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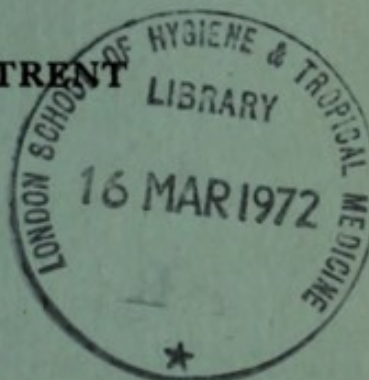
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CITY OF STOKE-ON-TRENT



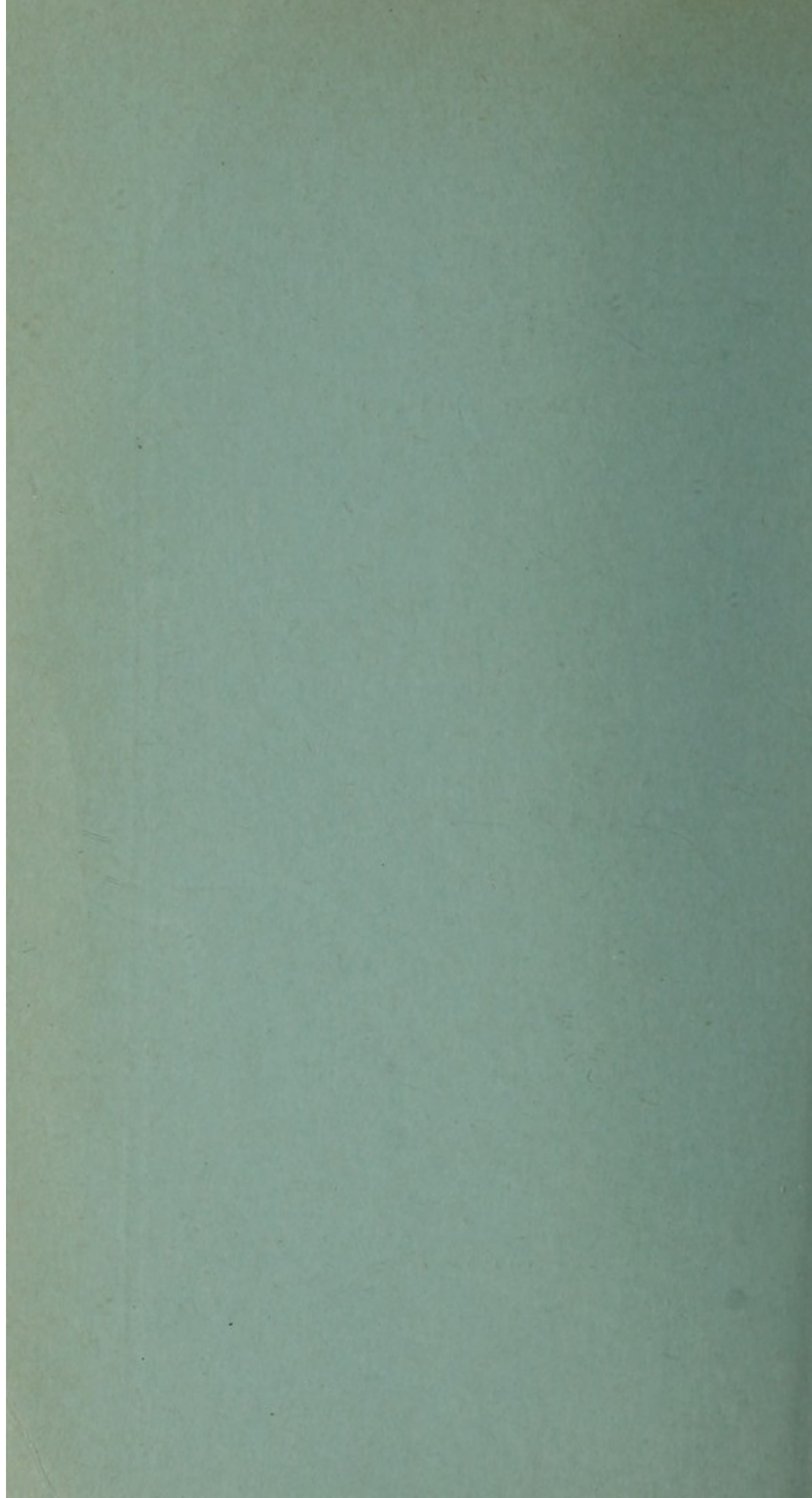
ANNUAL REPORT

on the work of the

**PUBLIC HEALTH
DEPARTMENT**

1970

J. S. HAMILTON, M.B., Ch.B., D.P.H., F.R.S.H.
Medical Officer of Health





CITY OF STOKE-ON-TRENT

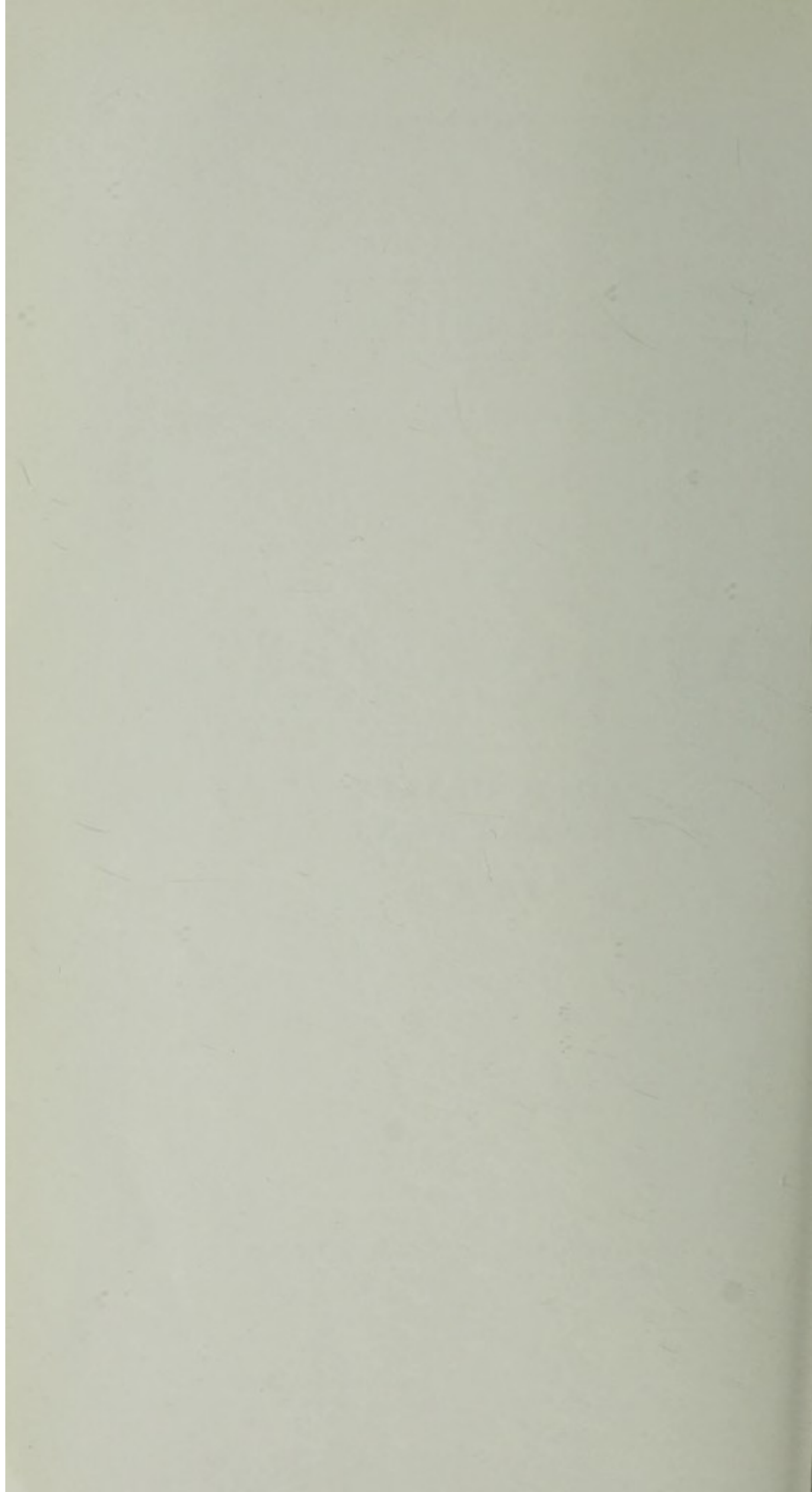
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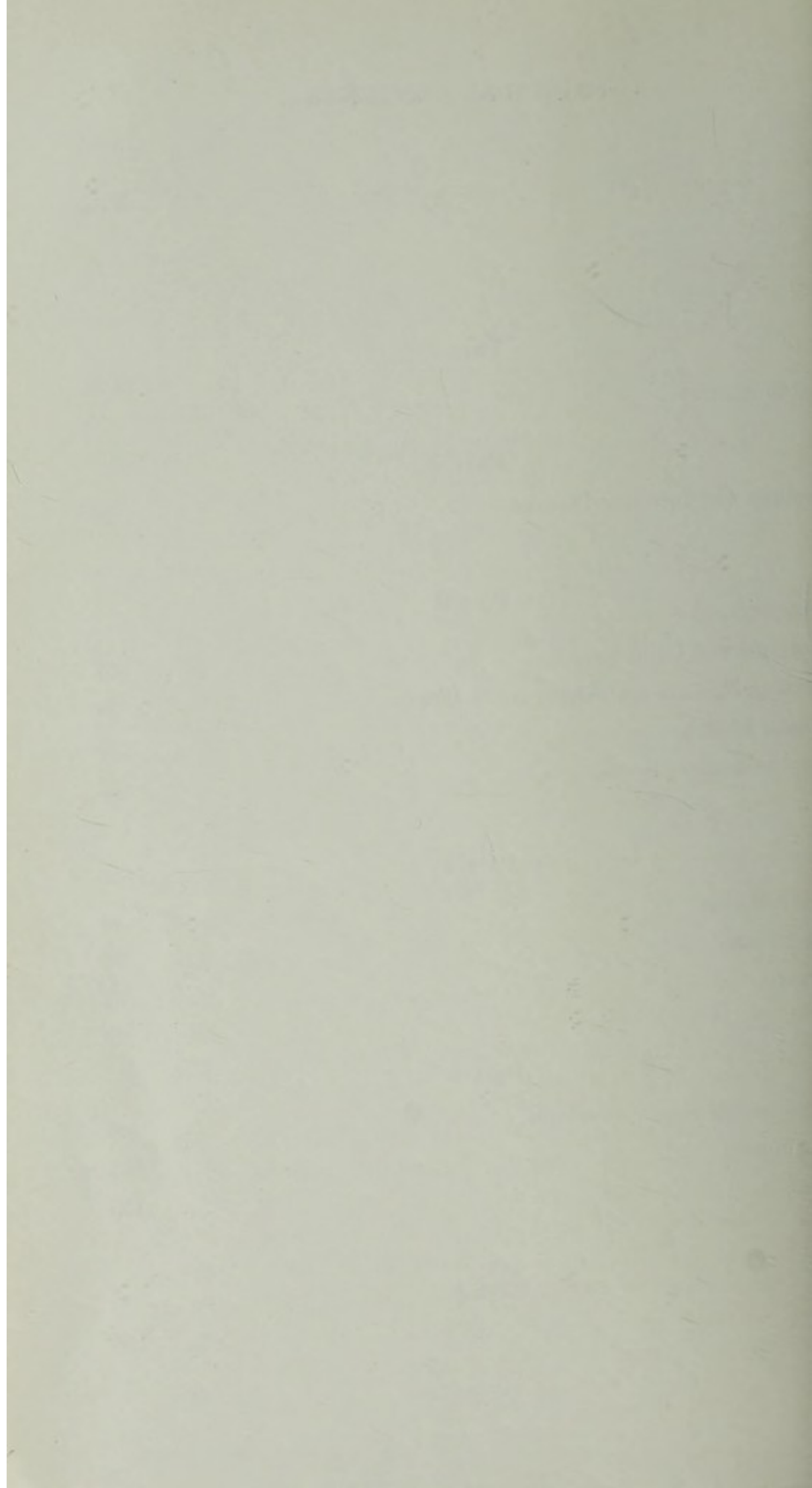
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CITY OF STOKE-ON-TRENT

PUBLIC HEALTH DEPARTMENT

*To the Lord Mayor, Aldermen and Councillors of the
City of Stoke-on-Trent.*

MY LORD MAYOR, LADIES AND GENTLEMEN,

I have the honour to present to you the Annual Report for 1970 which has been prepared on the lines indicated by the Ministry of Health in Circular 1/71.

The Registrar General estimated the civil population at the middle of the year to be 270,800, a decrease of 1,460 compared to a decrease of 780 during the previous year.

During the year 4,090 births were registered compared to 4,223 in 1969. This gives a birth rate 15.1, lower than the 15.5 of 1969 and still well below the rate for England and Wales (16.0).

The crude death rate for the City was 12.4 which is higher than the 10.95 for 1969. The 1970 rate for England and Wales was 11.7. When the standardising factor is applied the rate for the City becomes 15.6.

A notable event during the year was the bringing into use of our latest health centre, situated in the town centre of Tunstall on the 1st June. It was officially opened on the 29th October, 1970 by W. J. Eardley, Esq., J.P. who retired as Chairman of Health Committee in May after long, honourable service to the community and City Council. I would like to express my personal appreciation of his service on the health committee and his years of service as its Chairman, for his great help, encouragement and stimulation.

This new Health Centre catered from the general practitioner side for five general practices involving eleven doctors at the outset and for all the local authority services side by side. An unusual feature is the incorporation of district offices for the Home Help Service and for the Public Health Inspectorate. We feel that their incorporation in a large town centre Health Centre like this has many advantages to the public and to the practitioners also. A brochure and details of the centre are incorporated in the body of the report.

The cervical cytology service has increased during the year and 2,660 women attended compared to 1,700 in 1969. In addition general practitioners and the hospital service carry out many smear tests. Our service has again proved its worth with 9 positive smears and 22 doubtfuls referred for hospital treatment or investigation as necessary. We wish to promote this life saving service and to encourage as many as possible of our female citizens within the appropriate age groups to come forward at regular three yearly intervals for testing.

Once again we are pleased to report that all our six students on the Health Visitor Course at Keele were successful and have proved very useful additions to our staff. A further five students are now attending the course.

For the first time in a number of years the total of illegitimate births dropped substantially. It was 294 compared to 332 in 1969. This drop is due at least in part to the operation of the Abortion Act. Of the total of 286 surviving at the end of 1970 only 37 were *not* in the care of the mother, parents or grandparents. Of the total 85 were born to mothers under 19 and of these 6 were to mothers aged 15 and 15 to 16 year olds.

The number of patients referred to the district nursing service goes up by several hundreds annually and 109,981 visits were paid in 1970. As the population ages the number of patients referred is likely to keep on going up and more staff will be required.

There has been much uncertainty amongst the social worker staff and the training centre and hostel staffs, home help and day nursery staff over the transfer to the new social services department which will operate from 1st April, 1971. There is bound to be such a feeling of unease and uncertainty until the new department settles down and pulls its pieces together. It will have the task of proving that the unified service is indeed better than the present departmental split service and only time will show whether the reorganisation has been worth while. It will need the help and co-operation of many people and the Health Department is more than willing to offer its help and co-operation in every way.

During the year we welcomed the opening of a new rehabilitation hostel for the mentally ill which is described elsewhere in the report. It has quickly proved to be a valuable addition to our mental health service.

For the second year in succession the number of patients carried by the ambulance service showed a decrease (from 134,546 in 1969 to 126,977 in 1970) and the number of miles run reduced by 55,454. This increases the hope that the service is at last stabilising.

The number of salmonella infection cases has again been high and is likely to remain so unless a real attack is made on the veterinary side of the problem by sterilising all animal feeding stuffs especially imported cattle, pig and fowl foods. This is the major source of the infection and our attempts to tackle the problem by prevention of spread at the human level will not eliminate it however hard we try unless there is a concurrent attack at the animal level.

Smoke control action goes on slowly because of the limited fuel position but the situation should improve rapidly from 1971 onwards.

Our current slum clearance programme is nearing completion and should be largely finished within two years, leaving only a relatively slight residual problem of perhaps 200 houses per year to be dealt with. It is likely that by the end of next year we shall have to instigate a review of all pre 1914 houses in the City to give a clear picture of our future problem in housing.

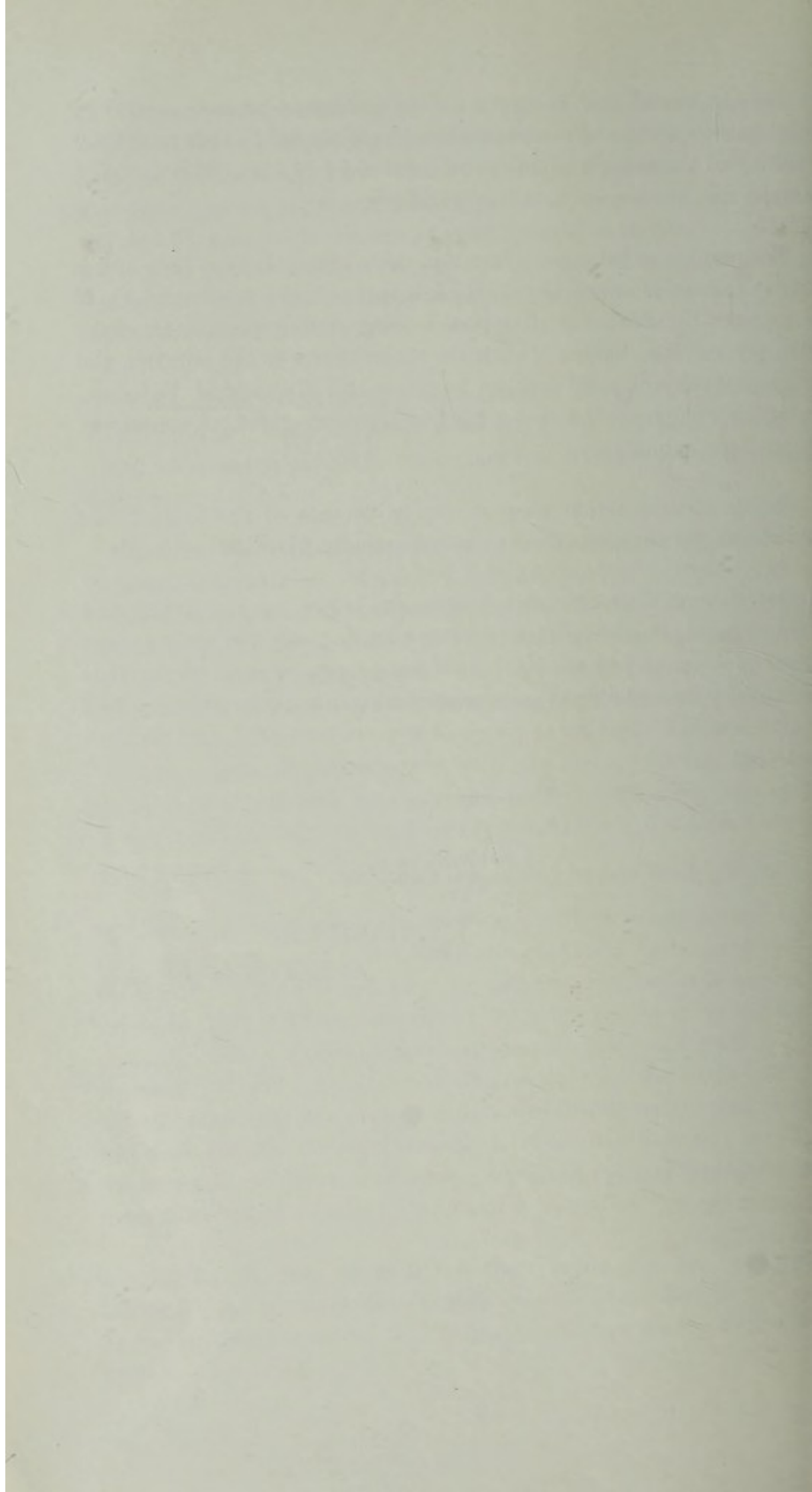
I am, my Lord Mayor, Ladies and Gentlemen,

J. S. HAMILTON,

Medical Officer of Health.

PUBLIC HEALTH DEPARTMENT,
79 LONDON ROAD,
STOKE-ON-TRENT,
ST4 7PZ.

August, 1971.



Health Committee at December, 1970

CHAIRMAN—

Councillor (Mrs.) A. Gatensbury

VICE-CHAIRMAN—

Councillor J. W. D. Davies

Alderman (Mrs.) B. E. Meakin, M.B.E.

Councillor (Mrs.) E. Beddow

Councillor D. Brown

Councillor W. H. Brown

Councillor (Mrs.) R. J. Cant

Councillor G. Clarke

Councillor H. Hammersley

Councillor A. G. Hodgkinson

Councillor G. Hodgkinson

Councillor (Miss) J. Moston

Councillor R. Rigby

Councillor (Mrs.) D. Robinson,
C.B.E., J.P.

Councillor B. N. Shackleton

Councillor (Mrs.) L. Smallwood

Councillor W. Screen

Councillor J. Worthington

SENIOR STAFF OF THE DEPARTMENT

Medical Officer of Health,

JOSEPH STEWART HAMILTON, M.B., Ch.B., D.P.H., F.R.S.H.

Deputy Medical Officer of Health,

WILLIAM BARRINGTON WHISKER, M.B., Ch.B., D.P.H.

Maternity and Child Welfare Officer,

MARY M. ESSEX LOPRESTI, M.B., B.S., M.R.C.O.G.

Assistant Maternity Child Welfare Officers,

ANNA MARY WALSH, M.B., B.Ch., M.R.C.O.G., D.P.H.

GWENDOLINE TURNER, M.B., Ch.B.

GORDON CLARKE (Commenced 17th September, 1970)

Chest Consultant (Part Time),

FREDERICK ALAN SMITH, M.D., Ch.B., D.P.H.

Chest Physician (Part Time),

CHARLES MCBRIDE, M.B., Ch.B., B.A.O.

Chief Public Health Inspector,

F. COLBERT, F.R.S.H., M.A.P.H.I.

Ambulance Officer,

F. E. S. JONES, O.St.J., F.I.A.O., F.I.C.A.P.

Senior Mental Health Officer,

E. E. STEPHENSON, A.A.P.S.W.

Public Analyst,

R. S. HATFULL, F.R.I.C., F.R.S.H.

Chief Clerk,

A. J. PLIMBLEY

PART 1.

VITAL STATISTICS

AREA AND POPULATION

Following the report of the Boundary Commission the area of the City was increased with effect from the 1st April, 1965, the increased area of the City being 22,949 acres. It is 10 miles long, and in no part more than 5 miles wide. About 150 acres are covered with water.

The Registrar General gives the civilian population of the City as 270,800 at the middle of 1970. This figure is a decrease of 1,460 on the figure supplied by the Registrar General for the previous year.

The Registrar General in his Report on the Census, 1961, gave the population figure as 265,306.

The populations at the Census periods were as follows:—

1911	1921 (Extended Area)	1931	1951	1961
234,534	267,647	276,639	275,115	265,306

Table 1—Areas, Population in Wards at Census

Area Ward Nos.	Acreage	POPULATION				
		1951	1961			
		Persons	Persons	Males	Females	Persons per acre
1 Goldenhill/Tunstall ..	1,128	11,132	10,115	4,941	5,174	9.0
2 Tunstall	444	11,838	9,580	4,575	5,005	21.6
3 Packmoor/Chell ..	1,708	12,603	14,580	7,236	7,344	8.5
4 Longport/Burslem ..	561	10,035	6,743	3,223	3,520	12.0
5 Burslem	417	11,302	9,747	4,643	5,104	23.4
6 Burslem	624	10,750	6,963	3,416	3,547	11.2
7 Norton/Smallthorne ..	1,201	9,969	13,078	6,492	6,586	10.9
8 Sneyd Green/Milton ..	860	9,883	11,756	5,682	6,074	13.7
9 Hanley	649	13,823	10,176	4,940	5,236	15.7
10 Hanley	424	11,667	8,399	4,068	4,331	19.8
11 Milton/Abbey Hulton ..	870	13,390	11,874	5,896	5,978	13.6
12 Hartshill/Basford ..	637	11,969	10,985	5,206	5,779	17.2
13 Hanley/Shelton ..	488	12,845	9,537	4,622	4,915	19.5
14 Hanley	424	12,472	9,190	4,510	4,680	21.7
15 Hartshill/Penhull ..	489	13,073	10,747	5,115	5,632	22.0
16 Bucknall	1,596	5,328	19,306	9,667	9,639	12.1
17 Stoke	525	10,930	9,833	4,772	5,061	18.7
18 Trent Vale/Trentham ..	2,086	9,674	12,782	6,259	6,523	6.1
19 Fenton	970	10,839	8,478	4,077	4,401	8.7
20 Longton	1,353	13,026	17,120	8,463	8,657	12.7
21 Fenton	715	9,680	8,156	3,977	4,179	11.4
22 Longton	558	13,167	10,228	4,873	5,355	18.3
23 Longton	1,252	11,960	11,012	5,411	5,601	8.8
24 Meir	1,230	13,760	14,921	7,335	7,586	12.1
TOTALS ..	21,209	275,115*	265,306	129,399	135,907	12.5

* Estimated population in Wards given for 1951 as the number of wards was reduced in May, 1955 from 28 to 24.

The distribution of the population over the whole area at the time of the 1901 Census averaged 18·6 persons per acre, during the year 1911, 21·0 persons per acre, and in 1921, 22·0 persons per acre. The number of persons per acre for the extended City in 1931 was 13·05, in 1951 12·98 and the 1961 Census shews it to be 12·5. The extended boundaries now give us 12·04 per acre.

INHABITED HOUSES

The number of inhabited houses at the Census of 1931 for the City was 58,687, in 1951 it was 74,278, and the census for 1961 was 84,664

The estimated number of inhabited houses at the end of 1970 is 95,349.

During the year 1970, 1,908 dwellings were certified for habitation; 126 dwellings were built by the Corporation, and 970 dwellings were built by private owners; 397 houses were demolished.

Table 2.—Population in Existing Wards

Ward		Estimated Population Middle of 1970
1	Goldenhill/Tunstall	11,007
2	Tunstall	10,523
3	Packmoor/Chell ..	9,915
4	Longport/Burslem ..	11,979
5	Burslem	10,633
6	Burslem	11,996
7	Norton	9,618
8	Sneyd Green/Milton	10,175
9	Hanley/Shelton ..	13,328
10	Hanley	10,842
11	Milton/Abbey Hulton	13,920
12	Hartshill/Basford ..	10,747
13	Stoke	8,412
14	Hanley	8,321
15	Bucknall	9,239
16	Bucknall	12,194
17	Penkhull/Trent Vale	13,398
18	Trentham	9,385
19	Fenton	14,242
20	Longton	12,027
21	Fenton	7,729
22	Longton	13,155
23	Longton	16,097
24	Meir	11,918
TOTAL		270,800

RATEABLE VALUE

The rateable value of the City for the purposes of the General Rate at 31st March, 1970 was £10,246,838 compared with £10,068,756 at 1st April, 1969.

On 31st March, 1970 the product of 1d. Rate was £42,200 compared with £41,000 at 1st, April, 1969.

BIRTHS

There were 4,090 births registered and allotted to the City in 1970 giving a birth rate of 15·1 per 1,000 of the population.

When the Registrar General's Comparability Factor for births (0·99 for Stoke-on-Trent) is applied to the recorded rate it becomes 14·9 per 1,000 of the population.

The rate for England and Wales was 16·0.

The recorded rate is 0·4 lower than in 1969.

The ratio of births of males to births of females during the year was 38 to 1,000 For the year 1969 the ratio was the same.

The natural increase of population, that is excess of births over deaths was 850. In the previous year it was 1,080, a difference of 230, the number of births registered being 133 less than in 1969 and the number of deaths 258 more.

ILLEGITIMATE BIRTHS

Of the total births, 283 or 6·91 per cent., were illegitimate, compared with 303 or 7·17 per cent. in the previous year. It should be noted that 283 remained in the care of both parents giving a relatively stable family background to these children. The illegitimacy rate for England and Wales for 1970 was 8·0 per cent. i.e. 80 per 1,000 live births.

STILL BIRTHS

Under the Notification of Births Act, all still-births must be notified to the Medical Officer of Health. 143 were notified during the year under the Act, and of these 1 was attended by a midwife, and 142 took place in an institution.

The number registered during the twelve months ending 31st December was 78.

Taking the number of still-births that occurred in 1970 as 78 it is equal to 1.90 per cent. of the total births. In 1969, there were 87 still births equal to 2.06 per cent.

VITAL STATISTICS

Live Births	..	..	..	..	..	..	..	4,09
Live Births rate per 1,000 population	..	..	..	..	..	..	..	15
Still-births	..	..	..	..	..	..	..
Still-births rate per 1,000 live and still-births	..	..	..	..	..	..	..	18
Total live and still-births	..	..	..	..	..	..	..	4,1
Infant deaths	..	..	..	..	..	..	..
Total infant mortality rate per 1,000 live births	..	..	..	..	..	..	..	19
Legitimate infant mortality rate per 1,000 live births	..	..	..	..	..	..	..	19
Illegitimate infant mortality rate per 1,000 live births	..	..	..	..	..	..	..	0
Neo Natal rate	..	..	..	..	..	..	..	13
Perinatal death rate	..	..	..	..	..	..	..	2
Illegitimate live births per cent of total live births	..	..	..	..	..	..	..
Maternal deaths (including abortion)	..	..	..	..	..	..	..
Maternal mortality rate per 1,000 live and still-births	..	..	..	..	..	..	..	0

Table 3

Vital Statistics of Whole District during 1960 to 1970

Year	Population estimated to middle of each year	BIRTHS			Total Deaths registered in the District		Transferable Deaths		Net Deaths belonging to the district			
		Un- corrected Number	Nett		Number	Rate	of Non- residents registered in the district	of Resi- dents not registered in the district	Under 1 yr of age		At all ages	
			Number	Rate					Number	Rate per 1000 net Births	Number	Rate
1960	270,200	5,354	4,178	15.5	3,549	13.1	764	157	104	25	2,942	10.9
1961	265,800	5,578	4,260	16.0	3,804	14.3	752	170	123	29	3,222	12.1
1962	266,130	5,804	4,459	16.7	3,842	14.4	940	179	100	22	3,081	11.5
1963	266,110	5,902	4,348	16.3	3,492	13.1	606	163	85	19	3,049	11.4
1964	263,910	6,262	4,480	16.9	3,683	13.9	835	143	74	16	2,991	11.3
1965	276,630	6,438	4,490	16.2	3,901	14.1	919	164	88	19	3,146	11.3
1966	276,300	6,411	4,398	15.9	4,027	14.7	962	182	82	18	3,247	11.7
1967	275,730	6,652	4,431	16.0	3,855	13.9	973	158	98	22	3,040	11.0
1968	273,040	7,046	4,483	16.4	4,040	14.7	1,037	170	84	18	3,173	11.6
1969	272,260	7,247	4,223	15.5	3,987	14.6	1,005	161	89	21	3,143	11.5
1970	270,800	7,201	4,090	15.1	4,331	15.9	1,091	144	81	19	3,384	12.4

Table 4

Showing the number of Births, Birth Rate, number of Deaths, Death Rate and Infantile Mortality Rate in each of the 24 Wards.

WARD			No. of Births registered	Birth Rate	No. of Deaths registered	Death Rate	Infantile Mortality Rate
1	..	..	124	11.2	230	20.8	24
2	..	..	121	11.4	133	12.6	41
3	..	..	171	17.2	110	11.0	29
4	..	..	179	14.9	147	12.2	22
5	..	..	205	19.2	169	15.8	9
6	..	..	175	14.5	157	13.0	28
7	..	..	131	13.6	86	8.9	15
8	..	..	126	12.3	110	10.8	15
9	..	..	238	17.8	177	13.2	42
10	..	..	138	12.7	144	13.2	14
11	..	..	196	14.0	174	12.5	—
12	..	..	134	12.4	150	13.9	29
13	..	..	125	14.8	108	12.8	16
14	..	..	150	18.0	119	14.3	40
15	..	..	177	19.1	124	13.4	—
16	..	..	238	19.5	87	7.1	17
17	..	..	150	11.1	176	13.1	26
18	..	..	129	13.7	103	10.9	7
19	..	..	233	16.3	166	11.6	21
20	..	..	159	13.2	139	11.5	12
21	..	..	170	21.9	114	14.7	11
22	..	..	216	16.4	172	13.0	23
23	..	..	288	17.8	146	9.0	10
24	..	..	117	9.8	143	11.9	25
Whole City ..			4,090	15.1	3,384	12.4	19.8

Table 5

Birth Rate, Death Rate and Infantile Mortality Rate for the whole City since Federation.

	Birth Rate	Death Rate	Infantile Mortality Rate
1911	31.3	19.6	203
1912	31.2	15.9	128
1913	31.9	18.7	169
1914	31.6	17.4	144
1915	26.9	18.4	147
1916	23.9	16.8	126
1917	20.8	16.5	116
1918	22.3	20.3	111
1919	22.5	16.2	111
1920	30.9	12.8	98
1921	29.0	14.8	134
1922	25.9	14.3	115
1923	24.6	12.7	93
1924	23.7	13.5	101
1925	22.9	13.5	106
1926	21.7	12.5	101
1927	21.2	13.4	99
1928	19.6	11.7	87
1929	19.0	15.1	105
1930	19.9	11.7	70
1931	18.8	13.1	100
1932	17.2	12.1	88
1933	16.2	12.9	89
1934	16.7	11.7	85
1935	16.6	12.3	83
1936	16.8	12.4	74
1937	16.7	13.1	81
1938	16.4	11.3	52
1939	16.3	12.3	61
1940	17.0	13.2	61
1941	17.5	12.4	63
1942	18.9	11.9	49
1943	20.6	12.7	62
1944	21.4	11.6	51
1945	19.8	11.9	50
1946	22.2	12.1	55
1947	23.5	12.1	61
1948	20.0	10.7	42
1949	18.7	11.5	34
1950	17.0	11.4	43
1951	15.8	12.9	33
1952	16.4	11.3	28
1953	16.4	10.9	28
1954	15.6	11.0	33
1955	15.3	11.4	31
1956	15.6	11.1	27
1957	15.8	11.5	30
1958	16.1	11.2	26
1959	15.6	10.3	21
1960	15.5	10.9	25
1961	16.0	12.1	29
1962	16.7	11.5	22
1963	16.3	11.4	19
1964	16.9	11.3	16
1965	16.2	11.3	19
1966	15.9	11.7	18
1967	16.0	11.0	22
1968	16.4	11.6	18
1969	15.5	11.5	21
1970	15.1	12.4	19

Table 6

Vital Statistics compared with those of England and Wales over a period of five years, and the natural increase for Stoke-on-Trent.

	Death Rate		Birth Rate		Infantile Mortality Rate		Natural Increase in Population, Stoke-on-Trent
	Stoke-on-Trent	England and Wales	Stoke-on-Trent	England and Wales	Stoke-on-Trent	England and Wales	
1966	11·7	11·7	15·9	17·7	18	19	1,157
1967	11·0	11·2	16·0	17·2	22	18	1,391
1968	11·6	11·9	16·4	16·9	18	18	1,309
1969	11·5	11·9	15·5	16·3	21	18	1,080
1970	12·4	11·7	15·1	16·0	19	18	850

DEATHS

The number of deaths registered in the City during the year 1970 was 4,331. Of the total deaths, 2,757 occurred in public institutions in the district. If the deaths of non-residents which occurred in the district be excluded and the deaths of residents which occurred beyond the district be included the net deaths belonging to the district is 3,384 (1,748 male and 1,636 females), and the death rate 12·4 per 1,000.

When the Registrar General's Comparability Factor for deaths (1·26 for Stoke-on-Trent) is applied to the recorded rate it becomes 15·7 per 1,000 of the population.

The death rate for the whole of England and Wales was 11·7.

The death rate of 12·4 per 1,000 is 0·9 more than that for 1969.

PRINCIPAL CAUSES OF DEATH REGISTERED DURING THE YEAR

	1970	1969
Tubercular Diseases (all forms)	22	24
Congenital Debility and Malformation, etc., including Premature Birth	57	32
Bronchitis	215	128
Pneumonia	238	213
Organic Heart Disease, etc.	916	863
Cancer	647	612
Violence	117	125
Nephritis and Bright's Disease	9	9
Influenza	78	2

DEATHS FROM PRINCIPAL ZYMOTIC DISEASES

	1970	1969
Smallpox	0	0
Enteric	0	0
Diphtheria	0	0
Scarlet Fever	0	0
Whooping Cough	0	0
Measles	1	0
Diarrhoea and Enteritis (under two years of age) ..	1	1

Lead Poisoning

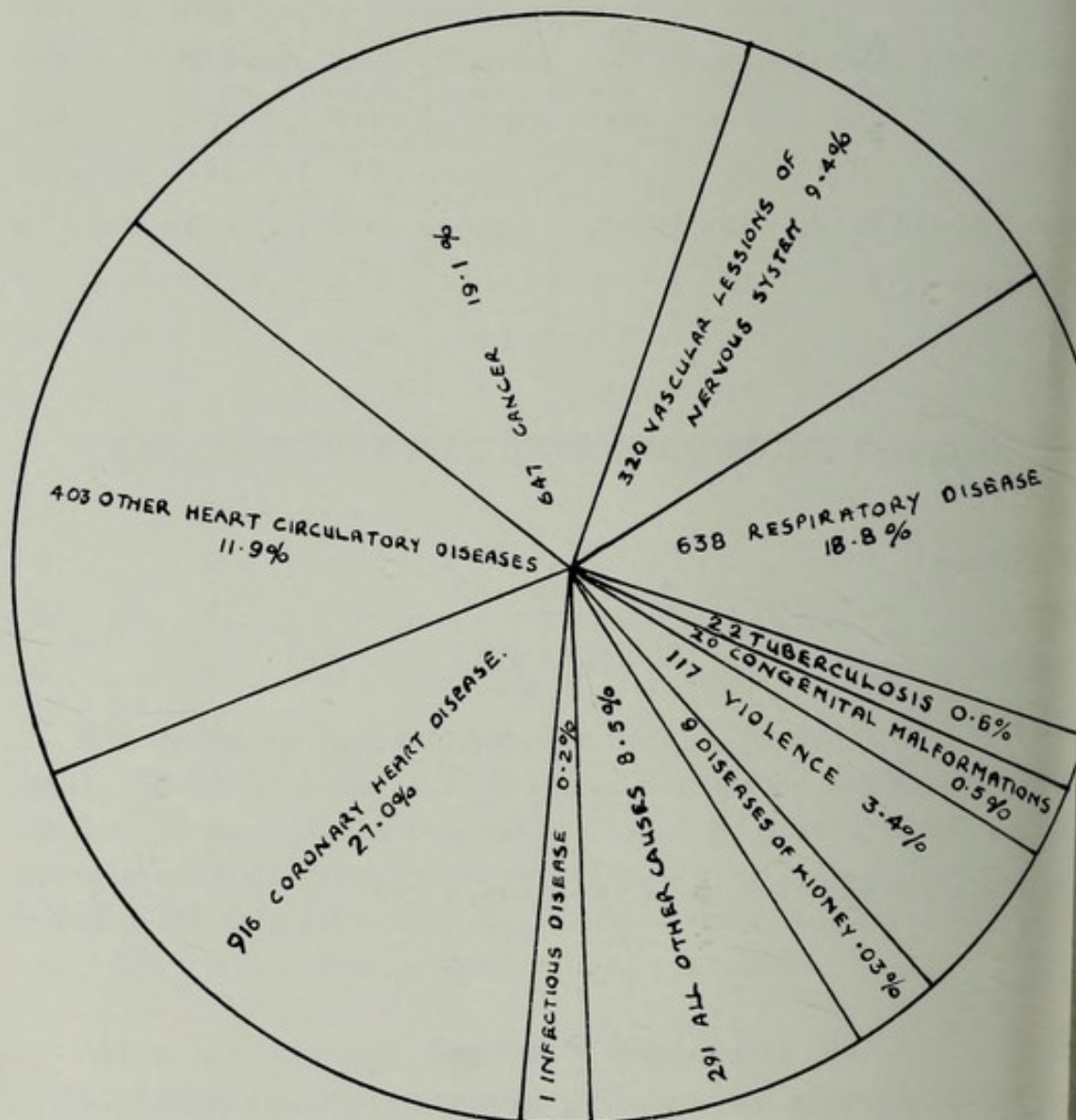
No deaths from lead poisoning have occurred since 1950.

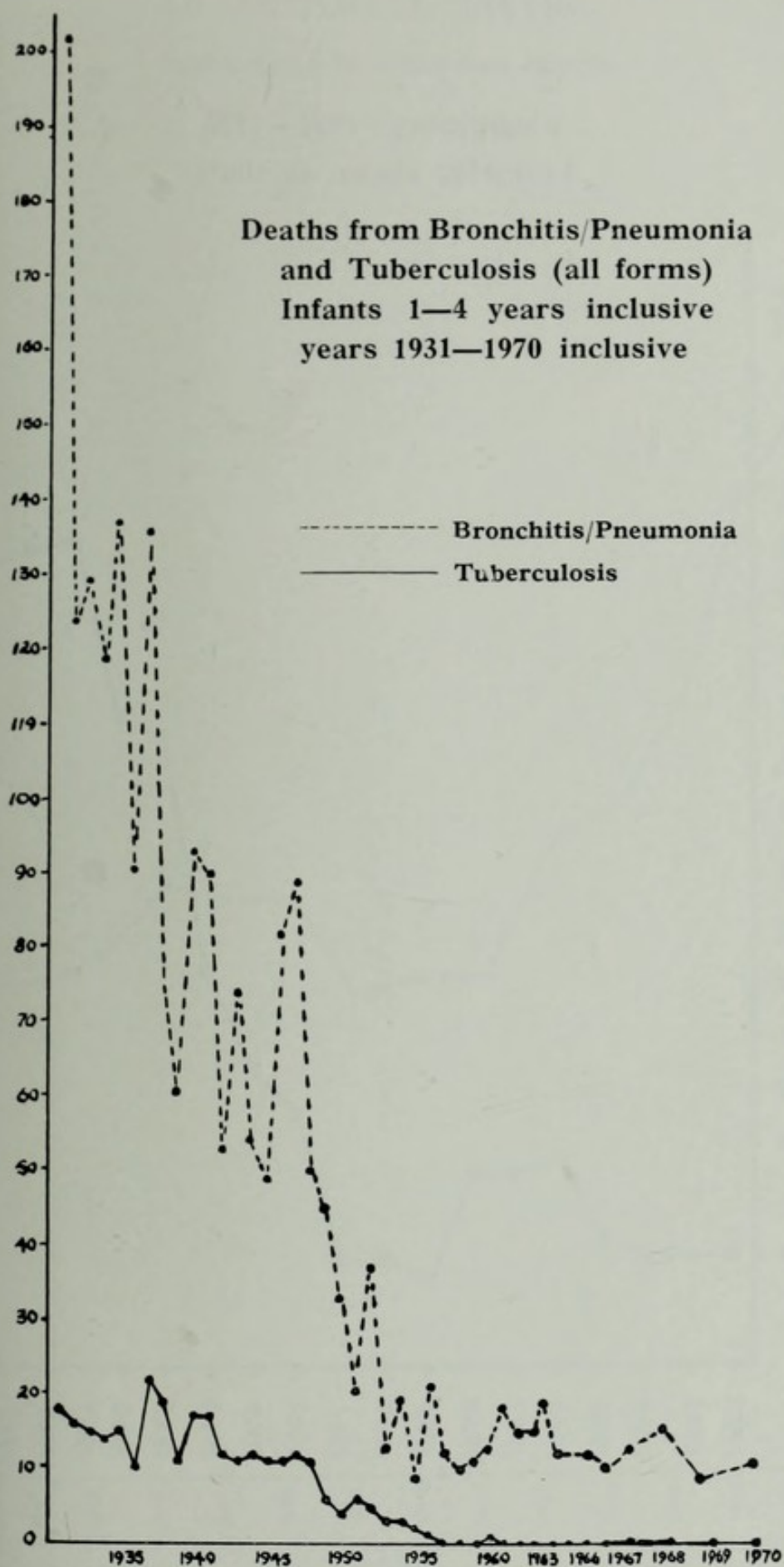
Cancer

The total number of deaths from cancer was 647 an increase of 35 from the previous year. This is equal to a death rate of 2.38 and in England and Wales the rate was 2.390 per thousand population.

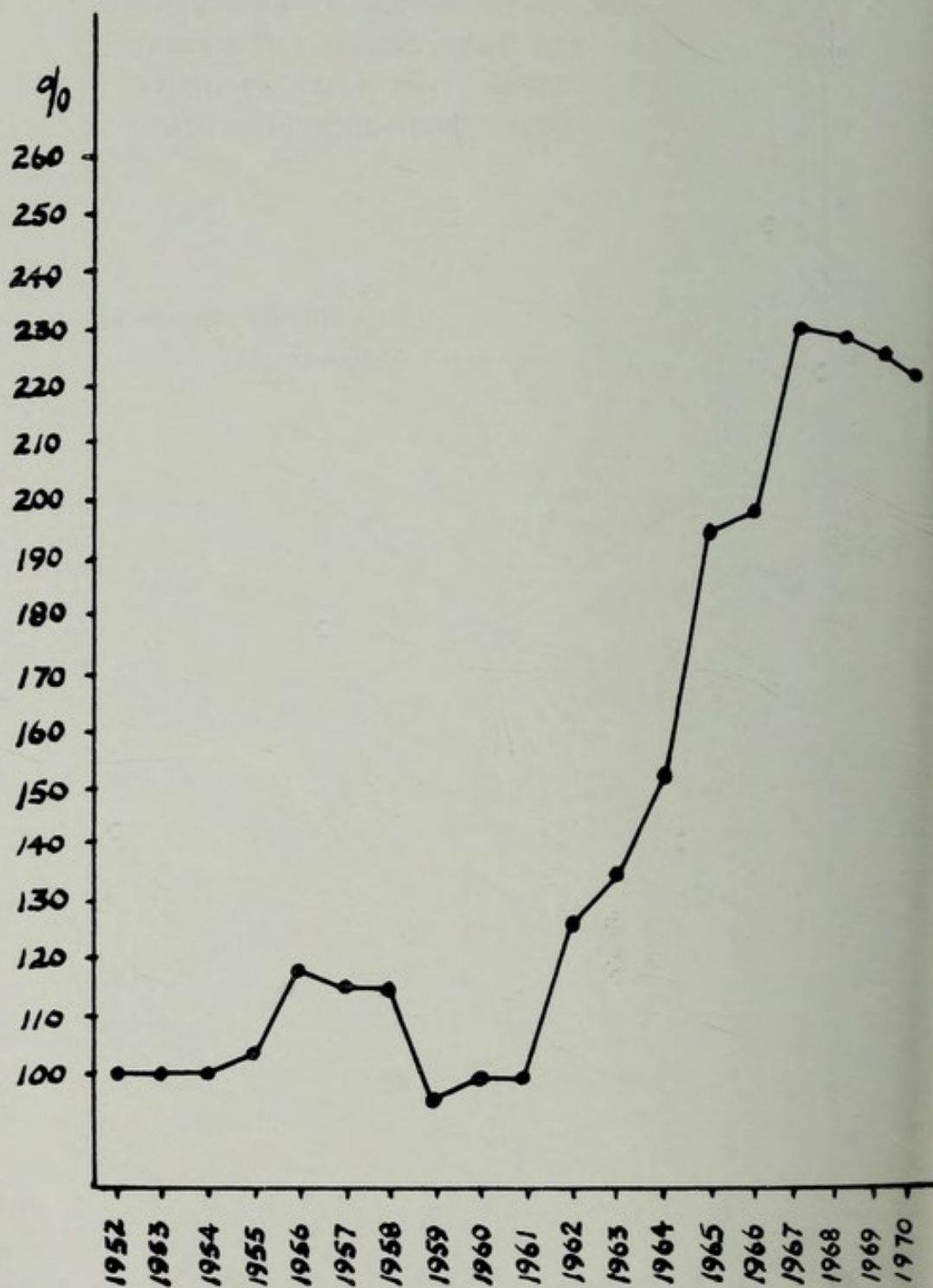
Proportion of Deaths from principal causes 1970

Total Deaths 3,384





Illegitimacy 1952 - 1970
Year 1952 shewn as 100%



ILLEGITIMATE BIRTHS
Percentage to total live Births

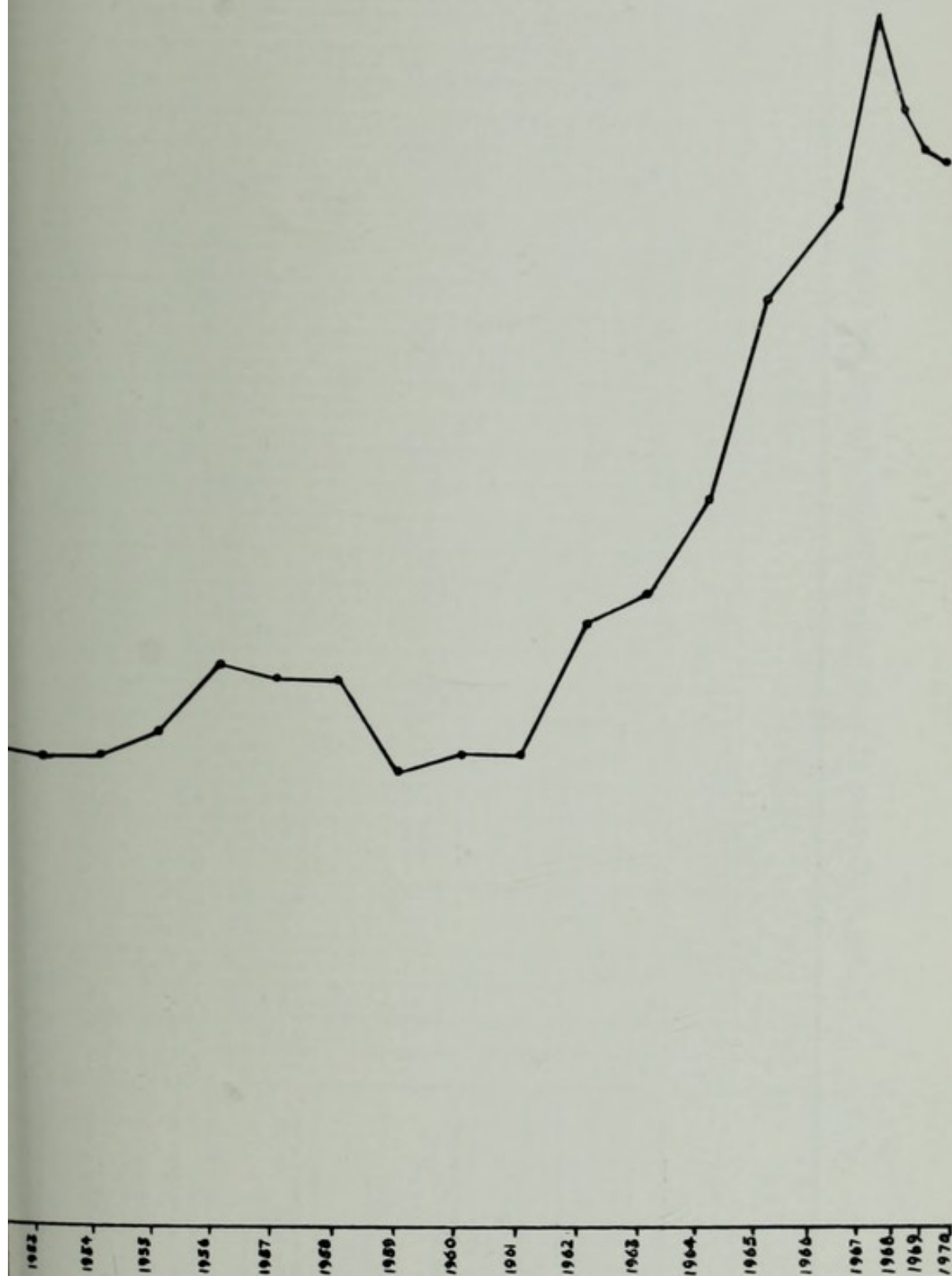


Table 7—Causes of, and Ages at Death, during the year 1970

Causes of Death	W A R D S																			
	1		2		3		4		5		6		7		8		9		10	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bacillary dysentery and amoebiasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteritis and other diarrhoeal diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis of respiratory system	2	2	—	—	1	1	1	1	1	1	—	—	—	—	1	1	1	1	—	—
Other tuberculosis, including late effects	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping cough	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Streptococcal sore throat and scarlet fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningococcal infection	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhus and other rickettsioses	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Syphilis and its sequelae	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
All other infective and parasitic diseases	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malignant neoplasm—stomach	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malignant neoplasm—lung, bronchus	8	—	7	1	4	1	6	4	6	1	5	1	5	1	5	1	7	2	8	1
Malignant neoplasm—breast	3	—	1	—	2	—	—	2	—	3	—	—	1	—	3	—	1	—	4	—
Malignant neoplasm—uterus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leukaemia	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other malignant neoplasms, including lymphatic and haematopoietic tissue	10	7	5	8	6	5	6	6	6	7	5	10	5	5	5	8	4	8	4	3
Benign neoplasms of unspecified nature	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diabetes mellitus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avitaminoses and other nutritional defic.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Endocrine, nutritional & metabolic dis.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Anaemias	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Disease of blood/blood forming organs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mental disorders	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diseases of nervous system & sense organs	1	4	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Active rheumatic fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chronic rheumatic heart disease	6	1	1	1	2	1	3	2	1	2	1	2	2	2	1	1	1	3	1	1

Table 7—Causes of, and Ages at Death, during the year 1970—continued

[illegible]

Table 7—Causes of, and Ages at Death, during the year 1970—continued

Causes of Death	WARDS								Net deaths at the subjoined ages of "Residents," whether occurring within or without the district																Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District					
	21		22		23		24		All ages		under 1 year		1		2 to 4 years		5 to 14 years		15 to 24 years		25 to 44 years		45 to 64 years				65 to 74 years		75 years and over	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bacillary dysentery and amoebiasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteritis and other diarrhoeal diseases	—	—	1	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis of respiratory system	—	—	1	—	—	—	—	10	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other tuberculosis, including late effects	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping cough	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Streptococcal sore throat and scarlet fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningococcal infection	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhus and other rickettsioses	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Syphilis and its sequelae	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
All other infective and parasitic diseases	—	—	—	—	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malignant neoplasm—stomach	3	1	7	2	—	1	3	60	39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malignant neoplasm—lung, bronchus	5	1	8	—	8	1	7	131	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malignant neoplasm—breast	—	—	1	—	4	2	—	54	54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malignant neoplasm—uterus	—	—	—	—	—	—	—	—	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leukaemia	—	—	—	—	—	—	—	5	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other malignant neoplasms, including lymphatic and haematopoietic tissue	2	6	11	6	9	10	9	146	149	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Benign neoplasms of unspecified nature	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diabetes mellitus	—	—	—	—	—	—	—	3	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avitaminoses and other nutritional defic.	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Endocrine, nutritional & metabolic dis.	—	—	—	—	—	—	—	2	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Anaemias	—	—	—	—	—	—	—	3	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Disease of blood/blood forming organs	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mental disorders	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diseases of nervous system & sense organs	—	2	—	2	—	—	—	15	21	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Active rheumatic fever	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chronic rheumatic heart disease	1	1	—	2	3	1	—	26	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Causes of Death and Ages at Death, during the year 1970—continued

Causes of Death	WARDS								Net deaths at the subjoined ages of "Residents", whether occurring within or without the district																Total deaths whether of "Residents" or "Non-Residents" in Institutions in the District						
	21		22		23		24		All ages		under 1 year		1		2 to 4 years		5 to 14 years		15 to 24 years		25 to 44 years		45 to 64 years				65 to 74 years		75 years and over		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			M	F	M	F	
Hypertensive disease	1	2	—	2	—	1	—	2	16	29	—	—	—	—	—	—	—	—	1	—	2	—	6	4	3	15	4	10	6	24	
Ischaemic heart disease	8	8	17	15	25	16	26	8	409	272	—	—	—	—	—	—	—	—	—	—	13	3	174	45	130	93	92	131	288	188	
Other forms of heart disease	1	5	2	5	—	4	2	2	38	91	—	2	—	—	—	—	—	—	—	—	3	3	9	15	10	31	16	40	33	60	
Cerebrovascular disease	6	7	7	11	3	5	2	12	111	209	—	—	—	—	—	—	—	—	—	—	3	3	36	35	33	49	39	122	110	221	
Other diseases of the circulatory system	4	7	5	9	6	5	7	6	177	226	—	—	—	—	—	—	—	—	—	—	2	—	29	15	55	48	91	163	125	126	
Influenza	4	1	2	1	—	2	—	3	46	32	—	—	—	—	—	—	—	—	—	—	4	—	17	9	19	15	5	8	33	20	
Pneumonia	4	4	4	8	4	8	2	3	132	106	11	3	—	—	—	—	—	—	—	—	2	—	30	12	43	27	45	63	104	93	
Bronchitis, emphysema	6	3	13	2	2	3	3	4	161	54	1	—	—	—	—	—	—	—	—	—	1	—	62	10	58	15	39	29	125	26	
Asthma	—	—	—	—	—	1	—	2	2	9	—	—	—	—	—	—	—	—	—	—	—	—	—	5	1	1	—	—	2	6	
Other diseases of the respiratory system	4	2	3	—	6	3	2	2	71	25	3	1	—	—	—	—	—	—	—	—	2	—	19	5	35	7	12	12	56	17	
Peptic ulcer	—	—	—	—	—	2	1	—	14	8	—	—	—	—	—	—	—	—	—	—	—	—	7	1	3	5	4	2	16	9	
Appendicitis	—	—	—	—	—	—	—	—	3	2	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	2	7	
Intestinal obstruction and hernia	—	—	—	—	—	—	—	—	4	6	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	2	1	3	5	7
Cirrhosis of liver	—	—	—	—	—	—	—	—	1	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	4	
Other diseases of the digestive system	1	1	—	2	—	1	2	1	11	20	—	—	—	—	—	—	—	—	—	—	2	—	3	5	1	8	4	7	12	19	
Nephritis and nephrosis	—	—	—	—	—	—	1	—	5	4	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	1	1	1	4	3
Hyperplasia of prostate	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other diseases of the genito-urinary system	1	1	—	—	—	—	1	1	8	18	—	—	—	—	—	—	—	—	—	—	2	1	—	2	2	6	4	8	4	20	
Abortion	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other complications of pregnancy, childbirth and puerperium	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Diseases of the skin and subcutaneous tissue	—	—	—	—	—	—	—	—	1	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	—	—	—	—	
Diseases of the musculoskeletal system	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
and connective tissue	—	—	—	—	—	—	—	—	4	11	—	—	—	—	—	—	—	—	—	—	—	—	1	—	2	2	1	9	5	16	
Congenital anomalies	—	—	—	—	—	—	—	—	10	10	7	6	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	21	15	
Birth injury, difficult labour, and other anoxic hypoxic conditions	—	—	—	—	—	—	—	—	8	2	8	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other causes of perinatal mortality	—	—	—	—	—	—	—	—	21	6	21	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Symptoms and ill-defined conditions	1	1	—	2	—	1	1	—	15	38	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	12	4	1	34	5	
Motor vehicle accidents	—	—	—	—	—	—	—	—	23	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
All other accidents	2	1	2	3	3	—	—	2	31	29	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Suicide and self-inflicted injuries	—	—	—	—	—	—	—	—	5	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
All other external causes	1	—	—	—	—	—	—	—	11	8	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
TOTALS	56	58	89	83	81	65	77	66	1,748	1,636	56	28	2	1	5	—	3	6	22	13	62	34	596	327	562	456	440	771	1,440	1,317	

Table 8

Deaths from Bronchitis/Pneumonia and
Tuberculosis (all forms)

Year	Population	1 to 4 Years					
		Bronchitis/Pneumonia			Tuberculosis		
		Notifi- cations	Deaths	Death Rate per 1,000	Notifi- cations	Deaths	Death Rate per 1,000
1950	275,800	68	33	0.11	10	4	0.01
1960	270,200	28	13	0.04	3	1	—
1961	265,800	39	18	0.06	1	—	—
1962	266,130	23	15	0.05	7	—	—
1963	266,110	49	15	0.05	4	—	—
1964	263,910	28	20	0.07	8	—	—
1965	276,630	32	12	0.04	5	—	—
1966	276,300	29	13	0.04	1	—	—
1967	275,730	23	11	0.03	1	—	—
1968	273,040	9	14	0.05	3	—	—
1969	272,260	—	10	0.03	7	—	—
1970	270,800	—	15	0.05	2	—	—
45 to 65 Years							
1950	275,800	61	101	0.36	55	65	0.21
1960	270,200	21	76	0.28	50	17	0.06
1961	265,800	41	76	0.28	46	22	0.08
1962	266,130	27	93	0.34	35	16	0.06
1963	266,110	27	97	0.36	29	15	0.05
1964	263,910	17	80	0.30	54	9	0.03
1965	276,630	13	104	0.37	39	12	0.04
1966	276,300	15	113	0.40	34	14	0.05
1967	275,730	6	78	0.28	34	13	0.04
1968	273,040	11	79	0.28	30	12	0.04
1969	272,260	—	68	0.24	15	10	0.03
1970	270,800	—	114	0.42	36	10	0.03
65 Years and over							
1950	275,800	55	221	0.80	10	26	0.09
1960	270,200	36	229	0.84	21	16	0.05
1961	265,800	90	179	0.67	12	20	0.07
1962	266,130	61	260	0.97	13	17	0.06
1963	266,110	51	245	0.92	22	12	0.04
1964	263,910	61	217	0.82	20	20	0.07
1965	276,630	33	230	0.83	18	16	0.05
1966	276,300	60	307	1.11	19	15	0.05
1967	275,730	57	210	0.76	19	10	0.03
1968	273,040	93	308	1.12	14	17	0.06
1969	272,260	—	257	0.94	20	12	0.04
1970	270,800	—	319	1.18	24	11	0.04

PART 2

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INFECTIOUS AND INFECTIVE DISEASES

INFECTIOUS AND INFECTIVE DISEASES

Scarlet Fever

Number of cases notified	..	..	..	..	..	61
Number of cases removed to hospitals	..	..	..	..	..	—
Percentage of cases removed	..	..	..	..	..	—
Number of cases in which diagnosis was confirmed	..	..	..	..	..	61
Number of deaths	..	..	..	..	..	—
Case fatality per cent.	..	..	..	..	..	—

The attack rate for the City during the year was 0·22 per 1,000 of the population.

The death rate for the City during 1970 was 0·0.

Diphtheria

For the nineteenth year in succession, there have been no confirmed cases of diphtheria in the City.

Typhoid and Para-Typhoid Fever

No cases have been notified during the year.

Arrangements have been made for the inoculation against Enteric Fever, free of charge.

Smallpox

During the year no cases of smallpox occurred.

Erysipelas

There were no cases notified during the year. There were no deaths. In 1969 no cases were notified and no deaths.

Meningococcal Meningitis

There were 10 cases notified as Meningococcal Meningitis during the year. There were no deaths during the year.

Encephalitis

There were 4 cases of the above disease notified during the year, all post-infectious.

Acute Anterior Poliomyelitis

There were no cases notified during the year.

Dysentery

There were 336 cases of Dysentery notified during the year, all of which were confirmed bacteriologically.

Malaria

There was one case notified during the year.

Pemphigus Neonatorum

There were no cases of Pemphigus Neonatorum notified during the year.

Measles

Measles was made compulsorily notifiable in the latter months of 1939. and during 1970, there were 2,805 cases notified.

There was one death during 1970.

Whooping Cough

There were no deaths from Whooping Cough during the year.

This disease was made compulsorily notifiable in the latter months of 1939 and during 1970 there were 164 cases notified as compared to 28 in 1969.

FOOD POISONING

NUMBER OF NOTIFICATIONS (Suspected - Not Proven)

1st Quarter	..	5
2nd Quarter	..	13
3rd Quarter	..	22
4th Quarter	..	14
		—
Total	..	54
		—

PROOF DIFFERENTIATION

Proof differentiation between cross infection and food poisoning proved once again most elusive. *Salmonella* serotypes, Bredeney, Stanley, Enteritides and typhimurium were isolated from sporadic and family outbreaks.

The maintenance of good standards of personal hygiene and of kitchen hygiene, and the proper cooking and storage of cooked foods, are the most important means of preventing the continuance of such a large number of cases of food borne diseases. Salmonellosis is now becoming an almost endemic menace in this country. Really good standards would remove it from our midst. The rules are simple and easily carried out. Talks are available by experts on our staff. Leaflets and posters are given free, and college-run courses in Food Hygiene are available. It is a sad reflection that so little advantage is taken in this area of these things which could so easily greatly reduce the burden of such illness on the community.

Laboratory Investigation of Food Poisoning and Dysentery Cases, and Suspected Cases, and Routine Checks of Food Handlers

Years	..	..	1966	1967	1968	1969	1970
Cases of Dysentery Notified	..	..	172	143	233	188	336
Number of Positive Dysentery Cases (confirmed by Public Health Laboratory)	..	..	223	146	115	150	203
Corrected Notifications of Food Poisoning	..	..	13	27	20	62	20
Pathological samples taken	..	..	3,365	2,283	1,977	4,163	3,270
Pathological samples positive	..	..	383	272	241	716	807

Laboratory Examination of Suspected Foodstuffs

During the year there were submitted to the Public Analyst for laboratory examination 18 specimens of food which were implicated in cases of food borne disease or were suspected of being capable of causing disease or which were unfit for human food.

Table 9. Pulmonary Tuberculosis
Deaths, Death Rate & Notification. Years 1914-1970

Year	No. of Notific- ations	No. of Deaths TOTAL	under one	1-2	2-5	5-15	15-25	25-45	45-65	65 & over	Death Rate
1970	70	22	-	-	-	-	-	1	10	11	·081
1969	62	22	-	-	-	-	-	2	9	11	·080
1968	65	29	-	-	-	-	-	1	11	17	·106
1967	83	23	-	-	-	-	-	-	13	10	·083
1966	65	28	-	-	-	-	-	-	13	15	·101
1965	87	28	-	-	-	-	-	-	12	16	·101
1964	116	28	-	-	-	-	-	2	7	19	·106
1963	86	28	-	-	-	-	-	2	15	11	·105
1962	94	33	-	-	-	-	1	2	14	16	·123
1961	90	42	-	-	-	-	-	2	20	20	·157
1960	121	32	-	-	-	-	-	1	15	16	·118
1959	120	33	-	-	-	-	-	4	12	17	·122
1958	163	48	-	-	-	-	1	7	21	19	·247
1957	178	37	-	-	-	-	-	5	15	17	·136
1956	267	59	-	-	-	-	-	11	30	18	·216
1955	337	73	-	-	-	-	1	15	38	19	·266
1954	297	74	-	-	-	-	4	15	45	10	·266
1953	297	94	-	-	-	-	4	21	42	27	·380
1952	314	95	-	-	1	-	9	27	34	24	·349
1951	281	119	-	-	1	-	8	34	58	18	·436
1950	258	140	-	-	-	1	6	45	63	25	·508
1949	422	156	-	2	-	-	21	52	60	21	·568
1948	264	150	1	1	2	-	17	42	68	19	·548
1947	317	144	-	1	1	-	19	45	63	15	·533
1946	296	165	1	1	-	1	21	59	63	19	·621
1945	281	151	1	2	1	3	21	59	52	12	·600
1944	290	160	-	-	2	2	27	45	70	14	·639
1943	264	184	1	1	-	2	33	59	65	23	·734
1942	338	180	1	1	-	1	29	69	69	10	·704
1941	377	210	1	-	1	9	46	68	77	8	·812
1940	339	188	-	-	1	2	37	59	80	9	·725
1939	323	203	-	-	-	2	37	66	79	19	·750
1938	375	181	2	-	1	-	31	64	67	16	·670
1937	458	218	1	1	2	3	39	82	83	7	·800
1936	511	200	-	-	1	5	39	60	74	21	·730
1935	466	244	1	3	-	3	38	89	95	15	·890
1934	501	229	1	1	2	2	50	82	73	18	·830
1933	467	242	1	2	1	2	48	91	78	19	·880
1932	582	235	1	1	2	3	45	81	92	10	·840
1931	604	271	2	-	1	7	45	97	111	8	·980
1930	576	281	-	-	5	9	55	103	100	9	1·010
1929	627	289	1	5	5	15	61	109	84	9	1·040
1928	524	261	3	5	8	9	47	94	85	10	0·930
1927	411	293	4	4	4	12	60	111	97	7	1·060
1926	406	275	3	8	8	10	61	86	93	6	1·000
1925	451	275	-	3	5	14	57	102	90	4	0·990
1924	354	254	-	3	1	11	56	91	87	5	0·910
1923	390	267	2	1	-	8	61	112	78	5	0·960
1922	452	294	2	2	6	18	56	112	89	9	1·060
1921	491	292	1	4	1	10	68	115	85	8	1·180
1920	587	260	1	2	4	13	53	118	65	4	1·040
1919	742	283	3	2	1	22	59	109	77	10	1·180
1918	606	325	6	3	9	34	64	132	73	4	1·560
1917	501	330	1	5	8	24	64	133	91	4	1·530
1916	580	326	2	3	10	27	49	123	102	10	1·480
1915	686	293	3	-	6	14	56	122	83	9	1·300
1914	775	308	1	2	6	15	47	146	87	4	1·270

Table 10—Cases of Infectious Diseases notified during the year 1970

DISEASE	WARDS																								Public Institutions
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Scarlet Fever ..	2	2	6	1	2	4	1	2	2	2	2	4	9	6	2	4	2	—	2	2	—	1	—	3	
Whooping Cough ..	7	2	14	2	3	1	4	5	3	—	14	—	3	—	13	1	4	5	26	23	8	9	13	4	
Poliomyelitis Paralytic ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Poliomyelitis Non-Paralytic ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Measles ..	36	31	104	82	193	61	152	114	72	58	331	52	46	671	55	150	104	79	158	106	129	128	265	132	
Diphtheria and Membranous Group ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Dysentery ..	2	15	12	15	39	10	37	49	—	2	119	5	6	2	3	7	2	1	4	1	1	—	—	2	
Meningococcal Infection ..	1	2	3	—	—	—	—	—	—	—	—	—	1	1	—	1	—	—	—	—	—	—	—	1	
Pneumonia, Primary ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pneumonia, Broncho ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pneumonia, Influenzal ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Smallpox ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Encephalitis Infective ..	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	1	
Encephalitis Post-Infectious ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Enteric Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Para-Typhoid B. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Erysipelas ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Food Poisoning ..	1	3	4	2	4	3	3	—	3	—	10	3	1	—	—	4	2	3	2	2	—	1	—	2	
Pulmonary Tuberculosis ..	2	3	5	2	1	7	4	1	6	—	2	2	1	4	—	2	1	2	4	4	4	1	6	—	
Other Forms of Tuberculosis ..	—	—	1	1	—	—	1	—	1	—	—	—	—	1	—	—	1	—	1	1	—	—	—	—	
Puerperal Pyrexia ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Ophthalmia Neonatorum ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pemphigus ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Malaria ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	
Chicken Pox ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Infective Jaundice ..	14	9	6	3	7	3	1	1	3	1	—	2	—	1	1	1	6	—	1	4	3	6	4	1	
Leptospirosis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	
TOTALS ..	65	67	155	108	249	89	203	172	90	63	479	68	67	82	174	170	123	90	198	143	147	147	289	146	
	3																								

DISEASE	Total all ages	AGE GROUPS									Removed to Hospital
		under 1 year	1 and under 2 years	2 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 under 75 years	75 years and over	
Scarlet Fever	61	1	—	21	35	4	—	—	—	—	—
Whooping Cough	164	25	17	59	63	—	—	—	—	—	—
Poliomyelitis Paralytic	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis Non-Paralytic	—	—	—	—	—	—	—	—	—	—	—
Measles	2,805	127	359	1,258	1,040	20	—	—	1	—	—
Diphtheria and Membranous Group	—	—	—	—	—	—	—	—	—	—	—
Dysentery	336	29	25	53	96	29	71	23	7	3	—
Meningococcal Infection	10	1	1	3	5	—	—	—	—	—	—
Pneumonia, Primary	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Broncho	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Influenzal	—	—	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Infective	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Post-Infectious	4	—	—	1	2	1	—	—	—	—	—
Enteric Fever	—	—	—	—	—	—	—	—	—	—	—
Para-Typhoid B.	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	—	—	—	—	—	—
Food Poisoning	54	4	3	7	11	7	5	11	4	2	—
Pulmonary Tuberculosis	64	—	—	1	1	5	9	25	18	5	—
Other Forms of Tuberculosis	9	—	—	1	—	2	2	2	—	2	—
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—
Ophthalmia Neonatorum	—	—	—	—	—	—	—	—	—	—	—
Pemphigus	—	—	—	—	—	—	—	—	—	—	—
Malaria	1	—	—	—	—	—	1	—	—	—	—
Chicken Pox	—	—	—	—	—	—	—	—	—	—	—
Infective Jaundice	78	—	1	5	46	16	9	1	—	—	—
Leptospirosis	1	—	—	—	—	—	—	1	—	—	—
TOTALS	3,587	187	406	1,409	1,299	84	97	63	30	12	—

TUBERCULOSIS STATISTICS

70 new cases of Pulmonary and 11 cases of other forms of Tuberculosis were notified in accordance with the provisions of the Public Health (Tuberculosis) Regulations.

There were 22 deaths from Pulmonary Tuberculosis, which is equal to a death rate of 0.081 per 1,000; in 1969 there were 22 deaths and death rate of 0.080. In 1970 the death rate for England and Wales was 0.038 per 1,000 (Males 0.029; Females 0.009).

There were no deaths from forms of Tuberculosis other than Pulmonary. In 1969 there were 2 deaths. In 1970 the death rate for England and Wales was 0.029 (Males 0.019; Females 0.010).

The total death rate from all forms of Tuberculosis was 0.081 per 1,000 compared with 0.033 in England and Wales.

TUBERCULOSIS IN 1970

by

DR. F. A. SMITH, Consultant Chest Physician

The number of cases of tuberculosis considered notifiable within the City during the year was 82; 74 of these patients were suffering from pulmonary tuberculosis and 8 from non-pulmonary tuberculosis.

In comparison with last year, pulmonary tuberculosis has increased by 4% (71 cases in 1969) and non-pulmonary tuberculosis by 14% (7 cases in 1969).

Deaths directly attributable to pulmonary tuberculosis were 27 during the year, a rise of 80% from the previous year when there were 15 deaths. In addition were 2 deaths from non-pulmonary tuberculosis, making a total of 29 deaths from tuberculosis during 1970.

Included in the total of 74 notifications of pulmonary tuberculosis for 1970 are:—

1. 2 'TRANSFERS IN' from other parts of England, where they had previously been notified as suffering from active tuberculosis.
2. 3 CHILDREN, all of whom were contacts of relatives known to have active tuberculosis and were notified.
3. 5 POSTHUMOUS NOTIFICATIONS, see Table 11 for details.
4. 3 IMMIGRANTS, 1 man and 2 women, all from Pakistan.
5. 7 RENOTIFICATIONS, 3 men and 4 women.

The 3 men had attended the Chest Clinic for 17, 15 and 7 years respectively, and the 4 women for 17, 7, 7 and 5 years respectively, before being discharged as recovered.

The 8 cases of non-pulmonary tuberculosis are analysed in Table 17. In addition to the 82 cases of tuberculosis notified in the City, one case of non-pulmonary tuberculosis was notified to the County, making a total of 83 notifications of tuberculosis submitted from the Chest Clinic during the year.

Table 11
Analysis of Notified Cases, 1970
(In the City)

	Male	Female	Children	Total
Pulmonary T.B. ..	41	25	3	69
Non-Pulmonary T.B.	2	4	—	6
Posthumous	4	3	—	7
Totals	47	32	3	82

The posthumous notifications consisted of 5 pulmonary tuberculosis and 2 non-pulmonary tuberculosis.

Table 12
Sex distribution of the 74 cases notified in 1970
in comparison to 1969

	1970		1969	
	Number	% of Total	Number	% of Total
Men ..	45	60·81	43	60·56
Women ..	26	35·14	18	25·35
Children ..	3	4·05	10	14·09
Total ..	74	100·00	71	100·00

It should be remembered that included in the 1970 total of 74 are:—

1. 2 'Transfers In'.
2. 3 Children.
3. 5 Posthumous notifications.
4. 3 Immigrants.
5. 7 Renotifications.

Table 13 shows the age and sex distribution of the 74 patients notified during 1970.

Table 13
Age and Sex distribution of 74 cases notified in 1970

Age Groups	Males		Females	
	Number	% of Total	Number	% of Total
1—15 ..	3	6.25	—	—
16—20 ..	1	2.08	3	11.54
21—25 ..	2	4.17	1	3.85
26—30 ..	—	—	—	—
31—35 ..	1	2.08	—	—
36—40 ..	3	6.25	3	11.54
41—45 ..	4	8.34	1	3.85
46—50 ..	3	6.25	3	11.54
51—55 ..	3	6.25	2	7.69
56—60 ..	6	12.50	3	11.54
61—65 ..	8	16.66	3	11.54
66—70 ..	7	14.59	4	15.37
71—75 ..	5	10.42	2	7.69
76—80 ..	1	2.08	—	—
80 plus ..	1	2.08	1	3.85
Total ..	48	100.00	26	100.00

(64.86%) (35.14%)

The various percentages at the different age groups for both men and women are given below:—

Men

7 over 70—14.58%
14 over 65—29.16%
22 over 60—45.83%
31 over 50—64.58%

Women

3 over 70—11.54%
10 over 60—38.46%
15 over 50—57.69%

**Number of Patients on the Tuberculosis Register
at 31st December, 1970**

At the 31st December, 1970, there were 668 patients on the Chest Clinic Register, of whom 79 were known to have tuberculosis of organs other than the lungs, whereas at the end of 1969 there were 734 patients on the Register, including 91 patients with tuberculosis of organs other than the lungs. Table 14 shows the sex distribution of patients on the register at the 31st December, 1970.

Table 14

**Sex Distribution of Patients on the Register at 31st December, 1970
compared to 31st December, 1969**

	31st December, 1970		31st December, 1969	
	Number	% of Total	Number	% of Total
Men	389	58.23	438	59.68
Women ..	244	36.53	260	35.42
Children ..	35	5.24	36	4.90
Total ..	668	100.00	734	100.00

Included in the figure of 668 are 79 patients who are known to have tuberculosis of organs other than the lungs, they are as follows:—

34 (or 43.04%) Men
42 (or 53.16%) Women
3 (or 3.80%) Children

During the course of the year, 40 of the patients on the Chest Clinic Register were found to have a positive sputum, 28 of these being patients who had been notified in 1970. (19 Male and 11 Female).

Table 15

Source of New Cases of Pulmonary Tuberculosis during 1970

	1970		1969	
	Number	% of Total	Number	% of Total
Referred by G.P.'s ..	7	9.5	12	16.9
Chest Radiology Service	15	20.2	11	15.5
Notified from Hospitals and Chest Clinic ..	41	55.4	30	42.3
Contacts	4	5.4	9	12.7
Transfers In	2	2.7	4	5.6
Posthumous (Pulmonary only) ..	5	6.8	5	7.0
Total ..	74	100.0	71	100.0

During the year 654 patients were referred to the Chest Clinic from the Chest Radiology Service, and of these 546 patients attended.

In addition to the 7 patients notified posthumously, (5 pulmonary and 2 non-pulmonary tuberculosis) 22 other patients had post-mortem examinations which revealed tuberculosis on the death certificate.

7 (or 9.3%) of the 74 patients notified were known to have pneumoconiosis also.

Deaths

There were 29 deaths due to tuberculosis during 1970, 27 from pulmonary tuberculosis and 2 from non-pulmonary tuberculosis. Details of the sex and age distribution of 27 patients who died from pulmonary tuberculosis are given in and below Table 16.

Table 16
Deaths from Pulmonary Tuberculosis in 1970
(15 in 1969)

Sex	Numbers in Age Groups					Totals
	Under 25 years	25-44	45-64	65-74	75 and over	
Males ..	—	1	4	8	3	16
Females ..	—	—	6	3	2	11
Totals ..	—	1	10	11	5	27

In addition to the 27 deaths from pulmonary tuberculosis are the 2 deaths from non-pulmonary tuberculosis. These were both women falling in the age group 45-64, one having died from Renal Tuberculosis and the other from T.B. Meningitis.

Men

7 Men died in the City General Hospital.
1 Man died in Bucknall Hospital.
1 Man died in Westcliffe Hospital.
4 Men died in the North Staffordshire Royal Infirmary.
3 Men died at home.

Women (including 2 non-pulmonary T.B.)

8 Women died in the City General Hospital.
1 Woman died in Bucknall Hospital.
1 Woman died in the North Staffordshire Royal Infirmary.
3 Women died at home.

Included in the 29 deaths from pulmonary and non-pulmonary tuberculosis are the 7 patients who were notified posthumously - 4 male and 3 female. 4 of these 7 patients had never attended the Clinic, one patient was taken off the Register in 1965 as a non-attender, one patient was discharged in 1965 when the diagnosis of tuberculosis was unconfirmed, and another patient was discharged in 1968 for the same reason.

Of the remaining 22 patients, all suffering from pulmonary disease, 7 men and 7 women were already notified and were currently attending the Chest Clinic. 5 patients had attended the Chest Clinic and had been discharged (only one of these was a notified case, discharged recovered in 1962) and 1 woman and 2 men had never attended the Chest Clinic.

Non-Pulmonary Tuberculosis

Table 17 gives details of the 8 cases of non-pulmonary tuberculosis notified in addition to the 74 cases of pulmonary disease during 1970.

Table 17

8 Cases of Non-Pulmonary Tuberculosis in 1970 (in addition to 74 Pulmonary cases)

	SEX						Total
	MALE			FEMALE			
	Under 1	16-45	45 and over	Under 1	16-45	45 and over	
Bones	-	-	1	-	-	-	1
Renal	-	-	-	-	-	1*	1
Laryngeal	-	-	1	-	-	3	4
Abdominal	-	-	-	-	1	-	1
Meningitis	-	-	-	-	-	1*	1
Total	-	-	2	-	1	5	8

*Denotes posthumous notification.

All 8 patients are adult, and only 2 immigrants (1 male and 1 female) are included in this total.

No children were notified as having non-pulmonary tuberculosis during the year.

B.C.G. Vaccinations in 1970

Table 18 shows the age and sex distribution of 108 contacts vaccinated against tuberculosis in 1970. In 1969, 115 contacts were vaccinated.

Table 18

B.C.G. Vaccinations

SEX	AGE GROUPS						Total
	Under 1 year	1—2	3—5	6—10	11—15	16 and over	
Males ..	—	9	13	6	11	4	43
Females ..	11	5	9	23	12	5	65
TOTALS ..	11	14	22	29	23	9	108

In addition to the 108 contacts vaccinated, 49 other patients who fell into the category of "those at risk" were also vaccinated, making a total of 157 B.C.G. vaccinations for the year. This shows a decrease of 8.71% on the 1969 total of 172 B.C.G. vaccinations, of which 115 were contacts and the remaining 57 "those at risk".

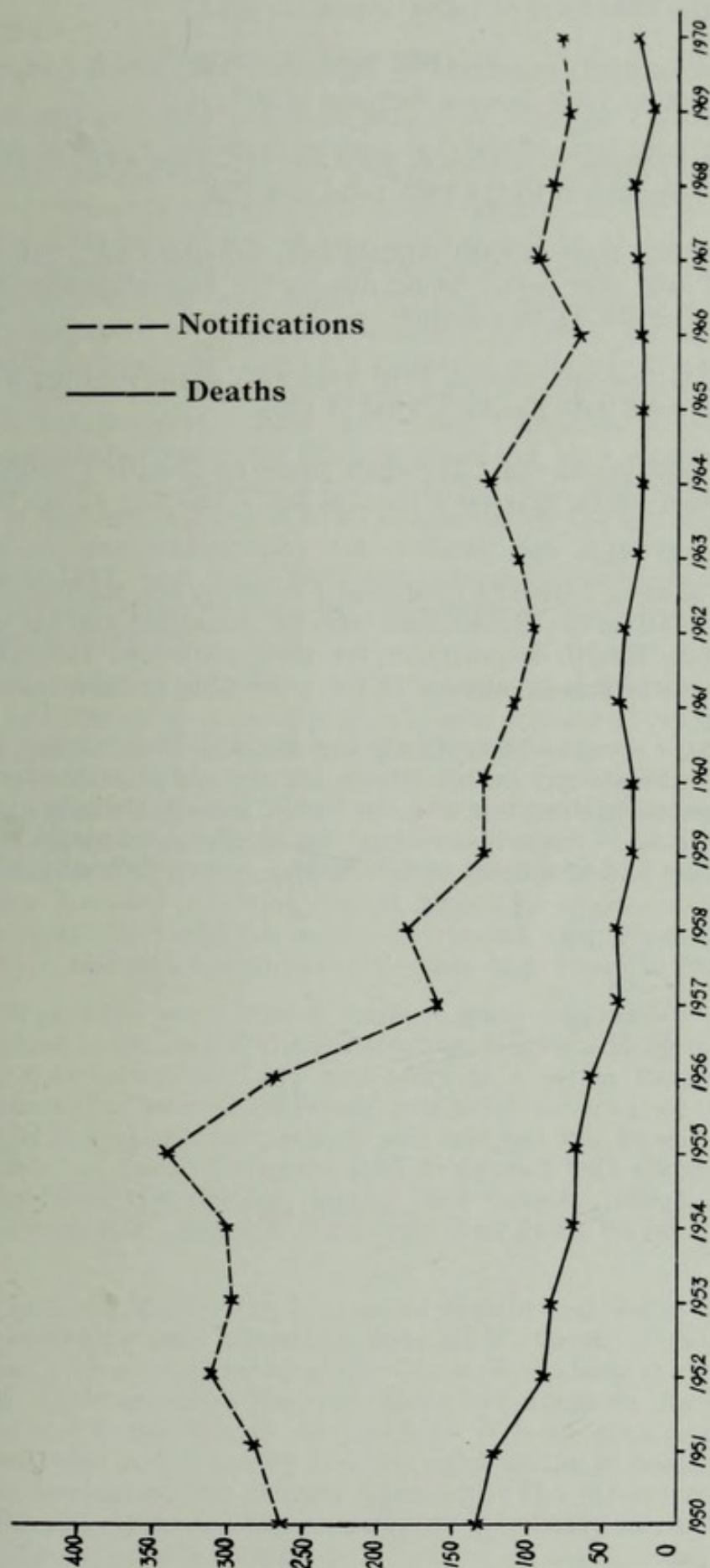
Table 19 gives some statistical information about the general work of the Chest Clinic.

Table 19

Routine Work of the Chest Clinic over the last Five Years

	1966	1967	1968	1969	1970
New Patients examined	1,426	1,610	1,402	1,438	1,395
New contacts examined	143	202	125	192	134
Patient attendances	4,618	5,120	4,576	4,769	4,182
X-ray examinations	4,002	5,698	5,327	5,076	4,554
Mantoux tests	683	855	608	703	483
Visits by H.V.'s	1,946	2,144	1,660	1,539	1,245
B.C.G. vaccinations	132	168	123	172	157

Shelton Chest Clinic - Annual Report, 1970
Comparison of Notifications to Deaths from Pulmonary Tuberculosis, 1950-1970



Total new patients examined during 1970 were 1,395, a decrease of 3% on the 1969 total of 1,438.

New contacts examined in 1970 were 134, which compared with a total of 192 in 1969 shows a decrease of 30%.

Total patient attendances (new and old) were 4,182 in 1970, a fall of 12% in comparison to the 1969 total of 4,769.

Mantoux tests in 1970 totalled 483, showing a 31% fall on the 1969 total of 703, this partly being due to the discontinuance of mantoux testing after B.C.G. vaccination.

B.C.G. vaccinations in 1970 were 157, again showing a decrease of 9% compared with the 1969 total of 172.

In addition to the 1,245 visits made by Health Visitors there were 322 wasted visits, making a total of 1,577 visits in all by three Health Visitors.

As always, I wish to thank most sincerely the Medical, Nursing and Clerical Staff at the Chest Clinic, and Dr. Hamilton and his colleagues of the Public Health Department for their continued assistance and co-operation which is invaluable in the combating of tuberculosis.

Also, I would like to thank the Medical Director and Staff of the Chest Radiology Service, the family doctors, and in particular the various departments in Hospitals and the Public Health Laboratory at Stafford for their help in diagnosis, without whose efforts we would find the early recognition and treatment of tuberculosis a very difficult job indeed.

REPORT ON THE WORK OF THE CHEST RADIOLOGY SERVICE IN 1970

Historical Introduction

75 years ago and only a few months after Röntgen's detection of X-rays, John McIntyre, an aural surgeon of Glasgow, first photographed with an ancient camera the image of a hand on a fluorescent screen, and thus invented miniature radiography. Being Scottish, he characteristically said that "the advantages of this method will be at once evident because large plates are expensive". To the medical world this was not so evident at all, as it took 60 years before Manuêlo d'Abreu introduced mass miniature radiography in Brazil and Uruguay in 1936. Germany and Czechoslovakia soon followed suit - it can now be revealed - the writer of this report constructed with his colleagues the first mass miniature apparatus in Czechoslovakia from memorised blueprints uncautiously shown to them at the time of the Munich agreement by a representative of a German firm. In Britain, after extensive and highly successful application of the new method in H.M. Forces during the war, the "controlled" use of mass radiography for civilians was approved by the Government in 1941, and from 1943 onwards mobile miniature radiography sets were allocated to "selected authorities". North Staffordshire was not selected until 1952.

The annus mirabilis of M.M.R. was 1954 when the nationwide service found close to 9,000 cases of previously unknown active and/or infectious tuberculosis mostly at routine factory and Public Surveys. However, even in these early days the late doctors Brailsford and Halliday-Sutherland of Birmingham suggested - that the new method will become more selective and ultimately confined to "high risk groups". Gradually the emphasis shifted from the "hit and run" raids on factories and from Public Surveys to the x-raying of certain groups, especially to patients referred by family doctors who found the service convenient, effective and devoid of waiting lists, tiresome appointment systems and delays in reporting.

Over the past ten years M.M.R. units in many regions followed the example of those in the area of the Birmingham Regional Hospital Board who turned their attention more and more to General Practitioners' patients, tuberculin positive children, contacts, inmates of prisons, mental hospitals, geriatric institutions, and last but not least, to "preventive X-rays" of Local Authority staff in contact with children. In North Staffordshire the pottery, mining and foundry industries were obviously a "high risk" population and has been given its fair share of surveys.

At the end of 1969 the Department of Health and Social Security found it necessary to issue a memorandum (H.M. 69, 97) a mixture of common sense and wishful thinking, the latter particularly in respect to the so-called "Open access to Hospital X-ray Departments" for General Practitioners and Public Health Authorities. It is an open secret that in many places this access simply does not exist and/or is beset by long waiting lists, formalities and delayed reporting. The present notorious shortage of qualified and training radiologists is unlikely to change this situation in the foreseeable future.

However, North Staffordshire has, in fact, been approved as one of the areas "where continued existence of M.M.R. for particular groups of people will be justified in so far as it meets a need which cannot be met by hospital departments". It is perhaps not too much to say that this preferential treatment of our area had something to do with the vociferous opposition against drastic curtailment of the service, expressed by Medical Officers of Health, both sides of the affected industries and the public at large.

Since the inception of the service at Hartshill, Stoke-on-Trent, in 1952, it has taken 1,200,000 X-rays (not including follow-up X-rays), found 2,660 cases of active tuberculosis, unfortunately also 1,460 cases of lung cancer and almost 9,000 cases of previously unknown cases of pneumoconiosis. (Table 20).

It is against this historical background that the following figures and comments are presented:

Tuberculosis

97 cases of clinically significant tuberculosis were detected in 1970, an increase of 24 compared with the previous year. The large majority of cases originated from General Practitioners' referrals and over 40% of them were found during the first quarter of the year, i.e. during the aftermath of the influenza epidemic which hit Staffordshire at Christmas, 1969. This does not mean that the epidemic caused or re-activated quiescent cases of tuberculosis but it does mean that many doctors made greater use of the service because of the widespread and long-lasting respiratory symptoms of their patients. Some of the cases of pulmonary tuberculosis brought into the open by the influenza epidemic were the worst seen in the area for some years, some of them were resistant to the standard drugs and it was very fortunate that at about the same time new powerful anti-tuberculous drugs became available.

Five cases of tuberculosis needing close supervision and/or treatment were found in tuberculin positive children, their family contacts and in persons in charge of schoolchildren, a figure which underlines the value of this service. The case-finding rates in Asian immigrants - mostly outside Stoke-on-Trent - were again considerably higher than in the rest of the population but it is pleasant to report that they were only half of those in 1969.

Lung Cancer

It is quite clear from the figures shown on Table 22 that this preventable epidemic continues in its remorseless course. The number of cases found - (135 men and 24 women) was the highest for both sexes in the Unit's history. Most cases were unfit to undergo successful surgery and in many instances diagnosis was followed by early death. Depressingly also the age distribution in men at the time of diagnosis showed no change towards the higher age groups and men below the age of 54 years contributed almost 22% of the total. The youngest man - a heavy smoker - was only 33 years old.

Pneumoconiosis (Table 21)

The number of newly identified cases - which has to be distinguished from "newly arisen cases" has over the past few years settled around the

250 mark. It will be seen that there were only a few cases of the advanced type but the figures hardly lend themselves to a feeling of complacency. The M.M.R. service, together with the Pneumoconiosis Medical Board and the Department for Respiratory Physiology at the City General Hospital has now carried out the biological and radiological monitoring of pottery workers for 19 years. It will be interesting to see whether the results of the recent pilot survey by the Medical Department of the Ministry of Labour will support or disprove these findings.

The Influenza Epidemic of 1969/70

Some preliminary figures were given in my previous report. Table 23 now shows the final analysis which was first produced at a highly successful but also critical symposium at the North Staffordshire Medical Institute. It shows the workload of the static unit during the first quarter of 1970 and the high rate of complications.

Publications

1. Pleural Effusion and Fibrosis during Treatment with Methysergide. (jointly). *Brit. Med. J.* (1970) I, 605.
2. Gerhard Domagk. *Dictionary of Scientific Biography*. C. Scribners, Sons, New York.
3. Reception of Röntgen's Discovery in Britain and U.S.A. *Brit. Med. J.* (1970) 4, 357.
4. Pneumoconiosis in Laundry Workers. (Jointly). *Environmental Research*, New York; In Press.
5. The Early Years of Chest Radiology in Britain. *Thorax*. In Press.
6. The Black Lung Murder. *J. of North Staffordshire Medical Institute*, Autumn Ed. 1970.

Acknowledgements

Once again I wish to thank the Medical Officer of Health for Stoke-on-Trent, Dr. J. S. Hamilton, and his staff for their interest and unfailing support. The work of the service is now centred on the Central Out-Patients' Department; relations with the Chest Clinic at Shelton have remained very close. My staff worked under very heavy pressure during the first three months of the year, cheerfully borne and gratefully acknowledged.

This report for 1970 cannot end without recording the death of Dr. Andrew Meiklejohn, in the field of industrial health the greatest benefactor to this area since the death of J. T. Arlidge at the end of the last century. He was the first Senior Medical member of the local Silicosis Board but even after leaving the district to become Reader in Industrial Medicine at the University of Glasgow, he maintained his deep interest in the health of the potters and miners of North Staffordshire. He very often gave me a helpful hand in times of difficulty and crisis. The J. T. Arlidge Section of Occupational Health and Preventive Medicine will in future, arrange an annual "Andrew Meiklejohn Memorial Lecture", the first of which will be held in November, 1971.

E. POSNER,

Consultant Chest Physician.

Table 20
Numbers X-rayed and Some Abnormalities Detected 1952-1970

Year	Number X-rayed	Active T.B.	T.B. rate per 1,000	Bronchogenic Carcinoma	Pneumoconiosis (N.S. only)	Sarcoidosis	Spontaneous Pneumothorax
1952-1954	156,343	615	3.9	44	2,204	9	2
1955-1957	194,648	590	3.0	81	2,130	29	7
1958-1960	180,800	475	2.6	184	1,546	38	21
1961-1963	190,221	331	1.7	251	1,237	60	37
1964-1966	200,971	314	1.5	347	623	53	55
1967-1969	199,387	238	1.2	394	783	95	76
1970	69,803	97	1.4	159	263	52	23
1952-1970	1,192,173	2,660	—	1,460	8,786	336	221

Table 21

**Newly Detected Cases of Pneumoconiosis, according to
Occupation and X-ray Category, 1970
(North Staffordshire Only)**

X-ray Category	Simple Pneumoconiosis			Total Simple Pneumoconiosis	Progressive Massive Fibrosis	Grand Total
	Cat. 1	Cat. 2	Cat. 3			
Coalminers	39	21	2	62	2	64
Ex-Miners	35	19	4	58	4	62
Potters—Men ..	30	18	2	50	2	52
Potters—Women ..	22	6	—	28	1	29
Ex-Potters—Men ..	8	9	2	19	—	19
Ex Potters—Women	6	10	2	18	2	20
Asbestos and Talc .. Workers	—	1	—	1	—	1
Welders—Siderosis	—	2	—	2	—	2
Other Mineral Dust Pneumoconiosis	2	6	2	10	—	10
Farmer's Lung and Aspergillosis ..	—	—	—	—	—	4
TOTAL ..	142	92	14	248	11	263

Table 22

**Age Distribution of 1,310 Male Cases of Bronchogenic
Carcinoma at Time of Diagnosis
1952-1970**

	Total Number	Under 45 years		45-54 years		55-64 years		65+ years	
1952 - 1954	37	1	2.7%	9	24.3%	19	51.4%	8	21.6%
1955 - 1957	74	7	9.5%	19	25.7%	32	43.2%	16	21.6%
1958 - 1960	174	10	5.8%	39	22.4%	63	36.2%	62	35.6%
1961 - 1963	229	12	5.5%	53	23.1%	95	41.5%	69	30.1%
1964 - 1966	311	16	5.2%	61	19.6%	122	39.2%	112	36.0%
1967 - 1969	350	7	2.0%	55	15.7%	142	40.6%	146	41.7%
1970	135	7	5.2%	22	16.3%	54	40.0%	52	38.5%

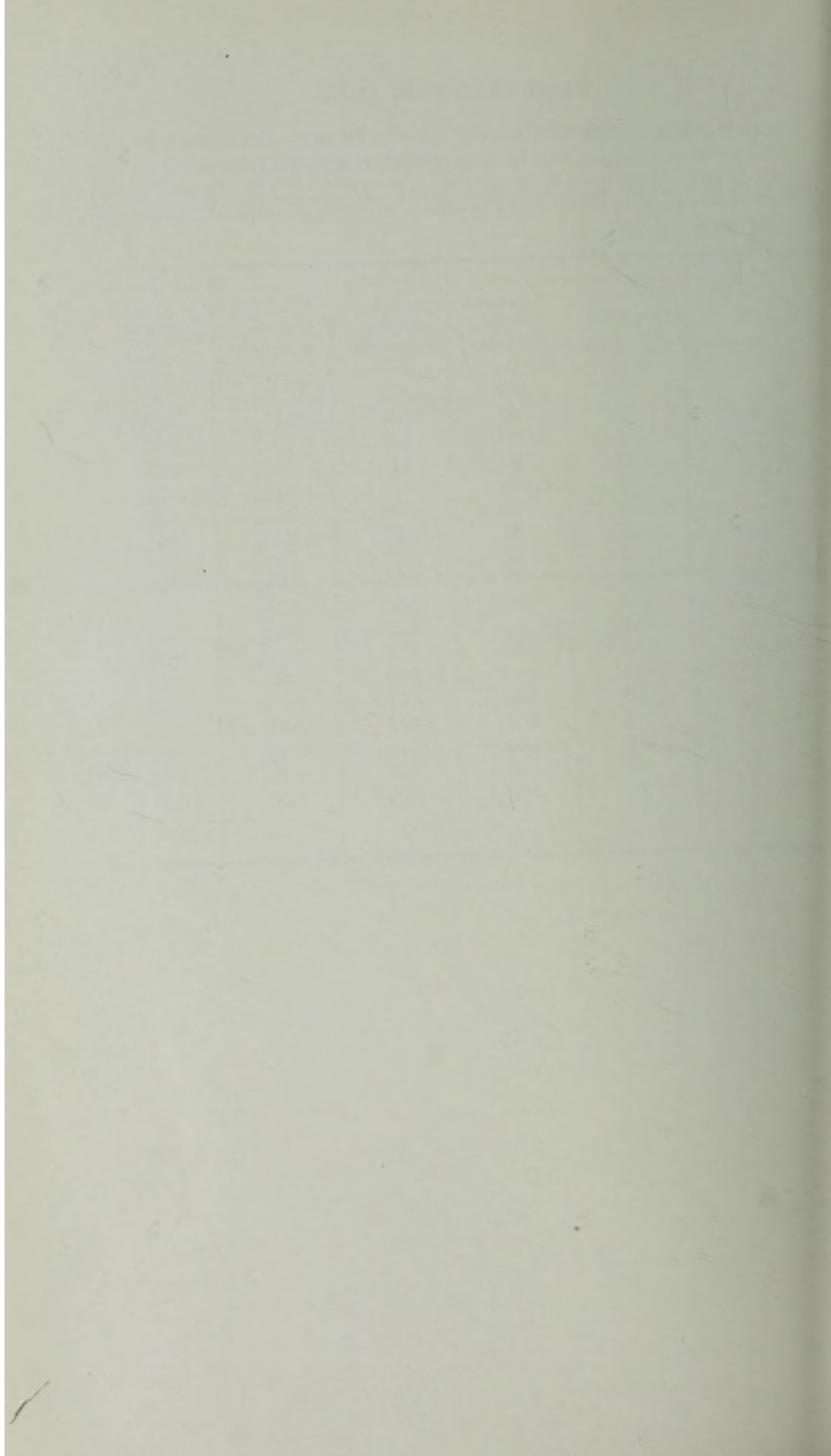
Table 23
Some Aspects of the Influenza Epidemic 1969/70
General Practitioners Referrals

	Jan.-March 1969	Jan.-March 1970
Patients referred by General Practitioners with diagnosis of "Influenza, bronchitis, pneumonia, pleurisy and P.U.O" ..	3,113	6,003
Radiological evidence of pneumonia, pneumonitis or pleurisy	165 (4.9%)	474 (7.9%)
Active Tuberculosis detected	11	29
Lung Cancer detected	24	43

VENEREAL DISEASES

Below is a summary of data of general interest in relation to the work of the treatment centre in the City which is under the control of the North Staffs. Hospital Management Committee. The figures given relate to all new cases treated at the centre, and include those from outside the City area.

Year	Syphilis	Gon- orrhoea	Non- venereal	Percentage non- venereal	Total
1953	57	102	572	78%	731
1954	43	48	466	81%	557
1955	52	68	463	79%	583
1956	42	97	438	76%	577
1957	31	101	545	81%	677
1958	29	58	502	85%	589
1959	23	78	512	82%	613
1960	17	56	537	88%	610
1961	24	71	570	89%	605
1962	14	88	500	83%	602
1963	11	69	633	88%	713
1964	13	63	515	87%	591
1965	15	53	314	82%	382
1966	13	125	671	82%	809
1967	5	104	644	85%	753
1968	10	146	746	82%	902
1969	13	165	798	81%	976
1970	16	179	836	81%	1,031



PART 3

HEALTH SERVICES—

MATERNAL AND CHILD HEALTH

PREVENTION, CARE AND AFTER-CARE OF ILLNESS

MENTAL HEALTH

CITY AMBULANCE SERVICE

Tunstall Health Centre



TUNSTALL HEALTH CENTRE

This Centre was opened on 29th October, 1970 and is designed to integrate City Maternal and Child Welfare, and other Local Health Authority Health Services with local General Practitioner practices. 12 G.P. Consulting suites are provided along with a special treatment and examination room. Provision is made for Health Visitors, Maternal and Child Health Doctor, Examination Cubicles, Weighing Room, Midwives Accommodation, Chiropodist's Room and accommodation for District Nurses and Home Helps. A district office for Public Health Inspectors is also housed within the building. Administrative and reception facilities are centralised and shared.

Accommodation

The site of the project is located near the Tunstall Town Centre. The area, restricted by present clearance lines, has a crossfall of some 20' 0'', within which a one level building had to be designed with allowance for adequate car parking and provision for a resident caretaker.

Access by the public is via a ramped pathway from Dunning Street through the main entranceway to a General Waiting Area with a reception and enquiry counter directly siding the Central Administration Office.

Pre-documentation and control is carried out at this reception point from which members of the public are directed to the appropriate service. Public toilet accommodation and Pram Storage is provided off the main entranceway.

The General Waiting Area has a secondary function as a seating area for the Demonstration Kitchen adjoining. The room may be suitably sub-divided by folding partitions so that it can be used for example for antenatal exercises, lectures and so on.

Direct access is available from the main entranceway to suites of District Health Visitor, Public Health Inspector, Home Help and other offices to Health staff.

Parking space for 18 vehicles off Dunning Street and immediately accessible to the main entrance by stepped approach is provided for the visiting public.

Rear entrances provide direct access for staff and doctors from a car park for 20 vehicles to the north.

Communal staff rest facilities are provided adjacent to the Central Administration Office.

A three-bedroomed Caretaker's bungalow with garage and enclosed yard and garden sides the Doctors' car park.

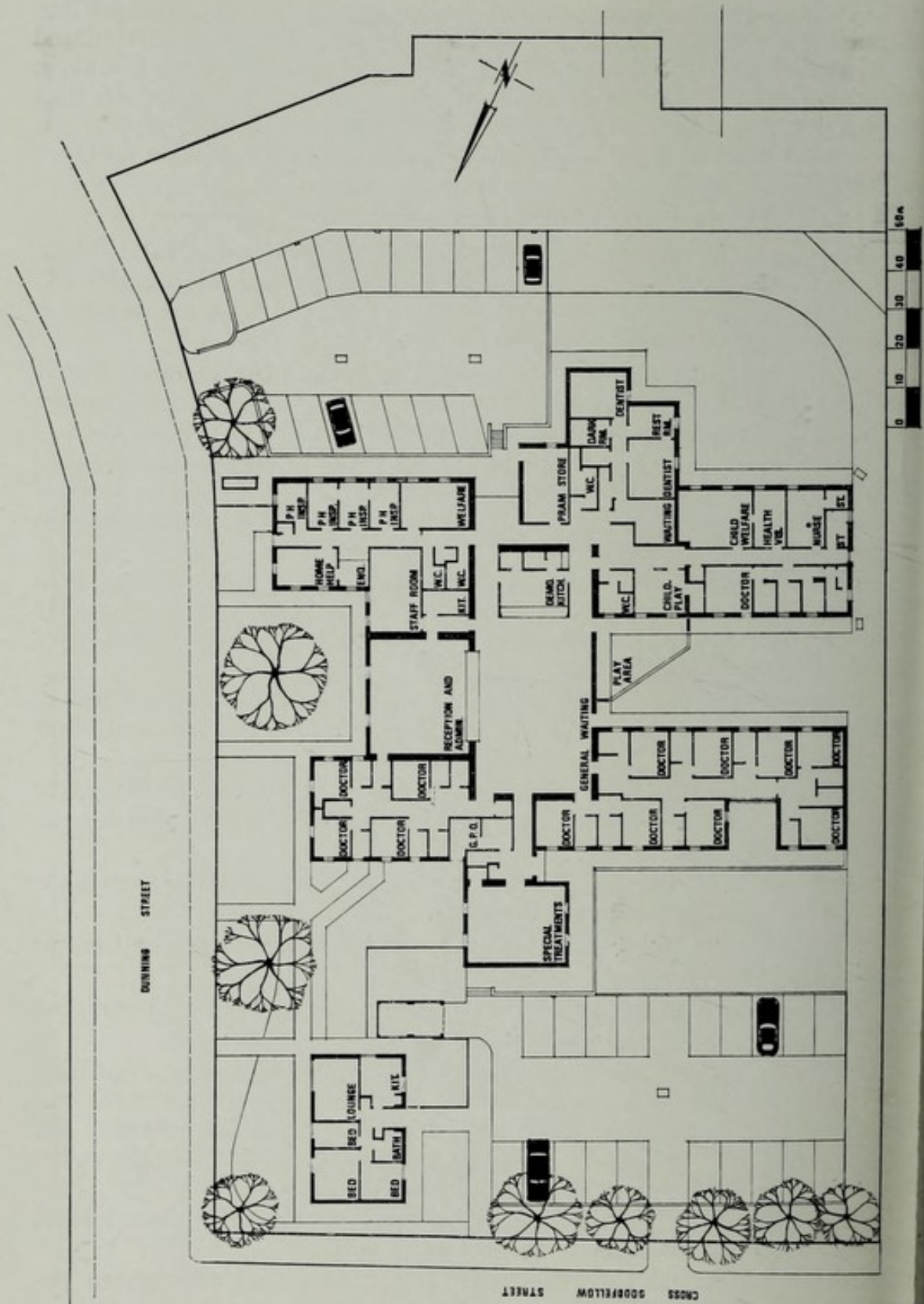
Heating is provided by thermostat-controlled under-floor heating coils supplemented by localised heating from wall mounted electric bar heaters in public changing areas, cubicles etc., carpet floor finishes are provided to these areas and heat losses generally reduced throughout the building by double glazing to all windows.

Hot water is provided by electric instantaneous heaters to wash-hand basins or supplied via immersion heaters to sinks.

Ministry Hospital type sign-posting has been used throughout the building and light indicator panels for calling patients in the General Waiting Areas are operated directly by doctors from the surgeries.

Cost—The contract price for the erection of this centre was £89,468.

Plan of the Tunstall Health Centre



MATERNAL AND CHILD HEALTH

BIRTHS

Births notified numbered 4,231 of which 3,806 occurred in institutions. Of the home confinements 425 were delivered by midwives and in 8 cases doctors were present at the delivery.

PREMATURE BIRTHS

Premature births (alive or dead), that is infants weighing $5\frac{1}{2}$ lbs. or less at birth, made up 9.3% of all births. Premature infants alive at birth made up 8.4% of the live births.

	1970	1969
Number born alive ..	349 (Males 162) (Females 187)	350 (Males 174) (Females 176)
Number Stillborn ..	48 (Males 27) (Females 21)	47 (Males 30) (Females 17)

ANALYSIS OF PREMATURE LIVE BIRTHS

Born at home ..	11
Born at home and transferred to hospital ..	7
Born in hospital ..	331

ANALYSIS OF PREMATURE INFANTS BORN ALIVE IN RELATION TO WEIGHT AND SURVIVAL RATE

Weight at Birth	Born in Hospital		Born at Home		Born at Home and transferred to hospital		Total No. Born Alive	Total No. Surviving 28 days
	No.	Surv'd 28 days	No.	Surv'd 28 days	No.	Surv'd 28 days		
lb. 4 oz. or less	37	9	2	—	1	1	40	10
lb. 5 oz. to 4 lb. 6 oz.	42	38	—	—	2	—	44	38
lb. 7 oz. to 4 lb. 15 oz.	79	78	1	1	2	2	82	81
lb to 5 lb. 8 oz.	173	169	8	8	2	1	183	178
TOTAL	331	294	11	9	7	4	349	307

Of the 349 premature infants born alive, 307 were surviving at the end of the first month, that is 87·9%.

Survival rate for those born in hospital	88·0%
Survival rate for those born at home	81·0%
Survival rate for those born at home and transferred to hospital	57·0%

46·9% of all premature births were first babies.

REPORT OF THE PREMATURE BABY NURSE

This report refers only to babies visited by the premature baby nurse either from birth, before admission to hospital or after discharge from the premature baby unit.

Number of premature babies born at home	5
Number of premature babies born at home and transferred to hospital	3
Number of premature babies visited after discharge from hospital	246
Total number of visits	2,202

WEIGHT OF PREMATURE BABIES BORN AT HOME:

3 lb. 4 oz. or less	—
3 lb. 5 oz. to 4 lb. 6 oz. ..	2
4 lb. 7 oz. to 4 lb. 15 oz. ..	1
5 lb. to 5 lb. 8 oz. ..	—

STILLBIRTHS

The number of Stillbirths in the City was 78 (Males 44, Females 34).

The Stillbirth rate was 1·84% of total births. Last year's figure was 1·44%.

Place of Birth—Born at Home	4
Born in hospital	74
Where mother was admitted to Hospital as emergency	13

ANALYSIS OF CONDITIONS AFFECTING MOTHER

1. NOT ASSOCIATED WITH PREGNANCY

Essential hypertension	..	..	..	3
Diabetes	..	..	..	1
Renal disease	..	..	..	1

2. ASSOCIATED WITH PREGNANCY

Pre-eclampsia	..	..	..	8
Placental insufficiency	..	..	..	2
Intra-uterine death (cause unknown)	..	..	..	7
No ante-natal care	..	..	..	1
Rhesus incompatibility	..	..	..	1

3. ASSOCIATED WITH LABOUR

Ante-partum haemorrhage	..	..	..	12
Breech presentation	..	..	..	8
Cord around the neck	..	..	..	1
B.B.A.	..	..	..	2
Unknown cause	..	..	..	6
Prolapsed cord	..	..	..	1
Knot in cord	..	..	..	1

4. CONDITIONS AFFECTING THE BABY

Foetal abnormality	..	..	..	14
Premature birth weight	..	..	..	48
Duration of pregnancy less than 40 weeks	..	..	..	56
Post-Maturity	..	..	..	9
Macerated foetus	..	..	..	45

5. EMERGENCY ADMISSIONS

ANALYSIS OF EMERGENCY ADMISSIONS

Ante-partum haemorrhage	..	..	..	7
Pre-eclampsia	..	..	..	1
Foetal abnormality	..	..	..	1
Breech presentation	..	..	..	1
Placental insufficiency	..	..	..	1
Unknown	..	..	..	2

Number of twin stillbirths (1 surviving twin) .. 6

Number of illegitimate stillbirths .. 2

TABLE SHOWING AGE OF MOTHERS:—

	Up to 19 years	20 – 29 years	30 – 39 years	40 years and over	Total
First baby ..	9	17	3	—	29
Other mothers	2	29	14	4	49

TABLE SHOWING PARITY OF MOTHERS

Parity	1	2	3	4	5	6	7	8	9	10	13
Number	29	18	10	8	6	2	—	1	1	1	1

Provisional stillbirth rate		1970	1969	1968
per 1,000 births ..		18.4	14.4	15.8

ILLEGITIMATE BIRTHS

Number reported in City—294. (It gives a percentage of 6.9 of the total births).

Total number of illegitimate births 294 (Males 170, Females 124)

Born at home	22
Born in hospital	272
Number of sets of twins	2
Number of stillbirths	2
Number of infant deaths	6

All the illegitimate infants are followed up by the Health Visitors and the following data shows the position of surviving children (286) at the end of 1970.

Children in the care of the mother	142
Children in the care of both parents	84
Children in the care of both parents (now married)	14
Children in the care of Children's Officer ..	17
Children in the care of Children's Officer (adoption pending)	9
Children in the care of Maternal Grandmother	9
Number of children adopted	5
Number of children removed from City ..	6

TABLE SHOWING PARITY OF MOTHERS:—

Parity	1	2	3	4	5	6	7	8	9	Uncertain
Number	150	47	30	22	16	3	4	2	4	16

TABLE SHOWING AGE OF MOTHERS:—

Age ..	Under 20	20 - 29	30 - 39	40 - 49	Uncertain
Number ..	85	137	48	4	20

TABLE SHOWING AGE OF MOTHERS UNDER 20 YEARS:—

Age	15	16	17	18	19
Number	6	15	21	18	25

	1970	1969	1968
Illegitimate birth rate	6.9%	7.6%	6.4%

Lichfield Diocesan Association for Family Care
Report on their Agency Care of Illegitimate Children, 1970
City of Stoke-on-Trent

51 cases in which illegitimate births occurred in 1970 have been dealt with and these are reported on below. In addition 13 expectant mothers whose babies were due to be born in 1970 had the necessary arrangements made for their confinements. This makes a total of 64 cases under care during 1970.

9 mothers were accommodated in Diocesan Homes, and 42 had their babies in hospital.

5 of the cases concerned married women - 3 were divorced, 1 legally separated and 1 was a widow.

Every effort had been made to contact the putative fathers and as a result no payments were obtained.

The ages of the mothers ranged from 15 to 40 and are listed below. The ages of 5 were unknown.

aged 15, 6; aged 16, 1; aged 17, 8; aged 18, 8; aged 19, 4; aged 20, 7; aged 21, 2; aged 22/27, 4; aged 28/34, 3; aged 35/40, 3.

The ages of the putative fathers ranged from 16 to over 40. The ages of 7 were unknown.

aged 16, 4; aged 17, 3; aged 18, 4; aged 19, 4; aged 20, 5; aged 21, 10; aged 22/27, 8; aged 28/34 - 4; aged over 40, 2.

The babies were placed as follows:

- 36 with mother at home;
- 2 with foster parents;
- 10 adopted through Association;
- 1 transferred to another caseworker;
- 1 miscarriage
- 1 local authority homes.

192 visits have been paid in connection with the 64 cases under care. In addition the homes of 10 prospective adopters have been visited and reported on, 3 babies visited after placings have been made, girls conveyed to Homes in some instances and accompanied when they have had to appear in Court or to have their signatures witnessed when consent is required to an Adoption Order. Also 20 personal and matrimonial cases.

We wish to express our gratitude for the help and advice of the Medical Officer of Health and his staff.

T. R. HARRINGTON,
Organising Secretary.

INFANT MORTALITY

The total number of deaths of infants under one year was 81 (males 53, females 28) giving an Infant Mortality Rate of 19.5 per 1,000 live births compared with 20.2 in 1969, and 18.5 in 1968.

Deaths under one year per 1,000 Births in the City

Year	Births	From all causes	From Gastro Enteritis	From Respiratory Disease	From Congenital Defects	Premature Births	From Measles	From Whooping Cough
1964	4480	16	0.22	5.53	3.3	2.2	0.0	0.0
1965	4490	19	0.22	4.23	4.6	4.6	0.0	0.0
1966	4398	18	1.36	2.72	4.3	2.2	0.0	0.0
1967	4431	22	0.22	4.28	3.1	4.2	0.0	0.2
1968	4483	18	0.22	2.89	4.7	4.9	0.0	0.2
1969	4223	20	0.71	2.60	3.3	7.1	0.0	0.0
1970	4090	19	0.24	4.88	2.4	6.3	0.0	0.0

	1970	1969
Percentage of deaths on 1st day	43.2%	55.1%
Percentage of deaths in 1st week	56.7%	66.6%
Percentage of deaths in 1st month	67.9%	73.5%

INFANT MORTALITY RATE AMONGST ILLEGITIMATE AND LEGITIMATE CHILDREN OF STOKE-ON-TRENT DURING THE PAST FIVE YEARS

	Illegitimate	Legitimate	Whole
1966	23	17	18
1967	24	19	22
1968	13	17	18
1969	11	19	20
1970	11	18	19

NEONATAL DEATH RATE	1970	1969
(i.e. deaths in 1st month) per 1,000 live births	13.4	12.5

PERINATAL DEATH RATE	1970	1969
(i.e., Stillbirths and Deaths in first week of life) per 1,000 total births	29.7	25.4

26 infants died from prematurity but there were 49 deaths altogether where the birth weight was 5½ lbs. or under.

Table 24.—Infantile Mortality occurring in the City Comprising Twenty-four Wards, 1970

Causes of Death	W A R D																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Causes { Certified .. Uncertified ..	2	1	3	2	3	1	1	5	2	7	3	2	4	1	1	2	3	1	1	4	1	1	2	3
Chicken-pox	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Whooping Cough	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningitis (<i>not Tuberculous</i>)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Convulsions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bronchitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pneumonia (all forms)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Respiratory	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gastro-enteritis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Suffocation (overlying)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Injury at Birth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Atelectasis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Congenital Malformations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Premature Birth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haemolytic Disease of Newborn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pemphigus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diseases peculiar to early infancy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anaphylaxis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accidental Deaths	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Causes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	2	1	3	2	3	1	1	5	2	7	3	2	4	1	1	2	3	1	1	4	1	1	2	3

Net Births in the year:—Legitimate, males 1,985; females 1,824. Illegitimate, males 163; females 119. Net Deaths in the year:—Legitimate, males 50 females 28. Illegitimate, males 2, females 1.

Table 24.—Infantile Mortality occurring in the City Comprising Twenty-four Wards, 1970—cont.

Causes of Death	Under 1 week		1 to 2 weeks		2 to 3 weeks		3 to 4 weeks		Total under 4 weeks		4 weeks and under 3 months		3 months and under 6 months		6 months and under 9 months		9 months and under 12 months		Total Deaths under 1 year	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Causes { Certified .. Uncertified ..	34	12	3	2	2	—	2	—	41	14	5	6	4	5	1	3	2	—	53	28
Chicken-pox ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningitis (not Tuberculous) ..	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Convulsions ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bronchitis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia (all forms) ..	1	2	1	—	2	—	1	—	5	2	3	1	1	1	1	—	—	—	2	1
Other Respiratory ..	2	—	—	—	—	—	—	—	2	—	—	—	2	1	—	—	—	—	11	4
Gastro-enteritis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
Suffocation (overlying) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Injury at Birth ..	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Atelectasis ..	2	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—
Congenital Malformations ..	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Premature Birth ..	3	1	—	1	—	—	—	—	2	1	—	—	—	—	—	—	—	—	2	—
Haemolytic Disease of Newborn ..	19	5	1	1	—	—	—	—	20	6	1	2	—	1	—	1	—	—	4	6
Pemphigus ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	6
Diseases peculiar to early infancy ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Anaphylaxis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Accidental Deaths ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Causes ..	5	3	—	—	—	—	1	—	6	3	1	2	1	1	—	2	1	—	1	8
TOTALS ..	34	12	3	2	2	—	2	—	41	14	5	6	4	5	1	3	2	—	53	28

DOMICILIARY MIDWIFERY SERVICE

During the year, 118 midwives notified their intention to practice in the City. Of this number, 21 were employed as municipal midwives, 97 were engaged in the hospital service.

Home confinements—425

Municipal Midwives (practising as midwives)	417
Municipal Midwives (practising as maternity nurses) ..	8
	425
Number of miscarriages attended	7
Independent Midwives (practising as midwives) ..	—
Independent Midwives (practising as maternity nurses) ..	—

As the requests for hospital confinement exceed the number of beds available, the domiciliary midwives investigate applications for admission on social grounds.

An increasing number of women are being discharged from hospital before the tenth day of the puerperium and in many cases as early as the second and third days. These cases are nursed by the midwives and include both hospital booked cases and emergency admissions.

	1970	1969
Number of patients ..	3,683	3,591
Number of visits	32,979	29,469

During the year the Supervisor carried out 330 inspections.

Analgesia Outfits

During the year 305 requests for outfits were received from city midwives as compared with 390 last year.

Twelve Entonox ($O_2 + N_2O$) outfits are stored at the Ambulance Station and are made available and despatched to addresses as stated by midwives.

An electrically heated Oxygenaire incubator, with oxygen supplies, is also available for the use of midwives when premature babies have to be moved by Ambulance transport.

Midwives Night Duty Rota

When the services of midwives are required between the hours of 6 p.m. and 7 a.m., any requests are now, in the first instance, received at the Ambulance Station, and the midwife on duty and covering a particular area is then contacted by phone and a request made for her services.

During the year 375 such requests were made.

WORK OF MUNICIPAL MIDWIVES

There are 22 Ante-natal Clinics staffed by Midwives.

Women book the midwife at these Clinics and attend for care and supervision.

A. Ante-Natal Period

Ante-Natal Clinics—1st attendance	779
Subsequent attendances	6,588
Visits by midwives to home	2,365

B. Labour

(a) Doctor booked and present at delivery	8
(b) Doctor booked and not present at delivery	412
(c) Doctor not booked but present at delivery	1
(d) Doctor not booked and not present at delivery	4
Number of false alarms (that is midwife called but not required)	293
Number of women who had Gas and Oxygen	305
Number of women who were given Pethidine	271

Nursing Period

(a) No. of visits to women confined at home	7,777
(b) No. of visits to women confined in hospital and discharged before the tenth day	25,202
(c) Special visits to infants apart from nursing of mother	525

Patients Booked with Midwives but Transferred to Hospital on Medical Advice

(a) Before delivery 41 }	48
(b) After delivery 7 }	

Analysis of Calls for Medical Aid

Total number—151.

	<i>During Pregnancy</i>	<i>During Delivery</i>	<i>During Puerperium</i>	<i>Baby</i>	TOTAL
a) Dr. booked	10	72	17	50	149
b) Dr. not booked	2	—	—	—	2
TOTAL	12	72	17	50	151

The Flying Squad was called out on 6 occasions.

Requests for Admission to Hospital on Social Grounds

Number of visits paid by midwives	1,126
---	-------

Recommendations:

for General Practitioner Unit	1,074
for home confinement	28
miscarriage or altered arrangement	24

Classes for Relaxation in Childbirth

Classes are held weekly either in the afternoon or in the evening at some of the clinics. They are popular and the midwives are very satisfied with their value in labour.

The classes are combined with instruction in Mothercraft.

Number of sessions	396
Number of new patients	378
Total attendances	1,909

Special Tests

At the Doctors' Ante-Natal Clinics, blood is taken for the Rhesus test and the Wasserman and Kahn tests, and women are advised to attend the Chest Radiology Centre for a report on the chest. A report on the latter is included in The Chest Radiology report.

A haemoglobin estimation is made (Sahli method) on every patient and repeated at intervals throughout pregnancy.

Reports are sent to the general practitioner obstetrician.

Number of blood tests	1,012
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Mothercraft

The Deputy Supervisor of Midwives attends the Midwives Ante-Natal Clinics and undertakes the teaching of mothercraft. Health education posters, flannelgraphs and the film strip camera are used. These talks have become popular and are of great value in preparing the mother for the care of her baby.

Maternal Mortality

There were three deaths in, or in consequence of childbirth during the year.

	<i>Total Maternal Mortality</i>
1970—per 1,000 total births (City)	0·71
England and Wales	0·18
1969—per 1,000 total births (City)	0·23
England and Wales	0·19

HEALTH VISITING SERVICE

A. VISITS TO THE HOME				1970	1969	1968
First visits to children under 1 year				5,616	5,934	5,488
Total visits to children under one year				15,464	15,287	13,202
Visits to children 1 to 2 years of age				5,068	4,425	3,628
Visits to children 2 to 5 years of age				7,838	6,715	5,635
B. INFANT WELFARE CLINICS						
Number of infant welfare clinics ..				22	22	22
Total number of children who attended				5,314	6,008	5,661
(a) Born in 1970				2,498	2,624	2,632
(b) Born in 1969				1,640	2,142	1,958
(c) Born in 1968-65				1,176	1,242	1,071
Total number of attendances ..				31,938	33,595	34,946
(a) Under one year				25,590	27,694	29,053
(b) Aged 1-2 years				4,703	4,198	4,282
(c) Aged 2-5 years				1,645	1,703	1,611
C. SCREENING TESTS TO EXCLUDE DEAFNESS						
Premature infants				110	117	91
0-1 years of age				1,962	1,985	1,755
1-2 years of age				94	93	99
2-5 years of age				13	31	19
				<hr/> 2,179	<hr/> 2,226	<hr/> 1,964
Repeat tests by Health Visitors ..				118	93	65
Number referred to Dr. Roberts ..				17	23	22
D. CERVICAL CYTOLOGY CLINICS						
Number of women who attended ..				2,660	1,700	1,263
Number of negative smears				2,629	1,675	1,238
Number of doubtful smears				22	15	18
Number of positive smears				9	10	7

All patients with doubtful and positive smears were referred to the consultant gynaecologist and received the appropriate treatment.

The cervical cytology clinics started in the autumn of 1966 and as is recommended smears are repeated every three years. Appointments for revisits have been sent as appropriate and the response has been good.

Number of repeat smears	993	315
Number of negative smears	983	311
Number of doubtful smears	8	4
Number of positive smears	2	—

All patients attending the Cytology Clinics have a routine examination of the breasts and are instructed in self palpation.

It is interesting to note that in all the cases where a mass was found the Cervical Smear was negative and in no cases where the smear was positive or doubtful was any abnormality detected in the breast mass. All the masses were thought to be either fibroadenoma or chronic cystic mastitis. Of all the patients who attended, only one had a radical mastectomy for carcinoma of the breast and this was 17 years prior to her first attendance.

As far as can be ascertained all the cases who were referred to the General Practitioner, or who already had an appointment for the Out Patients Department, were non-malignant.

E. FAMILY PLANNING CLINICS				1970	1969
Number of new patients	..	..	..	442	285
Number of revisits	..	..	..	1,068	589
Total number of attendances				1,510	874

F. VISITS TO CHRONIC SICK AND AGED

1. UNDER PENSIONABLE AGE				Males	Females	Total
Hospital admission requested	..	..		12	10	22
Home Help requested	..	..		6	11	17
Home Help recommended	..	..		5	10	15
Supervision requested	..	..		29	27	56
<i>Brought forward from previous year</i>						
Hospital admission requested	..	..		1	3	4
Hospital revisits	..	..		4	3	7
Home nurse attending	..	..		4	2	6
Supervision requested	..	..		5	6	11
Visits to patients living alone	..	..		13	14	27
2. OVER PENSIONABLE AGE						
Hospital admission requested	..	..		154	190	344
Home Help enquiries	..	..		113	295	408
Home Help recommended	..	..		88	257	345
Home nurse recommended	..	..		13	16	29
Home nurse attending	..	..		153	253	406
Supervision of new cases	..	..		245	524	767
<i>Brought forward from previous year</i>						
Hospital admission requested	..	..		72	90	162
Home Help enquiries	..	..		4	2	6
Supervision requested	..	..		94	249	343
<i>Revisits</i>						
Hospital admission	..	..		47	143	190
Home Help enquiries	..	..		12	70	82
Home Help recommended	..	..		12	53	65
Refused help	..	..		18	33	51
Visits to persons living alone	..	..		207	523	730
Number of routine visits	..	..		4,651	11,622	16,273
Number of routine visits to persons living alone	..	..		2,357	7,148	9,505

The third Health Visitor Training Course at the University of Keele was completed in September, 1970. The six health visitor bursars sponsored by this authority all passed the examination successfully, five are now working in the Health Department and one for the School Health Service.

In October, 1970 the new Health Centre in Dunning Street, Tunstall was opened officially. This accommodates eight general practices in addition to the Maternal and Child Health Service. There is also an area Public Health Inspectors Office and office accommodation for the Home Help Service administering the northern third of the City.

I think that perhaps the most gratifying aspect of this report is the increasing attendances at the cytology and family planning clinics. The number of sessions of cytology clinics has not increased but the attendance, by appointment, of the general public has shown a marked improvement. A good response has come from several industrial concerns and special sessions have been arranged at factories when facilities are suitable.

Two further fortnightly evening family planning sessions were started in July, 1970 at Smallthorne and Abbey Hulton and it is hoped that such sessions will start at other Health Centres and clinics in 1971 as trained staff become available.

Dental Treatment

Children under five years of age and expectant and nursing mothers are treated through the Dental Service of the School Medical Department, and I am grateful to Mr. G. T. Emery, the Principal School Dental Officer for the following report:—

CHILDREN UNDER SCHOOL AGE:—

Number of children examined	..	..	142
Number of children needing treatment	..	..	137
Number of children treated	..	..	137
Number of temporary teeth extracted	..	..	170
Number of temporary teeth filled	..	..	50
Number of temporary teeth treated with AgNO ₃	..	..	16
Number of scalings and cleanings	..	..	5
Number of local anaesthetics	..	..	5
Number of N ₂ O/O ₂ anaesthetics	..	..	61

NURSING AND EXPECTANT MOTHERS:

Number of patients examined	..	..	50
Number of patients needing treatment	..	..	48
Number of patients treated	..	..	48
Number of permanent teeth extracted	..	..	136
Number of permanent teeth filled	..	..	37
Number of scalings	..	..	19
Number of local anaesthetics	..	..	22
Number of N ₂ O/O ₂ anaesthetics	..	..	31
Number of full upper or lower dentures	..	..	1
Number of partial upper or lower dentures	..	..	7

DAY NURSERIES

There are five Day Nurseries and they are open from Monday to Friday. The maximum charge is £3.50 per week, the minimum 75p, and in certain hardship cases the charge of 75p is reduced with the approval of the Committee.

NUMBER OF CHILDREN ATTENDING DAY NURSERIES—1970.

	No. of Approved Places	Average Daily Attendance During Year		
		under 2	over 2	Total
Tunstall ..	40	11	21	32
Burslem ..	40	12	24	36
Hanley ..	40	13	24	37
Trent Vale	50	15	21	36
Dresden ..	40	11	21	32
TOTALS ..	210	62	111	173

Total number of children admitted during the year 208

	1970	1969	1968
Priority cases ..	112	101	96
Financial help cases ..	96	79	108

The priority cases were:—

Unmarried mother ..	32
Widow ..	4
Widower ..	1
Parents divorced ..	5
Parents separated ..	36
Health of child ..	7
Health of mother ..	9
Health of father ..	7
Father in H.M. Prison ..	3
Short stay cases ..	8

There were 112 priority admissions during 1970 but the proportion of priority admissions to financial at the end of December, 1970 was 70 to 118. 37 of the priority admissions have been in the nurseries for more than one year.

Seven free places were granted to children from deprived home backgrounds, in each case the child has shown all round improvement.

In 1970, 14 students obtained the N.N.E.B. Certificate. 21 students employed by the Education Department received training in the Day Nurseries in the care of children under two years of age.

All the Day Nurseries continue to have a waiting list for financial cases but many of these are now being absorbed by registered daily minders.

DISTRIBUTION OF WELFARE FOODS

Under Circular 10/54 of the Ministry of Health, the Local Health Authorities are responsible for the distribution of welfare foods which had previously been distributed by the Ministry of Food. The foods concerned being National Dried Milk, Orange Juice, Cod Liver Oil and A/D Vitamin Tablets.

These arrangements are undertaken by the Health Committee as part of the Authority's duty to provide for the care of expectant and nursing mothers and young children under Section 22 of the National Health Service Act 1946, and the Local Health Authority's Scheme under this section was amended accordingly.

The following is a list of the distribution points in the City:—

- Public Health Dept., 79 London Road, Stoke-on-Trent.
- Infant Welfare Centre, 62 Knypersley Road, Norton.
- Infant Welfare Centre, Outclough Road, Brindley Ford.
- Infant Welfare Centre, Fegg Hayes Road, Fegg Hayes.
- Infant Welfare Centre, Community Drive, Smallthorne.
- Infant Welfare Centre, Andrew Street, Goldenhill.
- Infant Welfare Centre, Dunning Street, Tunstall.
- Infant Welfare Centre, Lucie Wedgwood Clinic, Massey Square, Burslem.
- Infant Welfare Centre, 17 Charles Street, Hanley.
- Infant Welfare Centre, Richmond Terrace, Shelton.
- Infant Welfare Centre, Leek Road, Abbey Hulton.
- Infant Welfare Centre, Church Hall, Werrington Road, Bucknall.
- Infant Welfare Centre, 312 Etruria Vale Road, Etruria.
- Infant Welfare Centre, Gospel Hall, Claytonwood Rd., Trent Vale.
- Infant Welfare Centre, Brotherhood Hall, Leek Road, Milton.
- Infant Welfare Centre, Lime Close, Weston Coyney.
- Infant Welfare Centre, Ripon Road, Blurton.
- Infant Welfare Centre, Glebedale Road, Fenton.
- Infant Welfare Centre, Marlborough Road, Longton.
- Infant Welfare Centre, Saracen Way, Meir.
- Infant Welfare Centre, Bargrave Street, Bentilee.
- W.R.V.S. Headquarters, 37 Kingsway, Stoke-on-Trent.
- Messrs. Lewis's Ltd., Hanley.
- Community Hall, Lorraine Street, Packmoor.
- North Midlands Co-op Society Emporium, Market Street, Longton.

The following table shows the amounts of the various foods distributed during the year 1970:—

	Co-op Society Longton	Health Office	Lewis's Ltd.	W.R.V.S. H.Q.	All Other Centres	Total
National Dried Milk (pkts.)	6,563	4,147	20,179	895	10,173	31,957
Orange Juice (bottles) ..	4,268	4,106	27,078	1,459	17,584	54,495
Cod Liver Oil (bottles) ..	205	236	1,247	74	1,302	3,064
A/D Vitamin Tablets (pkts)	189	371	1,592	88	1,020	3,260

CONVALESCENCE

Convalescent Treatment

Under Section 28 of the National Health Service Act, 1946, the Local Authority may provide convalescent treatment for suitable cases. Arrangements are made with the Lady Forester Trust Home for men and women at Llandudno.

During the year a total of 380 cases were sent for convalescence as compared with 430 in 1969. 336 cases were sent to the Lady Forester Home, 24 cases to the Evelyn Devonshire Home and 20 cases to the Lear Home of Recovery. The full cost of maintenance is borne by the Local Authority, though subject to recovery according to the patient's financial circumstances based on the Association of Municipal Corporations Scale. During the year 443 applications were dealt with of which 63 were cancelled or withdrawn.

The period of convalescence is for two weeks, however, on requests from the medical officer at the Home a further period was allowed in 2 cases.

IMMUNISATION AND VACCINATION

Immunisation against Diphtheria and Whooping Cough

The immunisation of children against Diphtheria and Whooping Cough is carried out at the School Clinics, special sessions held at the Infant Welfare Centres, each Monday afternoon at the Richmond Lodge Welfare Centre, Shelton, and by general practitioners, who obtain their supplies of Prophylactic from the Public Health Department.

As a routine Triple Vaccine against Diphtheria, Whooping Cough and Tetanus is used for children for primary inoculation in all our M. and C.W. clinics, unless the parents request otherwise.

During the year the number of children immunised was as follows :—

Diphtheria—

Primary	584	
Secondary or Reinforcing	3,940	
	<hr/>	4,524
Diphtheria and Whooping Cough and Tetanus (Triple)		2,208
Secondary or Reinforcing		489
Whooping Cough		—
	<hr/>	
TOTAL ..		2,697
		<hr/>

Vaccinations against Smallpox

Age at 31st December, 1970:—	<i>Number Vaccinated</i>	<i>Number Re-vaccinated</i>
Under one	3	—
One year	688	26
Two to Four	343	32
Five to Fifteen	110	70
	<hr/>	<hr/>
TOTAL ..	1,144	128
	<hr/>	<hr/>

A letter signed personally by the Medical Officer of Health is sent to the parents of every newborn baby, within a few days of its birth. This letter stresses the need for immunisations and encloses a card giving suggested ages at which various immunisations should be carried out and which could act as a personal record card for the child.

POLIOMYELITIS VACCINATION

During 1970 the following children had three oral doses of Sabin Vaccine:—

Children born in 1970	..	..	..	32
Children born in 1969	..	..	..	1,686
Children born in 1968	..	..	..	246
Children born in 1967	..	..	..	89
Children born in 1963-1966	..	..	..	492
Others under 16 years	..	..	..	105
				2,650

Children age 5-11 years who had a reinforcing dose .. 2,731

Oral Vaccine commenced March, 1962 and is now our standard method. No Salk Vaccine was given during the year.

DISTRICT NURSING

The District Nursing Service is administered directly through the Health Department. All nursing staff live in their own homes and receive messages at centres in their own districts. The following figures indicate the work done:—

			1970	1969	1968
Number of patients	..	..	4,096	3,696	3,432
Number of visits	..	..	109,981	107,739	103,994

Classification of Illness

	Medical	Surgical	Infections	T.B.	Maternal Comp.	Others	Total
Patients ..	2,589	1,132	39	54	12	270	4,096
Visits ..	76,709	29,726	303	1,936	99	1,208	109,981

Types of Illness Affecting Adults (excluding surgical cases)

	Respiratory	Cardiac	Senility	Accidents	Preparation for Hospital	Gynaecological	Cerebral Thrombosis	Diabetes	Cancer	Genito Urinary	TOTAL
Men ..	112	53	71	59	61	—	146	16	150	110	778
Women ..	85	99	193	99	75	97	194	78	228	—	1,148
TOTAL ..	197	152	264	158	136	97	340	94	378	110	1,926

FURTHER NOTES ON PATIENTS:—

Number of children under 5 years	..	..	..	37
Number of visits to children under 5 years	..	..	336	
Number of children over 5 and under 15 years	..	..	63	
Number of visits to children between 5 to 15 years	..	997		
Number of adults over 65 years	..	..	..	2,583
Number of visits to adults over 65 years	..	..	..	78,159
Number of adults over pensionable age living alone:				
Males	..	..	..	108
Females	..	..	..	466
				<hr/> 574 <hr/>
Number of patients who have been on the books for 3 years				
or more: Males	..	..	..	83
Females	..	..	..	294
				<hr/> 377 <hr/>
Number of patients who had more than 24 visits in the year				1,227
Number of visits to these patients	..	..	..	85,778

LOAN OF NURSING EQUIPMENT

All equipment belongs to the Corporation and no charge is made for the loan of it. The use of suitable equipment not only assists the sick person but enables patients to be nursed and taken care of at home, who might otherwise need admission to hospital. Invalid chairs are very much in demand during the summer months.

The following table indicates the type of equipment and the number of times loaned out:—

District Nursing Loans 1970	LEGG HAYES			LONGTON			MEIR			SMALLTHORNE			BLURTON			GRAND TOTAL 1970		
	On Loan Jan. 1970	Loaned during 1970	Total	On Loan Jan. 1970	Loaned during 1970	Total	On Loan Jan. 1970	Loaned during 1970	Total	On Loan Jan. 1970	Loaned during 1970	Total	On Loan Jan. 1970	Loaned during 1970	Total	On Loan Jan. 1970	Loaned during 1970	Total
Air Rings . . .	6	7	13	13	16	29	8	19	27	6	29	35	7	6	13	138	228	366
Attachable Sides . .	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	6	17	23
Back Rests . . .	8	11	19	15	10	25	18	17	35	9	16	25	5	11	16	212	279	491
Bed Blocks . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	30	8	38
Bed Cradles . . .	3	2	5	6	1	7	2	4	6	4	4	8	—	—	—	58	43	101
Bed Pans . . .	9	15	24	24	20	44	12	23	35	9	31	40	8	3	11	244	311	555
Bed Pans Rubber	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	3
Bedsteads . . .	7	21	28	2	3	5	5	1	6	2	4	6	1	3	4	83	105	188
Blanket Master . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3
Blankets . . .	18	—	18	—	—	—	—	—	—	—	—	—	—	—	—	62	8	70
Coll. Toilet Seats . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	2
Commodore . . .	4	8	12	5	11	16	5	6	11	7	3	10	2	8	10	116	172	288
Concord Fan . . .	—	—	—	—	2s	4s	2s	—	2s	4s	6s	10s	—	2s	2s	—	40s	90s
Crutches (in. elbow)	8s	—	8s	—	—	—	—	—	—	—	—	—	—	—	—	—	3	11
Fracture Boards . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3
Heart Tables . . .	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	3	7
Hoists . . .	3	11	14	3	2	5	4	5	9	3	3	6	4	2	6	83	123	206
Invalid Chairs . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leg Supports . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mack. Sheets . . .	11	9	20	21	2	23	13	31	44	7	3	10	11	2	13	229	181	410
Mattresses . . .	3	25	28	1	5	6	4	1	5	1	7	8	2	4	6	111	129	240
Mattress Covers . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pehnrn Lifter . . .	—	2	2	1	—	1	—	—	—	—	—	—	—	—	—	26	2	28
Pillows . . .	2	—	2	1	—	1	—	—	—	—	—	—	—	—	—	1	2	3
Pillow cases . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	33	6	39
Quadrupeds . . .	3	—	3	—	—	—	—	—	—	—	—	—	—	—	—	4	—	4
Self Lift Chairs . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	7	10
Sick Feeders . . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2
Sp. Child's Chair . .	—	—	—	—	—	—	—	—	—	1	2	3	—	—	—	2	2	4
Sp. Rsd. Toilet Seat	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sp. Toilet Chair . .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	4
Tripods . . .	2	2	4	4	—	4	—	—	—	—	—	—	—	—	—	—	1	1
Urinals . . .	9	4	13	7	15	22	7	15	22	2	3	7	3	3	6	54	71	125
Walking Aids . . .	—	2	2	1	2	3	—	3	3	—	2	2	7	2	9	125	153	278
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	32	49

HOME HELP SERVICE

Applications for the Home Help Service have decreased in 1970. All cases receive some help as soon as possible after receipt of the application. 2,778 persons had domestic help, 452 cases were new applications in 1970.

	1970	1969	1968
Total number of cases where domestic help was given	2,778	2,784	2,730

CLASSIFICATION OF HOUSEHOLDS:

(a) Maternity	28	18	26
(b) Tuberculosis	—	1	1
(c) Chronic sick and infirm of pensionable age	2,627	2,633	2,553
(d) Illness and persons under 65 years of age	123	132	150
	<hr/> 2,778 <hr/>	<hr/> 2,784 <hr/>	<hr/> 2,730 <hr/>

CLASSIFICATION OF PERSONS OF PENSIONABLE AGE:

(a) Couples	387	429	442
(b) Others in the same house ..	273	280	256
(c) Women living alone	1,555	1,514	1,490
(d) Men living alone	412	410	365
	<hr/> 2,627 <hr/>	<hr/> 2,633 <hr/>	<hr/> 2,553 <hr/>

2,213 Pensioners are drawing Social Security Supplementary Benefit and qualify for domestic help free (in 1969, the number was 2,188).

HOME HELP LAUNDRY SERVICE

The laundry service has again been in great demand in 1970.

Approximately one-third of the City can use the laundry service, but even within this area there is an unsatisfied demand.

	1970	1969	1968
Total number of individual washes	6,646	6,567	6,495
Number of persons who send a weekly wash ..	95	130	131
Number of persons who send a fortnightly wash	207	145	135
Number of persons who send a monthly wash	—	—	1
	<hr/> 302 <hr/>	<hr/> 275 <hr/>	<hr/> 267 <hr/>

TYPES OF CASES USING LAUNDRY SERVICE:

(a) <i>Old Age Pensioners:</i>				1970	1969	1968
Persons living alone	..	..	..	212	198	177
Married couples	..	..	..	55	42	49
Others	..	..	..	29	29	33

(b) <i>Under Pensionable Age:</i>						
Number of persons	..	..	..	6	9	8

Reasons for using Laundry Service:

Orphaned family	..	..	..	1
Pneumonia and pleurisy	..	..	..	2
Arthritis	..	..	..	1
Paraplegia	..	..	..	1
Nervous diseases	..	..	..	1

FAMILY CASEWORK

Since July when the new family caseworkers (one full-time and one part-time) took up their posts 24 families have been referred and found to need long term intensive casework.

The overt problems in many cases have been debt, bad household management, and the failure of the fathers to obtain work. These problems themselves often turn out to be symptoms of deeper emotional problems, e.g. a man is unwilling to work because his wife cannot run the home or cope with the children adequately in his absence, or, in four cases, mental ill-health is the reason why the man cannot work. Debt and bad household management often seem to occur, not so much due to low standards of intelligence, although this is so in at least two cases, but because the mother in particular has given up in despair, overwhelmed by her problems. In these cases, given encouragement, a return of self-confidence, and some judicious material help, the mother is prepared to try and cope again. Also, by these means, latent affection for the children can be brought to the surface again and it is therefore possible to effect some improvement in the care and nurture of the children.

Both parents in most families are suffering from acute mental strain, often depression and anxiety, not so much because they are short of money, but because they feel left behind and somehow inferior to other people with whom they are unable to compete in the rat race of society. Numerous types of pills from the doctor are only of limited use. With the fathers in particular, since they are considered unworthy of good jobs, this often leads to an aggressive attitude to cover up their feelings of weakness and inadequacy. For this reason it seems on the whole that fathers are less responsive in the first instant to offers of support and help than are the mothers. Little progress can be made unless the family caseworker can gain the confidence of both parents and get them to work together as a team instead of, as they usually are, two isolated individuals in a state of tension with each other. This will to work together, however, is not easy to achieve and in quite a number of cases one has to do the best one can with the one responsive parent.

Families have been referred by Health Visitors, Children's Department, Ministry of Social Security, and some families have referred themselves. Besides with the Departments mentioned, contacts have been made in varying degrees with the Education Department, Mental Health Department, Housing Department, Police, N.S.P.C.C., W.R.V.S., Hospitals, General Practitioners, County Court, lawyers, H.P. shops, financial companies, the Gas Board and Electricity Board, Young Volunteer Force and others. It is through contact with these agencies, with their help and support that the caseworkers have managed to achieve in a number of cases a stable and viable method of reducing and sometimes clearing debts: to reduce the attitude of apathy and hatred towards the rest of society, especially officialdom, that so many of these families suffer from: and to promote instead an attitude of hope and a desire at least to be self-reliant.

CHIROPODY SERVICE

National Health Service Act, 1946, Section 28

This service is carried out for us on an agency basis by the W.R.V.S.

The work is still very limited by the serious shortage of qualified chiropodists.

Treatments during the year:—

	<i>No. of Treatments</i>	<i>Domiciliary</i>
Part-time staff ..	10,436	3,962

MENTAL HEALTH SERVICE

This is the last complete year in which a report on the Mental Health Services will be possible. On 1st April, 1971 the Mental Health Services together with some other functions of the Health Department will pass to the new Social Services Department. The two Junior Training Centres will become part of the Education Department and will be renamed "Special Schools". Whilst I cannot help a feeling of regret in losing the direct control of the service which has developed so well over the years, I hope that there will be close liaison with the two Departments so that I shall be able to help and advise on maintaining the present high standards.

Administration

The Mental Health Service of the City is administered by the Mental Health Sub-Committee of the Health Committee. This sub-committee consists of the whole of the members of the Health Committee and meets every second month to consider the organization and development of the service; reports on cases; the work of the Junior and Adult Training Centres; hostels, and other business. No functions are delegated to Voluntary Associations.

Staff

The Mental Health Service is controlled and directed by the Medical Officer of Health, and Mr. E. E. Stephenson, A.A.P.S.W. is the Senior Mental Health Officer. On 31st December, 1970 the Social Work Staff numbered

- 1 Senior Mental Health Officer
- 3 Senior Mental Welfare Officers
- 1 Senior Psychiatric Social Worker (Part-time)
- 1 Social Worker
- 5 Mental Welfare Officers
- 6 Trainee Mental Welfare Officers

One of our trainees qualified in June and is now back with us as a Mental Welfare Officer. Two trainees and a Mental Welfare Officer are away in the second year of their training on a C.S.W. Course, and one other was seconded in September. One Mental Welfare Officer was seconded to a University course in social work which will last for one year.

One Mental Welfare Officer left in November following her marriage. Two new trainee Mental Welfare Officers were appointed in September.

Mrs. Pope who had been the Home Teacher for years retired in January and was replaced by a qualified Occupational Therapist.

Social Work Section

The impending reorganization of the social work services has created some feeling of uncertainty. Whilst most Mental Welfare Officers welcome the promise of integration with other social work disciplines, they are aware of the drawbacks that could follow if the existing close liaison with the

Health Department staff and with the General Practitioners were to be lost. Perhaps one of the attitudes that the Mental Health Social Workers can take to the new Department of Social Services is that just as the medical profession needs social workers, so too do social workers need close links with the doctors if both professions are adequately to serve the needs of the clients.

The number of referrals to the Department has continued to rise and is now almost double that in 1963. What is perhaps more significant is that the reason for referral has gradually changed over this period. In 1963 the referrals of patients for admission to hospital totalled 498 whereas in 1970 it dropped to 320. Referrals for social work help on the other hand rose from 330 in 1963 to 598 in 1970. This change is evidence of the change in emphasis from in-patient to out-patient treatment for the mentally ill, but it is also an indication of the change in the role of the Mental Welfare Officer from being a statutory officer mainly concerned with assessing the need for and arranging admission, to that of a social worker concerned mainly with the needs of the client and his family in a mental health setting. Admission to a mental hospital, particularly when it has to be carried out against the wishes of the patient, can still be an emotionally charged event, and the presence of a social worker who can deal calmly with the procedure and answer queries about the hospital, the treatment likely to be given, probable length of stay etc. can be immensely reassuring to the patient and his family. In cases where the admission is straightforward and there is no undue anxiety, there is no need for a social worker to be involved. Transport to the hospital can be by ambulance, by the family's own car if one is available, or even by public transport. To involve a social worker in what is purely a transport problem would be a waste of valuable professional worker time. Most of the General Practitioners - who of course play a large part in the care and treatment of mentally disordered patients in the community - are now referring any patients considered to be in need of admission, direct to the Consultant Psychiatrists rather than via the Mental Health Department. This enables discussion to be on a "doctor-to-doctor" level which is far more satisfactory in all ways than a three way "General Practitioner-Mental Welfare Officer-Psychiatrist-Mental Welfare Officer-General Practitioner" basis. If either the General Practitioner or the Psychiatrist feel that the patient or the family needs social work help, then they can refer them to the Mental Health Department. The idea that all mentally disordered patients must be referred no longer applies, and is quickly dying out, so that the referrals now being made to the Department are more appropriate.

In September the rehabilitation hostel at Burslem was opened with Mr. and Mrs. Crighton as superintendent and matron. The hostel has 25 beds and will cater for men and women recovering from mental illness. Residents will be working in local industry and will probably stay for periods varying from a few weeks to two years, before moving into lodgings or returning home. Thus the hostel will be rather different from the other two at Shelton and Tunstall which cater mainly for long-term sub-normal residents. But these two hostels do not overlook the possibility that some residents may be helped to move on into the community, although progress is much slower, and the number able to make the move is fairly small.

The demand for long-term hostel care continues to increase with the recognition that people should not be admitted to psychiatric hospitals merely because they need care, and also that many patients already in hospitals do not need medical and nursing care so should be discharged into hostels. In particular Stallington Hospital has recently been subjected to intense pressure from the General Nursing Council to reduce overcrowding, and the names of 16 women and 14 men added to the waiting list for our hostels.

One of the factors limiting any immediate increase in hostel places is the shortage of day care facilities for those residents not able to work. There is now a waiting list for admission to the Adult Training Centre, but this should be reduced by the provision of the Special Care Unit and the Industrial Unit - both due to open early in 1971.

WORK OF THE ADULT TRAINING CENTRE

1970

The adult training centre provides training and further education for mentally subnormal persons residing in the City of Stoke-on-Trent. They are admitted at sixteen years from junior training centres or schools for the educationally subnormal; from hospitals for the mentally subnormal; and a number are referred from the Probation Service, Youth Employment Officers and Disablement Resettlement Officer. In some cases selected patients who have been mentally ill, and are in need of training and rehabilitation are admitted.

For some, attendance at the centre will only be for a limited period before they are placed in regular employment; others will need to attend more or less indefinitely.

The trainees attend the centre voluntarily from Monday to Friday, starting at 9.15 a.m. and finishing at 4.30 p.m. Because the majority are incapable of travelling to the centre unescorted on public service vehicles they are transported free under the supervision of 'bus guides on contract hire 'buses to and from the centre to points convenient to their homes. A few of the less handicapped trainees do make their way independently to the centre. A free lunch is provided to all irrespective of their means. All trainees receive a pocket money allowance ranging from 25p to £2 according to attendances and progress made.

Again I have to report a continued increase in the number of trainees attending the centre; during the year there was a 4% increase.

<i>Year</i>	<i>Males</i>	<i>Females</i>	<i>Total</i>
1961	73	47	120
1962	93	65	158
1963	98	74	172
1964	101	82	183
1965	102	90	192
1966	106	87	193
1967	124	86	210
1968	121	80	201
1969	123	88	211
1970	132	88	220

This year's total comprises of 45 mentally subnormal, 152 severely subnormal and 23 mentally ill.

In addition to their mental handicap 23 trainees have a physical handicap, 33 suffer from epilepsy, 10 have speech defects, 2 are partially deaf and 23 are in need of special care.

This year the centre was full to capacity for the first time since it was opened in 1961. At the year end there was a waiting list of nine people awaiting admission. Seven of these were children who had attained the age of 16 years in the two Junior Training Centres who in normal circumstances would have been admitted in September. Until vacancies occur all seven will continue to attend the Junior Training Centres.

Age Analysis

<i>Age Group</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
16-20	26	15	41
21-25	31	34	65
26-30	15	13	28
31-35	12	12	24
36-40	15	7	22
41-45	9	1	10
46-50	12	1	13
51-55	6	1	7
56-60	5	2	7
61-65	1	2	3

The need to expand facilities for the care of the mentally handicapped in the community has been anticipated and steps taken to acquire suitable premises which can be adapted at reasonable cost. Two properties have been purchased and the Architect's Department have prepared plans for their conversion. One is the former Civil Defence Headquarters in Cemetery Road, Shelton, adjacent to the Adult Training Centre, which will accommodate 30 severely subnormal adults in need of special care. The second is the Thorley China factory situated in Glebedale Road, Fenton. Parts of these premises will be demolished and the remaining buildings adapted to form a small factory unit. It is hoped that it will eventually progress from an industrial unit to a sheltered workshop, recognised by the Department of Employment and Productivity, providing sheltered employment for 30 to 40 handicapped persons.

If the increase in referrals continue at the present rate then these two expansion projects will only satisfy the demand for places for the next five years. For the long term, thought must ultimately be given to the building of another Adult Training Centre.

Trainees Employment

Five trainees, one male and four females, were placed in regular employment during the year. One is doing domestic work and the other four are in various departments of the pottery industry.

Training Activities

After leaving the Junior Training Centre or Schools for the Educationally Subnormal the trainees continue to receive social training and further elementary education. Each day time is devoted in each of the work groups for this. The programme is devised to meet the needs of the individual trainees, it teaches them to make the best possible use of their limited intellectual ability, and gives them the opportunity to experience and learn all aspects of living in the community.

Recreation and other pleasurable activities are also organised to teach them to enjoy their leisure time to the full. This is most important in the majority of cases as there is a tendency for them to be isolated in the home, where for many the only form of recreation is the television.

A number of trainees able to make their own way to the public baths continue to enjoy a swimming session every Thursday morning. It is hoped that this facility will be enjoyed by all the trainees in the near future.

Work Activities

The greater part of the working day is taken up with industrial work. By taking on realistic work contracts the trainees can be taught to do simple repetition jobs. By involving them in purposeful activity they can be taught good work habits and a sense of urgency. It is only by trying them out with all types of jobs that an accurate assessment can be made of any trainee.

To simulate actual working conditions the following outwork contracts were undertaken: assembly of television aerials; making cardboard cartons; making carrier bags; hand stamping prescription pads; dismantling Post Office equipment; repairing boots and shoes; printing a variety of record cards; assembling cup divisions and labelling boxes. Prices for doing this work is negotiated and is on a par with work done in the factory.

Other work undertaken during the year included laundry done for the two Junior Training Centres and two hostels; studio pottery and pottery decorating; a wide variety of woodwork articles; gardening and concrete block making.

Specialised training in housecraft is given in the domestic science room. Every day a different group of trainees are taught simple cookery and domestic cleaning.

Special Care

The increase in numbers of trainees who because of their severe handicap are in need of special care, made it necessary to open a unit to cater for their special needs. Two female staff were appointed in April to train and supervise the 23 trainees of both sexes who make up the group. Until the former Civil Defence building has been altered and repaired they are being accommodated in the Centre.

The activities consist of social training, sense training, music and dancing, ball games, simple handicraft, walks in the park, visits to the shops etc. The staff endeavour to provide as much stimulating experiences and activities as possible. In the short time the unit has been opened there has been a great improvement in the majority of the trainees.

Lack of room and proper facilities does restrict the effective working of the unit but it is hoped that they will be soon accommodated in the above mentioned premises which will allow them to extend their range of activities.

Staff Training

One instructor was seconded to the Central Training Council Diploma Course for Instructors of Mentally Handicapped Adults at the Kingston-upon-Hull College of Commerce.

Swimming Pool Fund

A total of £9,505 17s. 8d. was raised during the year. Including interest the fund now stands at £13,330 3s. 3d.

The largest single donation was given by the City Athletic Club who raised a total of £8,654 2s. 8d. which was the proceeds from a sponsored swim which was staged in October, 1969.

The cheque for this amount was formally presented to Ald. Mrs. B. E. Meakin by Mr. C. P. Davison, chairman of the Athletic Club, at a buffet luncheon on Tuesday, 9th June. Ald. Mrs. Meakin sincerely expressed our gratitude to all those who took part in "Splash" and who thereby brought much nearer our dream of a swimming pool specially for our handicapped people.

When one considers that this fund was only started in May, 1967, to raise this amount of money does reflect the interest of the public at large who have given so generously. It is also evidence of the hard work and dedication of the staff who have time after time organised fund raising efforts to make this project the success it undoubtedly is.

Social Club

The Social Club meets each Tuesday evening providing numerous diverse recreational activities for its members. Throughout the year an average of 80 members attend to enjoy the facilities the Club offers. Members are encouraged to take an active part in the general running of the Club and the planning of various outings and events.

In addition to the usual meeting activities they went on outings to Chester Zoo, Blackpool Illuminations and three theatre shows, all of which were paid for out of their savings. Other special entertainment items included a visit by the Stone Brass Band, several full length feature films and a Police Dog Handler demonstration.

The Club has now been in existence for five years and has gone from strength to strength. It has done much to widen the social experiences of the trainees and has also been the means of them living a fuller, a richer and a happier life.

City of Stoke-on-Trent Association for the Mentally Handicapped

This Association meets once a month in the centre. It continues to give substantial financial assistance to purchase additional equipment and amenities. During the year it donated £334 10s. 0d. which was used to defray holiday expenses, purchase Christmas presents and teaching equipment.

Holidays and Outings

84 trainees accompanied by staff went to Scarborough for one week's holiday. This was thoroughly enjoyed by all.

On Tuesday, 2nd June, all the trainees and staff spent a most enjoyable day at Rhyl.

Northern Junior Training Centre, Chell Heath

The Northern Junior Training Centre takes handicapped children, both mentally and physically from the age of two to 17 years. As far as possible the children are grouped according to their ability, and the Special Care Unit at the Centre caters for the doubly handicapped child which requires very special care and attention. Nearly all these children have to be fed and toileted, and need constant supervision.

At the end of 1970, there were 71 children on the register. 50 males and 21 females. The average weekly attendance throughout the year was 49.

Speech Therapy is given one day per week by a qualified Speech Therapist from the City Education Dept.

A Physiotherapist visits the Centre twice weekly.

The children arrive at the Centre by special buses with the exception of those children requiring special care, the children are conveyed to and from the centre by ambulance.

The children attend from 9.30 a.m. to 3.30 p.m. Each child receives a morning drink and a free mid-day meal is provided at the centre.

Training

The centre daily programme includes Social and habit training, Speech training, Physical Education, Percussion Band, Simple art, Clay modelling, Word matching and simple numbers. Visits of observation in which the older groups only take part.

Outings

An enjoyable outing provided for the children during the year was spent at Rhyl on the 7th July, 1970. This being made possible by the Health Committee.

Holiday

A party of 16 children accompanied by three staff spent a week's holiday at St. Annes on Sea, from the 30th May to the 6th June, 1970.

Gifts

The City of Stoke-on-Trent Association for the Mentally Handicapped donated ten shillings per child which was used to provide Christmas presents. Also one pound per child holiday money. A letter of thanks was sent to the Association.

Staff Training

Mrs. C. J. Wood has successfully obtained her N.A.M.H. Diploma after completing a two year course at Manchester.

Harvest Festival

The Harvest Festival was held at the Centre on 1st October, 1970, and was conducted by the Rev. Romell, vicar of Chell. Most of the children took part in the service.

Christmas Concert and Party

The Christmas Concert was held on 15th December, 1970 in which many children took part. This was very well attended by parents, officials and visitors.

The Christmas Party was held at the Centre on 17th December, 1970.

Pantomime

The Stoke-on-Trent Handicapped Children's Outing Association once again very kindly included the children from the Northern Junior Training Centre in their party of City children visiting the Pantomime at Leek on 28th January, 1971.

Southern Junior Training Centre

The Southern Junior Centre takes children handicapped both mentally and physically from the age of 2 to about 16 years. The children are grouped as far as possible according to their ability, and a Special Care Unit caters for the doubly handicapped requiring very special care and attention.

At the end of 1970 there were 60 children on the register, 42 males and 18 females. The average weekly attendance for the year being 52. Physiotherapy is given twice weekly by a visiting qualified physiotherapist from the School Health Service.

Prior to her resignation in December, 1970, a qualified speech therapist also gave speech therapy one-and-a-half days weekly.

The children are brought to the Centre by special bus, with the exception of those requiring special care, who are conveyed to and from the Centre by ambulance. The children attend from 9.30 a.m. to 3.30 p.m., and receive their morning milk and a free mid-day meal at the Centre.

Training

Activities in the daily programme at the Centre include group activities, physical education, art, music, with percussion band, needlework, habit and social training, pre-reading activities, number work and elementary woodwork. Educational visits of observation and nature rambles, in which most groups take part, are also made.

Outing

The annual summer outing again took the form of a very enjoyable visit to Rhyl. This took place in July and was attended by the children, staff, parents and Dr. and Mrs. J. S. Hamilton.

Holiday

A party of 16 children were sent to a boarding house at St. Anne's-on-Sea for a holiday of one week during May. They were accompanied and supervised by three members of the Centre staff, and all had a very enjoyable holiday. The Stoke-on-Trent Association for the Mentally Handicapped kindly donated £1 per head towards the children's expenses.

Gift

A sum of £10 (part of the proceeds from a school concert) was made to the Centre by Mr. Payres, Organizer of Music in Schools, for the provision of percussion instruments for use at the Centre.

Staff

Mrs. V. Haddow, Assistant Supervisor, commenced maternity leave of absence from 30th November, 1970. Mrs. S. Pearson, Assistant Supervisor, was transferred from the Northern Junior Centre to the Southern Junior Centre on the 14th December, 1970.

Parents Meeting

A good attendance of parents and staff were present at the second annual meeting of a parents and teachers "get-together" which was held at the Centre on the evening of the 29th October, 1970. The children's work was on display and a film featuring some of the Centre's activities was shown on this occasion.

Harvest Festival

The annual Harvest Festival was held at the Centre during October, 1970, and was conducted by the Rev. Paul King, Minister of the Methodist Church, Meir. The children sang suitable hymns with chime bar and percussion accompaniment. They also gave a suitable mime presentation of Easter. Gifts of fruit etc. brought by the children were afterwards sent to a local home for the aged.

Christmas Concert and Party

A Christmas concert in which most of the children took part, was held at the Centre on 9th December and was attended by a large number of parents, officials and other interested visitors.

The Christmas Party took place at the Centre on the 17th December and consisted of an excellent tea followed by a Punch and Judy Show. Afterwards Santa Claus again paid a visit and presented each child with gifts provided both by the Stoke-on-Trent Association for Mentally Handicapped and the Mental Health Committee.

Pantomime

On 28th January, 1971, the Stoke-on-Trent Handicapped Children's Outing Association were once again kind enough to include the children from the Southern Junior Centre in the number of children they took from Stoke-on-Trent and district to visit a Pantomime performance of "Robin Hood" at the Grand Theatre in Leek.

AMBULANCE SERVICE, 1970

General Remarks

The figures relating to the work of the Service during the year show a decrease when compared with last year. The number of patients carried on Service vehicles was 126,977 as against 134,546 for last year.

The mileage covered by Service vehicles also showed a decrease, for this year the mileage figure was 513,672, as against 569,126 last year, a decrease of 55,454.

Staff

At the end of the year there were 93 Staff, consisting of:

- 1 Ambulance Officer
- 1 Deputy Ambulance Officer
- 2 Control Officers (operational)
- 1 Control Officer (administrative)
- 1 Clerk/Telephonist
- 1 Clerk/Typist
- 1 General Clerk
- 4 Section Leaders
- 4 Deputy Section Leaders
- 67 Ambulancemen
- 5 Ambulancewomen
- 1 Storekeeper/Handyman
- 1 Labourer
- 1 Part-time Telephonist
- 2 Part-time Cleaners

There was one vacancy for an ambulancewoman to be filled.

Vehicles

There were no vehicle replacements during the year, but one Dennis ambulance was disposed of (Ambulance 44). The vehicle strength is now as follows:

- 17 Bedford Ambulances
- 22 Bedford dual purpose ambulances
- 2 Austin Cars
- 1 Ford Mobile Control Vehicle
- 1 Commer emergency equipment Vehicle

All vehicles are equipped with two-way wireless receiving/transmitting sets.

Vehicles are repaired and serviced at the Corporation Vehicle Maintenance Department, the servicing being undertaken when each vehicle has covered a specified mileage.

Long Distance Travel

During the year arrangements were made for 23 patients to be transported over long distances by rail, this number being 17 less than last year.

Entonox Outfits

During the year 319 calls were received from local midwives for gas and air (Entonox) outfits, as compared with 436 last year.

These outfits are stored and maintained at the Ambulance Station and are available for local midwives as required. Outfits are collected and returned to the Station after use, where they are checked and cleaned and left in readiness for further use.

An oxygenaire Incubator is also available for the use of midwives when transferring premature babies to hospital.

Midwives Night Duty Rota

All requests for the services of midwives at night time are made through the Ambulance Service Control.

During the year 355 calls were dealt with by Control Staff during the hours of 6.00 p.m. to 7.00 a.m.

N.A.A.O.'s Regional Competition

An ambulance team consisting of two Ambulancemen (Drivers/Attendants M. J. Grocott and B. Sellars) competed as representatives of the Service in the National Association of Ambulance Officers No. 9 Regional Competition, which was held at Telford, near Shrewsbury on Sunday, 10th May, 1970, and were placed second with 279½ marks. (Hereford C.C. gained first place).

Industrial Action

During the period from Monday, 5th October, to Friday, 6th November, certain Industrial Action was taken by Driver/Attendants. This included a:

- Complete ban on all overtime.
- Complete ban on all clerical work.
- No portering duties at hospitals.
- Speed limits for ambulance vehicles, 20 m.p.h. with patients,
25 m.p.h. without patients.
- Radio Ban.

Summary of Figures for 1970

<i>Monthly Totals</i>		<i>Number of Patients Carried</i>	<i>Mileage Covered</i>
January	..	11,009	46,944
February	..	10,224	42,808
March	..	10,419	45,564
April	..	11,706	48,706
May	..	11,438	46,661
June	..	10,645	43,499
July	..	12,211	47,044
August	..	9,901	41,799
September	..	11,049	44,422
October	..	8,087	25,068
November	..	9,423	35,544
December	..	10,865	45,613
Yearly Total	..	126,977	513,672

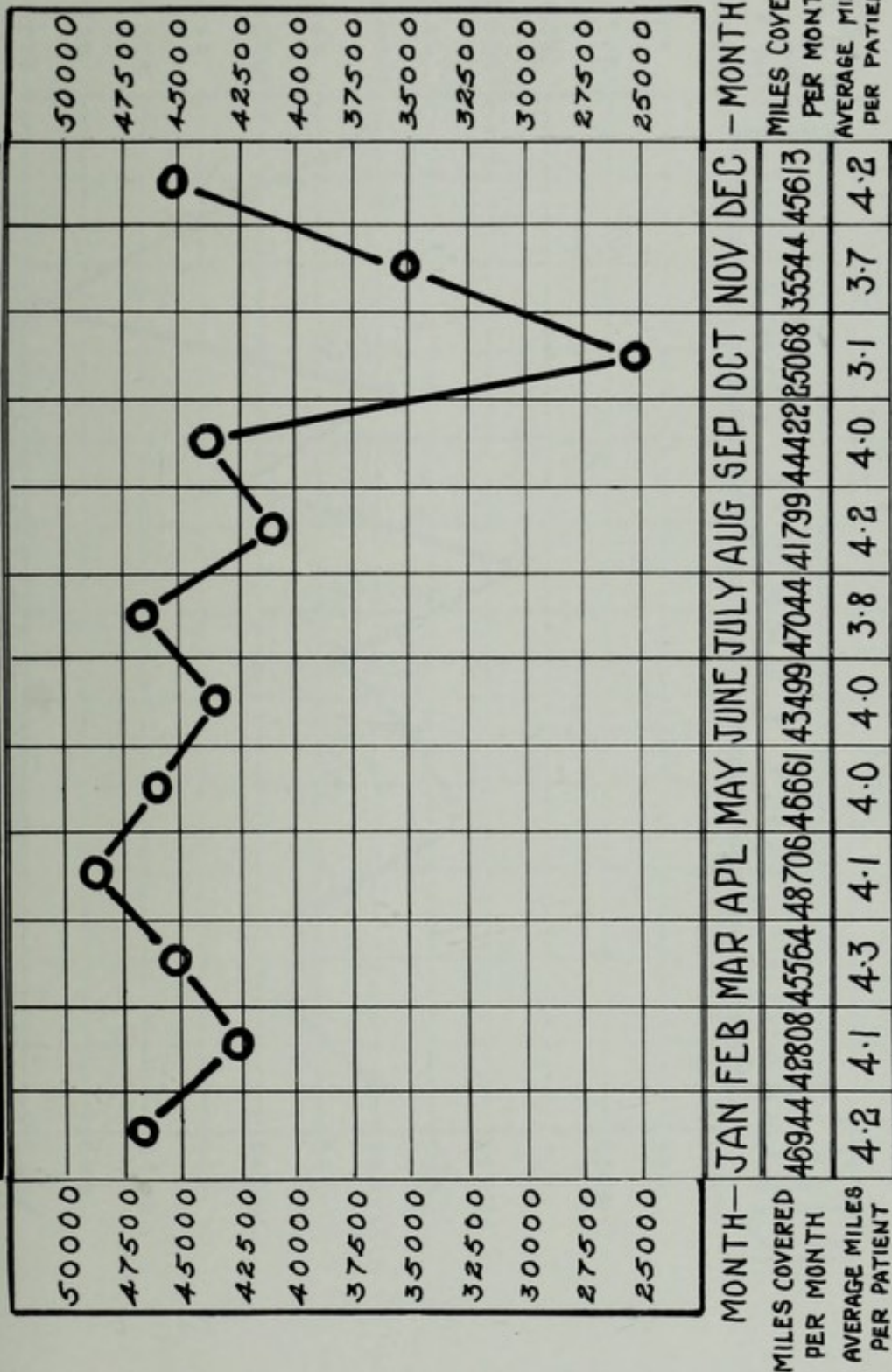
Summary of Yearly Totals

	<i>Patients</i>	<i>Mileage</i>	<i>Average Miles per Patient</i>
1948 (5th July to 31st Dec.)	9,287	83,972	9.0
1949	33,993	275,465	8.1
1950	46,841	308,111	6.5
1951	57,524	342,709	5.9
1952	63,798	360,082	5.6
1953	72,897	379,725	5.2
1954	78,203	389,972	4.9
1955	77,767	398,014	5.1
1956	78,001	394,631	5.0
1957	73,522	378,278	5.2
1958	79,006	401,980	5.0
1959	82,791	416,628	5.0
1960	92,789	437,798	4.7
1961	99,220	454,885	4.6
1962	110,520	468,353	4.3
1963	106,626	461,217	4.3
1964	105,580	474,040	4.4
1965	116,196	520,019	4.4
1966	123,881	557,037	4.4
1967	135,948	565,823	4.1
1968	138,765	572,859	4.1
1969	134,546	569,126	4.2
1970	126,977	513,672	4.0
	2,044,678	9,724,396	4.2

1970

MILEAGE COVERED MONTHLY

1970

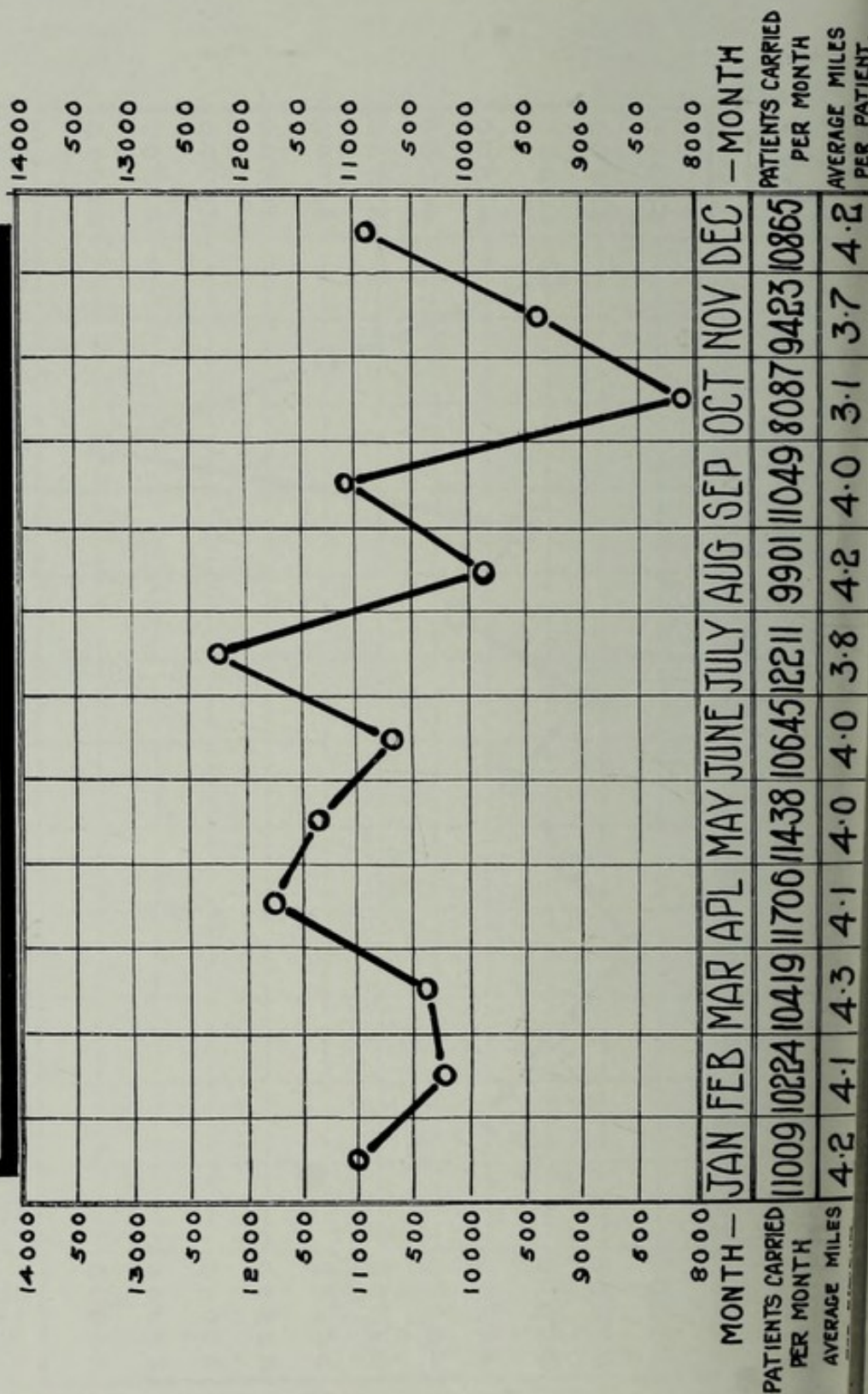


CITY OF STOKE-ON-TRENT AMBULANCE SERVICE

1970

1970

PATIENTS CARRIED MONTHLY



PART 4

NURSING HOMES

CREMATORIUM

PUBLIC MORTUARY

NATIONAL ASSISTANCE ACTS, 1948 AND 1951

NURSING HOMES

Staffordshire Nurses Institution, Stamer House Convalescent and Rest Home, Oxford Street, Penkhull, Stoke-on-Trent is registered under Section 187 of the Public Health Act 1936 as a Nursing Home to accommodate twenty-four persons. Regular inspections of this Nursing Home are carried out by the officers concerned.

CREMATION

The Stoke-on-Trent Crematorium is under the management of the City Council and is situated in the grounds of the Carmountside Cemetery on the main Stoke-on-Trent to Leek road.

During 1970, 1,989 cremations were carried out, as compared with 1,956 in 1969. During the same period, 2,120 interments took place in the City Cemeteries as compared with 1,998 in 1969.

PUBLIC MORTUARY

The only Public Mortuary in use is situated at Hinde Street, Hanley. During 1970, 693 bodies were received at the Mortuary and 684 Post Mortems carried out.

Table showing length of retention of Bodies in the Mortuary

3 bodies	1 day
15 bodies	2 days
59 bodies	3 days
113 bodies	4 days
163 bodies	5 days
143 bodies	6 days
98 bodies	7 days
54 bodies	8 days
26 bodies	9 days
12 bodies	10 days
5 bodies	11 days
3 bodies	12 days
2 bodies	13 days
1 body	16 days
1 body	42 days

NATIONAL ASSISTANCE ACTS, 1948 AND 1951

Proceedings were taken under Section 47 of these Acts in two cases during the year.

PART 5

ENVIRONMENTAL HYGIENE SERVICES

WATER SUPPLY

RAINFALL

ENVIRONMENTAL HYGIENE SERVICES OF THE CITY

Chief Public Health Inspector's Report on:—

FOOD AND DRUGS ACT, 1955	PUBLIC HEALTH (RECURRING NUISANCES) ACT, 1969
STOKE-ON-TRENT CORPORATION ACTS, 1923, 1928, 1935	PREVENTION OF DAMAGE BY PESTS ACT, 1949
SLAUGHTER OF ANIMALS ACTS, 1933—1958	DISEASES OF ANIMALS ACT, 1950
HOUSING ACTS, 1914—1969	AGRICULTURE (SAFETY, HEALTH AND WELFARE) PROVISIONS ACT, 1956
SHOPS ACT, 1950	CLEAN AIR ACT, 1956-1958
HOUSING REPAIRS AND RENTS ACT, 1954	NOISE ABATEMENT ACT, 1960
RENT RESTRICTIONS ACTS, 1920—1939	CARAVANS, SITES AND CONTROL OF DEVELOPMENT ACT, 1960
MERCHANDISE MARKS ACT	LANDLORD AND TENANT ACT, 1962
RAG FLOCK AND OTHER FILLING MATERIALS ACT, 1951	LICENSING ACT, 1964
PET ANIMALS ACT, 1951	OFFICES, SHOPS & RAILWAY PREMISES ACT, 1963
SLAUGHTERHOUSES ACTS, 1954—1958	THE ANIMAL BOARDING ESTABLISHMENT ACT, 1963
FERTILIZERS AND FEEDING STUFFS ACT, 1926	RIDING EST. ACT, 1964
THE CIVIC AMENITIES ACT, 1967	CARAVAN SITES ACT, 1968
FACTORIES ACTS, 1961	CHRONIC SICK & DISABLED PERSONS ACT, 1970
PUBLIC HEALTH ACT, 1936—1961—1968	

In addition to the above, there are the numerous regulations made under these Acts dealing specifically with various matters.

General Comments

11,605 visits were made to the various food premises in the City in 1970. The general standards of food hygiene continues to improve, and the public are now taking a keener interest in food sales and storage.

One can remember when food shops sold one food and the venders appeared to make a reasonable living. Now the supermarkets sell a wide variety of foods and have the floor space, segregation and refrigeration to satisfactorily carry out this type of trading.

The present trend is for some small food shops to become self service and reduce staff. One problem with this type of business is stock rotation.

Some non-food shops are selling pre-packed foods and some food venders are selling ladies stockings, tights and other apparel. This trend is difficult to discourage. One hopes that food hygiene standards and personal standards will discourage the sale of inedible goods in food shops.

The customer has the final answer. Her trade will dictate the pattern of business.

1970, Conservation Year, was expected to yield great advances in the fight against pollution. The Dustmen and Council Manual Worker's Strike posed problems in Public Health. However, this city came off comparatively well with no serious problems.

During the strike we had two cases of maggot infestation in yards of food premises. This stresses the importance of proper hygiene and adequate containers for waste food. As regards the disposal of condemned foods from local shops these were delivered to the Condemned Food Room at the Public Abattoir. The collection of condemned meat from the various slaughter houses posed no problems as this was collected and disposed of by private contractors.

We continue to progress in reducing atmospheric pollution but progress towards satisfactory disposal of industrial waste leaves much to be desired.

The pottery industry activities over the past century has left this City with a number of marl holes, some containing water of varying depths up to 90 feet. Many of these are now used for tipping industrial waste and have caused serious nuisances in the past. The Town Planning Department and ourselves now maintain rigid control of industrial waste known to be deposited in these marl holes, but the deposits by unknown people, many times in the hours of darkness, are extremely difficult to control.

The working party reporting to the Department of the Environment on the Code of Practice for disposal of solid materials by control tipping also omits this problem from their code.

In view of the possible pollution from the drainage of these marl holes to rivers and under ground water supplies, a positive preventive measure could be legal powers to ensure complete records relating to disposal of all industrial waste, solid or liquid, which would require to be available for inspection by officials of the Local Authority.

It is considered that one effective way of controlling the disposal of all waste would be known records which could be followed up in any pollution or nuisance troubles in the future.

4 fun fairs were held on vacant land in the City in 1970. Sanitary accommodation of varying standards was provided. It is to be deplored that proper mobile sanitary units are not standard equipment with itinerant show men. Wet weather also added to the problems of using vacant land for fairs and circuses. Officials are looking at the feasibility of providing a permanent site in the Hanley Forest Park Area which could be used for wakes fairs, circuses and other ancillary uses.

In 1970 two student inspectors qualified. These, and five other inspectors, were appointed giving us an opportunity with 35 inspectors to plan our work load properly.

Three inspectors attended a management course for Senior Officers and Local Government and Public Health Services at the North Staffs. Polytechnic. We are expecting to benefit from the implementation of some of the techniques discussed on this course.

Offices, Shops and Railway Premises Act, 1963

It is felt that during 1970 a significant advance was made by the Department in the enforcement of this Act. 132 more general inspections were carried out than in 1969 (an increase of almost 24%) and in the main this has been due to the improved staff situation. There was a slight reduction in the total number of registered premises due to the demolition and vacation of property.

Almost all registered premises in the City have now received at least one general inspection. At the present time an intensive and complete survey is being carried out in order that premises which have not registered are revealed. When this survey is completed it is hoped that all non-food premises subject to the Act will be visited at least once every two years.

The number of premises registered on 31st December, 1970, was as follows:

Table 25

Premises	Number
Offices	547
Retail shops	1,281
Wholesale shops	192
Catering establishments	195
Fuel depots	6
TOTAL	2,221

Table 26

Analysis of Persons Employed in Registered Premises by Workplace

Class of Workplace (1)	Number of Persons Employed (2)
Offices	7,802
Retail Shops	7,550
Wholesale Department, Warehouses	2,239
Catering Establishments open to the Public	1,638
Canteens	133
Fuel Storage Depots	64
	<hr/>
	19,426
	<hr/>
Total Males: 8,522	Total Females: 10,904

Table 27
Registrations and General Inspections

Class of Premises	Number of Premises registered during the year	Total number of registered premises at end of year	Number of registered premises receiving a general inspection during the year
Offices	77	547	245
Retail Shops	92	1,281	284
Wholesale Shops, Warehouses	12	192	100
Catering Establishments open to the public, canteens	15	195	44
Fuel Storage Depots ..	—	6	1
Totals	196	2,221	674

Table 28
Number of Visits of all Kinds by Inspectors to Registered Premises
2,069

Table 29
Inspections of Premises

Type of Premises	Full Inspections	Revisits or Other Inspections
Retail Shops	284	916
Wholesale Shops	100	156
Offices	245	282
Catering Establishments/Canteens ..	44	28
Fuel Depots	1	—
TOTALS	674	1,382
Total visits of all kinds ..	1970 1969	2,069 2,072

For a classification of the premises registered, please see Table 27.

Table 30
Analysis of Contraventions

Section	Subject	Contraventions			
		Found 1969	Abated 1969	Found 1970	Abated 1970
4	Cleanliness (lack of)	610	525	235	270
5	Overcrowding	1	—	1	1
6	Temperature	55	60	61	52
7	Ventilation	200	161	70	79
8	Lighting	96	120	41	41
9	Sanitary Conveniences	441	459	170	217
10	Washing Facilities	195	211	95	76
11	Supply of drinking water	72	38	39	15
12	Clothing accommodation	35	68	7	20
13	Sitting facilities	—	1	1	1
14	Seats (sedentary workers)	—	1	1	1
15	Eating facilities	61	64	19	23
16	Floors, passages and stairs	414	305	180	139
17	Fencing exposed parts machinery	18	20	8	3
18	Protection of young persons working at dangerous machinery	3	1	2	2
19	Training of young persons working at dangerous machinery	1	—	—	—
20	Hoist and Lifts	6	—	—	—
23	Prohibition of heavy work	—	—	—	2
24	First Aid—General provisions	103	102	70	51
49	Premises not registered	121	86	78	62
50	Abstract	189	207	114	120
	TOTALS ..	2,621	2,429	1,192	1,175

Table 31**Prosecutions**

PROSECUTIONS INSTITUTED OF WHICH THE HEARING WAS
COMPLETED IN THE YEAR

Section of Act or title of Regulation or Order	No. of persons or companies prosecuted	No. of informations laid	No. of informations leading to a conviction
O.S.R. Act, Sec. 53	Nil	Nil	Nil

No. of complaints (or summary applications) made under Section 22 .. Nil

No. of interim orders granted Nil

Number of complaints received from Employees and Trade Unions:

Total No. .. 15

(all but 2 were substantiated)

<i>Nature of complaint</i>	<i>Action taken</i>
Insufficient heating (9)	Additional heating provided
Dirty sanitary accommodation (1)	Redecorated
Dangerous staircase (1)	Repaired
Obstruction of passageways (1)	Passageways cleared
General contraventions (1)	Part done at end of year

Table 32

There were 44 accidents notified to the department as compared with 77 the previous year. The breakdown and comparison with 1969 is as follows:—

	Women	Men	Girls under 18 years	Boys under 18 years	Total
1970	23	14	6	1	44
1969	35	32	8	2	77

No fatal accidents were reported during the year. All but one of the notified accidents were investigated.

Table 33
Reported Accidents

Workplace	Number Reported		Total No. Investigated		Action Recommended						No Action	
					Prosecution		Formal Warning		Informal Advice			
Offices	(5)	3	(5)	2	(-)	-	(-)	-	(3)	1	(2)	2
Retail shops	(48)	35	(42)	35	(-)	-	(2)	2	(27)	8	(19)	25
Wholesale shops Warehouses	(14)	1	(13)	1	(-)	-	(-)	-	(4)	1	(10)	-
Catering establishments open to the public, canteens	(10)	5	(10)	5	(-)	-	(1)	-	(5)	1	(4)	4
Fuel storage depots	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-
TOTALS	(77)	44	(70)	43	(-)	-	(3)	2	(39)	11	(35)	31

Numbers in parenthesis are the 1969 equivalent figures.

Table 34
Analysis of Reported Accidents

	Offices		Retail Shops		Wholesale Warehouses		Catering Establishments open to public, canteens		Fuel Storage Depots	
Machinery	(-)	1	(2)	1	(1)	-	(1)	-	(-)	-
Transport	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-
Falls of persons	(5)	1	(20)	20	(3)	1	(3)	1	(-)	-
Stepping on or striking against object or person	(-)	-	(11)	1	(3)	-	(-)	-	(-)	-
Handling goods	(-)	-	(9)	8	(5)	-	(2)	-	(-)	-
Struck by falling object	(-)	-	(6)	1	(-)	-	(2)	1	(-)	-
Fires and explosions	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-
Electricity	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-
Use of hand tools	(-)	-	(-)	2	(1)	1	(-)	1	(-)	-
Not otherwise specified	(-)	1	(-)	2	(1)	1	(2)	2	(-)	-

The numbers in parenthesis are the 1969 equivalent figures.

It is realised that many notifiable accidents may not be reported to us. We have attempted to correct this situation by informing occupiers of their responsibilities in this regard when inspections are carried out. During inspections, examination is made of any accidents register which is kept e.g. under the National Insurance Acts.

No exemptions were granted for any particular class of premises or for any individual requirement.

Table 35

Inspectors

No. of Inspectors appointed under Section 52(1) or (5) of the Act ..	35
No. of other staff employed for most of their time on work in connection with the Act	Nil

General Inspections

INSPECTIONS	1969	1970
Infectious Diseases	995	1,387
Overcrowding (special enquiries)	1	8
Drainage	1,247	885
Structural Defects	811	477
Other Nuisances	613	618
Total number of houses inspected ..	3,667	3,375
Total number of houses in which defects were found	2,672	1,988
Total number of defects found	4,974	4,778

REVISITS AND SPECIAL APPOINTMENTS	1969	1970
In respect of nuisances	3,325	3,985
In respect of Infectious Disease	2,995	2,987
In respect of other causes	2,258	3,208
Appointments kept	1,485	1,916

COMPLAINTS

During the year, 3,392 complaints were received, of which 58 were unfounded.

715 complaints relating to dangerous structures, street paving, gas and water leakages, and other matters were referred to the Departments concerned.

INSPECTION OF DRAINAGE WORK					1969	1970
New Drains and Repairs	..	..	..	..	8	19
Conversions, etc.	..	..	..	..	61	57
Other Visits in Connection with Drainage Work	..				856	1,601
Re-visits to Drainage Work		..	..	..	884	818

NUMBER OF DRAIN TESTS MADE

		<i>Negative</i>	<i>Positive</i>
1969	..	27	6
1970	..	69	10

Other Special Inspections

<i>Purpose</i>					1969 <i>Number of Inspections</i>	1970 <i>Number of Inspections</i>
Theatres, cinemas etc.	..	..	..	..	45	93
Public conveniences	..	..	..	..	—	1
Public Halls and baths	..	..	..	..	9	1
Marl pits, pit shafts, tips, quarries	..	..	..	..	9	24
Hairdressers	..	..	..	..	105	86
Stables, pigs and poultry	..	..	..	..	35	2
Fair grounds	..	..	..	..	4	4
Animal Food Shops	..	..	..	..	2	—
Waste food boiling plants	..	..	..	..	6	4
Caravan sites	..	..	..	..	4	3
Agricultural units (farms)	..	..	..	..	46	12
Common yards and courts	..	..	..	..	1	—
Private school	..	..	..	..	1	—
					267	230

Riding Establishments Act, 1964

There are two premises licensed under the Act which are visited annually by a Veterinary Surgeon accompanied by a Health Inspector. A visit is also made by a Fire Prevention Officer and his remarks are embodied in our recommendations which are made a condition of the Licence.

Animal Boarding Establishments Act, 1963

12 visits were made to eight premises licensed under the Act. These premises are also visited by a Veterinary Surgeon and Fire Prevention Officer as above.

Pet Animals Act, 1951

38 visits were made to 24 premises licensed under the Act.

STATUTORY NOTICES AND LEGAL PROCEEDINGS

Table of Statutory Notices Served

						<i>Notices Served</i>	
						1969	1970
PUBLIC HEALTH ACT, 1936							
Section 39	Provision of Drainage, etc.	..	..			201	202
Section 40	Soil Pipe and Vent Shafts	..	..			1	—
Section 44	Insufficient Closet Accommodation	..				2	—
Section 45	Defective Closet Accommodation	..				126	104
Section 47	Conversions	..	..	..	..	—	5
Section 56	Unpaved Yards	..	..	..		5	7
Section 83	..	..	..	..	..	—	—
Section 89	..	..	..	..	..	1	—
Section 93	Statutory Nuisances	..	..	..		288	320
Section 138	..	..	..	..	..	—	—
Section 275	..	..	..	..	..	—	—
PUBLIC HEALTH ACT, 1961							
Section 18	(Private Sewer)	..	..	..		—	—
SHOPS ACT, 1963						—	—
STOKE-ON-TRENT ACT, 1928							
Section 32	Stopped and Defective Drains	..				57	101
FACTORIES ACT, 1961							
Section 7	..	..	..	..	..	1	—
TOTALS						682	739

Proceedings under the Public Health Act, 1936 were instituted in 9 cases during the year and work was referred to the City Works Department in default of statutory notices as follows:—

Section 27	..	2 cases
Section 39	..	23 cases
Section 45	..	6 cases
Section 93	..	6 cases

Common Lodging Houses

Three inspections were carried out of the only common lodging house in the district and conditions generally were found to be satisfactory.

Works required to be carried out by the Fire Prevention Officer were completed during the year.

Waste Water Closets

A scheme for the conversion of Waste Water Closets was approved by the Minister of Health in September, 1950, and loan sanction has already been given to the extent of £70,000.

At the end of 1970, the position was as follows:—

Number of conversions completed during the year	8
Total number completed	4,058
Average Cost Per Conversion	£37 10s. 11d.
Total Cost	£152,366
Cost to Owner	£86,315
Cost to Corporation	£66,051

DISINFECTION AND PEST CONTROL

DISINFECTION SERVICE

Table showing disinfection carried out following infectious disease etc.:—

Number of Rooms disinfected	754
Number of Hospital Wards disinfected	35
Number of Schools disinfected	-
Total number of Articles of Clothing, etc. disinfected	969

Increasing use has been made of the staff and vehicles to distribute aids to Care and After Care patients and also in connection with the laundry service.

The following is a summary of work in connection with some of these services:

13,289 laundry bags were handled.

20 Problem families were given furniture.

785 visits were made to Care & After Care patients.

PEST CONTROL

Insects

The section has dealt with many types of insect infestations during the year. Complaints of cockroaches, wasps and ants have been numerous. Infestations of bed-bug have shown a marked decrease.

All Corporation Buildings and Hospitals in the City are covered by this service, and a large number of business premises are under annual contract for monthly inspections and necessary treatments.

As a precautionary measure the furniture of 476 householders moved from Slum Clearance properties into Corporation dwellings was treated with insecticide immediately prior to removal.

The following table shows the different types of property treated:—

Number of treatments carried out at Private Houses	152
Number of treatments carried out at Council Houses	476
Number of treatments carried out at Business Premises ..	1,195

Rodents

Many more firms have taken out contracts for the periodic inspection and treatment of their premises by the Rodent Operators.

Free treatment is given to householders reporting rats around their houses. This has resulted in the section becoming aware of and being able to treat more minor infestations as they occur.

Increasing resistance to Warfarin by mice has been noticed during the year, and where this has occurred the premises have been treated satisfactorily with Zinc Phosphide or Alpha Chloralose.

The following is a summary of the work carried out:—

	1969	1970
Number of visits to premises	17,933	16,035
Estimated kill (Rats and Mice)	17,706	15,859
Number of Bodies seen (Rats and Mice) ..	5,204	5,129

Sewer Treatment

During the year 898 Manholes were treated with Fluoracetamide.

As sufficient labour becomes available, complete sections of the sewer system are given a treatment at 100% of the manholes. This has resulted in a decrease in the number of surface infestations, a large number of which originate from defective drains.

PUBLIC HEALTH ACT, 1936—OFFENSIVE TRADES

List of Classifications of Registered Trades

Bone Burners	3
Tripe Boilers	4
Gut Scrapers	2
Fat Melters and Extractors	5
Hide and Skin Dealers	2
Rag and Bone Dealers	4
	<hr/>
	20

The premises in all cases are maintained in compliance with the provisions of the Bye-laws applicable to each particular trade.

MEASUREMENT OF ATMOSPHERIC POLLUTION

Three types of instruments are employed. The first is a deposit gauge which collects particles falling out of the atmosphere and impurities washed down by the rain; the second is a lead peroxide candle, which indicates the amount of sulphur dioxide in the air by the facility with which lead peroxide reacts with sulphur to form lead sulphate; and the third is an instrument which is used to estimate the amount of suspended matter (smoke) and to measure the amount of sulphur dioxide in the air.

Instruments of the first and second types are maintained at 14 sites in the industrial and densely populated areas of the City, as well as in the more open and purely residential areas. The readings of these instruments are analysed monthly and the results for 1970 are shown in Tables No. 41 and 42. The readings of insoluble deposit obtained by the use of this type of gauge give a reasonably accurate indication of the "fall out" over a radius of a quarter of a mile from the site. Readings are generally higher in industrial areas than for sites in country districts and reflect the type of industry in an area, as in this area with its steel and ceramic manufactures. The transport of materials connected with our local industry, spillages on roads and attendant dust must also reflect on the amount of fall-out. It is not, however, always confined to transport of materials used in manufacture as serious inconvenience to residents fronting roads occurs when large-scale earth moving operations are undertaken involving use of public roads. An instance of this nature occurred during the year and lasted for several weeks. Although efforts were made to remove deposits from the roads it was obvious from the amount of dust produced that better and more frequent cleaning of roads is necessary while such operations are in progress, including the cleansing of vehicle wheels before they enter upon the roads.

These next few years are likely to see considerable activity of this kind during the construction of the 'D' road and the projected Derby link road. Ways and means of preventing the inconvenience and nuisance attendant on these operations should be considered beforehand so that they can be applied at the start of operations.

The average monthly readings for 1970 of solid deposits (insoluble) are lower at 7 out of the 14 stations, and for sulphur dioxide, are lower at 13 out of the 14 stations, than those for 1969. No explanation can be given why the October reading at Station No. 5 or the June reading of No. 15 are high.

It will be noted from Table No. 41 that the readings for November at Station No. 12 and for December at Station No. 1 are particularly high. This was due to the "fallout" resulting from the operation of removing Berryhill colliery tip into an adjacent marl hole. This "fallout" was aggravated because the tip was hot and, in consequence, the spoil was lustrous. An operation of this kind would have been considered impracticable some years ago, its use today has removed a potential fume nuisance besides removing an eyesore resulting from industrial operations. Fortunately the operation was not prolonged, reducing the length of time nearby residents had to suffer the nuisance.

In order to observe trends of insoluble deposits and estimation of SO_2 by the lead peroxide instruments it is necessary to compare five-year averages. It is a convenient time now to do this and Table No. 37 shows a comparison between the five-years' averages of 1956-60 and 1966-70.

It will be noted that there has been a reduction at all sites. In the case of insoluble deposit the largest reduction has been at the site close to the steelworks. To a certain extent the reduction of smoke in the atmosphere will have produced lower readings, but the main reduction must be due to the less dusty methods of handling raw materials by industry and its decreasing use of raw coal. The decrease in SO_2 is evidence of the increasing use of non-sulphur producing fuels - gas and electricity. It will be noted that the greatest decrease is at those sites in and near the industrial areas where the greatest reduction in use of solid fuel will have taken place.

The third type of instrument consists of an apparatus through which air, from outside the building, is drawn at an even rate of approximately 70 cu. ft. per day and passed through a filter paper which retains the suspended matter in the air, forming a "stain", then through a solution of hydrogen peroxide where the sulphur dioxide in the air is converted to sulphuric acid. An eight-port apparatus is in operation which automatically switches the incoming air from one set of prepared filter papers and solutions to another every 24 hours, thereby, only needing attention every seven days. The amount of "smoke" retained on the filter papers is evaluated by means of a photo-electric reflectometer and the acid solution is titrated with a standard alkali solution. The amounts of "smoke" and sulphur dioxide recorded are given in "microgrammes per cu. metre".

Tables Nos. 37 & 38 indicate the station sites (including No. 22 which was brought into use in October) where this type of instrument is in use together with the readings obtained. Besides the yearly averages - summer and winter averages, highest daily readings and the number of days when readings exceeded 500 microgrammes per cu. metre - are now included in the table to keep in line with the format used by Warren Spring Laboratory.

The high readings, particularly those exceeding 500, are normally due to adverse weather conditions such as fogs or mists occurring during very cold weather when the "ventilation" of the atmosphere breaks down. The number of days when these fogs and mists occurred is indicated.

An analysis of the readings as regards smoke shows that readings at Station No. 16 were higher in the earlier years possibly due to emissions from coal-fired pottery ovens. As these were replaced by gas and electrically fired kilns the amount of smoke recorded was less. In the autumn of 1964 the area surrounding Station No. 16 became smoke controlled and further reduction took place. Unfortunately the use of this Station has had to be discontinued. The only other Station at present in a Smoke Control Area is No. 11 and the Order covering this Area came into operation in the autumn of 1968. The reduced readings of smoke show the effect of smoke control.

It is clear that any dramatic reduction in the amount of smoke recorded at the other stations will have to await the introduction of further smoke control areas and /or the voluntary changeover to the use of smokeless fuels by householders on a large scale.

Reduction in readings of sulphur oxides are not so great except in the earlier years of Station No. 16 when coal was replaced by smokeless fuels for pottery firing. The concentration of sulphur oxides in the air is dependant on the amount of solid fuel and oil burned. In smoke control areas the use of solid smokeless fuels still gives rise to the emission of sulphur oxides therefore it is only by increased use of sulphur-free fuels, such as gas and electricity, that further reduction can take place.

Table No. 36 shows the readings of smoke concentrations obtained by the use of a similar instrument at the Sewage Works, Leek Road, Hanley between 1925 and 1949. As summer and winter averages are now shown in Tables Nos. 37 and 38 a comparison is possible.

The sites, were specially chosen because of the type of district where they are situated. These are:—

Station No. 3—Industrial area interspersed with domestic premises of high density;

Station No. 10—Residential area with medium density housing interspersed with low-density housing and fields;

Station No. 11—Residential area with medium density housing, typically an inner suburb or housing estate, surrounded by other built-up areas and interspersed with some industrial undertakings;

Station No. 16—Mixed area of commercial and industrial property with high density housing (now taken out of commission).

Station No. 20—Predominantly a residential area with high-density housing (terraced) interspersed with some industrial undertakings.

Station No. 21—Mixed area of commercial and industrial property with high density housing.

Station No. 22—Predominantly a residential area with high density housing (terraced) interspersed with some industrial undertakings.

The concentration of smoke in the air at any point depends on the housing density in the immediate neighbourhood and not, as may be thought, on the size of a town. It also depends on the customs of the inhabitants. As this district is a mining area where concessionary coal is located to miners, more coal per head of population may be burned than other areas.

Now that local industry has reduced smoke emissions by upwards of 90%, by the use of gas and electricity in place of coal and the burning of coal relatively smokelessly in boilers, the greatest source of smoke is now due to the use of coal on domestic firegrates, which takes place mainly during the winter months.

CONTROL OF ATMOSPHERIC POLLUTION

The solution to the problem of eliminating smoke emissions arising during the manufacture of blue and brindled clay products fired by coal, and latterly also by oil, remained unresolved until recently although it had been the subject of a study for many years, including that of a Working Party. Due, no doubt, to the advantage in cost natural gas now has in relation to other fuels, compared with the past, and to its plentiful supply, it has been found economically possible to fire clay products in beehive kilns with this fuel. It has also been found practicable to produce blue and brindled products in these kilns with little or no smoke.

One firm has built a new shuttle kiln, designed specifically to use natural gas, and is producing blue bricks in this kiln without the production of smoke.

With this "break-through" the complete elimination of dark and black smoke emissions from industrial processes in the City is now within reach.

A works where beehive kilns were operated to produce salt-glazed stoneware drain pipes and fittings, although since the kilns were converted to use oil fuel little smoke was emitted, produced during the period of salt-glazing an acid mist which caused a serious nuisance to an area surrounding the works. This nuisance has now ceased as the firm closed the works during the year. If they had continued they would have had to provide tall chimneys as required by the Alkali Inspectorate.

From the information supplied by the Boards, and from other sources, the number of kilns in use at the end of the year in the pottery and heavy clay sections of local industry was as follows:

ELECTRICITY	Intermittent	559
	Continuous	91
GAS (town and natural)	Intermittent	248
	Continuous	297
FUEL OIL	Continuous	21
GAS OIL	Continuous	8
	Intermittent	12
L.P.G.	Continuous	23
	Intermittent	15

In addition there are a number of coal and oil-fired intermittent kilns in use which are registered processes under the Alkali Act and controlled by H.M. Alkali Inspector.

Clean Air Act, 1968 – Section 6

Approval of Chimney Height

Under the above Act an occupier of a building intending to erect a chimney to serve a furnace, enlarge an existing furnace or replace a furnace by a larger one, has to obtain local authority approval of the height of the chimney in order to prevent, as far as practicable, the effluent from the chimney being a nuisance.

Of the applications for approval dealt with, two are of interest. The first was a chimney to be erected in connection with a new factory and intended to serve gas-fired fritt kilns. Although gas was to be used as a fuel, and therefore would be smokeless, the concern was about other gases and dust which may arise from the material being fired. In addition to asking for a 120 feet high chimney to serve these kilns it was required that apparatus be provided and used to wash the gases before discharge through the chimney.

The second was in connection with a factory which, due to expansion, needed further steam boiler capacity. Instead of providing an individual chimney to serve the additional boiler, as had appertained in recent years when additional boilers were installed, the proposal was to provide one multi-flue chimney to serve the additional as well as some of the existing boilers. The additional boiler will be fired by heavy fuel oil and the existing boilers, to be served by the proposed chimney, are fired by heavy fuel oil and coal. The combined emissions of sulphur oxides from these boilers required a chimney of 210 feet in height and this has been approved.

Smoke Control Areas

These are areas, established by means of Orders made by the City Council and confirmed by the Minister, designed to deal with the domestic smoke problem. It is an offence, except where exemptions are in force, to emit smoke from a chimney of a building in areas covered by Orders unless it can be proved that the smoke arose from the burning of an authorised smokeless fuel. Grants are payable to owners and occupiers of dwelling houses in areas covered by Orders that have been confirmed, who need to adapt their fireplaces to burn smokeless fuels in order to avoid contraventions.

A public enquiry was held on 6th January into two objections made to the No. 24 Order. The Order was eventually confirmed by the Minister and the operative date is 1st July, 1971. The work of converting and adapting fireplaces in private dwelling-houses situated in the area covered by this Order was proceeded with.

The present position regarding Smoke Control Areas is shown in Table No. 40. No new Orders were made during the year owing to the inadequacy of supply, nationally, of solid smokeless fuels brought about, in part, by the rapid closure of retorts at gas works throughout the country,

including Stoke gas works. This set-back in the implementation of smoke control is deplored as, as has been previously mentioned, it is only by the reduction of smoke from domestic fires that any further great improvement in the City's atmosphere during winter months, particularly in view of the progress made by industry, and of further progress likely in the heavy clay section, in the elimination of smoke.

Although the Minister, due to the solid smokeless fuel supply situation, advised that he was prepared to make Orders, on the application of a local authority, temporarily suspending Smoke Control Orders, no action was taken by this authority as the local fuel supply situation was not considered so serious.

Contraventions of Orders were detected on 47 occasions and warnings issued.

Table 36

**An Indication of the Smoke Content of the City's Atmosphere
obtained by the use of Dr. Owen's Automatic Filter
at Hanley Sewage Works between 1925 and 1949**

(Average Daily Readings in Microgrammes per cubic metre)

Year	Summer 1st April to 30th September	Winter 1st October to 31st March (following year)	Year	Summer 1st April to 30th September	Winter 1st October to 31st March (following year)
1925	350	590	1944	260	580
1926	170	580	1945		
1927	280	540	1946		
1928	470	600	1947		
1929	550	730	1948		
1930	390	560	1949		
1931	640	840			
1932	580	770			
1933	610	820			
1934	610	790			
1935	610	810			
1936	510	780			
1937	580	730			
1938	440	660			
1941	350	670			
1942					
1943					

Table 37

**TABLE OF READINGS OF SMOKE BY VOLUMETRIC APPARATUS
JANUARY, 1970 - MARCH, 1971**

AVERAGES:

YEARLY (APRIL - MARCH) :: SUMMER (APRIL-SEPTEMBER) :: WINTER (OCTOBER-MARCH)

STATION NO. 3—BROWNHILLS HIGH SCHOOL, TUNSTALL

STATION NO. 10—HANLEY HIGH SCHOOL, BUCKNALL

STATION NO. 11—THISTLEY HOUGH SCHOOL, PENKHULL

STATION NO. 16—PUBLIC HEALTH DEPT., GLEBE STREET, STOKE
(ceased September, 1968)

STATION NO. 20—WELLINGTON ROAD SCHOOL, HANLEY

STATION NO. 21—PUBLIC HEALTH DEPT., 79 LONDON ROAD, STOKE

STATION NO. 22—HEALTH CENTRE, TUNSTALL

SMOKE READINGS IN MICROGRAMMES PER CUBIC METRE

Station	Daily Average							Highest Daily Reading							No. of Days exceed, 500							Days with Fog
	3	10	11	16	20	21	22	3	10	11	16	20	21	22	3	10	11	16	20	21	22	
1970																						
January	108	142	103	—	256	204	—	347	588	470	—	790	858	—	—	1	—	—	3	2	—	6
February	112	159	100	—	217	222	—	316	328	294	—	489	497	—	—	—	—	—	—	—	—	
March	87	138	71	—	183	214	—	287	297	318	—	557	520	—	—	—	—	—	1	1	—	
April	56	59	51	—	119	155	—	132	135	140	—	244	207	—	—	—	—	—	—	—	—	
May	43	42	22	—	71	79	—	91	77	41	—	115	146	—	—	—	—	—	—	—	—	
June	20	16	20	—	32	37	—	51	46	41	—	57	85	—	—	—	—	—	—	—	—	
July	27	41	17	—	47	54	—	58	97	46	—	71	77	—	—	—	—	—	—	—	—	
August	44	45	39	—	73	55	—	104	144	107	—	133	114	—	—	—	—	—	—	—	—	
September	51	57	37	—	93	88	—	114	146	149	—	186	187	—	—	—	—	—	—	—	—	
October	77	94	68	—	150	138	112	431	287	319	—	402	456	456	—	—	—	—	—	—	—	1
November	85	103	54	—	176	158	132	196	353	157	—	366	327	307	—	—	—	—	—	—	—	
December	116	156	87	—	239	174	190	306	420	297	—	460	433	383	—	—	—	—	—	—	—	
1971																						
January	163	169	101	—	255	201	197	704	957	625	—	914	983	965	2	3	1	—	3	2	3	5
February	108	138	73	—	226	183	179	273	377	185	—	629	487	382	—	—	—	—	1	—	—	
March	85	105	53	—	181	126	138	253	286	157	—	353	256	284	—	—	—	—	—	—	—	
April	73	85	52	—	138	121	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
May	40	43	31	—	72	78	—	132	146	149	—	244	207	—	—	—	—	—	—	—	—	
June	106	127	73	—	204	163	158	704	957	625	—	914	983	965	2	3	1	—	4	2	3	6
July	81	105	73	—	148	148	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
August	47	61	45	—	82	78	—	220	223	332	—	137	236	—	—	—	—	—	—	—	—	
September	114	150	86	—	217	218	—	908	625	814	—	790	858	—	1	4	1	—	8	8	—	14
October	91	88	94	—	161	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
November	50	38	51	95	95	—	—	156	222	226	302	265	—	—	—	—	—	—	—	—	—	
December	136	138	138	—	230	217	—	558	702	720	—	896	847	—	2	5	3	—	8	13	—	17
January	80	93	76	130	123	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
February	42	47	43	88	60	—	—	173	164	209	323	218	—	—	—	—	—	—	—	—	—	
March	115	139	110	169	188	—	—	738	571	861	823	801	—	—	2	1	2	7	5	—	—	16
April	—	88	95	110	154	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
May	—	53	60	62	102	—	—	—	205	358	248	350	—	—	—	—	—	—	—	—	—	
June	—	125	129	162	206	—	—	—	592	855	948	1164	—	—	—	1	4	5	9	—	—	10
July	—	—	—	159	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
August	—	—	—	122	—	—	—	—	—	—	355	—	—	—	—	—	—	—	—	—	—	
September	—	—	—	194	—	—	—	—	—	—	848	—	—	—	—	—	—	9	—	—	—	15
October	—	—	—	221	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
November	—	—	—	122	—	—	—	—	—	—	451	—	—	—	—	—	—	—	—	—	—	
December	—	—	—	313	—	—	—	—	—	—	1593	—	—	—	—	—	—	26	—	—	—	17
January	—	—	—	196	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
February	—	—	—	134	—	—	—	—	—	—	410	—	—	—	—	—	—	—	—	—	—	
March	—	—	—	255	—	—	—	—	—	—	1616	—	—	—	—	—	—	12	—	—	—	15
April	—	—	—	252	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
May	—	—	—	136	—	—	—	—	—	—	322	—	—	—	—	—	—	—	—	—	—	
June	—	—	—	356	—	—	—	—	—	—	1388	—	—	—	—	—	—	33	—	—	—	20
July	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
August	—	—	—	357	—	—	—	—	—	—	2618	—	—	—	—	—	—	27	—	—	—	34

Table 38

**TABLE OF READINGS OF SULPHUR DIOXIDE BY VOLUMETRIC APPARATUS
JANUARY, 1970 - MARCH, 1971**

AVERAGES:—

YEARLY (APRIL - MARCH) :: SUMMER (APRIL - SEPTEMBER) :: WINTER (OCTOBER - MARCH)

STATION No. 3—BROWNHILLS HIGH SCHOOL, TUNSTALL

STATION No. 10—HANLEY HIGH SCHOOL, BUCKNALL

STATION No. 11—THISTLEY HOUGH SCHOOL, PENKHULL

STATION No. 16—PUBLIC HEALTH DEPT., GLEBE STREET, STOKE
(ceased September, 1968)

STATION No. 20—WELLINGTON ROAD SCHOOL, HANLEY

STATION No. 21—PUBLIC HEALTH DEPT., 79 LONDON ROAD, STOKE

STATION No. 22—HEALTH CENTRE, TUNSTALL

SULPHUR DIOXIDE READINGS IN MICROGRAMMES PER CUBIC METRE

STATION	Daily Average							Highest Daily Reading							No. of days exceed. 500						
	3	10	11	16	20	21	22	3	10	11	16	20	21	22	3	10	11	16	20	21	22
1970																					
January	145	119	208	—	202	320	—	305	422	498	—	538	870	—	—	—	—	—	2	3	—
February	142	155	174	—	227	275	—	321	305	358	—	374	491	—	—	—	—	—	—	—	—
March	132	158	150	—	195	260	—	353	287	433	—	425	670	—	—	—	—	—	2	—	—
April	101	115	96	—	160	223	—	245	211	188	—	271	476	—	—	—	—	—	—	—	—
May	93	99	75	—	115	163	—	152	146	110	—	163	375	—	—	—	—	—	—	—	—
June	71	67	66	—	75	127	—	106	116	140	—	134	255	—	—	—	—	—	—	—	—
July	69	54	47	—	92	71	—	114	90	115	—	153	148	—	—	—	—	—	—	—	—
August	119	92	89	—	119	106	—	250	176	289	—	247	290	—	—	—	—	—	—	—	—
September	106	75	95	—	127	162	—	257	187	348	—	257	398	—	—	—	—	—	—	—	—
October	122	114	112	—	168	149	115	337	265	298	—	358	382	280	—	—	—	—	—	—	—
November	129	141	120	—	225	196	150	281	238	317	—	380	363	326	—	—	—	—	—	—	—
December	182	182	149	—	252	245	192	410	343	294	—	508	458	381	—	—	—	1	—	—	—
1971																					
January	227	211	206	—	299	322	269	842	924	629	—	945	824	1110	3	1	3	—	5	4	3
February	169	181	152	—	254	202	203	318	304	276	—	411	381	399	—	—	—	—	—	—	—
March	139	157	128	—	217	168	150	383	387	263	—	386	355	316	—	—	—	—	—	—	—
Yearly 70-71	127	124	111	—	175	178	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Summer 70	93	84	78	—	115	142	—	257	211	348	—	271	476	—	—	—	—	—	—	—	—
Winter 70-71	161	164	144	—	236	214	180	842	924	629	—	945	824	1110	3	1	3	—	6	4	3
Yearly 69-70	152	125	120	—	175	216	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Summer 69	134	95	86	—	131	143	—	743	210	322	—	346	403	—	1	—	—	—	—	—	—
Winter 69-70	169	155	155	—	219	290	—	622	579	849	—	540	870	—	1	2	3	—	3	11	—
Yearly 68-69	192	120	129	—	188	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Summer 68	160	91	85	131	139	—	—	354	227	632	350	385	—	—	—	—	1	—	—	—	—
Winter 68-69	226	150	174	—	238	293	—	569	547	746	—	651	843	—	3	1	2	—	7	17	—
Yearly 67-68	160	140	122	186	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Summer 67	129	96	89	134	149	—	—	247	267	417	374	349	—	—	—	—	—	—	—	—	—
Winter 67-68	189	187	156	233	254	—	—	731	542	717	687	691	—	—	4	1	4	9	8	—	—
Yearly 66-67	—	124	123	157	197	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Summer 66	—	82	83	113	131	—	—	—	179	340	285	339	—	—	—	—	—	—	—	—	—
Winter 66-67	—	166	164	204	264	—	—	—	530	665	800	693	—	—	—	1	2	8	9	—	—
Yearly 65-66	—	—	—	194	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Summer 65	—	—	—	141	—	—	—	—	—	—	339	—	—	—	—	—	—	—	—	—	—
Winter 65-66	—	—	—	246	—	—	—	—	—	—	658	—	—	—	—	—	—	12	—	—	—
Yearly 64-65	—	—	—	233	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Summer 64	—	—	—	127	—	—	—	—	—	—	474	—	—	—	—	—	—	—	—	—	—
Winter 64-65	—	—	—	333	—	—	—	—	—	—	1123	—	—	—	—	—	—	30	—	—	—
Yearly 63-64	—	—	—	225	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Summer 63	—	—	—	161	—	—	—	—	—	—	422	—	—	—	—	—	—	—	—	—	—
Winter 63-64	—	—	—	286	—	—	—	—	—	—	1331	—	—	—	—	—	—	16	—	—	—
Yearly 62-63	—	—	—	307	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Summer 62	—	—	—	180	—	—	—	—	—	—	438	—	—	—	—	—	—	—	—	—	—
Winter 62-63	—	—	—	421	—	—	—	—	—	—	1329	—	—	—	—	—	—	56	—	—	—
Winter 61-62	—	—	—	379	—	—	—	—	—	—	2114	—	—	—	—	—	—	29	—	—	—

Table 39

READINGS OF SOLID (INSOLUBLE) DEPOSITS AND SULPHUR DIOXIDE
BY LEAD PEROXIDE METHOD

COMPARISON OF MONTHLY AVERAGES FOR THE FIVE-YEAR PERIOD 1956-60
AND THOSE FOR 1966-70

Station No. ..	4		5		3		6		7	
Site	TUNSTALL, WESTCLIFFE		TUNSTALL, MILL HILL		TUNSTALL, BROWNHILLS		BURSLEM, PARK		BURSLEM, COBRIDGE PARK	
	I.D.	SO ₃	I.D.	SO ₃	I.D.	SO ₃	I.D.	SO ₃	I.D.	SO ₃
Year average										
1956-1960	114.53	1.59	90.74	2.54	136.50	3.16	152.88	2.75	183.04	2.20
1966-1970	80.34	1.34	79.43	1.72	107.64	1.93	88.79	1.92	150.54	1.45
Reduction ..	29.86	15.72	12.46	32.28	21.14	38.93	41.93	30.18	17.76	34.09

Station No. ..	8		10		1		11	
Site	HANLEY, ETRURIA PARK		HANLEY, HIGH SCHOOL		HANLEY, SEWAGE WORKS		STOKE, THISTLEY HOUGH HIGH SCHOOL	
	I.D.	SO ₃	I.D.	SO ₃	I.D.	SO ₃	I.D.	SO ₃
Year average								
1956-1960	434.07	2.51	95.81	1.51	137.41	2.06	74.49	2.11
1966-1970	244.53	1.35	71.24	1.35	88.53	1.57	51.87	1.91
Reduction ..	43.66	46.20	25.64	10.59	35.57	23.79	30.37	9.48

Station No. ..	12		13		14		15	
Site	FENTON PARK		LONGTON EMPLOYMENT BUREAU		LONGTON PARK		LONGTON, SANDON HIGH SCHOOL	
	I.D.	SO ₃	I.D.	SO ₃	I.D.	SO ₃	I.D.	SO ₃
Year average								
1956-1960	104.13	2.15	114.27	2.05	79.30	1.05	78.26	1.96
1966-1970	74.75	1.58	84.11	1.54	70.98	0.87	75.53	1.64
Reduction ..	28.23	26.51	26.39	24.88	10.49	17.14	3.49	16.32

Table 40

Smoke Control Areas

Number of Areas confirmed and in operation	..	..	23
Number of Areas awaiting confirmation	..	..	Nil
Number of dwellings in Confirmed Areas	..	..	21,576
Number of other premises in Confirmed Areas	..	..	2,575
Total acreage of Confirmed Areas	..	..	9,510

Progress in 1970

Area No.	Area covered	Date Order made	No. of Objectors	Date confirmed	Date of operation	No. of dwellings	No. of other premises	Acreage
21	Burslem Town Centre	26.1.68	1	18.12.68	1.7.69	903	408	394
22	Blurton/Hollybush/ Drubbery Lane	4.7.68	—	12.9.68	1.7.69	2,278	36	378
23	Harpfields, Penkhull (part), Hartshill (part)	30.1.69	—	22.4.69	1.12.69	1,054	86	372
24	Lightwood, parts of Dresden, Meir and Normacot	1.10.69	—	17.7.70	1.7.71	2,767	83	1,410

Continuation of Atmospheric Pollution by Standard Deposit Gauge
Readings of Solid Deposits (Insoluble) in Milligrammes per Square Metre—Day, 1970

Station No.	Location	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Monthly Averages for 1970	Monthly Average for 10 years 1961-1970
4	Tunstall, Westcliffe ..	57.9	71.9	84.3	120.7	101.4	84.6	42.1	52.6	74.3	51.8	37.5	18.4	66.5	85.59
5	Tunstall, Mill Hill ..	64.5	63.0	*	75.7	97.9	81.0	29.2	32.7	47.4	234.5	77.5	52.6	77.8	78.54
3	Tunstall, Brownhills ..	57.0	121.0	116.7	114.9	*	103.2	70.0	69.0	85.2	115.4	*	89.9	94.2	115.04
6	Burslem, Park ..	75.8	73.9	74.6	91.1	74.3	125.6	40.6	56.1	71.0	54.2	65.0	52.8	71.2	101.52
7	Burslem, Cobridge Park ..	69.7	121.0	110.8	161.3	91.6	131.4	70.1	59.1	100.0	147.0	127.0	78.2	105.6	136.42
8	Hanley, Etruria Park ..	164.0	264.5	339.0	267.0	147.7	127.9	486.0	158.0	588.4	138.0	111.1	171.5	246.9	212.77
10	Hanley, High School ..	*	*	*	*	*	*	92.0	54.2	71.4	91.2	71.7	58.8	73.21	70.87
1	Hanley, Sewage Works ..	80.8	83.4	100.8	108.0	65.0	98.0	73.4	61.5	81.3	62.4	103.8	202.1	93.3	95.86
11	Stoke, Thistley Hough High School ..	124.7	37.1	48.9	42.0	40.6	83.1	25.6	45.9	58.7	39.7	94.8	33.4	56.2	59.25
12	Fenton, Park ..	47.8	54.5	46.3	58.3	199.3	70.6	8.8	11.3	79.8	48.0	236.0	161.8	85.2	96.13
13	Longton, Employment Bureau	180.0	68.6	65.5	69.4	59.5	81.4	39.8	47.8	55.5	66.6	89.4	57.9	73.5	85.46
17	Longton, Webberley Lane ..	72.4	83.5	98.0	95.0	74.7	109.9	54.5	65.0	69.4	91.3	60.6	56.7	77.6	118.13
14	Longton, Park ..	54.4	70.1	69.8	49.1	91.1	*	60.8	56.9	49.8	47.9	62.4	19.9	57.5	72.32
15	Longton, Sandon High School	77.6	83.1	*	*	80.7	240.0	82.0	69.6	63.8	84.2	58.0	49.1	88.8	80.09

* Indicates Station out of action

Table 42

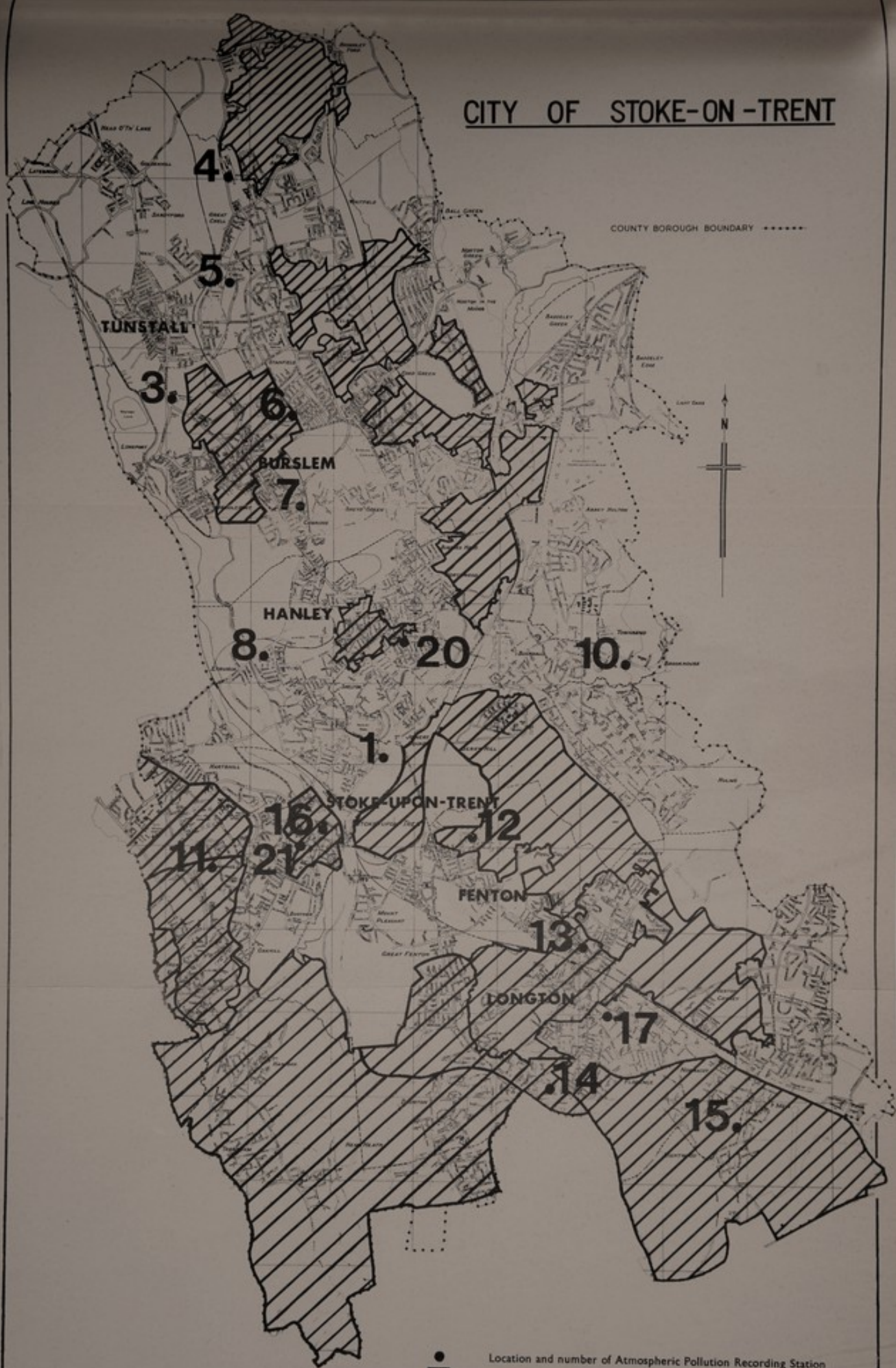
Estimation of Atmospheric Pollution by Lead Peroxide Instruments
 Readings of Rate of Absorption of Sulphur Dioxide Expressed as Milligrammes SO₃ per 100 Square Centimetres Lead Peroxide
 Per Day, Year 1970

Station No.	Location	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Monthly Average for 1970	Monthly Average for 10 years 1961-1970
4	Tunstall, Westcliffe ..	2.16	1.06	*	0.76	0.89	0.59	0.42	0.60	0.82	1.01	1.47	1.14	0.99	1.29
5	Tunstall, Mill Hill ..	2.66	1.77	1.44	0.38	1.12	0.79	0.78	0.88	1.10	1.35	2.40	2.21	1.41	1.93
3	Tunstall, Brownhills ..	3.02	1.87	1.79	1.75	1.41	0.96	0.68	1.15	1.25	1.44	2.29	2.27	1.66	2.19
6	Burslem, Park ..	2.49	2.01	1.98	1.82	1.11	0.64	0.70	0.87	0.88	1.38	1.79	2.04	1.48	2.09
7	Burslem, Cobridge Park ..	1.48	1.78	1.76	1.58	1.04	0.44	0.61	0.57	0.65	1.00	1.36	*	1.12	1.68
8	Hanley, Etruria Park ..	1.42	1.16	1.25	1.10	0.69	0.42	0.49	0.60	0.59	0.88	1.07	1.42	0.92	1.61
10	Hanley, High School ..	1.95	*	*	*	*	*	0.61	0.81	0.92	1.22	1.65	1.60	1.25	1.54
1	Hanley, Sewage Works ..	2.16	1.89	1.74	1.54	0.98	0.55	0.53	0.60	0.73	1.08	1.51	1.64	1.25	1.75
11	Stoke, Thistley Hough High School ..	3.52	1.90	1.94	1.62	1.36	0.86	0.73	1.11	1.30	1.29	1.96	2.13	1.64	1.98
12	Fenton, Park ..	1.79	1.60	1.40	1.18	0.85	0.59	0.44	0.61	0.78	0.95	1.53	1.62	1.11	1.68
13	Longton, Employment Bureau	2.37	1.86	2.66	1.25	1.07	0.60	0.61	0.88	1.25	1.26	1.57	1.77	1.43	1.65
17	Longton, Webberley Lane ..	2.08	1.67	1.60	1.27	1.06	0.64	0.58	0.85	0.73	1.06	1.30	1.31	1.18	1.75
14	Longton, Park ..	1.15	0.81	0.88	0.76	0.53	0.35	0.20	0.36	0.34	0.47	0.64	0.64	0.59	1.03
15	Longton, Sandon High School	2.34	1.62	2.16	1.82	1.21	0.76	0.65	0.99	0.86	1.42	1.87	1.93	1.49	1.61

* Indicates site out of action

CITY OF STOKE-ON-TRENT

COUNTY BOROUGH BOUNDARY - - - - -



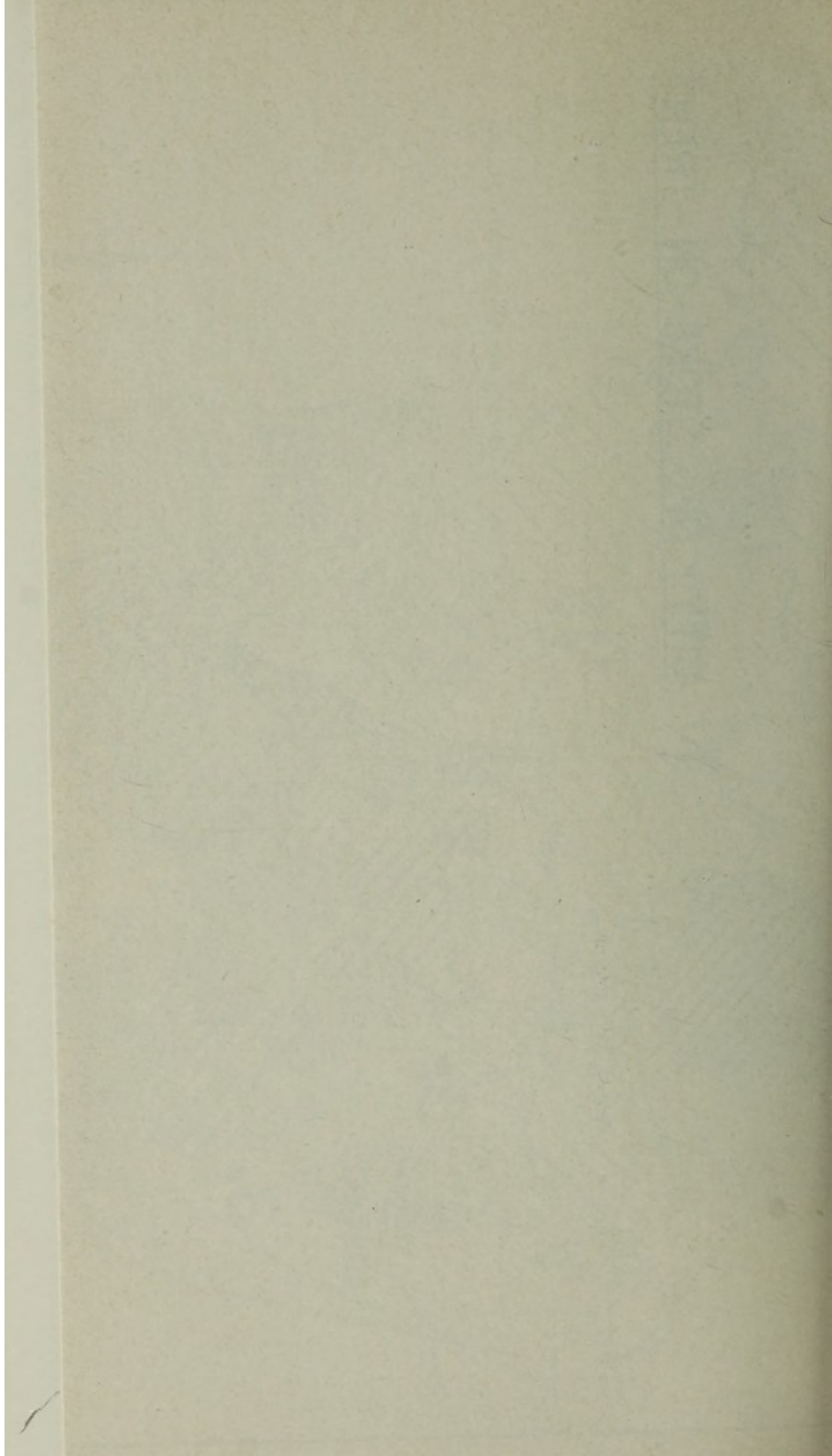


Table 43

**Administration of Clean Air Acts, 1956/68, and
Abatement of Nuisances from Dust, Fumes and Noise**

COMPLAINTS RECEIVED AND INVESTIGATED WITH RESPECT TO:—

Smoke	40
Grit or Soot	3
Dust	27
Fumes or Effluvia	20
Noise or Vibration	62
Burning Spoil Banks	—
TOTAL	152

Action under Clean Air Act:—

OBSERVATIONS FOR SMOKE:—

	No. of Observa- tions	No. of Chimneys Contra- vening	Contraventions Recorded for		
			Excess Dark Smoke	Continuous Dark Smoke	Black Smoke
Boiler Chimneys ..	58	19	15	13	7
Kilns and other Furnaces	9	3	2	2	—
Railway Locomotives	—	—	—	—	—
Other Chimneys ..	—	—	—	—	—
TOTALS ..	67	22	17	15	7

OBSERVATIONS FOR:—

	<i>Offence</i>	<i>No Offence</i>
Grit Emissions	—	3
Burning Spoilbanks	1	3
Burning waste in open	9	9

Action under Clean Air Act and/or Public Health Act:—

OBSERVATIONS FOR SMOKE, ETC.:—

	<i>Nuisance</i>	<i>No Nuisance</i>
Boiler Chimneys	2	10
Kilns and other Furnaces	—	4
Other Chimneys	2	28
Burning Waste in Open	1	50
Burning Colliery Spoilbanks	—	—
For Dust	5	119
For Fumes or Effluvia	2	32
For Noise or Vibration	5	110
For Other Purposes	—	22
TOTALS	17	375

INSPECTIONS:—

Of Boilers	29
Of Kilns and Other Furnaces	33
Of Railway Locomotives	—
Of Other Installations	11
Of Plant re Grit Emissions	4
Of Burning Spoil Banks	1
For Dust	29
For Fumes or Effluvia	8
For Noise or Vibration	55
For Other Purposes	46
Burning Waste in open	9

SMOKE CONTROL AREAS:—

Visits to Areas for Preliminary Survey	100
Inspection of Dwelling Houses	3,412
Inspection of Commercial Premises	52
Inspection of Plant re Exemptions	1
Interviews	164
Notices served under Public Health Act, 1936	10
No. of Premises where Work done in Default	—
Visits following Contraventions	47

OTHER SPECIAL INSPECTIONS:—

Investigations—Chimney Height	61
Inspections after Notification—Sec. 3	26
Inspections for Approval—Sec. 3	—
Inspections re Town Planning Decision	—
Survey Industrial and Commercial Premises	—
Other Inspections	250

IMPROVEMENTS AND ALTERATIONS EFFECTED:—

Improved Hand Firing	—
More Suitable Coal Fuel Used	—
Stokers Overhauled or Renewed	—
New Boiler Provided	—
Draught Improved	—
Smokeless Fuel Used	—
Conversion from Coal to Oil Firing	1
Conversion from Coal to Gas Firing	1
Converted to use Electricity	—
Mechanical Stokers fitted	—
F.R.S. Doors or Smoke Consumers fitted	—
Flues Cleaned	—
Flues and Furnaces repaired	—

IMPROVEMENTS AND ALTERATIONS EFFECTED:—*continued*

Mirrors Fixed or Replaced	—
Grit from Furnaces prevented	—
Improved Operation of Plant	—
Instrumentation Provided	—
Smoke Alarm and/or Recorder fitted	—
Dust Emission prevented	2
Arrestors provided to Cupolas	—
Noise and Vibration prevented	10
Chimney raised	—
Fume or Effluvia prevented	2
Use of Furnace discontinued	—

Notices Served—Clean Air Act, 1956/68:—

CONTRAVENTIONS:—

Notices Served (Sec. 30)	78
Letters of Warning Sent	—
Notices and Letters Sent—Sec. 2 (1968)	1
Notices and Letters Sent—Sec. 18	1

NUISANCES—SECTION 16 :—

Statutory Notices Served	—
Preliminary Notices Served	—

Notices Served—Public Health Act, 1936:—

	<i>Prelim.</i>	<i>Statutory</i>
Dust	3	—
Fumes or Effluvia	—	—
Noise and Vibration	3	—
Section 39	—	—

INTERVIEWS:—

Owners or Occupiers	208
Managers, Engineers and Firemen	360
Other Persons	354
TOTAL	922

Action under Clean Air Act with respect to:—

HEIGHT OF CHIMNEYS—SECTION 6 (1968):—

	<i>No. dealt with</i>
Proposed Height Satisfactory	7
Greater Height Required	9
Decision given prior to Submission of Plan	5

PRIOR APPROVAL—SECTION 3:—

No. of Plans, etc., Submitted	..	..	..	—
No. of Plans, etc., Approved	..	..	..	—

No. OF NOTIFICATIONS—SECTION 3 26

Complaints and Other Matters referred to H.M. Alkali Inspector 9

PRINCIPAL REASONS FOR EXCESSIVE EMISSIONS OR NUISANCES:—

Bad Hand-firing	..	..	..	..	2
Unsuitable Fuel..	..	..	..	..	3
Mechanical Failure	..	..	..	..	6
Starting Up from Cold	..	..	..	..	3
Overloaded Plant	..	..	..	..	—
Underloaded Plant	..	..	..	..	1
Lack of Draught	..	..	..	..	—
Inadequate Plant	..	..	..	..	1
Faulty Operation of Plant	..	..	..	..	5
Faulty Oil-Burning Equipment	..	..	..	..	—
Chimney too Low	..	..	..	..	—
TOTAL	..	..	..	..	21

Factories Acts, 1961

PART I OF THE ACT

1. INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH.

Premises (1)	Number on Register (3)	Number of		
		Inspections (4)	Written Notices (5)	Occupiers Prosecuted (6)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by the Local Authority ..	60	4	—	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	1,291	490	134	—
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	—	—	—	—
TOTALS ..	1,351	494	134	—

2. CASES IN WHICH DEFECTS WERE FOUND

Particulars (1)	No. of cases in which defects were found			
	Found (3)	Remedied (4)	Referred	
			To H.M. Inspector (5)	By H.M. Inspector (6)
Want of cleanliness (S.1)	—	—	—	—
Overcrowding (S.2)	—	—	—	—
Unreasonable temperature (S.3) ..	—	—	—	—
Inadequate ventilation (S.4)	—	—	—	—
Ineffective drainage of floors (S.6) ..	—	—	—	—
Sanitary Conveniences (S.7) :—				
(a) Insufficient	—	1	—	—
(b) Unsuitable or defective	138	58	—	—
(c) Not separate for sexes	—	—	—	—
Other offences against the Act (not including offences relating to Outwork)	—	—	—	—
TOTALS ..	138	59	—	—

SECTION 8 (3)

Table of Mechanical and Non-mechanical factories at present on the register :—

<i>Mechanical</i>	<i>Non-Mechanical</i>
1,291	60

PART VIII of the ACT—OUTWORKERS

Number of Out-workers on the list was 23 (Wearing Apparel); These were inspected and found satisfactory.

HOUSING INSPECTIONS, RECONDITIONING, SLUM CLEARANCE, DEMOLITION AND CLOSURE OF UNFIT HOUSES, IMPROVEMENT OF HOUSES

The programme submitted and approved by the Ministry of Housing and Local Government in 1955, estimated a total number of unfit houses in this City to be 12,000 and it was proposed to deal with 6,000 of these within the first five years, ending 1959. As a result of these inquiries and action on individual unfit properties, 13,309 of these houses have been dealt with. To date 246 public and private inquiries have now been held in the City.

During the year 1970, 10 clearance areas were submitted to the Ministry for confirmation. 26 new areas were submitted to the Committee.

The demolition and clearance of the sites is continuing to work satisfactorily. During the year, 374 houses were demolished and the sites cleared. A new system has been commenced whereby when houses become vacant they are properly secured by bricking up the ground floor openings and taking out the outside W.C. until such time as the house can be demolished. This has prevented a considerable amount of vandalism and general nuisance to the people living in the neighbourhood.

Work continues on Improvement Grants, and since the passing of the Act in 1949, a total of 6,706 grants have been completed out of 11,444 applications. It is regretted that more owners of tenanted houses do not make greater use of this financial assistance to effect improvements to existing housing accommodation. Under the Housing Act, 1969 grants for the improvement of houses have been considerably extended and owners of properties are being invited to take advantage of the extra allowances. The local authority have appointed an Improvement Grants Officer to visit and advise on what can be obtained in the way of financial aid for improvements.

Under the Housing Act, 1964, Improvement Areas could be made whereby dwellings which are situated in an Improvement Area and are tenanted, can compulsorily be brought up to provide standard amenities. This has now been amended under the new Housing Act, 1969 whereby general Improvement Areas can be declared providing the Area is predominantly residential and that the living conditions in the area ought to be improved by the improvement of the amenities. This includes the closing of streets, the making of open spaces, the planting of trees and the provision of car park arrangements. Two such Improvement Areas have been approved by the Local Authority.

Families from 996 condemned houses were awaiting re-housing at the end of 1970.

Housing Repair and Demolition, etc.

During the year, 4 applications were received for a Certificate of Disrepair. 1 certificate was issued in respect of all the defects and 2 were issued in respect of some defects.

In 1 instance an undertaking submitted by the landlord to complete the repairs within a period of six months was accepted in lieu of issuing a Certificate of Disrepair.

5 applications were received for the cancellation of Certificates of Disrepair.

Housing repairs were dealt with through the medium of the Public Health Act, 1936, and only in special cases is action taken under the Housing Act, 1957.

During the year, 66 Demolition Orders and 71 Closing Orders were made in respect of individual houses unfit for human habitation.

1. INSPECTION		1969	1970
(a)	(i) Total number of dwelling-houses inspected for housing defects (under the Public Health or Housing Acts)	1,018	1,302
	(ii) Number of inspections made for the purpose ..	1,052	1,580
(b)	(i) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Acts, 1936 to 1969 ..	1,018	1,302
	(ii) Number of inspections made for the purpose ..	1,052	1,580
(c)	Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	993	1,231
(d)	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	226	150
(e)	Number of dwelling-houses found in a fit state ..	80	70
(f)	Number of inspections under Part III of Housing Act, 1957 (Clearance Areas)	742	1,082
(g)	Number of inspections under Rent Acts, 1957/1968	4	5
(h)	Number of inspections under Section 51 ..	—	—
2. REMEDY OF DEFECTS WITHOUT SERVICE OF FORMAL NOTICE		1969	1969
	Number of Defective dwelling-houses rendered fit in consequence of informal action taken by the Local Authority or their officers	429	379

SLUM CLEARANCE—PROGRESS REPORT

Year	Quota	Demolition and Closing Orders Made	Clearance Areas Represented Houses	Total	Referred to Housing Department	Number Re-housed	Awaiting re-housing
Carry over from 1952	—	139	—	139	139	—	139 at end of 1952
1953	300	444	—	444	444	215	368 "
1954	400	320	530	850	320	367	321 "
1955	1200	679	515	1,194	656	710	267 "
1956	800	378	1,414	1,792	1,245	1,125	387 "
1957	800	328	384	712	1,664	1,301	750 "
1958	—	115	223	338	670	887	533 "
1959	—	126	152	278	130	335	328 "
1960	—	164	268	432	481	373	436 "
1961	—	124	741	865	204	326	314 "
1962	—	161	1,082	1,243	454	375	393 "
1963	—	126	322	448	1,154	449	1,098 "
1964	—	109	570	679	923	771	1,250 "
1965	—	161	307	468	534	1,120	664 "
1966	—	226	644	870	727	746	645 "
1967	—	172	705	877	447	569	523 "
1968	—	168	642	810	1,028	434	1,016 "
1969	—	176	101	277	1,121	673	1,080 "
1970	—	137	552	689	624	1,193	996 "
TOTAL	3,500	4,253	9,152	13,405	12,965	11,969	996

Following is a tabulated list of areas represented for action during 1970.

No.	Situation of Area	No. of Houses	Date Represented	Date Statutory Resolution	Date Sent to Ministry	Date Advertised	Date Enquiry	Date Confirmed
154	Foden Street	5	19 Mar. 70	23 April 70	24 July 70	23 July 70	—	28 Aug. 70
157	Willeton Street	8	"	"	"	"	—	"
158	"	4	"	"	"	"	—	"
159	Etruscan Street	4	12 June 70	30 July 70	"	"	—	"
160	"	3	"	"	"	"	—	"
37	Minshall Street	11	"	"	"	"	—	"
117	Gower Street	4	"	"	"	"	—	"
161	Ward Street	3	20 July 70	"	"	"	—	"
162	"	50	"	"	"	"	—	"
5	Water Street	66	8 Sept. 70	24/5 Sept. 70	"	"	—	"
163	Mount Street	4	29 Oct. 70	17 Dec. 70	"	"	—	"
164	"	11	"	"	"	"	—	"
166	Bemersley Road	6	10 Dec. 70	"	"	"	—	"
100	Hanley Road	30	"	"	"	"	—	"
101	Navigation Street	71	"	"	"	"	—	"
102	"	9	"	"	"	"	—	"
103	Fearn Street	12	"	"	"	"	—	"
165	Marple Street	6	"	"	"	"	—	"
166	Hillman Street	10	"	"	"	"	—	"
167	Paddock Street	7	"	"	"	"	—	"
168	"	159	"	"	"	"	—	"
118	Bengry Road	12	"	"	"	"	—	"
119	"	38	"	"	"	"	—	"
120	"	15	"	"	"	"	—	"
121	"	2	"	"	"	"	—	"
122	"	2	"	"	"	"	—	"

3. ACTION UNDER STATUTORY POWERS

1969 1970

(a) Proceedings under Section 9 of the Housing Act, 1957.

Number of dwelling-houses which were rendered fit:—

(i) By Owners	..	..	..	..	..	—	—
(ii) By Local Authority in default of Owners	..	..	..	..	..	—	—

(b) Proceedings under Section 17 and 18 Housing Act, 1957:—

(i) Demolition Orders made	..	..	..	..	70	66
(ii) Undertakings accepted	..	..	..	..	7	2
(iii) Closing Orders made (Part of a Building)	..	..	..	..	11	5
(iv) Informal Undertakings	..	..	..	..	—	—
(v) Closing Orders made (Whole of a Building)	..	..	..	..	95	66

(c) Proceedings under Public Health Acts:—

Number of dwelling-houses in which defects were remedied:—

(i) By Owners	..	..	..	..	203	496
(ii) By Local Authority in default of Owners	..	..	..	..	61	36

4. DEMOLITION OF HOUSES

In Progress *Demolished*

1970

1969 1970

(a) Compulsory Purchase Areas	..	18	316	323
(b) Individual Unfit Houses	..	—	46	51

Revisits in respect of Statutory Notices served under the Housing Act, 1957, and Public Health Act, 1936	1969	1970
Appointments	103	106
Defects Remedied	—	—
Visits in respect of Clearance Areas, etc.	755	1,200

Overcrowding Provisions—Housing Act, 1957

During the year there were 11 complaints of overcrowding and of these 9 were certified as overcrowded in accordance with the provisions of the Housing Act, 1957. No Families were rehoused by the Corporation to abate overcrowding.

IMPROVEMENT GRANTS, HOUSING ACT, 1949

1,187 inspections were made as compared with 586 for the previous year.

The number of improvement grants completed was 379 as compared with 429 for the previous year.

Houses in multiple occupation

By virtue of the new definition provided by the Housing Act, 1969, these are houses which are occupied by persons who do not form a single household.

A determined effort was made during the year, within staff limitations, to deal with the unsatisfactory conditions which many of these houses exhibited, particularly with regard to the provision of amenities, means of escape in case of fire, and state of repair.

Houses in Multiple Occupation Housing Acts, 1961 – 1969

Number of Inspections:

1969	1970
101	161

NOTICES SERVED:

	Informal		Formal	
	1969	1970	1969	1970
Sec. 15 Provisions of Amenities ..	6	8	Nil	3
Sec. 16 Means of Escape etc. ..	6	9	Nil	5
Sec. 19 Direction Order ..	Nil	Nil	1	Nil

FOOD AND DRUGS ACT, 1955

Since the war definite changes have taken place in people's feeding habits and tastes. Although the basic foods, such as meat, bread and milk have remained, changing circumstances have caused other types of food to find favour with the housewife. There has been a definite trend towards the so called "convenience foods". This has been brought about by a number of factors. Primarily due to a desire for more domestic embellishments and comforts, there has been a large increase in the number of married women going out to work. Lunchtime shopping has now become routine, and with the refrigerator becoming a recognised household necessity, foods which formally would have been unacceptable have now become an established part of the family diet. A product that can be prepared for consumption easily and quickly has, therefore, become a good line in the food shop. Further, the desire for the slim figure has resulted in a considerable reduction by some people in the consumption of such commodities as bread, potatoes and other such carbohydrate containing foods. Another factor that has undoubtedly made some impact is the trend by some people to consume more of the 'continental foods', having been first introduced to them by taking holidays abroad and then carrying on eating these foreign dishes on their return. Lastly, one must not forget the effect of the motor car on week-end eating habits. Should the weather be suitable, a day out in the car replaces the Sunday joint in a great number of families, and a more expedient substitute is eaten whilst enjoying the pleasures of seaside or country.

As in other fields technology has come more and more into food production and methods of distribution. Apart from the technological advances in agriculture, additives of all types to foods and improvements and changes in methods of food production have greatly influenced the finished product. These changes in methods of production have resulted in some instances in increased consumption of certain commodities, e.g. instant coffee. Other foods prepared by similar methods viz. soup mixes, skimmed milk powders, dehydrated vegetables, have also become part of the diets of a considerable number of people. These and similar easily prepared commodities have come into such prominence that specific legislation is now on the statute book to control their labelling and advertising.

Undoubtedly the next decade will see more changes in food habits together with an increase in the types and varieties of food available to the consumer. These will probably necessitate different methods of manufacture and packaging and will permit an even wider field of food additives to:—

- (i) prolong keeping quality,
- (ii) improve flavour, texture or appearance,
- (iii) allow for changes in humidity during storage,
- (iv) provide a more acceptable and easier form for reconstitution.

Also we shall see different types of containers and wrappers to accommodate these innovations.

New laws will be required to control new processes and further permissible additives. It is incumbent on all concerned in formulating such legal requirements to ensure that there are sufficient provisions to make certain that the compositional quality of the finished product is satisfactory in all respects, and that the labels inform prospective purchasers in words of adequate size and in simple terms that can be understood, of the true nature of the commodity, and, where necessary, of the ingredients which constitute the food or drink.

The number of samples taken for analysis and submitted to the Public Analyst during the year was as follows:—

Total number of samples submitted for analysis					Results of Analysis	
					Satisfactory	Adulterated below standard or otherwise not complying with prescribed regulations
DAIRY PRODUCTS						
88	Milk, ordinary (composition)	..	88	—	87	1
22	Milk, Channel Island	.. ..	22	—	21	1
10	Milk, condensed	.. ..	—	10	10	—
26	Cream	.. ..	—	26	26	—
11	Butter	.. ..	9	2	11	—
27	Ice Cream	.. ..	—	27	27	—
12	Milk puddings	.. ..	—	12	12	—
CEREAL PRODUCTS						
2	Flour confectionery	.. ..	—	2	1	1
1	Bread	.. ..	—	1	—	1
5	Flour and flour mixes	.. ..	—	5	5	—
MEAT AND MEAT PRODUCTS						
3	Meat, raw or cooked	.. ..	—	3	3	—
26	Meat, cured or corned	.. ..	—	26	23	3
238	Sausages	.. ..	2	236	222	16
88	Prepared meat	.. ..	—	88	82	6
37	Meat in pastry	.. ..	—	37	36	1
3	Spreads	.. ..	—	3	3	—
POULTRY AND POULTRY PRODUCTS:						
15	Prepared poultry	.. ..	—	15	13	2
1	Spreads	.. ..	—	1	1	—
FISH AND FISH PRODUCTS						
1	Fish, raw or cooked	.. ..	—	1	1	—
1	Prepared fish	.. ..	—	1	1	—
1	Spreads	.. ..	—	1	1	—
618	Carried forward	..	121	497	568	32

Total number of samples submitted for analysis	Formal	Informal	Results of Analysis	
			Satisfactory	Adulterated below standard or otherwise not complying with prescribed regulations
518 Brought forward ..	121	497	586	32
FRUIT AND FRUIT PRODUCTS				
35 Dried	—	35	35	—
68 Preserves	—	68	67	1
11 Canned or bottled	—	11	7	4
19 Other products	—	19	19	—
VEGETABLES AND VEGETABLE PRODUCTS				
1 Fresh	—	1	—	1
5 Canned or bottled	—	5	1	4
4 Other products	—	4	4	—
NUTS AND NUT PRODUCTS				
17 Nuts	—	17	17	—
12 Nut products	—	12	12	—
SUGAR AND SUGAR PRODUCTS				
1 Sugar	—	1	1	—
1 Other products	—	1	1	—
OILS AND FATS				
5 Animal	—	5	5	—
1 Vegetable	—	1	1	—
FERMENTATION PRODUCTS				
1 Beer	—	1	—	1
4 Vinegar, pickles etc.	—	54	52	2
SOFT DRINKS				
0 Squashes, cordials etc.	6	14	20	—
1 Mineral waters	—	1	1	—
SPICES, FLAVOURINGS etc.				
0 Herbs and spices	—	10	10	—
5 Mineral adjuncts	—	6	6	—
REMEDIAL FOODS				
Vitamin foods	—	1	—	1
DRUGS				
Digestive aids	—	4	4	—
Laxatives and purgatives	—	5	3	2
Respiratory system	—	7	7	—
Analgesics and antipyretics	—	3	3	—
Vitamins and mineral preparations	—	1	1	—
TOTAL	127	784	863	48

Formal Samples	..	..	..	127
Informal Samples	..	..	..	784
Number of Samples Genuine	..	..	..	863
Number of Samples Non-Genuine	..	..	..	48

The average of fat in the milk samples passed as genuine was as follows:—

Quarter ending:—	Ordinary Milk	Channel Island
31st March, 1970	3.65%	4.75%
30th June, 1970	3.55%	4.45%
30th September, 1970	3.70%	4.60%
31st December, 1970	3.75%	5.85%

The Sale of Milk Regulations 1939, fixed a minimum presumptive fat standard of 3.0%.

Details of unsatisfactory samples where proceedings were not instituted:—

Article	Remarks
PORK SAUSAGES	2.3% deficient of the 65.0% meat content required. Informal sample. Letter of warning sent to retailer. Reply received stating that a mistake had been made in shop service and that steps had been taken to prevent a recurrence.
PORK SAUSAGES	2.5% deficient of the 65.0% meat content required. Informal sample. Letter sent to manufacturer-retailer who replied stating that he had taken steps to prevent a repetition of this nature. Ingredients had not been sufficiently mixed.
PORK SAUSAGES	1.9% deficient of the 65.0% meat content required. Contained 310 parts per million undeclared sulphite preservative. Informal sample. Letter of warning sent to manufacturer-retailer who replied stating the matter had been rectified.
HAMBURGERS	6.2% deficient of the 80% meat content required. Informal sample. Letter sent to manufacturer-retailer who replied stating that he had altered the recipe to ensure 80.0% minimum meat content.
MINCED PORK	The contents of the can were found to be undergoing decomposition due to puncture in the can through which putrefactive organisms had gained entry. Repeat sample taken was reported satisfactory. The puncture in the original can was not visible at the time of purchase—being concealed by the label. Repeat sample taken reported genuine.
PURE MALT VINEGAR ..	Contained 1.8% of salt, the presence of which was not declared. Letter sent to manufacturers who replied stating that the label was to be altered to include salt as an ingredient.

Article	Remarks
SLAB CAKE	Insects found in the cake were identified as brown house moths - <i>hofmannophila pseudospretella</i> . Letter of warning sent to manufacturers.
WHEAT GERM FLAKES ..	An insect, which was alive, was identified as the larva of the Mediterranean flour moth - <i>ephestia kunniella</i> . Letter of warning sent to manufacturers.
STEWED STEAK IN GRAVY ..	4.3% deficient of the 75.0% meat content required. Informal sample. Letter sent to firm on whose behalf the product is packed.
PLUM JAM	Soluble solids 67.7%. The Food Standards (Preserves) Order, 1953, requires that jam, not packed in hermetically sealed containers, should contain not less than 68.5% of soluble solids. Informal sample. Letter sent to manufacturers who replied stating that the sample was old stock. New product is up to the required standard.
BRAMBURY APPLES (CAN) ..	Apples, that had been in contact with the unlacquered inner surface of the can, had a deep pink discolouration. The discoloured portions contained an excessive amount of tin (255 parts per million). The pink colour was an anthocyanin pigment and appeared to have been formed by a reaction of the natural constituents of the fruit and the metal of the can. Complaint received from a bakery regarding this condition. In view of the Public Analyst's report they decided not to use these apples and they were therefore destroyed.
CAN OF RHUBARB	Following a complaint of illness two cans of rhubarb were submitted to the Public Analyst. The interior surfaces of the cans were severely corroded and excessive amounts of tin were present (760 parts per million and 1,200 parts per million). Stocks from local retailer taken off sale and returned to the canner.
BAKED BEANS ON TOAST ..	A small piece of toast with a small quantity of baked beans was submitted following a complaint of a "tinny flavour". The amounts of tin (110 parts per million) and iron (35 parts per million) were higher than normal although not excessive. Other parts of the contents of the can may have had higher amounts of metal and which would have accounted for the flavour. Full investigation carried out at catering premises.
STEAKETTES	7.9% deficient of the 80.0% meat content required. Letter sent to the manufacturers who replied stating that the sample should have contained 80.0% meat. Recipe to be improved to give 85.0% meat content so as to allow for any deficiency in mixing.

Article	Remarks
BEEF SAUSAGES	Contained 105 parts per million undeclared sulphite preservative. Manufacturer and retailer interviewed. Notice displayed at time of second visit. Advice given regarding the notice being exhibited in a more prominent position in the shop and preferably in close proximity to the sausages.
PORK SAUSAGES	Contained 150 parts per million undeclared sulphite preservative. Manufacturer-retailer interviewed. Letter of warning sent.
PORK AND BEEF SAUSAGES	Contained 250 parts per million undeclared sulphite preservative. Manufacturer-retailer interviewed. Letter of warning sent.
PORTIONS OF BREAD ROLLS	Contaminated with foreign matter. Public Analyst reported that the material was starch and dark particulate matter with textile fibres. Dark matter mostly iron. Warning sent to baker regarding equipment cleansing.
PORK SAUSAGES WITH PRESERVATIVE ..	12.2% deficient of the 65.0% meat content required. Informal sample. Formal sample since taken reported 3.4% deficient of meat. Letter of warning sent after discussing with the manufacturer the constituents used in the making of the sausage.
CASTOR OIL, B.P.	Acid value 3.8. The British Pharmacopoea requires that the acid value of Castor Oil should not be more than 2.0. Retailer interviewed. Remaining stock withdrawn from sale. Change of acid value probably due to prolonged storage in shop. Letter of warning sent.
CHOPPED PORK (CANNED)	2.8% deficient of 90% meat content required. Imported from Poland. Wholesale supplier has taken matter up with representatives of manufacturers in England.
PORK SAUSAGE	Contained 123 parts per million undeclared sulphite preservative. Letter of warning sent to the retailer. At the time of revisit a notice was on display in the shop stating that the sausages contained preservative.
RASPBERRIES IN SYRUP (Two cans) ..	Complaint regarding the condition of the contents. The Public Analyst reported that the lacquer on both cans had become detached over small areas of the internal surface. Product withdrawn from sale in shop and surrendered for condemnation.
CAN OF TOMATOES	The Public Analyst reported that the interior of the can was severely corroded and a mould of the ascomycetes type was present. A small hole in the can, apparently caused by corrosion was probably the means by which mould had gained access. The contents contained 3600 parts per million of iron and 580 parts per million tin. Imported product from Italy. Retailer referred matter to wholesalers (importers) who have taken this up with the canners in Italy regarding the quality of the tin plate used.

Article	Remarks
PORK SAUSAGES WITH PRESERVATIVE ..	3.4% deficient of the required 65.0% of meat. Manufacturer-retailer interviewed. Recipe discussed and was altered. Letter of warning sent.
PORK SAUSAGES WITH PRESERVATIVE ..	3.5% deficient of the required 65.0% of meat. Letter sent to manufacturer who replied stating that this was an isolated case probably due to insufficient mixing. Letter of warning sent.
PORK SAUSAGES WITH PRESERVATIVE ..	4.2% deficient of the required 65.0% of meat. Letter sent to manufacturers. Unable to account for deficiency. Letter of warning sent.
PORK SAUSAGES WITH PRESERVATIVE ..	8.9% deficient of the required 65.0% of meat. Informal sample. Formal sample taken later reported genuine. Retailer interviewed and letter of warning sent.
CORNED BEEF ..	Complaint of dark material in the substance of the corned beef. The Public Analyst reported that two patches of foreign matter measuring 9 mm x 6 mm and 2 mm x 3 mm respectively consisted of finely divided iron. The absence of mineral oil could be due to the use of lubricant based upon saponifiable oils or the removal of mineral oil extraction by the meat fat during the processing of the meat. The company whose name appeared on the label of the can was informed of the Analyst's report and the manufacturers in South Africa were notified by them. They were unable to ascertain the cause of the complaint but gave an assurance that a strict control of the manufacturing process would be instituted to prevent a recurrence.
APRICOT HALVES IN SYRUP (six samples)	The Public Analyst reported that the amounts of iron and tin present were not excessive, but indicated that some corrosion of the interior of the cans had taken place. Samples taken following illness of consumer of one can. All stock remaining in the local store was later surrendered and the importers raised the matter with their Spanish suppliers.
PORK SAUSAGES ..	Contained undeclared sulphite preservative equivalent to 150 parts per million of sulphur dioxide. Shop revisited. Notice displayed regarding preservative but not conspicuous. Letter of warning sent.
PURE MALT VINEGAR ..	Contained an undeclared ingredient - 1.1% of salt. Letter sent to manufacturers. Specimen new label, including salt as an ingredient, later submitted to this office.
PORK SAUSAGES ..	2.8% deficient of the required 65.0% of meat. Retailer interviewed. Warning given. Undertaking given to ensure a more thorough mixing of ingredients in future.
PORK SAUSAGES WITH PRESERVATIVE ..	2.8% deficient of the required 65.0% of meat. Manufacturer interviewed and letter sent.

Article	Remarks
BEEF STEAK WITH GRAVY .. (canned)	2.7% deficient of the required 75.0% of meat. Letter sent to manufacturers who replied stating the product was no longer being made by them (ceased May, 1969). Recipe was for a product in excess of 75.0%. Stocks at shop exhausted. Retailer informed.
LIGHT ALE	Complaint of foreign matter in ale. The Public Analyst reported that the material received contained two pieces of foreign matter, consisting of growths of a mould with the characteristics of stempylidium together with yeast of the candida and saccharomyces types. Letter of warning sent to the brewery concerned.
BABY BEETS (two jars) ..	The Public Analyst reported that the contents of both jars were in a state of active fermentation and the presence of live yeast was confirmed. The liquid contained only 1.2% of acetic acid and this small amount, together with the absence of salt, although salt was declared to be an ingredient, would be insufficient to prevent fermentation. Product held at wholesalers premises pending Analyst's report. Consignment later surrendered and disposed of.
PEELED TOMATOES	The contents of the can, submitted separately in a glass jar, contained 600 parts per million of iron and 720 parts per million of tin. These amounts are excessive but it is understood that the contents had remained in the can for some time after opening and this could be a contributory factor. The wholesalers were notified and they in turn contacted the importers who notified the canners. An examination is to be carried out regarding the quality of the tin plate used in the canning process and its suitability investigated.
STEWED STEAK WITH GRAVY (canned)	6.7% deficient of the required 75.0% of meat. Letter sent to firm whose name appeared on the can. Product canned in Cyprus. Letter in reply stated that the matter was being taken up with the importer.
BONED CHICKEN IN JELLY (canned)	Two cans of this product were examined. One can was found to contain 4.5 gr. of foreign matter identified as being tissue. The second can was found to contain 76.7% of meat, a deficiency of 4.1% of the 80% of meat required. Dutch product. Letter sent to importer. Telephone message received that the contract with the manufacturers was to be cancelled and all stocks returned.
PORK SAUSAGES (with preservative)	Sulphur dioxide present equivalent to 520 parts per million. (Prescribed limit 450 parts per million). Retailer interviewed. Letter of warning sent.
CHICKEN BREAST IN JELLY (canned)	Deficient in meat to the extent of 4.0% of the minimum of the 80% of meat required. Dutch product. Letter sent to importer. Telephone message received that the matter had been taken up with the canners in Holland.

Article	Remarks
CHIPPED POTATOES .. (prepacked)	.. Contained sulphur dioxide preservative equivalent to 65 parts per million. The Preservatives in Food Regulations, 1962, permit the presence of sulphur dioxide in raw peeled potatoes but in an amount not exceeding 50 parts per million. Letter sent to manufacturers who replied stating that every precaution is taken to prevent the production containing preservative in excess of the legal limit. Random samples taken during production. Reason for excess could be the presence of a large number of small chips in the sample.
PASTEURISED MILK ..	.. Contained at least 1.0% added water. Letter sent to dairy company who carried out a full investigation, and replied stating that instructions had been given to staff to pay greater attention to draining plant after cleansing. Letter of warning sent.
CASTOR OIL B.P. ..	.. Acid value 3.1. The British Pharmacopoeia specify that the acid value should not be <i>more than</i> 2.0. Letters to retailers and manufacturers. All stocks uplifted from shops and returned to manufacturers. Deterioration probably due to prolonged storage.

Stoke-on-Trent Corporation Act, 1935, Section 68 and The Food and Drugs Act, 1955

32 samples of ice cream were submitted for bacteriological examination with results as follows:—

	<i>Samples</i>	
Provisional Grade 1	19
Provisional Grade 2	3
Provisional Grade 3	5
Provisional Grade 4	5
		—
		32
		—

In the cases of the samples in grades 3 and 4, the manufacturers premises were visited, the production and storage arrangements investigated and advice given.

FOOD AND DRUGS ACT, 1955

Milk and Dairies (General) Regulations, 1959 The Milk (Special Designation) Regulations, 1963-1965

All samples for bacteriological tests were submitted to the Public Health Laboratory Service (Medical Research Council), Stafford.

DESIGNATED MILK

250 samples of designated milk were submitted for bacteriological examination as follows:—

PASTEURISED MILK (CHANNEL ISLANDS):—38

38 passed the Phosphatase Test.

38 passed the Methylene Blue Test.

PASTEURISED MILK (HOMOGENISED):—22

22 passed the Phosphatase Test.

22 passed the Methylene Blue Test.

PASTEURISED (H.T.S.T.):—131

131 passed the Phosphatase Test.

131 passed the Methylene Blue Test.

PASTEURISED (HOLDER):—Nil.

STERILISED:—57

57 passed the Turbidity Test.

UNTREATED:—2

2 passed the Methylene Blue Test.

BIOLOGICAL TEST

Two samples of untreated milk were reported negative for tuberculosis and brucella abortus.

MILK AND DAIRIES (GENERAL) REGULATIONS, 1959

76 visits to dairies in connection with sampling, inspections, alterations and repairs were made.

Miscellaneous Visits

1,642 visits were made for appointments, interviews, licensing and investigations.

The Liquid Egg (Pasteurisation) Regulations, 1963

(1) No. of egg pasteurisation plants in the district:—Nil

(2) No samples of pasteurised whole egg were submitted to alpha-mylase test during the year.

FOOD HYGIENE

<i>No. of Premises</i>	<i>Type of Premises</i>	<i>No. of Inspections</i>
117	School kitchens	94
198	Industrial canteens	130
128	Restaurants, cafes, snack bars, hotel kitchens etc.	307
84	Bakehouses and oatcake bakeries	117
1,502	Food shops, including butchers, grocers, con- fectioners	1,710
73	Food warehouses	67
484	Licensed premises	429
126	Fried fish shops	126
8	Milk depots	74
	Total	3,054
	Stalls and delivery vehicles	79
	Market stalls	214

As part of both the routine control of food premises and in the follow up of cases and outbreaks of food poisoning the following bacteriological samples were taken:

Type of Sample	Number Negative	Number Positive
Surface swabs	509	2—S. Bredeney
Finger swabs	6	Nil
Nose swabs	1	2—Staph. Aureus
Sewer swabs	32	Nil
Food stuffs	54	1 Trifle—Staph. Aureus 1 beef sausages - Staph. Aureus and Salmonella 5 cooked chicken breasts - S. Bredeney 4 cooked chicken legs - S. Bredeney 1 leg of pork - S. Panama

FERTILISER AND FEEDING STUFFS ACT, 1926

16 samples were submitted for analysis as follows:—

Sows and weaners	..	..	..	..	..	1
Mor pecks	..	..	..	..	..	1
Baby chick	..	..	..	..	..	1
Basic slag	..	..	..	..	..	3
Bone meal	..	..	..	..	..	1
Dried blood	..	..	..	..	..	1
Tomato Feed	..	..	..	..	..	1
Tomato special liquid feed	..	..	..	..	..	1
Compure K (high ratio potash fertiliser)	..	..	..	..	..	1
All purpose fertiliser	..	..	..	..	..	1
Liquinure general	..	..	..	..	..	1
Mor-egg	..	..	..	..	..	1
Turkey grower	..	..	..	..	..	1
Growers (poultry)	..	..	..	..	..	1
						16

ALL PURPOSE FERTILISER

The Agricultural Analyst reported that there was an excess of 1·5% of phosphoric acid insoluble in water, which is 0·75% beyond the limits of variation but not to the prejudice of the purchaser.

MOR PECKS

There was an excess of 2·9% of oil which was 2·15% beyond the limits of variation, but not to the prejudice of the purchaser. Informal sample. Information passed on to the manufacturer who stated that he would take measures to reduce the amount of oil.

The following samples were taken from the same manufacturer. Premises visited and the manager interviewed. He stated that the variation was due to the oil content in the maize used varying from time to time. Copies of the Agricultural Analyst's certificate were forwarded to the manufacturers for any action they deemed necessary.

MOR-EGG

There was an excess of 1·9% of oil which was 1·15% beyond the limit of variation, but was not to the prejudice of the purchaser.

TURKEY GROWERS

There was an excess of 3·3% of oil which was 2·55% beyond the limit of variation, but was not to the prejudice of the purchaser.

GROWERS POULTRY

There was an excess of 1·3% of oil which was 0·55% beyond the limits of variation, but was not to the prejudice of the purchaser.

Meat Industry

There would appear to be a continuing falling off in the quantity of meat being consumed per head of the population. This does not necessarily manifest itself when considering the numbers of animals slaughtered per annum over the whole of the country or of any particular area. The type of cattle required by the meat trade, based on the demands of the consumer public, may vary by as much as 3 or 4 cuts per live animal in neighbouring areas, so that to arrive at the same percentage consumption by weight the area using the smaller animal may show a 40% increase in animals slaughtered. Using the number of animals slaughtered as a yard stick to measure consumption gives a completely false figure.

Present day conditions demand the production of young animals, ready for slaughter at 12 - 15 months, weighing somewhere in the region of 8 - 9 cwts. live weight. This calls for intensive rearing and provides for a complete cycle of development in a period of one year, allowing an established pattern of production to be formed taking full advantage of the seasons of the year as an aid to production. It will, therefore, be seen that although the percentage yield of meat per carcass will be higher with intensive rearing to meet the demands of the meat trade more animals are slaughtered than would be the case if animal husbandry went back to its old established practices. Previously the ideal butcher's beast was considered to be an animal of $2\frac{1}{2}$ - 3 years of age, weighing 16 - 17 cwts. These animals produced carcasses of almost twice the weight of those that the butcher now requires. The butcher's problem is basically the provision of a smaller joint to satisfy the falling requirements of the public. No longer are large weekend joints in demand so, no longer are the larger animals in demand by the trade.

Statistically, whilst there are similar numbers of livestock being slaughtered the amount of meat consumed is less. The balance is now being taken up by an increase in the consumption of poultry.

This changing pattern within the meat industry has meant the production of less meat but with considerable increase in cost. The increase in cost subsequently damages the purchasing power of the consumer and is further reflected in the reduced profit margins in the trade.

With these worsening conditions, future development of the proposed abattoir site at Cobridge must now be considered at an end.

MEAT AND GENERAL FOOD INSPECTION

During the year 49,736 units of animals were slaughtered and examined in the City, and 48 tons, 17 cwts, 1 qr., 9 lbs. of meat and offal were condemned, as compared with 50,153 units slaughtered and 69 tons, 13 cwts., 3 qrs., 8 lbs. of meat and offal condemned during the previous year.

ANIMALS SLAUGHTERED AND INSPECTED IN THE CITY

<i>Cattle</i>	<i>Calves</i>	<i>Sheep</i>	<i>Pigs</i>	<i>Total Animals</i>	<i>Total Units</i>
18,635	92	78,263	46,247	143,242	49,736

DETAILS OF CONDEMNATIONS

						<i>Weight of Meat Condemned</i>			
Carcases found to be affected with Tuberculosis						T.	C.	Q.	lbs.
288 Pigs	comprising	288 part carcasses	..	..	..	1	5	3	27
288 Animals	comprising	288 part carcasses	..	..	..	1	5	3	27

Carcases found to be affected with Other Diseases						T.	C.	Q.	lbs.
60 Cattle	comprising	9 whole and	51 part carcasses	..	..	3	4	2	22
2 Calves	comprising	2 whole carcasses	..	..	..	—	1	0	13
47 Sheep	comprising	31 whole and	16 part carcasses	..	..	—	14	0	14
223 Pigs	comprising	100 whole and	123 part carcasses	..	..	6	8	1	9
332 Animals	comprising	142 whole and	190 part carcasses	..	..	10	8	1	2

Total number of carcasses affected

(Tuberculosis and other Diseases)						T.	C.	Q.	lbs.
60 Cattle	comprising	9 whole and	51 part carcasses	..	..	3	4	2	22
2 Calves	comprising	2 whole carcasses	..	..	..	—	1	0	13
47 Sheep	comprising	31 whole and	16 part carcasses	..	..	—	14	0	14
511 Pigs	comprising	100 whole and	411 part carcasses	..	..	7	14	1	8
620 Animals	comprising	142 whole and	478 part carcasses	..	..	11	14	1	1

TOTAL WEIGHT OF MEAT AND OFFAL CONDEMNED

<i>Meat</i>				<i>Offal</i>				<i>TOTAL Meat and Offal</i>			
T.	C.	Q.	lbs.	T.	C.	Q.	lbs.	T.	C.	Q.	lbs.
11	14	1	1	37	3	0	8	48	17	1	9

INCIDENCE OF DISEASE OTHER THAN TUBERCULOSIS IN FOOD ANIMALS WHICH NECESSITATED THE CONFISCA- TION OF THE WHOLE OF THE CARCASE AND ORGANS

	<i>Cattle</i>	<i>Calves</i>	<i>Sheep</i>	<i>Pigs</i>	<i>Total</i>
Peritonitis	3	—	—	5	8
Dropsy	—	—	2	—	2
Bruising	—	—	—	4	4
Emaciation, generalised ..	—	—	11	4	15
Oedema	1	—	—	2	3
Fever, acute	1	—	3	2	6
Immaturity	—	—	—	1	1
Jaundice	1	—	—	2	3
Moribund	1	—	12	6	19
Multiple injuries	1	1	1	—	3
Pyæmia	1	1	—	43	45
Septicæmia or Septic Intoxication	—	—	2	2	4
Abscesses	—	—	—	24	24
Toxaemia	—	—	—	1	1
Carcinoma	—	—	—	1	1
Pyelo Nephritis	—	—	—	2	2
Abnormal odour	—	—	—	1	1
TOTALS	9	2	31	100	142

The Tuberculosis (Reactors) Order, 1950 (Brought into Operation in October, 1954)

4 cattle were dealt with under this Order during the last twelve months. All carcases and offals passed.

OTHER FOODS CONDEMNED

	<i>Tons</i>	<i>cwts.</i>	<i>qrs.</i>	<i>lbs.</i>
Canned meat	1	6	1	27
Canned fruit	3	—	2	20
Canned milk	—	1	—	1
Canned fish	—	—	2	15
Canned vegetables	2	3	2	12
Canned soups	—	4	2	11
Rice	—	2	—	12
Cheese	—	—	—	26
Preserves	—	—	—	10
Miscellaneous	—	3	1	12
Fruit	—	1	1	17
Vegetables	2	5	2	14
Wet fish	—	—	1	13
Frozen foods	2	5	—	12
TOTAL	11	15	1	6

Other Foods Condemned—continued

			<i>Tons</i>	<i>cwts.</i>	<i>qrs.</i>	<i>lbs.</i>
Total condemned, 1969	..	..	15	9	1	14
Total condemned, 1970	..	..	11	15	1	6

SLAUGHTER OF ANIMALS ACT, 1938-58**Humane Slaughtering**

The stunning of animals is carried out by means of electrically operated instruments or captive bolt pistols.

Slaughtermen's Licences

Slaughtermen are required to be licensed by a Local Authority and only fit and proper persons who have attained the age of 18 years are permitted to hold such a licence.

The total number of licences in operation at 31st December, 1970 was 65.

PROSECUTIONS, 1970

Description	Fines			Costs		
	£	s.	d.	£	s.	d.
(1) Selling a small pork pie which was found to be in a mouldy condition	50	0	0	3	0	0
(2) Selling a can of Braised Steak with Rich Gravy which contained portions of bovine hide and hair	10	0	0	3	0	0
(3) Selling a bottle of Channel Islands pasteurised milk which contained at least 4.3% of added water	10	0	0	7	11	6
(4) Failing to comply with a legal notice served under Section 93 of the Public Health Act, 1936, relating to the existence of a nuisance at a property	Case dismissed as the existence of a nuisance had not been proved.					
(5) Offences against the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966	20	0	0	—		
(6) Offences against the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966	24	0	0	6	0	0
TOTAL	114	0	0	£19	11	6

Warning letters were sent by the Town Clerk in the following instances:

- (1) Selling a pork pie which contained a piece of wire.
- (2) Selling two packets of wheat germ flakes which contained live larvae of the Mediterranean flour moth (*ephestia kuhniella*).
- (3) Selling two small dinner cobs which contained dark foreign matter.
- (4) Selling a can of corned beef which contained portions of bovine hide with hair attached.
- (5) Piece of metal served in a portion of cottage pie.
- (6) Selling a portion of curry and potato chips containing a piece of plastic coated wire.
- (7) Selling a bottle of lemonade which contained fragments of glass.
- (8) Selling a fruit malt loaf which contained a stone.
- (9) Selling a can of minced beef with onion and gravy which was found to contain a quantity of hair.
- (10) Selling a fruit pastille which contained a metal nut.
- (11) Selling two pork pies which were found to be in a mouldy condition.
- (12) Selling a wrapped loaf which was later found to be in a mouldy condition.
- (13) Selling a mouldy pork pie.
- (14) Selling a sausage roll in a mouldy condition.
- (15) Selling a wrapped thin sliced loaf of bread which was extensively contaminated with oil.
- (16) Selling a wrapped sliced loaf containing areas of dark discolouration.
- (17) Selling a meat and potato pie containing a small beetle.

PUBLIC SWIMMING BATHS

267 samples of Public and School swimming baths were taken for bacteriological examination. In the cases of unsatisfactory reports from the laboratory the Departments concerned were notified so that immediate action could be taken. Repeat samples taken to note any improvement.

In addition samples of the water were analysed for Chlorine content and pH. This information is of great value to baths superintendents to check plant efficiency.

WATER SUPPLY

Two routine samples of main water were taken by the Department during the year. One was satisfactory but the second was reported by the Public Analyst as containing traces of iron oxide. The matter was taken up with the S.P.W.B. with a view to the supply pipe being flushed out.

BADDELEY EDGE SEWERAGE SCHEME

Since this area was transferred to the City from Leek R.D.C. in 1965, we have had to deal with numerous problems caused by the inadequate drainage facilities, which in the main part were primitive. In the 83 properties in the unsewered area the following arrangements for sanitation existed:

- 24 Water Closets draining to cesspools or septic tanks.
- 40 Privies.
- 19 Chemical Closets.

The provision of a sewer to this area was considered to be an ideal time to review the general housing conditions. Each property was visited and the various methods of improving the property by the provision of amenities such as a bath, inside water closet, wash basin and hot water supply were discussed, together with the different forms of grant available.

The contract for the sewerage scheme was near to completion at the end of 1970 and it is pleasing to be able to report that, at the time of writing, the following position exists:

Improvement grants applied for	21
Conversion grants completed:	
(Section 47. Public Health Act, 1936)	2
Conversion grants applied for	2
Connection to sewer at own expense ..	3

It is hoped that, during 1971, the remaining properties will be satisfactorily dealt with.

SYNOPSIS OF PUBLIC HEALTH ENGINEERING WORKS PUT IN HAND OR COMPLETED 1970/71

1. BADDELEY EDGE—completed £38,000.
2. WHITFIELD/RIDGEWAY—completed £8,500.
3. BURSLEM W.P.C. WORKS EXTENSION—overall scheme approved by Department of the Environment at £1,100,000.

Stage 1 out to tender in September, 1971.

4. BURSLEM SEWER CONTRACT III through Rogerson's Meadow. Completed £141,000.

BURSLEM SEWER CONTRACT IV approved by the Department of the Environment from head of Rogerson's Meadow to Sneyd Hill, at an estimated cost of £507,000 due to commence during 1971/72.

5. HANLEY MAIN OUTFALL SEWERS—final contract through Hanley Forest Park due to commence in September. Estimated cost £104,000.

6. BLITHE VALLEY W.P.C. WORKS—Stage 2 due for completion in Autumn, 1971 at total cost of £162,000. City's proportion £86,000.
7. STRONGFORD-FEASIBILITY STUDY—completed for centralisation at Strongford. Approval of the Department of the Environment obtained. Stage 1 extensions (including provision at Strongford for dealing with Hanley sewage) due to commence in 1972. Estimated cost £3,011,000.
8. LINK SEWER FROM HANLEY TO STRONGFORD—due to commence 1972, 7 kilometers 1650/1850 mm. Estimated cost £1,175,000.
9. TUNSTALL TO GOLDENHILL SEWER—2,900 yards of new sewer and a P.S. Estimated cost £254,000. Preliminary design to commence during current year.
10. POPLAR LANE SEWER—2,200 yards of 30" - 42" diam. Estimated cost £250,000. A sewer badly affected by mining subsidence and reconstruction due to commence during 1972/73. A contribution being sought from N.C.B.
11. RECONSTRUCTION OF F.W. SEWER—Hilton Road to A.34 to prevent pollution of adjacent brookcourse during periods of exceptional rainfall. Estimated cost £30,000. Due to be carried out in 1972/73.

STAFFORDSHIRE POTTERIES WATER BOARD

Register of Rainfall in 1970, kept at the Meir, Longton

(by the courtesy of F. L. Ardern, Esq.)

					<i>Total Depth (ins.)</i>	<i>No. of days on which .01 inch or more fell</i>
January ..	..	..	..	..	3.82	24
February..	..	..	..	..	3.39	19
March ..	..	..	..	..	2.50	20
April ..	..	..	..	..	4.03	23
May ..	..	..	..	..	0.71	7
June ..	..	..	..	..	1.41	12
July ..	..	..	..	..	2.41	20
August ..	..	..	..	..	4.01	11
September	..	..	..	..	2.01	10
October ..	..	..	..	..	2.64	17
November ..	..	..	..	..	6.48	25
December ..	..	..	..	..	1.54	17
TOTALS ..					34.95	205

In 1969, the total rainfall was 32.98 inches.

WATER SUPPLY

The water supply of the City is provided by the Staffordshire Potteries Water Board, and is obtained from wells and boreholes sunk in the New Red Sandstone rocks, from springs issuing from the Millstone Grit and surface water collected and treated from an impounding reservoir at Tittesworth, near Leek.

The supply is a constant one, and practically all the houses within the City have a piped supply for domestic purposes. Only a few persons draw water from standpipes. Water is supplied also for the trade purposes of the district.

The water is not plumbo-solvent. Chloramine treatment is applied to the whole of the water supply.

During the year ended 31st December, 1970 the Board took 964 Bacteriological and 189 Chemical samples of water as supplied to the district including samples of the final water after treatment of the Tittesworth Reservoir water. All the waters are periodically examined for radioactive levels and all are very low, well within the maximum permissible levels laid down by the Medical Research Council, and were reported on as being "very satisfactory, clear and bright in appearance and of the highest standard of bacterial purity, indicative of a pure and wholesome water suitable for the purposes of a public supply". All the samples taken were 100% free from faecal contamination (E.Coli. I.). The chemical quality was also of the highest standard.

The total rainfall during the year was 34.95 inches, this being 6% *above* the Standard Average of 32.95 inches.

During 1970, the average daily quantity of water consumed in the whole of the Board's area of supply amounted to 27,415,000 gallons, with a population of 480,000, this represents an approximate consumption of 57 gallons per head per day for domestic, trade, and waste purposes.

FARM, HULME

A routine sample taken from the tap in the kitchen of a farm, revealed an excessive amount of lead at 3.7 parts per million. This supply was gravity fed from the well via a lead supply pipe to a stand pipe situated inside the kitchen of the farmhouse. The well water was found to be strongly plumbo-solvent.

The tenant was advised to take his supply directly from the well until a satisfactory supply was provided. The owner of the farm was contacted and although the nearest main supply was several hundred yards away a connection was, in fact, made and the existing lead piped supply was abandoned.

RAINFALL RECORDED AT HANLEY SEWAGE WORKS, LEEK ROAD, STOKE-ON-TRENT

(By the courtesy of J. W. Chibbett, Esq.)

MONTHLY TOTALS FOR 1970

							<i>Inches</i>
January ..	..	..	..	..	..	..	3·02
February ..	..	..	..	..	..	..	3·55
March ..	..	..	..	..	..	..	2·36
April ..	..	..	..	..	..	..	3·91
May ..	..	..	..	..	..	..	0·75
June ..	..	..	..	..	..	..	2·07
July ..	..	..	..	..	..	..	2·33
August	3·93
September	2·50
October	2·78
November	5·76
December	1·43
YEARLY TOTAL: ..							<u>34·39</u>

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