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CITY OF NOTTINGHAM

ANNUAL REPORT

HEALTH SERVICES

1972

WILFRID H. PARRY
M.D., F.F.C.M., D.P.H.,
D.T.M. & H. F.R.S.H.
Medical Officer of Health

CITY OF NOTTINGHAM

Hundredth
Annual Report
of the
Health Services
1972

Medical Officer of Health

Wilfrid H. Parry

M.D., F.F.C.M., D.P.H., D.T.M. & H., F.R.S.H.

Principal Contents

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1972

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WILFRID H. PARRY, M.D., F.F.C.M., D.P.H., D.T.M.&H., F.R.S.H.

SENIOR DEPARTMENTAL STAFF

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WILFRID H. PARRY, M.D., F.F.C.M., D.P.H., D.T.M. & H., F.R.S.H.

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Chief Ambulance Officer—

F. WILKINSON, F.I.A.O.

Chief Public Health Inspector—

R. YOUNG, M.B.E., F.R.S.H., F.A.P.H.I.

Preface

To The Chairman and Members
of the Health Committee

Ladies and Gentlemen,

I have pleasure in presenting my report on the work of the Health Services Department for the year ended 31st December 1972.

This was a most memorable year in that local planning for the unification of the National Health Service began. Full details are given by Dr. Mason and myself of the setting up of the Area Joint Liaison Committee and its nine Working Groups. The role of the Regional Joint Liaison Committee, the problems encountered in recommending a health district structure for Nottinghamshire and formulating the 'Area Profile' for the new shadow Area Health Authority are also given. Guidance from the Department of Health and Social Security was in the form of advice circulars, which often arrived late and were occasionally difficult to understand or interpret. With hindsight, one can see that such a mammoth task as the N.H.S. reorganisation could have benefitted from a more logical time-plan. Speed and haste appear to be the key motivation with all the attendant dangers of major mistakes, frustration and overwork.

Despite the uncertainty associated with the future of public health, the year was one of great progress in the City Health Services. Mention should be made of the establishment of Local Authority comprehensive family planning with a virtual doubling (including vasectomy) planned for 1973; the provision of a mobile health clinic under Phase 7 of the 1972 Urban Aid Programme; further development of the Ambulance Service to include a cardiac ambulance and a statistical survey into the usage of ambulances. Revised programming of health centres, the effect being to double their provision over the next decade, subject to possible delays following upon recent Government restriction on Local Authority capital building. At the time of writing, Bulwell and St. Ann's health centres have been opened by Sir George Godber, G.C.B., Chief Medical Officer, Department of Health and Social Security on the 16th February 1973 and Sneinton health centre is rapidly approaching completion. Linked with this increase in health centres has been the overall improvement in the nursing services, which in Nottingham, are planned so as to support and supplement the general medical practitioners. Considerable headway has been made to increase their establishment and health visitor training facilities at the Trent Polytechnic are being expanded proportionately.

Although planning for the future was an important aspect of 1972, the existing services were not neglected. There were interesting developments in the epidemiology of infectious diseases. Reference is made on page 35 to the fall in whooping cough, but an important and significant local increase in scarlet fever (103 cases in 1972 compared with 39 in 1971) which needs further investigation. The

interesting case of leptospirosis draws attention to the need for constant alertness for diseases that can be transmitted by pets, while the small outbreak of "hand, foot and mouth disease" in Clifton illustrates the extent to which the Department investigates problems.

Sexually transmitted diseases are not only a world and national problem, but they are also a local one, especially in relation to gonorrhoea and non-specific urethritis. Dr. Bittiner has given the overall picture in Nottingham. New clinic premises at the General Hospital which can deal more effectively with demand for treatment, together with a close liaison with the local health authority in the field of Health Education and contact tracing are the methods of "attack" against this 20th century epidemic.

Tuberculosis still remains a problem and Dr. Crowther's contribution to the annual report illustrates the constant battle being fought against a disease which is still present in the community but which is so easily controlled by early diagnosis and adequate treatment.

The need to encourage parents to bring their children for booster doses of the 'triple' vaccine and to maintain the drive for measles vaccination is the message spelt out by Dr. Gazidis in the section on Immunisation, page 48. The wide range of vaccines in routine use for immunisation programmes in this country as well as for those intending to travel abroad are discussed. The latter are becoming more important as more people travel abroad to exotic lands for business or pleasure. With this in mind and to ease the potential traveller's immunisation and vaccination problems, a 'Traveller's Clinic' will be set up in 1973.

The importance of close liaison between the local authority Social Service, Health Departments and hospitals is highlighted by the two interesting cases related by Dr. Mason on pages 119 to 123. One had a tragic ending, but both illustrate the failure of separate departments trying to handle medico-welfare cases. Full details have been given as a reminder that services should be provided to assist and help 'the patient', and not to build 'empires' that become impersonal and helpless in the face of urgent action. I must admit to the fear that under Reorganisation of the National Health Service and Local Government there will be a widening gap between medical and nursing services in the N.H.S. and social welfare services in the new local authorities.

As in previous years, Mr. Young has written an excellent description of the varied and vital environmental health aspects of the Department. Nottingham can be proud of its drive against slums, its new Improvement Grant service and the recognition, in recent years, of the importance of the home in family health.

Finally, details of the past 100 years of Public Health in the City of Nottingham are reprinted in the appendix. This concise historical survey was originally written to celebrate the centenary of the appointment in 1872 of Dr. Seaton, Nottingham's first Medical Officer of Health, and to coincide with the City's celebration

of the event in February 1973 at the official opening of Bulwell and St. Ann's Health Centres. I have included it in the 1972 annual report deliberately so that the report would not be lost to posterity. It could well be that 1972 will be the last year that an annual report in its present format will be published. That for 1973 may have to take the form of a short statistical review due to the operational date of reorganisation of both Local Government and the National Health Service on 1st April 1974. Retirement and/or re-appointment of key members of both the medical, nursing and administrative staff elsewhere could make it extremely difficult to carry on this pleasant annual task.

At the time of writing this preface, I wish to record the retirement of Mr. F. F. Pellatt, Administrative Deputy to Mr. Tubb. Mr. Pellatt has been with the Health Department for 18 years. As its servant, he has served it and the Health Committee well and faithfully. We wish him long life and happiness in his retirement.

Throughout 1972, I have been supported by an excellent team of medical, nursing and administrative staff. It is sad that with current reorganisation many will leave the team that has been built up with care by myself and predecessors. The wholehearted support that we have received from the Chairman, Vice-Chairman and members of the Health Committee during 1972 was very much appreciated and has gone a long way in maintaining morale and interest in the prelude to unavoidable change.

WILFRID H. PARRY
MEDICAL OFFICER OF HEALTH

HEALTH DEPARTMENT,
HUNTINGDON HOUSE,
NOTTINGHAM
NG1 3LZ

Vital Statistics

VITAL STATISTICS

	1972	1971
Population	**294,420**	296,750
Area in Acres	**18,364**	18,364
No. of Marriages	**2,827**	2,687

LIVE BIRTHS		
Legitimate Males 1,909 Females 1,824 ..	**3,733**	4,171
Illegitimate ,, 453 ,, 448 ..	**901**	930
,, births expressed as a percentage of all births	**19·44**	18·23
Total No. of Births	**4,634**	5,101
Live Birth Rate per 1,000 of population ..	**15·74**	17·19
STILLBIRTHS		
Legitimate Males 23 Females 24 ..	**47**	49
Illegitimate ,, 8 ,, 5 ..	**13**	13
Total No. of Stillbirths	**60**	62
Stillbirth Rate per 1,000 live and stillbirths ..	**12·78**	12·00
Total No. of Live and Stillbirths	**4,694**	5,163
INFANT DEATHS	**101**	108
Infant Mortality Rate Total	**21·80**	21·17
,, ,, ,, legitimate births ..	**20·63**	19·38
,, ,, ,, illegitimate births ..	**26·64**	31·18
Neonatal Mortality Rate—first four weeks of life	**11·87**	11·76
Early Neonatal Mortality Rate—first week of life	**10·36**	10·59
Perinatal Mortality Rate	**23·01**	22·47
MATERNAL DEATHS (see page 58)	**2**	2
Maternal Mortality Rate per 1,000 live and still-births..	**·43**	·39
DEATHS AT ALL AGES		
Males 1,885 Females 1,905	**3,790**	3,629
Death Rate per 1,000 of population ..	**12·87**	12·23

Analysis of Deaths from Birth to 5 Years*

Registered Causes of Death	*0—6 days*	*7—13 days*	*14—20 days*	*21—27 days*	*Total under 28 days*	*Total under 1 year*	*1 year*	*2 years*	*3 years*	*4 years*	*Total 1—4 years*
Prematurity	29	1	—	—	30	30	—	—	—	—	—
Congenital malformations ..	5	2	2	—	9	14	1	1	1	—	3
Birth injuries	2	—	—	—	2	2	—	—	—	—	—
Atelectasis	—	—	—	—	—	—	—	—	—	—	—
Haemolytic disease of the newborn ..	1	—	—	—	1	1	—	—	—	—	—
Bronchitis..	—	—	—	—	—	3	1	—	—	—	1
Pneumonia, all forms ..	3	—	—	1	4	11	—	3	1	—	4
Other respiratory diseases and conditions	5	—	1	—	6	9	—	—	—	—	—
Gastro-intestinal infection including dysentry ..	—	1	—	—	1	12	—	—	—	—	—
Measles ..	—	—	—	—	—	—	—	—	—	1	1
Whooping Cough ..	—	—	—	—	—	—	—	—	—	—	—
Meningococcal infection	—	—	—	—	—	—	1	—	—	—	1
Leukaemia	—	—	—	—	—	—	—	—	—	—	—
Non-meningococcal meningitis	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis	—	—	—	—	—	—	—	—	—	—	—
Malignant neoplasms	—	—	—	—	—	—	—	—	—	—	—
Abdominal emergencies	—	—	—	—	—	—	—	—	1	—	1
Accident *(a)* motor..	—	—	—	—	—	—	—	—	—	1	1
(b) other ..	1	—	—	—	1	8	—	2	2	3	7
Suffocation	—	—	—	—	—	1	—	—	—	—	—
Other conditions	1	—	—	—	1	10	2	1	—	1	4
TOTALS	47	4	3	1	55	101	5	7	5	6	23

*Compiled from Local Registrars' Death Returns

Populations, Birth, Death, Infant and Maternal Mortality Rates

	Estimated Population	*Birth Rate*	*Death Rate*	*Infant mortality*	*Maternal mortality*
		per 1,000 population		*rate per 1,000 live births*	*rate per 1,000 total births*
1851-1855 ..	55,883	—	—	—	—
1856-1860 ..	59,741	36.8	27.2	209	—
1861-1865 ..	75,765	34.8	24.9	192	—
1866-1870 ..	88,040	31.3	23.8	200	—
1871-1875 ..	89,510	34.1	24.9	192	—
1876-1880 ..	142,756*	34.6	21.7	175	—
1881-1885 ..	208,937*	36.6	20.9	174	—
1886-1890 ..	229,762	30.4	17.9	168	—
1891-1895 ..	219,770	29.5	18.3	174	—
1896-1900 ..	235,200	28.9	18.5	191	—
1901-1905 ..	246,020	27.7	17.2	170	—
1906-1910 ..	260,483	26.1	15.8	152	4.54
1911-1915 ..	264,316	22.9	15.1	137	3.66
1916-1920 ..	264,151	19.1	16.0	113	4.66
1921-1925 ..	268,900	20.4	12.9	90	3.34
1926-1930 ..	266,000	17.5	13.6	88	3.78
1931-1935 ..	277,336	16·1	12·9	79	3·48
36 ..	279,400	15.2	13.2	89	4.5
37 ..	278,800	16.0	13.4	80	2.8
38 ..	278,300	15.6	12.7	71	1.8
39 ..	278,800	15.8	13.3	66	1.3
40 ..	263,600	16.5	15.5	61	2.7
41 ..	258,100	16.0	14.0	80	2.8
42 ..	255,900	18.2	13.1	62	2.5
43 ..	265,400	19.1	14.3	65	1.38
44 ..	262,310	21.7	13.2	56	.85
45 ..	265,090	19.7	12.9	53	1.33
46 ..	283,160	22.0	12.5	42	1.09
47 ..	291,150	23.9	12.3	50	1.26
48 ..	296,900	19.8	10.9	44	.49
49 ..	300,640	18.9	11.8	38	.51
50 ..	307,000	17.4	11.1	31	.37
51 ..	306,600	16.97	11.98	33	.57
52 ..	310,700†	16.71	10.74	28	.38
53 ..	311,500	16.64	11.01	27	.77
54 ..	311,500	16.05	10.61	24	.59
55 ..	312,000	15.67	11.28	28	.60
56 ..	312,500	16.50	11.15	22	.76
57 ..	312,600	17.52	10.82	23	.36
58 ..	313,000	17.82	10.93	22	1.05
59 ..	313,300	17.95	11.48	24	.35
60 ..	313,760	18.26	10.97	23	.51
61 ..	313,280	18.59	12.29	27	.34
62 ..	314,360	19.86	12.14	25	.47
63 ..	315,050	20.29	11.96	26	.15
64 ..	311,850	19.95	11.56	23	.16
65 ..	310,990	19.52	11.76	27	Nil
66 ..	310,280	19.40	12.69	30	Nil
67 ..	309,740	18.41	11.48	20	.52
68 ..	305,050	19.48	12.60	21	.17
69 ..	303,090	18.00	12.80	22	.18
70 ..	300,580	16.68	12.96	23	.98
71 ..	296,750	17·19	12·23	21	·39
72 ..	294,420	15·74	12·87	22	·43

*Borough boundary extension †City boundary extension

Analysis of Deaths

	1972	1971	1970	1969	1968
TOTAL DEATHS ..	3,790	3,629	3,894	3,874	3,846
Deaths under 1 year	101	108	113	120	123
,, 1— 4 years ..	27	17	26	24	47
,, 5—44 years ..	146	157	175	175	391
,, 45—64 years ..	820	850	871	911	682
,, 65 and over ..	2,696	2,497	2,709	2,644	2,603
Causes of Deaths:					
Ischaemic heart disease	784	792	735	714	736
Vascular lesions of nervous system ..	490	491	493	495	525
*Malignant and lymphatic neoplasms ..	346	328	394	380	357
Defined and ill-defined diseases—various ..	285	286	289	323	288
Bronchitis	258	259	265	312	278
Other heart disease ..	266	247	270	278	272
Pneumonia	249	197	269	258	246
Malignant neoplasm, lung, bronchus ..	203	213	226	194	220
*Circulatory disease ..	213	163	155	165	165
Accidents, other than motor vehicle accidents	79	67	92	104	97
Malignant neoplasm, stomach	84	74	87	91	93
Hypertension with heart disease	77	85	80	88	71
Malignant neoplasm, breast	68	81	75	69	69
*Diseases of respiratory system	61	51	76	56	60
Motor vehicle accidents	50	45	49	36	50
Congenital malformations	31	24	31	41	45
Suicide	39	36	33	38	45
Malignant neoplasm, uterus	29	19	42	31	39
Ulcer of stomach and duodenum ..	31	33	32	36	39
Diabetes	35	31	37	39	28
Influenza	12	1	57	27	24
All other external causes	16	21	15	16	18
Leukaemia, aleukaemia	15	22	19	17	18
Tuberculosis, respiratory	9	11	11	6	13
Gastritis, enteritis and diarrhoea	14	13	8	8	11
Nephritis and nephrosis	15	12	14	19	11
Hyperplasia of prostate	10	14	14	12	8
Other infective and parasitic diseases ..	13	4	5	6	7
Tuberculosis, non-respiratory	3	1	8	9	5
Syphilitic disease ..	2	1	5	2	4
Meningitis	—	5	2	3	3
Pregnancy, childbirth, abortion	2	2	5	1	1
Acute poliomyelitis ..	—	—	—	—	—
Diphtheria	—	—	—	—	—
Measles	1	—	—	—	—
Whooping cough ..	—	—	1	—	—

*Not given otherwise in table

ADMINISTRATION

BY

C. V. TUBB, D.P.A., F.H.A.

Administrative Officer

MANAGEMENT

The major building projects for the Health Committee did not progress during 1972 in accordance with the timetables prescribed in the networks that had been prepared for them. This was partly due to the power crisis that occurred in the early part of the year and partly to the national building strike which took place during the late summer.

However, the extensions to the Ambulance Service Headquarters at Beechdale Road were completed in April and the Bulwell Health Centre was completed by the end of July.

Progress on the St. Ann's Health Centre was held up considerably by the national building strike and completion has been delayed by some two or three months. It is anticipated that the centre will be ready by the end of March 1973.

Job specifications have now been drawn up for all of the posts in the Health Services and the appropriate job evaluation is now being undertaken by the Establishment Officer. This is an exercise that will have been well worthwhile undertaking, especially in view of reorganisation which will have effect from the 1st April 1974.

The Medical Officer of Health attended a Senior Management Course at the Civil Service College, Sunningdale Park, during May and June and other senior members of the staff undertook management courses of varying lengths. The financial provision for training in management techniques has again been expanded in the 1973-74 budget.

The Director of Nursing Services was offered a short-term Fellowship tenable at the University of Nottingham by the University Authorities and the Department of Health and Social Security. The Fellowship is in connection with the establishment and running of courses designed to help senior staff to prepare themselves for reorganisation of the National Health Service and covers the period from October 1972 to September 1973. The necessary leave of absence was granted by the City Council.

AMBULANCE SERVICE

In the annual report for 1971 reference was made to expansions approved in the City Ambulance Service and to a review proposed to be undertaken during 1972 to assess the impact of the additional vehicles. The review was to be made in two parts, the first part before and the second part after the new vehicles became available. The first part of the survey which took place during January 1972, revealed that emergency work was being dealt with satisfactorily

in that the average time between an emergency call being received and arrival at the scene in 168 cases examined was only 5·3 minutes. In the normal routine day to day work, however, the picture was very different.

Notifications to out-patients specify that they must expect to be collected up to one hour before the time of their appointment at the out-patient clinic. However, nearly one-third of the patients were picked up after the time of their hospital appointment. This is reflected in the analysis of arrival times at hospital in that only some 25% of out-patients arrived before their appointment time and over 70% arrived late. The average time late was, in fact, 36 minutes. A further analysis was made of the delay between the time of the return journey booking received and the actual departure time of the patient. The daily average number of out-patients was 137 and the average delay time was 43 minutes.

The second part of the survey was carried out in September 1972 after six additional vehicles had been made available, together with the necessary number of ambulancemen/women. In fact, the survey showed no significant improvement in the service to out-patients in September compared with January since in spite of the increase in number of vehicles and personnel the number of staff available in September was no higher than in January because of holidays and training. Sickness was also as high in September as in January.

The emergency service still showed satisfactory results in that 187 calls were answered with an average delay of 5·7 minutes. In routine work approximately 35% of patients were picked up after the time of their appointment at the out-patient clinics, approximately one-third of patients arrived at hospitals before the time of their appointment whilst most of the remainder were late, with an average time late being 40 minutes and the average delay between time return journey booked and departure time was 46 minutes.

In view of the inconclusive nature of the results of the second survey it is proposed to conduct another survey into the position in January 1973 when weather conditions and staff availability should be similar to those in January 1972. This may permit a more valid comparison which may prove of assistance, if not to the present Health Committee. then to the Area Health Authority of the reorganised National Health Service.

Medical Examinations

The total number of medical questionnaires received for entry to the superannuation scheme in 1972 was 1,216, compared with 1,041 in 1971. Of these 1,043 were accepted on the basis of the answers contained in the questionnaire, compared with 869 in 1971. In the remaining 173 cases, the Medical Officer of Health required a full medical examination. This figure compares with 170 the previous year.

The results of the medical examinations are as follows:—

Category	*No.*	
	1972	1971
Accepted as being suitable for employment and fit to enter the superannuation scheme	**143**	133
Suitable for employment, but not for superannuation	**13**	5
Suitable for employment but superannuation deferred for varying periods	**14**	29
Unsuitable for employment	**3**	2
Unfit to return to original post but capable of light duties	—	1
	173	170

In addition, 34 requests were received from Departments of the Corporation for medical examinations for possible early retirement, compared with 33 in 1971. The following table shows the results of such medical examinations:—

Category	*No.*	
	1972	1971
Examined and recommended for retirement on medical grounds	**29**	31
Examined but decision deferred for one month	**1**	—
Examined once—employee subsequently resigned post	**1**	—
Examined—fit to resume normal duties	**3**	2
	34	33

There was one request for advice as to whether or not a particular employee was fit for insurance purposes. The employee was examined and found fit to drive a mechanically propelled vehicle on the public highway.

There were 23 requests for advice as to whether or not a particular individual was fit to resume normal duties after a period of illness, compared with seven such requests the previous year. The following table shows the results of such examinations during 1972:—

Category	*No.*
Retirement recommended on medical grounds	8
Unfit to resume normal duties	3
Referred for psychiatric report	1
Not wholly unfit for duty—requires less responsibility	1
Unfit for present duty, but capable of other work	1
Unfit for duty at present—awaiting operation	1
Fit for light work—review in 3 months	1
Fit to remain in post—review in 6 months	2
Fit to resume full normal duties	5
	23

The administrative staff are heavily engaged in the work preparatory to reorganisation of the National Health Service in 1974. The Administrative Officer is a member of four working groups of the Area Health Joint Liaison Committee for Nottinghamshire, whilst the Assistant Administrative Officer, the Senior Clerk, Administration and the Senior Clerk, Maternal and Child Health are each members of one working group. This involvement with the working groups imposes a considerable extra strain on the members of the administrative staff concerned since these extra duties are carried out in addition to the normal work of the department.

The collection of information for the Area Profile has also imposed a considerable extra strain, not only on members of the administrative but also on members of the clerical staff of the department.

A full description of the activities relating to National Health Service reorganisation appears later in this report.

Mortuary

This was the second full year of operation of the new mortuary facilities provided at the General Hospital.

During the year there were 938 bodies, the responsibility of the local authority, received into the mortuary and autopsies to determine the cause of death were performed on 861 of them, of which 12 were carried out by a Home Office Pathologist. In the previous year 836 bodies were received and 787 autopsies carried out.

It is interesting to note that of the bodies admitted 53 were the result of road traffic accidents, five were industrial accidents and five were recovered from the River Trent.

Nottingham Crematorium

The total number of cremations was 4,791 an increase of 139 over 1971. 1,192 were the subject of coroners' enquiries and post mortem examinations were requested by a deputy medical referee in three cases.

The following tables compare the figures for 1972 with those of previous years. The Medical Officer of Health is the Medical Referee and deputy medical referees are the Deputy Medical Officer of Health and the Principal Medical Officer.

	All Cremations			*Cremations of City Residents*			
Year	*No.*		*Alteration from previous year*	*No.*		*Alteration from previous year*	*Percentage of all City deaths*
1960 ..	3,658	—	7.9%	1,692	—	2.2%	49.2%
1961 ..	3,796	+	3.8%	1,944	+	14.9%	50.5%
1962 ..	3,818	+	0.6%	1,915	—	1.5%	50.2%
1963 ..	3,807	—	0.3%	1,865	—	2.6%	51.68%
1964 ..	4,031	+	5.9%	1,980	+	6.2%	54.94%
1965 ..	4,206	+	4.3%	2,028	+	2.4%	55.47%
1966 ..	4,354	+	3.5%	2,209	+	8.9%	56.09%
1967 ..	4,108	—	5.7%	2,118	—	4.1%	60.06%
1968 ..	4,468	+	8.8%	2,282	+	7.7%	61.46%
1969 ..	4,611	+	3.2%	2,395	+	4.9%	61.82%
1970 ..	4,766	+	3.4%	2,426	+	1.3%	62.30%
1971 ..	4,652	—	2·4%	2,390	—	1·5%	65·86%
1972 ..	4,791	+	3·0%	2,450	+	2·5%	64·59%

CREMATION AND RESIDENCE

Place of Residence	*Number of Cremations*				
	1972	1971	1970	1969	1968
City	2,450	2,390	2,426	2,395	2,282
County excluding West Bridgford ..	1,752	1,652	1,740	1,623	1,552
West Bridgford ..	289	295	295	235	268
Other areas	300	315	305	358	366
TOTAL	4,791	4,652	4,766	4,611	4,468

Department of Health and Social Security Sickness Return

Average Number of sickness claims per week

	1972	1971	1970	1969	1968
January ..	2,385	1,679	3,374	2,175	2,450
February ..	2,537	1,365	1,611	1,957	1,980
March ..	1,983	1,572	1,452	2,028	1,889
April ..	1,674	1,188	1,472	1,451	1,180
May ..	1,622	1,203	1,199	1,311	1,282
June ..	1,599	1,222	993	1,242	1,140
July ..	1,677	1,220	1,096	1,219	1,224
August ..	1,608	1,114	1,046	1,146	1,177
September ..	1,935	1,515	1,279	1,373	1,294
October ..	2,429	2,035	1,509	1,493	1,609
November ..	2,404	1,995	1,147	1,509	1,616
December ..	2,653	1,725	948	1,992	1,326

Population

The Registrar General's estimate of the population of the City of Nottingham was 294,420 on 30th June 1972, a decrease of 2,330 from the previous year. The highest recorded population of 315,050 occurred in 1963 when the influx of immigrants was highest. The continued decline is due in part to a decrease in the number of immigrants received and in part to movement of the more well to do from the city to the outlying rural and urban areas adjacent to the City.

Live Births

Net live births totalled 4,634 a decrease of 467 over last year giving a rate of 15·74 per 1,000 population as compared with 17·19 for the previous year. The estimated birth rate for England and Wales for 1972 was 14·8 per 1,000 population. The following table shows the fluctuations during the past 15 years of the live birth rate and illegitimate birth rate as compared with those of the country as a whole.

	Live Births			Illegitimate Live Births		
	Nottingham		England and Wales	Nottingham		England and Wales
Year	Number	Rate	Rate	Number	% of Total	% of Total
1957 ..	5,478	17.52	16.1	457	8.3	4.8
58 ..	5,577	17.82	16.4	514	9.2	4.9
59 ..	5,624	17.95	16.5	547	9.7	5.1
60 ..	5,729	18.26	17.2	524	9.1	5.4
61 ..	5,823	18.59	17.6	646	11.09	5.9
62 ..	6,243	19.86	18.0	759	12.16	6.6
63 ..	6,392	20.29	18.2	857	13.41	6.5
64 ..	6,221	19.95	18.5	843	13.55	7.2
65 ..	6,070	19.52	18.1	883	14.55	7.7
66 ..	6,021	19.41	17.7	876	14.54	7.9
67 ..	5,702	18.41	17.2	900	15.78	8.4
68 ..	5,944	19.48	16.9	921	15.49	8.5
69 ..	5,444	18.00	16.3	911	16.70	8.0
70 ..	5,013	16.68	16.0	925	18.45	8.3
71 ..	5,101	17·19	16·0	930	18·23	8·4
72 ..	4,634	15·74	14·8	901	19·44	9·0

Stillbirths

After adjustment for inward and outward transfers stillbirths numbered 60 producing a rate of 12·78 per 1,000 total births as compared with 62 with an equivalent rate of 12·00 in 1971. The comparable rate for England and Wales was 12·00 per 1,000 births. An analysis appears in the table on page 127.

Infant Mortality

Deaths of infants under one year numbered 101, the infant mortality rate being 21·80. The rate in 1971 was 21·17 per 1,000 live births. Of the 101 infant deaths, 24 were of illegitimate children, 11 occurring in the neonatal period. Variations in the infant mortality rate, both for legitimate and illegitimate births and for England and Wales are shown for the period 1963-1972.

Infant Mortality — Nottingham and England & Wales 1963—1972

Year	*Legitimate Infants* Rate per 1,000 legitimate live births	*Illegitimate Infants* Rate per 1,000 illegitimate live births	*All Infants* Rate per 1,000 live births	
			Nottingham	*England and Wales*
1963 ..	24.57	32.67	25.66	21.1
1964 ..	20.45	40.33	23.15	19.9
1965 ..	26.22	32.84	27.18	19.0
1966 ..	27.40	33.10	29.39	18.9
1967 ..	21.03	13.33	19.82	18.3
1968 ..	19.71	26.06	20.70	19.0
1969 ..	23.00	19.00	22.00	18.0
1970 ..	21.53	27.03	22.54	18.0
1971 ..	19·38	31·18	21·17	18·0
1972 ..	**20·63**	**26·64**	**21·80**	**17·0**

Neonatal Mortality

There were 55 deaths of infants during the first four weeks of life, giving the neonatal mortality rate of 11·87 per 1,000 live births as compared with 11·76 in 1971. The rate for the country as a whole was 12·00 per 1,000. An analysis appears in the table on page 126.

Perinatal Mortality

Still births and deaths of infants under one week numbered 108 resulting in a perinatal mortality rate of 23·01 per 1,000 total births. In 1971 the rate was 22·47.

Maternal Mortality

2 deaths were registered during the year compared with two in 1971. Details are given on page 58.

Deaths

There have been 3,790 deaths registered during the year. The death rate from all causes was 12·87 per 1,000 population as compared with a rate of 12·23 in 1971. Of the total deaths 71·1% were of persons aged 65 years and over. The death rate for England and Wales in 1972 was 12·1 per 1,000 population.

A table giving the population, birth, death, infant and maternal mortality rates is given on page 4.

Deaths of Nottingham residents by age groups for the decade 1963-1972 are shown below.

Deaths by Separate Age Groups 1963—1972

Age	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Under 1 year ..	164	144	165	170	113	123	120	113	108	101
1—4 years ..	23	24	22	21	29	24	24	26	17	27
5—44 years ..	185	205	175	184	147	165	175	175	157	146
45—64 years ..	848	859	881	912	850	931	911	871	850	820
65 and over ..	2,547	2,372	2,413	2,651	2,417	2,603	2,644	2,709	2,497	2,696
TOTAL DEATHS	3,767	3,604	3,656	3,938	3,556	3,846	3,874	3,894	3,629	3,790

Marriages

There were 2,827 marriages during the year, the marriage rate being 19·2 compared with a rate of 17·9 in 1971.

AREA JOINT LIAISON COMMITTEE (NOTTINGHAMSHIRE AREA) REORGANISATION OF THE NATIONAL HEALTH SERVICE

BY

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AND

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The unification of the existing tripartite National Health Services will take effect from the 1st April 1974. During 1972, the initial preparation for reorganisation began in earnest. In February 1972, the City and County of Nottingham was one of seven areas visited by a Management Study Group, set up by a Steering Committee of the Department of Health and Social Security. A Management Study Team was organised by the Steering Committee to carry out its field work. The Management Study Team began its preparatory work in July 1971 when, as a first phase of the study, they developed management hypotheses which they hoped would suggest solutions to the many and varied controversial issues in reorganisation. The second phase, in 1972, included the testing of these hypotheses in typical areas of the country. The Study Group visiting Nottingham comprised a management consultant from McKinsey and Co. Inc., and two senior administrators (one lay and the other medical) from the Department of Health and Social Security. A document termed "A first tentative hypothesis" was the basis of local discussion with all three branches of the N.H.S. in Nottingham. By discussion and interchange of ideas the intention was that this tentative hypothesis could be modified into realistic proposals for a local N.H.S. administrative structure. By the end of June, discussions (such as there were) ended and proposals were put forward in a document by the Group. This was entitled "Realizing the Objectives of National Health Service Reorganisation in Nottingham". The document, together with the results obtained from other areas, was used ultimately to help prepare the central Steering Committee's proposals and recommendations for management arrangements for the new health service countrywide.

A few weeks earlier (at the end of May 1972) the Hunter Report (i.e. the Report of the Working Party on Medical Administrators), was published. This was expected to be of importance to the local authority Health Departments because it contained definite recommendations for the future of community medicine, community physicians and the way in which present public health administration could be changed into a new form of combined medical administration.

Also, during June 1972, the Department of Health and Social Security began to publish the following preliminary circulars on National Health Service Reorganisation:—

(i) *HRC(72)1—Reorganisation Circulars*

The first simply announced the Department's intention to publish such circulars.

(ii) *HRC(72)2—Boundaries Outside London*

The second made proposals for new regional health boundaries outside London and showed that Nottinghamshire would become part of Health Region 3, comprising the new counties of Derbyshire, Leicestershire, Lincolnshire, Nottinghamshire and four metropolitan districts in South Yorkshire which would be the same as the existing Sheffield Hospital Board Region. In the whole country there would be 14 regions outside London, i.e. the same number as existing Regional Hospital Boards.

(iii) *HRC(72)3—Joint Liaison Committees*

The publication of the third circular heralded a new spurt of activity. It dealt with the formation of Joint Liaison Committees to be set up locally to co-ordinate the preparatory work which would fall to existing authorities, principally the Regional Hospital Board, the Hospital Management Committees, the Executive Council, and the Local Health Authorities, who would, within the various J.L.C's, collate jointly the information needed by the new shadow health authorities. These shadow authorities would be:

1. The new Regional Health Authority for the No. 3 Health Region, (just described).
2. A new Area Health Authority for Nottinghamshire, one of eight health areas comprising the new No. 3 Health Region.

The Nottinghamshire health area would be a teaching area because of the University of Nottingham Medical School. The shadow authorities would come into being following the enactment of National Health Service Reorganisation legislation during 1973, which would give them legal existence. This would likely be after the new local government elections in May 1973. The shadow authorities would exist, therefore, several months before 1st April 1974 when they would become the substantive health authorities.

Thus, in order to prepare for the two new shadow health authorities, two Joint Liaison Committees had to be set up:

1. A Regional Joint Liaison Committee for the new No. 3 Health Region.
2. An Area Joint Liaison Committee for Nottinghamshire.

As well as their preparatory information-collecting work, they would have to undertake a preliminary assessment of matters falling for decision to the new authorities when these came into being.

The first preliminary meeting was convened by Mr. W. N. Judd, the Principal Regional Officer of the Department of Health and Social Security in Nottingham on the 21st July 1972, when the Area Joint Liaison Committee for Nottinghamshire was established. Dr. W. H. Parry, Medical Officer of Health, and Mr. S. A. Dobson, Assistant Solicitor for the Town Clerk, represented the Nottingham City Council and other bodies were represented, generally by two members, as follows:—

Nottinghamshire County Council
Notts. and Nottingham Executive Council
Berry Hill Hospital Management Committee
Nottingham and District Hospital Management Committee
Nottingham University Hospital Management Committee
Trent Vale Hospital Management Committee
Worksop and Retford Hospital Management Committee
Mansfield Hospital Management Committee
Sheffield Regional Hospital Board

Initially there were no representatives from the University or Medical School. Within a short period of time, Professor S. Shone (part-time Professor of Medical Administration, University of Nottingham) was appointed as their representative. A deputy was appointed for each member of the Committee. The late Mr. D. G. Davies, Chief Administrative Officer of the Nottingham University Hospital Management Committee, was appointed Chairman, with Dr. N. Colley of the Notts. and Nottingham Executive Council, as Vice-Chairman. Mr. A. Ashworth, Group Secretary of the Mansfield Hospital Management Committee, was appointed Secretary. It was the intention that Joint Liaison Committees were to be informal consensus groups whose business would be conducted without resorting to voting which could not be binding on member authorities. Votes could be used to assess the balance of opinion on matters such as points of procedure and committee appointments. The possibility of unresolvable differences of opinion was faced from the beginning. These might be reported to the new shadow authority or to the constituent authorities or to the Department of Health and Social Security, if earlier action should be needed.

Most of the work of National Health Service Reorganisation in Nottingham in 1972 arose directly out of the deliberations of the Area Joint Liaison Committee. The work of the Health Department in this field was, therefore, mostly, but not entirely, carried out at area level, so the account of the formation and work of the Area Joint Liaison Committee is dealt with first.

The establishment of a Joint Committee of the elected members of constituent authorities was not recommended. Instead, Committee members would report to their respective authorities when deemed expedient and appropriate. Co-option of many professional interests to advise and work with the Joint Liaison Committee would be arranged. Local Authority Social Services Departments would be represented by the invited Local Health Authority members. It was agreed that the Department of Health and Social Security should be represented by observers and this raised questions of the monitoring function over the Area J.L.C. of the Department and of the Regional Joint Liaison Committee yet to be formed. Mr. D. G. Davies, the Chairman, Dr. W. H. Parry, Medical Officer of Health for the City, and Dr. N. Colley, general practitioner of the Executive Council, were nominated to serve as representatives of the Nottinghamshire Area Joint Liaison Committee on a proposed Regional Joint Liaison Committee.

The Area J.L.C. agreed to meet on the third Friday of every month from September 1972. As already indicated, the basic tasks of the Area J.L.C. were to provide full and systematic information and appraisal of existing services, to identify problems in the transition from the old to the reorganised management structure and, as far as possible, make recommendations about the setting up of the new area authority and the district management structure. The information, identification of problems and recommendations should be ready in time to present to the new shadow area authority.

White Paper on N.H.S. Reorganisation

In August 1972 the White Paper on National Health Service Reorganisation for England was presented to Parliament by the Secretary of State for Social Services. This contained the main features as they were proposed for the reorganised services.

Here mention is made only of Section VI which deals with the collaboration arrangements between the new Local Authorities and the proposed Area Health Authorities and of Section XIV describing a sound management structure for the new health services, which deals with specialists in community medicine and refers to the Hunter Report on the Working Party on Medical Administrators. The White Paper was covered by a fourth Health Reorganisation Circular, HRC(72)4 entitled "Command Paper—National Health Service Reorganisation: England".

Early in September 1972 the Management Study Steering Committee of the Department of Health and Social Security published its "Management Arrangements for the Reorganised National Health Services". This document expounded in greater detail on the general principles already proposed.

The same month, the Area Joint Liaison Committee set up Joint Working Groups as follows:—

J.W.G. 1 — *Planning and Resources* (excluding staff)

This working group dealt principally with existing health service premises, including hospitals, health clinics and centres and other accommodation occupied by transferable staff. It was concerned with programmes of capital building development.

J.W.G. 2 — *Finance*

Including financial computer arrangements, the payment of salaries and wages and financial matters generally.

J.W.G. 3 — *Supplies, Contracts and all types of Technical Services*

Existing and future arrangements for these.

J.W.G. 4 — *Maintenance of Buildings and Engineering Services.*

J.W.G. 5 — *Manpower*

Including training and with a special sub-section for nursing staff. Medical staff were excluded for consideration by this group and were to be dealt with by Joint Working Group 9.

J.W.G. 6 — *Health Care (Patient) Services*

This working group dealt with services to patients and the public now administered by the various authorities and was to make recommendations for the integration of these services under the new Area Health Authority.

J.W.G. 7 — *Patient Records, Information and Statistics*

This working group was to deal with existing systems, the transfer and continuation of records, statistics and information and to recommend, if necessary, new procedures to be adopted in this field.

J.W.G. 8 — *Ambulance Services*

This working group's responsibilities included the arrangements for the amalgamation of the two services (City and County) and recommendations for future operational policies, premises and staff.

J.W.G. 9 — *Medical and Dental Services*

This working group was to consider medical and dental responsibilities and interests and was to include community medicine in its brief.

The joint working groups proceeded with an initial phase of collecting information from the existing health authorities in the various fields of work and compiling schedules of such information which would be useful to the new shadow Area Health Authority. They were busily engaged on this work up to the end of the year.

A further five circulars were issued by the Department of Health and Social Security on various matters which were the concern of the Area Joint Liaison Committee and its Working Groups. These were:—

HRC(72)5	Accommodation for Area Health Authorities.	September 1972
HRC(72)6	Working Party on Financial Administration.	November 1972
HRC(72)7	Preparation of Area Profile (Details of existing health service resources, developments in hand and current forward plans for the area to be prepared during the first quarter 1973).	December 1972
HRC(72)8	Filling of Vacancies by Existing Authorities Before 1st April 1974.	December 1972
HRC(72)9	Community Health Services	December 1972

The last one, HRC(72)9 contained a timetable of guidance on Community Health Services to be given during 1973 and up to 1st April 1974. The guidance would be for action by the Joint Liaison Committees or by the new health authorities when these were formed.

Departmental Membership of the Joint Working Groups

J.W.G. 1 — Dr. W. H. Parry
Medical Officer of Health (or Dr. K. D. Mason, Deputy M.O.H.).

Mr. C. V. Tubb
Administrative Officer

Mr. S. A. Dobson
Assistant Solicitor in the Town Clerk's Department and member of the Joint Liaison Committee.

J.W.G. 2 — Mr. C. V. Tubb
Administrative Officer

Mr. G. T. Southern
Assistant Treasurer from the City Treasurer's Department

J.W.G. 3 — Mr. F. F. Pellatt
Assistant Administrative Officer

J.W.G. 4 — Mr. A. L. Kirchin
Senior Clerk

Mr. J. A. Pugh
Surveyor from the City Estates Surveyor's Department

J.W.G. 5 — Mr. C. V. Tubb
Administrative Officer

Mr. F. Wilkinson
Chief Ambulance Officer
(Ambulance Service representative)

Dr. K. M. Taylor
Establishment Officer in the Town Clerk's Department

J.W.G. 6 — Dr. W. H. Parry
Medical Officer of Health (or Dr. K. D. Mason, Deputy M.O.H.)

Miss P. Morton
Director of Nursing Services

Dr. E. J. More
Principal School Medical Officer

J.W.G. 7 — Miss P. Morton
Director of Nursing Services

Miss C. M. Boughey
Senior Clerk, Maternal and Child Health Section

Mr. S. Palmer
School Health Service

J.W.G. 8 — Dr. W. H. Parry
Medical Officer of Health and Chairman of this Group

Mr. F. Wilkinson
Chief Ambulance Officer

Mr. C. V. Tubb
Administrative Officer

Mr. D. Rose
Principal of the Financial Planning Section, City Treasurer's Department

J.W.G. 9 — Dr. W. H. Parry
Medical Officer of Health (or Dr. K. D. Mason, Deputy M.O.H.)

National Health Service Reorganisation Bill

The Bill was laid before Parliament in November 1972 and began its passage through the House of Lords. It gave effect to the policies set out in the White Paper of August 1972—National Health Service Reorganisation: England (Command 5055).

The Bill aims to remove the present distinction between hospital and special services and their administration and the administration of personal health services, the function of local health authorities and unify these with family practitioner services under new health authorities. It will, therefore, abolish, when it passes into law, the office of Medical Officer of Health and the powers of the local health authority in the field of personal health. This will come into effect on 1st April 1974.

The Bill's other features are of interest. Provision of means of representing the interests of the community and of collaboration between the new National Health Services and other agencies in the health and social care field, including the new local authorities are in it. The Bill will establish Health Service Commissioners for England to investigate complaints against the new Health Service Authorities. It ensures that the views of the health profession are given full weight in planning and management and it continues National Health Service responsibility for providing facilities in support of the training of doctors and dentists by the universities.

Health District Structures for Nottinghamshire

One of the major tasks of the Area Joint Liaison Committee was to consider the division of the new health area into health districts. The criteria for identifying health districts were set out in the report of the Management Study Steering Committee (mentioned earlier) published in September 1972. It was entitled "Management Arrangements for the Reorganised National Health Service" and became known as "the grey book". In spite of its advice, no agreeable solution for the Nottinghamshire health area was found by the end of 1972.

The chief difficulty was that no rational acceptable way could be devised by the Joint Liaison Committee or by any of its Working Groups to divide South Nottinghamshire (the City of Nottingham and the south of the county, including the County Urban Districts of Arnold, Carlton, Beeston and Stapleford, Hucknall and West Bridgford) into operational health districts. The north of the county could form a small, but convenient health district round Worksop and East Retford. Central Nottinghamshire could form an almost ideal district, including Mansfield and Newark, with its centre at the former. To identify appropriate health districts in South Nottinghamshire proved more difficult. The hospital medical consultants and the University Medical School wished to see one combined district in the south. The lay administrators of the three district general hospitals in the City were less certain that one large district in the southern part of the health area would be in the best interests of the new health service. Various ways of dividing South Nottinghamshire were put forward, some of them ingenious, but no one of them was completely convincing or practicable for a unified service.

It was the conviction of this department that the identification of health districts should take proper account of the new local government district boundaries (in particular the new Social Services) in order to promote the development of viable community health. However, the matter was not settled and a solution is awaited during 1973 when more specific advice will be forthcoming from the Department of Health and Social Security.

Other important tasks of the Area Joint Liaison Committee were concerned with preparation for the advent of the new shadow Area Health Authority (to be set up after mid-1973) such as accommodation and secretarial help. Sites for new Area and District headquarters had to be recommended. The acquisition of new accommodation and the use of existing premises were in the Committee's brief. Policies, procedures and staff requirements for the future had to be studied in all parts of the health service as well as the way in which the new management structure could be adopted in Nottinghamshire. It was essential to consult staff interests at every stage and keep everyone informed of the Committee's deliberations. A monthly bulletin of developments and progress was circulated.

No tasks were completed before the end of the year, although progress was made with many of them. In some respects, the failure to identify health districts in Nottinghamshire delayed work on the other tasks and in the Joint Working Groups.

Late in December, the question of accommodation for the new Area Health Authority (HRC(72)5 above) was raised when an accommodation sub-committee of the Area Joint Liaison Committee reported its findings to the Committee. The sub-committee's recommendation was that the Department of Health and Social Security should obtain the part-tenancy of a building which was proposed to be erected on the Nottinghamshire County Cricket Club ground at Trent Bridge. Both adequate office accommodation and car parking space would be available. Moreover, it seemed probable that County Hall, West Bridgford, would be retained as the new County Council Headquarters after 1st April 1974 and the proposed location of the new Area Health Authority in close proximity to the new Local Authority was highly desirable. Again, it had also been proposed that the new County Social Services Department should be located outside County Hall on the Trent Bridge site and the proposals envisaged the new department being a joint user of a building with the new Area Health Authority which was considered an ideal arrangement for collaboration and liaison purposes.

Nevertheless, such advice as the Department of Health and Social Security was prepared to give at that stage indicated its reluctance to provide new accommodation for any Area Health Authority at the outset and that the Department would require firm assurance that accommodation, even if less suitable and involving the dispersal of certain departments, could not be found in existing resources. It was evident, however, that suitable existing accommodation would not become available in or near Nottingham in 1974, and the Committee decided unanimously to convey its strong recommendation for acquisition of accommodation on the Trent Bridge site to the Department and seek authority to negotiate for this.

Regional Joint Liaison Committee

Dr. W. H. Parry, the Medical Officer of Health, was one of the three members of the Nottinghamshire Area Joint Liaison Committee put forward by the latter Committee in September 1972 for membership of the Regional Joint Liaison Committee of the proposed No. 3 health region of the reorganised National Health Service. At this meeting, Dr. H. I. Lockett, County Medical Officer for Nottinghamshire, agreed to act as Dr. Parry's deputy on the Committee. The Regional Committee had its first meeting, with Dr. W. H. Parry in attendance, at Balderton Hospital, Newark, on 29th September 1972.

This Committee had a number of functions as did the Area Joint Liaison Committee. It had to co-ordinate the work of Area Joint Liaison Committees and generally endeavour to establish a common approach to similar problems in the area. However, the Regional Joint Liaison Committee would not monitor the work of the Area Joint Liaison Committees. The Area Committees were not accountable to their Regional Committee, nor, strictly speaking, would the Department of Health and Social Security monitor the work of all the Liaison Committees. Rather, each body would want to be aware of the deliberations and the progress of work of the others. Therefore, an "observer" system was developed whereby the central department had, by agreement with the Liaison Committees, observers attending them. The Regional Joint Liaison Committee had an observer at each Area Joint Liaison Committee. The latter had representatives on the Regional Joint Liaison Committee.

Another function of the Regional Joint Liaison Committee was to undertake training on reorganisation for all the staff of the existing health services in the Region. All members of the Area Joint Liaison Committees and of the Regional Committee attended a one-day conference held in Nottingham on 30th November 1972. Further day conferences for area staff were arranged in all areas between December 1972 and February 1973. These would continue until all staff above a certain grade had had an opportunity to attend. Three-day residential "workshops" were also planned to be held on university campuses in the region during university vacations in 1973. Nottingham would have one in April 1973. Like the Area Committees, the Regional Joint Liaison Committee also had responsibility to promote staff consultation and to keep staff informed of developments and so the Committee began to establish a regular staff information bulletin.

The Committee had to make preparations so that the functions of the new Regional Health Authority could be carried out. The main functions would be:—

1. Planning for the Health Region and giving guidelines for planning at area level
2. Allocating resources to the Health Areas and deciding priorities and approving area plans

3. Monitoring the work of Area Health Authorities
4. The development of medical specialties
5. The deployment of medical manpower
6. The management of the design and construction of major and capital building projects
7. The provision of some operational services, such as the blood transfusion service, and the more highly specialised management services and support for university medical and dental teaching.

The Regional Joint Liaison Committee could assist with the development of improved computer operations for the new service and with the reorganisation of financial administration.

The Committee had to make preparation for the advent of the new shadow Regional Health Authority just as the Area Committees were having to do at their level. The Regional Joint Liaison Committee set up Working Groups for these functions as the Areas were doing, or had done. These were fewer than at Area level. They covered Training and Information, Ambulance and Transport Services, Inter-Regional and Inter-Area Arrangements, Finance and Computers.

The Regional Joint Liaison Committee was given funds by the Department of Health and Social Security to finance the administrative work of all the Liaison Committees in the region and these amounted to £8,000 in the first instance. Other monies, to meet further expenses, might have to be provided by existing authorities.

Finally, the vexed question of the location of the new Regional Health headquarters had to be settled. Late in December 1972 the Secretary of State for Social Services announced his proposal to locate the headquarters at Nottingham. This, however, would not happen in 1974, but would be brought about between 1976 and 1978.

EPIDEMIOLOGY

BY

COSTA GAZIDIS, M.B., B.Ch., M.F.C.M. D.S.M.

Senior Medical Officer

Public health epidemiology is still largely concerned with communicable disease, despite the declining importance of these diseases as a source of community ill-health. It can be held that it is this emphasis which contributes to keeping these diseases at bay. But it is also clear that epidemiology will be increasingly concerned with non-communicable diseases in the future. This tendency has been growing in Nottingham in the past few years and it must be hoped that the reorganised National Health Service will reinforce this need for systematic epidemiological investigations of all diseases and health hazards in every community. This is the indispensable prelude to formulating policies for preventing disease.

INFECTIOUS DISEASES

The main source of information about this group of diseases continues to be the statutory notifications received from general practitioners. These relate to the notifiable diseases (as listed below). Other sources of information are laboratory reports, hospital letters, school absenteeism returns and personal investigations of uncommon incidents. Reports from the public health inspectorate, nursing staff and members of the public are also fruitful sources of information.

NOTIFIABLE DISEASES 1968-1972

Notifiable disease	1972	1971	1970	1969	1968
Acute encephalitis:					
infective	2	—	3	1	4
post infectious ..	—	1	2	10	4
Acute meningitis ..	18	13	18	19	9
Acute poliomyelitis					
paralytic	—	—	—	—	—
non-paralytic ..	—	—	—	—	—
Cholera	—	—	—	—	—
Diptheria	—	—	—	—	—
Dysentery	35	44	98	60	74
Food poisoning ..	33	65	42	24	23
Infective jaundice (*) ..	62	104	81	44	33
Leprosy	2	2	—	—	1
Leptospirosis	1	—	—	—	—
Malaria	3	—	1	—	3
Measles	609	232	3,958	330	1,380
Ophthalmia neonatorum ..	2	1	2	—	3
Paratyphoid fever ..	1	—	—	1	—
Scarlet fever	103	39	79	37	88
Smallpox	—	—	—	—	—
Tetanus	—	—	—	—	—
Tuberculosis	115	108	117	112	121
Typhoid fever	—	—	—	2	1
Whooping cough ..	11	65	112	28	109

(*) Made notifiable in England and Wales in June 1968.

The two main features which are noted in this table are (1) the marked reduction in whooping cough notifications to 11 which is the smallest number ever recorded: (2) on the other hand scarlet fever shows a three-fold increase to the highest total for many years.

Acute Encephalitis

There were two cases notified during the year. The first was a child eight years old who developed symptoms of encephalitis during an attack of mumps. The child was not admitted to hospital and made a full recovery. The other case was a girl 15 years old who died.

Acute Meningitis

There were 18 cases notified during the year and five deaths. There were two infants among the fatalities, both aged 16 months. One died of meningococcal septicaemia and the other from E. coli meningitis. Pneumococcal meningitis caused the death of an eight year old girl with malabsorbtion syndrome and a 75 year old man with lymphosarcoma. The remaining death was in a woman of 87 who was dead on arrival at the hospital and acute meningitis was diagnosed at post-mortem. No bacteriology or virology is available.

Meningococcal meningitis was diagnosed in a two year old boy and a 48 year old woman. The child recovered and the woman was referred to Derby Infirmary.

Of the remaining cases, nine were returned by one general practitioner as acute meningo-encephalitis over a three-week period in July during a mumps epidemic in the northern part of the City. Three children were aged five or less, six were aged 6-10 years, and one was 12 years old. All these children recovered and none of them were hospitalised.

Acute Poliomyelitis and Diphtheria

No cases were reported during the year.

Cholera

During the year this disease established itself in several African countries. Only sporadic cases have been reported in Europe and no cases were reported in the city. One person who developed diarrhoea and vomiting two days after flying in from New Delhi was investigated specifically for cholera, but no organism was isolated.

Dysentery

The total of 35 cases reported represents the lowest number of notifications of this disease since 1946. Erratic notification plays a bigger part in causing fluctuations of reported cases than does the actual incidence. Nevertheless, it is clear that the main trend in the last few years has been downward.

There were three outbreaks involving families. One involved both parents and three of their four children. The causative organism was *Shigella flexneri Type 6*. The incident began when the three week-old baby developed a tummy upset soon after returning home from the hospital. No other members of the family had any recent history of illness. They all reverted to negative within two weeks of the initial infection.

The second outbreak involved a large family of seven. A boy two years old attending Bulwell Day Nursery developed dysentery and *S. sonnei* (untyped) was isolated from his stool. When the other members of the family were screened, all except the father were found to be harbouring the same organism. It took three weeks for every member of this family to be free of the organism.

The third episode involved a nursery school teacher at Croft Day Nursery who developed dysentery, and her two children of nine and four years were found to be harbouring the organism. It took four weeks for the stools to be free of the offending organism, during which time she and the younger child were excluded from the nursery.

Early in the year there was a small outbreak of dysentery at Redcot and Cherry Orchard Children's Homes. A baby of seven months was found to be very weak the day after she was transferred from Redcot to the Cherry Orchard Home. She was admitted to Heathfield Hospital and *S. flexneri Type 3* was isolated from her stools. She spent 10 weeks in hospital during which time *S. sonnei* and *E. coli 086* were also recovered from her stools. By the time she was discharged she had submitted eight negative stools and put on four lbs. in weight. Two days later a girl of seven years at Redcot developed diarrhoea and was found to have the same organism. The staff and children of both institutions were screened and one of the staff members was found to be carrying this organism. No further cases were reported after standards of hygiene improved.

Enteric Fever

A child eight years old was found to have *Salmonella paratyphoid B* (untyped) on admission to Heathfield Hospital with acute gastro-enteritis. He made an uneventful recovery after six weeks. Other members of the family were all negative and the source of the infection was not ascertained.

No cases of typhoid were reported during the year.

Food Poisoning

There were 33 cases of food poisoning notified during the year, all of them due to salmonellosis. The serotypes were as follows:—

Serotype	*Number of Isolations*
Salmonella typhimurium ..	11
,, enteritidis	11
,, agona	7
,, aba	1
,, alachua	1
,, caledon	1
,, derby	1

Salmonella typhimurium

A six month old girl admitted to hospital was found to harbour *Salmonella typhimurium* phage type 10. All the other five members of the family were found to harbour the same organism and her five year old brother had *Shigella sonnei* as well. The girl was taken out of hospital by her mother before the organism had disappeared and she is possibly still a carrier. In another family incident the four members of a shopkeepers' family were found to have this infection (organism not typed). All reverted to negative after six weeks.

Salmonella enteritidis

The 11 cases encompassed two small outbreaks. A girl of 15 who was admitted to Heathfield Hospital with acute gastro-enteritis was found to have an infection from this organism. Her two sisters of 13 and 17 and her mother were also found to be infected.

The other outbreak involved two couples who had eaten chicken at a dinner in a County restaurant. One couple had the expected *Salmonella enteritidis* in the stool but in addition had *Salmonella typhimurium* present. This unexpected finding remained unexplained as the other persons living in the County who were present at the same dinner and developed an illness were found to have *Salmonella enteritidis* alone.

Salmonella agona

Of the seven reported cases only two occurred in a cluster. The other five occurred as single cases with no apparent connection.

It is worth noting in this connection that a 96-year old woman who had been admitted to Heathfield Hospital with *Salmonella agona* in August 1971 was discharged almost a year later. She had contracted the infection during an outbreak of *Salmonella agona* in Sherwood Hospital in 1971 involving 12 patients and 16 people in the community. She made good progress in Heathfield. Several courses of Kanemycin had failed to eradicate the organism but there were 31 negative specimens submitted after the antibiotic had been stopped. There were no other sequelae to the original outbreak.

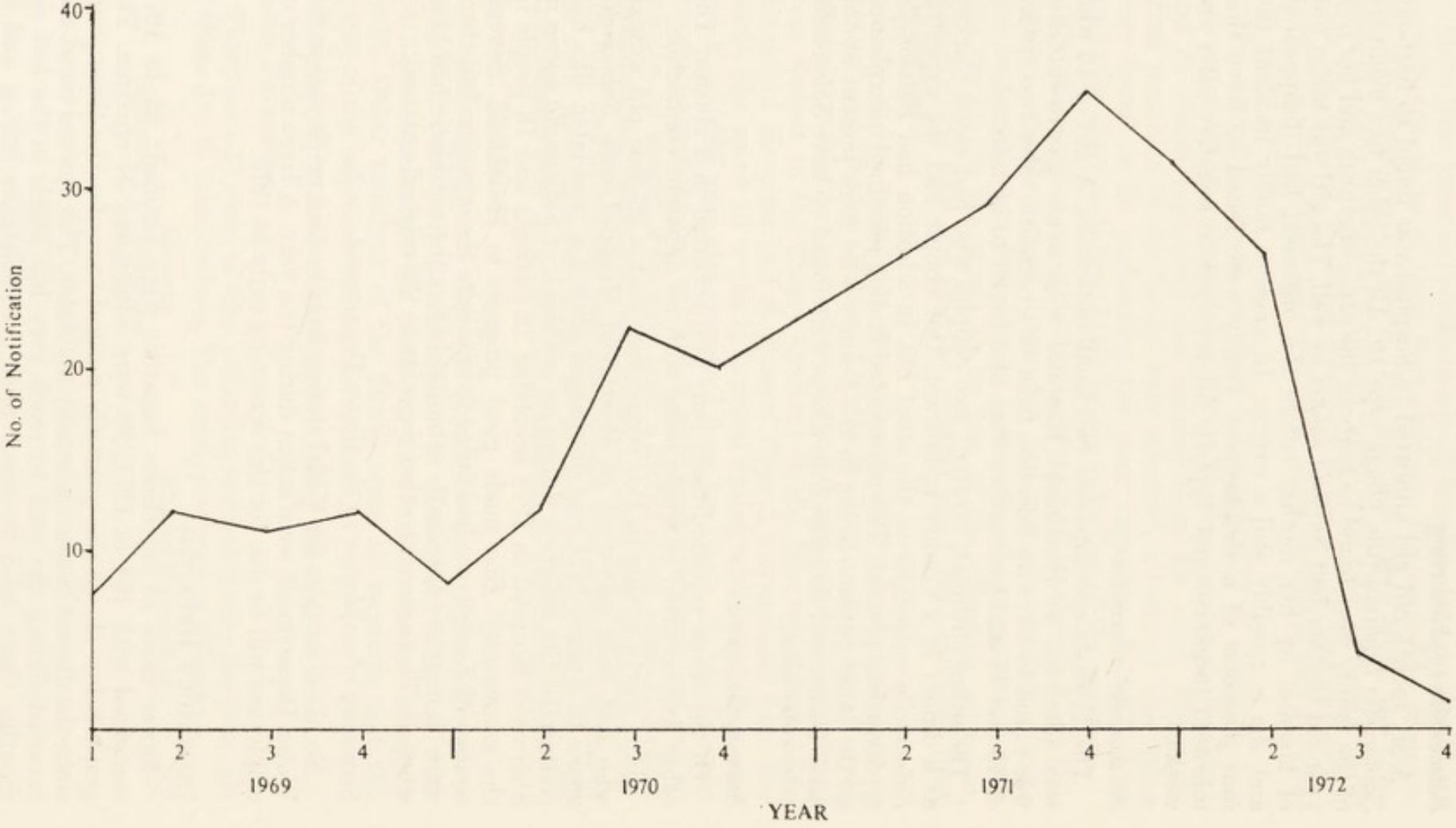
Screening of employees in the Water Department

No blood samples for Widal testing from certain employees in the Water Department were taken during the year. A large number of employees will be due for this screening early in 1973.

Infectious Hepatitis

Fewer cases of infectious hepatitis were notified: 62 in 1972 compared with 104 in 1971. 28 were adults and 34 children. The graph below shows the quarterly notified cases for the three years since the disease became generally notifiable. The upward trend was reversed during the year to reach very low levels in the last six months. Cases tend to occur most frequently in Spring and in

Infective Hepatitis — Quarterly Returns 1969–72



Autumn: and the notified cases probably total around 40% of the numbers in fact occurring. 92% of cases in 1972 occurred in the first six months of the year. One quarter of these were the tail end of a localised epidemic that had occurred in the Autumn of the previous year. The remaining cases were sporadic, with the largest number reported from any one part of the City being eight (six of whom were children from four to nine years).

There were 10 cases (five adults and five children) that required hospital admission, with three deaths occurring. Two were young adults in their twenties. The third was a five year old girl.

One of the adults was a 24 year old woman, who was admitted with anorexia, dark urine and pruritis. She had given birth to a baby boy three weeks before. Prior to this she had been treated for manic-depressive psychosis and suffered from multiple sclerosis with retro-bulbar neuritis. She was diagnosed as having acute infective hepatitis and treated as such. She made good progress and was treated with phenergan, septrin and piriton. The night before she was due to be discharged she was very restless and had a tremor of the hands. On the evening of her discharge her husband arrived in the ward and found her dead in bed. A few minutes before his arrival she had been seen reading in bed and pleased to be leaving, despite the deep jaundice she exhibited. Post-mortem findings were those of acute massive necrosis of the liver.

Leprosy

No new cases were notified during 1972.

Of the four registered cases only one woman remained on the register at the end of the year. She has been attending regularly and is making good progress. During the year a 38 year old man who had been notified in 1971 died of renal failure consequent on amyloidosis. The second patient was a woman of 53 years of age who was referred to the Cochrane Leprosy Assessment Unit in Oxford in January 1972. She was admitted and treated for advanced lepromatous leprosy. Her relatives removed her from the hospital the following month and sent her back to India by air. The third patient also returned to India and her son has reported that she died soon after arrival.

Leptospirosis

One case of leptospirosis was reported during the year, the first time this has happened since the disease was made notifiable in 1968.

A 47-year old man was bitten and scratched on both hands when he intervened in a dog-fight between his Alsatian puppy "Sally" and two guard dogs from a scrap-yard. Within 24 hours of this incident he felt weak and then developed general malaise, headaches, stiffness of the leg muscles and vomiting. He visited the Casualty Department of a local hospital and was given tetanus

toxoid. His condition did not improve and he was finally admitted into hospital with dehydration and jaundice with marked conjunctivitis. Investigations showed agglutination antibodies to *Leptospira icterohaemorrhagica* and *Leptospira canicola*. Leptospira were not found in his urine despite repeated tests. He was discharged from hospital after a two-week stay.

As soon as the Health Department was notified an epidemiological enquiry was launched to ascertain the source of the infection. Blood and urine samples were taken from three Alsatians who shared accommodation with "Sally". The tests showed that the guard dogs were free of infection but "Sally" and one of her kennelmates were excreting leptospira in their urine.

A large rat-infested Corporation tip not far from the patient's home was baited and *Leptospira icterohaemorrhagica* was isolated from both urine and kidney tissue of the one live rat that was caught. (31 dead rats were also caught).

A questionnaire survey of households in the area of the tip did not uncover any further clinical cases.

It is reasonable to assume that the patient contracted the disease from his pet's urine, probably when he was tending her wounds after the fight. The lesions on his own hands would have facilitated entry of the organism at that time. The two dogs in their turn may well have been infected from a rat source or even an unknown infected dog.

This incident highlights the need for extensive rodent control in areas of heavy infestation. This is the main preventive measure necessary to avoid similar incidents. The full implementation of the Agricultural (Miscellaneous Provisions) Act, 1972, will strengthen the hand of local authorities in dealing with infected animals. In the present instance there was considerable difficulty in persuading the owners of the infected dogs to accept the advice that they be destroyed.

Malaria

There were three cases of malaria notified during the year. All occurred in persons who had arrived from Pakistan where malaria is endemic. One patient was a girl of eight years who had arrived in England nine months before the onset of illness. She was ill for six weeks before malaria *(P. vivax)* was diagnosed. She gave a history of fever and abdominal pain on alternate days. The attacks lasted four to five hours and she was quite well between attacks. She responded clinically to chloraquine. The second patient was a four year old boy who was found to have malaria *(P. falciparum)* soon after arrival from Pakistan via Moscow. (This child also had a roundworm, tapeworm and giardia infestation). The third patient was an adult (age not specified) who developed the disease five days after arrival.

Measles

Notified cases of measles totalled 609 during the year. Before the advent of measles vaccine epidemics of measles occurred every two years with monotonous regularity. The pattern was interrupted by the mass use of the vaccine in 1968. Unfortunately the early promise of popular acceptance has not been completely fulfilled and the disease has retained its biennial periodicity but certainly at a lower level than before.

The age groupings for the four quarters of the year appear in the table below:—

Age groups	0—	1—	2—	3—	4—	5—	10—	15—	25+	Age unknown	Totals
1st Quarter	4	10	14	16	21	52	1	2	—	—	120
2nd Quarter	14	23	24	25	33	50	6	3	—	5	183
3rd Quarter	6	19	29	24	21	70	3	—	—	2	174
4th Quarter	8	14	18	12	16	49	4	1	—	10	132
TOTALS	32	66	85	77	91	221	14	6	—	17	609

There were seven children hospitalised as a result of measles complications. Two girls, aged five and three years respectively, developed epistaxis during the early stages of the disease. Both were able to go home after four days. A boy aged seven years developed basal pneumonia as a complication but made a good recovery. There was a two year old girl who developed an acute bronchopneumonia. She appeared neglected on admission and was found to be anaemic. Her mother removed her from hospital after two weeks and before her treatment was completed. She was followed up at home and no sequelae resulted. A four year old boy had a history of convulsions at home but these were not repeated in hospital and he, too, was discharged quite well. He was incidentally found to have a thyro-glossal cyst. A three year old mentally retarded child was admitted with measles a month after being discharged with a sonne dysentery which cleared up. The last case was an 11-month old girl who was admitted to hospital with measles because her mother was unmarried and working. She developed otitis media but made a good recovery.

Psittacosis

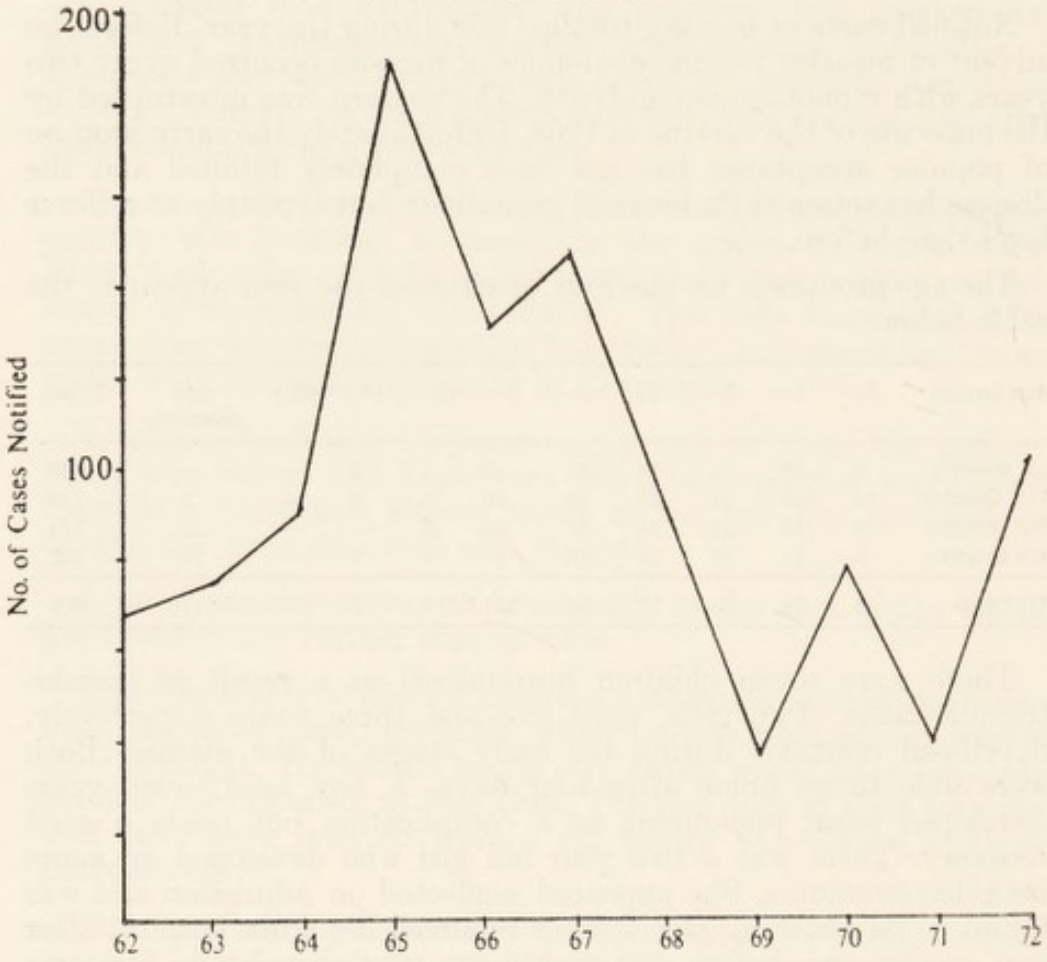
No case of this disease in either birds and/or humans was reported during the year.

Scarlet Fever

There were 101 cases of scarlet fever notified during the year. This is the highest total for five years and is 2·6 times greater than last year's figure. This is the biggest increase that has occurred in the last 10 years.

Of the total number of cases five (4·9%) occurred in adults aged 16 and over while there were 29 (28·1%) under fives. Primary school children (5-10) accounted for 56 (54·4%) of the total.

Scarlet Fever 1962-72



	0–4	5–10	11–15	16+	Not known	Total
Number of cases ..	29	56	11	5	2	103

The monthly incidence is indicated below:—

Month	*Jan.*	*Feb.*	*March*	*April*	*May*	*June*
Number	13	5	7	8	6	8
Month	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*
Number	5	4	2	22	17	6

In the last quarter of the year there were 45 (43·7%) cases. (The indications are that this level of incidence is continuing into 1973 with 10 cases in January).

There were three districts in particular where there was the biggest concentration of cases:

Rise Park ..	29
Clifton ..	9
Bulwell ..	5

There was no change in the severity of the clinical disease as noted by the general practitioners. But it is thought that this

increase may indicate that a new type of haemolytic streptococcus is responsible. A careful watch is being kept on the situation and it is planned, in conjunction with the laboratory, to conduct an investigation in 1973.

It must be emphasised that this sudden increase is *not* a national phenomenon and the national statistics have remained steady.

Smallpox

No cases were reported during the year. There were two travellers who arrived in the City from India without proper vaccination certificates and they were kept under surveillance for 21 days.

Tuberculosis

(See Dr. Crowther's report on tuberculosis on page 41).

The arrangement for the mass radiography unit to visit Sneinton House and the Salvation Army hostel, to screen residents and staff, continued in 1972. No new cases of tuberculosis were found, but attendance on the part of residents has shown a tendency to be falling off.

Chest Diseases Liaison Committee

Two meetings were held during the year at which personnel from the Health Department and Chest Clinic discussed matters of mutual interest and importance.

Whooping Cough

There were only 11 cases notified during the year, the lowest number ever noted in any single year. This is a most gratifying situation and one which must be mainly attributed to the efficacy of vaccination. The improvement of the vaccine following the Public Health Laboratory Service report of 1968 which seriously questioned its efficacy, is certainly the important factor in achieving this result.

All the cases occurred in children whose ages ranged from six months to six years. Only one child was under a year old, seven others were under five and the remaining three were six years old. None of the cases were admitted to hospital. Seven of the children had no history of previous vaccination and one child had only received one injection the year before. The remaining three children had been fully immunised.

One other point is worth noting. Of the 11 cases, nine were notified by one general practitioner. Of these nine cases, three occurred in one household and two in another. There is one possibility for the low figure reported this year that must, therefore, be considered, viz. that general practitioners are not reporting cases which they see. Although there is probably some degree of under-reporting this possibility can be discounted by the fact that in 1971 when 65 cases were notified, the total was shared by more than 18 general practitioners. One must conclude that the marked drop in the incidence of pertussis (and probably the severity of the disease) is a real one.

Infectious Diseases Not Notifiable

Virus Disease

In July a 12 year old boy was admitted to the City Hospital with markedly swollen gums and ulcers on the gums, tongue and mucosal surface of the cheek. He was unable to speak and had only been able to sip liquids for three days. He also had two pustules on his hands.

While viral studies from swabs of the lesions were being done the family was visited. There were five children in all, aged 14 months, three, five, 10 and 12 years respectively. They lived in a semi-detached Council house in Clifton and were obviously overcrowded. It was elicited that four of the five children had all had a similar illness of varying severity. The condition would begin with a cough and sore throat, the submandibular glands would become enlarged and tender, blisters would then appear in the mouth and the gums would swell. The development was very rapid and occurred over 24 hours. Only the eldest who had been hospitalised had developed lesions on the hands.

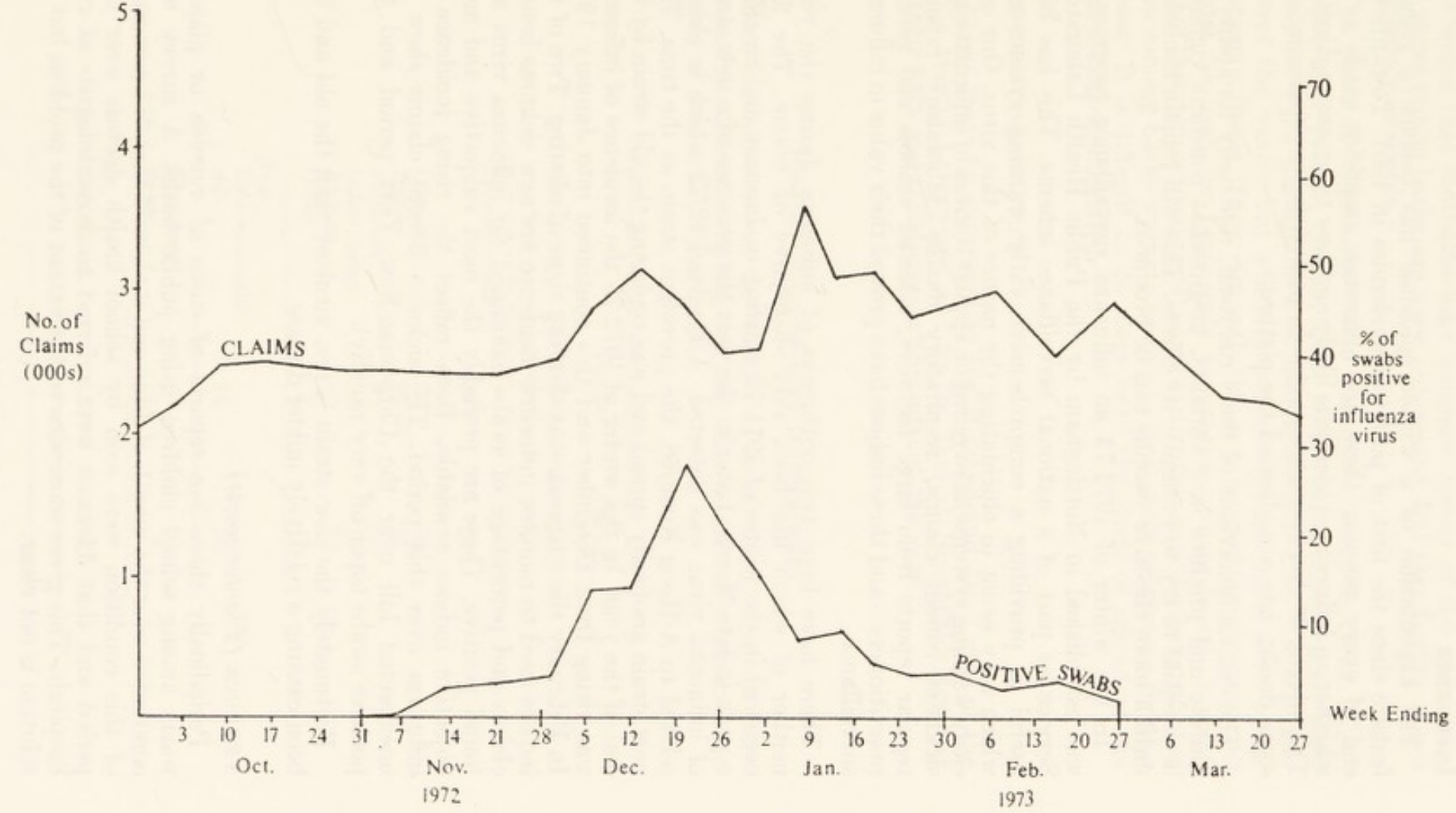
The 14 month old child had been the first to have symptoms. Her mouth infection had lasted two days by which time the five year old boy developed the condition. The illness lasted for five days and cleared up. A week later the 10 year old girl showed signs of the disease and was ill for two weeks. During this time she was seen by the family doctor. (It was ascertained later that the doctor had developed mouth ulcers and a "paronychia" soon after seeing her). It was during the girl's convalescence that the eldest child became ill and was admitted to hospital.

Enquiries of local general practitioners and the laboratory did not uncover any further cases. The local dental clinic had not seen any condition of that nature, nor had the health visitors. The head teachers of the three schools attended by the affected children were also negative. There was one informal report of a neighbourhood child with a similar condition but this could not be confirmed.

Herpes simplex virus was isolated from the mouth swabs taken from the eldest child and the outbreak was ascribed to Herpes simplex gingiro-stomatitis. Surveillance was maintained through the various agencies for further cases. Six weeks after this incident the general practitioner of this family reported that he had seen two siblings who had a similar condition. They had both developed a sore throat, then ulcers on the tongue and palate and blisters on the toes, fingers and hands. *Coxsackie A16 virus* was isolated from both siblings. They both recovered and no further cases were reported during the rest of the year.

On the evidence it would seem that the six cases described were in fact all due to hand, foot and mouth disease. The isolation of *Herpes simplex* from one of the sufferers in the first cluster may well have been an incidental finding. The spread of the virus within the first family was greatly facilitated by their overcrowded condition. The five children shared two bedrooms between them.

New Sickness Benefit Claims — Nottingham 1972-3
Positive Viral Swabs — England and Wales 1972-3



Influenza

The expectation of a winter epidemic has become a regular feature since the first of post war epidemics in 1957. Towards the end of every summer there are numerous enquiries made as to whether an influenza epidemic is likely and how to protect against it. The advent of vaccines whose value in preventing an epidemic is in some doubt, has complicated the picture.

The erratic behaviour of the virus itself, especially its ability to mutate and produce new variants, means that constant vigilance is essential to try to minimise its effects. This will remain necessary until a more effective vaccine can be produced.

In the winter of 1972-73 an influenza surveillance programme was established in Nottingham by the Public Health Laboratory Service as part of a national surveillance scheme. This has been useful in providing a comprehensive early warning system and which may assist in elucidating the nature of this virus. Our own early warning systems have relied on similar sources of information—sickness benefit claims, respiratory deaths, laboratory reports, regular reports from large factories, selected schools and general practitioners—and these indices have proved their value in influenza surveillance.

There have been two outbreaks of influenza during the year, neither of which has been very disruptive or severe. The first occurred in the winter of 1971-72 starting in January and reaching a peak in late March. Later in the year the presence of a new strain of influenza virus was detected, A/England/42/72 which is closely related to A/Hong Kong/68, the prevalent strain at the time. This new strain gradually spread and was replacing the old strain by the end of the year. In the winter of 1972-73 the incidence of influenza was rising from December and this continued into January 1973. In February the outbreak was showing signs of abating. Two of the indices used to monitor influenza incidence are new sickness benefit claims and percentage of swabs examined for influenza virus and found positive. These are probably the most subjective and most objective indices available. Both reflect the rising incidence of influenza over this period. The sickness benefit claims show an unexpected lull over the Christmas-New Year period and the positive swabs taper off very rapidly).

Fortunately the new strain is less virulent than the old and has been causing a relatively milder disease.

Verruca *(Plantar warts)*

Periodically there are reports of cases of verruca or plantar warts among school children using public baths. A survey was conducted over the month of June and it showed that 317 new cases of this condition were seen by school health doctors over this period and that 32 cases were referred to dermatologists at city hospitals. This gives some idea of the extent of the problem but its solution is not clear.

It seems that footbaths may minimise spread of the wart virus but some public baths are very antiquated and this facility is not adequately available.

Ten pairs of "Plastsoks" were obtained during the year. These consist of a pair of cotton socks with rubber-impregnated soles which are worn throughout a swimming session. They will not only protect the wearer but will also prevent spread when worn by an existing sufferer. They can only have a limited application and cannot be used for large-scale prevention. Nevertheless, a small trial of this item is pending. Posters and leaflets have been distributed at swimming baths warning people to seek early treatment for this disease. It is difficult to do more until the mode of spread of the virus is better elucidated.

Hospital Co-operation

Thanks must be expressed to Dr. Mitchell and Dr. Lewis of the Public Health Laboratory and to Dr. Don at Heathfield Hospital for their help and collaboration throughout the year.

Health of Long-Stay Immigrants

The table below shows the number of notifications received from port health authorities during the year, the country of origin and the number of successful visits made.

Country of origin	*Number of notifications received*	*Number of successful first visits*
Commonwealth:		
All	341	264
Carribean ..	66	58
India ..	69	35
Pakistan ..	89	80
Other Asian	28	17
African ..	80	70
Other ..	9	4
Non-Commonwealth:		
All ..	15	10
European ..	5	3
Other ..	10	7
All Countries	356	288

In addition to the 356 immigrants who were notified as arrivals, there were an additional 14 arrivals who were visited in respect of whom no notification had been received. They included 10 people from Pakistan, two from Uganda and one from Kenya and Tanzania respectively.

The numbers show an increase of 52 immigrant arrivals over the 304 persons who arrived last year. This is a surprisingly small number considering the expected increase of Ugandan Asians holding British passports. In the last quarter of 1972 there were 69 people who arrived from Uganda, i.e. 86% of all arrivals from Africa for the whole year. There were two Ugandans who came from camps in Lincolnshire and two who moved here from Birmingham.

One of the families that arrived from Pakistan—a mother and her four children—were found to have thyroid goitre. It was established that they came from a mountainous part of the country where goitre was endemic. None of the members of the family complained of any illness but they were co-operative and were referred for treatment to the general practitioner with whom they had recently registered. They were given iodised salt in the first instance.

Tuberculosis in Immigrants

The following table gives the number of tuberculosis notifications in different groups of immigrants over the past five years.

Land of origin	1972	1971	1970	1969	1968
Asia	33	40	26	19	38
West Indies	6	1	4	7	1
Europe	9	7	9	1	13
Other	—	1	—	1	—
Total	48	49	39	28	52

There is little alteration in the general pattern over this period. It continues to remain true that the vast majority (85%) of immigrants develop the disease two years or more after arrival, a certain indication that it is the conditions they face in this country which lead to infection.

Worm Infestations

The School Health Service continues to screen immigrant children for worm infestation by examination of stool specimens. During 1972, 41 specimens were taken and eight were found to be positive as indicated in the table below.

Hookworm	3
Hookworm and whipworm	2
Tapeworm	2
Threadworm	1

The high rate of positive results (19·5%) indicates that this procedure remains a useful one.

Tuberculosis and Chest Diseases

BY

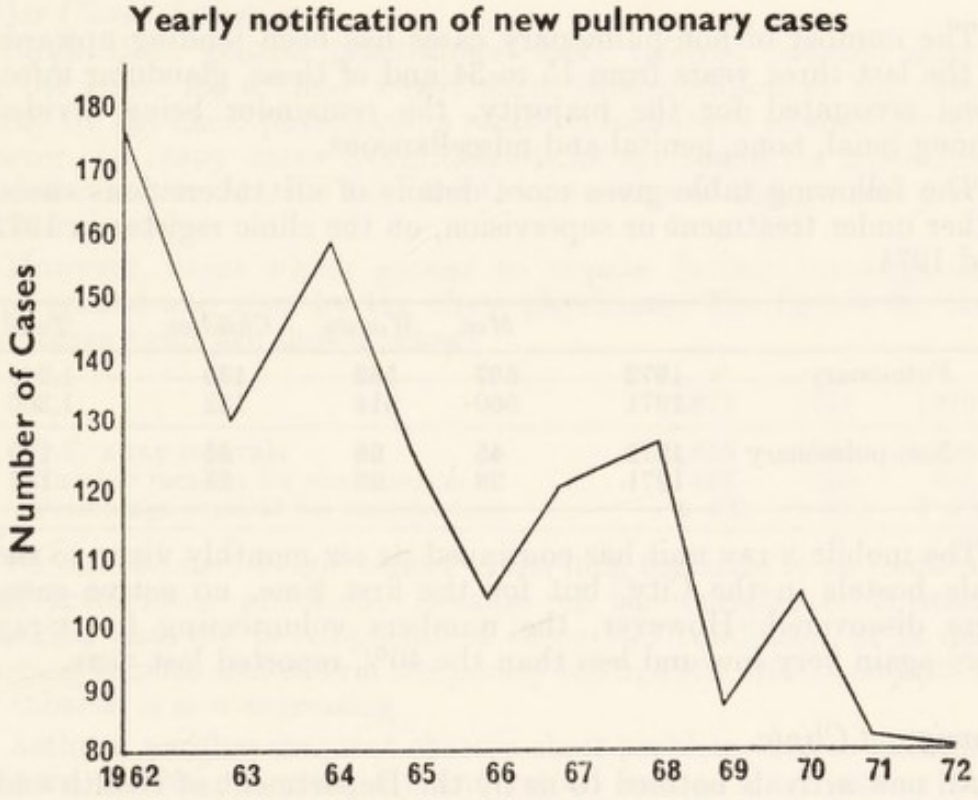
J. S. CROWTHER, M.D., F.R.C.P.

Consultant Chest Physician

Tuberculosis

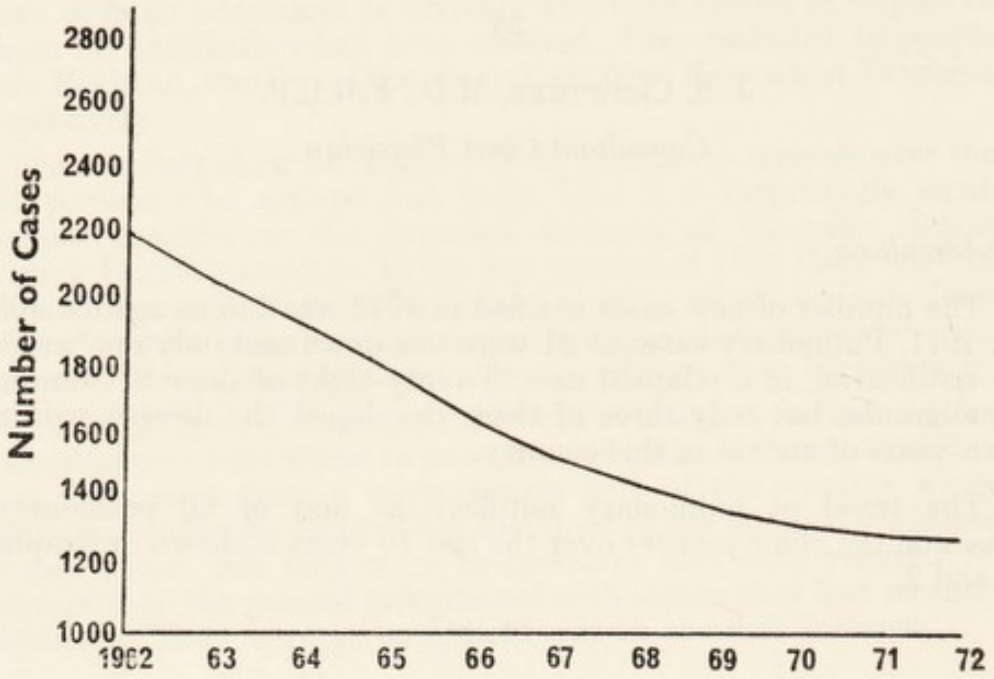
The number of new cases notified in 1972 was 115 as against 108 in 1971. Pulmonary cases at 81 were one down and only one was a re-notification of a relapsed case. Twenty-eight of these 81 were in immigrants, but only three of these developed the disease within two years of arrival in this country.

The trend of pulmonary notifications and of all pulmonary cases on the clinic register over the last 10 years is shown in Graphs 1 and 2.



GRAPH 1

Cases of pulmonary tuberculosis on clinic register



GRAPH 2

The number of non-pulmonary cases has been tending upwards in the last three years from 15 to 34 and of these, glandular infections accounted for the majority, the remainder being divided among renal, bone, genital and miscellaneous.

The following table gives more details of all tuberculous cases, either under treatment or supervision, on the clinic register in 1972 and 1971.

		Men	*Women*	*Children*	*Total*
Pulmonary	**1972**	**507**	**582**	**130**	**1,219**
	1971	560	614	132	1,306
Non-pulmonary	**1972**	**45**	**99**	**26**	**170**
	1971	38	95	24	157

The mobile x-ray unit has continued its six monthly visits to the male hostels in the City, but for the first time, no active cases were discovered. However, the numbers volunteering for x-ray were again very low and less than the 40% reported last year.

Immigrant Clinic

All new arrivals notified to us by the Department of Health and Social Security are offered Tuberculin tests and B.C.G. vaccination and x-ray. The numbers showed a slight increase on last year, but were less than the peak year of 1970.

No active cases were discovered, but 18 with slightly abnormal x-rays are being kept under observation.

Immigrant Clinic Statistics

	1972	1971	1970
Arrivals notified to Health Authority ..	356	304	529
Tuberculin tests—	307	266	416
Positive reactors:	149	169	270
Negative reactors:	125	84	145
Number vaccinated with B.C.G.	134	100	141
Number x-rayed	241	226	259
Number kept under x-ray supervision ..	18	19	6

Examination of Contacts

The health visitors try to trace all contacts of new cases and invite them for screening at the clinic. Figures for examination of contacts are as follows:—

	1972	1971	1970
Number of contacts investigated—new ..	1,125	1,012	996
—old	1,171	987	797
	2,296	1,999	1,793
Number found to be tuberculous	11	7	7
Percentage found to be tuberculous ..	0·47	0·35	0·39
Number of contacts given B.C.G.	397	313	337
Number of visits made by health visitors ..	2,786	3,146	2,942

Other Clinic Activities

Since 1960, general practitioners have referred patients direct to the clinic for a chest x-ray. After interpretation of the chest x-ray by the chest physicians, a report is forwarded to the referring doctor. In many cases recommendations are made for treatment and this saves valuable time for the patient and the general practitioner.

However, cases which appear to require further investigation are recalled and seen by the chest physicians. The figures for the last three years are shown below.

	1972	1971	1970
G.P. x-ray referrals	7,646	8,364	8,439
Number recalled for examination	493	559	618
Percentage recalled for examination ..	6·4%	6·6%	7·3%

Chronic bronchitis and cancer of the lung continue to be frequent and intractable problems. Because of the correlation between smoking and the development of these two conditions, it is disturbing to note that after a temporary fall in 1970, the consumption of tobacco is now increasing.

Asthma, another frequent chronic chest problem, due to multiple factors, is being increasingly understood and as more causes are discovered, treatment is slowly becoming more effective. This may be by the avoidance of causative factors or the desensitisation of the patient. Even when this cannot be done, more potent drugs are available for control of asthma than was the case a few years ago. Consequently, the asthma patient is now better able to lead a near normal life.

SEXUALLY TRANSMITTED DISEASES

BY

JOHN B. BITTINER, T.D., M.B., Ch.B.
Consultant Venereologist

In last year's report, it was anticipated that the new Department for the diagnosis and treatment of venereal disease, sexually transmitted diseases and certain other diseases of the genitals would be opened at the General Hospital, Nottingham, during 1972. However, mainly owing to the building strike, completion was delayed, and the new premises finally opened on 12th February 1973. The clinics are named Perth House (Male Clinic) and Amberley House (Female Clinic).

The siting of a clinic of this nature, where patients can attend of their own accord, is important. I believe that the position of the clinic in Nottingham is particularly good. It is within the hospital building, but the main access is from a relatively quiet street—Postern Street. Entry is also possible from within the hospital and in-patients from other Departments and wards can now be referred more easily.

LOCAL HEALTH DEPARTMENT LIAISON

The Health Department of the local authority has an important part to play in the control of venereal disease. They have responsibility for contact tracing, health education and publicity of the clinical services. These clinical services come under the general supervision of the Sheffield Regional Hospital Board. Co-operation between the staff of the clinic and the local health administration is therefore essential. In Nottingham this co-operation is very satisfactory. Staff is made available by the local health authority for contact tracing and interviewing. The Health Education Officer, in liaison with the clinic, has set up an exhibition of graphs and photographs which will be available for display at schools and local firms who wish to make use of it. A recorded message on tape, giving information about clinic address, times, telephone number and a few brief facts about venereal disease is available by ringing Nottingham 57333.

The staff of the Department have had another busy year, partly because of the increase in number of patients and partly because of the transfer of the clinic. I should like to pay tribute for the manner in which they have coped with these changes.

STATISTICS

The following figures show the number of new cases dealt with during the year and the incidence of the principal types of diseases dealt with in the Department of Venereal Diseases in Nottingham. These statistics are subject to certain limitations, as they apply only to patients registered in the Department. No data is readily

available for patients examined elsewhere, for example by other specialists or general practitioners. The total incidence can therefore not be accurately assessed, but the trend in incidence is reflected. The 1971 figures are given in parentheses, in all of the tables for the purposes of comparison.

Syphilis

The number of cases of syphilis decreased, especially in its later stages. The disease continues to remain well controlled.

New cases of syphilis attending Nottingham Clinic during 1972

	Male	*Female*	Total
Primary	2 (2)	1 (—)	3 (2)
Secondary	— (—)	2 (1)	2 (1)
Latent in first 2 years of infection ..	— (5)	1 (2)	1 (7)
Cardio vascular	2 (6)	1 (1)	3 (7)
Of the nervous system	5 (1)	2 (1)	7 (2)
All other late and latent stages ..	6 (14)	5 (8)	11 (22)
Congenital aged under 2 years ..	— (—)	— (—)	— (—)
Congenital aged 2 years and over ..	— (—)	— (1)	— (1)
	15 (28)	12 (14)	27 (42)

Area of residence of patient

Primary and secondary syphilis ..	Nottingham	2 (3)
	Nottinghamshire	3 (—)
Other syphilis	Nottingham	17 (32)
	Nottinghamshire	5 (7)

Age groups of patients with primary and secondary syphilis

18 and 19	3 (—)
25 and over	2 (3)

Gonorrhoea

This common contagious disease increased from 1,167 cases in 1971 to 1,238 in 1972. Apart from the more common complications of epididymitis, proctitis, salpingitis and ophthalmia neonatorum, rare complications seen included gonococcal pharyngitis and gonococcal conjunctivitis in an adult.

It is probable that the female cases under 16, i.e. 11 in number, should have been higher, as girls in this age group tend to claim that they are 16 or above.

New cases of Gonorrhoea attending Nottingham Clinic during 1972

	Male	*Female*	Total
Post-pubertal infections ..	731 (708)	503 (453)	1,234 (1,161)
Pre-pubertal infections ..	— (—)	— (—)	— (—)
Ophthalmia neonatorum ..	4 (2)	— (4)	4 (6)
	735 (710)	503 (457)	1,238 (1,167)

Area of residence of patient

Nottingham	953 (868)
Nottinghamshire	211 (233)
Derbyshire	43 (45)
Others	28 (17)
H.M. Forces	3 (4)

Age groups of patients with gonorrhoea

	Male	*Female*
New-born infants ..	4 (2)	— (4)
Under 16	2 (4)	11 (16)
16 and 17	40 (38)	93 (75)
18 and 19	58 (61)	88 (71)
20 to 24	203 (211)	147 (140)
25 and over ..	424 (394)	164 (151)

Other Genital Infections

There was an increase of other genital infections from 2,200 in 1971 to 2,568 in 1972. This was largely accounted for by the increase in non-specific urethritis in men (included in non-specific genital infection) and genital warts.

New cases of other genital infections attending Nottingham Clinic during 1972

	Male	*Female*	Total
Chancroid	— (1)	— (—)	— (1)
Lymphogranuloma venereum	— (—)	— (—)	— (—)
Granuloma inguinale ..	— (—)	— (—)	— (—)
Non-specific genital infection	1,057 (915)	173 (139)	1,230 (1,054)
Non-specific genital infection with arthritis	5 (1)	— (—)	5 (1)
Trichomoniasis	19 (24)	523 (466)	542 (490)
Candidiasis	4 (1)	181 (148)	185 (149)
Scabies	46 (61)	19 (23)	65 (84)
Pubic lice	65 (56)	31 (16)	96 (72)
Herpes simplex	48 (37)	27 (9)	75 (46)
Warts	234 (179)	128 (112)	362 (291)
Molluscum contagiosum ..	6 (8)	2 (4)	8 (12)
	1,484 (1,283)	1,084 (917)	2,568 (2,200)

Area of residence of patient

Nottingham	1,700 (1,469)
Nottinghamshire	683 (580)
Derbyshire	108 (81)
Others	67 (58)
H.M. Forces	10 (12)

Other Conditions

Many patients attend with anxiety about venereal disease, others are seeking help for psycho-sexual problems. Yet others present with genital symptoms which they attribute to venereal disease, for example, nine patients attended with genital lesions due to diabetes mellitus.

New cases of other conditions attending Nottingham Clinic during 1972

	Male	*Female*	TOTAL
Other treponemal diseases ..	2 (—)	— (1)	2 (1)
Other conditions requiring treatment in the centre ..	281 (232)	140 (109)	421 (341)
Other conditions NOT requiring treatment in the centre	982 (1,002)	571 (548)	1,553 (1,550)
	1,267 (1,234)	709 (658)	1,976 (1,892)

Area of residence of patient

Nottingham	1,159 (1,115)
Nottinghamshire	623 (608)
Derbyshire	95 (82)
Others	88 (76)
H.M. Forces	11 (11)

	Male	*Female*	TOTAL
Total of all registrations (including patients referred from other Clinics) ..	3,511 (3,260)	2,310 (2,050)	5,821 (5,310)

IMMUNISATION

BY

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Senior Medical Officer

Details of immunisation of children under 16 years of age are given on page 52.

Diphtheria, Whooping Cough, Tetanus and Poliomyelitis

The number of children immunised against these diseases shows an overall fall over those in the previous year of the order of 16%. It is encouraging to note that the numbers of children born in the previous year were not lower than those of last year and in fact showed a slight increase.

One factor contributing to this decline is the long period of 6-12 months which is scheduled between the second and third immunisation visits. It is mainly these third visits which are being missed and the table does not reflect the partially immunised children who have received the first two doses of triple and polio vaccine.

The second factor which is contributing to the decline in the numbers is the declining birth rates. Nevertheless a campaign to encourage a higher acceptance rate is being planned in those parts of the city where a very low proportion of children—in some areas only 50%—are immunised.

It continues to be the case that over 80% of all immunisations in the city are given at our health clinics. This pattern has been evident for many years. It is a clear indication that for the foreseeable future these clinics must continue to remain in existence if only to continue this vital task. It is clear that mothers feel that it is far more preferable to attend clinics for this purpose. The emphasis in the future should be to encourage the family doctor to provide this facility but it will take a long time for the shift to become a reality.

A further schedule is to be added to our immunisation programme in the coming year. School-leavers are to be offered boosters of tetanus and poliomyelitis vaccine on the eve of their entry into the risky world. A good response is anticipated.

In connection with the above, approaches have been made to local hospitals asking them to inform us of all tetanus vaccinations given. It is known that hundreds of such injections are given every year. particularly in the casualty departments, and records of doses given to schoolchildren will need to be available.

During 1972, 189 primary courses and 50 boosters of tetanus were administered by general practitioners (none were given at the clinics). 55% of these were given to teenagers.

Measles

During the year 3,415 children were immunised against measles. This is 414 less than last year's figure. Again the fall did not occur in children born the previous year—where there was in fact an increase of 145—but occurred in the number of older children vaccinated. The acceptance of measles vaccination continues to be well below that of other vaccines.

There is still a great deal of resistance on the part of mothers to a vaccine which has some side effects, albeit mild, against a disease which is still fairly widely regarded as "natural".

Rubella

The programme of rubella vaccination for schoolgirls was continued. An adjustment has been made to the programme which was last year aimed at the 12 and 13 year olds. The 12 year old age group alone is now offered vaccination against rubella. There were 1,975 vaccinations given during the year, which must be regarded as a very good response. The figures for 1970 and 1971 are 2,721 and 2,829 respectively. These figures included the 13 year old girls and are thus not strictly comparable with this year's figure.

Rubella antibody testing is being carried out routinely at the ante-natal clinics. The main problem is that it often happens that a woman does not start attending the clinic early enough to make the test useful should there be subsequent exposure to the disease. The first test is often only carried out towards the end of the first trimester. Earlier attendance and testing is being encouraged. Women found to have no immunity are offered vaccination in the immediate post-partum period. As was the case last year it seems that hardly any women are availing themselves of this facility.

Rubella antibody testing has an important role to play in the prevention of the disease. Techniques have been developed which allow estimations to be made on 2-3 drops of blood obtained from a finger-prick. Since about 85% of girls who are at present vaccinated are immune anyway, it must inevitably become established that all girls should be tested first and vaccinated if necessary. This is not only ethically a better procedure but is cheaper than mass vaccination. However, it will mean that laboratory facilities must be available for such a large number of tests. The costing exercise of such a switch should be simplified under the reorganised National Health Service.

Influenza

By popular request, vaccination against influenza was made available to Health Department staff, and 63 immunisations were carried out.

In May, a questionnaire survey was conducted among the 214 members of staff who were immunised in October 1971. The object of the survey was to assess the extent to which vaccination was acceptable and the degree of reactions it was thought to have caused. Replies were received from 126 people, a response rate of

57·5%. Just under half the respondents said they had some reaction to the vaccine. The commonest reaction reported among them was a cold which developed within a week of the vaccination. In 60% of these persons symptoms lasted up to a week, whilst in 20% symptoms persisted for up to a month. Local reactions were reported by 51% of persons reporting reactions. These consisted in almost every case of a painful arm starting soon after the injection and usually subsiding within 24 hours.

Previous vaccination did not predispose to reaction. Of the 38 people who had been vaccinated the previous winter, 17 reported reactions and 21 reported no reactions. This difference is not significant.

The most striking result to emerge from this survey was the high degree of confidence that the vaccine had. No less than 84% of persons replying wanted to have a seasonal vaccination. This included a third of those who did not feel it had done them any good. The table below shows how the attitude of respondents varied according to whether or not they had any reaction.

	Reaction		
Attitude to vaccine	*Reacted to vaccine*	*No reaction to vaccine*	*Total*
Did good	36	50	86
Did not do good ..	27	4	31
Not sure	4	5	9
All	67	59	126

($P<0·01$)

This shows that there was a significant difference in the attitude of people in relation to their reaction to the vaccine. Persons who did not react to the vaccine were far more likely to feel that it did them good.

From comments which were made on the form it is clear that many people are under the misconception that influenza vaccination will protect them against colds and sore throats. This may be one of the reasons that it has such a good reputation. As for the protection afforded by vaccination, no assessment could be made as there was no influenza epidemic in the winter of 1971/72.

Smallpox

The number of children aged 15 years and under who were vaccinated during the year was 59. This is a drastic reduction from last year's total of 1,722. The main reason is the withdrawal of smallpox vaccination from the routine immunisation schedule following on the recommendation of the Department of Health and Social Security in July 1971. The number of adults vaccinated during the year was 364, of which 61 were primary vaccinations. This latter figure can be expected to rise as more and more unvaccinated adults will face their first vaccination in adulthood as a result of the Department's recommendation.

General practitioners continue to perform most (56%) of the vaccinations as the table below shows.

SMALLPOX VACCINATION 1972

Agency	*Primary*	*Revaccination*
G.P.	116	225
Health clinics ..	89	176
Total	205	401

YELLOW FEVER

Travellers abroad whose country of destination required yellow fever vaccination totalled 672 in 1972. This is 53 less than last year.

It is planned to expand the Yellow Fever clinic into a Traveller's Clinic where all the vaccination requirements of travellers can be met and advice be available about infectious disease hazards in general.

ANTHRAX

Vaccination against anthrax continued to be offered routinely to employees at a tannery and 77 doses of vaccine given.

B.C.G. VACCINATION

The figures for B.C.G. vaccination in 13 year old schoolchildren from 1968-72 are shown in the following table:—

	1968	*1969*	*1970*	*1971*	**1972**
Number of 13 year olds ..	4,952	4,720	4,907	4,977	**5,330**
Percentage accepting Heaf test	73·9	74·3	77·3	79·6	**80·0**
Number tested	3,735	3,707	3,883	3911	**4,375**
Number of positive reactors	282	186	141	328	**496**
Percentage positive reactors	8·4	5·7	4·3	8·4	**11·6**
Number vaccinated ..	3,053	3,058	3,156	3102	**3,411**

The acceptance rate for B.C.G. vaccination has reached 80% for the first time. This is a very good achievement. There has been a marked increase in the positive reactor rate which now stands at 11·6%.

Children with Heaf Grade I reactions are not counted as "positives" and they are vaccinated. 48 Grade I reactors were identified. Once again there has been a rise in the number of positive reactors from 4·3% in 1970 to 8·4% in 1971 and 11·6% in 1972. This rate is slightly above the national average (9·2%) reported by the Chief Medical Officer for 1971.

Vaccination of Children under age 16 completed during 1972

Completed primary courses

Type of vaccine	Year of Birth: 1972	*1971*	*1970*	*1969*	*1965–1968*	*Others under age 16*	*Total*
Triple D.T.P.	204	2,634	893	249	119	2	4,101
Diphtheria/Tetanus ..	1	6	11	13	134	32	197
Diphtheria only ..	—	—	—	—	2	2	4
Whooping cough only	—	—	—	—	—	—	—
Tetanus only	1	—	3	—	18	122	144
Poliomyelitis	200	2,662	900	273	286	61	4,382
Measles ..	10	1,972	924	261	233	15	3,415
Totals							
Diphtheria ..	205	2,460	904	262	255	36	4,302
Whooping cough ..	204	2,634	893	249	119	2	4,101
Tetanus ..	206	2,640	907	262	271	156	4,442
Poliomyelitis	200	2,662	900	273	286	61	4,382

Reinforcing doses

Type of vaccine	Year of birth: 1972	*1971*	*1970*	*1969*	*1965–1968*	*Others under age 16*	*Total*
Triple D.T.P.	—	27	21	7	137	3	195
Diphtheria/Tetanus ..	—	2	—	2	2,472	119	2,595
Diphtheria only ..	—	—	—	—	37	1	38
Whooping cough only	—	—	—	—	—	—	—
Tetanus only	—	—	—	2	6	37	45
Poliomyelitis	—	18	16	10	2,523	129	2,696
Measles ..	—	—	—	—	—	—	—
Totals							
Diphtheria ..	—	29	21	9	2,646	123	2,828
Whooping cough ..	—	27	21	7	137	3	195
Tetanus ..	—	29	21	11	2,615	159	2,835
Poliomyelitis	—	18	16	10	2,523	129	2,696

THE PROGRESS OF HEALTH CENTRES

BY

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Principal Medical Officer

Details were given in the 1971 Annual Report of three health centre projects, namely at Bulwell, St. Ann's and Sneinton. Actual building work on the Bulwell and St. Ann's health centres continued during 1972 and the work on the site for the conversion of Sneinton Welfare Centre into a health centre started in April 1972.

Bulwell health centre was completed by the end of July 1972 and the local authority welfare and dental facilities commenced on the 7th August 1972. The general practitioners were occupying their suites by early September. However, progress on the St. Ann's health centre was seriously disrupted by a national building strike which was 100% effective on site from the 15th August for the following seven weeks and work on the Sneinton site was similarly affected from the 6th September.

The St. Ann's health centre, although not fully ready for occupation, was, together with Bulwell health centre, officially opened on the 16th February 1973 by Sir George Godber, G.C.B., Chief Medical Officer to the Department of Health and Social Security.

FUTURE SITES

During 1972 a full survey was carried out, together with the appropriate officers of other departments, regarding the availability of further sites throughout the City, either for child health clinics, which could at a later date be converted into health centres, or for full health centres. A previous survey had been carried out in 1959, but in the intervening years some of the available sites had been used for the erection of health centres or welfare centres and the need for others had been modified. The 1972 Survey took into account facilities offered by existing premises and the capital building programme for health centres and child health clinics was revised, with forward planning until 1978. The programme outlined was accepted by the Health Committee on the 5th September 1972 and the proposals accepted in principle by the Policy Committee on the 19th September 1972. Details are as follows:—

CAPITAL PROGRAMME

1973/74	North Sherwood Street Health Centre
	Sneinton Dale/Oakdale Road Health Centre
	Moor Road/Strelley Road Welfare Centre
1974/75	Meadows Area Health Centre
	Wollaton Health Centre
1975/76	Conversion of Radford Welfare Centre into a Health Centre
1976/77	Beechdale Road Health or Welfare Centre
	Nuthall Road/Napoleon Square Health or Welfare Centre
1977/78	Nottingham Road/Northgate Health or Welfare Centre
	Haydn Road/Burnham Street Health or Welfare Centre

MATERNAL AND CHILD HEALTH SERVICES

BY

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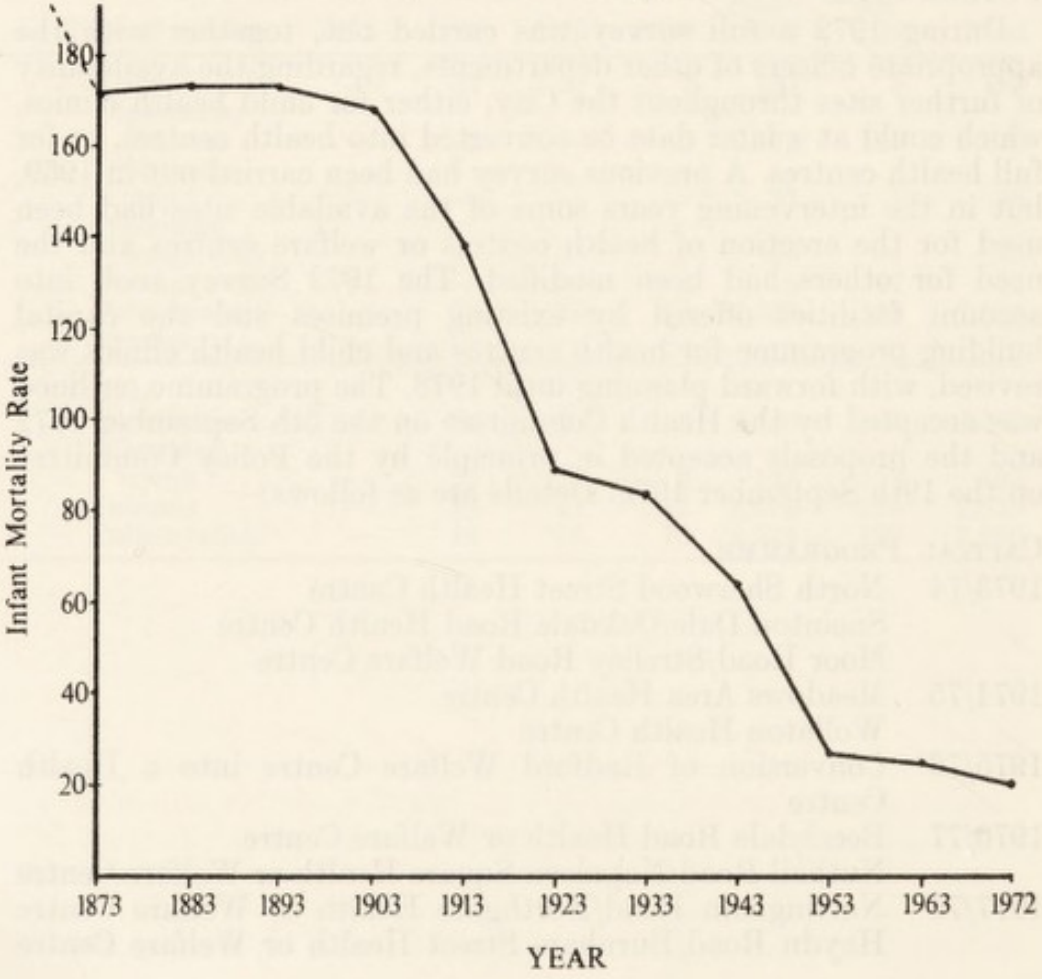
As 1972 is the centenary year of the City of Nottingham Health Services, the developments in maternal and child health services over this period are briefly reviewed as an introduction to the work of this section for the year. The steady improvement in the health of the community can be evaluated by the following statistical data for the period 1873-1972 at 25 year intervals:—

	Birth rate	*Death rate*	*Infant mortality rate*	*Maternal mortality rate*
1873	35·1	22·6	173	—
1898	28·8	17·2	178	—
1923	19·9	13·3	86	3·00
1948	19·8	10·9	44	0·49
1972	15·5	12·8	33	0·43

The infant mortality rate, which is considered to be the most sensitive and valuable indicator of the prevailing conditions for the

Infant Mortality Rate Nottingham 1873-1972



mother and her child, dropped from 173 in 1873 to 22 in 1972. Although the figures available in the earlier parts of this period were not entirely reliable, it is clear that deaths in early childhood comprised a major proportion of the total deaths, e.g. deaths of children under five years of age recorded in 1879 were 41·3% of the total deaths while in 1972 they made up only 3·27% of the total. (A more concise history of the total health services for the past 100 years is given in the appendix, page 149).

Notified Births

During 1972 there were 4,657 total births, with 4,598 live births, giving a birth rate of 15·49 per 1,000. Out of the total live births there were two sets of triplets and 46 sets of twins, two sets of twins were delivered on the district.

The table below shows the birth figures for the last five years.

	Total births	*Live births*	*Birth rate per 1,000 population*	*Stillbirths*	*Stillbirth rate per 1,000 livebirths*
1968 ..	6,036	5,944	19·48	92	15·24
1969 ..	5,540	5,451	18·00	89	16·00
1970 ..	5,094	5,013	16·68	81	15·90
1971 ..	5,163	5,101	17·19	62	12·00
1972 ..	**4,657**	**4,598**	**15·49**	**59**	**12·67**

Live births during 1972 in relation to the country of origin of the mother can be summarised as below with 1971 figures for comparison:—

	Live Births		*% of total*		*Premature*		*% Prem.*		*Illegitimate*		*% Illeg.*		*Infant deaths*	
	1972	*1971*	**1972**	*1971*	**1972**	*1971*	**1972**	*1971*	**1972**	*1971*	**1972**	*1971*	**1972**	*1971*
G.B. & N.I.	**3,881**	4,383	**84·4**	84·9	**298**	318	**7·7**	7·4	**724**	802	**23·5**	18·7	**86**	94
W. Indies	**202**	260	**4·4**	5·0	**24**	27	**11·9**	10·4	**97**	100	**48·0**	38·4	**9**	4
India	**111**	126	**2·4**	2·5	**14**	26	**12·6**	20·6	**—**	—	**—**	—	**5**	5
Pakistan	**162**	158	**3·5**	3·1	**25**	16	**15·4**	10·1	**—**	1	**—**	0·6	**1**	3
Ireland	**132**	126	**2·9**	2·5	**14**	10	**10·6**	7·9	**24**	17	**18·2**	13·5	**—**	2
Others	**110**	110	**2·4**	2·0	**12**	6	**10·9**	5·5	**15**	10	**13·6**	9·1	**—**	1
Total	**4,598**	5,163	**100**	100	**387**	403	**8·41**	7·9	**860**	930	**18·70**	18·20	**101**	108

Illegitimate Births

During the year there were 860 illegitimate live births out of a total of 4,598, which constitutes 18·7% of the total live births. This is a slight increase of 0·5% over 1971 when there were 930 live illegitimate births in 5,101 live births (18·2%) and is in line with a rising trend over the years.

The social class distribution of illegitimate births for 1972 according to the Registrar General's Classification is as follows:—

Social Class	*1*	*2*	*3*	*4*	*5*	*Unclassified*	*Total*
Illegitimate births	2	20	244	418	151	25	860

A total of 835 births were registered locally, while 25 remained unclassified because of their inward transfer to the City from other areas.

Maternal Age of Illegitimate Live Births

Illegitimate live births when examined in relation to maternal age, gave the following age distribution for the 1971 figure of 930; the figures for 1972 will not be available until October 1973.

Maternal age	*–20*	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45+*	*Unclassified*	*Total*
Number of illegitimate births	301	295	180	83	48	18	3	2	930
Percentage	32·43	31·70	19·39	8·94	5·17	1·93	0·32	—	100

Illegitimate stillbirths can be examined similarly in relation to maternal age as the following figures show. They also relate to 1971 stillbirths, as the figures for 1972 will not be issued until October 1973.

Maternal age	*–20*	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45+*	*Total*
Number of illegitimate stillbirths	4	2	2	2	2	1	—	13

Hospital Confinements

During 1972 there were 3,606 hospital confinements out of 4,579 total confinements. With domiciliary confinements at 973, the percentages of 78·75 and 21·25 respectively are in line with the trend of an increasing percentage of hospital confinements over the years.

The table below shows the hospital confinements for years 1968-72.

Year	*Total confinements*	*Hospital confinements*	*Percentage of total*
1968	5,899	3,856	67·1
1969	5,421	3,703	69·7
1970	5,006	3,602	72·0
1971	5,060	3,858	74·7
1972	**4,579**	**3,606**	**78·8**

Of the total 3,606 hospital confinements in 1972, 2,874 i.e. 79·7% were discharged from the hospitals within 10 days of the confinement as follows:—

Time of discharge after delivery	*No. discharged*	*Percentage of hospital confinements*
Within 48 hours	640	17·8
3-7 days	1,457	40·4
8-10 days	777	21·5

Applications for hospital confinements on social grounds were accepted in 602 cases out of a total of 662 applications.

Ante-natal Clinics

The domiciliary confinements and the number of women who booked their family doctors for confinements at home have continued to decline. The following are the figures for 1972 with the 1971 figures for comparison:—

Year	*Home confinements*	*G.P. booked*	%
1971	1,305	1,279	98·5
1972	**973**	**961**	**98·8**

Most of the ante-natal care was carried out by the general practitioners themselves.

There were 710 sessions at local authority ante-natal clinics held during 1972, of which 99 sessions were conducted by medical officers with 203 attendances and 611 sessions held by domiciliary midwives with 7,645 attendances. The following procedures were continued to be carried out as before.

Blood Examinations

Blood grouping along with rhesus factor ascertainment was done in 724 (829 in 1971) expectant women. 97 of these were considered to be "at risk" of iso-immunisation of whom 47 (35 in 1971) needed protection by "Anti-D" immunoglobulin injection. Two were found to be iso-immunised; one was delivered in the hospital and the other at home; both had live babies.

Haemoglobin Estimation

Haemoglobin estimation for early detection of anaemia during pregnancy was performed on 1,307 (1,961 in 1971) women attending ante-natal clinics. Since August 1972 a new policy of haemoglobin estimation for post-natal cases has been adopted and 287 samples were taken from the sixth day after delivery.

Test for Venereal Disease

Blood samples for the detection of syphilis were taken from 798 (1,392 in 1971) expectant mothers attending the ante-natal clinics. None of them was found to be positive for syphilis.

Blood Examination for Rubella Antibody

The procedure of blood examination for rubella antibody estimations has been continued during 1972. Blood samples from 134 (181 in 1971) pregnant women were examined; out of these 110 (150 in 1971) women showed antibody levels indicating their immunity to the disease and requiring no further action. Twenty-four did not show any antibodies in their blood and were considered to be at risk of contracting rubella with its serious consequences, especially during the first three months of their pregnancies. These women could only be advised to avoid contact with rubella during their current pregnancies but to have immunisation in future.

A Department of Health and Social Security circular received in March 1972, states as follows:—

"The Joint Committee on Vaccination and Immunisation has reviewed the question of vaccinating women of child-bearing age. It has advised the Secretary of State that, while the Committee remain of the view that routine rubella vaccination of women of child-bearing age is not recommended, rubella vaccination may now be given to women of child-bearing age who request it and are found to be seronegative, to women in the post-partum period found during their pregnancy to have been seronegative and to seronegative women at special risk either of acquiring rubella or of transmitting it to others. Women considered to be at special risk include school teachers, nursery staff, nurses and female doctors in children's hospitals and obstetric and gynaecological units and the staff of ante-natal clinics". The Secretary of State has accepted this advice.

Sickling Test

Blood tests for the detection of factor responsible for "sickle-cell anaemia", mostly prevalent in races of African origin, were carried out in 76 cases (101 in 1971). Only one (7 in 1971) was positive of 76 samples taken and this was in a person of West Indian origin. Samples taken according to the country of origin were as follows:—

	Blood Samples examined	*Positive*
West Indian ..	20	1
Asian	47	—
African	2	—
Others	7	—

Maternal and Peri-Natal Mortality

Maternal Deaths

During 1972 there were two recorded maternal deaths (two in 1971) giving a maternal mortality rate of 0·43 per 1,000 births (0·39 in 1971). The details of these deaths were carefully looked into and are given below:—

Case 1 A 22-year old English woman with a previous history of four live birth deliveries and a miscarriage, delivered a macerated stillborn baby on 14th March 1972 in the City Hospital. She was

re-admitted into the City Hospital on 24th March 1972 with a severe abdominal pain and died on 25th March 1972. The recorded cause of death: 1a Liver failure, b Portal vein thrombosis, c Thrombosis of inferior vena cava, mesenteric and ovarian veins.

Case 2 A 20-year old English woman (para 1) was delivered in the City Hospital on 23rd October 1971 by a Caesarian section because of cephalo-pelvic disproportion. There was a history of "fainting attacks" a month after delivery. She was admitted into the General Hospital on 10th March 1972 and was diagnosed as suffering from thrombo-embolic pulmonary hypertension. She was transferred to the Groby Road Hospital on 27th March 1972 with a poor prognosis. She was later followed up as an out-patient, but finally died in the General Hospital on 29th August 1972. The cause of death recorded was: 1a Respiratory failure, b Pulmonary hypertension, c Thrombo-embolic episodes after Caesarian section in October 1971.

Infant Mortality Rate

Total deaths under one year of age were 101 (109 in 1971) with an infant mortality rate of 21·97 (21·43 in 1971) per thousand live births.

Peri-natal Mortality

In 1972 there were 59 (61 in 1971) stillbirths and a further 47 (55 in 1971) children who died within the first week of life, which, when combined, give a peri-natal mortality rate of 22·8 per thousand total births, the same rate as it was in 1971. The primary causes of the 106 peri-natal deaths recorded are shown in the table below:—

Primary Causes of Peri-Natal Deaths

Primary causes of death	*Premature births*	*Total of Peri-natal deaths*
Ante-natal causes		
Toxaemia including haemorrhage ..	1	1
A.P.H. without toxaemia	4	6
Rh. incompatibility	2	3
Intra-natal causes		
Injury	2	4
Anoxia	9	17
Intra-uterine death	2	4
Congenital malformations	20	25
Prematurity only	16	16
Respiratory distress syndrome	11	13
Placental insufficiency	7	9
Other causes	4	8
All causes	78	106

Congenital Malformations and the Handicapped

Congenital Malformations

Eighty-six children with a total of 99 congenital malformations were notified in 1972 with the comparative figures for the previous four years.

	1972	1971	1970	1969	1968
Central nervous system ..	26	22	33	19	26
Eye, ear	2	2	—	2	6
Alimentary system	14	10	6	20	12
Heart and great vessels ..	1	4	3	5	4
Respiratory system	—	—	—	—	1
Urino-genital system	5	9	9	6	5
Limbs	28	22	27	35	48
Other skeletal	3	2	—	1	2
Other symptoms	9	5	2	2	11
Other malformations	11	3	5	4	10
Totals	99	79	85	94	125

Liaison has been maintained with the Children's Hospital, other local hospitals and general practitioners, to have up to date information available on young children which is essential for the planning and co-ordination of community health and social services.

"At Risk" Register

The observation register for children "at risk" of a handicap has been maintained since 1963 and is reviewed at regular intervals. Children with established handicaps are transferred to a "Register of Handicapped Children".

Children 'At Risk'

Category	*Number on register at 31.12.72*	*Number on register at 31.12.71*
Congenital abnormality ..	135	107
Family history of defect ..	13	20
Complication of pregnancy ..	19	60
Complication of labour ..	42	53
Post-natal factors	117	145
Symptomatic group	104	158
Total	430	543

The total number of children on the register at the end of the year was 430 compared with 543 at the end of 1971. A reduction was achieved by a thorough review of those on the register.

The register of handicapped children was also reviewed and the total number of children on this register was 156 at the end of 1972 compared with 210 at close of 1971.

The children on the register belonged to the following categories of handicaps:—

REGISTER OF HANDICAPPED CHILDREN

Category	*Number on register at 31.12.72*	*Number on register at 31.12.71*
Mental subnormality	11	30
Developmental	39	49
Cerebral palsy	13	16
Epileptic	8	8
Cardiac defects	21	28
Orthopaedic	26	29
Eye defects	5	10
Deafness	4	8
Other	29	32
TOTAL	156	210

In 1972, 102 children over two years of age were notified to the Principal School Medical Officer for assessment regarding their 'special educational needs' in the future.

CHILD HEALTH CLINICS

Nottingham was one of the 'pioneers' in Britain for providing child welfare services. The first centre was established in the city in 1908 under the name of "The Mothers' and Babies' Welcome", with the object of reducing the excessive infant mortality of the town of Nottingham and to improve the "health and stamina" of the mothers. This was second only to a centre opened in St. Pancras, London, earlier that year.

Since then the child health clinics have continued to provide valuable community health services for the young children.

In 1972 a total of 1,705 (1,687 in 1971) child health clinic sessions were held, 1,480 (1,543 in 1971) of which were conducted by medical officers and the remaining 225 (144 in 1971) by health visitors. There were 45,665 (53,335 in 1971) attendances by infants and pre-school children during the year by the following groups of children:—

1972	1971
3,352 born in 1972	3,396 born in 1971
2,200 born in 1971	1,197 born in 1970
1,494 born in 1967-70	1,455 born in 1966-69

Immunisation, routine screening procedures, and medical assessments have continued to be carried out in these sessions.

PHENYLKETONURIA

For an early detection of phenylketonuria, blood samples by heel-stab for Guthrie test were taken at 6th day of life from 4,434 infants (4,910 in 1971) during 1972. None of them was reported to be positive.

Hearing Tests

Children numbering 3,483 (3,276 in 1971) had routine screening tests done for hearing, 22 (16 in 1971) of these children were referred for investigations and further testing. Eleven were established to have impaired hearing and another 10 were still under review. In 1971, the screening brought to light, one markedly deaf, five impaired hearing, and three remained under review.

Establishments for Massage or Special Treatment

Fifteen of the 16 establishments registered in accordance with the regulations set out in the Nottingham Corporation Act 1952 had their licences renewed in 1972.

Nursing Homes

As in 1971, two nursing homes registered with the Corporation. They admit medical cases and old people.

Nursing Agencies

The one remaining agency in Nottingham renewed its licence to operate during 1972.

Family Planning Service

BY

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AND

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Senior Medical Officers

During 1972, a comprehensive family planning service, including a domiciliary service, was established directly by the City of Nottingham as a complementary service to the already existing facilities.

In previous years, the local authority family planning service had been provided by two voluntary organisations: the Family Planning Association and the Midlands (Family Planning) Advice Association, with financial support by the local authority in certain specific cases, together with the free use of some local authority premises.

Detailed planning and substantial ground work were carried out during the previous year in preparation for the new scheme which had a net cost of £10,363. Free advice and service was provided for all, with a charge for supplies and appliances, except in medical cases or patients receiving social security benefits.

SUMMARY OF ESTIMATED EXPENDITURE

	£
Staff	9,406
Transport	300
Furniture (non-recurring)	352
Stationery and telephone	475
Medical equipment	550
Contraceptive supplies and appliances	10,140
Domiciliary service	247
Publicity	300
GROSS EXPENDITURE	£21,779
Less receipts from sale of supplies and appliances	11,407
NETT COST OF SERVICE	£10,363

APPRECIATION AND TRAINING COURSES

Considering the important role of existing field staff, health visitors, midwives and district nurses, in providing information about family planning to the community in general and in the motivation of the needy in particular, a series of "appreciation courses" was arranged before the service began. Interested staff were divided into three batches and given a series of four lectures, comprising an outline of the scheme, contraceptive techniques and the health education aspects.

A further two training courses, including practical aspects were held for nurses selected to work in family planning clinics. In-service training was arranged for nurses requiring experience. Those medical officers who were to work in these clinics either had training and experience in family planning previously or were given in-service training. Similar courses of training have continued according to need.

A comprehensive, but easily maintained, patient record card with a simple colour coding system, based on the classification of contraceptives used, was designed. Considering all the factors of management and access, a centralised appointment system for all the clinics was adopted, with records and supplies maintained at individual clinics.

Clinics

Having in mind the availability of staff and other facilities, the opening of clinics had to be phased-in with two sessions per week starting in the middle of April. This was increased to four sessions per week in May. A full complement of eight sessions, including two in the evening plus two sessions for domiciliary service, was put into effect in July 1972. Another weekly session was added at the opening of the new Bulwell health centre in August.

Information media, including press and Radio Nottingham, have been employed to bring the service to the people in real need. The main emphasis, however, has remained with the dissemination of information through personal contact by the staff working in the community.

Clinic Attendances

All patients attending clinics for the first time were considered as new cases. This meant a thorough medical and gynaecological history relevant to the use of the contraceptive methods provided. The medical examination included blood pressure and weight recording, a speculum and bi-manual examination of the genital system, as well as a cervical smear.

The following is the procedure adopted in the clinics:—

Medical examination (as detailed in case-sheet) and cervical cytology on first visit (unless menstruating when it may be postponed till the next visit) and every year in all cases.

First visit	*Second visit*	*Subsequent visits*
IUD cases		
Insertion advisable during or immediately after menstrual period in normal circumstances. Consent form signed by patient and husband. Letter to G.P. when insertion advised.	6 weeks after insertion.	Next recall should be six months later. Subsequent visits yearly.
Oral contraceptive cases		
The pill to be started on the 5th day of the current or next menstrual period. Letter to G.P. when pill advised.	After 6 weeks use of the oral contraceptive (6 – 10 weeks after first visit).	Medical consultation and supplies after 3-6 months depending on needs. Social Security cases 3 months' supply at a time.
Conventional methods		
Issue of sheaths, jelly, foam, pessaries—3 months supply if to be used regularly, or according to needs if used for interim or transitional period. Cap — issue of practice cap for 1 or 2 weeks.	1-2 weeks for cap. Check and supply of cap for regular use.	Six months. Medical examination after a year but supplies for 6 months. Social Security cases 3 months' supply at a time.

New Cases

Up to the end of the year there were 1,471 new cases registered, with total attendances, including return visits of 2,693. Out of a total of 1,471, 595 (40·5%) can be considered entirely new cases to family planning. This group had not used any contraceptive method for at least three years prior to attendance. The table shows attendances at the different clinics:—

Clinic Attendances

Clinic	*No. of sessions*	*New cases*	*Total attendances including return visits*
Basford W.C.	32	162	208
Bestwood Park H.C. ..	25	110	316
Bilborough W.C.	24	109	194
Bulwell H.C.	18	98	175
Ernest Purser W.C. ..	35	197	336
Hyson Green H.C. ..	36	212	407
John Ryle H.C.	25	155	290
Radford W.C. (afternoon) ..	37	250	441
Radford W.C. (evening) ..	24	161	296
Domiciliary	16	17	30
Totals	272	1,471	2,693

Social Classification of Patients

The following is the social class distribution of the new cases according to the Registrar General's classification:—

Social classification

Class	*No.*	*Percentage*
1	6	0·4
2	178	12·1
3	837	56·9
4	441	30·0
5	9	0·6
Total	1,471	100·0

Free Treatment

No charge for advice or service has been made. Contraceptive supplies were charged at the manufacturers' cost price plus a local authority 30% handling fee for those able to pay. For those medico-social cases where it was decided that a woman ought not to become pregnant on medical grounds or in those receiving social security benefits, the charge for supplies was waived. Out of 1,471 cases 190 (12·9%) received supplies completely free. Of these seven were for medical and 183 for social reasons.

Age Groups and Marital Status

The following table shows patients according to age groups.

Ages of Patients

Age group	*Under 20*	*20-24*	*25-29*	*30-34*	*35+*
No. of patients	171	491	376	253	180

Out of the total 1,471 registered cases, 1,214 were married and 257 were unmarried women. Of the 595 women considered completely new to family planning, 144 were unmarried compared with 451 married women, a percentage of 24·2 unmarried women and a ratio of 1 : 3·1 unmarried to married women.

Methods of Contraception

Both oral contraceptives and intra uterine devices were the most popular methods of contraception, a percentage of 49·1 and 36·0 of all cases respectively. The following table gives the number of users of different methods and their percentage:—

Methods used

Method of contraception	*No. of users*	*Percentage of total*
Oral contraceptive	722	49·1
I.U.D.	531	36·0
Diaphragms (caps)	121	8·2
Sheaths	29	1·9
Other methods	12	0·8
No method used	56	3·7
Total	1,471	100·0

Method effectivity and side effects of the different contraceptives used

For this first year of the service, only a few general comments are appropriate.

Oral contraceptives

Selection of an oral contraceptive preparation for a particular woman can be made on the basis of her oestrogen/progestogenic balance which may be indicated by a detailed history and an examination. Throughout the year, it has rarely been necessary to change the oral contraceptive initially prescribed to individual patients. The very few women who needed a change did so either because of persistent break-through bleeding or because of persistent nausea. Those who complained of side effects had mostly nausea, slight breast tenderness or inter-menstrual bleeding or spotting during the first two or three months of use only. They also were few in number.

Intra-uterine devices

Aseptic techniques for the insertion of the intra-uterine devices are adhered to the use of pre-packed and sterilised instruments. They have been used for every individual insertion. The devices mostly inserted were Lippe's loops and Saf-T coils, while Dalkon Shields have been used only on an experimental basis in two clinics. 46 Dalkon Shields have been inserted and appear to be satisfactory. Among the women using intra-uterine devices the side-effects have been moderately heavier menstrual periods, especially during the first two or three months of use. The other complaints have been inter-menstrual spotting/bleeding or lower abdominal pain or cramps, although in relatively few cases. So far there have been no known cases developing serious complications or requiring emergency treatment.

Domiciliary service

The domiciliary family planning service provided in 1972 was planned in the light of the findings of existing field staff, who through their personal contact tried to provide information, encouragement and motivation to the potential users of the clinic service. This they did with success and tenacity even to the extent of bringing them to the clinics in their own transport. It was apparent that a domiciliary service was necessary to meet all needy cases. With its introduction, field staff began to identify those who would benefit from it. Its development was necessarily gradual.

Social Services Department and local hospitals were provided with "referral forms" for requesting a domiciliary visit indicating the need in specific cases. This was usually followed by an "assessment visit" by the health visitor concerned. A physical or mental handicap of the woman, her child or a dependent relative was initially considered an indication for a visit by a domiciliary service team consisting of a doctor and nurse in conjunction with a health visitor. For the purpose of the domiciliary service, the City has been divided into four areas along the lines of existing nursing divisions, North, Central, West and South. Each area was covered monthly for one session, the team doing one session per week. The main emphasis has remained with the clinic services and by comparison with clinic attendances, the relative use of the domiciliary service has been small.

The following is the work done by the team up to the end of the year:—

Number of sessions	16
Number of cases	17
Total visits (including return visits) ..	30
Methods used:	
I.U.D. insertion	7
O.C. prescribed	4 cases
Sheaths prescribed	1 case

Mobile clinic

Under phase 7 of the 1972 Urban Aid Programme, a scheme was submitted for the purchase of a caravan and a towing vehicle in

July 1972. The caravan is to be used as a mobile clinic, partly for family planning purposes and partly for cervical cytology and immunisation and vaccination sessions where appropriate, especially in those areas of the City where no clinic or other suitable premises are available. The purchase was finally approved in November 1972 and it is hoped that the mobile unit will be in use from July 1973.

Expansion of Services

The family planning service is constantly under review. All clinics have been well attended and a waiting list is rapidly building up in some clinics. With this increasing demand an expansion of the service has been provided for in the 1973/74 estimates.

Vasectomy

In view of the National Health Service (Family Planning) Amendment Act, 1972 relating to vasectomy, the possibilities of providing a vasectomy service are being examined. Finance for the introduction of such a service has been provided for in the 1973/74 estimates.

Cervical Cytology

Cervical cancer screening has continued to show encouraging results. During 1972 the number of smears taken increased to 6,785 compared with 6,053 smears during 1971, a previous record number in itself. The cumulative total since the inception of this scheme in 1966 had reached 30,107 at the end of the year.

The table below shows the yearly number of smears taken during the period 1966-72.

Year	*Number of smears*	*Number positive*	*Rate/ 1,000*
1966	5,448	67	12·2
1967	2,948	31	9·5
1968	2,598	25	9·6
1969	2,725	20	7·3
1970	3,550	14	3·9
1971	6,053	40	6·6
1972	**6,785**	**30**	**4·4**

Under the recall by letter system, adopted in 1971 for repeat smears, there has been a special effort to bring back for examination those women who had not responded to the initial recall letter sent out after an appropriate lapse of time. Normal recall intervals are as follows:—

Aged under 35 years—3 years
Aged 35-45 years —2 years
Aged over 45 years —18 months/2 years

The women recalled are advised to attend specific clinics nearest to their available addresses. For those who did not make an initial response, the Executive Council was approached for any change of address and of general practitioner.

Cervical cytology is also a necessary component of the family planning service, smears being taken at all routine visits. Visits to industrial organisations, to take smears from women workers at the work premises, have continued as in previous years.

STATISTICS

Out of a total of 6,785 attendances during 1972, there were 3,202 new cases and 3,583 recalls, compared with 3,255 new cases in 1971 and 2,798 recalls.

The following is the breakdown of the total figures according to the sessions attended:—

	1972	1971
Attendances at local authority day clinics ..	3,008	2,454
Attendances at local authority evening clinics ..	1.343	1,479
Attendances at local authority family planning clinics	968	—
Attendances at industrial sessions	1,466	2,120

The age distribution of the patients was as follows:—

	1972	1971
Patients aged under 25 years	1,171	864
Patients aged 25-34 years	1,657	1,452
Patients aged 35-44 years	1,756	1,645
Patients aged 45-54 years	1,584	1,572
Patients aged 55-64 years	544	484
Patients aged 65+	73	36
	6,785	6,053

When the Registrar General's classification according to the occupation of women or their husbands is applied, it gives the following number of women belonging to the different social classes:—

Number of women examined	1972	1971
Social Class 1	31	58
Social Class 2	764	463
Social Class 3	4,366	3,364
Social Class 4	1,474	1,669
Social Class 5	150	499

A list of all the establishments employing more than 100 women in the City was obtained from the local Employment Exchange. Selected firms were sent a letter from the Medical Officer of Health informing them of arrangements for cervical cytology and that, depending on the number of women willing to have the test done and the availability of certain facilities, their premises could be visited by a combined medical/nursing/clerical team.

During the year the following industrial organisations were visited by a team:—

Firms visited	*No. of smears taken* 1972	1971	*Positive results* 1972	1971
Albany Hotel ..	21	—	—	—
John Player & Son ..	721	758	4	4
C. & A. Modes ..	52	—	1	—
Mapperley Hospital ..	100	—	—	—
Royal Ordnance Factory	33	—	—	—
Inland Revenue ..	60	—	—	—
Crossland Filters ..	58	—	2	—
East Midlands Gas Board	65	—	—	—
Bell Fruit Machine Co.	28	—	—	—
Daks-Simpson ..	73	—	—	—
Haddon Textiles ..	20	—	—	—
Department of the Environment ..	53	—	—	—
G.P.O. Broad Street..	63	72	—	3
G.P.O. Walton House	119	95	—	1
	1,466	925	7	8

POSITIVE REPORTS

On receipt of a laboratory report indicating pathological changes in the cervical cells, the general practitioner of the patient is contacted by telephone and a copy of the report is sent by letter so that consultant gynaecological referral can be arramged. Follow-up reports are subsequently obtained from the Pathology Department.

During 1972, 30 pathological cervical smears were reported out of 6,785, a rate of 4·4 per thousand. In 1971, 40 positive smears were found in 6,053 examinations, a rate of 6·6 per thousand. The distribution according to age groups and the sessions attended is shown in the following table:—

	Under 25	*25–34*	*35–44*	*45–54*	*55–64*	*65+*	*Total*
Day clinics	— (—)	3 (5)	2 (5)	7 (5)	— (2)	2 (—)	14 (17)
Evening clinics	1 (—)	2 (3)	1 (1)	1 (4)	1 (—)	— (—)	7 (8)
Family planning clinics	1 (—)	1 (—)	— (—)	— (—)	— (—)	— (—)	2 (—)
Industrial sessions	— (—)	2 (3)	1 (4)	4 (7)	— (1)	— (—)	7 (15)
TOTAL	2 (—)	8 (11)	4 (10)	12 (16)	2 (3)	2 (—)	30 (40)

The 1971 figures are in parentheses.

The "Women's National Cancer Control Campaign" is running a project to campaign for cervical cytology early in 1973 and this will cover the East Midlands Area. Arrangements were made in 1972 to book their "mobile clinic" so that it is on loan for two weeks in the middle of March 1973. The intention is to use the "clinic" in the known "poor response areas" not fully covered by regular cervical cytology clinics. Staff and equipment will be provided by the local authority as well as the expenses for publicity, while the W.N.C.C.C. will use their volunteers for health education purposes, including distribution of leaflets giving the dates and sites for the "clinic". A publicity campaign, including the use of Radio Nottingham and the local press, will be organised.

DENTAL SERVICES

BY

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During 1972 there was an increase in the number of visits for dental treatment by pre-school children and the change in the pattern of treatment from an emergency to a comprehensive service, which has been a feature of the last few years, continued.

However, those treated represent only a small proportion of the eligible population and since, in 1970, in the whole of England and Wales, there were only 510,000 courses of dental treatment for pre-school children in the general practitioner and local authority services combined, Nottingham can be said to reflect the national situation.

Perhaps this is because the dentist has traditionally had little contact with children during infancy and is rarely asked for advice about teething or perhaps parents, in view of the difficulty of carrying out treatment on very immature individuals subconsciously defer the problem. Because of this lack of contact, it is certain that a great opportunity in terms of the preventive aspects of child dental care has been missed in the past. The expectant or nursing mother is particularly open to advice about her child and this includes the area of dental health education. This advice should be two-fold.

Firstly it should be concerned with maternal and child nutrition and in particular with the problem of sucrose intake between meals. The pernicious habit of the sweetened comforter could in many cases be prevented or controlled by providing mothers with relevant information on the dental hazards likely to ensue from such a practice.

Secondly, adequate measures for the establishment of oral hygiene in the young child should be discussed. In this respect, advice could be given on cleansing of the infant mouth with cotton buds soaked in normal saline or dilute bicarbonate solution and a gradual conversion suggested to the use of a baby-sized toothbrush by the age of 12-18 months. The introduction of toothpaste should be advised by the early part of the third year and the benefits of a fluoridated toothpaste made known. These measures would enable the deciduous dentition to erupt into a relatively non-cariogenic oral environment and will render enamel surfaces more resistant to carious attack from acid producing bacteria.

Thus, the objective must be to persuade the parents of pre-school children of the benefits of early dental examination and advice. With this in mind, a pilot scheme was introduced in the Clifton area of the City in the first quarter of 1972. A simple questionnaire was completed by a health visitor during a routine visit to three-year old children and a dental appointment was offered. The pilot scheme

was completed in March and some of the early conclusions are explained below. Caution must be exercised in extending the results to the rest of the pre-school population because the sample of parents interviewed was not randomly chosen because Clifton with a better than average dentist to population ratio is by no means typical of the rest of Nottingham.

A total of 243 questionnaires were completed and the questions asked and the replies received are summarised in Table 1.

TABLE 1 THE RESULTS OF THE DENTAL QUESTIONNAIRE

QUESTION	*YES*		*NO*	
	No.	%	*No.*	%
Does your child have regular dental inspections?	73	29·90	170	70·10
Has your child ever had emergency dental treatment? ..	16	6·90	227	93·10
Do you have regular dental treatment?	137	56·30	106	43·70
Would you like a dental examination to be arranged for your child at a school dental clinic?	127	52·30	116	47·70

It is immediately apparent that less than one third of the parents interviewed arranged regular dental inspections for their young children and though there is no comparable national information available, it was estimated in 1965 that, at best, only 20% of 3-4 year olds visited a dentist in any one year. Although apparently better than the national average, it is still disturbing that so few of Nottingham's "under fives" are regularly dentally examined.

The number of children who had sought emergency treatment (6·9%) was broadly in agreement with a 1971 London survey which found that 8% of a sample of 0-5 year olds needed urgent dental extractions. These teeth will almost certainly have to be extracted under general anaesthesia, which for a very small child may often lead to an emotional upset that will profoundly affect attitudes to future dental treatment.

The proportion of mothers apparently arranging regular dental examinations for themselves was 56·30% compared with the 1968 Adult Dental Health survey finding of 45·30% for men and women of the 16-34 year old age group. These results reflect the attitudes to dental treatment of an age group which, due to the National Health Service, has had the opportunity of conservative treatment without economic barriers for most of their lives and it is encouraging that the patterns of behaviour of the community have changed so quickly from the pre-1948 period when there was little or no restorative dentistry for the bulk of the population.

The most important question asked was whether parents would like an appointment to be arranged for their children at a school

dental clinic and of those interviewed 52·30% said they would. Table 2 summarises the results obtained by sending one appointment to each of the 127 parents who agreed to the examination and Table 3 illustrates the pattern of attendance of those children who kept the first appointment.

TABLE 2 THE RESULTS OF SENDING ONE APPOINTMENT TO EACH PARENT WHO AGREED TO A DENTAL EXAMINATION

	No.	%
Appointment kept	76	59·80
Appointment not kept	51	40·20

TABLE 3 THE PATTERN OF ATTENDANCE OF THOSE CHILDREN WHO KEPT THE FIRST APPOINTMENT

	No.	%
Course of treatment completed	46	61·10
No treatment required..	19	25·00
First appointment kept but did not attend further	6	7·70
Appointment kept but referred to own dental practitioner	3	3·80
Appointment kept but untreatable	2	2·40

The attendance for examination and treatment was lower than had been hoped, but it was gratifying that, once committed to treatment, most children completed it, thus indicating satisfaction with the service provided. However, it is interesting to examine possible reasons for the low acceptance rate.

The attitudes of present parents will largely have been formed by their experience when they themselves were young. Dental policies for children at that time and for many years after were, due to lack of resources and manpower, ones of emergency treatment and extractions only. It seems likely that many parents are still unaware that the modern, sophisticated techniques available for adults are now used in the treatment of the very young and that a visit to the dentist with a small child need no longer be a source of anxiety.

To expect to radically change these parental attitudes overnight would be unrealistic but the Clifton pilot scheme illustrated well both the need for more dental information about pre-school children and how important are our present policies for the future generation of mothers and fathers whose opinions are now being formed.

From the experience gained in this study it is hoped that further schemes may develop and form the foundation of a more comprehensive pre-school dental service and I am grateful to the Director of Nursing Services and her staff whose enthusiasm made the project possible.

A copy of the information sent to the Department of Health and Social Security on Form LHS 27/7 is set out in the following table.

Part A—Attendances and Treatment

	Children 0-4 (incl.)		*Expectant and nursing mothers*	
	1972	1971	**1972**	1971
Number of visits for treatment during year				
First visit	**428**	356	**62**	65
Subsequent visits	**539**	383	**107**	147
Total Visits	**967**	739	**169**	239
Number of additional courses of treatment other than the first course commenced during the year ..	**7**	2	**—**	3
Treatment provided during the year:				
Number of fillings	**669**	407	**135**	100
Teeth filled	**605**	362	**124**	89
Teeth extracted	**512**	511	**83**	141
General anaesthetics given ..	**267**	269	**18**	25
Emergency visits by patients ..	**164**	185	**13**	18
Patients x-rayed	**6**	—	**7**	14
Patients treated by scaling and/or removal of stains from the teeth (Prophylaxis)..	**118**	88	**11**	30
Teeth otherwise conserved ..	**20**	22	**—**	—
Teeth root filled	**—**	—	**1**	—
Inlays	**—**	—	**—**	—
Crowns	**—**	—	**—**	—
Number of courses of treatment completed during the year ..	**230**	153	**29**	43

Part B—Prosthetics

	1972	1971
Patients supplied with full upper or full lower (first time)	**1**	7
Patients supplied with other dentures	**8**	15
Number of dentures supplied ..	**10**	26

Part C—Anaesthetics

	1972	1971
General anaesthetics administered by dental officers	**—**	—

Part D—Inspections

	Children 0-4 (incl.)		*Expectant and nursing mothers*	
	1972	1971	**1972**	1971
Number of patients given first inspections during year	A **437**	370	D **41**	47
Number of patients in A and D above who required treatment	B **346**	319	E **41**	46
Number of patients in B and E above who were offered treatment ..	C **333**	316	F **41**	46

	1972	1971
Number of dental officer sessions: (equivalent complete half-days) devoted to maternity and child welfare patients:		
For treatment	108	80
For health education	20	18

THE NURSING SERVICES

BY

Miss Patricia M. Morton
Dip.Soc.Stud., S.R.N., H.V. & P.H.N. (Admin.) Cert.

Director of Nursing Services

Over this past year some further progress has been made in consolidating the nursing teams and fostering relationships with general medical practitioners. Ways and means have been sought to collaborate with the Social Services and to further liaison with hospitals. The changing pattern of the work undertaken by the community nursing staff is reflected in the statistical returns which appear later and in the more detailed reports for each branch of the service which are given below. Retrospectively this year may be viewed as a final phase of developments in nursing which have taken place over the past 100 years within local health authority prior to the unification with hospital nursing within the framework of a reorganised National Health Service.

In February, circular 13/72 "Aids to improve efficiency in Local Health Services—Deployment of Nursing Team" was issued by the Department of Health and Social Security. It stressed the need to strengthen the services so that they could move into an integrated health care system in a strong and viable form and the growing importance of measures for the prevention of ill health and trend toward maximum treatment, care and after-care of patients outside hospital. Emphasis was laid, among other things, on realistic staff/population ratios; adequate support services to conserve nursing skills; up to date equipment; attachment to general practice and suitable working premises.

In the City some headway has been made in that there has been an increase in the number of home nurses and nursing aides although it is interesting to note that the work during the year expanded proportionately. Clerical help has been provided in each of the four areas and a margin of support for a depleted health visiting staff through additional clinic nurses. A city the size of Nottingham requires at least 60 health visitors; out of our establishment of 44 there are still vacancies. What is hopeful is the rise in applications for student sponsorships although a positive effect of this, should more students be accepted for training, would not be felt until 1974. The work-load of domiciliary midwives has settled on a more even keel. There were 481 fewer births in 1972 and the percentage of home confinements was 21·25% compared with 25·64% in 1971.

In some parts of the City staff are still accommodated in overcrowded premises; the opening of Bulwell Health Centre came as a welcome relief. With two more centres due to become operational in 1973 our main problems may be overcome apart from the sheer inadequacy of premises in Aspley, Bilborough and Broxtowe.

In-Service Training and Community Nursing Experience

Although in making a review for the year one is always aware of things which were not accomplished much time and effort went into further education and training. If the report of the "Committee on Nurse Education" (Briggs) is accepted the emphasis on providing experience in preventive aspects of health care and the nursing of patients at home will be of greater significance.

To provide for our own recruits and for nurses from neighbouring authorities, two district nurse training courses were organised; 12 were successful in gaining the National certificate in May and 13 have recently sat the examination.

Twelve experienced district nurses who have followed a special course of preparation are designated as practical work instructors to provide guidance to both district nurse students and hospital students. Sixteen of the latter followed a six week course and eight completed a three month course covering a community care programme.

Other programmes of in-service training included several two day courses on family planning and five two day courses on modern visual aid techniques. Ten members of staff attended management appreciation courses organised by Trent Polytechnic. A further health visitor was trained for fieldwork instruction and four district nurses undertook a two week practical work instructors course. A nursing officer who followed a special course of instruction at the Department of Audiology, University of Manchester, now provides in-service training on screening tests for hearing.

A week of experience in clinical teaching for six practical work instructors was arranged by the Nottingham School of Nursing and local hospitals invited our staff to share their study days.

In addition three members of staff began post entry training courses which were for the Diploma in Nursing, Diploma in Health Service Administration and Advanced Diploma in Midwifery.

MIDWIFERY

There were 491 fewer births in the City than in 1971 and 328 less home confinements. Consequently night calls were reduced which made a welcome change for staff who have given many years of service and have met all demands made upon them. Over the past year midwives have adapted to working with a group of general practitioners and a number are now sharing their ante-natal and post natal sessions. The advantages, where this has been instigated, are for better co-operation which cuts down the risk of faulty communication and duplication of effort.

A nursing officer or part time midwife attends maternity hospital booking clinics where arrangements for early discharge and other matters can be discussed with expectant mothers. A daily visit is also made to the maternity units at the Firs and City hospitals to meet the mothers who are due for discharge on the following day and to exchange information with hospital midwifery staff. Both these arrangements have been welcomed by staff and patients alike.

Since July a haemoglobin test on the sixth day after delivery is carried out for all mothers delivered at home, a procedure which is routine for hospital confinements.

Parentcraft classes were a flourishing aspect of work undertaken jointly by midwives and health visitors and pre-term and low weight infants received concentrated care from specialist midwives.

The authorised strength of 36 midwives was maintained throughout the year and sick leave accounted for the loss of 769 working days. Two unfortunate accidents kept two staff off over a long period.

	1972	1971	1970
Premature babies born at home	44	58	50
Subsequently removed to hospital.. ..	21	22	30
Discharged from hospital for domiciliary care	453	472	384
Visits paid during the year	4,793	5,639	5,415

DISTRIBUTION OF PRACTISING MIDWIVES AT THE END OF THE YEAR

	1972	1971
Domiciliary Service ..	44	43
City Hospital	49	40
Firs Maternity Hospital ..	16	19
Women's Hospital ..	27	28
Highbury Hospital ..	19	19
Nursing Homes and Agency Midwives	17	24

HEALTH VISITING

Where feasible, health visitors have elected to relate their case load to specific general medical practices covered by a nursing team. Few of the doctors' premises can offer full working facilities but direct contact and regular meetings are possible. The changing pattern of the health visitors' work is similar to that found in other parts of the country where attachment schemes have developed. Referrals cover a wide age range with a significant rise of elderly and those recently discharged from hospital. Five health visitors are involved in liaison schemes with local hospitals.

Case conference sessions absorbed a great deal more time and group health education activity, mainly in schools, was double that of the previous year. Although actual home visits were fewer many unrecorded personal interviews with members of the public take place in health centres and clinics particularly for those seeking advice on family planning.

Replacements, from among newly qualified and married health visitors returning to part-time duties, were forthcoming for the six staff who left so that the staffing situation showed little change at the end of the year. Sickness absence accounted for 194 days which was considerably less than in 1971.

Home Nursing

The pace of this service continued to accelerate with a rise of 1,362 new cases over the preceding year. The total on the register at the end of the year was nearly 300 more than in 1971. Team work with general practitioners enhanced the existing good relations and a higher referral rate followed. First treatments carried out on health centre and general practitioner premises totalled 1,303. Follow-up treatments and home visits totalled 177,955 an overall increase of 10,319.

Improved liaison arrangements particularly with casualty departments, some surgical wards and the geriatric unit increased the flow of patients referred to the community nursing services.

Eight more nursing aides joined the service mainly undertaking part-time duties, and this provided welcome support for the nursing teams.

Increased travelling and the keeping of more detailed reports has however absorbed more time of the nursing staff within an actual working day. The pace too is slower when a nursing student accompanies the nursing sister.

Nineteen new appointments were made and eleven staff resigned. There was a welcome reduction in sickness absence this year attributable perhaps to an improved off-duty system which reduced the working strain of what can be a very busy week.

Nursing Equipment

The escalation of requests for the loan of nursing equipment and disposable incontinence pads has presented problems where demand at times exceeded supply. Part of the increased demand was attributable to additional cases referred through Social Services where the supply of disposable incontinence pads to the elderly or severely disabled would ease the domestic burden of laundering soiled linen. It is a debatable point as to whether the provision of a laundry service would be more economic.

Auxiliary and Marie Curie Services

The Marie Curie day and night sitter service helped 88 patients, a total of 330 visits and 2,870 hours. The actual hours worked were fewer than in 1971, due to limited staff available for this service.

The auxiliary service helped 64 patients through periods of illness, 158 visits were made, and 1,576 hours worked. Day care to support elderly people accounted for the overall increase in hours.

A plan which we would like to put into effect in 1973 is for a late evening and night nursing service on a regular basis. The high dependency of many patients calls for several nursing visits over twenty four hours and there are increasing difficulties in organising this through an auxiliary service on a casual basis.

The Way Ahead

Integration of the National Health Service planned for 1974 will bring about the unification of hospital and community nursing services. Efforts will continue during 1973 to keep staff informed of the changing management structure through the circulation of memoranda from the Department of Health and Social Security the Joint Liaison Committees and by informal staff discussion groups.

As plans for integration of the National Health Service proceed so inevitably will it mean some change for the nursing service. particularly at the management level. The work of the midwives, district nurses and health visitors will continue for the most part unchanged but we anticipate a gradual expansion of their present range of duties and use of skills as we plan for continuity of health care.

MEDICAL CARE IN THE COMMUNITY AND LIAISON WITH THE SOCIAL SERVICES DEPARTMENT

BY

MARGARET W. SEYMOUR, M.B., Ch.B., M.F.C.M., D.P.H.

Principal Medical Officer

In the 1971 Annual Report, the main services which passed from the supervision of the Medical Officer of Health to the Director of Social Services, with the setting up of the Social Services Department were outlined.

In 1972 the home nursing services still continued to provide an important and vital service to the community. The supply and collection of incontinence pads to elderly people in their own homes was further extended and improved and a new fully equipped delivery vehicle for this purpose came into operation during the year.

LIAISON WITH THE SOCIAL SERVICES DEPARTMENT

During 1972 liaison has continued between the Health Department and the Social Services Department. At field worker level, the health visitor is encouraged and expected to co-ordinate directly with the social worker involved in a particular case. Regular case studies are convened by the Director of Social Services when individual families are discussed by all the medical and social support services involved.

As part of the active liaison between the two departments the Principal Medical Officer has visited all the residential establishments (including privately owned old people's homes) and day centres which are under the control and supervision of the Director of Social Services. In addition a public health inspector has visited each establishment and given environmental health advice.

In 1970 the Chronically Sick and Disabled Persons Act came into operation, and whilst the Act is implemented by the Director of Social Services, the advice of the Medical Officer of Health regarding the provision of a telephone or in other cases of disabled persons, the issue of a car badge, was sought by the Director on a number of occasions. Initially each case was visited by a community medical worker on the staff of the Medical Officer of Health in order to establish the facts. The case would then be discussed with the Principal Medical Officer who would make a visit in border-line cases. Further advice and information where necessary were obtained from the general practitioner. During 1972, 61 cases who had requested a telephone on wholly or partly medical grounds were referred by the Director of Social Services; one of these cases was again reviewed during the year. Of these 61 cases, 26 (43%) were considered to have medical grounds for the provision of a telephone. In comparison, 25 requests for telephones were investigated in 1971, and of these 20 (80%) were considered justifiable on medical grounds.

During 1972, 13 requests for car badges were investigated and of these only two were found to satisfy the medical criteria. In 1971 there were no car badge requests investigated.

Chiropody

The treatment of persons in the priority groups continued to be provided through the agency of the Nottingham General Dispensary. The total number of patients treated increased by 188 from 4,870 in 1971 to 5,058 in 1972, and there was an increase in the number of treatments given from 24,242 in 1971 to 26,169 in 1972. Of the 26 169 treatments given, 1,815 (6·5%) were carried out in patients' own homes and 354 in old people's homes. 5,013 patients were aged 65 and over, three were expectant mothers, and 42 were handicapped persons under the age of 65 years.

The Battered Baby Syndrome

During 1972, as in previous years, help has been given to families where there is considered to be a battered child and also to families where there are children considered to be "at risk" of battering. There is a close liaison between the health department staff, the social services department, the general practitioners and the hospital consultants regarding these difficult cases. During 1972, there were some alterations in the numbers on both the battered baby and the "at risk" registers due to families leaving or arriving in Nottingham. In addition several new cases came to light.

By the 31st December, 1972 (the figures in parentheses are the corresponding figures for 1971) there were 28 (24) children under five years of age belonging to 18 (16) families who were considered to have been battered, and a further 57 (53) children, all under five years of age, belonging to a further 38 (38) families, who were on the "at risk" register.

Renal Dialysis in the Home

One request for home adaptations to enable renal haemodialysis to be carried out was received in March 1972. This was a male patient, aged 32 years, living in a corporation house at Clifton. He had been ill for over a year and had been an inpatient in the Sheffield haemodialysis unit at Lodge Moor Hospital. The usual joint survey was made by the City Estates and Health Departments together with representatives from the Sheffield Regional Hospital Board. It was agreed that a "Portakabin", taken into store earlier in the year, was the best means of provision rather than a conversion of an existing bedroom or by building on to the house. The re-erection of the "Portakabin" and the installation of the necessary services cost £375.

The patient's renal condition was severe and by the time the installation was completed, re-admission to hospital was necessary for the removal of both kidneys. This took place in June and no attempt was made to do a renal transplant. It was intended that the patient should be maintained by renal haemodialysis at home. On the 23rd July 1972 the patient died, having just arrived home to commence renal haemodialysis. The "Portakabin" was moved back to store.

Progress Report

Another patient, for whom adaptations were undertaken in the previous year, completed over ten months' successful haemodialysis up to December 1972. This patient follows a full-time professional career successfully. Further, another patient who had had adaptations done to his home in 1969 and then had undergone an unsuccessful renal transplant in 1971, had a successful transplant operation in May 1972. Following this, the patient was able to live a normal, independent life without the need for dialysis, and was married soon afterwards.

COMMUNITY MEDICAL WELFARE

BY

MRS. DOROTHY L. FREEMAN

The appointment in September of a replacement community medical worker was the only staff change during the past year.

As home care becomes increasingly more difficult due to changing social pressures, the casework of the two community medical workers has covered a wide range of medico-social problems.

The following are among the main groups visited:—

(a) direct financial help to patients suffering from cancer is provided by the National Society for Cancer Relief, through the Medical Officer of Health, and these patients are visited regularly by the community medical workers. In many instances supportive visiting of the immediate relatives may be necessary for some time after the death of a patient;

(b) home visits are undertaken to all areas of the City and housing reports are made on the medical and social circumstances of those people requesting a recommendation for priority rehousing on medical grounds;

(c) referrals are received from Forest Dene Chest Clinic, mainly concerning financial problems and general after-care of patients suffering from tuberculosis and other chest conditions;

(d) the medico-social problem group can often be related to group "C" above, this group forming a large proportion of the community medical workers' caseload.

As far as possible during office hours one member of the section was on hand to deal with telephone queries and personal requests for advice and help from members of the public. In many instances of personal requests namely people coming into the Department for help and advice, many varied problems were undertaken by the community medical workers. In such cases, where necessary the appropriate Social Services officer was informed of developments.

In continuing to play an active role in the early detection and prevention of social problems associated with ill-health, the section provides a useful and necessary link between the various agencies involved in the network of community support and care.

SOCIAL WORK WITH PATIENTS IN RECEIPT OF AID FROM THE NATIONAL SOCIETY FOR CANCER RELIEF

Patients suffering from malignant disease continued to receive the weekly grants from the National Society for Cancer Relief. A high proportion of the patients were terminal care cases, such patients being well supported by their family doctor, the Home Nursing Service, and other social agencies. The financial help provided by the Society covered the special nursing needs, with attention to nutrition, hygiene, and the relief of pain or discomfort. These grants, usually of £1 per week, continue until the patient recovers sufficiently to return to work or until death.

The community medical workers prepare an annual financial assessment and report on the home circumstances of each patient, and a medical report is obtained from the family doctor. These reports are submitted to the Society for their discretion in the allocation of grants. Relatively few referrals were from general practitioners during the past year, the main sources being the Home Nursing Service, health visitors, hospitals, and other social agencies in the City.

Thirty-eight patients were being helped by the National Society for Cancer Relief, through this Department at the beginning of 1972. A further twenty-seven new patients were referred during the year, and by 31st December forty-one patients were in receipt of help, making a total of sixty-five patients who had been helped by the National Society.

Each patient was visited regularly by the community medical workers, usually every fortnight, particular attention being paid to those patients lacking support from relatives and friends. In many instances, especially long term cases, the needs of the family frequently paralleled those of the patient, thus they also required reassurance, advice, and support. Whenever necessary for their continued welfare supportive visiting was carried on after the death of the patient.

Tuberculosis and the Social Problem Group

There was a slight increase in the notifications of persons suffering from tuberculosis. From a total of 120 notifications, 81 were classed as respiratory, and 39 other forms were noted. Referrals from Forest Dene Chest Clinic increased this year; details of these, together with general enquiries are included in the table below. Eight patients were assisted with fares to Ransom Hospital. Supportive help was given to patients and their families.

Type of Assistance	*Cases Brought Forward*	*New Cases*	*Total*
Financial and general advice	15	120	135
Referrals to Social Services	—	64	64
Clothing provided	2	18	20
Referrals to other agencies	—	20	20
Referrals to Health and Social Security	6	35	41
Domestic (including Home Help Service and other help)	2	13	15
Housing T.B.	9	6	15
Referrals to home nursing	—	47	47
Provision of bedding	1	12	13
Employment and training arrangements	—	2	2
Milk at reduced rate	1	—	1
Totals	36	337	373

The co-ordinating committee of statutory and voluntary social services, established to consider problem families, met on 16 occasions during the year, when 133 case conferences took place on 119 families. Of these cases 81 were considered for the first time.

Housing	79
Social Services	2

These figures show a decrease, 81 families being referred for the first time, compared with 118 families during 1971.

The following examples illustrate the close liaison with other social agencies. These brief case notes typify some of the day to day problems referred to the community medical workers during the year.

Case I

An eight year old child suffering from leukaemia, was referred to this department by the Home Nursing Service because her parents were not able to afford the extra nourishment she required. A grant of £1 per week was obtained from the National Society for Cancer Relief, and supervision has been maintained to ensure that the family receive all necessary support.

Case II

Father aged 38, with a family of six young children, had inoperable cancer of the stomach. Considerable debts had accrued before the family were referred for financial advice by the Home Nursing Service. With the help of the National Society for Cancer Relief and the Department of Health and Social Security, these debts were cleared before the father died.

Case III

Mother, aged 21, with one child, and expecting a second baby, was referred by her general practitioner. She was living in bad housing conditions, and there was a real danger of a break-up in her marriage. She requested a termination of pregnancy. Support was given until the family could be rehoused, and it is pleasing to be able to report that there was a considerable improvement in the family circumstances and the mother finally decided to proceed with her pregnancy.

Case IV

Man aged 65, living in drab, social isolation, suffering from bronchitis, was referred to this department by the Chest Clinic. Home Help was arranged, also W.R.V.S. contacted who supplied meals-on-wheels, clothing and bedding. This man eventually regained sufficient confidence in himself to join the local community association where he takes an active part. He contacts this department when in need of advice.

Case V

Mother aged 41, with one child, was referred to this department by the chest physician at Forest Dene who requested rehousing as the family were living in poor conditions. She suffered from tuberculosis, had multiple marital problems and was ill-treated by her husband. Support was given to the family until alternative accommodation could be provided. This prevented the break up of the marriage.

Case VI

Husband and wife, aged 36, developed pulmonary tuberculosis. At the time of notification the marriage was on the point of breakdown. The couple were admitted to hospital, however after one month they discharged themselves, as their house had been broken into and the meters emptied. They then refused to leave the house until it was arranged for the doors and windows to be boarded up. After this had been done and following much persuasion, they returned to hospital to complete their treatment. The chest physician had requested rehousing and their discharge, three months later, was to modern accommodation. Considerable financial problems had to be sorted out and bedding provided. This couple have been visited regularly in an effort to support them, both financially and emotionally, in the hope that a reconciliation may be effected.

Case VII

On numerous occasions during the year young pregnant unmarried girls, calling at the department to book social emergency beds have been referred to this section for general advice and help with their social and financial problems.

Requests for Priority Rehousing on Grounds of Ill-Health

Requests for priority rehousing on medical grounds showed an increase during the year. There were 640 requests during 1972 an increase of 49 over the figures for the previous year and involving 783 actual home visits. Of these requests 192 were recommended by the Medical Officer of Health and subsequently approved by the Housing Committee. The majority of recommendations were made on behalf of tenants living in privately rented property, who would not normally be eligible for rehousing by the Corporation or to register on the housing waiting list. By this emergency measure cases with special medical problems have been rehoused in accordance with their needs.

Applications from the patients were normally accompanied by medical details from a hospital consultant or a general practitioner. In exceptional cases the recommendations came from the Housing Department, Councillors, or Members of Parliament. These applications were followed up with a medical and social report by the community medical workers submitted to the Medical Officer of Health. The nature of illness or disability and the age distribution of those recommended for priority rehousing is contained in Table I

on page 132. This table illustrates that a large proportion of those recommended were between 60 and 80 years, and the major complaints continued to be cardio-vascular—a slight increase over last year; respiratory—a slight increase, and rheumatic—a substantial increase.

In the case of the elderly living in poor conditions but not eligible for priority rehousing on medical grounds, advice was given to register on the Corporation waiting list for those over 65 years. The elderly tend to be particularly vulnerable when having to contend with poor living conditions, and sheltered housing would appear to be the solution in these instances.

When the problems were overcrowding, or complaints of dampness, structural deficiencies, or rodent infestation, they were duly referred to the Chief Public Health Inspector for investigation. Table 2 on page 132 shows the breakdown into areas of requests for rehousing on medical grounds.

Liaison with W.R.V.S.

Close liaison exists between the Health Department and the W.R.V.S., figures provided by the County Borough Organiser are given below.

Meals on Wheels

The total number of meals supplied in 1972 was 44,170.

Luncheon Clubs

There are now 17 Luncheon Clubs being run, and the number of meals provided during 1972 was 15,447.

Clothing

7,488 garments were issued in 1972 to 1,411 needy people, from the W.R.V.S. Clothing Store.

Old People's Visiting Scheme

W.R.V.S. volunteers regularly visit lonely old people, and hospitalised patients who would not otherwise receive visitors. In addition, old war pensioners, and their widows are regularly called on and their well-being or any problems are reported on.

Trolley Shops in Old People's Homes

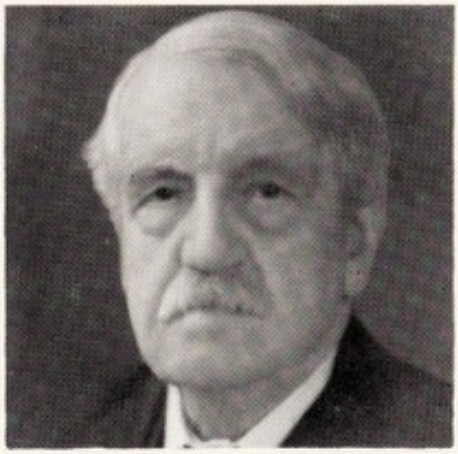
W.R.V.S. Trolley Shop service continues to meet a regular demand in 12 Old People's Homes in the City.

Books on Wheels

W.R.V.S. Library Service provides books for elderly housebound people on a fortnightly rota, and also calls at four Old People's Homes.

Medical Officers of Health for Nottingham
1872 — 1973

Edward Seaton, M.D.
1872-1884



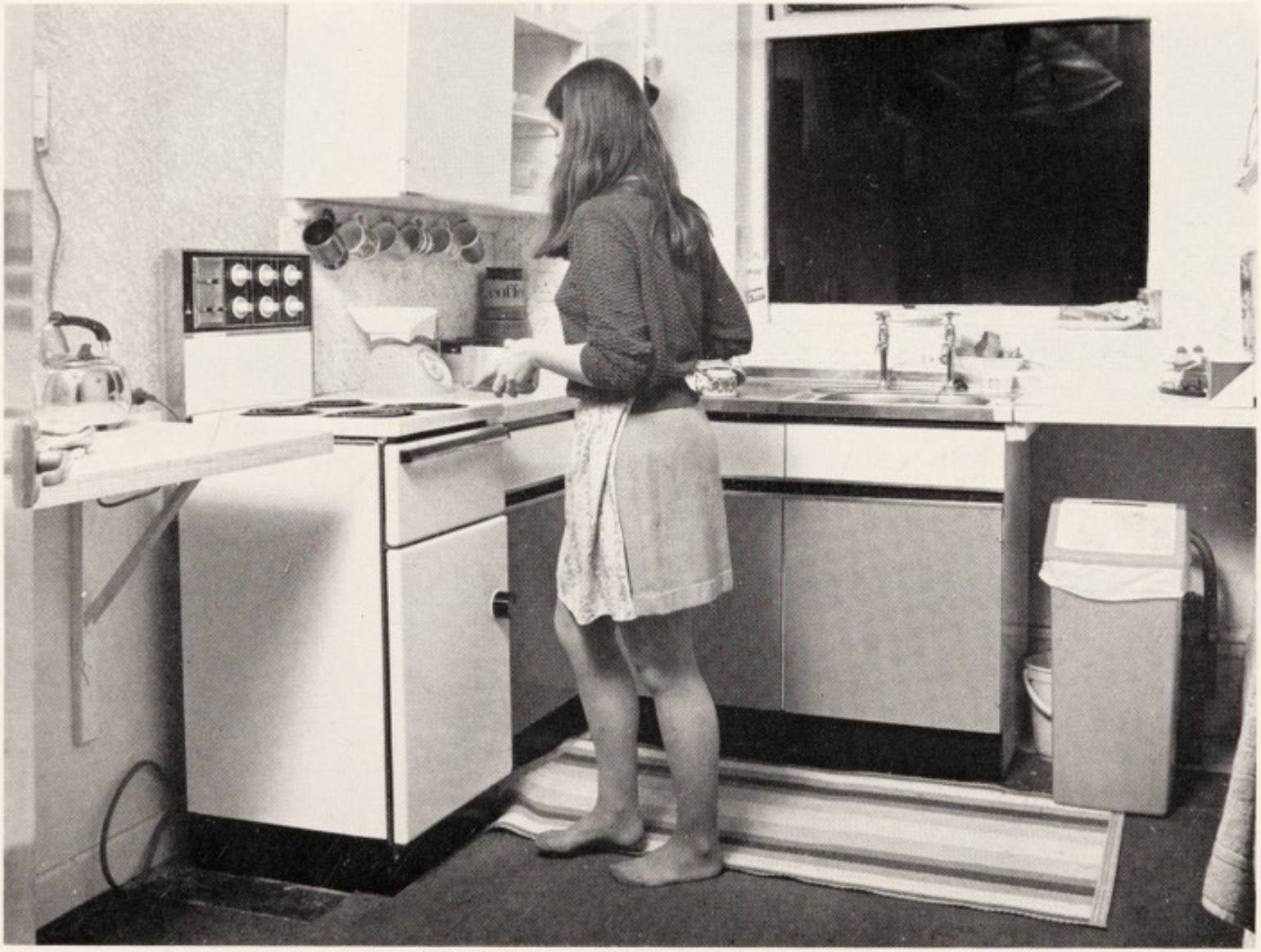
Sir Arthur Whitelegge,
K.C.B., M.D., F.R.C.P., D.P.H.
1885-1889

Philip Boobbyer, M.D., D.P.H.
1889-1929

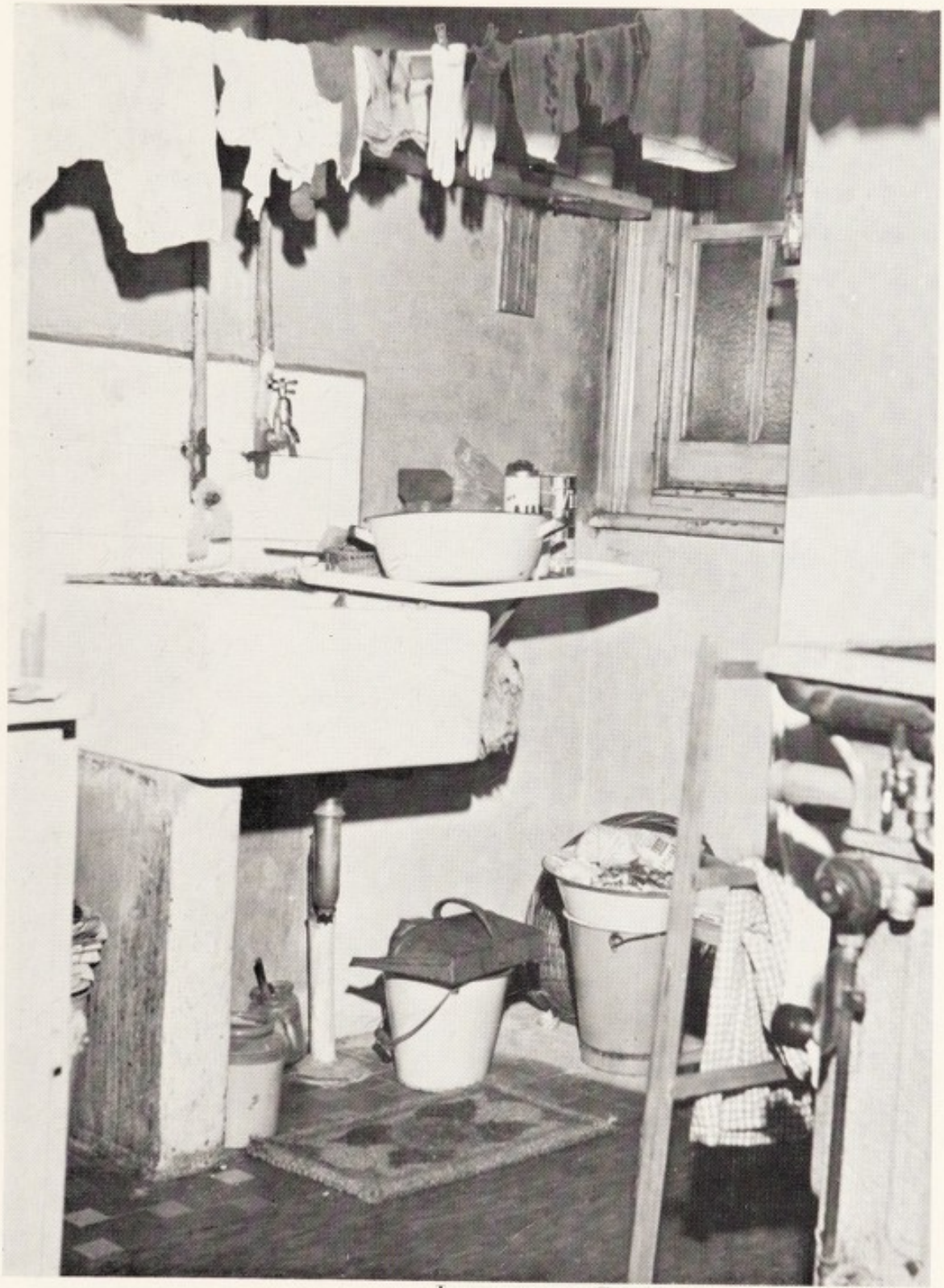
Cyril Banks, M.D., D.P.H.
1929-1948

William Dodd, M.D., M.R.C.P.,
F.F.C.M., F.R.C.G.P., D.P.H.
1948-1968

Wilfrid H. Parry, M.D.,
F.F.C.M., D.P.H., D.T.M.& H.
1969-present



WHAT CAN BE DONE WITH .....



. . . . . AN IMPROVEMENT GRANT

Opening of Bulwell Health Centre by Sir George Godber, G.C.B.

HEALTH EDUCATION

BY

THOMAS P. FLAHERTY, M.R.I.P.H.H.

Health Education Officer

Most of this year has been spent in building up the resources of this section and making contact with the agencies used in propogating health education. In July the new Health Education Centre in Lower Parliament Street came into use, providing offices, lecture/exhibition room, stores, workshop and projection room. However, to use these excellent facilities properly, more staff are required to man them. The section now possesses a small library of 16 mm. movie films on smoking, cytology, drugs and childbirth, 35 mm. film strips and slides, a large stock of posters and leaflets on many aspects of health care, a range of other audio-visual aids and useful workshop art tools.

Positive health education progress has been slow, mainly because of difficulties encountered in clearing projected schemes with other bodies and agencies. Some measure of success has however been obtained in the schemes outlined in last year's report.

THE NURSING SERVICES

Sixty members of the staff have now completed the two-day in-service training courses run by the Health Education Section. Instruction and practice has been given in the use of projectors and films, group discussion techniques and audio aids.

Following this training, there has been a large demand for audio-visual aid materials from nursing staff engaged in health education in clinics and schools.

SCHOOLS AND COLLEGES

As these organisations have become aware of the section's existence, the demand for advice and visual aid material has increased. The section has provided speakers and materials in four major school health education programmes to adolescent pupils.

Lectures on contraception, abortion and venereal diseases have been presented in two of the City's training colleges. Many students are using the facilities offered by the section on teaching practice. The demand for information by students is encouraging and augurs well for the future.

College authorities have discussed the form or content of health education within their syllabuses. It is envisaged that progress will be made before the 1973/74 academic sessions begin.

In the schools themselves, some progress has been achieved in training teachers to do more effective health education. There is disagreement among teachers as to who should present health education and what the course content should be. However, the Health Education Advisory Committee of the Education Department (on which representatives of this Department sit) is trying to find positive and acceptable solutions to the different problems.

Family Planning Clinics

Leaflets and posters were issued through the health visitors, Health Centres and the Information Centre to coincide with the opening of the Corporation's Family Planning Scheme in April. The demand for this service has been so great that no further publicity has been required. Most of the health education in this field is being carried out by health visitors. Information also passes by word-of-mouth from patient to patient. We are, however, grateful for the publicity provided by local radio and press. It was significant that following a feature article in the '*Evening Post*', appointment enquiries trebled during the next few days.

Cytology Clinics

Attendance at these clinics continues to be high. The publicity issued by this section has consisted of posters and leaflets stressing the need for regular cytology tests and giving instructions about self examination of the breasts. The literature has been distributed through health centres, and through the medical and nursing services in many factories.

A close watch is being kept on clinic attendances. This will be the pointer for the future publicity needs of this preventative service.

Sexually Transmitted Infections

Preparations for a health education campaign in this field have been long and arduous and not without frustrations. Difficulty arose in finding and agreeing suitable designs for posters and leaflets to be used in the campaign. We are grateful to the Graphic Design section of the Trent Polytechnic for their generous help in solving our design problems without offending public decency.

The second major difficulty was the design of an exhibition suitable for use in schools, colleges and industry. This, however, has been overcome, the exhibition has been set up, and all the interested agencies have now previewed it. They have agreed to display the material in their establishments.

Thirdly, industrial action by building workers caused further delay in the opening of the new V.D. Clinic at the General Hospital. The work has been held up so much that the clinic will not now open until February 1973. Since the campaign was planned to begin in conjunction with the new clinic opening, it was decided to put back the scheme until then.

A recorded message attached to the telephone system has been installed in the Health Education Centre. Primarily, it will carry a brief message about the transfer of the V.D. clinic to the new premises. Afterwards it is envisaged that information about the signs, symptoms, spread and treatment of sexually transmitted infections will be given by this means. The posters and leaflets will carry the telephone number of this service (Nottingham 57333).

Staff Training

The Health Education Officer was fortunate to obtain a place on the Health Education Diploma Course at Leeds University, beginning his training year in October and returning to Nottingham in July 1973. This course is the first of its type in Europe. During the Health Education Officer's absence, the health education section is being administered through the Director of Nursing Services.

AMBULANCE SERVICE

BY

F. Wilkinson, F.I.A.O.

Chief Ambulance Officer

The new extensions to the Beechdale Ambulance Station which began in the autumn of 1971 were completed early in 1972. April 14th was an eventful day for the Ambulance Service when the Lord Mayor, Alderman Dr. E. Want, performed the opening ceremony of the new canteen and domestic block. This was a much needed addition and places this service amongst the few others to enjoy such facilities. The new maintenance bay and stores together with the spacious and well equipped training school were put into operation in July and one wonders how we ever managed without them.

The land at the rear of Beechdale station has been acquired from the Baths Department and fencing with gates has been erected giving excellent parking facilities for the ambulance staff until such a time that further extensions can be carried out. The City Engineer has made some improvement to the steep ramp from the exit doors of the main garage and less damage to vehicles is being caused.

Cardiac Ambulance

With the ordering of the cardiac ambulance in May 1972, Dr. Mason, Mr. Tubb and myself visited the Brighton ambulance service in June and spent a most informative period studying their training methods and the application of the service provided. As a result of information gained several modifications to vehicle design and staff training were possible.

The main items of equipment to be installed in the cardiac ambulance comprised an oscilloscope for continuous cardiac monitoring of the patient whilst in the ambulance, a defibrillator and a transrite machine which will provide a permanent written record of the heart pattern produced by the oscilloscope.

Dr. Hampton of the General Hospital coronary care unit has undertaken to give technical instruction to the crews and has set out a syllabus for the ambulance training officer when he commences this specialised training. Both the training officer and instructor spent a considerable time at the coronary care unit. Unfortunately the instructor, Mr. A. O. Lawrence, died after a short illness, having only just completed his course of training. It is hoped to fill his post in the new year.

Hospital Liaison

In an endeavour to co-ordinate journey times of patients and obtain quicker turn round of ambulances at the General Hospital the City and County Health Committees agreed to the appointment of a joint ambulance liaison officer. Mr. Caley, formerly a shift leader at the Nottinghamshire West Bridgford station was appointed in May. Already important improvements have been effected.

Staff

The Administrative Assistant, Mr. B. J. Ruddle, was appointed in November. In addition to his duties at headquarters he will provide the much needed link with other sections of the Health Department. The position of chief controller was advertised and Mr. J. Simons, a staff officer with this service, was appointed; he took up his duties in January 1973.

National Health Service Reorganisation

Regular meetings as part of the National Health Service Reorganisation began in October. The Area Joint Liaison Committee appointed a working group (number eight) under the chairmanship of the Medical Officer of Health for the City to plan for the reorganisation and amalgamation of the City and County Ambulance Services. Considerable progress towards liaison between the services had already been made, and this made the task of the working group easier. Assisting in the integration of the City and County services are the joint "in-service" training courses now being carried out at Beechdale and the sharing of the stores accommodation with the County service. With the fullest co-operation of Mr. F. E. Jolley, the County Chief Ambulance Officer, forward planning for a joint control system is being investigated and all future staff positions are now jointly advertised within both services.

Vehicles and Maintenance

Six additional vehicles ordered for delivery in April 1972 are now in operation and a further six additional vehicles were ordered in October for delivery in April 1973. In addition to five replacement vehicles ordered in May 1972 authority was given to order the cardiac resuscitation ambulance and these vehicles should be in service early in the New Year. Due to the increasing tendency for modern vehicles to have light chassis and body construction Mr. J. A. Lowrie, the Assistant Engineer, is looking into the possibility of shortening the service life of these vehicles. Appropriate recommendations will be made to the Health Committee early in 1973. The maintenance staff has been increased to four and a quicker turn round in vehicles out of service is now experienced. The emergency tender will be nine years old in April 1973 when the possibility of converting a later model to that duty will be explored.

Patients—Mileage

For the first time since 1948, both the number of patients carried and vehicle mileage showed a decrease. This was due to dissatisfaction over the national pay structure which led to industrial action by the crews in September. Had this not occurred the work load would undoubtedly have continued to increase. Patients carried in 1972 totalled 206,680 and vehicle mileage was 736,463 as against 217,950 and 736,925 respectively in 1971, a reduction of 11,270 patients and 462 miles. The mileage was not greatly affected owing to the increase in long distance road journeys. Requests to the

two major hospitals in the City to spread the out-patient load more evenly over the working day have not met with a great deal of success. There are still two peak periods into which patients are placed for treatment, namely 08.30 to 10.30 hours and 13.00 to 14.30 hours. This means that, allowing for all the day care cases also booked for those early times, it is virtually impossible to ensure that patients will arrive on time for their treatment and the ambulance service is then faced with a lull during which the parking areas at these hospitals, in particular the General Hospital, become choked with ambulances.

Isolated instances of patients being kept waiting long periods before arriving home in the evening still occur due to day crews going off duty and the remaining emergency staffing being inundated with urgent calls from 16.30 hours onwards. Indeed some evenings it is difficult to get crews in for their meal breaks. The highest number of patients carried in one day was 893 on the 22nd May 1972.

Long Distance Journeys

Out of town journeys still increase, this year the total journeys numbered 642 as against 609 of 1971. Journeys to hospitals in Derby totalled 357 as against 355 of the previous year, the increases being mainly those involving Sheffield, Leeds and London. Long distance journeys also affect the routine work especially if they are not prearranged and in most cases they are calls of some urgency.

Emergency Calls

There were 12,454 calls during the year as against 11,252 for 1971 showing an increase of 1,202 calls. The highest number in any one day was 70 on the 22nd December 1972. The service again attended many hazardous incidents including major fires.

Training of Staff

Staff are still attending the Leicester regional training school and excellent reports have been received; this reflects on the efficient training programme being carried out at the Beechdale school. The joint training programme mentioned earlier is being studied by other authorities and several visits have been made by other chief officers. Valuable assistance is given by the medical profession. I am particularly grateful to Mr. A. J. Callander, the training officer of the city. I foresee the time when an ambulance is manned by a driver and a 'paramedical' technician, such are the advances in the ambulance field. Training of staff to operate the cardiac ambulance will commence early in the New Year and Dr. Hampton of the General Hospital is affording all assistance to the ambulance training officer.

Open Day and Visits to Headquarters

Open day again attracted considerable numbers of the public and, arising from this, numerous requests to bring parties around the station were received and met. Several schools again visited the headquarters. When the Health Committee paid their annual visit in November they were shown over the new extensions and saw the training and stores wing.

Summary of Work

Date	*Fleet*	*Driver Attendants*	*Patients*	*Mileage*
1949	22	60	54,297	301,426
1955	27	63	93,405	389,311
1956	29	70	95,551	397,636
1961	30	76	147,843	510,018
1966	32	85	190,760	638,589
1968	33	89	203,959	700,926
1969	35	95	213,625	703,494
1970	35	95	205,203	704,262
1971	39	100	217,950	736,925
1972	**46**	**112**	**206,680**	**736,463**

Work Load During 1972

	Patients	*Mileage*
Emergencies	12,454	74,494
Admissions	11,443	95,526
Discharges	11,178	85,940
Out-patients	171,387	459,274
Unclassified	218	3,251
Non-service	—	17,978
Total	206,680	736,463

ENVIRONMENTAL HEALTH SERVICES

BY

ROYCE YOUNG, M.B.E., F.R.S.H., F.A.P.H.I.

Chief Public Health Inspector

GENERAL

There was an increase in the number of complaints dealt with by the Department, such increase being largely due to housing defects as shown on page 133. Where houses are already subject to a clearance compulsory purchase order or clearance order or are likely to be so dealt with by way of clearance procedure during the next few years, rapid deterioration of both the houses and the environment makes conditions for the occupiers difficult whilst waiting for the necessary legal procedures to be carried through, before their rehousing can take place. Both landlord and tenant tend to lose interest in property with a known limited 'life'. The fact that some families, for special reasons, obtain other accommodation in advance, leaves empty houses which add to the appearance of dereliction for the remaining tenants who may have to wait for a considerably longer period before being rehoused. Public health inspectors have been kept busy in securing essential repairs to these houses in order to make conditions more tolerable. One difficult problem is that of the indiscriminate and often continual dumping of refuse on land and in yards and passages by persons unknown which adds considerably, and quite unnecessarily, to the already unsatisfactory conditions. Nuisance Orders were obtained from the Magistrates' Court requiring the remedying of defects or removal of refuse following the failure of the responsible person to comply with statutory notices.

Complaints of nuisance from noise also increased. The purchase of a sound level meter during the year was extremely useful, not only in assisting in establishing whether or not a particular noise could be regarded as a public health nuisance, but in measuring the effectiveness of remedial measures. Many noises which are acceptable or indeed unnoticed during the daytime become a source of irritation at night when the daytime background noise has subsided so that the now isolated noise interferes with the sleep of nearby residents. Many complaints, therefore, arose from night shift working on business premises and required inspectors to make late night and even early morning visits to investigate the problems before suggesting remedial measures to the firms responsible. It must be pointed out that some complaints involved much time in investigation and were found to be unjustified.

Further positive steps were taken towards the establishment of a permanent caravan site for gipsies as required by Part II of the Caravan Sites Act, 1968. The Health Committee agreed to the use of a site at Moor Bridge, Bulwell, and approved plans prepared by the City Architect to provide standings for fifteen caravans with a separate amenity block for each standing. Tenders were also accepted requiring the work to commence at the beginning of 1973

and it is anticipated that the site will be ready for occupation by mid-summer. It was also decided that a full-time warden should be employed who would not only be responsible for the lettings and day to day supervision of the site but would also assist the residents with their social problems by acting in the capacity of a liaison officer between them and the particular local authority or central government department who may be able to help them. The decision to establish the site aroused apprehension among certain residents in the neighbourhood, but it is hoped that, with the employment of a warden and with good will on both sides, particularly in the early stages, the project will go a long way towards removing the unsatisfactory indiscriminate camping by gipsies on unsuitable sites without proper sanitary facilities.

With the date of local government re-organisation getting nearer and the passing of the Local Government Act, 1972 in October, it was natural that much thought was given to the future of public health inspectorate from 1st April, 1974. It is a source of satisfaction that the government have quite rightly decided that the environmental work at present administered by public health inspectors in the broad fields of housing, air pollution, fitness of food and food hygiene, noise abatement, pest control and health, welfare and safety in places of employment should remain the responsibility of the new district council. A few duties, mainly those relating to the sampling of food for composition and labelling and Diseases of Animals Act work will be transferred to the County Council. There will, therefore, be a need for an environmental health officer to give advice on environmental matters in co-operation with other departments and to liaise with the Community Physician of the Area Health Board in connection with important matters such as infectious disease and outbreaks of food poisoning.

The number of site licences in force under the provisions of the Caravans Sites and Control of Development Act, 1960, was six.

Measures against Rodents and Insect Pests

There was little change in the number of rat infestations dealt with over the year. Although there are some extensive infested areas this was balanced by improvements in other parts of the city.

The banks of the River Leen have been a frequent source of complaints in the past but the improvement scheme which has been under progress for a number of years, has resulted in few complaints of infestation recently. Treatment of the river banks has taken place from time to time as the contractors' work proceeds upstream and the areas in the immediate vicinity of the River Leen have been noticeably free from rodents.

The number of premises treated for mice by the Health Department gives a false impression of the degree of infestation in the city as a whole, in that it takes no account of the increasing amount of work being undertaken by private service companies in commercial premises. As reported on previous occasions, the extension of infested areas continues to give cause for concern.

An infestation of Pharaoh's ants occurring in a block of flats was reported in September. An immediate inspection of adjacent flats revealed that eleven dwellings were already affected. In most cases the occupiers had seen a few insects and had dismissed them as being unimportant but one tenant declared: "We have switched to a vegetarian diet as we have not been able to keep meat in the house for weeks", and this was not in the flat from which the original complaint came. Control measures were hampered because so many of the occupiers of the flats were out at work, making it difficult to assess the full extent of the infestation and impairing the efficiency of control measures. These ants cannot survive the normal winter temperatures in this country and have presented no problems in houses which cool down rapidly at night. It is possible, however, that the problem will occur much more frequently in the future in view of the increasing use of domestic central heating.

Cats were once again responsible for the majority of cases where houses had to be treated for the control of fleas but one exception presented rather a different problem. Fleas appeared in one corner only of a tiled window sill in the kitchen of a house and examination of them revealed that they were bird fleas. A through extension had been built on to the kitchen with a lean-to roof over the window. On investigation, a starling's nest was found under the tiles immediately above this corner of the window and fleas were finding their way down the wall cavity and into the house between the wall and window frame. Roof and cavity were treated and the starlings persuaded to seek other accommodation.

During the year a confirmed case of leptospirosis was reported to the Department, details of which appear on page 31.

The patient concerned lived in an area of the City known to have a fairly high rat population, being situated close to a municipal tip and to the canal. It is also a district occupied by many car breaking firms, most of whom have guard dogs within their premises.

A full-scale rat eradication drive was made in the area following the notification referred to above; surveillance has continued since then and further action will be taken as found necessary in an attempt to secure a permanent reduction in the number of rats in the area.

Rodent and Insect Control	**1972**	1971	1970	1969	1968	1967
Properties surveyed ..	**4,834**	4,561	5,325	4,990	4,996	5,118
Infestations dealt with:						
rats	**1,571**	1,477	1,883	1,666	1,472	1,629
mice	**1,564**	1,568	1,570	1,669	1,617	1,222
insects	**867**	771	1,006	737	987	946
TOTAL VISITS ..	**12,364**	12,042	13,169	13,328	11,177	12,731

Sewerage

The improvement of the River Leen was substantially completed in December.

A further section of the renewal of the defective brick sewer in The Wells Road was completed with reinforced concrete pipes.

The 42 domestic cesspools were regularly emptied, together with a small number of private industrial sumps which were emptied and the cost charged to the owners.

Sewage Purification

The drainage area served by the sewage treatment works has remained unchanged and comprises 53,533 acres, approximately 84 square miles, in which the resident population is estimated to be 458,585 persons. Although the population of Nottingham decreased by a further 822, there was an increase in the estimated population of the contributing urban and rural districts of 3,568 persons. The average daily flow of sewage received was 33·9 million gallons fluctuating between a minimum of 20·1 million gallons per day and 65·5 million gallons per day.

Preliminary treatment resulted in the removal of 3,647 tons of wet grit from detritus channels and 1,090 tons of wet paper and rags from screening processes to an adjoining tipping area where they were disposed of without nuisance.

The programme of maintenance and repainting of uptake tubes in the aeration plant, initiated last year, was again pursued during the summer months. Because of reduction in pollution loads received, the aeration capacity, although necessarily markedly reduced, remained sufficient to produce final effluents of satisfactory quality.

The volume of consolidated mixed primary and surplus activated sludge which was treated in the sludge digestion plant was 91,190,000 gallons and this contained 13,739·5 tons of dry solids. 4,038·3 tons of this organic material was degraded to yield 173,658,800 cubic feet of gas, the majority of this finding a use as a fuel for engines which drive generators and thereby produce most of the electrical energy consumed on the sewage works.

The construction of extensions to the sludge digestion plant was completed during the year. The primary digester and secondary tank which were withdrawn from service as a safety precaution were restored to normal service and, at a later date, the two additional secondary tanks were commissioned.

Water

The City's water supply was satisfactory in quality and quantity throughout the year.

Bacteriological and chemical analyses of supplies from each source were undertaken monthly by the Water Department's chemist and at those works where treatment was carried out the samples were examined both prior to and following such treatment.

During the year 183 chemical samples and 400 bacteriological samples were taken and Escherichia coli was absent in all treated water put into supply. All samples taken from the City distribution system were also satisfactory. In addition samples were taken weekly, 926 in all, from the various sources for bacteriological examination by the Public Health Laboratory.

During the year 168 samples of water were taken at random from dwelling-houses in all parts of the City. This total includes 11 repeat samples taken after unsatisfactory laboratory reports on the original samples. In these repeat cases the fault was found to be associated with the taps in the houses concerned. All the repeat samples were found to be satisfactory after remedial action had been taken.

No action was taken concerning fluoridation of water supplies.

Swimming Baths

The co-operation between the Baths and Health Departments has continued and all samples taken by the Health Department were satisfactory. In addition, the routine sampling of water by the staff of the Baths Department took place every two hours whilst each pool was open.

Knackery

There is one registered knackery in the city, situated at the Eastcroft, London Road. It received regular visits throughout the year and was found to be conducted in a satisfactory manner. All meat was sterilised in accordance with the Meat (Sterilisation) Regulations, 1969, before leaving the premises.

Common Lodging-Houses

There were two common lodging-houses in the city, one in Aberdeen Street and the other in Boston Street. The former was provided and operated by the Salvation Army and the latter, Sneinton House, operated for part of the year under the control and management of the Corporation. On the 8th July, however, the Salvation Army entered into an agreement with the City Council whereby they became responsible for the control and management of this hostel and a programme of improvement is now in hand for these premises.

Verminous Persons

During the year, work was started on the conversion of premises in Perth Street for use as a small Cleansing Station; this will come into operation during 1973. During the year 13 persons were treated for lice in their own homes.

Rag Flock and other Filling Materials Act, 1951

The number of upholsterers' premises registered in accordance with the Act increased by one to a total of 25. In addition to sampling

the various types of materials under the Act, regular supervisory visits were made to registered premises. There are no premises in the city licensed for the manufacture or storage of rag flock. Out of a total of 46 samples of filling materials submitted to the Prescribed Analyst five failed to comply with the requirements of the appropriate tests laid down in the Rag Flock and Other Filling Materials Regulations, 1971. In all instances the failure appeared to be due to genuine processing errors on the part of the manufacturers of the materials. The assurance of remedial action by each firm concerned was accepted.

Fertilisers and Feeding Stuffs Act, 1926
Fertilisers and Feeding Stuffs Regulations, 1968

A total of 30 samples of fertilisers and feeding stuffs were taken for analysis of which nine fertilisers and two feeding stuffs were found to be unsatisfactory (see page 135). Two fertilisers had labelling irregularities and seven were in excess of the limit of variation allowed by the Regulations. Both feeding stuffs were in excess of the limits of variation permitted. Subsequent remedial action was taken by all the firms concerned. Some difficulty was found in assessing degree of responsibility in two instances as the original producers had gone out of business and the products concerned had been bought as job lots and eventually appeared at retail sale level in their original package material.

Pharmacy and Poisons Act, 1933

This Act permits the sale of poisons under Part II of the Poisons List by persons whose names and premises are entered in the local authority's list. There were six new applications approved during the year and one of the premises was removed from the list as the firm ceased to operate under the Act. In addition to inspections following applications, supervisory visits were made to the various premises of listed sellers during the year.

Shops Act, 1950
Shops (Early Closing Days) Act, 1965

On the 5th June the City Council made an Order known as the City of Nottingham (Victoria Shopping Zone) Early Closing Day Exemption Order, 1972, exempting the occupiers of all the retail shops in the Victoria Shopping Zone of the city from the obligation contained in the Shops Act, 1950, to close early on one day per week.

As in previous years, a considerable amount of time was spent in dealing with complaints that shops were open for retail business on Sundays in contravention of the Act.

Complaints that young persons were working excessive hours and were not receiving adequate breaks for meals, were satisfactorily resolved with the employers concerned.

The Consumer Protection Act, 1961

The Heating Appliances (Fireguards) Regulations, 1953

Seven advisory letters were sent to second-hand dealers in respect of the insufficient guarding of heating appliances.

The Stands for Carrycots (Safety) Regulations, 1966

Inspections of carrycots in both retail and wholesale premises were carried out and all the carrycots examined complied with the Regulations.

The Nightdresses (Safety) Regulations, 1967

On no occasion was it found necessary to take action under these Regulations.

The Toys (Safety) Regulations, 1967

Routine sampling took place on several occasions, as well as liaison with outside authorities reporting excessive lead in toys. The ready co-operation of both retailers and wholesalers was obtained, resulting in suspect toys being withdrawn from sale.

The Electrical Appliances (Colour Code) Regulations, 1969 (as amended)

Regular inspections were made of various premises concerned with the sale of electrical goods. On three occasions it was necessary to draw attention to out-dated colour coding: in one instance the appliance was rewired and in the other two cases the appliances were returned to the wholesaler.

Offices, Shops and Railway Premises Act, 1963

Reference to the tables on pages 136 and 137 will give *(a)* details of registrations and general inspections, and *(b)* an analysis by workplace and type of accident occurring to persons employed in premises registered under the Act.

The total number of infringements listed in notices served during the year was 1,505 and the total number of infringements remedied, including some outstanding from 1971 was 1,475.

The total number of registered premises was reduced by 23 during the year whilst the number of persons employed at work on premises registered under the Act increased by 1,373.

Offices, Shops and Railway Premises (Hoists and Lifts) Regulations, 1968

Where lifts or hoists under premises to which the Offices, Shops and Railway Premises Act apply are examined by an engineer of the insurance company which insures the hoist or lift, a copy of any adverse report regarding its safety must be sent to the local authority. During the year, 22 reports were received of lifts or hoists in need of attention and in each case visits were made to ensure that the necessary works had been completed without delay.

Diseases of Animals Act, 1950

There were no cases of anthrax, foot-and-mouth disease or swine fever reported in the city during the year. The following is a brief summary of the work carried out in connection with the various Orders made under the Act:—

Number of licences issued under the Regulation of Movement of Swine Order, 1959.	2,295 including 37,410 animals.
Number of licences received under the Importation of Animals Order, 1955, etc.	10 involving 79 animals.
Number of licences received from Local Authorities.	802 involving 16,307 animals.
Number of poultry exposed for sale in the Nottingham Cattle Market under the Live Poultry (Restrictions) Order, 1957.	21,610
Total number of visits in connection with the Act.	685

During the latter part of the year some areas of the county were affected by outbreaks of Swine Vesicular Disease but no cases were reported within the city. Following information from the Divisional Veterinary Officer that half a carcass of a pig from a swine infected place in Staffordshire had been brought to premises in Nottingham, an inspector took possession of the meat and supervised its destruction by burning at the Eastcroft Depot.

Outbreaks of fowl pest occurring in the county did not spread to premises within the city but because of fowl pest restrictions, no licences were issued for the sale of store poultry at the Cattle Market. Therefore, all poultry sold in the market was for immediate slaughter.

Regular inspections were made under the Conveyance of Live Poultry Order, 1919, to ensure that the provisions relating to the construction, overcrowding, cleaning and disinfection were being complied with. In addition, checks were made in accordance with The Transit of Animals (Amendment) Order, 1931, with regard to the records which must be kept on vehicles used for the transportation of animals. No irregularities or breach of conditions were found.

Diseases of Animals (Waste Food) Order, 1957

There were five premises within the city licensed under the above Order. These were premises where pigs or poultry were kept and where waste food of animal origin or waste food which had been in contact with meat, was used for feeding. Satisfactory plant for boiling such waste food was maintained on the premises as required by the Order, and 27 visits were made to ensure that the conditions of the Licences were being complied with.

The Pet Animals Act, 1951

This Act makes it an offence for any person to keep a pet shop unless the local authority are satisfied that the arrangements for the keeping of animals on the premises are such that will maintain the well being of the animals. Licences to keep a pet shop were granted in 23 cases and 112 inspections were made to find out whether the conditions under which the licences were granted were being fulfilled.

Animal Boarding Establishments Act, 1963

Only one establishment is licensed for the boarding of animals, and four visits were made during the year, when it was found that the premises were in a satisfactory condition.

The Riding Establishments Acts, 1964 and 1970

At the commencement of the year there was one riding establishment which was licensed but early in the year the business was discontinued.

HOUSING

During the year, 1,640 houses which were unfit for human habitation were demolished, bringing the total number of houses so dealt with since 1955 to 11,262.

Further progress was made towards the clearance of unfit houses in accordance with the Corporation's approved programme. The public inquiry into the clearance order for Phase 11 of the St. Ann's Redevelopment Scheme was held in April and later in the year the order was confirmed by the Secretary of State for the Environment. Only one public inquiry, that for Phase 10, remains in respect of this particular scheme.

Confirmation of the compulsory purchase order for Phase 1 of the Meadows Redevelopment Scheme followed by a public inquiry into a similar order for Phase 2 and the representation of 1,450 houses in Phase 3 was considerable progress towards the complete elimination of unfit housing in this large area to the south of the city.

With the clearance of St. Ann's district well advanced and a satisfactory start made in the Meadows, attention was given to the third largest area of unfit property which is to we found in the streets around Kirkstead Street, Hyson Green, by the representation of 961 houses.

In addition, the inspection of sub-standard houses in four proposed general improvement areas and the representation of those that were found to be unfit for human habitation was completed, so that in the preparation of schemes for environmental improvement for these areas, the availability of land for any essential amenities would be known well in advance.

Details of the work relating to unfit houses carried out during the year is as follows:—

Represented to the Housing Committee	*Number of unfit houses*
Thorneywood Rise	31
North Sherwood Street	9
Querneby Road Areas Nos. 1 and 2	10
Whitemoor Avenue Areas Nos. 2 and 3	17
Prospect Street Areas Nos. 1 and 2	18
Commercial Road	42
Wilton Street	91
Meadows Phase 3	1,450
Corporation Oaks	45
Kirkstead Street	961
Individual Unfit Houses	17
	2,691

Public Inquiries held in respect of Clearance Compulsory Purchase Orders	*Number of unfit houses*
Fisher Street No. 2	138
St. Ann's Phase 11	238
Meadows Phase 2	786
	1,162

Orders Confirmed	*Number of unfit houses*
St. Ann's Phase 9	574
Meadows Phase 1	1,031
Meadows Phase 4A	58
Fisher Street No. 2	138
St. Ann's Phase 11	238
North Sherwood Street	9
	2,048

Improvement Grants

Reference was made in the previous year's annual report to the fact that the Corporation had decided to set up a house improvement grant section within the Health Department. To accommodate this new section alterations had to be made to additional premises at No. 67 Lower Parliament Street. Therefore, it was not until July that the premises were ready for occupation. Although the Improvement Officer and two public health inspectors commenced work in the new offices in July, four further public health inspectors and four technical assistants were obtained later. The advantage of one address where enquiries in connection with improvement grants could be made was soon apparent and delays in dealing with applications were overcome. During the six months of operation there was an increase of about 27% in the number of applications for grant, compared with the similar period in the previous year. The Corporation could only pay grants of up to 50% whereas in some adjoining local authority areas, grants of 75% are permitted. The higher level of grant in these areas undoubtedly lead to the transfer of resources from the city by both owners and builders. In the early stages it was not possible to engage in any large scale publicity but preparations were in hand for the issue of a handbook and a display advertising improvements in the Old Market Square in January 1973.

Work was commenced on the Corporation's programme for the declaration of general improvement areas. An area known as The Promenade containing 150 houses was declared a general improvement area and surveys were carried out in three other proposed areas known as Wellington Street (151 houses), Cromer Road (169 houses) and Wordsworth Road (283 houses), and the City Planning Officer in conjunction with the Improvement Officer prepared plans and suggested environmental improvements for public comment. The unfit properties in four proposed general improvement areas were represented so that the cleared sites would be available for use in providing the necessary amenities to the areas.

The response from owners of houses in the proposed general improvement areas was disappointing but it is hoped that by personal contact with individual owners this reluctance will be overcome.

The Housing Act, 1964 makes provision under Section 19 whereby the tenant can make an application to the local authority to require the owner to provide standard amenities, if the authority are satisfied that the house is suitable and that the owner will not improve the house voluntarily. This procedure is very prolonged if the owner fails to co-operate. Nevertheless, it is hoped that by the stimulation of interest in improvement areas, tenants will come forward with many more applications. Details of the applications dealt with since the 1st July, are as follows:—

Improvement grants	313
Standard grants	35
Special grants	4
Section 19—applications from tenants ..	124

Qualification Certificates

In accordance with the provisions of the Housing Act, 1969 owners of controlled houses submitted 72 applications for qualification certificates. This was a considerable reduction compared with previous years and this is likely to be the trend in view of the provisions of the Housing Act, 1972.

Houses in Multiple Occupation

Further progress was made in the inspection of houses in multiple occupation in an endeavour to improve the conditions for the occupants. This work presents many problems as the lettings in such premises are continually altering and the requirements for amenities such as cooking, washing facilities, sanitary accommodation, etc., are subject to continual change, so that much revisiting is required. In many cases, however, conditions inside the houses in multiple occupation are better than the impression gained from the external appearance because the gardens and forecourts are often seriously neglected. Large numbers of lodging houses are being demolished as a result of clearance schemes and many more will be removed during the next few years in similar schemes of redevelopment.

Details of action taken are as follows:

Number of premises inspected	230
Number of visits	879
Notices requiring information as to ownership	166
Informal notices served	82
Notices requiring provision of amenities ..	14
Notices to require works of improvement ..	1
Notices requiring means of escape in case of fire	15
Management Orders	6
Direction Orders	18

Corporation Home Loans

An inspection of 411 houses was carried out on behalf of the City Estates Surveyor and Valuer, to find out the extent of disrepair and the 'expected life' of the properties, before consideration was given to the application for Corporation loans towards their purchase.

ATMOSPHERIC POLLUTION

Work continued throughout the year on the conversion of heating appliances in the houses contained within Smoke Control Order No. 6(a) and it is anticipated that the work will be completed by the operative date of the 1st July 1973.

Smoke Control Order No. 6 was made by the Corporation in December and is awaiting confirmation by the Secretary of State for the Environment. This further Order which adjoins the No. 6(a) Order, covers 406 acres and contains the Corporation owned Aspley Estate. It comprises 3,495 dwelling houses, 45 commercial premises and 16 other properties and it is proposed that it should come into operation in July 1974. With confirmation, this will enable continuous conversion work to proceed from the adjacent estates with the existing labour force and will contribute still further to the efforts to clean the air over the city. The basic fire-place conversion in the local authority's houses in this new area will be upgraded from the draught assisted inset open fire appliances to closed stoves burning solid smokeless fuel. Tenants will still be given freedom of choice on the type of appliances they prefer, including improved heating standards by the installation of central heating, with the cost covered by an increase in rent. Experience has shown that many tenants will take advantage of this arrangement and that their preference will be for gas heating.

The miners' strike in the early part of the year created some difficulties in the supply and distribution of fuel but did not become serious enough to warrant the suspension of any of the existing Smoke Control Orders. During the summer and later in the year, all fuels became freely available and solid smokeless fuels were quite adequate for the demand.

Industrial and commercial premises continued the trend to use oil fuel or gas in preference to coal.

The three district heating schemes provided with coal-fired furnaces continued to operate but further experiments and modifications were required at one of the large units to improve the performance of the plant with regard to emission from the chimney. The construction of the large incinerator at the Eastcroft, London Road, was nearing completion by the end of the year. This plant will be connected to the large district heating scheme which will serve both the St. Ann's and Meadows Redevelopment Areas. In the meantime, as the housing developments have progressed further, temporary oil-fired boilers have been installed and these have operated satisfactorily without smoke nuisance. During the year, further industrial plants were fired with natural gas. In addition, the conversion of domestic premises to natural gas was commenced.

Measurement of Atmospheric Pollution

Seven measuring stations were in operation for the daily determination of smoke or suspended matter and sulphur dioxide by volumetric apparatus. Details of the results of these measurements are shown on page 139, and on the graph shown on page 143.

In addition to the measurement of smoke, there were seven stations in operation which measured heavier deposited solids from the atmosphere, details of which will be found on page 141.

Clean Air Acts, 1956 and 1968

During the year, 136 complaints of smoke, grit, fumes or odour arising from industrial or commercial premises were investigated, and in 75 cases work was executed for smoke and/or grit nuisance abatement.

Other improvements in order to comply with the Acts included the following works:—

Chimney stacks erected or extended	15
Chimney stacks dismantled	5
Mechanical stokers overhauled or renewed	16
New boilers installed	19
Grit arresting apparatus repaired	13
Conversions from coal to oil-fired or gas-fired	4
Miscellaneous	3

The provisions of Section 3 of the Clean Air Act, 1956, make it an offence to install a furnace in a building or in any boiler or industrial plant attached to a building unless it is, so far as is practicable, capable of being operated continuously without emitting smoke when burning fuel of a type for which the furnace was designed. In nine cases notices of such proposals to instal were received.

All plans and specifications submitted under the Building Regulations to the City Planning Department were examined and advice given on proposed fuel-burning installations, together with appropriate heights of chimneys where necessary. The provisions of Section 6 of the Clean Air Act, 1968, require that the heights of the chimneys of the larger installations be approved. In 18 cases notices of proposals were received, and approved with the necessary amendments where appropriate.

FOOD SUPERVISION AND INSPECTION

The inspection of premises on which food is prepared, stored or sold continued throughout the year to ascertain whether their construction, equipment and maintenance were in conformity with the Food Hygiene Regulations. Suitable premises are, however, only part of the solution towards the satisfactory hygienic production and sale of food because the personal behaviour of food handlers often puts food at risk from bacterial contamination owing to their lack of understanding of the basic principles of food hygiene. For this reason, inspectors spent more time during their visits giving advice to the staff in food premises and in this connection several of the larger food firms in the City made arrangements for inspectors to give a more detailed talk to the members of their staff. This educational work in co-operation with food manufacturers and retailers will have the most beneficial effect in protecting the public from the real dangers of faulty food handling and display.

The new Victoria Centre shopping complex opened during the year and contained many retail food premises requiring supervision and the Department was able to give advice to the individual occupants during the planning stages. One important feature of this shopping complex is the new Corporation owned market which moved from King Edward Street. This includes stall accommodation for meat, fish, fruit, vegetables, greengrocery and confectionery, properly equipped with modern facilities to ensure compliance with the Food Hygiene Regulations. Supervision was exercised during establishment of the new market and early teething troubles were overcome. One problem which persisted arose from the high atmospheric temperature of the new premises, which caused deterioration of some perishable foods on display.

The Health Department is represented on the Planning Sub-Committee of the Licensing Justices. This close co-operation has done much to improve conditions in licensed premises and the support received from the Justices was greatly appreciated because apart from food hygiene other health problems such as noise were taken into consideration. All plans submitted to the City Planning Officer in respect of new food premises were passed to the Health Department for comment so that the owners of the businesses could be advised of any amendments that were necessary, so that the requirements of the Food Regulations would be achieved so far as they affected the structure and the provision of the necessary facilities and equipment.

Routine inspection of various foods at wholesale markets, warehouses and cold-stores resulted in the surrender of 165 tons which were either unfit for human consumption or otherwise unsuitable, as shown on page 146. Damage by flooding, refrigeration faults, climatic conditions, pests, unsatisfactory processing and delays in transit causing decomposition, were among the main causes for condemnation. When food was found to be unfit owing to faulty processing, contact was made immediately with the food manufactory concerned

so that similar food distributed throughout the country may be traced and destroyed. In these circumstances, speed was essential and systematic inspection of other food outlets were urgently carried out.

There was an increase in the number of visits made to various food premises and stalls. In the course of 8,756 visits it was found necessary on 546 occasions to draw attention in writing to defects or contraventions of the Food Hygiene (General) Regulations, 1970 and the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966. Requirements including those outstanding from 1971 were met in 290 cases. The number of premises registered under Section 16 of the Food and Drugs Act, 1955 for the manufacture, storage or sale of ice-cream or the manufacture or preparation of sausages, potted, pressed, pickled or preserved food was 887 and 933 inspections were made to such premises. On page 144 will be found details of the types of food premises in the City and those which are registered.

A total of six prosecutions were taken, involving fifty-two separate offences against the Food Hygiene (General) Regulations, 1970 or the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966 and fines amounting to £639 with £50 costs were imposed, details of which will be found on page 145.

Foreign Matter in Food

A total of 181 complaints were received from members of the public of the purchase of food which was subsequently found to be unsatisfactory. This was an increase of 27 compared with the previous year and could be attributed to more vigilance on the part of the public, due to nationwide publicity in the press and on television relating to food hygiene. Such complaints to the Department were welcomed as they gave public health inspectors the opportunity of thoroughly investigating the procedures of manufacturing premises and retail outlets, so that advice could be given to the food traders on the steps to be takne to reduce the risk of such complaints occurring in the future. It was found that 35% of the complaints related to mould growth and decomposition in both home produced and imported food, 47% concerned the presence of extraneous matter such as glass, metal, paper etc., in the food and 18% of the complaints were found to be unjustified. In one case an official warning letter was sent to the offender but in five cases prosecutions ensued, resulting in fines and costs totalling £252.

Shell Fish

Shell fish from various sources were received at the Sneinton Wholesale Fish Market. A total of 83 samples of mussels which originated from layings in England and Wales, were submitted for bacteriological examination. Two of these were reported upon as being unsatisfactory, as they were found to contain salmonella typhimurium and immediate action was taken to prevent unsatisfactory mussels being exposed for sale.

The Meat Supply

Slaughtering

The Corporation-owned public slaughterhouse was the only premises used for the slaughter of animals, the flesh of which was intended for human concumption. All carcases and offals were inspected in accordance with the Meat Inspection Regulations, 1963, and all meat passed as fit for human consumption was duly stamped. Details of the number of animals slaughtered and inspected, together with the number found to be diseased or otherwise unfit, will be found on page 147.

Imported Food Regulations, 1968

The marked increase in the amount of imported food which occurred in 1971 was maintained in 1972. This food which arrived at depots in the city by "containerisation" was inspected to ascertain its fitness on its arrival at the premises to which it was consigned. Eleven samples of imported meat were taken for bacteriological examination, so as to check the hygienic standards under which the product had been produced and its subsequent handling and only one was adversely reported upon.

Poultry

There was one poultry slaughtering premises registered under the Slaughter of Poultry Act, 1967, situated within the city. Regular inspections of the premises showed that the business was conducted in compliance with the Food Hygiene (General) Regulations, 1970 and the Slaughter of Poultry (Humane Conditions) Regulations, 1971.

Transport

All vehicles operating from the public slaughterhouse were inspected regularly to ensure that their condition was in compliance with the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966.

Disposal of Condemned Food

All meat and offals found on inspection to be unfit were removed from the slaughterhouse by approved firms for manufacture into animal feeding stuffs and fertilisers, in accordance with the Meat (Sterilisation) Regulations, 1969.

Other foodstuffs were disposed of by the Corporation's Cleansing Department in controlled refuse tips or by incineration.

For details of unsound food surrendered see page 146.

The Milk Supply

The conditions under which milk was produced, stored, processed and distributed were regularly examined to ensure that the statutory requirements applicable to the dairy trade were observed.

REGISTRATIONS

The Milk and Dairies (General) Regulations, 1969	
Processing dairies	2
Distributors operating from wholesale dairies ..	2
Shopkeeper distributors (including registrations for the sale of cream) ..	585

LICENCES

The Milk (Special Designation) Regulations, 1963/72	
Dealers licensed to pasteurise	2
Dealers licensed to sterilise	2
Dealers licensed to apply ultra-heat treatment ..	1
Dealers licensed to sell pasteurised, sterilised or ultra-heat treated milks	580

No "untreated" milk has been retailed in the city during the year. In addition to milk processed in both dairies within the city milk is also sold in the city which has been processed in six other dairies outside the city.

Milk Sampling

Bacterial Examination

Pasteurised Milk

A total of 518 samples including 87 which were additionally homogenised, and 132 of Channel Islands quality were subjected to the methylene blue test and also to the phosphatase test. Of these 12 failed the methylene blue test and one failed the phosphatase test. The methylene blue test measures keeping quality and the phosphatase test indicates whether the milk has been properly pasteurised. All the failures with the exception of one, involved milk which had been processed outside the city. The one failure (a methylene blue test failure) mentioned was found to be due to faulty stock rotation at a retail outlet. All the other failures were referred to the particular dairies concerned. Subsequent follow-up samples were found to be satisfactory.

Sterilised Milk

Of 87 samples obtained for examination, all satisfied the turbidity test. The turbidity test shows whether the milk has been sufficiently heat treated.

Ultra-heat treated milk

Forty-two samples were obtained for examination and all satisfied the ultra-heat treated test. This test consists of a colony count after incubation, i.e. the bacterial count of viable organisms.

Chemical Examination

Of the samples analysed by the Public Analyst during the year, particulars were as follows:—

Total milk samples examined	483
Average fat content ..	3·72% (Channel Islands 4·80%)
Average solids-other-than-fat content	8·67% (Channel Islands 9·09%)

The presumptive standard for milk is "fat 3·0%" and "solids-other-than-fat 8·5%". For Channel Islands and South Devon Milk the legal *minimum* standard for fat content is 4·0%.

Of the 373 samples of raw milk ex farm subjected to a departmental informal Gerber test 12 (3·21%) were provisionally unsatisfactory. The object of this test is to determine the future pattern of formal sampling.

Action taken on unsatisfactory milk samples

The City Analyst reported that following chemical examination 18 samples of milk were deficient in milk fat and/or milk-solids-other-than-fat. The producer's attention was drawn to these deficiencies. Where necessary information was passed to the National Agricultural Advisory Service so that advice could be given to the producer concerned. In one other instance, warm milk sold in a cafeteria was found to be slightly adulterated with extraneous water. Investigation showed this to be due to faulty handling techniques in the use of the warming device.

Complaints

There were 12 complaints involving bottles of milk and one complaint involving a carton of milk. In 10 instances complaints related to material (paint, mortar, larvae etc.) which had become "fixed" to the inner surfaces of bottles and in the other three instances extraneous matter had been found in the containers. Each complaint was investigated at source and as a result of this satisfactory remedial action was taken by all concerned. It is interesting to note that whilst complaints are undesirable they can and do occur, bearing in mind the known misuse of bottles by a small section of the public. The shadow of a complaint constantly being with the processors they are always striving to improve existing methods of detection. Coupled with this are the difficulties involved in the need to speed up and increase throughput in order to keep down ever rising costs.

Ice Cream

All manufacturers of and dealers in ice cream were registered under the provisions of the Nottingham Corporation Act, 1935, and their premises were also registered under the provisions of the Food and Drugs Act, 1955.

A total of 1,024 inspections were made of premises, and mobile sales vehicles.

Registrations

In force at the end of the year:—

Manufacturers:		
'Hot mix' method	..	3
'Cold mix' method	..	1
'Soft ices' ..	..	9
		13
Vendors and Dealers		567
New registrations	..	50
Transfer of registrations		29

Chemical Analysis for Nutritive Quality

A total of 10 samples were taken for chemical analysis. All conformed to the standard required by the Ice Cream Regulations, 1967. One ice lolly was examined and found to be satisfactory.

Bacteriological Examination for Hygienic Quality

A total of 338 samples of ice cream were examined by the methylene blue test, 45 samples were found to be inferior or unsatisfactory from a hygienic (bacteriological) point of view, and 293 were considered to be satisfactory.

Ice cream may be graded according to the efficiency of its heat treatment and subsequent handling. The following table indicates the number of samples falling into the respective grades during 1972:—

Grading	*Unwrapped "Hard" Ice-cream*	*Unwrapped "Soft" Ice-cream*	*Prepacked Ice-cream*
1	162	35	70
2	18	6	2
3	20	14	1
4	6	3	1

Summary

Satisfactory	Grade 1	267	86·68%
Satisfactory	Grade 2	26	
Inferior	Grade 3	35	13·31%
Unsatisfactory	Grade 4	10	
	Total	338	

Whilst the number of inferior or unsatisfactory samples may appear to be high it must be borne in mind that the pattern of sampling was directed largely at sources which were most likely to reveal unsatisfactory hygienic results, i.e. "hard" and "soft" ice cream retailed unwrapped. Follow up investigations indicated that the initial bacteriological quality of the ice cream at the manufacturing stage was probably satisfactory. Faulty handling techniques noted at retail level were likely to be the causative factor. In each instance remedial action was taken by all concerned and subsequent samples from the same sources were found to be satisfactory.

Retail sales of ice cream in Nottingham continue to be on the increase, as is the number who are now selling unwrapped ice cream. The industry as a whole requires constant public health supervision in order to ensure that ice cream remains a "safe" food.

Probably the best controlling factor is the requirement that any person or premises involved in ice cream from the manufacture to the retail stage, must be registered for that purpose with the local authority. With this control, standards of hygiene are more easily pre-determined and maintained.

Six separate complaints were received of ice lollies having unpleasant tastes. Investigation showed that in each instance this was due to brine contamination from defective moulds during the freezing process. Remedial action was taken by both firms concerned.

Food Sampling

A total of 521 samples of food were sent for bacteriological examination with the following results:—

(a) Out of 37 samples of various foods which included pork pie, pork chop, sausages, cooked chicken, egg albumen, curry powder, desiccated coconut and soft drinks, only one was reported upon as being unsatisfactory. This was a cooked chicken but the bacteria found was non-pathogenic and investigation indicated that contamination had occurred due to faulty hygienic practices.

(b) During an investigation into confectionery containing cream, 200 samples were taken, with a result that the cream was reported as being satisfactory in 30 cases, fairly satisfactory in 65 cases and unsatisfactory in 105 cases. Of these samples 173 were obtained at retail sales points and 27 at production level in the form of whipped cream at the bakery. Cream used in the manufacture of cream confectionery is received by the confectioner in a pasteurised state. Approximately 61% of the cream confectionery examined was produced in the city and in each instance where the reports were not satisfactory, regular visits were made by an inspector to give advice on the hygienic handling of cream and cream products. This resulted in the satisfactory improvement, bearing in mind the sometimes unreliability of the keeping quality of cream. Discussions were also held with the producers of cream confectionery where premises were outside the city, with rewarding results.

(c) A total of 284 samples of pasteurised cream were obtained and of these 157 were reported as being satisfactory, 78 fairly satisfactory and 49 unsatisfactory. Of these 216 were obtained packed in small cartons at retail sales points and 68 were obtained from bulk supplies following delivery at bakery premises. Approximately 39% of the cream examined was processed in the city. All the bulk supplies to bakers were from sources outside the city.

The bacteriological examination of cream is essentially a screening or advisory test. Although cream is retailed on a wide scale pathogenic bacteria are rarely present and food poisoning incidents which can be traced to cream are very few in number. The bacteria

found are usually the result of faulty hygienic practices during handling after pasteurisation and/or subsequent lack of proper temperature control, the main result of which is loss of keeping quality.

There were no egg pasteurisation plants in the city. Regular consignments of imported frozen egg arrived in the city. All consignments were accompanied by the necessary certificates stating that each batch of eggs satisfied the alpha-amylase test as required by the Liquid Egg (Pasteurisation) Regulations, 1963.

Samples taken for chemical analysis were as follows:—

Formal ..	500	Analysed by City Analyst
Informal ..	500	Analysed by City Analyst
Informal Milk	373	Tested by the Inspector
	1,373	

Formal samples were found to be unsatisfactory in three cases. In two instances legal proceedings were taken successfully under The Fish and Meat Spreadable Products Regulations, 1968. In the remaining case, an alleged infringement of Section 2, Food and Drugs Act, 1955, a warning was given.

Informal samples were found to be unsatisfactory in 18 cases, which included labelling irregularities, composition faults and misleading claims. Letters were sent to the individuals or firms concerned drawing attention to the deficiencies.

Medical Liaison with the Local Taxation Department

BY

MARGARET W. SEYMOUR, M.B., Ch.B., M.F.C.M., D.P.H.

Principal Medical Officer

During 1972, medical advice regarding individual driving licence applicants and holders has continued to be given at the request of the local taxation department. The general practitioner was asked in each case to complete the appropriate form and then if it was considered necessary, a consultant opinion was obtained. These medical investigations were carried out with the consent of the person concerned.

In February 1972 an assessment of the cases of epilepsy referred over the previous 18 months was carried out. An account of 34 cases and their associated problems was published in a joint paper by the Medical Officer of Health and the Principal Medical Officer in '*Community Medicine*' of the 23rd June 1972.

During 1972 there has been an overall increase in the number of cases dealt with compared with 1971. Details are given below:—

PERSONS SUFFERING FROM EPILEPSY ASSESSED FOR THE LOCAL TAXATION DEPARTMENT

(1971 figures in parentheses for comparison)

Date	*Total number of cases assessed*	*Number referred for consultant opinion*	*Number referred to medical referee*	*Number refused a licence*
1st January 1972—31st December 1972	35 (28) *(including* 17 (8) *re-assessments)*	13 (7)	0 (0)	4 (4)

Number of cases awaiting assessment at 31st December 1972 ..	4 (2)
Number of cases found not to be suffering from epilepsy	2 (4)
Number of cases assessed for medical reasons other than epilepsy ..	9 (7)
Number of cases of licences revoked during 1972 on medical grounds	3 (1)

COMPULSORY REMOVAL TO HOSPITAL

National Assistance Act 1948, Section 47

BY

KENNETH D. MASON

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Deputy Medical Officer of Health

A widow aged 55, living alone in a terraced house, developed symptoms of a chronic neurological disorder. Her general practitioner tried to arrange an admission to hospital for medical assessment from October 1972 onwards but, over a period of two months, his patient consistently refused to become an in-patient. Determined efforts were made to persuade her to change her mind and, on one occasion, an ambulance arrived to take her, waited, but had to leave without her. She received support at home from the Social Services Department and a district nurse visited her regularly. Nevertheless her deterioration was progressive. The general practitioner and a number of visiting local authority health and social services staff all observed the following worsening features:—

MEDICAL CONDITION

The patient was unsteady on her feet. Her hands, face, head and neck made involuntary movements. Her speech was abnormal and almost unintelligible. However, if her visitor was patient, she could communicate rationally and adequately. Close medical inspection revealed that there were flexion and adduction deformities of her hands and feet with muscular stiffness. The involuntary movements were obviously related to the slurred speech.

The whole suggested a progressive cerebral lesion. Subsequently detailed investigation in hospital strongly suggested that what was being observed was the neurological component of Huntingdon's chorea.

SELF NEGLECT

There was great evidence of self neglect. She was underweight and pale and had poor personal hygiene with unkempt appearance except when recently attended to by the district nurse or home help. Meals were observed to be badly prepared unless supplied by meals-on-wheels.

Her efforts to prepare food and drink were pitiful and there was considerable spillage. The patient occupied the lower floor of her home with a bed in the living room. There was a general lack of cleanliness, and considerable disorder in these rooms with food stains and food scraps and dirty crockery littered about. Some corners were particularly unpleasant, but there was no evidence of incontinence of faeces. A pet budgerigar was apparently well cared for and the cage kept clean.

Fire Risk

The most important hazard was the risk of fire. There was an open unguarded coal fire into which the patient could stumble or in which she could burn her hands when building the fire. A naked flame on the kitchen gas stove was frequently alight when visitors called. The patient was also a chain smoker. Striking matches was a danger for her and hence the semi-permanent gas flame in the kitchen. Burn marks were apparent on both hands.

From the foregoing medical and social evidence it was unanimously concluded that the patient was suffering from a grave chronic disease and in the words of Section 47 of the National Assistance Act 1948 "was unable to devote to herself, and was not receiving from other persons, proper care and attention". Following a request from the general practitioner in early December to have the patient removed to hospital under this section, the Medical Officer of Health satisfied himself after thorough inquiry and consideration that it was for her safety and health to arrange her compulsory removal to hospital for assessment and treatment.

Both the Deputy Medical Officer of Health and the patient's general practitioner signed a joint certificate on behalf of the Medical Officer of Health, which formed the basis of an application to the Nottingham Magistrates by the Local Health Authority for a removal order under Section 47 of the National Assistance Act 1948. Application to the Magistrates' Court was made on the 14th December. Because of the fire hazard an expedited order for a period not exceeding three weeks was granted by the Court and the patient was removed the same day by ambulance to the City Hospital. Preparations were also made to apply for a further Court order to detain the patient for up to three months in the City Hospital should it prove necessary following medical assessment and treatment. At the expiration of the three weeks order, a case conference was held on 5th January 1973 at the City Hospital, where it was decided that the patient had improved sufficiently to be removed from the acute bed she occupied to long-stay institutional care. It was considered more appropriate that she be "detained" in the local authority social service accommodation (an old people's home) where she would receive adequate care and supervision. At some future date, it would be necessary to consider long-stay psychiatric care as she would deteriorate mentally as was invariably the case in Huntingdon's Chorea. As the patient had overcome her dislike of hospitals and was in a much happier state of mind, the need for a further court order was not considered.

Although the Social Services Department had some reservations about her suitability for admission to an old people's home they agreed to put her on a waiting list for admission for a trial period. Because of the length of waiting lists, no assurance of an early admission was given and they decided not to treat the patient as needing a high priority admission because of her location in hospital.

In the first week of January 1973, the hospital transferred the patient to Newstead hospital in Ravenshead, north of the City. On the 23rd January 1973, the patient was discharged home from

hospital with a hospital request to Social Services for adequate social support at home. Home help, meals on wheels, and regular supervision by a social worker were provided, but these, of course, could not include daily 24-hour supervision. The Health Department was not informed of the patient's return home.

Sixteen days after hospital discharge on 8th February 1973, the patient accidentally set fire to her own home and was overcome by smoke and heat. A neighbour tried repeatedly to break in to assist the patient but was driven back by heat and fumes. He was afterwards commended for his action by the Coroner. The fire services were sent for and neighbours on one side left their home for a time because their house became smoke filled. The firemen who were summoned found the patient collapsed and asphyxiated near the back door of her home. Mouth-to-mouth resuscitation and use of an oxygen positive pressure respirator failed to revive her and she was dead on arrival at hospital.

At the Coroner's Inquest on 28th February 1973, evidence was taken from the Fire Brigade, the Police, a neighbour and a member of the Social Services Department. Evidence from the Police and the City Fire Brigade excluded the possibility that any other person had been involved in starting the fire. The Social Services Department had visited and provided services for the patient from the time of her discharge from hospital. Visiting staff had noted that the patient had had difficulty in moving round the house and in gripping objects securely with her hands. Once back at home her heavy smoking had restarted and she was again careless in her handling of lighted cigarettes. Her appearance had deteriorated and she became and remained very dishevelled, often discarding her footwear and allowing her stockings to drop round her ankles. If she wore slippers she tied them on with crepe bandage. Her surroundings had become very untidy and cluttered but she was cheerful to be back at home and enjoyed her food, particularly that brought to her by meals-on-wheels.

The Coroner said that there could be no criticism of the Corporation's actions and he was satisfied that the Corporation had done all they could to assist the patient. He was grateful for the detailed reports received from the Corporation's officers but felt that it was not proper for him to comment on some of the matters referred to in the reports. He mentioned in particular the relationship between the Hospital Authorities and the Corporation. The Coroner's verdict was that the patient had died from carbon monoxide poisoning due to the inhalation of smoke from a fire accidentally started.

The Case of Mrs. B.

Early in the year complaints were received about large accumulations of rubbish in the backyard of a Corporation-owned terraced house on the edge of the St. Ann's Redevelopment Area. The Public Health Inspector had made several attempts over a period of months to persuade the occupant to remove this nuisance. The sole occupant

was a woman of about 58 years of age who had come to England from Jamaica in 1958. She steadfastly refused to comply. During this period a fire broke out in the house and burnt out the ceiling, door and window of one room. There was a clear fire hazard present from other accumulations inside the house.

A Court Order was obtained to clear the property and a group of dustmen arrived at the house on 28th June to implement it. While they were clearing the accumulations the woman arrived and stopped further clearance whilst retrieving articles from the dust-cart. The police removed her to the Guildhall Police Station where she was detained for several hours. A social worker and psychiatrist saw her there. She was not considered to be mentally ill and the Health Department was approached with a view to committing her to Part III Accommodation under Section 47 of the National Assistance Act 1948. She was seen at the police station by one of our doctors who interviewed her. She was calm and gave rational answers to questions. She obviously resented the earlier intrusion of her privacy. Her general practitioner was contacted and it was considered that grounds for committal under Section 47 were scanty. She was taken home by our doctor who was astounded by what he saw. The house could not be entered by the front door because of the piles of articles in the front room reaching up to the ceiling. There were all manner of articles—old mattresses, rags, dozens of old shoes, broken furniture and newspapers. There was no back door and the scullery was choked with bags of coal and bits of food. The other rooms were also piled high with rubbish. It was a hazardous operation to clamber upstairs where a similar situation prevailed. Mice nests and fleas were very evident.

A further attempt by the dustmen to clear the house the following morning was unsuccessful. They had no wish to upset the woman and respected her resistance. Four cartloads of rubbish had been cleared from the backyard the previous day in her absence.

She was living in a grossly unfit house to which gas and electricity supplies had been cut off about a year ago. She was known to the Social Services Department as a "magpie" from previous tenancies in St. Ann's. Her husband had left her in 1960 and her four grown children were in Jamaica. She defended her mountainous collection of goods by saying they were being saved up for when her children eventually came to join her.

Her brother living in Aspley was eventually contacted and he confirmed her story. He said that her collecting habit started after a hysterectomy in 1959. She had never behaved in this way in Jamaica and had in fact run a successful fish stall there. He was most concerned about his sister but had been unable to make her change her ways.

A conference was called to try to resolve the problem. Members of the Public Health, Social Services and Housing Departments were present as well as a psychiatrist and a Community Relations Council representative. In view of the new evidence from her brother it was

felt she could be committed to Mapperley Hospital under Section 25 of the Mental Health Act, 1959. She was eventually removed to hospital in July. The house was cleared and cleaned up.

At the end of the year she was still in hospital awaiting an allocation of a tenancy from the Housing Department.

The travails of this woman reveal shortcomings in liaison procedures among Corporation departments and between them and outside agencies. Three psychiatrists saw her over the course of a year and two of them reported that she belonged to some subnormal category. One of them reported that "this lady seemed to be living in primitive conditions as is perhaps quite acceptable in a tribe in Jamaica".

They all agreed that she was not ill enough for compulsory hospital admission and this seemed to have "immobilised" the Social Services Department. The Housing Department continued to charge her rent for a derelict property and were unable to effect repairs, whilst the exercise of Public Health powers took some time to reach fruition. Her relatives felt helpless and the police inappropriate. The Community Relations Council felt outside of matters and the Fire Department could only make recommendations. It does seem that unless a problem is clear-cut and belongs within the "brief" of one particular agency, the chances of prompt resolution are small. In the face of the upheaval of reorganisation it should be remembered that the compartmentalising of people and strict divisions of labour will not give the public better service.

Departmental Publications 1972

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Parry, W. H. and Ducksbury, C. F. J., *Tuberculosis problems in a Nottingham working men's hostel* (1972). Community Medicine, *128*, 52-55.

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Parry, W. H. and Seymour, M. W., *Some problems of epilepsy and driving* (1972), Community Medicine, *128*, 236-237.

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Cost of Health Services

SERVICE	ACTUAL COST Year ended 31st March 1972 — Gross expenditure	Income other than Government Grants	Government Grants	Net expenditure to be met from Rates	Equivalent Rate poundage (before 1973 revaluation)	Cost per head of population	ESTIMATED COST Year ended 31st March 1973 — Estimated net expenditure to be met from Rates	Equivalent Rate poundage (before 1973 revaluation)	Cost per head of population
	£	£	£	£	p	£	£	p	£
Administration ..	62,119	9,335	—	52,784	0·34	0·18	70,760	0·44	0·24
Environmental Services ..	127,847	8,447	1,358	118,042	0·75	0·40	158,350	0·99	0·54
Health Centres ..	60,057	25,043	—	35,014	0·22	0·12	46,470	0·29	0·16
Maternal and Child Health—									
Clinics and Centres	67,260	12,940	—	54,320	0·35	0·18	68,220	0·42	0·23
Other Services ..	11,031	12	270	10,749	0·07	0·04	19,620	0·12	0·07
Nursing Services ..	342,620	7,480	1,638	333,502	2·13	1·12	386,940	2·41	1·31
Vaccination and Immunisation ..	15,914	1,255	—	14,659	0·09	0·05	18,760	0·12	0·06
Ambulance Service ..	260,867	1,684	—	259,183	1·65	0·87	314,280	1·96	1·07
Prevention of illness, Care and After-care	47,795	2,300	—	45,495	0·29	0·15	67,110	0·42	0·23
TOTAL	995,510	68,496	3,266	923,748	5·89	3·11	1,150,510	7·17	3·91

Analysis of Neonatal Deaths

	Total	Born at			Legitimate	Sex		Premature	Age at Death				Place in Family					Age of Mother						
		Hospital	Home	Nursing Home		M.	F.		0–23 hrs.	24–47 hrs.	2–6 days	7–27 days	1	2	3	4	5 or over	15–19	20–24	25–29	30–34	35–39	40–44	Not Known
Ante-natal causes																								
(a) Toxaemia ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(b) A.P.H.; No toxaemia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) Rhesus incompatibility	1	1	—	—	1	—	1	—	1	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—
Intra-natal causes:																								
(a) Injury	3	3	—	—	3	3	—	2	1	—	2	—	—	1	2	—	—	—	3	—	—	—	—	—
(b) Anoxia	1	—	1	—	—	1	—	1	1	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—
Prematurity only ..	17	15	2	—	12	8	9	17	15	—	1	1	6	2	4	1	4	2	9	4	1	1	—	—
Respiratory distress syndrome	12	10	2	—	9	6	6	10	8	3	—	1	8	—	—	1	3	7	2	1	—	1	1	—
Congenital malformation ..	12	11	1	—	10	10	2	6	6	—	2	4	7	3	—	1	1	2	5	3	1	1	—	—
Infection:																								
(a) Respiratory ..	3	3	—	—	2	1	2	—	—	—	2	1	3	—	—	—	—	1	1	1	—	—	—	—
(b) Gastro-intestinal ..	1	1	—	—	—	—	1	1	—	—	—	1	1	—	—	—	—	—	1	—	—	—	—	—
(c) Other	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other causes ..	5	5	—	—	4	4	1	2	3	—	2	—	3	1	1	—	—	—	2	2	1	—	—	—
TOTAL	55	49	6	—	41	33	22	39	35	3	9	8	28	7	7	4	9	12	24	12	3	3	1	—

Analysis of Stillbirths

	Total	Born at			Legitimate	Sex		Premature	Place in Family					Age of Mother					
		Hospital	Home	Nursing Home		M.	F.		1	2	3	4	5 or over	15–19	20–24	25–29	30–34	35–39	40–44
Ante-natal causes:																			
(a) Toxaemia	1	1	—	—	1	—	1	1	—	—	—	1	—	—	—	—	—	1	—
(b) *A.P.H.; no toxaemia	6	6	—	—	5	1	5	4	1	—	3	1	1	—	2	2	2	—	—
(c) Rhesus incompatibility	2	2	—	—	1	1	1	2	—	—	—	—	2	—	—	2	—	—	—
Intra-natal causes:																			
(a) Injury	1	—	1	—	1	—	1	—	—	1	—	—	—	1	—	—	—	—	—
(b) Anoxia	16	15	1	—	12	11	5	8	3	3	3	—	7	1	3	6	2	4	—
(c) †Intra-uterine death ..	4	2	2	—	3	2	2	2	—	1	1	1	1	1	—	1	1	—	1
Placental insufficiency ..	9	9	—	—	5	4	5	7	4	1	2	—	2	2	4	1	—	1	1
Congenital malformation ..	17	16	1	—	12	7	10	15	9	4	1	—	3	5	4	3	2	2	1
Other causes	3	2	1	—	3	2	1	2	1	1	—	—	1	1	1	—	—	1	—
TOTAL	59	53	6	—	43	28	31	41	18	11	10	3	17	11	14	15	7	9	3

*Ante-partum haemorrhage †Cause not determined

Confinements in the City

Place	Nottingham Mothers			Others			Totals
	Total	*Live*	*Stillborn*	*Total*	*Live*	*Stillborn*	
At home:							
Conducted by midwife	971	965	6	—	—	—	971
„ „ private doctor ..	1	1	—	—	—	—	1
Home delivery by county midwife ..	1	1	—	1	1	—	2
County delivery by city midwife ..	—	—	—	2	2	—	2
	973	967	6	3	3	—	976
Hospitals:							
City	2,160	2,132	28	939	919	20	3,099
Firs	570	567	3	921	913	8	1,491
Women's	586	568	18	1,585	1,547	38	2,171
Highbury	290	287	3	928	921	7	1,218
General	—	—	—	1	—	1	1
TOTAL	3,606	3,554	54	4,374	4,300	74	7,980

HEALTH VISITING

Summary of Visits

Visits in connection with	1972	1971	1970	1969	1968	1967
Pre-School Children:						
Primary visits	**24,453**	29,242	29,046	30,234	32,188	30,571
Revisits ..	**30,955**	38,054	50,275	49,832	54,824	49,947
Old People:						
Primary visits	**1,646**	1,560	1,314	986	1,017	724
Revisits ..	**3,159**	2,003	2,607	1,941	1,752	1,180
Visits to Patients aged 5+—64 years:						
Primary visits	**1,178**	455	552	290	315	285
Revisits ..	**1,345**	1,334	943	761	666	701
NUMBER OF HOME VISITS	**62,736**	72,648	84,737	84,044	90,762	83,408
VISITS BY TUBERCULOSIS VISITORS	**2,786**	3,146	2,942	4,257	4,269	4,547

HOME NURSING SERVICE

Comparative Index of Work over Seven Years

	1972	1971	1970	1969	1968	1967	1966
Total visited	**6,877**	6,583	6,217	5,908	5,986	5,864	5,777
Total nursing visits ..	**177,955**	167,636	161,116	171,613	187,202	188,683	192,386
Age Groups of Patients							
Under 5 ..	**1·8%**	1·1%	0·8%	0·7%	0·9%	1·0%	0·9%
5—64 ..	**37·4%**	37·9%	33·9%	33·5%	34·7%	36·1%	35·2%
65 and over..	**60·8%**	61·0%	65·3%	65·8%	64·4%	62·9%	63·9%

Loan of Nursing Equipment

Article	1972	1971	1970	1969	1968	1967	1966
Air rings ..	**281**	255	224	217	249	258	257
Bed pans ..	**613**	605	691	550	621	663	768
Back rests ..	**399**	357	467	341	324	387	326
Bed tables ..	**7**	11	9	7	3	5	3
Bedsteads ..	**216**	171	151	131	150	85	99
Commodes ..	**913**	824	765	554	732	429	351
Cradles ..	**189**	196	156	148	152	170	155
Crutches ..	**38**	46	42	43	39	43	41
Draw sheets..	**104**	116	64	72	58	81	85
Feeding cups	**70**	64	55	63	54	66	76
Invalid chairs	**382**	420	373	305	267	162	142
Lifting apparatus	**—**	—	2	2	2	4	5
Mackintosh sheets ..	**24**	42	51	72	92	144	265
Mattresses ..	**238**	219	192	176	197	98	101
*Self lifting poles ..	**74**	76	59	27	43	28	20
Sorbo cushions	**282**	276	203	226	239	264	318
*Ripple beds ..	**11**	3	—	—	—	—	—
Urinals ..	**440**	439	436	390	385	389	445
Walking frames	**106**	124	61	38	27	15	9
Walking tripods	**233**	267	251	242	200	197	171
TOTALS..	**4,620**	4,511	4,252	3,604	3,834	3,488	3,637

DISPOSABLE EQUIPMENT ISSUED

Draw sheets..	**4,800**	2,000	1,800	1,200	825	561	670
Polythene sheets ..	**1,100**	1,340	1,728	1,536	1,216	996	960
Inco pads ..	**70,248**	46,452	32,088	21,840	47,395	40,248	32,700
Inco rolls ..	**13,873**	9,040	4,307	1,392	—	—	—
Inco pants ..	**838**	752	588	—	—	—	—

Epilepsy and Cerebral Palsy

The number of persons known to be suffering from epilepsy and cerebral palsy is shown below. Although an individual may be known to more than one service of the Local Authority he is shown in the table under the service mainly concerned with his welfare.

	Education	*Social Services*	*Others*	TOTAL
Cerebral palsy	35	86	23	144
Epilepsy	171	116	8	295
Cerebral palsy and epilepsy	3	16	—	19

Incidence of Blindness

BLIND	*Cause of Disability*			
	Cataract	*Glaucoma*	*Retrolental Fibroplasia*	*Others*
(1) Cases registered during the year in respect of which para. 7 *(c)* of Forms B.D.8 recommends:				
(a) No treatment ..	—	3	—	16
(b) Treatment (medical, surgical or optical) ..	14	7	1	32
(2) Cases at (1)*(b)* above which on follow up action have received treatment ..	6	7	1	32
PARTIALLY-SIGHTED				
(1) Cases registered during the year in respect of which para. 7*(c)* of Forms B.D.8 recommends:				
(a) No treatment ..	1	—	—	7
(b) Treatment (medical, surgical or optical) ..	21	4	—	41
(2) Cases which received follow up treatment	14	4	—	40

Number of blind persons on register at 31st December ..	725
Number of partially sighted persons on register at 31st December	257

Priority Rehousing on Medical grounds

TABLE 1

Age distribution:	0–9	10–19	20–29	30–39	40–49	50–59	60–69	70–79	80+	*Total*
Medical reason:										
Cardiac ..	1	—	—	1	2	5	19	11	2	41
Bones ..	—	—	2	1	2	8	15	23	8	59
Respiratory ..	4	1	1	3	3	6	4	3	1	26
Nerves ..	—	—	3	2	1	—	2	2	1	11
Central nervous	5	2	2	2	3	6	8	5	3	36
Malignant ..	—	—	1	—	1	2	4	3	1	12
Special senses	—	—	—	—	—	—	—	1	—	1
T.B. ..	—	—	—	—	2	2	2	—	—	6
TOTAL ..	10	3	9	9	14	29	54	48	16	192

TABLE 2

Area	*Visits Paid*
Meadows	172
Hyson Green	73
St. Ann's	46
Radford	90
Basford	37
Central	25
Lenton	27
Sneinton	39
Sherwood	46
Bulwell	53
Bilborough	14
Clifton	11
Wollaton	7
TOTAL ..	640

Summary of Complaints Received and the Action Taken

Complaints received:

Housing defects	2,853
Choked or defective drains and sewers	668
Overcrowding	284
Dirty houses	70
Defective dustbins	348
Accumulations of refuse	579
Offensive odours	181
Nuisance from smoke, grit and fumes	57
Nuisance from empty properties	28
Water in cellars	39
Keeping of animals	61
Noise nuisance	73
Caravans	28
Food hygiene	69
Nuisance from pigeons	48
Insect pests	758
Rats and mice	2,857
Miscellaneous	145
TOTAL	9,146

Nuisances remedied following the serving of notices:

Additional water closets provided	8
Water closets cleansed	8
Courts, yards and passages paved or cleansed	133
Drains repaired or cleared	188
Dustbins provided	327
Factories	3
Dirty houses	5
Keeping of animals	1
Accumulation of refuse	282
Water closets repaired or cleansed	456
Miscellaneous nuisances	122
TOTAL	1,533

Complaints referred to other Corporation Departments following investigation	1,075
Number of visits in connection with complaints	19,721

Housing defects remedied:

Fireplaces	46
Floors and ceilings	441
Rain water gutters and downspouts	826
Roofs	845
Walls	1,103
Sinks	70
Water pipes and fittings	92
Windows	717
Others	535
TOTAL	4,675

Number of houses involved in the foregoing defects 1,436

Statutory Notices

Total number served	1,634
	Complied with
Public Health Act, 1936:	
Section 39 Drainage	181
Section 40 Soil pipes	—
Section 44 Inadequate closet accommodation	6
Section 45 Closets	9
Section 56 Paving of courts, yards and passages, dwelling-houses	78
Section 75 Dustbins	63
Section 79 Offensive matter	2
Section 92 Houses	589
Section 287 Notice of entry	2
Public Health Act 1961:	
Section 17 Stopped-up drains	110
Nottingham Corporation Act, 1923:	
Section 64 Paving	—
Section 73 Repair of water-closets	91
Nottingham Corporation Act, 1952:	
Section 80 Repairs	1
Housing Act, 1957:	
Section 9	101
Section 9 (1a)	18
TOTAL	1,251

Consequent upon the failure of owners to comply with statutory notices, the Corporation ordered work on private contractors and recovered expenses incurred in 104 cases as follows:

	£
Nottingham Corporation Act, 1923:	
Section 73	25·54
Nottingham Corporation Act, 1952:	
Section 80	—
Housing Act, 1957:	
Sections 9 and 10	310·73
Public Health Act, 1936:	
Section 39	73·62
Section 56	201·24
Section 45	4·43
Section 79	—
Sections 92 and 93	—
Public Health Act, 1961:	
Section 17	290·31
TOTAL	£905·87

The cost of new dustbins supplied by the Corporation where owners or occupiers had not complied with notices served and where steps were taken to recover this amount was £38·65.

Insects received in the department for identification

Beetles

Anobium punctatum	6
Attagenus pellio	7
Cryptophagus	1
Dermestes lardarius	2
Harpalus latus	1
Lathridius nodifer	2
Lyctus	1
Niptus hololeucus	1
Nacerdes melanura	1
Ocypus olens	2
Oryzaephilus surinamensis	1
Ptinus fur	1
Ptinus tectus	5
Stegobium paniceum	9
Tenebrio molitor	7

Flies

Paracollinella fontinalis	4
Psychoda	1
Sciara	1

Larvae

Attagenus pellio	2
Fannia canicularis	1
Hofmannophila pseudospretella	1
Plodia interpunctella	1

Miscellaneous

Bryobia praetiosa	3
Ctenocephalides felis	4
Ceratophyllus gallinae	1
Ixodes ricinus	1
Mason wasp	2
Mining bees	5
Mites	2
Psocids	9

Fertilisers and feeding stuffs

Samples taken	*Satisfactory*	*Unsatisfactory*	*Total*
Fertilisers:			
Clays fertiliser	1	—	1
Eclipse plant food	1	—	1
Hoof and horn meal	—	2	2
Growmore	2	1	3
Garden plus	1	—	1
Phostrogen	1	—	1
Bone meal	—	1	1
Garden lime	1	—	1
Organic fertiliser	—	1	1
Blood and bone manure	1	—	1
Chrysanthemum fertiliser	—	1	1
Basic slag	—	1	1
Dried blood	—	1	1
Rose fertiliser	—	1	1
Feeding stuffs:			
Layers pellets	4	—	4
Layers mash	5	1	6
Chicken pellets	2	1	3
TOTALS	19	11	30

Offices, Shops and Railway Premises Act, 1963

REPORTED ACCIDENTS

Workplace	*Number fatal*	*Reported non fatal*	*Total no. investigated*	*Action recommended*			
				Prosecution	*Formal warning*	*Informal advice*	*No advice*
Offices ..	—	28	5	—	2	3	—
Retail shops	—	71	16	—	1	7	6
Wholesale shops, warehouses	—	36	13	—	8	5	—
Catering establishments open to public, canteens	—	20	6	—	1	2	2
Fuel storage depots ..	—	—	—	—	—	—	—
TOTALS	—	155	40	—	12	17	8

ANALYSIS OF REPORTED ACCIDENTS

	Offices	*Retail shops*	*Wholesale warehouses*	*Catering establishments open to public, canteens*	*Fuel storage depots*
Machinery	3	2	9	1	—
Transport	—	—	—	—	—
Falls of persons ..	14	28	6	11	—
Stepping on or striking against object or person	3	7	4	3	—
Handling goods ..	4	14	12	2	—
Struck by falling object	1	5	5	1	—
Fires and explosions ..	—	—	—	—	—
Electricity	—	—	—	—	—
Use of hand tools ..	1	10	2	2	—
Not otherwise specified	2	3	—	—	—
TOTALS ..	28	69	38	20	—

REGISTRATIONS AND GENERAL INSPECTIONS

Class of premises	*Number of premises newly registered during the year*	*Total number of registered premises at end of year*	*Number of registered premises receiving one or more general inspections during the year*
Offices	91	1,381	187
Retail Shops	124	1,802	408
Wholesale shops, warehouses	18	402	56
Catering establishments open to the public, canteens ..	21	478	77
Fuel storage depots ..	2	15	1
TOTALS	256	4,078	729

NUMBER OF VISITS OF ALL KINDS (INCLUDING GENERAL INSPECTIONS) TO REGISTERED PREMISES 2,484

ANALYSIS BY WORKPLACE OF PERSONS EMPLOYED IN REGISTERED PREMISES AT END OF YEAR

Class of workplace	*Number persons employed*
Offices	23,650
Retail shops	13,573
Whilesale departments, warehouses ..	3,883
Catering establishments open to the public	4,177
Canteens	456
Fuel storage depots	49
TOTAL	45,788
TOTAL MALES	22,231
TOTAL FEMALES	23,557

Factories Act

Prescribed Particulars on the Administration of the Factories Act, 1961

Part I of the Act

1. *Inspections* for the purposes of provisions as to health (including inspections made by public health inspectors).

Premises	*Number on register*	*Number of*		
		Inspections	*Written notices*	*Occupiers prosecuted*
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	7	10	—	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority ..	1,635	29	6	—
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	2	—	—	—
Total	1,644	39	6	—

2. Cases in which *Defects* were found.

Particulars	*Number of cases in which defects were found*				*Number of cases in which prosecutions were instituted*
	Found	*Remedied*	*To H.M. Inspector*	*By H.M. Inspector*	
Want of cleanliness (Section 1) ..	1	3	—	—	—
Ventilation (Section 4)	2	—	—	—	—
Drainage of floors (Section 6) ..	—	—	—	—	—
Sanitary conveniences (Section 7):					
(a) Insufficient ..	—	—	—	—	—
(b) Unsuitable or defective ..	—	—	—	4	—
(c) Not separate for sexes ..	—	—	—	—	—
Other offences against the Act (not including offences relating to outwork) ..	3	3	—	—	—
Total ..	6	6	—	4	—

PART VIII OF THE ACT

Outwork

Section 133

Nature of Work	*Number of out-workers in August list required by Section 133(1)(c)*		
	1972	1971	1970
Wearing apparel, making, cleaning, etc. ..	626	730	658
Lace, lace curtains and nets	636	698	563
Nets other than wire nets	36	98	156
Household linen	67	123	91
Carding, etc., of buttons, etc.	69	75	24
Curtains and furniture hangings ..	2	5	5
Making of boxes from cardboard, etc. ..	—	—	—
Weaving of textile fabrics	—	—	—
TOTAL	1,436	1,724	1,497

Section 134

No instance of work in unwholesome premises was found; no notice was served, nor was any prosecution undertaken.

Atmospheric Pollution—Summary of Measurements*

	Deposited solid matter in tons per square mile	*Micrognammes per cubic metre of air*			
		Smoke		*Sulphur Dioxide*	
		Average daily concentration		*Average daily concentration*	
	Annual	*Maximum monthly*	*During year*	*During maximum month*	*During year*	*During maximum month*
†Basford	193·60	27·44 : May	77	141 : Dec.	126	174 : Dec.
Bulwell	181·87	21·35 : April	73	113 : Dec.	121	200 : Sep.
City Centre	158·78	22·30 : Feb.	60	105 : Nov.	142	227 : Nov.
Clifton	107·77	21·04 : April	29	49 : Mar.	87	119 : Feb.
†Mapperley	123·35	22·25 : Mar.	40	88 : Nov.	93	123 : Nov.
Meadows	157·65	20·97 : Jan.	83	171 : Nov.	127	182 : Nov.
Wollaton	92·51	14·70 : Nov.	31	51 : April	86	111 : April
Average for City	145·08	—	57	—	112	—

†11 months deposit only.

*For full details see the following pages

Inspection of Dwelling-houses

Dwelling-houses inspected for housing defects under the Public Health or Housing Acts	7,926
Inspections made for the purpose	10,337
Dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ..	2,691
Dwelling-houses—exclusive of those referred to under the preceding sub-head—found not to be in all respects reasonably fit for human habitation..	1,745

Informal Action

Defective dwelling-houses rendered fit in consequence of informal notices by the Local Authority or their officers ..	2,734

Action under Statutory Powers

1. Proceedings under Section 9, 10 and 12 of the Housing Act, 1957:	
Dwelling-houses in respect of which notices were served requiring repairs	131
Dwelling-houses in which defects were remedied after service of informal notices:	
1. By owners	117
2. By Local Authority in default of owners	2
2. Proceedings under the Public Health Acts:	
Dwelling-houses in respect of which notices were served requiring defects to be remedied	1,098
Dwelling-houses in which defects were remedied after service of formal notices:	
1. By owners	808
2. By Local Authority in default of owners	49
3. Proceedings under Section 17 of the Housing Act, 1957:	
Dwelling-houses in respect of which demolition orders were made	9
Dwelling-houses demolished in pursuance of demolition orders	4
Closing Orders made	6

Number of Inspections of Houses under the Public Health and Housing Acts

First Visits	19,244
Re-visits	11,120
TOTAL	30,364

Measurement of Atmospheric Pollution

DEPOSIT GAUGES

Deposited solid matter in tons per square mile per month

	Basford			*Bulwell*			*City Centre*			*Clifton*			*Mapperley*			*Meadows*			*Wollaton*		
1972	*Insoluble*	*Soluble*	*Total*	*Insoluble*	*Soluble*	*Total*	*Insoluble*	*Soluble*	*Total*	*Insoluble*	*Soluble*	*Total*	*Insoluble*	*Soluble*	*Total*	*Insoluble*	*Soluble*	*Total*	*Insoluble*	*Soluble*	*Total*
Jan.	13·38	5·94	19·32	11·08	5·86	16·94	6·75	6·55	13·30	4·15	4·10	8·25	6·91	4·08	10·99	16·46	11·51	20·97	4·59	4·28	8·87
Feb.	14·06	5·17	19·23	7·62	5·30	12·92	16·31	5·99	22·30	2·17	3·59	5·76	6·09	3·47	9·56	11·57	4·94	16·51	5·78	4·28	10·06
March	18·27	3·29	21·56	11·36	6·09	17·45	10·24	6·09	16·33	9·27	4·00	13·27	17·56	4·69	22·25	15·34	5·17	20·51	5·30	4·61	9·91
April†	—	—	—	16·82	4·53	21·35	12·99	5·73	18·72	17·96	3·08	21·04	12·15	3·64	15·79	9·12	4·64	13·76	3·92	3·03	6·95
May†	22·50	4·94	27·44	15·39	5·66	21·05	8·13	5·45	13·58	5·99	3·80	9·79	—	—	—	7·77	4·13	11·90	1·15	3·72	4·87
June	13·76	3·82	17·58	7·82	4·23	12·05	2·19	5·61	7·80	4·05	3·87	7·92	14·50	4·13	18·63	4·99	5·10	10·09	2·32	3·87	6·19
July	14·68	4·66	19·34	10·42	4·28	14·70	5·76	4·61	10·37	2·73	3·29	6·02	1·73	0·84	2·57	7·11	3·69	10·80	1·45	2·80	4·25
August	18·09	3·29	21·38	8·66	1·81	10·47	6·14	2·57	8·71	1·86	1·71	3·57	5·71	1·66	7·37	3·92	1·94	5·86	3·16	1·78	4·94
Sept.	8·99	2·90	11·89	4·31	3·21	7·52	7·13	4·08	11·21	3·34	2·78	6·12	2·96	3·11	6·07	1·55	3·69	5·24	3·41	2·90	6·31
October	8·74	3·92	12·66	9·33	4·84	14·17	7·08	4·33	11·41	5·12	2·85	7·97	6·70	3·47	10·17	7·24	4·56	11·80	3·75	3·41	7·16
Nov.	8·64	4·08	12·72	14·29	5·43	19·72	6·65	4·41	11·06	5·50	3·57	9·07	4·99	4·08	9·07	8·43	5·91	14·34	11·36	3·34	14·70
Dec.	5·38	5·10	10·48	7·44	6·09	13·53	7·47	6·52	13·99	4·89	4·10	8·99	6·19	4·69	10·88	9·81	6·06	15·87	4·48	3·82	8·30
TOTAL	146·49	47·11	193·60	124·54	57·33	181·87	96·84	61·94	158·78	67·03	40·74	107·77	85·49	37·86	123·35	103·31	54·34	157·65	50·67	41·84	92·51

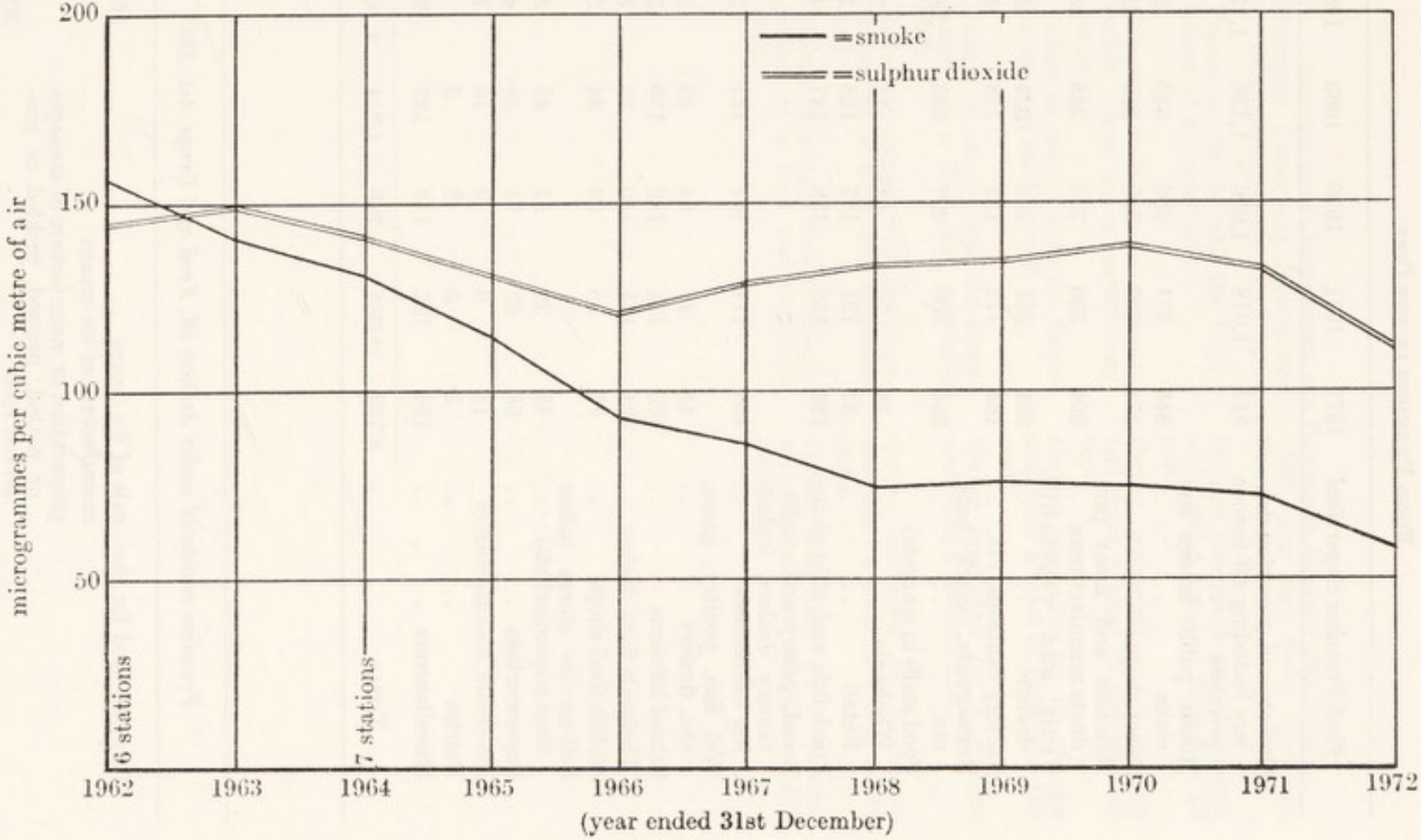
†Interference

Volumetric Apparatus

SULPHUR DIOXIDE (SO_2) AND SMOKE EXPRESSED AS MICROGRAMMES PER CUBIC METRE OF AIR

Gauge Site	*Jan.*	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Average During* **1972**	*1971*
CLIFTON														
SO_2	102	119	102	99	95	86	73	59	74	67	89	81	**87**	111
Smoke	41	30	49	20	21	16	[illegible] 14	16	37	31	45	31	**29**	35
CITY CENTRE														
SO_2	186	166	142	138	123	119	95	92	113	117	227	185	**142**	172
Smoke	55	52	55	48	47	39	30	33	71	—	—	—	**60**	81
Basford														
SO_2	160	169	150	111	104	111	86	67	95	110	170	174	**126**	186
Smoke	88	81	104	51	56	47	28	29	75	86	140	141	**77**	105
BULWELL														
SO_2	146	146	125	92	112	78	73	60	200	108	146	170	**121**	127
Smoke	107	90	90	45	50	37	30	29	96	86	101	113	**73**	89
MAPPERLEY														
SO_2	120	101	91	95	91	92	79	57	91	73	123	105	**93**	113
Smoke	55	57	53	33	29	29	26	23	66	53	88	77	**49**	62
MEADOWS														
SO_2	148	161	132	138	117	109	96	86	104	106	182	148	**127**	140
Smoke	110	77	86	88	50	47	34	34	81	85	171	127	**83**	104
WOLLATON														
SO_2	101	99	100	111	89	72	60	45	75	85	92	100	**86**	96
Smoke	30	25	43	51	26	19	15	19	47	35	28	35	**31**	39

Atmospheric Pollution 1962-1972
(monthly averages for all measuring stations in the City)



Food Hygiene

FOOD PREMISES IN THE CITY

Food Premises Supervised	1972	1971	1970	1969	1968
Grocers and provision dealers including off-licence premises	812	1,018	1,056	1,136	1,137
Hotels, public houses and clubs	545	571	552	540	529
Sweet shops	371	333	350	399	410
Butchers and meat products manufacturers	296	330	353	345	352
Fruit and vegetable dealers	239	331	345	324	327
Factory canteens, etc.	188	172	182	178	183
Restaurants, snack bars, etc.	296	300	327	293	286
Food stalls in markets:					
Wholesale	79	75	81	75	70
Retail	81	131	107	128	129
Fried fish and chip shops	128	150	159	147	143
Bread, pastry and confectionery dealers, including bakehouses	106	114	141	121	123
Wet fish, poultry, game, etc., dealers	45	47	64	49	50
School kitchens	103	104	142	130	129
Wholesale food dealers	121	141	110	79	81
Mobile food shops	35	35	33	34	33
Self-service stores (other than supermarkets)	49	39	51	42	32
Supermarkets	58	63	71	58	48
Ice-cream manufacturers	13	6	9	10	11
Dairies	3	3	2	3	3
Miscellaneous	164	122	113	123	90
TOTAL	3,732	4,085	4,248	4,214	4,166

Premises registered under Section 16, Food and Drugs Act, 1955

Premises used for the—sale of ice cream	567
manufacture of ice-cream	13
preparation or manufacture of sausages or potted, pressed, pickled or preserved food	307
TOTAL	887

PROSECUTIONS INSTITUTED FOR OFFENCES AGAINST THE FOOD HYGIENE (GENERAL) REGULATIONS, 1960, AND THE FOOD HYGIENE (MARKETS, STALLS AND DELIVERY VEHICLES) REGULATIONS, 1966

Failure to comply with the Regulations at a Supermarket.	Owners convicted on 12 charges and fined a total of £265 plus £5 costs.
Failure to maintain an ice-cream mobile shop in a satisfactory condition.	Owner convicted on 6 charges and fined a total of £59 plus £5 costs.
Failure to comply with the Regulations at a market stall.	Owner convicted on 11 charges and fined a total of £125 plus £10 costs.
Failure to comply with the Regulations at a fruit and vegetable stall.	Owner convicted on 8 charges and fined a total of £40.
Failure to comply with the Regulations at a fruit and vegetable stall.	Owner convicted on 8 charges and fined a total of £70 plus £14 costs.
Failure to comply with the Regulations at a fruit and vegetable stall.	Owner convicted on 8 charges and fined a total of £80 plus £16 costs.

Details of Unsound Food Surrendered

Food other than Meat	*In Stones*					
	1972	1971	1970	1969	1968	1967
Bacon ..	—	201	772	180	113	154
Butter ..	—	4	—	—	—	1
Canned goods ..	6,308	8,109	9,862	6,616	9,255	6,998
Cakes and pastry	1,223	720	1,545	982	1,185	758
Cereals ..	120	6	321	858	—	—
Cheese ..	65	146	27	44	59	81
Chocolate and sweets ..	6	—	12	163	9	17
Coffee ..	—	3	—	1	7	30
Conserves ..	—	1	80	71	83	32
Cooked meat ..	—	1	420	588	880	812
Dried fruit ..	—	—	21	37	12	15
,, milk ..	—	—	2	—	—	9
Eggs—liquid ..	—	3	—	4	2	12
—shell ..	—	—	—	—	6	12
Fish	178	72	1,023	622	1,106	399
Fruit ..	1,779	1,888	2,043	6,678	1,757	2,317
Flour ..	—	2	25	157	83	41
Margarine ..	30	—	7	5	2	1
Miscellaneous ..	685	1,037	28,524*	10,389	607	635
Poultry ..	277	—	100	39	331	119
Rabbits ..	4	2	40	25	1	23
Sausage ..	—	—	513	490	709	661
Shell fish ..	3	476	143	482	918	714
Sugar.. ..	—	—	—	—	—	1
Imitation cream	—	2	1,298	1,078	—	—
Vegetables ..	3,194	3,201	5,575	3,248	7,359	8,485
TOTAL ..	13,872	15,874	52,353	32,757	24,484	22,327

* includes 25,064 stones soft drinks

Meat	*Home-killed in stones*			*Imported in stones*		
	1972	1971	1970	1972	1971	1970
Beef	985	1,310	1,446	354	241	486
Mutton and Lamb	110	200	479	25	77	618
Pork	1,886	1,537	3,012	203	67	371
Veal	11	29	42	—	—	—
Offals	8,973	9,976	15,661	—	—	130
TOTAL ..	11,965	13,052	20,640	582	385	1,605

GRAND TOTAL ALL FOOD SURRENDERED 1972:

26,419 stones .. 165 tons approx.

Carcases of Meat Inspected and Carcases Condemned

	Cattle excluding cows	*Cows*	*Calves*	*Sheep and lambs*	*Pigs*	*Total*
Number killed and inspected	11,446*	1,947	49	32,300	31,225	76,967
All diseases except tuberculosis and cysticerci:						
Whole carcases condemned ..	—	6	2	10	38	56
Carcases part (or organ) condemned ..	2,460	1,117	4	1,261	8,588	13,430
Percentage affected ..	21·49	56·86	8·16	3·90	27·50	—
Tuberculosis only:						
Whole carcases condemned ..	—	—	—	—	—	—
Carcases part (or organ) condemned ..	1	—	—	—	277	278
Percentage affected ..	—	—	—	—	0·88	—
Cysticercosis:						
Carcases part (or organ) condemned ..	2	1	—	—	—	3
Carcases submitted to treatment by refrigeration ..	2	1	—	—	—	3
Generalised and totally condemned ..	—	—	—	—	—	—

* Bulls—13 Bullocks—8,351 Heifers—3,082

Food and Drugs

SAMPLES EXAMINED BY CITY ANALYST

Item	*Genuine*			*Unsatisfactory*			*Totals*		
	Formal	*Informal*	*Total*	*Formal*	*Informal*	*Total*	*Formal*	*Informal*	*Total*
Milk, untreated and farm ..	396	—	396	—	1	1	396	1	397
Milk, processed	85	2	87	—	—	—	85	2	87
Milk, canned, condensed or dried ..	—	8	8	—	—	—	—	8	8
Butter, cream, cheese and other dairy products ..	4	18	22	—	—	—	4	18	22
Ice cream and frozen lollies	—	10	10	—	—	—	—	10	10
Open meat products ..	4	51	55	2	4	6	6	55	61
Canned or preserved meats and meat products ..	—	52	52	—	1	1	—	53	53
Canned or preserved fish and fish products ..	—	32	32	—	1	1	—	33	33
Soups ..	—	22	22	—	2	2	—	24	24
Oils and fats ..	—	5	5	—	—	—	—	5	5
Canned or preserved fruit	—	31	31	—	4	4	—	35	35
Canned or preserved vegetables ..	—	32	32	—	—	—	—	32	32
Sweets, sugar confectionery, etc.	—	43	43	—	—	—	—	43	43
Jams, conserves, fruit curds, jellies, etc.	—	22	22	—	—	—	—	22	22
Bread, flour and flour mixtures	—	17	17	—	2	2	—	19	19
Cakes and puddings ..	—	11	11	—	—	—	—	11	11
Cereals ..	—	20	20	—	—	—	—	20	20
Food flavourings and colourings	—	26	26	—	—	—	—	26	26
Food drinks and non-alcoholic beverages ..	—	31	31	—	—	—	—	31	31
Spices, sauces and condiments	—	42	42	—	1	1	—	43	43
Wines, spirits and other alcoholic beverages ..	6	—	6	—	—	—	6	—	6
Drugs (internal and external use) ..	—	13	13	—	—	—	—	13	13
Baking powders and raising preparations	—	4	4	—	—	—	—	4	4
Bread and butter ..	5	1	6	1	1	2	6	2	8
Miscellaneous	—	7	7	—	1	1	—	8	8
TOTALS ..	500	500	1,000	3	18	21	503	518	1,021

100 years of Public Health in Nottingham

The Centenary of the appointment of the first Medical Officer of Health for the City

On the 3rd February 1873, Edward Seaton, M.D., was appointed Medical Officer of Health for the City out of 34 candidates. His salary was £400 per annum. Twenty-five years before, in 1848, the first health inspector had been appointed but the task of improving the health of the city's environment was a formidable one. Nottingham's growth had been conditioned by the Enclosure Act of 1845, and this, together with the results of general industrial development, had the greatest adverse effects on living conditions. By 1873, Nottingham was well known for its deplorable housing standards. Back-to-back houses that were described, at the time, as being 'perhaps the worst in England', were almost entirely inhabited by the poorer members of the population.

Open drains and accumulations of noxious material resulted in an almost continuous stench in the air over large areas of the town, and myriads of flies were an accepted fact of life during the warmer months of the year. Piped drinking water inside a working class house was rare, supplies being obtained from a stand tap half way along a street or in the middle of a common yard. Slops from the houses were usually tipped direct into the festering open channels that ran outside the doors of the houses.

Tradesmen's horses were kept in stables built amongst the houses, and upwards of one hundred small slaughterhouses were also to be found in the midst of these cramped districts. With the exception of the houses themselves, perhaps the one single factor more than any other affecting the environment was the lack of proper sanitary accommodation: middens and earth closets were only slowly replaced by pail closets as the century drew to an end, many of these, in turn, not being converted to a water carriage system until the 1920s. Such accommodation as was available was generally shared by the occupants of two or even three houses, and many blocks of closets were built directly against, or even under, the living rooms of houses.

Less obvious to the eye and nose were conditions affecting food. Up to the turn of the century, and even later, food was often adulterated: sand and plaster, for example, being added to sugar and flour. Milk—often dirty and contaminated was frequently watered. Much of the meat consumed came from tubercular animals, and under the yellow light of gas jets the nightly sale of jaundiced beef was rampant.

Infectious Diseases

Mortality figures reflect the dominant role infectious disease played in destroying life in these early years. In the Medical Officer of Health's Annual Report for 1882 the following deaths were recorded:

437	Tuberculosis (12)	75	Whooping cough (nil)
282	Scarlet fever (nil)	65	Typhoid (nil)
257	Diarrhoea (mainly infants) (13)	50	Smallpox (nil)
136	Measles (nil)	19	Diphtheria (nil)

Compared with 1972 (shown in brackets), these figures hardly begin to indicate the suffering imposed by these diseases but certainly reflect the progress made.

Notification of infectious diseases by medical practitioners was formalised in 1882 by a local Act and at that time there was a great deal of resistance to this measure on the part of a large number of doctors. But the Medical Officer of Health firmly pursued his objective and by obtaining this information expanded the preventive services with striking results. Smallpox and scarlet fever were the first to be tackled but the list was gradually enlarged.

Notifications enabled an outbreak of diphtheria to be traced to a milkman in 1886, an outbreak of smallpox to the arrival of a family of music hall artistes in 1888 and to a barber in 1902. In 1886 measles was noted to be a disease which became epidemic in Nottingham 'about every two years', a conclusion drawn without resorting to modern analytical methods and based solely on mortality data. Many epidemics were noted in these years and invariably they occurred in the poorer and crowded parts of the city.

Among the advances that had been made in the control of infectious diseases was the introduction of immunisation procedures. The first occurred at the turn of the previous century (1799) with Edward Jenner's promotion of inoculation with cow pox (vaccination). By the 1870's, vaccination was carried on by both public and private vaccinators and had become compulsory for infants. It was to remain so until 1946. Parents could apply for a 'certificate of conscientious objection' against vaccination and before 1873 a strong anti-vaccination lobby existed, backed by influential and wealthy persons. It inspired strong condemnation from the Medical Officer of Health for Nottingham. In answer to the contention that smallpox was no longer a problem and that strict isolation could contain the disease, Dr. Philip Boobbyer replied (in 1896) that '. . . . . the fact remains unalterably true that there is as much difference, so far as liability to smallpox is concerned, between a properly vaccinated and an unvaccinated community as there is, with regard to explosiveness, between wet and dry gunpowder.'

In 1904 a suit was brought against Nottingham Corporation by the Attorney-General acting on behalf of a group of residents near the site of Bulwell Smallpox Hospital. They claimed they were in danger of infection and that the hospital was a serious nuisance. The evidence concerned the question of whether smallpox was aerial-spread or transmitted only by

contact. The case failed and the hospital remained, a monument to the victory of enlightenment over bigotry.

In 1901 a Municipal Laboratory was established and a bacteriologist appointed, progress which was of great value in ascertaining the cause of fevers and, particularly in its early days, in the identification of diphtheria. Supplies of anti-diphtheria serum were distributed by the Health Department from 1903 and contributed to a lowering of its high mortality. At the turn of the century over 500 cases of diphtheria were being notified annually. A note in the Medical Officer of Health's Annual Report for 1913, despite the availability of free serum '. . . . . a very large number of cases among the poor are still allowed to pursue their course without serum treatment'. At that time doctors were admonished by the Medical Officer of Health for not using this facility.

In 1933 Dr. Cyril Banks, the then Medical Officer of Health, noted that '. . . . . children can be protected from it (diphtheria) by a simple process of immunisation, and full information is readily available, but I have not considered it desirable to start a campaign towards general immunisation against diphtheria in a community which has shown itself so unwilling to avail itself of vaccination against smallpox.' Perhaps his stern pessimism about public co-operation was well founded. It was only mitigated finally by the response to the diphtheria immunisation campaign launched in 1940 when nearly 30,000 children were immunised in two years.

In 1912, Dr. Boobbyer had commented on the effects of pertussis on small children. 'This disease (whooping cough) gave rise to relatively little trouble in Nottingham during 1911. The deaths from it numbered only 39 . . . . . .' Once again we can gauge the progress achieved later by such early comments. It was to be another 40 years or more before this infant killer could be said to be controlled.

The influenza outbreak of 1918-19 was the worst local epidemic of this period and part of a world-wide pandemic. In Nottingham influenza began in late October 1918 and continued to the end of March 1919 by which time over 1,500 persons had died. It was the young who were mostly affected, half the deaths being in the 20-55 age group and the rest in infancy and childhood.

Venereal disease came more into prominence in the 20th century and grew as a public health problem as other infections waned and facilities for treatment developed. In 1943 the Medical Officer of Health deplored 'the new sex morality' and the fact that 'the glamour and freedom of sex has been over-stressed during the past 40 years'. This criticism has an up to date ring about it.

Modern times for infectious disease control began with the advent of the National Health Service. In the past 25 years epidemic diseases have dwindled and vaccines of many kinds have appeared and have been incorporated in mass programmes. With the further advent of antibiotics bacteria have lost their predominance. Diseases caused by viruses appear now in the ascendancy, largely due, one suspects, to advanced virological technology.

Whooping cough vaccine was combined with diphtheria vaccine in 1954. In the same year B.C.G. was introduced for 13 year olds. Tetanus toxoid made up the triple vaccine in 1960. The introduction of live attenuated oral poliomyelitis vaccine in 1962, after a brief period of using injections of killed virus, has virtually eliminated that disease. Measles and rubella vaccine were used in the community from 1968 and 1970 respectively.

But with the solution of old problems, new ones hold the centre of the stage and secondary problems come to the fore. World-wide influenza pandemics occurred in 1957 and 1969-70 with local epidemics in Nottingham despite the appearance of a vaccine. Infective hepatitis, made notifiable in 1968, appears to be on the increase since the first outbreak occurred in 1954 involving about 100 school children. Psittacosis has demanded more attention in recent months.

In recent years the steady immigration of people from tropical countries into Britain has drawn attention to cases of 'exotic' disease. Typhoid, malaria, hookworm, tapeworm, roundworm, and whipworm infestations, and trachoma have all been noted in recent years. These are present day epidemiological problems for the Medical Officer of Health.

The vast slum clearance programme and general improvement in housing conditions since 1930, together with the enforcement of food hygiene regulations, have also made a considerable contribution towards the reduction of infectious disease. These improvements, too, have had their beneficial effect on the health 'yardstick' now to be described.

The Personal Health Services

Nottingham's vital statistics in relation to birth, death, infant mortality and maternal death rates are shown together in the following table at intervals of 25 years.

	Birth Rate	*Death Rate*	*Infant Mortality Rate 1,000 Live Births*	*Maternal Death Rate 1,000 Total Births*
1873	35·1	22·6	173	—
1898	28·8	17·2	178	—
1923	19·9	13·3	86	3·00
1948	19·8	10·9	44	0·49
1972 (71)	17·2	12·2	21	0·39

This is a 'yardstick' of the steady improvement of the personal health of the community. A hundred years ago infant deaths made up a major part of the total deaths, at all ages. In 1879, this proportion was 41·3% of the total. Such early figures were unreliable because of the lack of death certification especially of infants. For example, it is known that two-thirds of deaths reported in the Parish of Basford remained uncertified in 1878 and as a result it was decided that all uncertified deaths should be reported to the coroner. Eventually with stricter certification, much inaccuracy disappeared.

In 1861 an interesting survey by a Dr. Greenhow identified some of the causes of excessive infant mortality in manufacturing towns including Nottingham. A major cause was the long hours put in by young married women in factories with consequent neglect, malnutrition and illness of their infants. As a result a leaflet was issued in Nottingham. It was entitled 'The feeding and care of infants' and remained in use for many years. Principally, it stressed the importance of breast feeding. One important 'classified' cause of infant deaths for many years was 'want of breast milk, atrophy, debility and marasmus'. The foregoing shows that in the 1870's the City could lay claim to have the highest infant mortality rate in Britain. It was attributable not only to poor housing and the prevalence of infectious disease but also to starvation and neglect.

Out of these tremendous health needs of Nottingham mothers and children the personal health services began to grow. It is to the great credit of the third Medical Officer of Health, Dr. Philip Boobbyer, that he rose to this challenge and Nottingham was one of the first cities to pioneer a Child Health Movement, and in 1902 the first lady health visitors were appointed. In 1904 the Medical Officer of Health wrote '. . . . . there is open to them a large field of usefulness . . . . . .' and it was not long before they were actively undertaking home visiting, concentrating mainly on the health care of young infants. This work was not unrewarding for a few years later the Medical Officer of Health was able to report a marked reduction in the death rates of infants.

Then came welfare centres. The first welfare centre was established in Howard Street in 1908 under the name of 'The Mothers' and Babies' Welcome'. This was the second of its kind in Britain. The first had been opened in St. Pancras, London, earlier the same year. It was begun with the object of reducing the excessive infant mortality and to improve the general health and stamina of the mothers. It was considered 'a necessary adjunct or complement to any scheme of social reform among the poor'. Dinners were provided at minimal cost to expectant and nursing mothers. Babies were weighed fortnightly. Medical practitioners of the City acted as honorary medical officers and attended daily to give advice on diet and infant care and to conduct medical examinations.

Knitting and sewing classes were held for mothers. Health visitors took the lead in running the new centres. They visited homes to encourage mothers to attend along with their children. By 1910 there were three welfare centres. They were popularly known by the shorter names of 'Baby Welcomes' or 'Welcome Homes'. In 1919, medical supervision of the 'Welcome Homes' was introduced and children were kept under regular observation until school age.

By 1925 there were seven Maternal and Child Welfare Centres in the city (the name having been changed). In addition, there were three day nurseries, two run by a private society and one by the local authority. Two hostels for unmarried mothers and their infants were established. Three 'war-time day nurseries' were established in 1942 for 'women engaged in work of national importance'. By 1954 distribution of welfare foods as a function of infant

clinics was adopted by the Health Committee after the closure of local offices of the Ministry of Food.

The years 1963-64 saw the establishment of the 'Observation Register' for 'At Risk' children. A special card was issued for the purpose and the birth card was also modified to include congenital abnormalities.

The Community Nursing Services

In 1875 the work of the district nurse 'gratuitously providing for the sick poor' was being pioneered by the Nottingham and Nottinghamshire Private Nursing Association, while in the same year, the Sisters of the Little Company of Mary in Hyson Green were following a course of lectures on nursing. The Nursing Association by the turn of the century had assumed responsibility for the work of the Board of Guardians Parish Nurses and also linked its work with that of the General Dispensary in Broad Street.

Supported by subscriptions from these two bodies the nurses, then numbering 10, made 24,092 visits in 1894. Their work was only hampered by lack of funds but an appeal in the Nottingham Guardian to the 'benevolent public' brought little response. This appeal explained that the nurses cared for the 'incurables' and those 'ineligible for admission to hospital' and that 'a patient, on a first visit is often found destitute of food and everything necessary for the sick person'. However, grant aid was to come from the Corporation.

In 1951, under the provisions of the 1946 National Health Service Act, the Association was able to hand over a flourishing and well trained service with words which epitomised the years of untiring effort: 'We pass to the local health authority the Torch to be kept permanently lit'.

The early contribution of lady health visitors to infant and child life and health has already been described. In spite of this, health visiting is perhaps the least known among the different branches of nursing. In 1946, the Medical Officer of Health, Dr. Cyril Banks, recorded that 'The Health Visitor goes on working under difficult circumstances and meeting with insufficient recognition of the value of her work'. The Health Visitor of 1902 would have been astounded at the diversity of the tasks undertaken by her 1973 counterpart now actively involved over the whole field of health education and the prevention of ill-health.

At the turn of the century, the work of midwives, then engaged in private practice became subject to the supervision of the local health authorities by the passing of the Midwives Act, 1902. Over thirty years later, as a result of the Public Health Act, 1936, it was to become a salaried service as the city in 1937 took over thirty-six midwife practices. Much has been accomplished in these intervening years to improve their training and reduce maternal mortality and morbidity.

Nottingham's home confinement rate (just over 25% in 1971) still remains one of the highest in the country and, as the care of the mother and new-born infant becomes more sophisticated so too does the task of the midwife become more complex. In 1951, estimation of blood haemoglobin levels in expectant mothers attending ante-natal clinics became a routine screening procedure.

Cervical cytology screening was started in 1966. Regular sessions are held at different clinics and on the premises of industrial firms. Up to 1972 about 28,000 cervical smears have been taken by this local authority, in addition to those taken by general practitioners and hospital services.

Family Planning began in Nottingham on a voluntary basis. In 1934, there was official recognition of a privately managed organisation for birth control called the 'Women's Welfare Centre' in Market Street. Referral of cases from local authority clinics on health grounds with payment by the Corporation was introduced for women unable to pay the fees themselves.

In 1965 family planning sessions were increased to three a week and in 1966 to seven a week. Four sessions were held at local authority welfare centres. The Family Planning Association opened their first clinic in the General Hospital in 1966. In 1969 the Women's Welfare Centre was wound up after 25 years and the Midland (Family Planning) Association Limited registered under a new Committee.

Both the Family Planning Association and the Midland (Family Planning) Association Limited were given financial support and facilities in the health and welfare centres until the present Medical Officer of Health, Dr. Wilfrid Parry, introduced the city's own comprehensive Family Planning Service in 1972 with facilities available to all the residents of the city. This includes a domiciliary service. Future plans include a vasectomy service for adult males.

Health Centres

The concept of Health Centres was first contained in the Dawson Report 1920, and incorporated into legislation in Section 21 of the National Health Service Act of 1946. In 1952, the Medical Officer of Health, Dr. William Dodd, established the first Health Centre in Nottingham, the original John Ryle Health Centre in Clifton housing estate which then housed less than 3,000 people. The name of John Ryle was chosen because of the Oxford professor's lifelong and pioneer work in social medicine. The Centre was a block of four 2-storied terraced houses which were modified so that there was internal communication between the four houses. The ground floor then provided four consulting suites for general practitioners with waiting rooms, and the upper floor was adapted to serve as an office and a small Maternal and Child Health Unit with two flats for a nurse and a caretaker. Outside the building was a paved forecourt to provide parking spaces for cars and prams. Further stimulus was given in a Ministry of Health circular (7/67) issued in April 1967 which made realistic financial recommendations to Local Health Authorities and Executive Councils about the establishment of Health Centres. The Medical Officer of Health then entered into purposeful discussions with the Nottingham and Nottinghamshire Executive Council, the Local Medical Committee and interested general practitioners. As a result, a new purpose-built John Ryle Health Centre opened during April 1967, followed by one at Bestwood Park in the following year. That same year, 1968, building started on the Hyson Green (Mary Potter) Health Centre which was to be finished and opened in 1970. Three more Health Centres were planned for Bulwell,

St. Ann's and Sneinton under the guidance of the present Medical Officer of Health, Dr. Wilfrid Parry, the last being a conversion of the existing Sneinton welfare centre. Additionally, the Local Authority's programme contained two other Health Centres, one for the Meadows and another for the centre of the city. Nearly half the city's population of 130 general medical practitioners had become interested at that time, in general practice from a Health Centre. A large number of sites had been suggested over the whole of the city in the hope that, in the distant future, Nottingham's population might be served by as many as 20 Health Centres.

Today, Bulwell and St. Ann's Health Centres are built. Sneinton is nearing completion and there are ten further Health Centres programmed for the next eight years.

Day Nurseries

Among the problems of child care are the needs of small children who cannot be cared for at home during the daytime. Different kinds of adverse family circumstances, including the existence of handicap in the child, give rise to priority groups of parents and children where day care is needed for the children. Traditionally the homes of relatives, and child minding and fostering in the houses of unrelated families, have been available to meet this kind of need. The concept of the day nursery has only gained general acceptance in relatively recent times and in Nottingham, as in most other places, the provision of day nurseries dates mainly from the 1939-45 war. Thus, there were two pre-war Corporation-owned day nurseries founded in Nottingham and six started during the war. It was considered that after the war there would be a decline in the demand for day nursery places. However, in 1970 the first new day nursery since the 1939-45 war was built under the Urban Aid Scheme and opened in Independent Street. As a result of the Social Services Act, 1970 the Director of the new Social Services Department has had the administrative supervision of the day nurseries in Nottingham from the 1st February 1971.

The Mental Health Service

In 1914, the City Council decided that work under the Mental Deficiency Act, 1913, should be under the medical direction of the Medical Superintendent of the City Asylum. Accordingly, in 1948, the Medical Superintendent of Mapperley Hospital, the late Dr. Duncan Macmillan, O.B.E., was already working in close association with the mental health officer in the service for the mentally handicapped. The establishment of an integrated service was easier, therefore, when the wider mental health service was created as a result of the National Health Service Act, 1946.

Under the Mental Deficiency Act, 1913, the first mental deficiency officer, Mr. Percy P. Smith, was appointed from the 1st June 1914. Also in 1914 the Asylum Visiting and Mental Deficiency Committee was set up—the members were all Councillors but two lady members were co-opted since ladies were required to be on the Committee. In 1946 this Committee became the Mental

Health Committee and the mental deficiency officer became the mental health officer. The Mental Health Committee ceased to exist on the 5th July 1948, when mental health work in the community became the concern of the Health Committee and the hospital work came under the Sheffield Regional Hospital Board.

Section 28 of the National Health Service Act, with its prevention, care and after-care provisions, enabled a wide after-care service for patients from the mental hospitals to be established for the first time. Since the local health authority had the primary responsibility for the community, it was agreed with the hospitals that all social work should be under the direction of the Medical Officer of Health, Dr. William Dodd, but the hospitals would play their part by contributing some of their workers to a joint team.

The integrated mental health service in Nottingham became nationally and internationally famous. Mapperley Hospital led the world with its 'open doors' policy. Under this policy mental welfare officers agreed to avoid certification whenever possible, since under Section 20 of the Lunacy Act, 1890, the lay mental welfare officer had the power to remove people into the mental hospital for three days. By means of persuasion by the hospital, these patients remained as 'voluntary' patients. No enforced detention was necessary and the wards were kept unlocked. Since 1948, there has been a big increase in the turnover of hospital patients, which has led to an increase in demand for community mental health services.

Between 5th July, 1948, and 31st December, 1970, 20,000 cases were investigated regarding the need for admission to a mental hospital. 11,000 were admitted to hospital but admission was avoided in 9,000 cases.

Training facilities for the mentally handicapped

1. In October 1923 a six-place centre was established by the Nottingham Association for Mental Welfare.
2. Rosebery House was purchased in 1945 for 60 mentally handicapped persons of all ages. The premises were no longer used for this purpose from 1953.
3. Conversion to a training centre of the old smallpox isolation hospital on Bestwood Road, Bulwell, was undertaken. The main building of the hospital was vested in the Ministry of Health in 1948, but was reconveyed to the City Council in 1949. This became the City occupation centre with a capacity for 120 to 150 trainees.
4. By courtesy of the Education Committee a disused temporary primary school in Bilborough became a Junior Training Centre in 1964. The Bestwood Road premises became an Adult Centre.
5. A new Junior Training Centre in Harvey Road, Bilborough, opened in 1968.

The mental health section of the Health Department was transferred to the new Social Services Department on the 1st April, 1971, as a result of the Social Services Act, 1970.

The Home Help Service

Before 1948 and the start of the National Health Service, the earlier history of the Home Help Service divides naturally into two parts. There was a period before 1920 when the services were almost wholly voluntary. Between 1920 and 1946, voluntary efforts began to be supplemented by the commencement of official services. Following these two earlier periods, a third era commenced with the introduction of the National Health Service in 1948 which enabled local health authorities to operate home help services.

In Nottingham the Corporation started its service in 1945, in preparation for the National Health Service Act of 1946, but it was a token service until 1948. During the immediate following years, the service became much more widely known and consequently the demand for help grew in all types of cases. (In particular, T.B. cases were provided with help before entering a sanatorium in order that the ill person could rest). In the case of a tuberculous mother, this included complete household responsibilities and the care of the children over a period lasting perhaps six or seven months.

Since 1948 the greatest proportion of visits have been to the aged. In 1961, 85% of the total home help provided went to the elderly. Shortage of accommodation in old people's homes was partly responsible for this demand.

There has always been a shortage of helpers due to difficulties in recruitment. Households with infectious tuberculosis, the advent of the summer months together with the shortage of places in nursery schools have been factors that have prevented suitable women being found.

The home help service has been a relatively expensive one. Between 1948 and 1953 the total expenditure on the service increased from £9,638 to £80,000. Economies were attempted by limiting hours spent in one household and spreading helpers over more cases, but increased demand determined a rise in request for help.

By 1962 the total expenditure on the service had reached £136,192 per annum. In this year the Institute of Home Help Organisers' examination was started. By 1967 the total expenditure had risen to £153,438 per annum, but the following year (1968) the service was cut back, due to the start of a national economic squeeze, to a total expenditure of £144,435. The squeeze was still evident during 1969 but there was some increase in expenditure in 1970 to a total amount of £165,855.

On the 1st March 1971, the home help service was integrated into the newly formed Social Services Department according to the provisions of the Local Authorities (Social Services) Act of 1970.

The Ambulance Service

During the 1870's and 1880's little is recorded about the conveyance of patients to hospital in Nottingham. During this period, hand litters were being used. A litter was a large, covered or hooded 'stretcher', to which wheels were added. The patient was pushed or drawn to hospital by relatives

or by compassionate neighbours or by-standers rather as one would wheel a baby in a perambulator. One type of wheeled litter in use was called an 'Ashley litter' after its inventor. Other types with other names were introduced at about the same time in other towns and cities, including London. It is known that these were kept at police stations and at the first aid stations provided by the St. John Ambulance Brigade.

The real story of the Nottingham City Ambulance Service begins, perhaps, from a record of the year 1889. This consists of instructions giving an ambulance driver's duties as follows:—

The ambulance driver shall have charge of:—

Ambulance vans, Cleansing, Disinfectation, Horses, Stables, etc. He shall promptly and without loitering execute commissions for transport of patients and bedding etc. He shall not, whilst engaged in the conveyance of infectious patients place himself in contact with members of the public. He shall drive gently whilst conveying patients. His hours of duty shall be 0600 to 1800 hours with one hour for dinner.

Horses will be fed at the following times by the ambulanceman or his assistant:

0600—0700 hours
1700—1800 hours
2100 hours he shall bed the horse down for the night.

Horse-drawn ambulances continued to be used until the motor car was invented and developed around the turn of the century. The local health authority had as a major ambulance responsibility the carriage of patients suffering from infectious diseases. The ambulances were kept at the Heathfield (Bagthorpe) isolation hospital and, later on, at the City Hospital. Other types of cases were carried by ambulances owned by the police and by voluntary associations like St. John Ambulance Brigade. In 1928 the City Police had one Vulcan and three Talbot Ambulances based at the Guildhall. St John's had two vehicles kept at Cumberland Place off Park Row. These were used for non-infectious illness and accident cases while the local health authority garaged three Morris ambulances at Bagthorpe Hospital for the transport of infectious disease patients.

It is interesting to note the charges that were made for ambulance journeys. The police charged 5/- for all journeys within the City if the patient earned £2. 10s per week or more. If earnings were less, no charge was made. For journeys outside the City, 10/- was charged together with 1/- per mile in each direction. St. John's charged 2/6d per mile for persons of moderate means and carried the poor free of charge.

By 1930, the police had acquired another vehicle and by 1937 the ambulance strengths for the health department and police were as follows:—

Isolation Hospital	2
City Hospital	2
Police	4

The police were then charging 3/- per mile. St. John Ambulance Brigade had vehicles (the exact number is not known) at Wilford Crescent and provided a service for patients going to Ruddington and Adbolton Halls. In 1937, there were instructions about patients travelling by sea and air but no details of actual cases are recorded. In this year war-clouds were looming and air raid precautions had begun with a generous response from the public, willing to convert their private cars to ambulance use.

In a wartime year, 1940, the first figures are given of patients carried, journeys made and mileage covered with a cost analysis:

Mileage	25,364	
Patients	3,586	
Cost per mile		13.59 old pence
Journeys	3,135	

By 1943 the mileage had increased to 28,303 but the number of patients had fallen slightly to 3,538.

In 1946, the National Health Service Act placed the responsibility on the local health authority to provide an ambulance service. The police and hospital ambulances were accordingly transferred to the Corporation. The City Council decided that the Ambulance Service should be controlled by the General Manager of the Transport Department. At the end of the war the fleet consisted of a motley collection of vehicles including ex-civil defence and army models. It was virtually impossible to obtain replacements because nearly every authority in the country was placing orders for new vehicles.

Between 1948 and 1958, the ambulance service headquarters and garage facilities were located at the Parliament Street bus depot. Further development was not easy because of lack of space but other garages existed as sub-stations, at the City Hospital, the Guildhall and on Carlton Road. One major advance occurred in 1952, the introduction of radio-communications from a control room to the vehicles on the road.

In 1958 a separate headquarters and garage was opened at Beechdale which remains as the present headquarters. The existing sub-stations were closed and a new sub-station was opened at Wilford in 1960.

The Nottingham Ambulance Service began in-service training in the decade from 1960 starting with two-day courses and extending these to five, ten and fifteen days. As a result of the development of training, a training manual was compiled by senior officers and published in 1960. By 1967, the radio-communications had been extended to the midwifery service.

In 1970 the service was transferred to the administrative control of the present day Medical Officer of Health (Dr. Wilfrid Parry). In recent years equipment and vehicle design has advanced so that a resuscitation ambulance equipped for coronary care is about to be put into service.

The growth record since the inception of the National Health Service (1948) is instructive and an analysis of a recent year's work (1971) is impressive because of the size of the work load today.

SUMMARY OF WORK

Date	*Fleet*	*Driver Attendants*	*Patients*	*Mileage*
1949	22	60	54,297	301,426
1955	27	63	93,405	389,311
1956	29	70	95,551	397,636
1961	30	76	147,843	510,018
1966	32	85	190,760	638,589
1968	33	89	203,959	700,926
1969	35	95	213,625	703,494
1970	35	95	205,203	704,262
1971	39	100	217,950	736,925

WORK LOAD DURING 1971

	Patients	*Mileage*
Emergencies	11,252	67,338
Admissions	11,592	95,816
Discharges	12,552	93,948
Out-Patients	182,314	457,557
Unclassified	240	4,464
Non-service	—	17,802
Total	217,950	736,925

Health Service Finance and Administration during the 100 years

A selection of items of expenditure from the annual reports throws light on many aspects of the work of the Medical Officer of Health and his Department throughout the 100 years period.

The total expenditure of the Health Committee for the financial year ended 31st August 1873 was £10,093. It is interesting to note that even at this stage a subscription was being made to the General Dispensary.

There is an item in the accounts for 1875-76 relating to the supply of 'Coal to sufferers by the flood, October 1875—£61 19s 1d.'. In 1876-77 an epidemic hospital was opened in Windsor Street (now Huntingdon Street). An item relating to repairs to the hospital cab indicates that the hospital had its own ambulance even before 1889. Two lodging houses had been set up by the Health Committee by 1877-78. The Committee were also responsible for the public conveniences in the City and this, together with general nuisances and the collection and disposal of night soil, appeared to be their main duties. By 1878-79, a startling vision of the Medical Officer of Health careering round the City, with his coat tails flying, is conjured up by the expenditure incurred by him for horse-hire totalling £78. 10s. 0d.

By 1882/83 the total expenditure of the Health Committee had reached £29,368, and the salary of the Medical Officer of Health had reached the figure of £600. The same year the smallpox epidemic cost £403.

A second epidemic hospital had been opened at Bagthorpe by 1885-86 and six years later the hospital at Windsor Street was closed. Curiosity is stimulated by the item of £38 compensation paid in 1891-92 to Mr. J. W. Burgess for a house in Noel Street set on fire by disinfecting apparatus. The first resident medical officer for Bagthorpe was appointed, and the Department also had an account with the Nottingham Daily Express Company for lavatory paper costing £2 10s. 0d.

In 1897-98 a deputation from the Health Committee went to Germany to see the latest knackery at a cost of £67. This deputation bore fruit in that in 1902-03 the latest knackery plant, as seen in Germany, was installed at Old Basford. Another item of interest from the accounts at this time shows the expenditure of £47 on diarrhoea mixture which apparently was used in connection with the cleansing of pails and closets. Was this a prophylactic preparation to protect against an occupational hazard?

In 1914-15, the T.B. Dispensary was opened in North Church Street, and and two years later the first war crèche was set up. The first mention of the purchase of a motor car appears in this year. Records of the same year mention a claim for damage to the Carrington Street lavatory, to Eastcroft, and the T.B. Dispensary by aircraft! Was the aircraft too big to be towed through the streets? The Thurgarton Homes, Homes for tuberculous children, were opened in 1917-18. The first expenditure on treatment of venereal diseases appears in that year and the Pathological Laboratory in Park Row was opened. After the war in 1918-19 came the purchase of the first motor waggons for the collection and disposal of night soil, and a Maternity Home was opened in Queen's Walk, presumably now Queen's Drive. During the 1914-18 war, there was increased concern for general maternity and child welfare with a bigger expenditure.

In 1920-21 another Home for T.B. children was opened at Bulwell Hall as well as two hostels for mothers, one in Queen's Walk and the other on Carlton Hill. Several 'welcomes and clinics' were opened.

In 1921-22, during the smallpox epidemic of that year, the smallpox hospital at Bulwell was opened. Three hostels for mothers were now in existence, two at Nos. 1 and 95 Queen's Walk, which appears to confirm that Queen's Walk is now Queen's Drive. The third hostel was on Carlton Hill. By 1922-23 the expenditure had reached £120,523. The hostel for mothers on Carlton Hill was closed. In 1924-25 Greendale House, which was apparently a hostel for V.D. patients was opened, and the first motor ambulance was purchased for the epidemic hospital.

In 1928-29 appears the first mention of cancer research, in that a grant of £25 9s 0d. was made for a cancer research project undertaken that year. The Ultra Violet Ray Clinic was taken over by the Health Committee. This was a gift from the late Sir Julien Cahn. In 1930-31 public vaccinations were

mentioned for the first time. There had been some small expenditure in previous years but this was mainly fees for emergency vaccinations during smallpox epidemics.

By 1931-32 a separate Cleansing Department was set up under the control of the Health Committee and the Medical Officer of Health. The separate Department had direct control of Eastcroft and Radford destructors, and the salvage plant at Basford. By 1932-33 the expenditure had reached £171,868.

In 1935-36 expenditure on the City Hospital was brought into the Health Committee accounts for the first time, and the following year the public conveniences and the Cleansing Department were transferred from the Health Committee to the General Works and Highways Committee. Obviously, rationalisation and re-organisation are not the prerogatives of the present day.

During the Second World War, in 1940-41, Newstead Sanatorium was opened. The following year a Daily Minders' Scheme was begun, and three day nurseries were set up at the annexe to 95 Queen's Drive, at Radford, and King Edward's Park. The following year again, 1942-43, the day nurseries at Arnold Road, Sycamore Road, Bell's Lane, Bulwell and Pierrepont were added. The total expenditure now had reached £419,855. 1944/45 saw the start of three new services, the Home Help Service, Mass Radiography, and an Almoner's Department.

In 1952-53 the John Ryle Health Centre opened, the first in the City, and the total annual expenditure had reached £388,482. The reduction of expenditure in 1952/53 reflected the transfer of the hospital service to the new National Health Service in 1948.

General expansion of the present services, and inflation, show in the total expenditures for the next two decades, 1962-63, £731,906, 1972-73 (estimated) £1,203,355.

The gross expenditure over the hundred years for each decade is tabulated below.

Year	*Amount* £
1872-73	10,093
1882-83	29,368
1892-93	36,992
1902-03	43,656
1912-13	50,901
1922-23	120,523
1932-33	171,868
1942-43	419,855
1952-53	388,482
1962-63	731,906
1972-73 (estimate)	1,203,355

The 100 year history of progress and expansion of Nottingham's health services department draws to a conclusion. The re-organisation of the National Health Service in 1974 could open exciting new horizons and problems equally as great as faced Edward Seaton in 1872. On the 1st April 1974, the statutory appointment of Medical Officer of Health will be abolished and his present day health services, with the exception of environmental health (which remains within the re-organised Local Government) will be combined in a new unified National Health Service. A new medical administrator will emerge—the Community Physician—who will have an equally vital role as present day Medical Officers of Health but within a larger combined hospital and community health service. We wish him well.