different—a score or more of organo-chlorine, organo-phosphorus and organo-mercury compounds are in common use and the list grows longer every month. The variety of possibilities is so large that a systematic search for all possible pesticides occupies a skilled analyst for several days—a fact which severely limits the number of samples which can be examined. One method of overcoming this problem is the use of a rapid Biological Screening Test, which sorts samples into those

which contain a pesticide residue and those which do not. Only those samples giving a positive result in the screening test need be subjected to the time-consuming full chemical examination. These bioassay techniques have been employed for several years by the Food and Drug Administrations of some countries, but are not yet widely used in this country. A variety of test organisms have been employed. Last year a series of tests were carried out in this laboratory using *Daphnia* (water fleas), as the test organism, but the results were not entirely satisfactory. During the year under review more extensive tests have been carried out using the Fruit Fly (*Drosophila melanogaster*). Ample stocks of this fly are easily bred in the laboratory and it is sensitive to minute traces of most insecticides.

One method of test is to expose the flies directly to a pulp of the sample to be tested. An alternative method is to macerate the sample with a suitable solvent which extracts the pesticide, and the solvent is then evaporated so as leave a residual film of the insecticide on the walls of the test-jar. The second method is favoured in this laboratory since it is much more sensitive than the direct pulp test, which is only satisfactory when the residue levels are high. Twenty flies are introduced into the test jar and the LD₅₀ (the time required to kill 50 per cent. of the flies) is noted. If no more than one or two flies are dead after 24 hours' exposure, the sample can confidently be said to be free from organic insecticides.

Bioassays will not detect arsenic, lead or mercury, and samples are separately examined for these elements, using normal chemical methods.

During the year 122 samples of fruit and vegetables were subjected to this special examination. They comprised apples, apricots, bananas, cherries, damsons, gooseberries, grapes, grapefruit, greengages, lemons, melon, oranges, peaches, pears, plums, pomegranates, rhubarb, strawberries, tangerine; beans, beetroot, broccoli, cabbage, carrots, cauliflower, celery, cucumber, lettuce, marrow, mushrooms, spinach, sprouts, tomatoes, watercress.

Of these only two samples of lettuce (imported) were found by bioassay to contain any pesticide residue. Subsequent chemical examination revealed traces of organo-phosphorus insecticides in both samples, but in each case the amount present was well below the accepted safe limit.

These results confirm the opinion expressed above that the hazard from this source is not as great as is sometimes suggested.

Drugs.—Two of the 34 samples were unsatisfactory, neither *Essence of Pennyroyal* nor *Bronchials* being labelled in the manner required by the Pharmacy and Medicines Act, 1941.

BACTERIOLOGICAL SAMPLES

608 Milks and 94 Ice-creams were submitted to the required tests, the results being shown in the tables below. The Methylene Blue Test measures the keeping quality of the milk, and the Phosphatase Test the efficiency of pasteurisation. The Turbidity Test, which is only carried out on Sterilised Milk, shows whether or not such milk has been sufficiently heated.

MILK

Designation	Number examined	Unsatisfactory by			Percentage reported as unsatisfactory
		Methylene Blue test	Phosphatase test	Turbidity test	
T.T. Raw ..	192	..	..	..	..
Sterilised ..	96	..	..	..	..
Pasteurised :—					
Dairies ..	96	..	..	..	..
Schools ..	75	..	..	..	..
T.T. Pasteurised :—					
Dairies ..	149	..	..	..	..
Total ..	608	..	..	..	..

ICE-CREAM

Grade	Time taken to reduce Methylene Blue at 37°C	Number	Percentage	Quality
1.	4½ hours or more ..	61	64.9	Good
2.	3½ to 4 hours	14	14.9	Satisfactory
3.	½ to 2 hours	8	8.5	Unsatisfactory
4.	Nil	11	11.7	Very unsatisfactory
		94	100.0	

19 of the 94 samples of ice-cream (20.2 per cent.) were bacteriologically unsatisfactory, compared with 15.6 per cent. in 1961, and 39.6 per cent. in 1960.

RADIOACTIVITY

Facilities for carrying out measurements of radioactivity were augmented by the purchase early in 1962, of an anticoincidence counter. This instrument not only made it possible to increase the number of samples examined, but because of its very low background (about 1.8 counts per minute compared with the 27-29 counts per minute given by the existing scaler), resulted in greater accuracy in the results. A total of 237 samples were examined for radioactivity compared with 89 samples in 1961, details being as follows:—

Air.—The radioactivity of the smoke deposit obtained in the normal daily measurement of atmospheric pollution was determined each week-end throughout the year.

At the beginning of the year the activity was relatively high (6.9 picocuries per cubic metre) due to fall-out from Nuclear tests carried out by the Soviet Union in the Autumn of 1961. The level fell steadily each month until by August it had dropped to less than one picocurie per cubic metre. Russian nuclear testing was then resumed and was reflected by a jump to 3.9 picocuries per cubic metre in September. By December the figure had reached 7.0 picocuries per cubic metre.

The average monthly figures are shown in the table below.

Month					Total Beta Activity picocuries/metre ³
January	..	..	..	..	6.9
February	..	..	..	..	4.1
March ..	..	..	..	..	4.3
April ..	..	..	..	..	3.9
May ..	..	..	..	..	2.2
June ..	..	..	..	..	1.8
July ..	..	..	..	..	1.9
August	..	..	..	..	0.9
September	..	..	..	..	3.9
October	..	..	..	..	5.0
November	..	..	..	..	3.8
December	..	..	..	..	7.0

Rainwater.—Measurements of radioactivity were continued using the special collecting gauge set up last year on the roof of Market Buildings. As would be expected the results (see Table) followed the same general pattern as did atmospheric radioactivity, namely a high initial figure, followed by a steady fall, and a sharp increase in the last four months of the year. The low figure for October compared with September and November was due to the low rainfall in that month. The absence of rain to wash the activity from the atmosphere would be expected to lead to a high figure for atmospheric radioactivity and examination of the table in the preceding section will show that this was in fact the case.

Month		Volume (Litres)	Activity (pc/litre)	Activity per metre ² per day pc
January	..	4.10	1190	2060
February	..	1.90	1180	1045
March ..	..	1.70	1110	795
April ..	..	2.03	710	630
May ..	..	4.21	420	745
June ..	..	0.84	545	200
July ..	..	2.93	420	515
August	..	5.21	140	305
September	..	5.70	845	2185
October	..	1.47	670	415
November	..	2.02	2125	1870
December	..	2.76	1455	1695

Drinking Water.—There is always a time-lag before variations in the radioactivity of rainwater are reflected in the public supply, and the peak activity resulting from the 1961 tests was not apparent in the tap water until February 1962. Similarly the sudden rise in the radioactivity of the rainwater in September, 1962, was not apparent in the tap water until November.

The monthly levels of radioactivity are detailed in the following table:—

Month					Total Artificial Beta Activity picocuries/litre
January	..	..	..	..	14.7
February	..	..	..	..	19.9
March	..	..	..	..	18.4
April	..	..	..	..	14.4
May	..	..	..	..	10.8
June	..	..	..	..	9.9
July	..	..	..	..	11.3
August	..	..	..	..	9.6
September	..	..	..	..	7.5
October	..	..	..	..	7.7
November	..	..	..	..	14.9
December	..	..	..	..	19.8
Average 1962	..	..	..	..	13.2
Average 1961	..	..	..	..	3.1

As will be seen by comparing the tables for rainwater and drinking water the bulk of the radioactivity in the former is lost by the time the water gets into the public supply. This comes about as the combined result of natural decay, deposition and entrapment on vegetation, filtration through the soil, and settlement, dilution and storage in the reservoirs. Of the total radioactivity that does remain in the drinking water only a small proportion consists of medically undesirable isotopes such as Strontium-90.

Actual determinations of Strontium-90 (which involves a complex and lengthy radiochemical analysis) were made quarterly, with the following results:—

Period	Sr-90	Sr-89
1st quarter	0.5	1.4 pc/litre
2nd quarter	0.5	1.0 pc/litre
3rd quarter	1.0	Nil pc/litre
4th quarter	1.5	0.5 pc/litre
Average	0.9	0.7 pc/litre

Taken over the whole year the proportion of Strontium-90 in drinking water amounted to a little under 7 per cent. of the total artificial activity.

Milk.—A portion of each sample of milk received for routine chemical analysis (approximately 200 samples per month) is put on one side and the resulting bulked samples are analysed monthly for their Strontium-89 and Strontium-90 contents.

The results are shown in the table below:—

Month	Picocuries per litre		Ratio Sr-89 — Sr-90
	Sr-89	Sr-90	
January ..	Not determined	5.2	—
February ..	.. ..	5.5	—
March .. ..	.. ..	5.0	—
April .. ..	.. ..	15.0	—
May	42	8.7	4.9
June	36	12.0	3.0
July	38	14.0	2.8
August	22	12.0	1.8
September ..	42	13.0	3.2
October	61	14.0	4.3
November ..	16	16.0	2.5
December ..	11	11.0	0.9

No radioactive iodine was present in the milk supply in the first half of the year, and it was not until nuclear testing was resumed by the Soviet Union in August that it was necessary to test for this isotope. Thereafter Iodine 131 was determined twice weekly, one sample being taken from a Dales farm, the other being representative of bulk pasteurised milk.

The following table shows the results obtained:—

Date	Bulk pasteurised picocuries per litre	Upland Farm Milk picocuries per litre
9th August	Nil	Nil
16th August	Nil	Nil
22nd August	7	6
5th September	21	29
12th September	50	57
19th September	37	121
26th September	30	68
3rd October	112	145
10th October	62	66
17th October	50	32
23rd October	21	31
30th October	34	36
7th November	32	20
14th November	242	557
19th November	139	458
21st November	26	5
28th November	18	13
4th December	4	2
12th December	5	Nil

Several high figures were obtained in mid-November but thereafter the level fell steeply, partly as a result of the natural decay of this short-lived isotope, but probably more because of the fact that herds were moved inside at this time and ceased to feed on contaminated fresh grass.

Over the 13 weeks when activity was at its highest the average activity was 66 picocuries per litre (pasteurised milk) and 125 picocuries per litre (farm milk). Both figures are well below the recommended Quarterly limit of the Medical Research Council (520 picocuries per litre). A further safeguard lies in the fact that all the above figures are calculated back to the time of production of the milk. At the time of consumption radioactive decay would have slightly reduced this figure.

FERTILISERS AND FEEDING STUFFS

25 fertilisers were submitted. One **Compound Fertiliser** contained a 2 per cent. excess of potash, whilst two others showed slight deficiencies in the declared amounts of soluble phosphoric acid and potash.

ATMOSPHERIC POLLUTION

The daily measurements of Smoke and Sulphur Dioxide in the atmosphere have continued at the same five sites as in previous years, and at four additional sites where the necessary equipment was installed at the beginning of the year under review.

The results are summarised in the Table below:—

STATION	SMOKE		SULPHUR DIOXIDE	
	Microgrammes per cubic metre		Microgrammes per cubic metre	
	Daily Average		Daily Average	
	1962	1961	1962	1961
Blenheim	279	310	333	261
Hyde Terrace	256	308	361	356
Market Buildings	244	298	364	404
Park Square	249	284	355	398
Y.W.C.A.	246	284	340	359
Kirkstall Road	301	—	370	—
Potternewton Lane	249	—	219	—
Stanley Road	332	—	265	—
Temple Newsam	152	—	170	—

It is unwise to draw firm conclusions on the basis of one year's figures since these can show wide variations due to differences in climatic conditions, but it would certainly appear that the coming into operation of the Central Smoke Control Area has brought about an immediate improvement. The average smoke content of the atmosphere at the five sites within this area has fallen from 297 microgrammes per cubic metre per day in 1961, to 255 microgrammes per cubic metre per day in 1962 (a decrease of 14 per cent).

The average sulphur dioxide content of the air at the same five stations shows only a marginal improvement from 356 microgrammes per cubic metre (1961), to 351 microgrammes per cubic metre (1962).

The improvement has resulted despite the extremely severe "Smog" which occurred during the first week of December. The build-up commenced on the 3rd and reached its greatest intensity during the twenty-four hours ending at mid-day on the 6th December. In the worst affected area (Kirkstall Road) the highest levels of smoke and sulphur dioxide recorded during this period were 4,105 microgrammes per cubic metre (smoke) and 5,195 microgrammes per cubic metre (sulphur dioxide).

The significance of these figures becomes more apparent from a study of the following Table, from which it will be seen that the level of sulphur dioxide in the atmosphere was not only the highest ever recorded in Leeds, but was substantially higher than that reached during the notorious London "Smog" of 1952. One can only conjecture the figure to which the smoke content might have risen had it not been for the existence of the Central Smoke Control Area.

Occasion	Microgrammes per cubic metre	
	Smoke	Sulphur Dioxide
Leeds (Kirkstall Road), 5th-6th Dec. 1962 ..	4,105	5,195
Highest level in London "Smog" of 1952 ..	4,460	3,825
Previous highest level in Leeds, Jan. 1959 ..	4,030	3,825
Average level on a bright winter's day ..	400	200

The measurement of atmospheric pollution using standard deposit gauges was continued at the same eight stations as in previous years. The temporary gauge at Sayner Lane (a site where there have been complaints of particularly bad pollution) was also continued. The results are shown in the Table below:—

STATION	DEPOSIT GAUGES	
	Average monthly deposit in tons per sq. mile	
	1962	1961
Armley Park	19.8	21.1
Burley Park	23.9	29.3
Headingley	19.0	12.3
Hunslet	22.4	20.6
Market Buildings	24.1	25.3
Roundhay	11.5	12.6
St. James's Hospital	20.6	19.3
Temple Newsam	15.3	16.0
Sayner Lane (temporary)	86.9	61.4
Average of all permanent sites	19.6	19.6

On the recommendation of the Department of Scientific and Industrial Research the investigations of sulphur pollution by means of Lead Peroxide Candles was discontinued at the end of 1961.

MISCELLANEOUS SAMPLES SUBMITTED BY THE PUBLIC HEALTH DEPARTMENT

25 swimming bath waters were analysed of which two (not under the direct control of the Corporation) were unsatisfactory by reason of their extremely high acidity; 7 others showed less serious deviations from the recommended standards. 7 drinking waters were analysed, two of which contained excessive quantities of lead (2.7 and 1.1 parts per million respectively, compared with a desirable limit of 0.1 part per million; and a maximum permissible figure of 0.5 part per million).

22 samples of water taken from flooded basements were analysed in order to assist in discovering the source of the flood water.

A sterilising fluid recommended for holding ice-cream scoops was found to consist of a 2.9 per cent. solution of Cetrimide. No toxic material could be found in two anodised aluminium jugs which it had been suggested might have been responsible for an outbreak of food poisoning.

SAMPLES SUBMITTED BY OTHER CORPORATION DEPARTMENTS

Baths Department.—A soiled shirt, together with a sample of soap powder and a "builder" used in conjunction with the powder were analysed. As a result a new formulation of detergent was recommended which it is thought will result in much more satisfactory results being obtained by users of the Corporation Wash-houses.

Central Purchasing Department.—7 samples of white disinfectant fluid, 3 detergents, 2 soap powders, 2 samples of margarine and one flour were analysed. Two of the disinfectant samples (taken from contractors' deliveries) failed to comply with the contract specification.

City Architect's Department.—Three samples of ground water were analysed in order to determine their likely action on Portland Cement. Samples of cement rendering, plaster and tile adhesive were analysed. The reason for the failure of the tiling was shown to be due to the fact that the rendering contained a much greater proportion of sand than permitted by the contract specification.

City Coroner.—A record number of 150 samples was analysed in connection with 40 deaths. 13 cases involved determinations of blood alcohol and estimation of the quantity of intoxicating liquor consumed by persons killed in road accidents. All too frequently the results indicated a heavy consumption of alcohol.

The possibility of poisoning as a cause of death was excluded in seven cases where no drugs (or only therapeutic doses) were present.

Of the 19 confirmed deaths by poisoning, 17 were due to overdoses of barbiturates, the actual drugs concerned being Amytal (6 cases), Nembutal (4 cases), Tuinal (4 cases), Carbrital, Pheno-barbitone and Seconal. In another investigation a large overdose of a mixture of amytal and aspirin was responsible for the death, whilst the final case involved sodium cyanide.

Education Department.—15 samples of sausages taken from deliveries made to the School Meals Service were analysed during the year. Two samples contained slightly less meat than prescribed by the contract specification, and one sample contained an excessive proportion of gristle.

Transport Department.—One sample of fuel oil was analysed.

Waterworks Department.—The customary independent analysis of the City Water was carried out each month. With the exception of one slightly high iron content all samples were satisfactory. In view of the renewed interest towards the end of the year in the fluoridation of public water supplies, the fluoride content of the City Water was determined and found to be 0.08 part per million. The optimum level for the prevention of dental caries in children is 1.0 part per million.

SAMPLES RECEIVED FROM OTHER SOURCES

Private Samples.—The 131 samples classified under this heading involved the usual wide variety of investigations. 95 samples of foodstuffs (comprising milk, beer, chutney, jam, frozen fish, rice pudding, tea and whisky) were analysed, mostly for local firms,

6 specimens of viscera were analysed in connection with a suspected case of arsenic poisoning in cattle—the results did not confirm the suspicions.

An antiseptic solution, suspected of causing blistering of the skin, was found to be Cetrimide solution of seven times the recommended strength.

Other privately submitted samples comprised water (14 samples), chemical solution (for standardisation and subsequent use in examinations), paint scrapings from a child's toy (found to be free from toxic metals), packing material for possible damage by seawater, soil, a cylinder of compressed air (for use by under-water swimmers) and various deposits, tablets and solutions for identification.

Craven District Coroner.—Samples of blood and urine from the body of a pilot killed in an aeroplane crash were analysed. Both were entirely normal.

Leeds Group "A" Hospital Management Committee.—12 samples of Orange Squash were analysed in order to provide information for placing a tender for this commodity.

A pressurised fly-spray was examined and its effectiveness compared with that of a standard commercial spray. The latter was found to be very much more effective, this confirming complaints which had been made by users of the sample spray.

The stock of flies maintained for the bioassay of insecticide residues (*vide supra*) proved extremely useful in carrying out comparative tests on the two sprays.

Rothwell Urban District Council.—Three samples of water were submitted for routine analysis, together with determinations of their fluoride content.

Wakefield Corporation.—179 Food and Drug samples; 16 Fertilisers; 18 Atmospheric pollution samples; 18 Waters (including 12 for radioactivity measurement), 2 Sterilising fluids and 5 samples submitted under the Pharmacy & Poisons Act were analysed.

FOOD AND DRUGS ACT, 1955

SAMPLES SUBMITTED TO THE PUBLIC ANALYST DURING 1962.

Article	Number examined	Number unsatis- factory
FOODS (3,298)		
Almonds, ground and shelled	4	..
Baby Food	1	..
Baking powder	1	..
Beans in tomato (canned)	2	..
Beef hamburger	1	..
Beer and stout	10	2
Biscuits	9	..
Black pudding	2	..
Brawn	3	1
Bread	7	7
Breakfast cereal	1	..
Butter	6	1
Cakes	15	1
Cake decorations	2	..
Cake and pudding mixture	8	..
Cheese and cheese spread	13	2
Cherries, glacé	3	..
Cherry pie filling (canned)	1	..
Chicken preparations, chicken (canned and bottled)	15	..
Chocolate	7	..
Chocolate liqueurs	1	..
Coconut, desiccated	4	..
Coffee, instant	7	..
Cornflour, custard and blancmange powder	13	..
Cream, canned, clotted and fresh ..	5	1
Cream of Tartar	1	..
Curds	3	1
Dehydrated food	6	1
Dinner-for-one (frozen)	1	1
Carried forward	152	18

FOOD AND DRUGS ACT, 1955.

SAMPLES SUBMITTED TO THE PUBLIC ANALYST DURING 1962—*cont.*

Article	Number examined	Number unsatis- factory
Brought forward	152	18
Fish cakes	8	3
Fish paste	20	2
Fish (canned)	21	2
Food colour	1	..
Flavouring	6	1
Flour	7	1
Fruit, canned	24	2
Fruit, dried	17	3
Fruit, fresh	70	..
Fruit juices	9	1
Fruit and nut bar	1	..
Fruit pie	4	..
Gelatine	1	..
Gravy browning	2	..
Herbs, dried	2	..
Herrings, pickled	1	..
Ice-cream	5	..
Ice-cream powder	1	..
Ice Jolly syrup	3	..
Jelly, table	14	3
Lard, oil and cooking fat	16	1
Margarine	5	..
Meat extract	2	..
Meat paste	5	..
Meat, potted	3	2
Meat, minced	2	..
Meat tenderiser	1	..
Meat Products (canned):		
Beef and beans	1	..
Beef, corned	1	..
Carried forward	405	39

FOOD AND DRUGS ACT, 1955

SAMPLES SUBMITTED TO THE PUBLIC ANALYST DURING 1962—*cont.*

Article	Number examined	Number unsatis- factory
Brought forward	405	39
Beef with vegetables and gravy ..	6	..
Beef, minced with onion and gravy ..	1	..
Chicken dinner	1	..
Chicken and ham slicing meat ..	1	1
Ham and chicken	1	..
Hamburgers with gravy	1	..
Hamburgers with vegetables and gravy	1	..
Irish stew	1	..
Lamb chops with vegetables and gravy	1	..
Lamb chops with gravy	1	..
Minced meat loaf	2	1
Mixed grill in gravy	2	..
Pork, chopped	1	..
Pork luncheon meat	3	..
Pork sausage with beans in tomato sauce	1	..
Pork and tongue, chopped	1	..
Stewed Steak	1	..
Milk	2,407	8
Milk, Channel Island	68	1
Milk, condensed and evaporated (canned)	6	..
Milk, evaporated, separated with vegetable fat (canned)	1	..
Milk powder (skimmed)	1	..
Milk pudding (canned)	15	4
Milk shake powder	2	..
Milk shake syrup	2	..
Carried forward	2,933	54

FOOD AND DRUGS ACT, 1955.

SAMPLES SUBMITTED TO THE PUBLIC ANALYST DURING 1962—*cont.*

Article	Number examined	Number unsatis- factory
Brought forward	2,933	54
Mint in vinegar	1	..
Mustard and French mustard	4	..
Oatmeal	1	..
Onions, cocktail	1	..
Pastry mix	1	..
Peanut spread	2	..
Pectin solution	1	..
Peel, mixed cut	2	..
Pickles and Sauces	18	2
Polony	1	..
Potato crisps	1	..
Preserves	17	..
Pudding, ready made	2	..
Pulses, dried	3	..
Rennet, essence of	1	..
Rice	2	1
Rice curry (canned)	1	..
Rose Hip Syrup	4	4
Sage and onion stuffing	3	..
Salt	1	..
Sandwiches	2	2
Sausages	51	10
Sausage rolls	4	..
Savoury duck	1	..
Semolina	1	..
Slimbread	1	..
Soft drinks and soft drink powders	30	3
Soup, canned and powdered	16	..
Spices	14	..
Spirits	4	..
Carried forward	3,124	76

FOOD AND DRUGS ACT, 1955.

SAMPLES SUBMITTED TO THE PUBLIC ANALYST DURING 1962—*cont.*

Article	Number examined	Number unsatis- factory
Brought forward	3,124	76
Suet, shredded beef	2	..
Sugar and icing sugar	3	..
Sweets	76	2
Tapioca	1	..
Tomatoes, tomato juice and tomato paste (canned)	9	..
Treacle	2	..
Turkey, minced in jelly	1	..
Vegetables (canned)	19	1
Vegetables, fresh	52	..
Vegetable juice (canned)	1	..
Vegetable salad in mayonnaise (canned)	2	..
Wine	5	..
Yeast extract	1	..
DRUGS (34)		
Antiseptic lozenges	2	..
Brewer's yeast tablets	1	..
Codeine tablets	1	..
Cough mixtures, lozenges and pastilles ..	15	1
Essence of Pennyroyal	1	1
Fever mixture	1	..
Indigestion preparations	3	..
Laxative preparations	3	..
Olive oil B.P.	1	..
Pain killing capsules and tablets ..	3	..
Sulphur tablets	1	..
Tincture of Indian Bark	1	..
Vitamin capsules	1	..
TOTAL FOOD AND DRUGS ..	3,332	81

INDEX

Page

Adoption Act, 1950	66
Ambulance Service	89
Analgesia (Gas/Air and Trilene)	74
Ante-Natal Clinics	61
Area of City	2
Armley Grange Hostel	121
Armley Grange Senior Training Centre	120
Atmospheric Pollution	197, 229
B.C.G. Vaccination	41
Birth-rate—adjusted	5
—crude	3
Births—notified	72
—registered	3
Blindness, Incidence of	29
Bovine Tuberculosis	172
Bronchitis	31
Brucella abortus	164
Cafes, Canteens, etc.—Inspection of	150
Canal Boats, Inspection of	187
Cancer (Malignant Neoplasms)	30
Caravan Sites	185
Care and After-Care—Health Visiting	107
Care of Mothers and Young Children	60
Certificates of Disrepair	139
Chest Clinic, Report on the Work of	38
Children Neglected or Ill-treated in their Homes	67
Child Welfare Centres	60
Chiropody	109
City Analyst's Report	214
Clean Air Act, 1956	199
Clearance Areas	137, 145
Closet Accommodation	185
Closing Orders	137, 139
Common Lodging Houses	185
Complaints, Investigation of	189
Consultative Infant Clinics	62
Convalescent Treatment	105
Conveniences, Public	55
Conversion Areas	143
Cremations	6
Cysticercus Bovis	168
Cysticercus Ovis	168

Dairies—inspection	161
—registration	163
Day Nurseries	65
Death-rate—adjusted	5
—crude	4
Deaths	4
Deaths—in age-groups	6, 10, 11
—principal causes	5, 9
Demolition Orders	136, 139
Dental Care of Mothers and Young Children	69
Deposit Gauges (Atmospheric Pollution)	198, 230
Deposited Solids (Atmospheric Pollution)	206, 207, 230
Diarrhoea and Enteritis (under 2 years)	29
Diphtheria	21
Diphtheria Immunisation	85
Diseases of Animals	172
Disinfection	54
Disinfestation—general	53
—personal	52
Disrepair, Certificates of	139
Domiciliary Midwifery	73
Drains	56, 188
Dustbins	183
Dwelling-houses, Number of	2
Dysentery	24
East Leeds Training Centre	115
Encephalitis, Acute	27
Erysipelas	24
Extraneous Matter in Food	156
Eye Defects (in children under 5 years)	63
Factories—defects found	179
—mechanical	176
—non-mechanical	176
—registered premises, inspection of	177
Fertilisers and Feeding Stuffs	159
Fish, Transport of	171
Flushing, public sewers	56
Food and Drugs Act, 1955	150
Food—condemned as unsound	170
—extraneous matter in	156
—inspection	150
—preparing premises	151
—sampling	153

Food poisoning	27
Foot and Mouth Disease	173
Fowl Pest	173
Gale damage	133
Hairdressers and Barbers	189
Health Education and Publicity	94
Health Education by Health Visitors	95
Health Visiting	75
Health Visitors, Training of	76
Home Help Service	111
Home Nurses, Training of	79
Home Nursing Service	78
Hospital Car Service	93
Houses inspected	138, 189
Houses—number of	2, 132
—unfit	136
Houses-let-in-Lodgings	185
Housing Acts, 1936-1961	132
Housing (Financial Provisions) Act, 1958	139
Housing Repairs and Rents Act, 1954	132
Ice-Cream—bacteriological examination	155, 224
—premises	151
—sampling	155
Illegitimate Births	4
Immunisation—Diphtheria	85
—Whooping Cough	86
Importation of Cattle, Sheep and Pigs	174
Improvement Grants	140
Incontinent Laundry Service	55
Industries, Principal.. .. .	2
Infant Clinics.. .. .	62
Infant Mortality	6
Infant Mortality—Causes of Death	7, 12, 13
—Deaths in Age-groups	7, 13, 14
—Illegitimate	7
Influenza	31
Knacker's Yard	167
Legal Proceedings under :—	
Clean Air Act, 1956	199
Food and Drugs Act, 1955	157
Food Hygiene (General) Regulations, 1960	152
Leeds Corporation Act, 1956	187

Malaria	24
Malignant and Lymphatic Neoplasms	30
Mass Miniature Radiography	44
Maternal Mortality	8
Maternity and Child Welfare Centres	60
Measles	23
Meat—condemned as unsound	169
—inspection	166
Medical Requisites Loan Scheme	80
Medical-Social Work	102
Meningococcal Infection	27
Mental Health Services	113
Mental Illness	121
Mental Subnormality	114
Meteorology	2
Midwifery	71
Midwifery—medical assistance	74
—Training, Part II	72
Midwives—notification of intention to practise	72
—supervision of	74
Milk—adulterated	161, 217
—bacteriological examination	161
—biological examination	164
—radioactivity in	161, 227
—registered premises	163
—registered sellers	163
—sampling	160
—special designations	163
Mortuary, Public	6
Moveable Dwellings	185

National Assistance Act, 1948—Section 47	188
Natural Increase of Population	3
Neglect of Children in their Homes	67
Neo-Natal Mortality	7
Noise, Complaints of	180
North Leeds Training Centre	118
Notifications of Infectious Diseases	16, 17, 18
Nowell House Short-Stay Home	121

Nurseries and Child Minders Act, 1948	66
Nursing Agencies Act, 1957	67
Nursing Homes, Registration of	67

Offensive Trades	185
Ophthalmia Neonatorum	24
Outworkers	178
Overcrowding	132

Paratyphoid Fever	21
Peri-Natal Mortality	8
Pharmacy and Poisons	158
Physiotherapy (Mothers and Young Children)	62
Pigeon Nuisance	191
Pig-keepers	185
Plans, Examination of	188
Pneumonia	31
Poliomyelitis: Polioencephalitis	25
Poliomyelitis—vaccination against	82
Population of the City	2
Post-Natal Clinics	62
Poultry Premises, Disinfection	173
Premature Infants, Care of	64
Prematurity, Deaths from	7
Problem Families	67
Psychiatric Care and After Care	122
Public Cleansing	182
Public Conveniences	55
Public Health Inspectors—Training of	212
—Work done by	193
Public Sewers	56, 188
Puerperal Pyrexia	23

Radioactivity, measurement of	224
Rag Flock and Other Filling Materials	158
Rainfall	3
Rat Proofing	191
Rateable Value	2
Refuse Collection and Disposal	182
Rodent Control	189
Rutland Lodge Hostel	126

Salmonella Infections	27
Scarlet Fever	21
Sewage, Disposal of	182

Sewers—baiting	190
—flushing	56
—public	56, 188
—maintenance and repair of	188
Shellfish, Sampling of	170
Sheltered Workshop	118
Shops, Inspection of	179
Slaughter of Animals	166
Slaughterhouses	167
Slaughterhouses (Meat Inspection Grant) Regulations, 1958	169
Smallpox	21
Smoke Control Areas	202, 210
Smoke Observations	205
Social Care of the Unmarried Mother	103
Social Work, Tuberculosis	47
Stanningley Junior Training Centre	116
Stillbirths	4
Sulphur Dioxide Tests (Atmospheric Pollution)	199, 229
Sunshine	2
Swimming Baths	189
Swine Fever	172

Temperature	3
Training Centres (Mental Health Services)	115
Tuberculin Surveys	40
Tuberculosis—Case Finding Methods	40
—Deaths	35, 38
—Epidemiology	38
—Notifications	34, 38
—Report of the Chest Physician	38
—Social Work	47
Tuberculosis Order, 1938 (Bovine Tuberculosis)	172
Typhoid Fever	21

Unfit Houses	136
Unmarried Mothers, Care of	64
Unsound Food	169

Vaccination—B.C.G.	41
—Poliomyelitis	82
—Smallpox	83

Venereal Diseases—Incidence of	97
—Mortality	29
—Treatment of	97
Vital Statistics—Summary of	xiii
—1920-62 (table)	opp. page 18
Warble Fly	173
Waste Food Boiling Plant.. .. .	174
Water, Sampling of	182
Water Supply	183
Welfare Foods	60
Whooping Cough	23
Whooping Cough Immunisation	86
Workplaces, Inspection of	179

