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STAFFORDSHIRE COUNTY COUNCIL


REPORT

of the

MEDICAL OFFICER OF HEALTH

G. RAMAGE, M.A. (Admin.), M.D.

For the Year 1953



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STAFFORDSHIRE COUNTY COUNCIL

Annual Report of the Medical Officer of Health

PRELIMINARY NOTE

The annual report for the year 1953 is prepared in the form required by the Minister of Health, incorporating, on this occasion, additional subjects relating to blindness, epilepsy and spastic paralysis. With the passage of time the record has gradually grown, until now it has become rather an indigestible bedtime book and must be looked upon as a quarry of information, of use in assessing the results of the year's work, in showing the improvements needed within the County and, in conjunction with the reports of all my Medical Officer of Health colleagues, the national needs as well.

In general the state of health and the standard of service provided during the year in Staffordshire were satisfactory and a number of advances were made, and the general statistics on page 12 show that the death-rate for the County was well below that for England and Wales, i.e., 10.2 as compared with 11.4. The deaths from infectious diseases have become relatively few, though the continued presence of new cases of diphtheria is very disappointing and disturbing. In most parts of the country diphtheria belongs to the past and is not seen at all, yet in the south of this County 73 cases occurred in 1953 and amongst them there were six deaths. Every practical step has been taken to prevent the spread of the disease, but the cases still continue. It appears possible that the reservoir of infection is in the young adult population, and if this is the chief source the problem is a very difficult one to solve, carrying with it the disturbing thought that similar circumstances could arise in other parts of the country.

There has been much discussion about the advisability of giving children injections of combined vaccines to immunise them against both diphtheria and whooping cough. While there is no doubt about the efficiency of the diphtheria portion, if the maximum protection against whooping cough is to be obtained the injections must be given earlier than is desirable in the case of the other disease. Injections against diphtheria may not always be completely effective if carried out at an age of from four to six months, and, in any case, the diphtheria immunity gained at this age is considered to necessitate a reinforcement dose at three to four years of age, in place of the present five years of age when the child enters school. In view of the great difficulty of obtaining the attendance at the clinics of a large percentage of the children in the earlier age group, and

the incomplete protection afforded to them against whooping cough, the Health Committee accepted a recommendation that the protection against the latter disease should be given separately from that against diphtheria with the material shown in the Medical Research Council's Trials to be the most effective agent at present available in this country. If, in the future, there exists a combined vaccine which, when injected at the age at which it is desirable to ensure the maximum protection against whooping cough, provides equally efficient protection as regards diphtheria until the child enters school, a great advance will have been made, inasmuch as the number of injections will have been reduced without impairing the required results.

The rise in the number of cancer deaths has continued, and this year they account for 16.4 per cent. of the total deaths. This matter has been commented on in the preliminary remarks in previous reports, as also has the substantial proportion of deaths caused by accidents. Accidents in the home form a significant part of these, and this emphasises the need to implement the Health Committee's scheme for prevention which has suffered a number of delays.

The death-rates from both pulmonary and non-pulmonary tuberculosis continue to fall, which is a very welcome trend, although a little tempered by the increase in the numbers of cases of pulmonary tuberculosis notified and remaining on the registers which the District Medical Officers of Health are continuing to maintain. It is much to be hoped that the greater number of the newly-notified cases is due to the improved techniques of diagnosis, but only a further period of observation can decide this. For some time it had been noticed that there was not the close contact between the Chest Physicians and the Health Visitors which was intended by the scheme drawn up in 1948, so during the year now under review the Health Committee agreed to appoint three special Health Visitors to carry out the tuberculosis visiting in the areas covered by the Stafford, Cannock and Lichfield Chest Clinics. These appointments caused no increase in the staff establishment, and have assured not only the desired relationship between the Chest Physicians and the Health Visitors but also an improved service in the homes of the patients.

The work of the Chemical Laboratory continues to grow both as regards the numbers of samples and the complexity of the analyses required, and the increases have been largely due to more food, sewage and atmospheric pollution samples, together with the examinations of milks for the presence of hypochlorites. It is satisfactory to read that the adulteration rate, including milk samples, is the lowest yet recorded, because in 1952 adverse comment had to be made about a slight increase in the rate after improvements in previous years.

An important step forward was taken by the Ministry of Agriculture and Fisheries in declaring the Borough of Newcastle-under-Lyme and the Urban Districts of Biddulph and Kidsgrove, together with the City of Stoke-on-Trent, to be a designated area as from the 1st November, 1953; the "Black Country" having been dealt with similarly in 1952. In these areas, therefore, only pasteurised, sterilised, tuberculin-tested milk and, until the 1st October, 1954, accredited milk from a single herd, may be sold. A study of the results of the tests on samples taken during the year of the different types of milk now being sold (page 29) will show at once the importance of this step. The percentage of those failing to pass

the methylene blue test is seen to be highest with the undesignated milks, though that of the accredited milk is also high. More important still is the fact that accredited milk contained tubercle bacilli in a greater proportion than any other type of milk, and it is to be hoped that this grade and the undesignated milk will ultimately be withdrawn from the market.

In 1952 it was possible to open three new Infant Welfare Centres, though another centre was closed, and in the year under review Centres were established at Abbots Bromley, Pelsall and Tettenhall Wood. It must be commented that these centres are all in existing premises and that no specially built one has been provided in this County since the year 1939. It is now hoped that this long period will soon be ended because in many parts of the County specially built centres are an urgent need. The number of attendances of infants at the centres remains about the same, but there was an increase this year in the number of those of the toddler (two—five years) age group. Apart from the important general advice offered at these clinics a considerable number of defects were found and treatment secured. Although nearly 900 pre-school children were referred for dental treatment, this is, in fact, a smaller number than is desirable. The County Dental Officer has frequently commented on the poor state of the teeth of school entrants and that they require attention earlier than during school life, which is the first contact the majority have with the dentist. The desired result is not easy to secure, and although it is necessary to provide treatment for these children, it is more important to attack the cause of the increasing and excessive dental decay. One undoubted factor is the consumption of large quantities of starchy food, sweets and chocolate. From this point of view it is most unfortunate that these items are so cheap and attractive to eat, and it is now extremely difficult to wean the population from their consumption of sweets; one can say equally as difficult as to persuade them to forego the open coal fire.

It is gratifying to note that the number of mothers attending the ante-natal clinics has been more than maintained, so justifying the Council's general policy of continuance. In previous annual reports the importance of these clinics has been stressed for the County's clinics have the almost unique advantage that they are unhurried, so that no important detail of examination is missed. There is also ample time for the prospective mother to discuss any doubts she has, however small, and for all her minor problems to be dealt with sympathetically and patiently by the staff. The number of women who attend the clinics for post-natal examination is low, but may be accounted for by the fact that the majority receive maternity medical services from their own doctors or from clinics at Maternity Units.

It has been necessary to comment frequently in the past about the difficulties of recruiting Health Visitors to the staff, and this year there has been no real improvement. As a result of re-planning the Health Visitors' time during the year it has been possible to increase the home visits paid to children in the one to five years age group, but the position is still not completely satisfactory, and there are other fields of work to which the Health Visitors should give more attention than is now possible.

A number of changes in the Ambulance Stations occurred during the year. The Mile Oak Ambulance Voluntary Committee, which had provided a free service within the Parishes of Drayton Bassett, Fazeley,

Hints and Weeford, and, since 1948, had carried patients from the Tamworth district on behalf of the County Council, closed down after many years activity. They had performed a valuable public service which was greatly appreciated in their district, and their closure was caused by the provision of an urgently required Sub-Station at Tamworth rather earlier than had been intended. The latter became possible inasmuch as by agreement with the County Fire Committee the requisite accommodation was made available at the existing Fire Station in the town. It was necessary to change the premises at Rugeley, and, finally, a completely new main Station was built for the Newcastle area.

Again in 1953 the number of patients and the mileage run have both shown increases in spite of continual vigilance to ensure that there should be no abuse of the service provided. In the Stafford area the "Car Pool" has operated for a complete year and covered 12,931 miles which was of great help to the Stafford Ambulance Station and brought about a useful economy.

The work of the Mental Health Department has continued and there was an increase in the number of cases referred for action under the Mental Deficiency Acts. The waiting list for admission to Mental Deficiency Hospitals has not diminished, and is a source of great distress to the patients' relatives and embarrassment to the Department. To ensure a supply of properly trained workers and to help with the training at the Occupation Centres the Committee approved the recruitment of three trainees to the Centres at Newcastle, Bilston and Lichfield. A three-year course was drawn up, and the scheme, which is working well, will help to maintain the high standard of training which has been traditional in this County.

The Health Committee has received new proposals with understanding and enthusiasm, and played their part in improving the service to the maximum, for which I am very grateful. It is also a pleasure to record the cordial co-operation and help received from other Departments of the County Council, and no statement of the year's activities would be complete without the recognition of the diligent and devoted work of the whole staff of the Health Department which plays a large part in making possible such a satisfactory service to the public.

G. RAMAGE,
County Medical Officer of Health.

August, 1954.

COMMITTEES

The Committee of the County Council concerned with public health is the Health Committee.

The County Medical Officer also acts as medical adviser to all Committees of the County Council including the Education Committee, Welfare Services Committee and Children's Committee.

HEALTH OFFICERS

(A) MEDICAL

County Medical Officer of Health

G. RAMAGE, M.A. (Admin.), M.D., Ch.B., B.Sc., M.R.C.S., L.R.C.P.,
D.P.H.

Deputy County Medical Officer of Health

C. D. L. LYCETT, M.D., B.S., M.R.C.S., L.R.C.P., D.P.H.
(Resigned 20.12.53)

Senior Medical Officer for Maternity and Child Welfare

KATHLEEN D. ARNSBY, M.B., B.S., D.P.H.

County Psychiatrist

H. S. COULSTING, M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.M.

Medical Officers to Area Health Committees

E. H. TOMLIN, M.D., Ch.B., D.P.H.

J. TOLLAND, L.R.C.P., L.R.C.S., L.R.F.P.S., D.P.H.

H. B. BINKS, M.B., Ch.B., D.P.H.

A. W. M. BATTERSBY, L.R.C.P., L.R.C.S., L.R.F.P.S., D.P.H.

C. E. JAMISON, M.B., B.Ch., B.A.O., D.P.H.

R. M. WEBSTER, M.B., Ch.B., D.T.M. & H., D.P.H.

J. H. DONNELLY, T.D., L.R.C.S., L.R.C.P., L.R.F.P. & S., D.P.H.

W. A. McLENNAN, M.B., Ch.B., D.P.H.

A. H. KYNASTON, M.R.C.S., L.R.C.P., D.P.H.

(B) OTHER PROFESSIONAL

County Analyst

A. HOULBROOKE, M.Sc., F.R.I.C.

County Sanitary Inspector

H. PREST, M.I.San.E.

SUMMARY OF STATISTICS

1.—GENERAL STATISTICS

Area of Administrative County (acres)	685,503
Estimated Home Population of Area, 1953 (primarily for calculation of Death-rates or incidence of Notifiable Diseases)	868,200
Rateable Value at 1st April, 1953 (General County Purposes)	£3,963,805
Estimated net product of a penny rate, 1953-54 (General County Purposes)	£15,834

2.—EXTRACTS FROM VITAL STATISTICS OF THE YEAR

	Total	M.	F.		
Live Births, Legitimate	13,328	6,865	6,463		
Illegitimate	408	205	203		
Total	13,736	7,070	6,666	Birth-rate	15.8
Still-births, Legitimate	325	160	165		
Illegitimate	16	11	5		
Total	341	171	170	Rate per 1,000 total births	24.2
Deaths	8,859	4,705	4,154	Death rate	10.2

	Deaths	Rate per 1,000 total births
Deaths from pregnancy, childbirth, abortion	15	1.1

Death Rates of Infants under one year of age:—

All infants per 1,000 live births	32
Legitimate infants per 1,000 legitimate live births	31
Illegitimate infants per 1,000 illegitimate live births	49
Deaths from Cancer (all ages)	1,455
Deaths from Measles (all ages)	6
Deaths from Whooping Cough (all ages)	12
Deaths from Gastritis, Enteritis and Diarrhoea (under one year of age)	10

AREA AND POPULATION

Since 1934 there has been no alteration in the area of the Administrative County.

The estimated populations have been supplied by the Registrar-General and are primarily given for the calculation of death rates and the incidence of notifiable diseases. The figures are home populations (i.e., including members of the armed forces stationed in the area).

In the Report for 1939 alterations in the allocation of births and deaths were briefly described.

Until 1940 Area Comparability Factors supplied by the Registrar-General enabled local death-rates to be adjusted for comparison with the crude death-rate of the country as a whole or with the similarly adjusted rate of any other local area. From that year, however, and until 1948, the variety and magnitude of local population movements, and during the war years the uneven incidence of civilian war deaths, together combined to frustrate the attempt to secure such comparability. The factors to adjust local death rates were, however, reintroduced in the 1949 Report, and are again included to adjust both birth and death rates.

The estimated population and rates for each District are shown in the tables at the end of the Report.

In the following table the census population of the Administrative County for 1951, and the estimated home population for mid-1953 are set forth :—

	<i>Census, 1951</i>	<i>Estimated Population, Mid-1953</i>
Urban	640,665	647,200
Rural	214,519	221,000
Totals	855,184	868,200

BIRTHS

The live births registered in the Administrative County for birth-rate purposes numbered 13,736, compared with 13,287 the previous year, the number in the Urban Districts being 10,428 and in the Rural Districts 3,308.

Stillbirths. There were 341 stillbirths registered during the year, of which 269 were in Urban and 72 in Rural Districts. The stillbirth-rate per thousand of the population for the combined Urban and Rural Districts was 0.39. During the same period the rate for England and Wales was 0.35.

LIVE BIRTH-RATE PER 1,000 OF POPULATION																
DISTRICTS	5 yrs 1889- 1893	5 yrs 1894- 1903	5 yrs 1904- 1908	5 yrs 1909- 1913	5 yrs 1914- 1918	5 yrs 1919- 1923	5 yrs 1924- 1928	5 yrs 1929- 1933	5 yrs 1934- 1938	5 yrs 1939- 1943	5 yrs 1944- 1948	1949	1950	1951	1952	1953
Staffordshire (Combined Urban and Rural Urban .. Rural ..)	33.6	33.2	32.5	30.3	27.8	24.0	24.1	20.2	17.6	17.1	18.3	17.7	16.1	15.9	15.5	15.8
	35.5	34.7	33.6	31.5	29.2	25.0	20.7	18.1	17.5	18.9	20.4	17.8	16.4	16.1	15.6	16.1
England and Wales Large Towns in England	30.2	30.5	30.2	27.0	24.4	21.6	22.0	19.0	16.6	15.7	16.7	17.2	15.5	15.3	15.2	15.0
	30.8	29.7	28.7	26.9	24.5	20.4	21.3	17.8	15.6	14.9	15.2	16.7	15.8	15.5	15.3	15.5
	31.5	30.7	29.7	27.8	25.2	*20.9	22.0	18.2	15.8	14.9	16.3	18.7	17.6	17.3	16.9	17.0

* 4 years.

DEATHS

The number of deaths in the Administrative County amounted to 8,859, the number in the Urban Districts being 6,791 and in the Rural Districts 2,068.

DEATH-RATE PER 1,000 OF POPULATION																
DISTRICTS	5 yrs 1889- 1893	5 yrs 1894- 1903	5 yrs 1904- 1908	5 yrs 1909- 1913	5 yrs 1914- 1918	5 yrs 1919- 1923	5 yrs 1924- 1928	5 yrs 1929- 1933	5 yrs 1934- 1938	5 yrs 1939- 1943	5 yrs 1944- 1948	1949	1950	1951	1952	1953
Staffordshire (Combined Urban and Rural Urban .. Rural ..)	18.1	16.9	16.1	14.6	14.1	15.0	12.3	11.4	11.6	11.3	11.2	10.5	10.5	11.2	9.9	10.2
	18.9	17.5	16.6	15.1	14.7	15.5	12.6	11.5	11.8	11.3	11.2	10.5	10.7	11.4	10.2	10.5
England and Wales Large Towns Smaller Towns	16.8	15.7	15.1	13.4	12.7	13.8	11.6	11.2	11.2	11.2	11.0	10.7	10.0	10.6	9.1	9.4
	19.1	17.4	16.9	15.3	13.9	15.2	12.5	12.0	12.3	11.9	12.6	11.7	11.6	12.5	11.3	11.4
	21.0	19.0	18.2	15.8	14.3	15.5	12.6	12.0	12.3	12.0	14.0	12.5	12.3	13.4	12.1	12.2
	17.6	15.9	15.7	14.9	13.6	14.1	11.5	11.0	11.2	11.4	12.4	11.6	11.6	12.5	11.2	11.3

In the following table I have shown the *chief* causes of death for 1953. The numbers given are 82.0 per cent. of the total deaths.

TABLE SHOWING CHIEF CAUSES OF DEATH

Heart Disease	2,628
Cancer	1,455
Vascular lesions of nervous system	1,194
Bronchitis	558
Other Circulatory Disease	340
Pneumonia	313
All other accidents	191
Tuberculosis, respiratory	147
Nephritis and Nephrosis	120
Influenza	115
Motor Vehicle Accidents	92
Congenital Malformations	90
Tuberculosis, other forms	24

Causes of Death	Age at Death								TOTAL
	Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and under 75	75 and over	
1. Tuberculosis, respiratory	2	—	1	8	39	70	20	7	147
2. Tuberculosis, other	1	5	2	5	6	2	2	1	24
3. Syphilitic disease	—	—	—	—	2	9	2	5	18
4. Diphtheria	—	4	2	—	—	—	—	—	6
5. Whooping cough	12	—	—	—	—	—	—	—	12
6. Meningococcal infections	3	2	1	—	—	—	—	—	6
7. Acute Poliomyelitis	—	1	—	3	—	—	—	—	4
8. Measles	3	3	—	—	—	—	—	—	6
9. Other infective and parasitic diseases	6	—	1	—	3	7	5	—	22
10. Malignant neoplasm, stomach	—	—	—	1	20	89	88	70	268
11. Malignant neoplasm, lung, bronchus	—	—	—	—	19	168	56	13	256
12. Malignant neoplasm, breast	—	—	—	—	10	63	37	27	137
13. Malignant neoplasm, uterus	—	—	—	—	9	31	14	7	61
14. Other malignant and Lymphatic neoplasms	—	3	5	3	43	247	219	213	733
15. Leukæmia, aleukæmia	—	2	4	1	6	10	5	6	34
16. Diabetes	1	—	—	2	5	14	19	23	64
17. Vascular lesions of nervous system	1	—	—	1	26	242	379	545	1194
18. Coronary disease, angina	—	—	—	—	21	254	328	238	841
19. Hypertension with heart disease	—	—	—	—	5	28	69	55	157
20. Other heart disease	—	—	1	7	56	211	392	963	1630
21. Other circulatory disease	—	—	1	2	14	42	109	172	340
22. Influenza	4	—	1	—	7	33	25	45	115
23. Pneumonia	74	9	8	7	9	61	58	87	313
24. Bronchitis	9	1	—	2	8	140	183	215	558
25. Other diseases of respiratory system	4	2	2	3	14	35	16	11	87
26. Ulcer of stomach and duodenum	—	—	—	—	8	44	27	14	93
27. Gastritis, enteritis and diarrhœa	10	—	—	—	6	10	6	10	42
28. Nephritis and nephrosis	—	2	1	9	18	42	28	20	120
29. Hyperplasia of prostate	—	—	—	—	—	4	17	38	59
30. Pregnancy, childbirth, abortion	—	—	—	2	13	—	—	—	15
31. Congenital malformations	70	5	4	3	3	4	1	—	90
32. Other defined and ill-defined diseases	219	10	16	23	55	157	151	407	1038
33. Motor vehicle accidents	—	7	13	8	25	18	10	11	92
34. All other accidents	15	10	8	13	17	35	25	68	191
35. Suicide	—	—	—	1	18	39	18	5	81
36. Homicide and operations of war	—	—	—	1	2	2	—	—	5
Totals	434	66	71	105	487	2111	2309	3276	8859

The following table has been prepared covering the last 34 years, in which the percentage of deaths under 45 years of age is worked out in relation to the total deaths at all ages, and in the table the sexes are divided. Speaking generally, in 1953, 13.1 per cent. of all deaths occurred under the age of 45.

**DEATHS UNDER 45 YEARS OF AGE—MALE AND FEMALE—SHEWING
PERCENTAGE OF TOTAL DEATHS (ALL AGES).**

YEAR	MALE			FEMALE		
	Deaths all ages	Deaths under 45	% of Total	Deaths all ages	Deaths under 45	% of Total
1920	4626	2295	49.61	4084	1935	47.38
1921	4545	2120	46.64	3985	1759	44.14
1922	4534	1943	42.58	4191	1793	42.78
1923	4197	1816	43.27	3788	1556	41.08
1924	4332	1795	41.43	3906	1520	38.91
1925	4556	1919	42.12	4161	1724	41.43
1926	4148	1658	39.97	3808	1441	37.84
1927	4458	1766	39.61	4082	1564	38.31
1928	3965	1449	36.54	3563	1180	33.12
1929	4813	1827	37.96	4293	1453	33.84
1930	4100	1473	35.92	3672	1211	32.98
1931	4376	1472	33.64	3933	1272	32.34
1932	4190	1425	34.01	3824	1174	30.70
1933	4213	1415	33.59	3900	1207	30.95
1934	4105	1261	30.72	3655	1054	28.84
1935	4284	1354	31.61	3802	1159	30.48
1936	4203	1266	30.12	4022	1100	27.35
1937	4793	1484	30.96	4075	1041	25.55
1938	4497	1296	28.82	3915	1065	27.20
1939	4498	1223	27.19	4038	973	24.10
1940	4899	1315	26.84	4246	1069	25.18
1941	4882	1436	29.41	4110	1086	26.42
1942	4257	1150	27.01	3742	970	25.92
1943	4403	1090	24.76	4112	1004	24.42
1944	4136	1069	25.85	3800	889	23.39
1945	4356	1002	23.00	4133	921	22.28
1946	4385	1006	22.94	3934	804	20.44
1947	4657	988	21.22	4090	786	19.22
1948	4275	895	20.94	3717	715	19.24
1949	4651	861	18.51	4162	671	16.12
1950	4805	779	16.21	4183	631	15.08
1951	5139	793	15.43	4480	576	12.86
1952	4519	647	14.32	3993	510	12.77
1953	4705	657	13.96	4154	506	12.18

CHEMICAL LABORATORY

The following relates to the work undertaken during 1953:—

The total number of samples analysed was 9,690. The population of the area served by the laboratory was 1,143,295 and 7,587 samples were submitted from this area under the Food and Drugs Act and related measures. From the Staffordshire County Council's Food and Drugs administrative area, which has a population of 699,820, came 6,111 food and drugs samples. This gives a sampling rate per 1,000 of population of 8.7 per annum.

The County Council's food and drugs samples showed an adulteration rate of 2.5%, the lowest figure recorded since the establishment of the County Chemical Laboratory in 1930. The figure for milk adulteration was 2.1% which is just half of last year's figure and very little higher than the minimum rate of 1.9% recorded in 1951.

The remaining 2,103 samples, taken together, show an increase of 18.5% over the corresponding samples received last year. Consisting almost entirely of County Council samples, they are grouped under the various headings shown in Table I. Increases occurred in the number of water and effluent samples, atmospheric pollution samples and milk samples to be tested for hypochlorite.

An attempt has been made in the following paragraphs to give a very brief account of the nature of the work undertaken in the County Chemical Laboratory.

The main work consists of the chemical examination of samples submitted under the Food and Drugs Act, 1938, and the various Orders relating to food made under the Defence (Sale of Food) Regulations, 1943. The most important of these Orders is the Labelling of Food Order, but standards for many groups of foods have been set up under the Food Standards Order.

The relevant provisions of the Food and Drugs Act require that : (a) nothing shall be added to food for sale so as to render it injurious to health or to any drug so as to affect injuriously its quality or potency; (b) nothing shall be abstracted from food so as to affect injuriously its nature, substance or quality ; (c) no food or drug shall be sold to the prejudice of the purchaser which is not of the nature, or not of the substance, or not of the quality demanded by the purchaser ; (d) certain specified substances must not be added to milk and milk is presumed to be adulterated, until the contrary is proved, when it fails to reach certain minimum standards of composition.

Briefly, the Analyst has to determine whether the food examined is what the ordinary purchaser asked for, expected or should have expected to get and that it had not been tampered with in any way or contaminated during the processes of production, manufacture, handling or storage.

The Labelling of Food Order adds to this task by demanding that any pre-packed food sold by retail must carry on its label a list of ingredients in the order of the proportion in which they were used in the preparation of the food in question. The Food Standard Orders add further to the Analyst's work by laying down definite standards of composition for the foods to which they apply.

The welcome publicity given to the increasing use of science and scientific control in food production and manufacture has one very misleading result if it gives the impression that the Public Analyst's task has, thereby, been made easier. There is the possibility that the increasing use of toxic chemicals in agriculture may give rise to toxic residues in food, and chemicals used to control insect infestation of stored foodstuffs may have a similar effect. The food industry is continually adding to its food emulsifiers, stabilisers, anti-staling agents and other "aids". The increased use of machinery and mechanical methods may, on occasion, give rise to metallic and other contamination of foodstuffs. The sum of all this means more work for the Food and Drugs Authority's laboratory. Analytical methods must be kept under review and, when possible, improved. Intricate and expensive apparatus, comparable with that used in industrial laboratories, must be obtained where its use can be justified, and scientifically qualified staff of the high standard required must be engaged for this work.

While it remains true that the examination of food and drugs samples provide the main portion of the work done in the laboratory, other branches of work are increasing rapidly. Drinking waters, swimming bath waters, river waters and sewage effluents are examined for practically all the thirty-five County Districts in addition to such samples taken by the County Sanitary Inspector. Work on the measurement of Atmospheric Pollution continues to increase and samples submitted under the Fertilisers and Feeding Stuffs Act remain at a high level. There remains the large number of samples so diverse in origin that they must be collected under the title "Miscellaneous". They include many examinations for poisonous substances in human and animal foods together with the analysis of a great variety of articles other than foods and drugs.

The picture, over the past seven years, is one of rapidly increasing use of the facilities provided in the County Chemical Laboratory combined with a less rapid increase in those facilities. Unfortunately the point has now been reached where this volume of work cannot be done properly by the present staff in the accommodation now in use.

The figures recorded this year show how splendidly the present staff have overcome all the difficulties of cramped and inadequate accommodation in dealing with yet another substantial increase in their work. With added gratitude, therefore, I record my appreciation of the very efficient way in which they have performed their duties throughout the year.

While the laboratory has developed rapidly during the past seven years there is nothing to suggest that this development will not continue. There are, in fact, many possible ways in which the laboratory's facilities could be extended and used for the County Council's Service.

TABLE I

The total number of samples analysed was as follows :—

For County Council :

Food and Drugs Act, 1938 (a) Chief Inspector's Samples ..	4,647
(b) Chief Sanitary Inspector's Samples	1,264
(c) "Appeal-to-Cow" Samples ..	200
(d) Private Samples	12
Fertilisers and Feeding Stuffs Act, 1926	150
Drinking Waters	502
Swimming Bath and Pool Waters	63
River Waters	100
Sewages and Sewage Effluents, Trade Wastes, Crude Sewage and Sludge	230
Atmospheric Pollution	783
Pharmacy and Poisons Act, 1933	Nil
Coroners and Pathological Specimens	Nil
Milks for Hypochlorite Test	125
Miscellaneous Samples	101
	8,177

TABLE 1—Continued

For Stoke-on-Trent :

Food and Drugs Act, 1938 (a) Chief Inspector's Samples	..	846
(b) "Appeal-to-Cow" Samples	..	2
Fertilisers and Feeding Stuffs Act, 1926	.. ..	12
Miscellaneous and Private Samples	.. ..	13
		<hr/> 873

For Borough of Newcastle-under-Lyme :

Food and Drugs Act, 1938. Chief Inspector's Samples	..	172
Miscellaneous Samples	.. ..	4
		<hr/> 176

For Urban District Council of Brierley Hill

Food and Drugs Act, 1938. Chief Inspector's Samples	..	160
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For Borough of Rowley Regis :

Food and Drugs Act, 1938. Chief Inspector's Samples	..	296
Miscellaneous Samples	8
		<hr/> 304

TOTAL	<hr/> <hr/> 9,690
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COUNTY COUNCIL SAMPLES.

Table II shows the total number of Food and Drug Samples submitted and the number reported against.

TABLE II

Samples	Number Examined			No. Adulterated or below standard		
	Formal	Informal	Total	Formal	Informal	Total
Almonds	11	4	15	—	—	—
Baking Powder and Golden Raising Powder ..	6	1	7	—	—	—
Bread	2	1	3	—	—	—
Bun, Cake and Pudding Mixture	15	9	24	1	1	2
Butter	30	5	35	—	—	—
Canned Fruit and Vegetables	33	16	49	1	—	1
Cereal Products	19	11	30	—	1	1
Cheese	11	1	12	—	—	—
Cocoa and Chocolate Preparations	17	2	19	—	1	1
Coconut	5	2	7	—	—	—
Coffee, Coffee and Chicory Mixtures and Extracts						
(Dry)	9	3	12	—	—	—
(Liquid)	5	5	10	—	—	—
Cream	4	19	23	—	—	—
Custard Powder and Prepared Starches	14	5	19	—	—	—
Dried Fruit	5	6	11	—	—	—
Drinks, Alcoholic	46	5	51	1	—	1
Drinks, Soft (Liquid and Powder)	53	9	62	1	—	1
Drugs	56	51	107	4	4	8
Fats, Cooking	37	6	43	—	1	1
Fish Pastes and Fish Products	13	19	32	2	—	2
Flavourings and Colourings	3	2	5	1	—	1
Flour, Confectionery	16	8	24	—	—	—
Flour, Self Raising	15	—	15	2	—	2
Flour, Plain, various	9	5	14	—	—	—
Foods, Baby and Tonic	7	6	13	—	—	—
Gelatine	1	2	3	—	—	—
Gravy Browning and Salt	5	1	6	—	—	—
Herbs, Spices and Condiments	51	30	81	4	1	5
Honey	—	4	4	—	—	—
Ice Cream	55	1	56	3	—	3
Ice Lollies and Lollipops	20	—	20	—	—	—
Jellies	14	4	18	1	—	1
Margarine	16	—	16	—	—	—
Meat Products, Open (a) Sausage and Sausage						
Meat	42	1	43	3	1	4
(b) Brawn, etc.	9	4	13	—	—	—
Meat Products, Canned	35	16	51	3	2	5
Milk	1562	26	1588	50	2	52
" Accredited	228	61	289	7	8	15
" Channel Island (all grades)	65	—	65	3	—	3
" Pasteurised	518	1078	1596	4	5	9
" Sterilised	401	4	405	12	—	12
" Tuberculin Tested	328	65	393	4	2	6
" " " Pasteurised	313	35	348	—	—	—
" " " Certified	12	—	12	—	—	—
" " " Sterilised	1	—	1	—	—	—
" Malted	1	—	1	—	—	—
" Condensed	2	4	6	—	—	—
Oils, Cooking, Refined and Salad	4	4	8	—	—	—
Pickles, various	6	4	10	—	—	—
Preserves, various	25	18	43	1	—	1
Potato Products	2	1	3	—	—	—
Salad Cream and Dressing	—	2	2	—	1	1
Sauces, various	5	6	11	1	1	2
Soups	16	9	25	4	—	4
Sugar	4	20	24	—	—	—
Sweets, Sweet Spreads and Syrup	41	9	50	—	—	—
Tea	15	20	35	—	—	—
Vinegar	20	1	21	1	1	2
Unclassified	10	12	22	—	—	—
Total	4268	1643	5911	114	32	146

Of the 5,911 samples submitted from the County Area, 5,765 were found to be genuine and 146 adulterated or below standard, the percentage of adulterated samples being 2.5%. As previously stated, the rate of adulteration for the County is lower than any recorded since the establishment of the County Chemical Laboratory in 1930, the figures for 1947—1952 being 12.2, 7.7, 5.4, 5.1, 2.9, and 4.4 respectively.

(1) MILK.—Four thousand, six hundred and ninety-seven samples of milk, of all grades, were submitted for analysis. These comprised 405 samples of "Tuberculin Tested", 289 "Accredited", 1,944 "Pasteurised", 406 Sterilised, 65 Channel Island and 1,588 undesignated milk. Ninety-seven or 2.1 per cent. were found to be adulterated of which 30 contained added water, three contained added water and were fat deficient, 46 were fat deficient and 18 were deficient in fat and solids-not-fat. These figures do NOT include "Appeal to Cow" samples.

Action Taken.—Of the 97 unsatisfactory samples taken, 52 were of undesignated milk and 45 were of designated milk.

Seventeen of these were informal samples taken by Sampling Officers of the County Sanitary Inspector's Department, viz. :— 2 Undesignated, 5 "Pasteurised", 8 "Accredited" and 2 "Tuberculin Tested". They were included in the 1,264 samples collected from School Canteens, Day Nurseries, Works Canteens, Hospitals, Institutions and milk supplied under the "Milk in Schools" scheme. Four of the samples were found to contain added water, one contained added water and was also deficient in fat, seven were deficient in fat and five were deficient in fat and solids-not-fat. Formal repeat samples taken from the same sources proved to be genuine except in two instances where "Appeal to Cow" samples revealed that the cows were producing milk which was naturally poor in both cases.

The remaining 80 samples adversely reported upon were taken formerly under the Food and Drugs Act, 1938, and comprised 50 samples of undesignated milk and 30 of designated milk.

The samples of undesignated milk were dealt with as follows :—

The deficiencies in the case of 21 samples were small and the vendors were cautioned.

"Follow up" and/or "Appeal to Cow" samples were taken in the case of 20 samples of which 13 were found to be genuine. The remaining seven samples were noted down for further sampling.

Proceedings were instituted in respect of nine samples of milk found to contain added water, added water and fat deficiency.

Thirty samples of Designated milk were found to be adulterated, viz. :— five samples of Accredited Milk, two samples of Sterilised Milk, two samples of Tuberculin Tested Milk, three samples of Pasteurised Milk, two samples of Channel Islands Milk and one sample of Channel Islands Tuberculin Tested Milk were deficient in fat. One sample of Pasteurised Milk and nine samples of Sterilised Milk contained added water. One sample of Sterilised Milk contained added water and was deficient in solids-not-fat and two samples of Accredited Milk and two samples of Tuberculin Tested Milk were deficient in fat and solids-not-fat.

Cautions were issued respecting two samples of Accredited Milk found to be deficient in fat and two samples of Sterilised Milk found to contain added water.

With regard to seven samples of Sterilised Milk containing added water, the explanation submitted was a satisfactory one and accepted.

With regard to three samples of Accredited Milk, three samples of Pasteurised Milk, two samples of Tuberculin Tested Milk and one sample of Channel Islands Tuberculin Tested Milk, deficient in fat, repeat samples taken from the same sources were found to be genuine.

The remaining ten samples, viz :— two samples of Accredited Milk, two samples of Tuberculin Tested Milk deficient in fat and solids-not-fat, two samples of Sterilised Milk, two samples of Channel Islands Milk, one sample of Channel Islands Tuberculin Tested Milk deficient in fat and one sample of Pasteurised Milk containing added water were noted down for further sampling.

£2 0s. 0d. fines and £13 17s. 0d. special costs were awarded in those cases where proceedings were instituted.

Four hundred and twenty-three samples of milk were below the presumptive standard. Of these 308 were in respect of samples which were found by the Freezing Point (Hortvet) Test not to be adulterated with added water, although below standard in solids-not-fat. Sixty-three samples which were low in fat were found to be deficient due to natural causes. Fifty-two samples deficient in both fat and solids-not-fat were also found to be due to natural causes.

“Appeal to Cow” Samples.—Of the *“Appeal to Cow”* samples taken, 39 were found to be naturally poor in solids-not-fat, 48 naturally poor in fat and 41 naturally poor in both fat and solids-not-fat.

The average composition of the milks of all grades, including *“Appeal to Cow”* samples, was :—

Fat	3.62%	} Total Solids—12.29%
Solids-not-fat	..	8.67%	

Of the 4,600 samples of milk, of all grades, passed as genuine, 308 (6.7 per cent.) were naturally poor in solids-not-fat, their Freezing Point (Hortvet) showing that they were genuine. Sixty-three samples (1.4%) were naturally poor in fat and 53 (1.2%) were naturally poor in both fat and solids-not-fat, the Freezing Point (Hortvet) and *“Appeal to Cow”* samples proving them to be genuine.

(2) GENERAL ARTICLES OF FOOD.—One thousand, two hundred and fourteen samples were examined and 49 samples (34 formal and 15 informal) were found to be adulterated.

Proceedings were taken in respect of three cases regarding Pork and Tomato Sausage and Gin. Fines of £5 0s. 0d., together with special costs amounting to £6 14s. 0d., were imposed.

Informal samples of Mustard Sauce, Pork Sausage, Zinc Ointment B.P., Sal Volatile B.P., Chocolate Raisins, Ground Nutmeg, Sponge Jelly Trifle, Oil of Peppermint Tablets B.P., Real Minced Chicken, Powdered Nutmeg B.P., Sago Salad Cream, Malt Vinegar, Shredded Suet, were

found to be adulterated. The fullest investigations were made and the manufacturers and packers contacted resulting in the necessary steps being taken to prevent a recurrence of such deficiencies.

FERTILISERS AND FEEDING STUFFS ACT, 1926

The 150 samples submitted included 62 Fertilisers and 88 Feeding Stuffs.

Fertilisers

Of the 62 fertilisers, 37 were satisfactory. Of the remaining 25 samples, 10 had only slight excesses or deficiencies of the stated ingredients, and received adverse reports with the qualification that the differences were not to the prejudice of the purchaser.

Three of the ten samples in this category had a slight excess of nitrogen and four a slight excess of phosphoric acid ; the remaining three samples had incorrect proportions of soluble and insoluble phosphoric acid, one of these also containing a slight excess of potash.

Of the remaining 15 samples, two were deficient of potash and two of nitrogen ; one sample contained an excess of nitrogen and two samples an excess of phosphoric acid, one sample was deficient of soluble phosphoric acid and three samples had incorrect proportions of soluble and insoluble phosphoric acid, one of these also containing an excess of potash and one an excess of both potash and nitrogen. One sample was deficient of lime and three samples had defective statutory statements.

Feeding Stuffs

Of the 88 feeding stuffs, 51 were satisfactory. Of the remaining 37 samples, 10 had only slight variations from their statutory statements, and received adverse reports with the qualification that the differences were not to the prejudice of the purchaser. Five of these samples were slightly deficient of fibre and four contained a slight excess of oil, the remaining sample containing a slight excess of albuminoids.

Of the remaining 27 samples, four contained an excessive amount of oil and three were deficient of oil ; three samples contained an excess of albuminoids, one of these also containing an excess of oil ; two samples were deficient of albuminoids ; two samples contained an excess of fibre and one was deficient of fibre.

Eight of the remaining 12 samples were deficient of albuminoids and, in addition, showed the following further differences from the statutory statements :— three contained an excess of oil and one a deficiency of oil, one a deficiency of oil and an excess of fibre, one a deficiency of oil and an excess of phosphoric acid ; one an excess and one a deficiency of fibre.

Of the remaining four samples, two contained an excess of fibre, one being in addition deficient of oil, and the other showing an excess of oil ; one sample contained an excess of oil and was deficient in both fibre and sugar, and the remaining sample failed to give a satisfactory statement of ingredients, and contained deleterious substances, in the form of corn-cockle seeds and fish-bones.

DRINKING WATERS

Five hundred and two samples of drinking water were submitted in the course of the year ; 145 for full analysis ; 320 for partial analysis ; 12 for full analysis and plumbo solvency ; four for mineral analysis and 21 for special analysis.

Of the 502 samples for analysis :—

- 326 samples were of satisfactory quality.
- 17 samples contained sewage pollution.
- 55 samples contained organic pollution.
- 33 samples were of doubtful quality.
- 32 samples contained metallic contamination.
- 3 samples contained both sewage and organic pollution.
- 4 samples contained both sewage and metallic contamination.
- 13 samples contained both organic and metallic contamination.
- 1 sample contained sewage, organic and metallic contamination.
- 1 sample was of doubtful quality and contained metallic contamination.
- 1 sample contained oil and metallic contamination.
- 1 sample contained sulphuric acid and metallic contamination.
- 1 sample was of poor quality and unsatisfactory.
- 7 samples were plumbo-solvent.
- 1 sample was submitted for sulphur content only.
- 6 samples were submitted for fluorine content only.

SWIMMING BATH AND POOL WATERS

- 54 samples were submitted for full analysis.
- 9 samples were submitted for chlorine content only.

RIVER WATERS

- 99 samples were submitted for ordinary analysis.
- 1 sample was submitted for special analysis.

SEWAGE, SEWAGE EFFLUENTS AND TRADE WASTES

- 229 samples were submitted for full analysis.
- 1 sample was submitted for special analysis.

ATMOSPHERIC POLLUTION

During the year, 783 samples were examined for the nine local authorities in the County area served by this laboratory. The increase over last year's total of 716 is due to the additional work done for two authorities.

Each month now, the laboratory receives eight soils, 40 lead peroxide cylinders and 19 rainwaters, collected in deposit gauges, and analysis of these samples gives a record, month by month, of the amounts of acid fumes, sulphur compounds and smoke, ash or grit released into the atmosphere from the chimneys of domestic and industrial users. It is of some satisfaction to know that a Government Committee is now investigating this urgent problem.

Data supplied by the many thousands of observations on pollution carried out throughout Britain during the year will, no doubt, be carefully considered by this Committee. The Staffordshire County Council's factual contribution for the year is summarised in the following tables :—

TABLE III

LEAD PEROXIDE CYLINDERS

<i>District</i>	<i>Site</i>	<i>Average Sulphur Pollution</i> (<i>mgm SO₃/100 sq. cm/day</i>)	
		1952	1953
(a)	1	0.97	1.01
	2	1.71	1.61
	3	1.29	1.40
(b)	1	1.08	0.88
	2	0.70	0.81
	3	0.78	0.90
	4	0.94	0.97
	5	1.26	1.11
	6	1.45	1.45
(c)	1	1.21	1.09
	2	1.48	1.29
	3	0.92	0.93
(d)	1	1.79	1.68
	2	3.02	3.77
(e)	T1	1.28	1.04
	T2	1.50	1.45
	T3	1.75	1.66
	T4	1.39	1.26
	T5	1.35	1.19
	T6	1.53	1.34
	T7	1.98	1.81
(f)	1	1.46	1.41
	2	1.61	1.45
(g)	A	1.01	0.90
	B	0.71	0.63
	C	1.29	1.09
	D	1.28	0.96
	E	0.81	0.80
	F	1.06	1.01
	G	0.69	0.69
	H	0.91	—
	I	0.94	0.86
	J	0.74	0.65
	K	1.03	0.85
	L	1.34	1.30
	M3	2.80	1.86
(h)	1	—	1.40
	2	—	1.11
(i)	1	—	0.82
	2	—	0.84

When this table showing the results of sulphur pollution over the year is examined, it will be seen that no significant change in the amount of pollution occurred in 1953, as compared with 1952. For two areas, the average value of results is virtually the same as the 1952 value; most areas showed a slight improvement, varying from 7% to 16% of the average value for the same area in 1952, and in only one area was the amount of pollution slightly increased on average, to the extent of about 13%. It would, of course, be very pleasant to record a substantial improvement in conditions, but it is of some satisfaction to know that the position is becoming no worse.

For purposes of comparison, it may be of interest to note that a clean, rural atmosphere would give an average sulphur pollution figure of approximately 0.25 mgm SO₃/100 sq. cm/day and a heavily polluted industrial area might be expected to give an average figure of about 5 mgm SO₃/100 sq. cm/day, which means that the individual monthly figures rise to much greater heights during the winter. The highest individual result recorded in this laboratory during the year was 7.8 mgm SO₃/100 sq. cm/day, in November, 1953, but it must be emphasised that this is merely one outstanding result, as the table of yearly averages shows.

TABLE IV
RAINWATER DEPOSIT GAUGES

Area	Gauge Number	Annual Rainfall (inches)		Annual Solid Deposit (tons/sq. mile)	
		1952	1953	1952	1953
1	D304	24.74	22.48	163.0*	146.5
	D1034	20.83†	21.33†	154.6†	141.0†
	D311	24.73	23.69	140.2	134.8
2	D150	26.26	23.26	255.1	189.4
	D312	25.06	23.49	201.5	206.2
3	D131	31.47	29.54	179.2*	169.6
	D895	28.85	26.79	190.5*	162.7
	D234	26.80†	28.32	108.9†	109.3*
4	D353	26.36	23.13	252.2	243.8
	D354	24.08*	22.90	170.9*	154.1
5	D243	23.23†	23.92*	194.2†	196.8†
	D244	26.23	23.35	385.4	353.6
	D245	27.57	25.30	239.6	203.8
	D246	24.87	24.40*	289.8	208.0*
6	D374	23.36	20.21	179.0	149.7
	D376	25.63	14.81	203.2	133.1
8	D690	—	19.47	—	123.2
	D691	—	21.51	—	170.8*
9	D1017	—	25.69§	—	137.3§

N.B.—All the results above are calculated for 12 months.

* Actual determinations for 11 months.

† Actual determinations for 10 months.

§ Actual determinations for 9 months.

In connection with this table, it should be noted that, during 1953, Gauge No. D309 (Area 1) was changed to No. D1034, at the same site, and Gauge No. D132 (Area 3) was changed to No. D895, at the same site. During the last two months of the year Gauges No. D150 (Area 2) and No. D243 (Area 3) were moved to different sites in the same area.

The highest figure recorded for solid deposit in 1953 was 353.6 tons per square mile, which may be compared with last year's maximum figure of 385.4 tons per square mile, recorded at the same site. A heavily-polluted industrial site might give a comparable figure of 400 tons per square mile.

The lowest amount was obtained from the same site in previous years. In 1952, the amount was 108.9 tons per square mile, and this year the deposit totalled 109.3 tons per square mile, both figures being calculated to a period of 12 months. A clean atmosphere would give a deposit of about 50 tons per square mile. It is interesting to note that, for the 16 sites in Areas 1 to 6, there was a decrease in total rainfall amounting to 8.1% of last year's figure, and a corresponding decrease in solid deposit of 12.2%, so it will be seen that, at most sites, there was a slight but definite decrease in pollution during the year.

MISCELLANEOUS SAMPLES

The 226 samples grouped here are sub-divided as follows :—

(a) PUBLIC HEALTH SAMPLES.—In addition to 125 samples of milk submitted to tests for hypochlorite, 47 other samples were examined for various reasons. Nine *Ice Creams* included eight for fat content only and one for full analysis. Nine *Ice Lollies* were examined for metallic contamination and this was detected in three of the samples. Of the four samples of *Milk* examined one was normal, one contained a small amount of ammonia and two contained deposits of dirt. One of the two *Dried Milk Powders* was normal and the other had gone rancid. A *Dried Milk Powder* and a *Milk of Magnesia* sample were submitted with the complaint that their admixture gave a blackened product. Six samples of *Canned Foods* including Red Plums, Apricot Nectar, Peaches, Soup and Pineapple (two), were examined and found to be satisfactory. Two samples of *Peeled Potatoes* were submitted with a complaint that they turned black when stored in a galvanised iron bin. It was found that the potatoes were discoloured as a result of contamination with iron and zinc from the bin. Two samples of *Cheese* were examined for metallic contamination with negative results while a sample of *Brown Bread* submitted under suspicion of containing rodent excreta was found to be free from such contamination. A *Hot Water Jug* suspected of causing metallic contamination was exonerated from blame but was found to contain deposits of aluminium salts. Two samples of *Sewage Sludge* were examined, one for manurial value and the other for the presence of substances likely to interfere with the sewage purification process. Samples of *Kettle Scale* and *Roof Deposit* were submitted for identification. Finally, a complaint relating to *Cooked Sausages* was investigated by the examination of the cooked and uncooked sausages, the fat used for their cooking, the flour with which they should have been coated, and a scouring powder. Analysis showed that the sausages had been coated, not with flour, but with scouring powder prior to their cooking. There was, no doubt, some justification for the complaint regarding the taste of the resulting product.

(b) PRIVATE SAMPLES.—The 54 samples in this group are of a widely varied nature and provide some illustration of the versatility which the scientific staff of the laboratory is required to display. Specimens continue to be submitted in connection with the alleged emission of fluorine from a factory in the north of the County and 21 such specimens, consisting of eleven bones, seven urines, and three of herbage were examined for fluorine content. In a somewhat similar case from the south of the County a sample of herbage was examined for fluorine content and a sample of soil, from the same locality, for the presence of excessive amounts of iron alleged to be deposited as "swarf" from a nearby Grinding Shop.

Ten samples of Milk were submitted by producers and a further four samples, submitted for ordinary analysis, included two Drinking Waters, a Magnesium Limestone for use as a fertiliser and a solution of Bleach or sodium hypochlorite for determination of available chlorine.

The remaining 17 samples were submitted because they had given cause for complaint in various ways. Analysis of four of the eight Animal Feeding Stuffs received disclosed no reason for complaint. Of the remaining four of these samples one contained a trace of Castor Seed and three were of Poultry Mash which differed greatly in composition from previous deliveries and so caused trouble in the flock of birds concerned. A sample of soil and a sample of water were examined for the presence of poisonous substances but none was detected. A sample of sugar was found to contain a small amount of extraneous matter consisting, mainly, of tea leaves.

Six specimens were received from Veterinary Surgeons. A urine and a blood from a Greyhound were examined for the presence of sedatives with negative results. Capsules used for the prevention of liver fluke in sheep were examined because their administration to sheep had apparently caused the death of the animal in several cases. The accepted treatment is the administration, under carefully controlled conditions, of carbon tetrachloride. The capsules in question were found to contain both tetrachloride and extract of male fern. The last three specimens consisted of viscera from a cow which had died after eating potato tops and weeds. The potato tops and weeds had been sprayed in order to destroy them, apparently with an arsenical spray because significant quantities of arsenic were found in the specimens examined.

MILK SUPPLY

The Department continued its efforts to ensure that milk reaches the consumer in a clean and wholesome condition and free from disease-bearing organisms. Tables are given showing the number of samples of the various grades of milk collected. Figures of samples taken at schools in the County, and at various hospitals, institutions, etc., are given in separate paragraphs.

An increase over the previous year is again shown in the number of samples of designated milk collected and in the number of samples collected from schools and institutions. A decrease has also occurred again in the number of samples of ungraded milk collected. This, of course, reflects the continued trend towards the elimination of the sale of ungraded milk and its replacement by designated milk. A further area of the County

was scheduled as a "Specified Area" by the Milk (Special Designations) (Specified Areas) Order, 1953, which operated from the 1st November, 1953. This area included the following districts of the County :—

The Borough of Newcastle-under-Lyme.

The Urban Districts of Biddulph and Kidsgrove.

It will be recalled that in 1952 the greater part of the south of the County was declared a "Specified Area"; thus the bulk of the thickly populated parts of the County are now covered by these Orders, the effect of which is that in such areas only designated milk can be sold.

The specially designated milks are Pasteurised, Sterilised, Tuberculin-tested and, until the 1st October, 1954, Accredited milk from a single herd only. The County Council, as Food and Drugs Authority, are responsible for enforcing these provisions in the above areas, apart, of course, from the Borough of Rowley Regis and the Urban District of Brierley Hill, which are separate Food and Drugs Authorities.

An interesting provision of the order is that a dairyman, who retails milk both inside and outside the specified area, must limit the whole of his sales to the specially designated milks.

The Department is responsible for the licensing and supervision of milk pasteurising and sterilising plants and seven pasteurising and four sterilising licences were re-issued for the year. The plants were closely supervised during the year and regular routine visits were made for this purpose by the County Sanitary Officers. The importance of this work will be appreciated when it is realised that the milk supply of probably half a million people is treated in these plants.

Samples of retail milk ("street milk" sampling) are taken throughout the Administrative County except in the areas of the Municipal Borough of Newcastle and the Urban District of Brierley Hill which are Food and Drugs Authorities. In the case of the Municipal Borough of Rowley Regis, which is also a Food and Drugs Authority, the County Council staff undertake street milk sampling on their behalf and in this connection a total of 122 samples (including school samples) were taken during the year. This figure is in addition to the number of samples shown in the tables. "Raw" milk samples are examined for cleanliness and for the presence of the organisms of tuberculosis and brucella abortus, while processed milks are also examined for cleanliness, and for the efficiency of the pasteurising or sterilising process. A proportion of the samples of pasteurised milk is also submitted to the test for presence of tubercle bacilli. Two sampling officers are engaged on this work. The results of all retail milk samples are notified to the Medical Officer of Health of the district where the milk is sold. The Milk Production Officer of the Ministry of Agriculture and Fisheries of the County where the milk is produced is also notified of unsatisfactory samples of raw milk. The responsibility for clean milk production is upon these officers. No information is received in the Department as to any action which may be taken by them as a result of the notification of unsatisfactory samples.

Unsatisfactory samples of heat-processed milks are dealt with by this Department if from processing plants within the Administrative County. Otherwise they are referred for action to the Medical Officer of Health of the Food and Drugs Authority concerned.

All tubercular positive milk samples are reported to the Divisional Veterinary Officer of the Ministry of Agriculture and Fisheries, and to the Medical Officers of Health of the districts where the milk is produced and

retailed. The Ministry take steps to find the cow or cows responsible and the Medical Officer of Health has powers under the Milk and Dairies Regulations, 1949, to place restrictions on the sale of such milk for human consumption.

The tables which follow show details of the samples collected, together with the results of the various tests applied thereto. The first table is a summary of all street milk samples collected. Those taken from schools and institutions are dealt with separately in later paragraphs. So far as the cleanliness (methylene blue) test is concerned, the Tuberculin-tested and Pasteurised supplies show improvement over the previous year, but the Accredited and ungraded milks have fallen off. The results of the biological testing do not show any significant change on the year's figures. The total submitted was 2,644 as against 2,232 in 1952, and the number found to be tubercular positive was 65 as against 52 in 1952. The number of samples which can be submitted for biological examination depends upon the supply of guinea pigs.

The second table shows the number of ungraded milk samples collected in each of the sanitary districts of the administrative area, together with the results of the examinations.

Arising from the 65 positive samples found as a result of the sampling, 52 cows were found by the Ministry of Agriculture and Fisheries Veterinary Officer to be affected with tuberculosis, and these were slaughtered under the Tuberculosis Order of 1938.

During 1953 some special sampling was continued at various dairies in the Administrative County of farm milks coming into the dairies for pasteurising or sterilising. One hundred and eight samples were taken and were submitted to the biological test only. Six of these samples were found to be positive and as a result of subsequent investigations by the Ministry of Agriculture and Fisheries' Veterinary Officer six cows were slaughtered under the Tuberculosis Order. These samples are not included in any of the figures given in other parts of the Report. The value of this special sampling is that, even though the tubercular milk was being made "safe" in that it was being pasteurised, six cows were slaughtered under the Tuberculosis Order. Without the Department's activity it may well be that these animals would still be secreting tubercular milk today.

In addition to the above 30 cases were reported by Authorities outside the Administrative County of tuberculous milk produced in that County, but sampled outside, usually at large dairies where the milk was about to be pasteurised. These cases are dealt with by this Department and reported to the Divisional Veterinary Officer of the Ministry of Agriculture and Fisheries and also to the Medical Officer of Health of the district where the milk is produced. As a result of these investigations, 22 tubercular cows were found and slaughtered. Six complaints were similarly made to outside authorities in respect of milk sent from outside into the administrative area for sale and sampled by the Department's sampling officers.

Not included in the following tables are 1,264 samples which were collected by the Sampling Officers while visiting Schools and School Canteens, for informal examination under the Food and Drugs Act (i.e., for fat and non-fatty solids content). This work is carried out as an administrative convenience and the results are notified to the Chief Inspector of Weights and Measures. Seventeen samples were found to be unsatisfactory.

SUMMARY OF SAMPLES COLLECTED (EXCLUDING SAMPLES FROM SCHOOLS AND INSTITUTIONS) 1st JANUARY TO 31st DECEMBER, 1953

Grade of Milk	Total samples taken	Methylene Blue Test (for Cleanliness)		% 1953	% 1952	Phosphatase Test (for correct pasteurisation) Submitted Result	Turbidity Test (for Sterilised milk) Submitted Result	Biological Test (for presence of Tuberculosis)				
		Submitted	Result					Submitted	Positive	% 1953	% 1952	
Ungraded	1,603	1,603	Passed Failed	1,228 375	76.6	81.1	—	—	1,451	38	2.6	2.8
"Tuberculin-tested"	575	575	Passed Failed	507 68	88.2	84.3	—	—	467	4	0.9	0.4
"Accredited"	606*	604*	Passed Failed	503 101	83.3	87.1	—	—	595	23	3.9	2.5
"Tuberculin-tested (Pasteurised)"	804†	822†	Passed Failed	805 17	97.9	95.9	1,901 Passed 14 Failed	—	1	—	—	—
"Pasteurised"	1061†	1047†	Passed Failed	1033 14	98.7	95.7	% Satis. 1953 99.3 1952 99.4	—	130	—	—	—
"Sterilised" ... "T.T. (Sterilised)"	515 17	—	—	—	—	—	515 17	Satisfactory	—	—	—	—
TOTALS	5,217	4,651	Passed Failed	4,076 575	87.6	87.1	—	—	2,644	65	2.5	2.3

NOTE—Of the 1,451 samples of ungraded milk submitted to the Biological Test, 307 were from Urban Districts, of which 7, or 2.3% were positive, and 1,144 were from Rural Districts, of which 31, or 2.7%, were positive. Comparative percentages for 1952 were:— Urban Districts 3.04%, Rural Districts 2.77%.

* 2 "Accredited" samples were submitted for Biological Test only.

† 32 "T.T. (Past.)" and "Pasteurised" samples were not reported on the Methylene Blue Test owing to high atmospheric shade temperature at time of sampling.

UNGRADED MILK SAMPLES
1ST JANUARY TO 31ST DECEMBER, 1953

Sanitary District	No. of Samples Submitted	RESULT OF EXAMINATION			T.B.		
		CLEANLINESS			Submitted	Positive	Percentage Positive
		Satisfactory	Unsatisfactory	Percentage Unsatisfactory			
URBAN							
*Aldridge ..	—	—	—	—	—	—	—
Amblecote ..	—	—	—	—	—	—	—
Biddulph ..	98	75	23	23.5	97	2	2.1
*Bilston ..	—	—	—	—	—	—	—
Brownhills ..	17	12	5	29.4	13	—	—
Cannock ..	37	32	5	13.5	34	—	—
*Coseley ..	—	—	—	—	—	—	—
*Darlaston ..	—	—	—	—	—	—	—
Kidsgrove ..	65	47	18	27.7	61	2	3.3
Leek ..	43	33	10	23.3	31	1	3.2
Lichfield ..	1	1	—	—	1	—	—
Rugeley ..	16	11	5	31.3	15	1	6.7
*Sedgley ..	—	—	—	—	—	—	—
Stafford ..	19	14	5	26.3	18	—	—
Stone ..	11	11	—	—	4	—	—
Tamworth ..	23	20	3	13.0	6	1	16.7
Tettenhall ..	7	6	1	14.3	6	—	—
*Tipton ..	—	—	—	—	—	—	—
Uttoxeter ..	48	39	9	18.8	21	—	—
*Wednesbury ..	—	—	—	—	—	—	—
*Wednesfield ..	—	—	—	—	—	—	—
*Willenhall ..	—	—	—	—	—	—	—
RURAL							
Cannock ..	88	66	22	25.0	81	3	3.7
Cheadle ..	329	267	62	18.8	300	6	2.0
Leek ..	251	181	70	27.9	242	5	2.1
Lichfield ..	109	85	24	22.0	104	3	2.9
Newcastle ..	98	85	13	13.3	93	—	—
Seisdon ..	44	37	7	15.9	42	2	4.8
Stafford ..	98	71	27	27.6	93	2	2.2
Stone ..	61	46	15	24.6	58	3	5.2
Tutbury ..	66	47	19	28.8	62	4	6.5
Uttoxeter ..	74	42	32	43.2	69	3	4.3
Totals ..	1,603	1,228	375	23.4	1,451	38	2.6

* No ungraded milk sold in these Districts during 1953. The Districts are included amongst those coming within the provisions of the Milk (Special Designations) (Specified Areas) Order, 1952 which came into operation on 1st November, 1952.

BRUCELLA ABORTUS INFECTION IN MILK

During 1953, the Public Health Laboratory Service continued to examine samples of milk submitted by this Department for the presence of brucella abortus organisms. However, during the year the basis of the examination was changed, so the following report is dealt with in two sections.

Up to the 10th August, 1953, the examinations were continued as in the previous year and a positive sample was defined as one from which an organism of the genus brucella had been isolated, i.e. no attention was paid to a "guinea pig serological positive" where the culture was negative.

An analysis of the samples examined during this period is as follows :

Designation	Total number of samples tested	Number of negative samples	Number of positive samples	% of positive samples
Pasteurised ..	175	175	—	—
T.T.	333	324	9	2.7%
Accredited ..	411	391	20	4.9%
Undesignated ..	778	748	30	3.9%
Total	1,697	1,638	59	3.5%

These figures show the percentage of positive samples to be considerably lower than in the previous year, when of a total of 2,278 samples submitted 148 or 6.96% were positive.

Arising out of the positive results, the Department assisted a number of producers in tracing the affected animal or animals. This involved visiting the farms, often two or three times, and obtaining samples usually from each quarter of each cow in the herd. To this end some 285 cows were tested and over 1,140 samples taken. As a result of such work, 29 affected animals were traced. Samples found to be brucella abortus positive were notified to the producer, the Medical Officer of Health of the district where the milk was produced and/or retailed, and to the Divisional Veterinary Officer.

The District Medical Officer of Health has the power to have the affected milk diverted for heat treatment or the milk from the particular cow withheld. However, there is no power to have affected animals slaughtered, as in the case of tuberculosis. The farmer's action when any particular animal is traced is usually either to sell the animal, and it continues to excrete infected milk elsewhere, or the more conscientious farmer fattens the animal for slaughter.

From the 11th August, 1953, as stated above, the basis of the examinations for brucella abortus was changed. From that date the isolation of brucella organisms by culture methods as a routine was discontinued and in its place each milk sample was examined by the "Ring" test. This indicates, with approximately 99% accuracy, whether the abortus organism is being excreted by the cow, compared with about a 50% chance of culturing the organism contained in the sample. If the "Ring" test is positive the milk sample is inoculated into a single guinea pig and if the serological reaction confirms the preliminary test this is named a positive sample.

Although this procedure is more exacting than the previous isolation of the organism, the result cannot be used as evidence for legal action by a District Medical Officer. It will enable him to take unofficial action if he considers that sufficient, or he may request a further examination for the actual organism. Further experience with the changed method will be needed to assess the results, although there is no doubt that it will economise the use of guinea pigs and enable more samples to be tested for tuberculosis.

MILK IN SCHOOLS SCHEME

At the end of the year under review, the suppliers of milk to the various schools or departments in the administrative area were as follows :

	<i>No. of Suppliers</i>	<i>Schools or Departments Supplied</i>	<i>Children Supplied (These figures were supplied by the Education Department)</i>
" Tuberculin Tested " ..	12	13	539
" Accredited "	7	7	253
" Pasteurised "	59	539	93,394
Undesignated	1	1	11
	<hr/> 79	<hr/> 560	<hr/> 94,197

A supply of Pasteurised Milk or failing that Tuberculin Tested milk is obtained whenever possible.

School milk supplies are sampled twice a term after delivery to the schools. Raw milks are examined bacteriologically and biologically while Pasteurised milks are subjected to the phosphatase test (for efficient pasteurisation) and the methylene blue test (for cleanliness).

The number of samples collected at schools during 1953 was 1,035. Of these 54 failed to conform with the required standard of cleanliness. In the case of unsatisfactory samples of raw milks, the supplier and/or producer are notified, and also the Milk Production Officer of the Ministry of Agriculture and Fisheries, and repeat samples are taken. If no improvement is effected it is recommended to the Education Department that the supplier be changed. During the year 889 samples of pasteurised milk were submitted to the phosphatase test, five being unsatisfactory. This is again an improvement on the previous year, when 829 samples were submitted to the test and six were unsatisfactory.

As regards the biological examination of samples, where tubercle bacilli are found the school supply is stopped immediately and is not resumed from that particular source until the herd is free from infection. In the meantime, where possible, alternative arrangements are made so that the scheme is not interfered with. The number of tuberculous samples during the year was two and the procedure mentioned above was followed.

GENERAL

Apart from the foregoing, sampling was undertaken during the year at certain private schools, hospitals, sanatoria, institutions and school canteens. Of 539 samples obtained 26 were unsatisfactory from a cleanliness standpoint.

These results were an improvement on those for 1952 when, of 526 samples collected, 31 were unsatisfactory from a cleanliness standpoint.

The number of tuberculous samples found during the year was two, and these were appropriately dealt with. Four hundred and thirteen of the samples were submitted to the phosphatase test for correct pasteurisation. Five were unsatisfactory.

WATER SUPPLIES, SEWERAGE AND SEWAGE DISPOSAL

For the financial year 1953/54 a sum of £29,765 was contributed by the County Council to District Councils towards the cost of water, sewerage and sewage disposal schemes. The following is a list of schemes considered by the Health Department during 1953 for grants or loans under the Rural Water Supplies and Sewerage Act, 1944, or Section 307 of the Public Health Act, 1936. In all during the year schemes of water supply at an estimated cost of £272,772 and sewerage and sewage disposal schemes at an estimated cost of £283,504 were considered by the Department.

WATER SUPPLIES

Biddulph Urban District—Lask Edge Area

The Urban District Council submitted a scheme to provide a mains water supply to farms, cottages and small holdings in the Lask Edge district at an estimated cost of £8,429. The scheme was approved.

Cheadle Rural District

(1) A scheme to extend water mains from Calton to Blore-with-Swinscoe at an estimated cost of £19,400 was put forward by the Rural District Council. The scheme was approved in principle, but since the cost per property was very high it was left to the Ministry of Housing and Local Government to determine if the cost could be regarded as being reasonable.

(2) An extension of water mains to Sheepwash, Caverswall. This scheme, estimated to cost £1,350 to supply a small number of properties, was approved.

Lichfield Rural District

Following a request by the Lichfield Rural District Council a previous scheme for supplying water to three railway cottages and a railway signal-box at Elmhurst was reconsidered. In view of the greatly increased "cost-per-house basis" of schemes recently approved by the Ministry and with a view to encouraging piped water supplies when this is at all possible, the scheme was approved.

Stafford Rural District

Western Area Water Scheme—Section 3 (d)

The Rural District Council put forward another section of the Western Area Water Scheme. This section provided for mains to supply parts of the parishes of Gnosall, Ellenhall, Ranton, Seighford, Whitgreave, Haughton and Bradley. Also included in the scheme was a 12in. trunk main from the Gnosall bore-holes pumping station to a new reservoir to be sited at Butterhill, this forming part of the scheme whereby the Rural District Council have agreed to supply water in bulk to Stafford Borough. Subject to suggestions to provide water supplies to certain properties which appeared to be omitted from the scheme, the scheme was approved.

Uttoxeter Rural District

(1) A scheme for supplying water to the parishes of Mayfield, Ellastone, Stanton and Wootton at an estimated cost of £71,550 was put forward by the Rural District Council. The scheme was to provide water mains over a very sparsely populated and widespread area. Included in the scheme was the provision of a new bore hole, pumping stations and a reservoir. The scheme was approved in principle, subject to slight modifications.

(2) A scheme to make available mains water in the Stubwood area at a cost of £6,750 was approved.

SEWERAGE AND SEWAGE DISPOSAL

Aldridge Urban District

A scheme submitted by the Aldridge Urban District Council for proposed extensions at the Barns Lane Sewage Disposal Works, Aldridge, at an estimated cost of £144,591, was approved.

Brownhills Urban District—Alterations to Sewage Disposal Works at Walsall Wood

An application from the Urban District Council for a grant towards the cost of certain works carried out at Walsall Wood Sewage Disposal Works was considered. The works were approved in part, the cost of that part approved amounting to £8,463,

Tipton Municipal Borough

The Tipton Borough Council submitted proposals for extending the existing sewage disposal works and to reconstruct existing pumping stations at an estimated cost of £224,650 based on 1948 costs. The present works have been quite incapable of dealing with the flow reaching them. The scheme was approved.

Cannock Rural District

(1) *Essington*

A scheme to provide new sewage disposal works to replace the existing overloaded and ineffective works was considered. The estimated cost was £9,100 and the scheme was approved.

(2) *Wheaton Aston*

A scheme to provide new sewers to replace existing defective sewers and to sewer part of the village not already sewered, together with a new disposal works to replace the existing inadequate and ineffective works, was considered. The estimated cost was £25,000. The scheme, subject to proper provision being made for the disposal of surface water taken by existing sewers which it is proposed to leave in situ, was approved.

Stafford Rural District

(1) A scheme submitted by the Rural District Council for a new sewage disposal works on the existing disposal works site at Church Eaton to replace the present land irrigation system by settlement tanks and filters and to replace the windmill pumping to the irrigation area by automatic electric pumps was considered. The estimated cost of the scheme was £2,775. The Health Department agreed that some improved method of pumping sewage was required, but at this stage the provision of a new disposal system could not be said to be necessary, however desirable it may be. The scheme was approved in principle, but if the Ministry of Housing and Local Government decide that in the interests of economy the full scheme should not be carried out then it was agreed that the pumping and new manhole sections should be pressed for as it was thought that this would meet the need for some years to come. Certain improvements to the pump-house were also suggested to obviate considerable nuisance when the works were in operation.

(2) A scheme for sewerage and sewage disposal at Great Bridgeford at an estimated cost of £12,605 was approved.

(3) A scheme providing for the sewerage of the village of Hixon at a cost of £6,706 was approved.

Stone Rural District—Common Lane, Grindley Lane, Sandon Road, Meir Heath

A scheme providing for the sewerage of properties in these areas which had previously been approved in principle received full approval.

MINISTRY OF HOUSING AND LOCAL GOVERNMENT INQUIRIES

The Ministry of Housing and Local Government held inquiries during the year into the following schemes :—

- 18th March* Stafford Rural District. Proposed sewerage scheme at Creswell. Sewerage and sewage disposal at Gnosall and Gnosall Heath.
- 8th April* Stafford Rural District—Eastern Area Sewerage Scheme.
- 22nd April* Cannock Rural District and Cannock Urban District regarding proposed sewerage and sewage disposal schemes covering extensions of the Cannock Urban District works and proposals for sewerage and re-sewerage sections of the Great Wyrley, Cheslyn Hay and Saredon parishes in Cannock Rural District area and pumping the sewage therefrom to the Cannock works.
- 10th June* Tutbury Rural District. Ministry visit of inspection covering the Rolleston sewage disposal works and new sewers at Dunstall and Anslow.
- 11th June* Uttoxeter Rural District Council. Inquiry regarding proposed sewerage and sewage disposal schemes at Mayfield, Rocester and Abbots Bromley.
- 15th Sept.* Newcastle Rural District Council. Ministry visit of inspection regarding Baldwin's Gate sewerage and sewage disposal scheme.
- 6th Oct.* Cheadle Rural District Council regarding proposed new sewage disposal works and sewerage schemes for Kingsley and Kingsley Holt.
- 7th Oct.* Leek Rural District. Ministry visit of inspection regarding the Horton, Endon and Stanley water scheme.
- 20th Oct.* Stafford Rural District—Church Eaton, Bradley, Haughton and Whitgreave water scheme.
- 20th Oct.* Stafford Rural District—Church Eaton sewerage and sewage disposal scheme.
- 1st Dec.* Stoke-on-Trent. Ministry visit of inspection regarding the Blythe Valley sewer and new sewage disposal works at Deadman's Green, Near Fole, Uttoxeter.

The Health Department was represented at all the above Inquiries.

In cases where the County Council are making contributions under the Rural Water Supplies and Sewerage Act, 1944, or Section 307 of the Public Health Act, 1936, sewage works are regularly inspected and samples of effluents taken by Officers of the Department to ensure that the works are being satisfactorily maintained.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASE

The following statistics relate to the notifiable infectious diseases amongst the home population during the calendar year 1953. On reference to the tables at the end of the Report the numbers and death-rates for each Sanitary District will be found.

SMALLPOX.—No case of Smallpox was notified in 1953. The last cases recorded were in 1947, when an outbreak occurred in the south of the County, mainly in Bilston.

SCARLET FEVER.—There was a decrease in the incidence of this disease, 1,023 cases having been notified, compared with 1,497 in 1952. In the Urban Districts there were 783 cases and in the Rural Districts 240, as against 1,238 and 259 respectively, in the previous year. The case-rates per thousand of the population were :— Urban Districts 1.21, Rural Districts 1.09, with a total County Rate of 1.18, whilst that for England and Wales was 1.39. The corresponding rates for 1952 were 1.93, 1.10, 1.74 and 1.53 respectively.

DIPHTHERIA.—There was an increase in the incidence of this disease, for 73 notifications were made, compared with 47 in the previous year. In the Urban Districts there were 71 cases, as against 45, and in the Rural Districts two (the same as 1952). The total case-rate was 0.08, whilst that for England and Wales was 0.01, as against 0.05 and 0.01 respectively, in the previous year.

Six deaths occurred, all in the Urban Districts.

In 1952 there were two deaths from this disease.

ENTERIC FEVER.—Three notifications of enteric fever were made during the year, the same as in 1952. One case was of typhoid and two of paratyphoid. One case of typhoid and one of paratyphoid occurred in the Urban Districts and one case of paratyphoid was notified from a Rural District.

Of the three cases notified in 1952, two were of typhoid and one of paratyphoid, all of which occurred in Urban Districts.

The 1953 case-rates for the country as a whole, for typhoid and paratyphoid, were 0.00 and 0.01 per thousand of the population respectively, the Staffordshire rates being 0.00 and 0.00.

MEASLES.—During the period, 11,514 notifications were made, which indicates an appreciable increase, for the corresponding figure for 1952 was 5,688. Eight thousand, nine hundred and sixty-eight cases occurred in Urban and 2,546 in Rural Districts, compared with 4,139 and 1,549 in the previous year. The 1953 case-rates for the County and England and Wales were 13.26 and 12.36 as against 6.63 and 8.86 in 1952.

Five deaths occurred in Urban Districts and one in the Rural, the death-rates being 0.01 and 0.00 respectively. There were three deaths in 1952.

WHOOPING COUGH.—There was a marked increase in the number of notifications, 3,495 being made in 1953, as compared with 2,545 in 1952. In the Urban Districts there were 2,710, as against 1,946 whilst the corresponding figures for the Rural Districts were 785 and 599. The case-rate for the County was 4.03 and for England and Wales, 3.58.

There were 10 deaths in the Urban Districts and two in the Rural, the death-rates being 0.02 and 0.01 respectively. In 1952, five deaths were due to this cause.

DYSENTERY.—Fifty-four notifications were made in 1953 as compared with 134 in 1952 and 407 in 1951. Fifteen of the 35 Sanitary Districts were affected, but in five instances, viz., Biddulph U.D., Lichfield M.B., Wednesbury M.B., Cannock R.D. and Newcastle R.D., single cases only were notified.

Cases notified in other districts were as follows :— Aldridge U.D. 3, Brierley Hill U.D. 16, Cannock U.D. 2, Coseley U.D. 3, Leek U.D. 6, Stafford M.B. 6, Tipton M.B. 4, Willenhall U.D. 4, Cheadle R.D. 3, and Lichfield R.D. 2.

ACUTE POLIOMYELITIS, ACUTE ENCEPHALITIS, MENINGOCOCCAL INFECTION.—New regulations designed to replace former legislation were brought into operation on the 1st January, 1950. They introduced nomenclature consistent with the international standard classification of diseases and slightly extended the scope of clinical conditions notifiable under the head of acute encephalitis.

Forty-three cases of Acute Poliomyelitis were notified, compared with 46 in 1952, 36 occurring in Urban and seven in Rural Districts. Two cases of Acute Encephalitis were notified compared with none in previous year. Deaths from these causes numbered four ; three occurred in Urban and the other in a Rural District. In 1952 there were two deaths, one in an Urban and one in a Rural District.

Twenty-four notifications of Meningococcal Infection (19 in 13 Urban areas and five in four Rural Districts) were made during 1953, compared with 27 in 1952. Six deaths occurred, of which four were in Urban Districts. In the previous year there were ten deaths.

The deaths from non-notifiable infectious diseases were as follows :—

GASTRITIS, ENTERITIS AND DIARRHŒA.—Eight deaths occurred in Urban Districts and two in Rural Districts in children under one year of age, the death-rates being 0.77 and 0.60, respectively, per thousand live births. The figures for 1952 were 22, 1, 2.20 and 0.30 respectively.

INFLUENZA.—In 1953 there were 85 deaths in Urban and 30 in Rural Districts, as compared with 26 and 2, respectively, in 1952.

The number of cases of notifiable infectious diseases, with the deaths, in the Administrative County during 1953, are as follows :—

Diseases	Notificati ons		Deaths	
	Urban	Rural	Urban	Rural
Smallpox	—	—	*	*
Scarlet Fever	783	240	*	*
Diphtheria	71	2	6	—
Enteric Fever	2	1	*	*
Measles	8968	2546	5	1
Whooping Cough	2710	785	10	2
Puerperal Pyrexia	39	9	*	*
Erysipelas	59	23	*	*
Meningococcal Infection	19	5	4	2
Acute Poliomyelitis (Paralytic)	26	3	}	3
Acute Poliomyelitis (Non-Paralytic)	10	4		
Acute Encephalitis (Infective)	1	—		
Acute Encephalitis (Post Infectious)	1	—		
Pneumonia	550	188	235	78
Dysentery	47	7	*	*

*Not classified in Registrar-General's Return

TUBERCULOSIS

The following table shows new cases of tuberculosis, including primary notifications and cases which came to notice, otherwise than by formal notification, and deaths from the disease, classified according to age and sex :—

1953 AGE PERIODS.	NEW CASES				DEATHS.			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0—	3	1	3	2	1	1	—	1
1—	4	—	—	1	}	—	3	2
2—	18	13	7	6				
5—	18	26	14	5	}	1	—	2
10—	18	16	5	9				
15—	26	51	7	5	}	3	5	2
20—	53	74	4	6				
25—	90	95	2	5	}	23	16	4
35—	87	59	3	3				
45—	72	22	—	1	}	54	16	1
55—	56	25	1	1				
65—	22	7	2	1	13	7	2	—
75 and upwards	5	3	1	—	3	4	—	1
Totals	472	392	49	45	98	49	14	10

During 1953, 147 deaths occurred from pulmonary tuberculosis and 24 from other forms of this disease, the death-rates being 0.17 and 0.03, respectively. The corresponding rates for 1952 were 0.22 and 0.04.

The table which follows shows the death-rates in the Urban and Rural Districts of the County from 1914 :—

Year	Death Rate per 1,000 of the Population			
	Phthisis		Other forms of Tuberculosis	
	Urban	Rural	Urban	Rural
1914	0.89	0.54	0.31	0.20
1915	0.94	0.67	0.34	0.29
1916	1.01	0.80	0.40	0.29
1917	1.01	0.74	0.34	0.31
1918	1.03	0.88	0.31	0.28
1919	0.83	0.61	0.22	0.30
1920	0.75	0.56	0.30	0.21
1921	0.80	0.53	0.23	0.21
1922	0.80	0.55	0.24	0.17
1923	0.75	0.58	0.25	0.22
1924	0.73	0.58	0.22	0.20
1925	0.83	0.49	0.22	0.14
1926	0.74	0.50	0.22	0.11
1927	0.73	0.44	0.21	0.22
1928	0.64	0.48	0.14	0.13
1929	0.76	0.54	0.15	0.12
1930	0.72	0.54	0.15	0.13
1931	0.78	0.52	0.17	0.13
1932	0.64	0.42	0.16	0.14
1933	0.72	0.50	0.14	0.06
1934	0.67	0.43	0.11	0.16
1935	0.67	0.35	0.13	0.08
1936	0.53	0.34	0.11	0.08
1937	0.60	0.41	0.13	0.11
1938	0.56	0.29	0.13	0.11
1939	0.52	0.35	0.09	0.11
1940	0.51	0.29	0.11	0.06
1941	0.57	0.33	0.16	0.14
1942	0.52	0.34	0.13	0.10
1943	0.55	0.29	0.11	0.07
1944	0.52	0.25	0.10	0.07
1945	0.56	0.22	0.11	0.09
1946	0.49	0.28	0.08	0.06
1947	0.47	0.28	0.09	0.07
1948	0.51	0.33	0.07	0.05
1949	0.45	0.22	0.06	0.03
1950	0.39	0.20	0.06	0.06
1951	0.37	0.12	0.05	0.04
1952	0.27	0.07	0.04	0.04
1953	0.19	0.10	0.04	0.00

NOTIFICATION

The following are particulars of the primary notifications made from 1918 :—

1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
856	699	642	929	971	1029	974	1232	1400	1106	1194	1017	1021	1129	1074
1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
1011	929	825	831	858	789	726	669	788	830	841	798	769	775	813
1948	1949	1950	1951	1952	1953									
852	837	807	901	805	958									

The following table gives particulars of primary notifications of tuberculosis notified in the Administrative County each year since 1918, together with the case rates per 1,000 of the estimated population. Only from 1946 is it possible to divide these figures to show numbers of respiratory and non-respiratory notifications, and the appropriate case rates are given.

Year	Primary Notifications			Case Rate per 1,000 of the Population		
	Respiratory Tuberculosis	Non-Respiratory Tuberculosis	Tuberculosis (all forms)	Respiratory Tuberculosis	Non-Respiratory Tuberculosis	Tuberculosis (all forms)
1918			856			1.37
1919			699			1.04
1920			642			0.92
1921			929			1.29
1922			971			1.37
1923			1,029			1.45
1924			974			1.36
1925			1,232			1.71
1926			1,400			1.93
1927			1,106			1.55
1928			1,194			1.68
1929			1,017			1.43
1930			1,021			1.44
1931			1,129			1.59
1932			1,074			1.50
1933			1,011			1.41
1934			929			1.29
1935			825			1.14
1936			831			1.14
1937			858			1.16
1938			789			1.05
1939			726			0.95
1940			669			0.88
1941			788			1.01
1942			830			1.07
1943			841			1.09
1944			798			1.03
1945			769			1.00
1946	636	139	775	0.80	0.17	0.97
1947	681	132	813	0.84	0.16	1.00
1948	728	124	852	0.88	0.15	1.03
1949	713	124	837	0.85	0.15	1.00
1950	706	101	807	0.83	0.12	0.95
1951	778	123	901	0.91	0.14	1.05
1952	712	93	805	0.83	0.11	0.94
1953	864	94	958	1.00	0.11	1.10

The following is a summary of cases, other than primary notifications, coming to notice from other sources during the year:—

	1953
Number of cases other than primary notifications coming to knowledge within the year	19
Number of un-notified cases which died	13
Number of other cases which died, notification being made after death	6
Ratio of un-notified cases which died to total deaths	1 : 9.0

In 1953, roughly 15 out of 17 deaths were of cases notified under the regulations before decease.

The total notifications are classified in a preceding table.

REGISTERS OF DISTRICT MEDICAL OFFICERS OF HEALTH

At the end of the year the following cases were included in these registers :—

TOTAL CASES	PULMONARY			NON-PULMONARY		
	M.	F.	Total	M.	F.	Total
8555	3623	3105	6728	904	923	1827

The figures given above indicate that in 1953 there was one case of tuberculosis in every 101 persons, or 9.9 per 1,000 of the population.

The table also shows that in 1953 there was one death in approximately every 51 cases.

MASS RADIOGRAPHY

Particulars were given in the 1952 Report regarding the arrangements for mass radiography within the area. Four units are concerned and surveys have been conducted at which wherever possible appropriate categories of officers employed by the County Council have attended i.e., those whose employment is in any way connected with the care of children—staffs of Children's Homes, teachers, etc.

TUBERCULOSIS HEALTH VISITING

During the year consideration was given to the employment in a number of selected districts of nurses engaged whole-time in the home visiting of tuberculous patients instead of the work being carried out by a large number of Health Visitors responsible for the cases in their own districts. It was felt that the measure of liaison between the Health Visitors and the Chest Physicians, though improved since the beginning of the existing scheme, was still inadequate and that a fuller measure would be possible if a Chest Physician were dealing with a few nurses only in the area served by each Chest Physician. A full-time Tuberculosis Visitor would be available to attend each session of the clinic to meet the patients and to discuss with the Chest Physician particulars relating to the

cases in her area, whereas under the existing scheme visits to the Chest Clinics by nurses with combined duties were infrequent, and in any case it was impracticable for Chest Physicians to deal with a large number of individual nurses concerning their T.B. cases at any one session.

A report was duly submitted to the Health Committee and at a meeting on the 11th April, 1953, it was decided to appoint full-time T.B. Visitors in the following areas, the appointments to be within the framework of the staff establishment already approved by the Health Committee for the respective areas :—

- (a) Stafford, Rugeley and district and Uttoxeter ;
- (b) Cannock and district.
- (c) Lichfield and district.

Appointments were duly made, the nurses concerned commencing duty on the 1st September, 26th October and 23rd November, 1953, respectively. The total number of visits made by the Visitors to tuberculous households was 605.

TUBERCULOSIS—1953 CIRCULAR 1/54

No. of notified cases of pulmonary tuberculosis	864
No. of contacts examined	4,775
No. of contacts found to be tuberculous	71

EMPLOYMENT

Where possible the employment of known cases of tuberculosis is dealt with by consultation with the Chest Physician and the Disablement Resettlement Officer of the Ministry of Labour. Suitable cases are referred to Rehabilitation Centres.

EARLY CASES AMONG CHILDREN AND OTHERS

Several surveys have been carried out by the Mass Miniature Radiography Units of school children, and any cases requiring further supervision are referred to the Chest Clinic concerned. In certain areas all school entrants are tuberculin tested and all positive reactors are referred to the Chest Clinic. Adult contacts of these reactors are referred to the Mass Miniature Radiography Unit and a number of adult cases have been traced in this way.

POSTHUMOUS CASES

As far as is possible full examinations are made of the contacts of those cases who were not notified as tuberculous during life.

B.C.G. VACCINATION

During the year a total of 367 cases have been vaccinated at the Tuberculosis Dispensaries.

CANCER

In the following table the deaths from Cancer during 1953, in age and sex groups, in the Urban and Rural Districts of the County, are shown :—

Age Groups	Urban Districts			Rural Districts			Grand Total
	Male	Female	Total	Male	Female	Total	
0— ..	—	—	—	—	—	—	—
1— ..	—	1	1	2	—	2	3
5— ..	3	1	4	1	—	1	5
15— ..	3	1	4	—	—	—	4
25— ..	41	52	93	4	4	8	101
45— ..	276	192	468	65	65	130	598
65— ..	160	148	308	66	40	106	414
75— ..	112	121	233	48	49	97	330
Totals ..	595	516	1,111	186	158	344	1,455

As will be seen from the preceding table, this year there were 1,455 deaths from Cancer. In 1952 there were 1,388 preceded by 1,370 in 1951. This year's total is the highest number so far recorded in the Administrative County, the previous highest being in 1950 when 1,436 deaths were recorded. In each year since 1937 the figure has exceeded 1,000. During the period under review this group of deaths accounted for 16.4 per cent. of the total civilian deaths, as compared with 16.3 per cent. last year, when the total number of deaths from all causes was less by 347. As stated in previous Reports, there is little variation from year to year in the group of deaths from this cause which occur in persons under the age of 45 years, the current number being 113, as against 118 and 116 in 1951 and 1952, respectively.

In considering the mortality from Cancer, one must bear in mind that the general mortality from all causes under the age of 45 has, over a long period, become steadily less. This means, therefore, that in every population there exists an increasing number of persons of an age more susceptible to cancer than are younger persons, the statement being proved by the fact that whilst in 1920 48.6 per cent. of the deaths from all causes were of persons under 45, the figure has gradually decreased in the subsequent years to 13.1 per cent. in 1953.

VENEREAL DISEASES

During the year, 920 Staffordshire patients attended for treatment for the first time, compared with 856 in 1952, and the following detailed table indicates where it was obtained. It will be seen that in 1953, 698 of the persons who attended were found not to be infected, and the corresponding figure in the previous year was 666. The actual cases in 1952 and 1953 were 190 and 222, respectively.

TREATMENT CENTRE	Syphilis	Gonorrhœa	Other Conditions	Total New Cases
Birmingham General Hospital	14	13	99	126
Burton-on-Trent General Infirmary	1	—	5	6
Derby Royal Infirmary	1	3	15	19
Dudley Guest Hospital	14	38	135	187
Holloway, N.7, Royal Northern Hospital	—	2	—	2
Liverpool (Seamen's Dispensary)	—	—	4	4
Stafford (Staffordshire General Infirmary)	8	14	57	79
Stoke-on-Trent (North Staffordshire Royal Infirmary)	13	22	85	120
Stoke-on-Trent (Wellesley Street)	1	14	64	79
Walsall (Manor Hospital)	5	20	75	100
Wolverhampton Royal Hospital	7	32	159	198
Totals	64	158	698	920

For comparative purposes the totals of the cases included in the foregoing table for the last nineteen years have been extracted and are given below :—

Year	Syphilis	Soft Chancre	Gonorrhœa	Total Cases	Non-Veneral
1935 ..	166	4	322	492	295
1936 ..	137	6	294	437	341
1937 ..	116	5	320	441	326
1938 ..	133	3	302	438	344
1939 ..	116	5	283	404	310
1940 ..	126	1	244	371	348
1941 ..	111	1	267	379	359
1942 ..	134	2	266	402	512
1943 ..	163	2	271	436	783
1944 ..	171	2	273	446	791
1945 ..	186	—	355	541	867
1946 ..	275	2	451	728	1,180
1947 ..	147	2	254	403	682
1948 ..	177	4	219	400	904
1949 ..	148	—	234	382	842
1950 ..	85	—	178	263	824
1951 ..	67	—	163	230	760
1952 ..	54	—	136	190	666
1953 ..	64	—	158	222	698

BLIND PERSONS

The following table gives particulars of Registered Blind and Partially Sighted Persons registered during 1953. Of the 277 cases registered, 123 were recommended for treatment of one sort or another, and 70 of these actually received such treatment. Of the remaining 154, a few died before treatment could be carried out, and the remainder declined to undergo treatment, the main reason being their age. (Of the 277 newly-registered cases, 70% were over 65 years of age).

	<i>Cause of Disability</i>			
	<i>Cataract</i>	<i>Glaucoma</i>	<i>Retrolental Fibroplasia</i>	<i>Others</i>
(i) Number of cases registered during the year in respect of which para. 7 (c) of Forms B.D.S recommends :—				
(a) No treatment	38	16	—	100
(b) Treatment (medical, surgical or optical)	56	7	—	60
(ii) Number of cases at (i) (b) above which on follow-up action have received treatment . .	38	5	—	27

When treatment of any kind is recommended the Home Teacher of the Blind informs the person concerned and endeavours to persuade and encourage him to accept same. Such cases are kept under constant observation. It will be realised, however, that when the blind persons are very old they may not be suitable for certain treatment, for instance, surgical, although there was one case of a woman aged 97 where operative treatment had been recommended.

OPHTHALMIA NEONATORUM

The number of cases of Ophthalmia Neonatorum notified during the year was 20. In 16 instances the confinements were domiciliary, and of these 14 were nursed at home, one was admitted to hospital and one treated at hospital as an out-patient.

The remaining four cases were born in hospital, two being satisfactorily treated before discharge, one removed to another hospital and in the other case the condition occurred subsequent to discharge from hospital and was treated at home.

Of the 20 cases, six were moderately severe and 14 slight. Vision was unimpaired in every instance.

GENERAL HEALTH PROPAGANDA

During the year the facilities for the provision of general health and sex education lectures continued and talks were given to Youth Clubs, Parent/Teacher Associations and Women's Institutes.

In 1953, as formerly, the County Council made a grant to the Central Council for Health Education and during the year the latter again provided a speaker to give some of the talks and lectures mentioned above and also educational exhibition stands and a succession of interchangeable topic material.

The stands were again in use at the Welfare Centres and School Clinics in the Newcastle, Stafford, Uttoxeter, Lichfield and Wednesbury Areas.

AREA ADMINISTRATION

In the Report for 1948 particulars of the Area Committees and of their districts and population were given, and in the Report for 1951, mention was made of the revised scheme of administration which came into operation on the 1st July, 1951. No change has taken place since that time.

CARE OF MOTHERS AND YOUNG CHILDREN

INFANT WELFARE CENTRES

During 1953, three new Centres were opened at The Institute, Tettenhall Wood, The Institute, Abbots Bromley, and the Central Hall, Pelsall.

At the end of the year there were 105 Welfare Centres in operation, of which 61 were combined (i.e., Minor Ailment Clinics and Welfare Centres) and 44 were Welfare Centres only.

The following are particulars of the number of sessions and attendances made during the year :—

No. of sessions	<u>4,865</u>
-------------------------	--------------

No. of children who attended during the year and who were born in—

1953	7,581
1952	4,624
1951—1948	<u>6,275</u>
Total	<u>18,480</u>

No. of attendances during the year made by children who at the date of attendance were

Under 1 year	115,463
1 but under 2	34,652
2 but under 5	<u>33,326</u>
Total	<u>183,441</u>

ANTE-NATAL CLINICS

At the 31st December, 1953, there were 46 Ante-Natal Clinics (special sessions being held at 34 of them) and 4 Post-Natal Clinics (1 special and 3 held in conjunction with Welfare Centre sessions).

The following are the numbers of expectant mothers and attendances made by them during the year at the Ante-Natal Clinics :—

Number of expectant mothers attending ..	6,321
Total number of attendances	20,167

Two hundred and fifteen women attended the Post-Natal Clinics during the year, 250 attendances being made.

Where treatment is required, the patient is referred to her own doctor, through the medium of the midwife, except for unsatisfactory dental conditions. Treatment of the latter can be given under the County Council scheme and the patients are offered the facilities provided.

The Ante-Natal Clinic at Albert Street, Wednesbury, was closed on the 25th May, 1953.

RURAL ANTE-NATAL SCHEME

The following are details of the cases dealt with under the above-mentioned scheme during the period :—

	1951	1952	1953
Number of examinations undertaken ..	46	27	35
Number of expectant mothers examined	38	24	29
Number of expectant mothers examined twice in year	8	3	7
Number of expectant mothers examined once only during year	30	20	23
Of these, number who were examined in previous year	—	1	1

The figures for 1951 and 1952 are shown for comparison purposes.

MATERNITY OUTFITS

In accordance with the provisions of the National Health Service Act, maternity outfits are required to be provided by Local Health Authorities for appropriate cases free of cost. The number issued during the year was 7,263 as against 7,125 for 1951 and 6,709 for 1952.

PAYMENT OF MIDWIVES' FEES

The compensation fee of 10/- was not claimed by any independent midwives during the period covered by this Report in respect of any cases which had been booked by them and which they had lost as a result of County Council activities.

PUERPERAL PYREXIA

In 1953, 48 cases of Puerperal Pyrexia were notified in the County area.

Of the cases dealt with during the period under review, 10 were sent to hospital and 15 were cases in which confinement had taken place in hospital.

OPHTHALMIC TREATMENT

During the year 160 children were referred from the Infant Welfare Centres for ophthalmic examination.

Glasses were prescribed for 91 of these children who are mostly cases of squint and are kept under supervision.

These cases, with others seen in previous years, made 249 visits to the Clinics.

ORTHOPAEDIC TREATMENT

The number of cases of children under five years of age referred for orthopaedic treatment during the year was 233.

ARTIFICIAL LIGHT

During the year, 368 cases were referred for artificial light treatment.

DENTAL TREATMENT

The following table shows the number of cases provided with dental care :—

	<i>Examined</i>	<i>Needing Treatment</i>	<i>Treated</i>	<i>Made Dentally Fit</i>
Expectant and nursing mothers	562	562	560	278
Children under five ..	897	897	897	897

The form of treatment provided is shown in the table below :—

	Extractions	Anaesthetics		Fillings	Scalings or Scalings and Gum Treatment	Silver Nitrate Treatment	Dressings	Radiographs	Dentures provided	
		L.A.	General						Complete	Partial
Expectant and Nursing Mothers	2,327	404	267	194	54	3	257	18	111	125
Children under five	1,587	451	372	21	—	237	8	—	—	—

Dentures supplied were constructed in the County Dental Laboratory. X-ray units are now available at Stafford, Bilston, Sedgley, Cannock and Newcastle Clinics, and the radiographs were taken at these centres. In all other areas arrangements have been made with private practitioners to undertake X-ray examinations on behalf of this Authority.

DENTAL LABORATORY

The summary of work completed during the year at the County Dental Laboratory is shown in the following tables :—

DENTURE WORK

<i>Nature of Denture</i>						<i>Nos. Completed</i>
Full upper dentures	..	..	..	..	..	138
Full lower dentures	..	..	..	..	..	117
Partial upper dentures		..	..	..	..	288
Partial lower dentures	..	..	..	..	..	76
Remakes	..	..	..	..	..	20
Repairs to dentures	..	..	..	..	..	99
Total						738

ORTHODONTICS

<i>Appliances</i>						<i>Nos. Completed</i>
Regulation appliances	..	..	..	..	..	580
Repairs to appliances	..	..	..	..	..	22
Total						602

SUNDRIES

<i>Nature of</i>						<i>Nos. Completed</i>
Obturator	..	..	..	..	..	6
Crowns	..	..	..	..	..	2
Inlays	..	..	..	..	..	1
Splints	..	..	..	..	..	20
Special trays	..	..	..	..	..	116
Demonstration models		..	..	..	..	4
Total						149

EXTRA NOURISHMENT

During the financial year 1953-54 the sales and free issues amounted to £18,063 as compared with £16,048 during the previous financial year. Of this figure, the amount apportionable to free issues was very small, in fact almost negligible.

NOTIFICATION OF BIRTHS

The following are particulars of the live and stillbirths notified during 1953 :—

Number of live births	..	..	..	..	13,797
Number of stillbirths	..	..	..	..	335
Notified by midwives	..	..	..	..	13,485
Notified by parents and doctors	..	..	..	..	647

The births registered during the period cannot strictly be compared with those notified because of the period allowed by law for each purpose.

CARE OF ILLEGITIMATE CHILDREN

Full information has been given in previous Reports of the arrangements in being with the Lichfield Diocesan Association for Moral Welfare Work, and the following are the particulars of the cases dealt with during 1953 :—

With Mother	..	..	..	..	..	91
Adoption	..	..	..	..	..	58
Foster Mothers	..	..	..	..	..	3
Voluntary Children's Homes	..	..	..	..	..	2
Stillborn	..	..	..	..	..	7
Died	..	..	..	..	..	3
In County Council Children's Homes	..	..	..	..	..	5
Hospital	..	..	..	..	..	1
Referred to workers in other areas	..	..	..	..	..	1
Total	..	..	..	..	..	<u>171</u>

Sixty-four girls were sent to Diocesan Homes and Homes of other religious denominations during the year.

BROADFIELD HOUSE, KINGSWINFORD

The County Council's Mothercraft Training Hostel at Kingswinford, with accommodation for 18 cases, was opened on the 10th August, 1953, the following being a brief report on its history :—

This property was bought by the Staffordshire County Council in November, 1949, with the intention of using it for a Convalescent Home for mothers after discharge from hospital following confinement. At a meeting of the Health Committee in January, 1950, however, it was decided that Broadfield House should be used as a Mothercraft Training Hostel for unmarried mothers and their babies instead of a Convalescent Home, as the Mothercraft Training Hostel at Glentworth, Stafford, was to close down. Approval to the scheme was obtained from the Ministry of Health and as stated the Home opened on the 10th August, 1953. There are no facilities for confinements in Broadfield House, but arrangements have been made for these to take place in Wordsley Hospital which, owing to its proximity to the Hostel, is a most convenient arrangement and

transfer to hospital need not take place until the onset of labour. The normal period of stay in the Hostel is two months before confinement and two months after the baby is born, or if the confinement has already taken place until the child is two months' old.

Since the opening of the Hostel eleven cases have been admitted, nine still being in residence at the end of the year. Included in these figures is a case from an outside Authority. In this connection it should be mentioned that the Health Committee have agreed that cases from other Authorities can be admitted providing they accept financial responsibility for their maintenance.

PREMATURITY

The following table gives particulars of the number of premature infants who were born during 1953 :—

(1) *Number of Premature Live Births Notified*

(a) In hospital	..	..	..	..	..	531
(b) At home	..	..	..	..	..	344
(c) In private nursing homes			..	..	..	9
			Total	..	..	<u>884</u>

(2) *Number of Premature Stillbirths Notified*

(a) In hospital	..	..	..	..	..	111
(b) At home	..	..	..	..	..	67
(c) In private nursing homes			..	..	..	2
			Total	..	..	<u>180</u>

Weight at birth	PREMATURE LIVE BIRTHS												PREMATURE STILLBIRTHS						
	Born in hospital			Born at home and nursed entirely at home			Born at home and transferred to hospital on or before 28th day			Born in nursing home and nursed there			Born in nursing home and transferred to hospital on or before 28th day			Born in hospital	Born at home	Born in nursing home	
	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Born in hospital	Born at home	Born in nursing home
3 lb. 4 oz. or less (1,500 gms. or less)	62	29	18	12	8	2	25	13	7	—	—	—	—	—	—	52	52	22	—
Over 3 lb. 4 oz. up to and including 4 lb. 6 oz. (1,500-2,000 gms.)	113	10	86	12	1	10	48	4	34	—	—	—	—	—	—	29	29	19	—
Over 4 lb. 6 oz. up to and including 4 lb. 15 oz. (2,000-2,250 gms.)	113	8	104	38	1	37	17	—	14	—	—	2	—	—	—	10	10	12	1
Over 4 lb. 15 oz. up to and including 5 lb. 8 oz. (2,250-2,500 gms.)	243	1	235	163	2	160	29	1	25	—	—	7	—	—	—	20	20	14	1
TOTALS	531	48	443	225	12	209	119	18	80	9	9	9	—	—	—	111	111	67	2

NURSERIES AND CHILD MINDERS' REGULATIONS ACT, 1948

At the end of 1952 premises were registered in three instances under the above-mentioned Act. No new applications were received and one of the nurseries ceased to be so registered during the period. At the 31st December, therefore, premises were registered in two instances only.

DAY NURSERIES

The following table gives particulars of the Day Nurseries in operation in the Administrative County during 1953 :—

	No. of Approved Places		No. of Children on Register at end of the year		Average Daily Attendance	
	0-2	2-5	0-2	2-5	0-2	2-5
*LEEK (St. Luke's Hall, Organ Ground) ..	—	40	—	—	—	10.0
KIDSGROVE (Liverpool Road)	25	25	2	4	3.1	8.9
NEWCASTLE (Liverpool Rd., Cross Heath)	15	25	7	18	6.4	12.4
NEWCASTLE (Crown Street, Silverdale) ..	15	25	6	8	4.2	8.6
STAFFORD (Riverside, South Walls)	25	25	17	28	16.0	17.0
TIPTON (Toll End Road)	12	38	12	17	8.0	15.0
BILSTON (Prouds Lane)	10	30	7	14	5.5	16.3
WEDNESFIELD (Lichfield Road)	20	30	5	15	5.7	13.5
WILLENHALL (Pinson Park)	25	25	14	13	11.8	11.8
WILLENHALL (Shepwell Green)	26	34	1	9	5.9	11.5

*Leek Day Nursery was closed on 31st December, 1953.

As has been stated in the previous Report, the County Council also accepted financial responsibility for 20 of the places provided in a Nursery owned by Messrs. Rubery, Owen and Co. Ltd., of Darlaston. The total number of places provided in this Nursery is 42, 10 being approved for children up to two years of age, the remaining 32 being for children aged 2—5 years.

The following are the details of the average daily attendance of children at this Nursery during the year :—

0—2 years	..	..	..	..	3.5
2—5 years	..	..	..	..	18.1

MATERNITY AND NURSING HOMES

The County Council are responsible for the registration and pectionins of these Homes in the Administrative County.

The following are particulars of the premises registered during the year :—

Number of premises registered at end of year	..	10
Number of applications for registration granted	..	—
Number of Homes given up	.. .. .	2
Number of Homes with more than two beds	..	5
Number of Homes solely for midwifery and maternity cases	.. .. .	8
Number of Homes exempted from registration	..	2

MATERNAL MORTALITY

Until the 1949 Report it had been possible to include a table showing the mortality rate for the Administrative County giving deaths per thousand (live and still) births over a period of years. Figures, however, are not now given by the Registrar-General to coincide with the information previously shown, and the only information relative to the above heading received shows that there were 15 deaths during the year arising from pregnancy, childbirth and abortion. Thirteen of these occurred in Hospital.

In 1952 the number of maternal deaths occurring in the Administrative County was 13.

The number of deaths reported by midwives in accordance with their rules during the year, i.e., the deaths occurred whilst they were actually in attendance as midwives or maternity nurses, was two.

INFANTILE MORTALITY

Here again, until the Report for 1950 it was possible to include a table showing statistics over previous years relating to deaths from premature birth, congenital malformations, birth injuries and infantile diseases. The Registrar-General, however, has only defined one of the above-mentioned categories in his statistics, i.e., congenital malformations, and the number given under this heading is 70. The remaining causes mentioned above have not been classified.

During 1953, 48 deaths were reported by the midwives, having occurred whilst they were in attendance. Fourteen of these were due to feebleness and prematurity.

FAMILY PLANNING

The Family Planning Association maintains three clinics in the Administrative County, at Bilston, Stafford and Cannock. At Bilston the sessions are held at the Centre Health Clinic on Tuesday afternoons weekly, at Stafford each Thursday afternoon, at North Walls Clinic, and at Cannock at Church Street on the 2nd and 4th Thursday afternoons. In addition, early in 1952, arrangements were made to give financial support towards a family planning clinic which is held each Monday evening from 6.0 p.m. to 8.0 p.m. at the Infant Welfare Centre, Cross Street, in the County Borough of Burton-on-Trent.

CHILDREN NEGLECTED OR ILL-TREATED IN THEIR OWN HOMES

Full particulars were given in the Annual Report for 1952 of the joint circular dated 31st July, 1950, of the Home Office, Ministry of Health and Ministry of Education, which is concerned with the action to be taken on the discovery of neglect or ill-treatment of children in their own homes. Medical Officers to Area Health Committees, acting as

local co-ordinating officers on behalf of the County Medical Officer of Health, hold periodical meetings with members of all interested Authorities, Societies, etc., and good results have been obtained in many cases. During the year some 104 cases were considered and the necessary action taken wherever possible.

HOME NURSING SERVICE

At the 31st December, 1953, there were 71 whole-time general nurses, together with 75 part-time general nurses, 40 being also domiciliary midwives and 35 district nurse-midwives with part-time health visiting duties.

The principle of employment of male nurses in certain thickly-populated districts, for the nursing of patients suffering from diseases which could be more appropriately nursed by a male nurse, and heavy nursing cases, was agreed in 1950, and by the end of 1953 three male nurses were in the employ of the County Council, being centred in Newcastle-under-Lyme, Willenhall and Tipton. These are included in the figure of 71 whole-time general nurses.

As previously stated, the combined appointments are in those rural districts where the scattered population makes it impossible to separate general from midwifery work without creating districts too large to be practicable for either service.

Of the foregoing staff, 109 were car users, two had autocycles and two used cyclemasters, the remainder using ordinary cycles for their work.

During the year, 317,689 home visits were made by the nurses, the number of cases attended being 15,651.

The supervisory duties are undertaken by four Supervisors who are also Supervisors of Midwives and Health Visitors.

MIDWIVES' SERVICE

The following are particulars of the midwives practising at the end of 1953 :—

Number of midwives employed by the Authority	162
	(including 4 relief midwives)
	(S.R.N., S.C.M. 82, S.C.M. 80)
Number of midwives in private practice (including midwives employed in Nursing Homes) :—	
Domiciliary	14*
In Institutions	9
Number of midwives employed by Hospital Management Committees	33

*In addition, five out-of-area midwives notified, but of these only one took any cases.

The following table shows the number of cases dealt with by the midwives in the area of the Local Supervising Authority during the year.

NUMBER OF DELIVERIES ATTENDED BY MIDWIVES IN THE AREA DURING THE YEAR						
	Domiciliary Cases					
	Doctor not booked		Doctor booked		Totals	Cases in Institutions
	Doctor present at time of delivery of child	Doctor not present at time of delivery of child	Doctor present at time of delivery of child (either the booked Doctor or another)	Doctor not present at time of delivery of child		
(a) Midwives employed by the Authority	161	2,584	1,250	3,275	7,270	16
(b) Midwives employed by Voluntary Organisations :— (i) Under arrangements with the Local Health Authority in pursuance of Section 23 of the National Health Service Act, 1946	—	—	—	—	—	—
(ii) Otherwise (including Hospitals not transferred to the Minister under the National Health Service Act)	—	—	—	—	—	—
(c) Midwives employed by Hospital Management Committees or Boards of Governors under the National Health Service Act	—	—	—	—	—	3,828
(d) Midwives in Private Practice (including Midwives employed in Nursing Homes)	10	32	63	4	109	180
TOTALS	171	2,616	1,313	3,279	7,379	4,024

Of the midwives employed by the Authority, 116 were car users, seven had autocycles, one used a Bond Minicar, two used motor cycles, three used motorised cycles, the remainder using ordinary cycles for their work.

(These figures include the details of the transport of district nurse-midwives which are also included in those relating to the Home Nursing Service).

As mentioned in the section of this Report relating to Home Nursing, the Supervisors' duties also include supervision of that staff and, in addition, inspection of health visitors, school nurses and general nurses. During the year 844 visits and interviews were undertaken for midwifery matters.

Since the Act came into operation the names of 115 midwives have been removed from the roll in consequence of action taken by the Local Supervising Authority. In the year under review no such action was taken.

No applications were received during the year from independent midwives for compensation for loss of practice consequent upon suspension from duty, they themselves not being in default, after contact with infection.

Particulars of the notifications by midwives for the last fourteen years are given in the following table :—

Year.	* No. of Births attended by Midwives.	Medical Aid Notices.	Stillbirths.	Death of Mother.	Death of Child.	Contact with Infection.	Laying out the Dead.	Artificial Feeding.
1940	8714	3822	206	8	176	157	31	253
1941	9101	3966	220	8	187	151	38	280
1942	9325	3811	214	7	161	118	28	331
1943	9190	3546	172	3	159	125	17	374
1944	9136	3482	143	8	181	108	21	484
1945	8159	3259	133	8	119	113	14	460
1946	8526	3248	164	5	151	94	22	474
1947	9375	3358	167	4	127	125	18	568
1948	8071	3375	199	5	130	87	20	728
1949	6520	1767	146	5	81	82	21	616
1950	6586	1376	172	2	89	85	16	655
1951	5909	1467	161	1	67	85	20	709
1952	5252	1375	160	4	69	86	19	728
1953	5895	1290	148	5	48	60	21	764

* Including midwifery cases in Private Maternity Homes

The percentage of doctors' calls to the number of births attended by midwives was 21.9.

The following figures show the causes which occasioned the sending for medical assistance :—

PREGNANCY :

Albuminuria	12
Blood Pressure Abnormal	4
Disproportion	4
Hæmorrhage Ante-partum	28
Loss of Blood	2
? Presentation	3
Threatened Abortion	25
Unsatisfactory condition and general health	59
Varicose Veins	1
Total	<u>138</u>

LABOUR :

Abnormal Presentation	34
Abortion	36
Albuminuria	2
Delayed or Difficult Labour	121
Eclampsia	1
Hæmorrhage Ante-partum	10
Hæmorrhage Intra-partum	5
Hæmorrhage Post-partum	58
Inertia	11
Lacerated Perineum	423
Placenta Prævia	1
Premature Labour	11
Prolapse of Cord	1
Retained Placenta and Membranes	33
Unsatisfactory Condition	56
Total!	<u>803</u>

LYING-IN :

High Temperature	50
Inflamed and Painful Leg	13
Unsatisfactory Condition	69
Unusual Swelling of Breasts	1
Total	<u>133</u>

CHILD :

Asphyxia	8
Convulsions	2
Deformities	4
Feebleness and Prematurity	42
Hare Lip and Cleft Palate	4
Inflamed and Discharging Eyes	56
Jaundice	12
Rash	2
Spina Bifida	6
Unsatisfactory Condition	80
Total	<u>216</u>
Grand Total	<u><u>1,290</u></u>

Details of the number of notifications of sending for medical help during the financial year 1953-54 are given below :—

Number of notifications of sending for medical aid ..	1,326
Number of claims received	243
Percentage of claims received to notifications ..	18
Total amount paid to doctors during the year ..	£1,204

WATERY, INFLAMED AND DISCHARGING EYES

The number of cases notified during year was 56. All were treated at home. Vision was unimpaired in each instance. Of the 56 cases, 53 were not severe. They include medical aid calls for all unsatisfactory eye conditions and not only notified cases of Ophthalmia Neonatorum.

STILLBIRTHS

Number of Stillbirths registered	341
Reported by midwives	148

Causes of those reported by midwives :—

Albuminuria	1
Ante-Partum Hæmorrhage	6
Anencephalic	3
Blue Asphyxia	1
Cord Prolapse	4
Cord round Neck	3
Deformities	18
Difficult Labour	4
Following violent reaction of mother to blood transfusion	1

Inattention at birth	..	..	..	..	..	1
Inhalation before birth	..	..	..	..	..	1
Injury during birth	..	..	..	..	..	1
Maceration	..	..	..	..	..	32
Malpresentation..	..	..	..	..	..	8
Placenta Prævia	..	..	..	..	..	2
Post Maturity	..	..	..	..	..	1
Precipitate Labour	..	..	..	..	..	2
Premature	..	..	..	..	..	33
Toxæmia	..	..	..	..	..	2
Unsatisfactory Condition of Mother				..	..	3
Cause not known	..	..	..	..	..	21

GAS AND AIR ANALGESIA

At the end of 1953, 133 midwives employed by the County Council had received approved training in the administration of gas and air analgesia, and all existing midwives at present untrained will be trained as quickly as available vacancies at recognised training schools and staffing difficulties permit.

At the 31st December, 1953, 128 midwives were equipped with the necessary apparatus; the number of cases which were dealt with was 2,090, when nurses were acting as midwives, and 461 in their capacity as maternity nurses.

In addition, midwives administered Pethidine in a further 2,427 cases when acting as midwives and in 654 cases when acting as maternity nurses.

PUERPERAL PYREXIA REGULATIONS

Puerperal Pyrexia is defined as any febrile condition occurring in a woman in whom a temperature of 100.4° Fahrenheit (38° Centigrade) or more has occurred within fourteen days after child-birth or miscarriage.

The total notifications from the Administrative County were 48: Urban Districts 39, Rural Districts 9.

The case-rate for Puerperal Pyrexia per thousand total births (live and still) for Staffordshire was 3.41, as compared with 18.23 for England and Wales.

The figure for Staffordshire is extraordinarily low and it is possible that there may have been incomplete notification of all cases of puerperal pyrexia, the definition of which term was revised and defined under the Puerperal Pyrexia Regulations, 1951.

As will have been observed from a previous table, the midwives summoned medical assistance for rises of temperature on 50 occasions. These were specially investigated and it was found that in 32 instances the unsatisfactory conditions were due to abnormalities which could be said to arise directly from childbirth.

HEALTH VISITING

At the 31st December, 1953, the number of Health Visitors was 84 whole-time and one Health Visitor Lecturer and 34 part-time Health Visitors.

The arrangements mentioned in the Annual Report for 1945 concerning the training of Health Visitors were continued, and five nurses received such training during the year.

The following table gives particulars of the visits paid by this staff during 1953 to expectant mothers and young children :—

To Expectant Mothers

First visits	4,433
Total visits	8,233

To Infants under one year

First visits	13,939
Total visits	66,759

Total visits to children aged 1 year and under 2 years	40,497
Total visits to children aged 2 years but under 5 years	71,808

Two hundred and ninety-nine instances of insanitary conditions were reported by the Health Visitors to Local Medical Officers of Health during the period.

LECTURES ON MOTHERCRAFT

As in previous years lectures on mothercraft continued at Infant Welfare Centres and Ante-Natal Clinics.

Talks were given at 234 sessions of 28 Centres in various parts of the Administrative County, the total attendance being 4,322.

The Lecturer has been provided with a film projector and film strips which have made the talks more instructive and added greatly to the interest.

VACCINATION AND IMMUNISATION

In a previous Annual Report particulars were given of the arrangements made for this service from the 5th July, 1948, as required under the National Health Service Act, 1946.

VACCINATION

Every effort has continued to be made, through the medium of the midwife, health visitor and family practitioner during visits to the homes, Welfare Centres, etc., to encourage parents to have their babies vaccinated and the following are the particulars of the cases vaccinated or re-vaccinated during 1953. The figures for 1952 are given in brackets.

Age at date of vaccination	Under 1	1	2 to 4	5 to 14	15 or over	Total
Number Vaccinated ..	1,712† (1,680)*	365 (285)	167 (134)	142 (118)	307 (299)	2,693 (2,516)
Number Re-vaccinated ..	6 (5)	3 (2)	13 (19)	65 (56)	593 (613)	680 (695)

†12.5% of the Births for 1953 *12.6% of the Births for 1952.

DIPHTHERIA IMMUNISATION

Here again, every endeavour has been made during the year, through the medium of the Health Visitors, Welfare Centres, School Clinics, Teachers, etc., to ensure that the immunisation of children is carried out, and during 1953 the number immunised against diphtheria was as follows :—

Under 5	7,960
5—14 years	2,599

Reinforcing doses were given in 8,882 cases.

During 1952 the numbers were 8,080, 6,400 and 16,309, respectively

The following table gives particulars of immunisation in relation to child population at the 31st December, 1953 :—

Number of children at the 31st December, 1953, who had completed a course of immunisation *at any time before that date* (i.e., at any time since the 1st January, 1939).

Age at 31.12.53 i.e. Born in Year	Under 1 1953	1 to 4 1952-1949	5 to 9 1948-1944	10 to 14 1943-1939	Under 15 Total
Last complete course of injections (whether primary or booster)					
A. 1949-1953	625	28,760	45,018	22,949	97,352
B. 1948 or earlier	—	—	15,182	31,081	46,263
C. Estimated mid-year child population	13,190	55,910	139,600		208,700
Immunity Index 100 A/C ..	4.74	51.44	48.69		46.65

The number of notifications of diphtheria relative to children during the year was 55. Of these, 18 had completed a full course of immunisation. Six deaths from the disease occurred during the year and in one case the child had completed a course of immunisation.

The following table gives particulars of the incidence of, and mortality from, diphtheria amongst the child population of the Administrative County between 1949 and 1953.

DIPHTHERIA IMMUNISATION
INCIDENCE OF, AND MORTALITY FROM, DIPHTHERIA AMONGST THE CHILD POPULATION
ADMINISTRATIVE COUNTY 1949—1953

	Percentage of Total Population in Age Group					No. of Cases of Diphtheria					Attack Rate per 1,000 of Population in Age Group					No. of Deaths from Diphtheria					Case Fatality Rate per cent.					
	1949	1950	1951	1952	1953	1949	1950	1951	1952	1953	1949	1950	1951	1952	1953	1949	1950	1951	1952	1953	1949	1950	1951	1952	1953	
Children under 5 years of age :																										
Immunised ..	40.3	40.8	42.3	42.1	42.5	3	8	1	2	6	0.10	0.26	0.03	0.07	0.20	—	—	—	—	1	Nil	Nil	Nil	Nil	16.67	
Not Immunised	59.7	59.2	57.7	57.9	57.5	18	10	22	10	17	0.40	0.22	0.51	0.24	0.43	2	—	1	2	3	11.11	Nil	4.55	20.00	17.65	
Total ..	100.0	100.0	100.0	100.0	100.0	21	18	23	12	23	0.28	0.24	0.31	0.17	0.33	2	—	1	2	4	9.52	Nil	4.35	16.66	17.39	
Children aged 5 to 14 years:																										
Immunised ..	74.8	76.0	80.1	84.2	81.8	13	9	12	7	12	0.14	0.09	0.11	0.06	0.11	—	1	—	—	—	Nil	11.11	Nil	Nil	Nil	
Not Immunised	25.2	24.0	19.9	15.8	18.2	40	10	69	13	20	1.27	0.33	2.64	0.60	0.79	5	—	5	—	2	12.50	Nil	7.25	Nil	10.00	
Total ..	100.0	100.0	100.0	100.0	100.0	53	19	81	20	32	0.42	0.15	0.62	0.15	0.23	5	1	5	—	2	9.43	5.26	6.17	Nil	6.25	
All children under 15 years of age :																										
Immunised ..	61.8	62.9	66.4	69.7	68.8	16	17	13	9	18	0.13	0.13	0.09	0.06	0.13	—	1	—	—	1	Nil	5.88	Nil	Nil	5.56	
Not Immunised	38.2	37.1	33.6	30.3	31.2	58	20	91	23	37	0.76	0.27	1.31	0.37	0.57	7	—	6	2	5	12.07	Nil	6.59	8.70	13.51	
Total ..	100.0	100.0	100.0	100.0	100.0	74	37	104	32	55	0.37	0.18	0.50	0.15	0.26	7	1	6	2	6	9.46	2.70	5.77	6.25	10.91	

WHOOPING COUGH IMMUNISATION

In September, 1953, a scheme of immunisation against whooping cough was commenced throughout the County Area and is being operated both by general practitioners and also by the County medical staff at the Infant Welfare Centres. For some time previously the question of the type of antigen to be used had been given considerable thought and it was eventually decided on the advice of the Ministry of Health medical staff and the Medical Research Council that a combined vaccine for use for both whooping cough and diphtheria should not be used as the efficacy of the pertussis content is doubtful, the correct time to administer the two vaccines are different and more severe reactions are likely. In view of these circumstances, therefore, it was decided that a single antigen should be used, the type decided upon having shown promising results in Medical Research Council experiments.

It is, of course, too early as yet to comment on the working of the scheme, but information so far received shows that the public are taking advantage of it and at the end of the year 295 children had been immunised initially at Infant Welfare Centres whilst general practitioners had immunised 141 and given a further 11 children reinforcing doses.

COUNTY AMBULANCE SERVICE

STATIONS

During the year the 24-hour Station at Willenhall was transferred to Darlaston. The Station at Willenhall became an 8-hour Station and the 8-hour Stations at Wednesbury and Bilston were closed.

Arrangements were made with the Fire Brigade Committee for the joint use of the Fire Station premises at Tamworth and an 8-hour Station to serve the Tamworth area operated from the 12th January, 1953.

At the 31st December, 1953, the following was the position of the Stations for the County Area :—

24-hour Stations

Brierley Hill
Cannock
Coseley
Darlaston
Leek
Lichfield
Newcastle
Stafford
Uttoxeter

Sub-Stations

Aldridge
Biddulph
Brownhills
Cheadle
Kidsgrove
Rowley Regis
Rugeley
Stone
Tamworth
Tettenhall
Willenhall

Towards the end of December the new premises for the Ambulance Station at Newcastle were completed and occupied. In March the rented premises used for a Station at Rugeley had to be relinquished, the owner requiring the premises for other purposes. Other alternative accommodation was eventually found which has proved to be not entirely satisfactory for the purpose, but it is hoped that occupation will be for a

temporary period only. The progress in the building of new Stations is very slow and in the meantime rented premises have been adapted to meet the needs of the service and for the comfort and welfare of the personnel.

VEHICLES

The repairs and maintenance of the ambulance vehicles as far as mechanical condition is concerned continued to be the responsibility of the County Transport Department. During the year the Ambulance Committee considered the replacement of 20 of the older type of vehicles in the fleet and an order was placed towards the end of the year for 20 Daimler Ambulances. Two of these vehicles were delivered at the end of December and immediately placed into service.

MILEAGE, PATIENTS CARRIED, VEHICLES, ETC.

The table below indicates the mileage and the number of patients carried by each Station during the year, together with the number of personnel and vehicles at the 31st December, 1953 :—

STATION	Hours open	PERSONNEL		VEHICLES		AMBULANCES		SITTING CARS	
		Station Officers	Driver/Attendants	Ambulances	Sitting Cars	Mileage	Patients	Mileage	Patients
Aldridge ..	16	1	7	2	1	35,567	3,866	14,823	1,585
Biddulph ..	8	1	3	2	—	25,625	2,299	2,812	194
*Bilston ..	8	—	—	—	—	10,894	4,115	2,307	765
Brierley Hill ..	24	1	21	4	3	71,889	8,558	70,798	7,934
Brownhills ..	16	1	11	3	1	32,596	4,334	36,416	4,654
Cannock ..	24	1	20	4	3	66,442	7,726	78,751	9,683
Coseley ..	24	1	21	5	2	90,374	15,507	41,925	11,006
Cheadle ..	16	1	11	5	—	66,783	9,117	1,760	178
Kidsgrove ..	8	1	3	1	1	7,762	1,317	18,711	3,875
Leek ..	24	1	16	5	2	100,457	10,118	27,910	5,666
Lichfield ..	24	1	16	3	3	55,457	4,392	46,736	4,930
Newcastle ..	24	1	21	4	3	54,154	11,011	60,618	12,109
Rowley Regis ..	12	1	5	3	—	42,848	9,526	—	—
Rugeley ..	8	1	3	1	1	13,419	1,040	26,605	1,680
Stafford ..	24	1	21	3	4	41,437	4,474	70,285	6,759
Stone ..	8	1	3	1	1	18,868	2,337	25,314	2,962
Tamworth ..	8	—	3	1	2	11,350	1,010	23,314	2,044
Tettenhall ..	8	1	3	1	1	12,179	1,934	11,923	1,474
Uttoxeter ..	24	1	14	3	2	55,459	3,347	40,521	2,930
*Wednesbury ..	8	—	—	—	—	8,408	1,608	10,016	2,176
†Willenhall ..	8	1	3	1	1	4,615	1,461	4,003	1,345
‡Willenhall }						28,016	4,758	7,942	1,176
‡Darlston }	24	1	23	5	2	61,206	9,970	17,645	2,751
	—	20	228	57	33	915,805	123,825	641,135	86,976

* Closed 3rd October, 1953

† Opened as a Sub-Station 5th October, 1953

‡ Closed as a 24-hour Station and transferred to Darlaston

An analysis of the types of patients carried is given below :—

Maternity	3,879
Illness	197,981
Accident	4,525
Infectious	3,925
Mental	491
	<hr/>
	210,801
	<hr/>

The following is a comparison of the number of Stations, personnel, vehicles, patients carried and mileage at the 31st December, 1953, with the number at 31st December, 1952 :—

		31.12.52	31.12.53
Main Stations	.. ..	9	9
Sub-Stations	.. ..	11	11
Ambulances	.. ..	55	57
Sitting Case Cars	.. ..	33	33
Personnel	.. ..	238	248
Patients carried	.. ..	183,709	210,801
Mileage	.. ..	1,433,282	1,556,940

It will be observed from a comparison of the patients carried and mileage run that an increase of 27,092 occurred in the number of patients carried and the mileage increased by 123,658 miles.

AGENCY SERVICE

The services of the Mile Oak and District Ambulance which served a portion of the Lichfield Rural District area diminished upon the opening of the Tamworth Station on the 12th January, 1953, and this agency service ceased to operate on the 31st March, 1953.

The arrangements made with the Women's Voluntary Service for a Hospital Car Service in the area administered by the Stafford Area Health Committee continued throughout the year and in October a start was made with this service in the area administered by the Rowley Regis Area Committee. The following shows the number of volunteers, mileage run and patients carried :—

Month	STAFFORD AREA			ROWLEY REGIS AREA		
	No. of Cars	Mileage	Patients Carried	No. of Cars	Mileage	Patients Carried
January ..	14	1,074	32			
February ..	14	1,126	24			
March ..	14	572	13			
April ..	14	1,505	35			
May ..	14	1,060	28			
June ..	15	678	19			
July ..	12	1,128	35			
August ..	12	1,271	34			
September ..	12	1,570	30	3	—	—
October ..	6	929	27	3	248	1
November ..	9	774	22	3	—	—
December ..	10	1,244	42	3	—	—
TOTAL ..	—	12,931	341	—	248	1

FINANCIAL ARRANGEMENTS WITH OTHER AUTHORITIES

No change occurred in the accepted charge of 2/- per mile for ambulance vehicles and 9d. for sitting cars between County Authorities, also the standard charge of 2/9d. per mile for ambulances and 1/3d. for sitting cars in respect of County Borough Councils, any variation in these rates being specially approved by the Committee.

PREVENTION OF ILLNESS, CARE AND AFTER-CARE

The following are particulars of the work undertaken during 1953 by the four Social Workers :—

	<i>Free</i>	<i>Partial payment by patient</i>	<i>Paid in full by patient</i>	<i>Total</i>
(1) Number of patients supplied with extra nourishment†	475	1	—	476
(2) Number of patients supplied with clothing†	183	37	—	220
(3) Number of patients supplied with bedding†	127	27	—	154
(4) Number of patients supplied with convalescent home treatment	58	157	7	222
(5) Number of patients supplied with appliances*	228	—	—	228
(6) Number of visits and interviews with patients	—	—	—	4,486
(7) Housing				
(a) No. of cases recommended	—	—	—	150
(b) No. of cases re-housed ..	—	—	—	83
(8) No. of shelters supplied to T.B. patients	—	—	—	5

*Includes invalid chairs, air beds, rubber rings, hot water bottles, articles for occupational therapy, bed rests, etc. The majority of such appliances were provided on loan.

†Includes cases where assistance was given through Social Workers by bodies other than the Staffordshire County Council, e.g., British Red Cross Society and other voluntary associations, National Assistance Board.

The provisions of this Section of the Act empower the Local Health Authority to recover reasonable charges from persons availing themselves of the services provided, subject to consideration of their means. The foregoing table indicates to what extent there was recovery or partial recovery of charges during the year.

Particulars were given in the 1949 Annual Report of the arrangements in accordance with Ministry of Health Circular 85/49 for the provision of travelling warrants to relatives to enable them to visit patients in hospital. During the year 18 applications for the facility were received. In 14 instances full travelling expenses were allowed and one was granted partial assistance. In the remaining three instances it was found the financial circumstances were such that the cases could not be considered to be necessitous ones, so that the County Council could not pay the travelling expenses involved.

The arrangements entered into with the British Red Cross Society and the St. John Ambulance Brigade with regard to the Nursing Comforts Scheme, as described in the last Report, continued to work satisfactorily. At the end of 1953, 62 Nursing Comforts Depots were in operation as compared with 57 at the beginning of the year.

Mention was made in the report for 1951 of the appointment of an Occupational Therapist. The scheme has proved very satisfactory and during the year 1,077 visits were paid to patients in their homes. The number of patients on the register at the end of the year was 64.

Classes were commenced at Wolverhampton and Wednesbury in March and October respectively, the number of cases who attended during the year being 278 at Wolverhampton and 114 at Wednesbury.

CARE OF OLD PEOPLE

In the portion of the Annual Report for 1952 which dealt with the special survey of Local Health Services provided under the National Health Service Act, in accordance with Ministry of Health Circular 29/52, a brief mention was made of the scheme for the care of old people which was commenced in January, 1953.

One of the reasons for the inauguration by the Health Committee of the scheme for the visitation of old people for an experimental period was to bridge any possible gap between statutory and voluntary attention and to ensure that no case "fell between two stools", as it had become known that in some instances cases in need of attention were being overlooked. In the first instance a survey of certain representative areas of the County was carried out by the health visiting staff in which information was obtained of as many as possible of the old people in these districts who were classified in the categories given below :—

- (1) Appropriately provided for as regards accommodation, money and domestic assistance or care from relatives ; needing no, or only very slight, help from public sources ; not lacking such social contacts as are appropriate ; adequately nursed and treated at home if infirm, i.e., those about whom no anxiety need be felt.
- (2) In reasonable health and not without material necessities (e.g., food, shelter, clothing, ability to pay for household help), but lonely and lacking social contacts and relatives or friends able and willing to take an interest in them ; i.e., those whose main need is sympathetic visiting and observation, old people's clubs, holidays and other outside interests.
- (3) Needing substantial assistance from public and/or voluntary services (e.g., domestic helps, home nursing, social workers, someone to shop and collect pensions, etc.), but who with such assistance could be adequately cared for at home.
- (4) "Chronic sick" or seriously demented requiring more nursing care, supervision and treatment than could be provided in their homes and whose real need is a hospital bed, though the domiciliary services may be required while a bed is awaited.

- (5) Those (whether sick or not) living in grossly insanitary conditions such as to require initial action by the District Medical Officer of Health to secure cleansing or removal.

In due course the Social Workers and Duly Authorised Officers were instructed to undertake as a special duty the visitation of the aged coming within categories 2 to 5 to investigate their needs for public and voluntary services, to put them in contact with these services and to make follow-up visits when necessary.

As mentioned above, the Health Visitors are responsible for much home visiting and they are in a position with the General Nurses to report to the Area Medical Officers the need for any of the services under Part 3 of the National Health Service Act which can be provided for the aged, and the Medical Officers in turn refer the cases to the Social Workers and Duly Authorised Officers.

In addition, of course, there are other sources of information relating to people for visitation, i.e., Housing Welfare Officers, National Assistance Board, etc., as well as others "discovered" by the staff themselves. Cases so brought to notice are, as mentioned above, advised appropriately with regard to whatever service is applicable and contact is then made on their behalf with Area Welfare Officers, National Assistance Board, District Medical Officers of Health, Voluntary Associations, etc. In addition, of course, some "social" visiting is made to those living alone who come within category 2 above.

During the year some 429 homes were visited and 626 visits were paid to old people within the categories mentioned.

A further aspect of the care of the aged is the admission of chronic sick to hospital, which is, of course, the responsibility of the Regional Hospital Board. The bed position for this type of case is, as is well known, very difficult and to assist in this direction a scheme has been in operation in one portion of the County for some time whereby:—

- (1) All cases (emergencies excepted) considered to be in need of admission to accommodation for chronic sick are referred, as far as this County is concerned, to the Medical Officer to the Area Health Committee and not direct to the hospital or bed bureau, and the Medical Officers investigate all such cases with a view to requesting the admissions to hospital with an indication of the degree of priority *on social grounds* or offering all the services of the Local Health Authority which may enable the patient to remain at home. The general practitioner who has referred the case is, of course, informed by the Area Medical Officer of the action taken.
- (2) All admissions to hospital are arranged by the Management Committee and notification thereof sent direct from the bed bureau to the general practitioners and the Area Medical Officers.
- (3) The Area Medical Officer is consulted when a patient is fit for discharge, in order to ensure that the home conditions are suitable for his or her reception.

During the year, the number of cases referred to Area Medical Officers was 275, and in each instance the grading of domestic or medical urgency was undertaken by the Area Medical Officers concerned (the medical urgency in conjunction with the medical practitioner referring the case).

Of the total number referred, 144 were admitted to chronic sick hospital accommodation, three to Mental Hospitals, one to Part III Accommodation and two to General Hospitals. In 76 of these cases one or more of the County Council's Services were of help to the patients pending admission.

In 95 cases, therefore, the patients were cared for at home, the County Council's Services being of assistance in 48 instances, viz :—

Nursing	..	..	..	..	..	..	31
Domestic Help	..	..	..	..	..	..	9
Social Welfare	..	..	..	..	..	..	1
Nursing and Domestic Help	..	..	..	..	..	..	2
Nursing and Social Welfare	..	..	..	..	..	..	2
Domestic Help and Social Welfare	..	..	..	..	..	..	1
Nursing, Domestic Help and Social Welfare	..	..	..	..	..	..	2

DOMESTIC HELP SERVICE

Full particulars of the above-mentioned Service have been given in a previous Report.

The Service continued to expand further during the year and at the 31st December, 346 Domestic Helps were employed compared with 275 at the end of the previous year.

During the year 1,393 cases were attended compared with 1,274 in 1952.

MENTAL HEALTH SERVICES

(1) ADMINISTRATION

A Mental Health Sub-Committee of the Health Committee is appointed to deal with the functions of the County Council relating to the Mental Health Service, the recommendations of this Sub-Committee being subject to the approval of the Health Committee.

The medical direction of the Mental Health Section is undertaken by the County Psychiatrist subject to the general direction of the County Medical Officer of Health. The post is filled at present by a Medical Officer with the following qualifications—M.B., Ch.B., D.P.M. He is employed part-time by the Health Committee, the remainder of his time being spent in duties undertaken for the School Health Service.

A Mental Welfare Officer is employed, her qualifications being a B.A. degree with a Secondary Teachers' Diploma. She is authorised to present petitions under the Mental Deficiency Act, 1913, and makes the necessary arrangements for the majority of the certifications under this Act.

No Psychiatric Social Workers are employed.

The four Mental Welfare Visitors are qualified as under :—

- (i) Social Science Diploma ;
- (ii) R.M.P.A. Certificate. 12 years' experience of mental health social work.
- (iii) R.M.P.A. Certificate, with five years' experience in industrial social work prior to appointment in 1948.
- (iv) Uncertificated teacher with 18 years' experience in mental health social work.

Seven duly Authorised Officers are employed—six in a full-time capacity and one who is also engaged on registration duties, the proportion of time spent in the Mental Health Service being 61/76ths. In addition, one of the Mental Welfare Visitors undertakes relief duties at weekends and during annual leave periods of one of the regular officers.

The Occupation Centre staffs are as follows :—

Supervisors. Two with the diploma of the National Association for Mental Health, two who hold the Recognition Certificate issued by the National Joint Council for Mental Health and three with no qualifications.

Assistant Supervisors. One with the diploma of the National Association for Mental Health, one uncertificated teacher and eighteen who are unqualified, including one who is engaged on a temporary basis.

In addition, two trainee assistant supervisors have been appointed and are at present under training, together with a third who works in a voluntary capacity.

An unqualified Home Teacher is employed in the sparsely populated districts in the north of the County where it is not feasible to provide Occupation Centres.

The number of certified mental defectives from the Administrative County at the 1st January, 1954, was as follows :—

St. Margaret's Hospital, Great Barr	.. ..	467
Stallington Hall	.. .. .	102
Other Institutions (including State Institutions)	..	157

Supervision of mentally defective patients on licence was carried out on behalf of Hospital Management Committees of the Birmingham Regional Hospital Board as requested by Medical Superintendents. During the year 74 patients were thus supervised, 44 from St. Margaret's Hospital, Great Barr Park, nine from Stallington Hall, one from Burton Road Hospital, one from Andressey Hospital, three from Monyhull Hall and 16 from out-county authorities. Ten patients on licence were discharged from their orders during the year, seven were returned to hospital and the Order in respect of one case lapsed by operation of law. Approximately 180 reports on the home conditions of defectives who were seen by Visiting Justices for renewal of their Order were submitted after investigation of the circumstances in each case. On 31.12.53, there were 44 defectives on licence under supervision from Staffordshire Hospitals and 12 on licence from other counties.

It has been arranged with the Medical Superintendents of the Mental Hospitals in the County (St. Matthew's Hospital, Burntwood, St. George's Hospital, Stafford, and St. Edward's Hospital, Cheddleton) for those Officers of the County who undertake the after-care of patients discharged from Mental Hospitals to attend at those hospitals on the case conferences on the patients for whom they will be responsible on discharge. This is of great advantage not only to the patient, for whom it ensures continuity of treatment and care, but also to the Officers concerned, as it enables them to be briefed in the specific problems regarding each patient.

No duties have been delegated to Voluntary Associations although the Staffordshire Association for Mental Welfare is responsible for the financial aspects of the annual holiday provided for the defectives attending Occupation Centres towards the cost of which the County Council makes a grant. This Association has Sub-Committees attached to each Centre which raise funds locally towards the cost of such holidays and other social amenities.

Whenever possible one member of the County Occupation Centre staffs is seconded each year to attend the course for the diploma of the National Association for Mental Health. Due to there being no suitable candidate no one attended the 1953/54 course, however. The trainee scheme mentioned in last year's report is now in operation. Two trainees were engaged in September and have since been receiving training in the Occupation Centres at Newcastle and Bilston. A vacancy existed at the end of the year for a trainee assistant supervisor at the other Centre selected for training purposes, Lichfield.

The usual four-day refresher course for Occupation Centre staffs was not held this year as it was decided to hold such courses during the week before Easter instead of in August, commencing next year. A series of lectures and demonstrations was held on Saturday mornings in place of this course and was attended by a large proportion of the Occupation Centre staffs. The National Association for Mental Health held their annual refresher course in Birmingham and four assistant supervisors attended.

The Mental Welfare Visitor now engaged as a relief Duly Authorised Officer attended the course for Local Authority Mental Welfare Officers organised by the National Association for Mental Health in March prior to taking up her new duties. Training was, of course, also given by the full-time Officer.

(2) ACCOUNT OF WORK UNDERTAKEN IN THE COMMUNITY

(a) *Under Section 28, National Health Service Act, 1946 Prevention, Care and After-Care*

During the year 401 new cases were referred for preventive care and after-care to the Social Workers in Mental Health. In all, 1,290 visits of after-care were made by these Duly Authorised Officers and at the end of the year 274 cases remained on the registers. An increase is again shown in the number of new cases referred.

(b) *Under the Lunacy and Mental Treatment Acts, 1890—1930, by Duly Authorised Officers*

One thousand, four hundred and ninety-four cases were referred to the Duly Authorised Officers under the Lunacy and Mental Treatment Acts. They were dealt with as follows :—

Voluntary cases under Section 1 of the Mental Treatment Act	390
Temporary cases under Section 5 of the Mental Treatment Act	4
Three-day Orders under Section 20 of the Lunacy Act	336
Summary Reception Orders, Secs. 14—16 of the Lunacy Act	307
Fourteen-day Orders Section 21 (1) of the Lunacy Act	127
Reception Orders on Petition Sections 4 and 5 of the Lunacy Act	2
Urgency Orders Section 11 of the Lunacy Act ..	2
Admitted to chronic sick hospitals	26
Referred to Welfare Services Committee ..	5
Cases seen in which no action was taken ..	295
	1,494

Again it is noted that the proportion of cases dealt with on Summary Reception Orders remains low and an increase is shown in the percentage admitted as voluntary patients.

(c) *Under the Mental Deficiency Acts, 1913-38. Ascertainment*

Particulars of cases reported during the year 1953 :—

	Under age 16		Aged 16 and over		Total
	Male	Female	Male	Female	
(a) Cases at 31st December, 1953, ascertained to be defectives subject to be dealt with under the Act.					
(i) Reported by Local Education Authorities—					
Children at school or liable to attend school	41	33	—	—	74
On leaving special schools ..	12	9	—	—	21
On leaving ordinary schools ..	6	9	—	—	15
(ii) Reported by Police or Courts ..	1	—	4	3	8
(iii) Other Sources	3	—	7	4	14
(b) Cases reported but not regarded at 31st December as defectives "subject to be dealt with" on any ground ..	2	3	8	19	32
(c) Cases reported but not confirmed as defectives by 31st December and thus excluded from (a) or (b)	—	—	2	2	4
Total number of cases reported during the year	65	54	21	28	168

The number of cases in the community awaiting removal to institutions on 31.12.53 was :—

<i>Under 16</i>		<i>16 and over</i>		<i>Total</i>
<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	
31	22	16	29	98

Guardianship

On the 31st December, 1953, there were five defectives under statutory guardianship—four males and one female. All attend Occupation Centres and are regularly visited. Grants from the National Assistance Board have relieved the financial stringency, which formerly necessitated a number of guardianship orders to secure adequate maintenance for the defectives at home.

Supervision

On the 31st December, 1953, the following mental defectives were under supervision :—

	<i>Male</i>	<i>Female</i>	<i>Total</i>
Statutory Supervision :—			
(i) Under 16 years of age .. .	183	148	331
(ii) Aged 16 years and over ..	278	243	521
Voluntary Supervision :—			
(i) Under 16 years of age ..	2	2	4
(ii) Aged 16 years and over ..	265	261	526
	728	654	1,382
	728	654	1,382

Out of a total of 1,382 cases, 38.4% are under voluntary supervision.

Five thousand, one hundred and thirty-nine domiciliary visits and interviews by the four Mental Welfare Visitors took place during the year. In addition, 21 visits were paid to the homes of educationally sub-normal children at the request of the County Education Authority.

Twenty defectives under supervision appeared before Courts of Law during the year ; of these eight have since been admitted to institutions. Petitions for orders under the Mental Deficiency Acts were presented in the case of 37 alleged defectives in the County and eleven on behalf of other Authorities. Two petitions were dismissed.

Five defectives were sent to institutions under Section 8 on court orders and one under Section 9 by order of the Secretary of State. Eight defectives were admitted to institutions under Section 3 of the Mental Deficiency Act as "placed" cases without an order, and six were sent to Voluntary Homes, making a total of 57 vacancies offered by the Birmingham Regional Hospital Board for County Cases in the year.

At the close of the year there were 98 defectives awaiting beds in institutions and, in addition, 10 who had been admitted to Mental Hospitals pending transfer to Mental Deficiency Institutions. The list is a long and sad one, but it would be longer were it not for the domiciliary supervision carried out by the four Mental Welfare Visitors who pay regular

visits to the homes generally each quarter. Through their efforts advice is given to parents and the defectives when things seem to be going wrong regarding the special care needed by the defective. Personal effort is made to find the right employment or training for the individual as the case may be, and the help of others is enlisted in regard to physical care, housing difficulties, employment, National Assistance and other problems as they arise. It will be realised that close co-operation between the visitors and Occupation Centres' staffs is most valuable in the interests of the defectives; the visitors do much to win the confidence of parents in sending their children to Centres in the first instance when they have received the shock of knowing that their child must be excluded from the ordinary school. To advise institutional care is always the visitor's last resort when every effort to help the defective to remain in the community has failed.

Training

The number of Occupation Centres in the County Area is unchanged (7) and the Home Teacher continues to operate over a wide area around Leek in North Staffordshire. The particulars are as follows :—

<i>Centre</i>	<i>No. on Register</i>		<i>Staff at 31.12.53</i>
		<i>31.12.53</i>	
Stafford		16	Supervisor and one assistant
Cannock		24	Supervisor and one assistant
Bilston		53	Supervisor, four assistants and two trainees
Kingswinford		54	Supervisor and four assistants
Tipton		35*	Supervisor and two assistants
Newcastle		59‡	Supervisor, five assistants and a trainee
Lichfield†		40§	Supervisor and three assistants
		281	

Home teacher centred on Leek .. 25

†One vacancy for trainee assistant supervisor.

*Includes four defectives from West Bromwich (since withdrawn on opening of Occupation Centre by this Authority).

‡Includes eight children from City of Stoke-on-Trent.

§Includes one boy from Warwickshire.

In addition, the County Council have arranged with Wolverhampton County Borough Council and with Burton-on-Trent County Borough Council for cases living near to those Authorities' Occupation Centres who cannot reach a County Centre from where they live to be admitted to the Out-County Centre. At the end of the year five cases were maintained in Wolverhampton Centre and two in Burton-on-Trent.

There has been no change in the buildings from which the Centres operate during 1953. The accommodation for Tipton and Stafford Centres continues to give anxiety, and it is hoped that work will shortly commence on the new Centre to be built in Rowley Regis to replace the one at Tipton.

Summer holidays of one week were arranged in co-operation with the Staffordshire Association for Mental Welfare for children attending Occupation Centres as follows :—

Cannock Centre	Brynteg, Rhyl	May 15—22/53	19 pupils
Stafford Centre	Bartonville, Rhyl	May 15—22/53	8 pupils
Newcastle Centre	Eastwood Grange, Ashover	Jun. 12—19/53	32 pupils
Bilston Centre	Bartonville, Rhyl	Jun. 12—19/53	} 19 pupils
Bilston Centre	Brynteg, Rhyl	Jun. 12—19/53		} 15 pupils
Lichfield Centre	Bartonville, Rhyl	Jun. 19—26/53	22 pupils
Tipton Centre	Bartonville, Rhyl	Jun. 26—Jul. 3/53	23 pupils
Kingswinford Centre	Bartonville, Rhyl	Jul. 3—10/53	23 pupils
Kingswinford Centre	Bod Donwen, Rhyl	Jul. 2—9/53	10 pupils

171

The children were fortunate in having fine weather by the sea and the holidays proved beneficial in every way to them and were greatly enjoyed. Members of the Centres' staff supervised the children whilst on holiday.

The Centre Committees of the Staffordshire Association for Mental Welfare have continued to help the Centres they serve, providing funds for the summer holidays, day outings, help with the Christmas Parties and Harvest Services. There have been many acts of generosity and kindness to the children, the value of which it is hard to over-estimate.

The day-to-day administration of the Centres and appointment of their staffs is the responsibility of the Health Committee of the Area in which the Centre is situated. The majority of the Area Health Committees have appointed a representative to serve on the local Centre Committee of the Voluntary Association and in one area such representation is reciprocated. The Parents' Association at Newcastle Centre continues to do good work. All Centres have been inspected by the Board of Control.

The Home Teacher has continued to give weekly or fortnightly lessons to the 25 defectives on her register during the school terms, travelling by car 6,312 miles during the year. None of the defectives she visits could reach a Centre in the remote villages of North Staffordshire in which they live. The painstaking and conscientious work done through these visits makes the service well worth while, although the travelling involved is arduous and in some weathers impossible. Seven hundred and eighty-eight visits were made by the Home Teacher during the year.

The Social Club opened in April, 1952, continues to do useful work. It is open one evening each week under a specially appointed Club Leader at Bilston Occupation Centre. The scheme for an Adult Industrial Centre has not yet been put into operation due to the fact that despite

numerous enquiries no suitable premises have been found, but efforts to obtain accommodation for such a Centre continue, and a suitable centre is in view in the South of the County.

EPILEPTICS AND SPASTICS

The following are particulars of the known cases of epilepsy and cerebral palsy from the Administrative County at the 31st December, 1953 :—

EPILEPSY

Adults

No. in Part III Accommodation	7	
No. in own homes	50	
No. chargeable to the Authority in colonies outside the County	21	
	—	78

Children between the ages of 2 and 15 years

Epileptics

At special Schools	8 (6 boys 2 girls)	
Awaiting admission to Special Schools ..	4 (1 boy 3 girls)	
At ordinary schools	57 (29 boys 28 girls)	
Home Tuition	3 (2 boys 1 girl)	
	—	
	72 (38 boys 34 girls)	

Epilepsy with other major defects

At Special Schools	4 (3 boys 1 girl)	
At ordinary schools	15 (11 boys 4 girls)	
	—	
	19 (14 boys 5 girls)	91
	—	

Children under 2 years of age

No. treated in hospital	5	
No. treated by general practitioners ..	3	
	—	
	8 (4 boys 4 girls)	8
	—	

Mental defectives under statutory and voluntary supervision with the additional handicap of epilepsy

No. under 16 years	27	(12 male 15 female)	
No. 16 years and over	54	(28 male 26 female)	
	81	(40 male 41 female)	81
			<hr/>
			258
			<hr/> <hr/>

CEREBRAL PALSY

Adults

No. in own homes			17
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Children 2—15

At Special Schools	13	(7 boys 6 girls)	
At Special Schools (for other causes) ..	5	(2 boys 3 girls)	
Awaiting admission to Special Schools ..	22	(11 boys 11 girls)	
Attending ordinary schools	18	(9 boys 9 girls)	
Attending private schools	1	(1 girl)	
Others (under investigation, no tuition, etc.)	26	(14 boys 12 girls)	
	85	(43 boys 42 girls)	85
			<hr/>

Children under 2

No. treated in hospital	6		
No. treated by general practitioners ..	1		
	7	(5 boys 2 girls)	7
			<hr/>

Mental defectives under statutory and voluntary supervision with the additional handicap of cerebral palsy

No. under 16 years	50 (23 male 27 female)	
No. 16 years and over	57 (27 male 30 female)	
	<hr/>	
	107 (50 male 57 female)	107
	<hr/>	
		<hr/>
		216
		<hr/>

Of the 81 persons suffering from epilepsy in addition to mental defect, 14 attend Occupation Centres and one has Home Teaching.

Of the 107 defectives suffering from spastic conditions, 22 attend Occupation Centres and two have Home Teaching. Fifteen persons in these two totals suffer from both epilepsy and cerebral palsy.

With regard to adults, the figures given relate to those registered by the County Welfare Department under the scheme relating to permanently handicapped made under Section 29 of the National Assistance Act, 1948, and those chargeable in Part III Accommodation.

The fullest co-operation is maintained between the Welfare Services Department, the Ministry of Labour and National Service, Youth Employment Officers of the Education Committee, Voluntary Organisations, etc.

Each application for registration under the Authority's scheme is considered from the widest aspects of welfare, and where spectacles, artificial limbs, wheeled chairs, etc., are found to be needed application is made to the appropriate Department or body for what is required. Where further particulars are needed as to the extent of disability of any handicapped person these are obtained, with the person's consent, from the General Practitioner through this Department and intimation is given to the County Welfare Officer where there is any doubt as to suitability of any particular applicant for inclusion in the Register of Handicapped Persons.

With regard to spastics, the Midland Spastic Association, whose area includes Staffordshire, has a total of 1,056 cases under its supervision, of whom 127 are stated to be resident within the Administrative County and for whom the Association provides home tuition in handicrafts, visits, advice, etc. A contribution is made by the Authority to the Association in accordance with the decision of the Authority to utilise, as far as is considered practicable or desirable, the services available from Voluntary Organisations for all classes of handicapped.

With regard to the children between the ages of 2 and 15 years, such cases are ascertained from Health Visitors, routine medical inspections, Head Teachers, School Welfare Officers, parents, hospitals, etc. No medical treatment is undertaken by the School Health Service and it is usually ascertained when a case is brought to notice that it is already in the care of a General Practitioner and/or Consultant. Admission to Special Schools is arranged when requested and wherever possible by the Education Committee.

School Medical Officers have supplies of enrolment forms for the register maintained by the Welfare Services Department for distribution when children are examined in the "leaver group".

TABLES

TABLES

Table showing Population, Number of Persons per acre, Birth and Death-rates as well as the Death-rates at all ages and among Children under 1 year, and the Death-rates from Zymotic Diseases, Tuberculosis, Diseases of the Respiratory Organs, &c.

URBAN

DISTRICT	Population at all ages		Number of persons per acre	Live Birth-rate per 1,000 of Population	Adjusted Live Birth-rate by comparability factor	Still-births, Rate per 1,000 of Population	Crude death-rate per 1,000 of Population	Adjusted death-rate by comparability factor	Neo-natal Mortality rate per 1,000 registered live births (Infants under 4 weeks of age)	Mortality in children under one year per 1,000 registered live births	Zymotic Mortality of Population			Per 1,000 of Population							
	Census 1951	Estimated 1953									Measles	Whooping Cough	Diphtheria	Tuberculosis, Respiratory	Tuberculosis, other	Malignant Neoplasm	Bronchitis	Pneumonia	Other Diseases of Respiratory System	Nephritis and Nephrosis	Congenital Malformations
Aldridge	29,167	30,230	3.3	13.9	12.2	0.17	8.0	10.3	19	31	—	—	—	0.26	0.10	1.69	0.33	0.56	0.13	0.07	0.23
Ambicote	3,165	3,016	4.5	12.6	12.1	0.66	12.3	10.7	—	—	—	—	—	—	—	1.66	0.33	—	—	0.33	—
Biddulph	10,898	11,140	1.7	15.6	15.6	0.36	8.7	10.4	23	29	—	—	0.09	—	—	1.44	0.63	0.09	—	—	0.09
Bilston	33,464	33,600	18.0	18.6	18.0	0.48	9.3	12.1	30	42	—	0.03	—	0.21	0.09	2.08	0.51	0.33	0.18	0.09	0.12
Brierley Hill	48,943	48,970	8.3	15.8	15.3	0.45	9.4	10.7	17	22	0.02	0.04	0.02	0.20	0.06	1.37	0.86	0.29	0.14	0.18	0.08
Brownhills	21,482	21,270	3.4	17.0	17.0	0.19	8.6	10.2	25	33	—	—	0.05	0.09	0.09	0.94	0.56	0.09	0.19	0.05	0.24
Cannock	40,927	41,230	5.1	17.2	17.7	0.56	10.7	12.3	24	44	—	0.05	—	0.27	0.02	1.82	0.87	0.24	0.12	0.07	0.15
Coseley	34,414	35,590	10.8	16.4	15.6	0.45	8.9	11.7	19	39	0.03	—	0.08	0.34	0.03	1.40	0.67	0.51	0.11	0.20	0.08
Darlaston	22,024	21,940	14.3	15.5	14.9	0.41	10.1	12.7	32	38	—	—	—	0.27	—	1.09	0.96	0.55	0.05	0.27	0.09
Kidsgrove	16,231	16,540	4.0	16.4	16.1	0.48	10.0	11.5	11	26	—	—	—	0.12	0.06	1.33	0.73	—	0.06	0.18	0.06
Leek	19,358	18,930	4.4	14.8	15.2	0.32	12.3	11.9	21	25	—	—	—	0.05	—	2.17	0.74	0.21	0.05	0.05	—
Lichfield	10,624	10,930	3.0	17.8	18.3	0.46	16.8	15.5	10	31	—	—	—	0.09	—	2.01	1.46	1.56	0.27	0.09	0.18
Newcastle	70,028	70,230	7.9	15.7	15.1	0.40	9.5	11.1	23	34	—	0.03	—	0.16	0.01	1.59	0.37	0.30	0.10	0.13	0.13

URBAN—continued

DISTRICT	Population at all ages		Number of persons per acre	Live Birth-rate per 1,000 of Population	Adjusted Live Birth-rate by comparability factor	Still-births, Rate per 1,000 of Population	Crude death-rate per 1,000 of Population	Adjusted death-rate by comparability factor	Neo-natal Mortality rate per 1,000 registered live births (Infants under 4 weeks of age)	Mortality in children under one year per 1,000 registered live births	Zymotic Mortality Per 1,000 of Population			Per 1,000 of Population							
	Census 1951	Estimated 1953									Measles	Whooping Cough	Diphtheria	Tuberculosis, Respiratory	Tuberculosis, other	Malignant Neoplasm	Bronchitis	Pneumonia	Other Diseases of Respiratory System	Nephritis and Nephrosis	Congenital Malformations
Rowley Regis..	49,409	49,180	12.8	12.4	11.7	0.45	8.0	9.8	23	25	—	—	—	0.12	0.04	1.55	0.49	0.39	0.16	0.20	0.06
Rugeley ..	8,525	8,487	2.9	16.8	17.3	0.47	8.8	9.4	21	28	—	—	—	—	—	2.00	0.47	0.59	—	0.24	0.12
Sedgley ..	23,104	23,670	6.2	13.2	13.1	0.30	28.6	30.6	10	19	—	0.04	0.21	0.08	3.42	2.37	0.42	0.34	0.04	0.17	
Stafford ..	40,275	40,820	8.0	16.5	16.7	0.42	13.0	13.8	13	25	0.02	—	0.15	0.02	2.08	0.88	0.37	0.07	0.17	0.07	
Stone ..	8,299	8,452	5.2	15.9	15.3	0.35	19.2	18.8	7	30	—	—	0.24	—	3.55	1.42	0.71	—	0.12	—	
Tamworth ..	12,889	13,170	4.9	14.9	15.2	0.23	13.8	13.4	15	26	—	—	0.15	—	2.81	0.38	0.30	0.08	0.08	0.08	0.23
Tettenhall ..	7,742	9,444	3.8	17.5	16.6	0.74	8.3	8.1	12	12	—	—	0.11	—	2.01	0.53	0.32	—	0.21	0.11	
Tipton ..	39,382	39,250	18.1	18.7	18.3	0.33	8.7	11.3	16	35	—	0.03	0.18	0.03	1.17	0.76	0.48	0.18	0.18	0.05	
Uttoxeter ..	7,440	7,391	2.2	16.8	17.0	0.95	11.4	11.6	24	48	—	—	0.14	0.14	2.03	0.41	0.81	0.27	—	0.27	
Wednesbury ..	34,758	34,600	17.1	17.3	16.6	0.55	8.6	10.6	15	25	0.03	0.03	0.23	0.03	1.59	0.55	0.35	0.03	0.12	0.09	
Wednesfield ..	17,422	18,250	7.3	18.5	17.0	0.55	8.5	11.3	30	36	0.05	—	0.27	—	1.70	0.33	—	—	0.16	0.27	
Willenhall ..	30,695	30,870	10.9	16.8	16.3	0.29	8.4	10.6	6	23	—	0.03	0.29	—	1.43	0.84	0.29	0.06	0.10	0.03	
Totals and Averages ..	640,665	647,200	6.5	16.1	15.8	0.42	10.5	12.3	19	31	0.01	0.02	0.01	0.19	0.04	1.72	0.72	0.36	0.12	0.13	0.11
160 large towns in England..	—	—	—	17.0	—	0.43	12.2	—	—	31	—	0.01	0.00	—	—	—	—	0.59	—	—	—
160 smaller towns, resident Population 25,000-50,000	—	—	—	15.7	—	0.34	11.3	—	—	24	—	0.00	0.00	—	—	—	—	0.52	—	—	—

URBAN—continued

District	Live Births	Still Births	Deaths from all causes	Deaths under 1 year	Deaths under 4 weeks	Tuberculosis Respiratory	Tuberculosis, other	Syphilitic Disease	Diphtheria	Whooping Cough	Meningococcal Infections	Acute Poliomyelitis	Measles	Other Infective and Parasitic Diseases	Malignant Neoplasm				Leukemia, A leukæmia	Diabetes	Vascular Lesions of Nervous System	Coronary Disease, Angina	Hypertension with Heart Disease	Other Heart Disease	Other Circulatory Disease	Influenza	Pneumonia	Bronchitis	Other Diseases of Respiratory System	Ulcer of Stomach and Duodenum	Gastritis, Enteritis and Diarrhea	Nephritis and Nephrosis	Hyperplasia of Prostate	Pregnancy, Childbirth, Abortion	Congenital Malformations	Other Defined and Ill-defined Diseases	Motor Vehicle Accidents	All other Accidents	Suicide	Homicide and Operations of War		
															Stomach	Lung, Bronchus	Breast	Uterus																							Other Malignant & Lymphatic Neoplasms	
Rowley Regis	611	22	392	15	14	6	2	—	—	—	—	—	—	2	16	9	14	3	34	2	4	54	33	13	67	8	6	19	24	8	5	2	10	1	1	3	28	1	9	8	—	
Rugeley ..	143	4	75	4	3	—	—	—	—	—	—	—	—	—	2	2	4	1	8	1	—	10	11	1	6	3	—	5	4	—	—	2	2	2	—	—	1	8	—	1	1	—
Sedgley ..	312	7	677	6	3	5	2	1	1	—	—	1	—	—	12	14	10	3	42	1	7	77	23	5	187	29	16	10	56	8	4	1	1	1	4	138	2	14	—	2	14	—
Stafford ..	672	17	531	17	9	6	1	1	—	—	—	—	1	1	12	13	11	3	46	1	3	78	54	18	133	24	6	15	36	3	3	—	7	4	1	3	34	5	5	3	—	
Stone ..	134	3	162	4	1	2	—	—	—	—	—	—	—	—	5	4	4	1	16	—	2	18	10	—	37	6	—	6	12	—	—	2	1	1	—	—	26	2	2	5	—	
Tamworth ..	196	3	182	5	3	2	—	—	—	—	—	—	—	2	9	6	4	1	17	—	3	25	18	3	35	8	—	4	5	1	—	—	1	1	—	30	—	2	1	1	—	
Tettenhall ..	165	7	78	2	2	1	—	—	—	—	—	—	—	—	3	4	—	1	11	1	1	17	8	1	7	1	—	3	5	—	—	2	2	—	—	6	—	3	—	3	—	
Tipton ..	734	13	340	26	12	7	1	1	—	—	—	—	—	—	8	12	—	5	21	—	3	50	30	4	61	6	4	19	30	7	8	3	7	—	1	2	33	2	9	5	—	
Uttoxeter ..	124	7	84	6	3	1	—	—	—	—	—	—	—	—	1	1	—	—	13	—	13	10	1	12	—	1	6	3	2	—	—	1	—	2	12	—	3	—	3	—		
Wednesbury	600	19	297	15	9	8	1	—	—	—	—	—	1	1	10	12	6	—	27	—	3	43	27	7	49	4	3	12	19	1	4	2	4	1	1	3	31	3	6	6	—	
Wednesfield	338	10	156	12	10	5	—	—	—	—	—	—	1	—	7	6	1	—	17	—	1	18	13	2	17	8	2	—	6	—	—	1	3	—	—	5	33	1	7	1	—	
Willenhall ..	520	9	259	12	3	9	—	—	—	—	—	—	—	3	13	11	1	2	17	3	2	34	19	3	34	11	1	9	26	2	8	—	3	2	—	1	31	1	2	6	1	
Totals ..	10428	269	6791	322	200	124	23	14	6	10	4	3	5	16	201	203	108	47	552	25	44	907	613	131	1251	258	85	235	464	75	75	33	87	40	11	72	797	59	140	70	3	

RURAL

District	Live Births	Still Births	Deaths from all causes	Deaths under 1 year	Deaths under 4 weeks	Tuberculosis Respiratory	Tuberculosis, other	Syphilitic Disease	Diphtheria	Whooping Cough	Meningococcal Infections	Acute Poliomyelitis	Measles	Other Infective and Parasitic Diseases	Malignant Neoplasms				Leukemia, Apleukemia	Diabetes	Vascular Lesions of Nervous System	Coronary Disease, Angina	Hypertension with Heart Disease	Other Heart Disease	Other Circulatory Disease	Influenza	Pneumonia	Bronchitis	Other Diseases of Respiratory System	Ulcer of Stomach and Duodenum	Gastritis, Enteritis and Diarrhoea	Nephritis and Nephrosis	Hyperplasia of Prostate	Pregnancy, Childbirth, Abortion	Congenital Malformations	Other Defined and Ill-defined Diseases	Motor Vehicle Accidents	All other Accidents	Suicide	Homicide and Operations of War				
															Stomach	Lungs, Bronchus	Breast	Uterus																							Other Malignant & Lymphatic Neoplasms			
Cannock ..	478	18	200	25	15	4	—	—	—	1	—	—	—	—	—	10	10	1	18	—	2	30	21	—	26	6	1	7	13	1	1	—	3	3	3	—	4	25	5	5	5	3	—	
Cheadle ..	473	7	432	14	10	3	—	—	—	—	—	—	1	2	10	7	10	5	40	2	4	46	45	2	106	27	12	14	25	1	3	1	3	1	8	1	8	2	2	48	5	8	1	—
Leek ..	249	11	151	7	5	—	—	—	—	—	—	—	—	—	5	3	3	1	14	2	1	29	16	3	28	5	1	3	5	2	—	2	2	4	3	2	13	2	3	—	3	—		
Lichfield ..	583	9	362	13	9	6	—	—	—	—	1	1	—	1	8	9	4	2	34	3	6	44	35	5	70	15	4	17	12	3	5	1	3	4	—	—	44	8	14	2	—	—		
Newcastle ..	221	7	198	9	7	3	—	—	—	—	—	—	—	—	1	8	4	3	12	—	1	32	22	5	32	9	4	7	10	3	3	1	4	1	—	1	22	3	6	—	—	—		
Seisdon ..	364	4	226	7	6	3	—	—	—	—	1	—	—	—	9	3	5	4	24	—	3	32	32	2	32	7	3	3	13	—	4	—	—	5	—	—	1	30	2	4	3	—	—	
Stafford ..	284	4	137	12	10	2	—	—	—	—	—	—	—	—	1	9	6	2	17	—	1	17	14	2	18	2	3	3	3	—	—	—	—	—	—	—	1	20	4	3	—	—	—	
Stone ..	273	6	133	11	8	1	—	—	—	—	—	—	—	—	3	2	3	3	6	1	—	24	13	1	24	2	2	12	4	—	—	—	—	—	—	—	—	20	1	2	1	2	1	—
Tutbury ..	230	4	139	10	8	1	—	—	—	—	—	—	—	—	1	6	1	2	13	1	1	21	20	6	20	4	—	6	7	1	1	1	1	1	1	1	3	13	2	3	—	—	—	
Uttoxeter ..	153	2	90	4	—	—	—	—	—	—	—	—	—	—	4	3	2	—	3	—	1	12	10	—	23	5	—	6	2	1	1	2	2	—	—	—	6	1	3	1	—	—	—	
Totals ..	3308	72	2068	112	78	23	1	4	—	2	2	1	1	6	67	53	29	14	181	9	20	287	228	26	379	82	30	78	94	12	18	9	33	19	4	18	241	33	51	11	2	—		

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Table showing the number of cases of certain Infectious Diseases notified in each sanitary area during the year ended 31st December, 1953, and the Attack-Rates per 1,000 of the population.

URBAN

District	Estimated Population 1953 for calculating rates	Smallpox		Typhoid		Para-Typhoid		Scarlet Fever		Whooping Cough		Diphtheria		Erysipelas		Measles		Pneumonia		Puerperal Pyrexia		Polio-myelitis Cases
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	
Aldridge ..	30,230	—	—	—	—	—	—	51	1.69	187	6.18	1	0.03	2	0.07	654	21.63	34	1.12	—	—	3
Amblecote ..	3,016	—	—	—	—	—	—	4	1.33	3	0.99	—	—	—	—	55	18.24	3	0.99	—	—	—
Biddulph ..	11,140	—	—	—	—	—	—	25	2.24	56	5.03	—	—	5	0.45	181	16.25	15	1.35	—	—	1
Bilston ..	33,600	—	—	—	—	—	—	38	1.13	74	2.20	—	—	—	—	459	13.66	62	1.85	1	0.03	1
Brierley Hill ..	48,970	—	—	—	—	—	—	39	0.80	148	3.02	2	0.04	4	0.08	879	17.95	17	0.35	3	0.06	1
Brownhills ..	21,270	—	—	—	—	—	—	15	0.71	101	4.75	9	0.42	5	0.24	558	26.23	23	1.18	—	—	3
Cannock ..	41,230	—	—	—	—	—	—	66	1.60	181	4.39	—	—	3	0.07	753	18.26	6	0.15	9	0.22	7
Coseley ..	35,590	—	—	1	0.03	—	—	48	1.35	119	3.34	37	1.04	6	0.17	531	14.92	131	3.68	1	0.03	1
Darlaston ..	21,940	—	—	—	—	—	—	28	1.28	89	4.06	1	0.05	—	—	342	15.59	26	1.18	3	0.14	2
Kidsgrove ..	16,540	—	—	—	—	—	—	10	0.60	57	3.45	—	—	3	0.18	184	11.12	9	0.54	—	—	1
Leek ..	18,930	—	—	—	—	—	—	35	1.85	49	2.59	—	—	—	—	174	9.19	17	0.90	—	—	1
Lichfield ..	10,930	—	—	—	—	—	—	1	0.09	86	7.87	—	—	—	—	248	22.69	15	1.37	8	0.73	1
Newcastle ..	70,230	—	—	—	—	—	—	44	0.63	301	4.29	—	—	5	0.07	282	4.01	41	0.58	1	0.01	4

URBAN—continued

District	Estimated Population 1953 for calculating rates	Smallpox		Typhoid		Para-Typhoid		Scarlet Fever		Whooping Cough		Diphtheria		Erysipelas		Measles		Pneumonia		Puerperal Pyrexia		Pollo-myelitis Cases
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	
Rowley Regis ..	49,180	—	—	—	—	—	—	44	0.89	181	3.68	1	0.02	—	—	452	9.19	2	0.04	—	—	—
Rugeley ..	8,487	—	—	—	—	—	—	12	1.41	51	6.01	1	0.12	—	—	123	14.49	—	—	—	—	—
Sedgley ..	23,670	—	—	—	—	—	—	26	1.10	87	3.68	7	0.30	4	0.17	243	10.27	28	0.18	—	—	—
Stafford ..	40,820	—	—	—	—	1	0.02	117	2.87	335	8.21	—	—	1	0.02	908	22.24	19	0.47	4	0.10	—
Stone ..	8,452	—	—	—	—	—	—	3	0.35	7	0.83	—	—	—	—	129	15.26	7	0.83	—	—	3
Tamworth ..	13,170	—	—	—	—	—	—	21	1.59	58	4.40	—	—	5	0.38	76	5.77	16	1.21	5	0.38	—
Tettenhall ..	9,444	—	—	—	—	—	—	7	0.74	25	2.65	—	—	—	—	210	22.24	9	0.95	—	—	1
Tipton ..	39,250	—	—	—	—	—	—	44	1.12	120	3.06	8	0.20	—	—	403	10.27	34	0.87	1	0.03	1
Uttoxeter ..	7,391	—	—	—	—	—	—	24	3.25	22	2.98	—	—	5	0.68	19	2.57	—	—	—	—	—
Wednesbury ..	34,600	—	—	—	—	—	—	55	1.59	194	5.61	2	0.06	5	0.14	481	13.90	24	0.69	2	0.06	1
Wednesfield ..	18,250	—	—	—	—	—	—	12	0.66	77	4.22	2	0.11	4	0.22	243	13.31	—	—	1	0.05	3
Willenhall ..	30,870	—	—	—	—	—	—	14	0.45	102	3.30	—	—	2	0.06	381	12.34	12	0.39	—	—	1

RURAL

DISTRICT	Estimated Population 1953 for calculating rates	Smallpox		Typhoid		Para-Typhoid		Scarlet Fever		Whooping Cough		Diphtheria		Erysipelas		Measles		Pneumonia		Puerperal Pyrexia		Pollomyelitis Cases
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	
Cannock ..	24,710	—	—	—	—	—	—	32	1.29	113	4.57	2	0.08	3	0.12	327	13.23	12	0.49	—	—	—
Cheadle ..	32,850	—	—	—	—	—	—	36	1.10	116	3.53	—	—	4	0.12	206	6.27	44	1.34	3	0.09	1
Leek ..	16,810	—	—	—	—	—	—	18	1.07	35	2.08	—	—	2	0.12	54	3.21	4	0.24	—	—	—
Lichfield ..	43,180	—	—	—	—	—	—	59	1.37	101	2.34	—	—	4	0.09	690	15.98	59	1.37	—	—	4
Newcastle ..	17,290	—	—	—	—	—	—	3	0.17	120	6.94	—	—	3	0.17	36	2.08	9	0.52	2	0.12	—
Seisdon ..	23,630	—	—	—	—	—	—	29	1.23	78	3.30	—	—	2	0.08	423	17.90	28	1.18	1	0.04	2
Stafford ..	19,790	—	—	—	—	1	0.05	38	1.92	74	3.74	—	—	2	0.10	326	16.47	8	0.40	1	0.05	—
Stone ..	16,520	—	—	—	—	—	—	12	0.73	53	3.21	—	—	—	—	163	9.87	9	0.54	—	—	—
Tutbury ..	14,870	—	—	—	—	—	—	6	0.40	24	1.61	—	—	1	0.07	241	16.21	14	0.94	2	0.13	—
Uttoxeter	11,350	—	—	—	—	—	—	7	0.62	71	6.26	—	—	2	0.18	80	7.05	1	0.09	—	—	—