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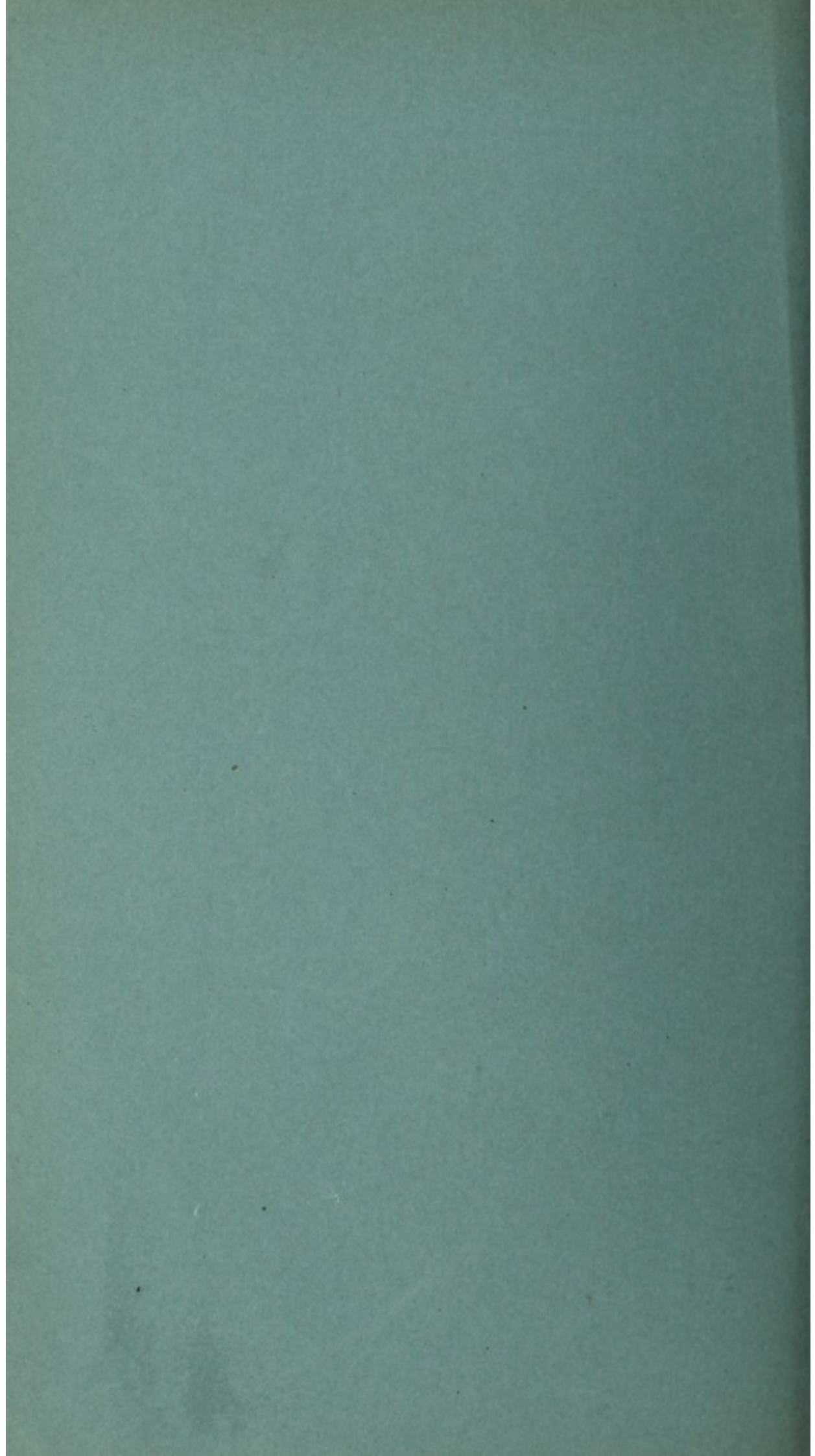
ANNUAL REPORT

OF THE

Medical Officer of Health

FOR

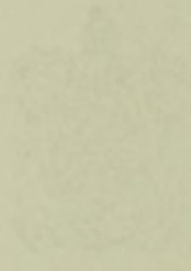
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COUNTY BOROUGH OF BOLTON



ANNUAL REPORT
OF THE
Medical Officer of Health
FOR
1951



ANNUAL REPORT

Medical Officer of Health

1921

The Local Health Authority,
Civic Centre,
Bolton.

7th July, 1952

ANNUAL REPORT

To: **The Chairman and Members of the Health Committee.**

Ladies and Gentlemen,

In the chiaroscuro of the evening, I pen the last lines of my Annual Report recording the *quis, quid, quibus auxiliis, quomodo* and ruminating as I write upon the many problems which were dealt with by the department during the year which is covered by this Report.

In doing so, I recall . . . that the general health of the Borough remains good and this in spite of a very severe epidemic of influenza which occurred in the early part of the year and which severely taxed the resources of the family practitioners, the hospitals, the district nurses and the home help service . . . that the number of cases of the more common notifiable infectious diseases remained fairly static but there was a large increase in the notifications of dysentery, due partly to the importance which I place upon the science of epidemiology and to the co-operation of the general practitioners in nourishing this disease . . . there were no deaths due to diphtheria . . . that the number of children immunised fell; a serious matter which must be rectified if the task of stamping out diphtheria from our midst is to be completely successful . . . that there was a rise in the Infantile Mortality Rate which rose to 40.8, the highest figure since 1945 and that rise was mainly attributable to an increase in deaths from prematurity and respiratory diseases; respiratory diseases which come within the ambit of the preventable diseases and which must be tackled energetically by all whose task it is to care for young children—doctors, mothers, health visitors . . . the excellent work done in the day nurseries and in the child welfare clinics and by those indispensable members of the staff, the health visitors, whose journeys take them in all weathers to every part of the borough . . . the work done by the home help service; they will tackle anything, these women: and they get results because most of them are prepared to make personal sacrifices to carry on their good work . . . the ambulance service which is the subject of so many criticisms regarding abuse but which carried on getting there on time . . . the efforts of staff of the mental health service who laboured on understaffed, always hoping that hospital beds would become more easily available and that an occupation centre would be established . . . the sanitary inspectors with their difficult housing tasks, their vigilance in the inspection of the meat to be sold, their many and varied other duties all aiming at better health . . . the staff of the analyst's department ever on the watch for adulteration of food, contamination of water and the atmosphere . . . the excellence of the clerical staff who carried on and got the job done despite many shortages and difficulties.

I remember too the decision of the Health Committee to appoint whole-time Medical Officers and of the great help my Deputy, Dr. Bryant, has been to me and the Department since he came in August . . . the enthusiasm of the staff to participate in the B.C.G. trials and also into the efficacy of the new diphtheria-pertussis antigen which is referred to in the body of the report.

In the broader sphere of the Nation's health, the improvements brought about by the National Health Service are each year becoming more and more apparent. But the maximum achievements can only be attained if there is the necessary co-operation by the general public. There are many many ways in which the public can co-operate and this co-operation is mainly in the field of preventive medicine.

For instance, during the year, a definite menace to good health reared its ugly head—a craze for slimming. How much suffering and ill health could be avoided if only people would learn to take a good, wholesome diet which can still be done despite rationing. Too many people keep repeating that they can't take this and they can't take that and many of the 'thises' and 'thats' are the basic foods essential to good health. These people, once they have made up their minds that they cannot eat certain things will never try to eat them. If only we could all remember—

“Eat all good Nature doth bestow,
It will amalgamate below
If your mind says it shall be so,
But if you once begin to doubt,
Your gastric juice will find you out.”

Another way the public can help themselves is in the provision of good beds. In many houses, the so called “sitting room” is expensively and tastefully furnished at the expense of the bedroom. If the public would only realise that they spend a third of their lives in bed then I am sure that they would realise that it is far more important to have a good, comfortable bed than to have an attractively furnished “sitting room.” I would strongly recommend that all people purchasing beds should pay the most careful attention to the type and quality of the bed which they purchase and to remember that good, healthy sleep is worth its weight in gold.

I have only mentioned two simple ways in which the public can co-operate in the avoidance of ill health but if each and all of us would pause for a few moments and consider how he or she can prevent ill health then I am sure there would be a general improvement in the health of the community.

In conclusion, I would like to record my deep appreciation of the help given to me and to the staff by the Committee throughout the year and to assure them of the continuing loyalty of all the staff.

And now my pleasant task is done; the evening shadows fall aslant my page—it is time to draw the curtains and to turn out the light—Good night!

ALEXANDER HUTCHISON

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SUMMARY OF STATISTICS, 1951

COUNTY BOROUGH OF BOLTON

Position	Lat. 53° 35' N. Long. 2° 27' W.
Elevation above sea level... ..	230-ft. to 1,450-ft.
Geological Formation: Boulder Clay and Sand over Coal Measures.	
Rainfall (Av. 1887-1951, 44.696")	51.755
Area in Acres (Land and Inland Water)	15,280
Population (Census 1921)	178,683
„ (Census 1931)	177,250
„ (Census 1951)	167,162
„ (Estimated Civilian Population, 1951)	166,700
New Houses Certified including Flats, 1951	292
Existing buildings altered to provide dwelling accommodation, 1951	1
Estimated No. of Houses in the Borough at 31st December, 1951	54,900
Rateable Value at 1st April, 1951... ..	£1,130,367
Rate at 1d. in the £ estimated to produce	£4,560
Births	2,475
Birth Rate (Crude) (per 1,000 of population)	14.84
Deaths	2,655
Death Rate (Crude) (per 1,000 of population)	15.92
Still Births	61
Still Birth Rate (per 1,000 total Births)	24.05
Average Death Rate (1942-1951)	14.20
Heart and Circulation Death Rate	7.74
Cancer Death Rate	2.15
Death Rate from diseases of Respiratory System	2.37
Pulmonary Tuberculosis Death Rate ... ..	.26
Infantile Mortality (Deaths under one year per 1,000 live births)	40.8
Diarrhoea Death Rate (Deaths under two years per 1,000 live births)	2.02
Puerperal Death Rate (per 1,000 total births)... ..	1.97
ENGLAND AND WALES—	
Birth Rate (per 1,000 civilian population)	15.5
Death Rate (per 1,000 civilian population)	12.5
Infantile Mortality (Deaths under one year per 1,000 live births)	29.6
Diarrhoea and Enteritis (under two years), (Death rate per 1,000 live births)	1.4

STATISTICS

Births

There were 2,475 live births to Bolton residents in 1951, 1,259 being males and 1,216 females. The birth rate per 1,000 of the population was 14.84.

529 domiciliary births occurred. 1,039 births occurred to Bolton residents in Bolton District General Hospital, 291 in Haslam Maternity Home, 302 in Havercroft Maternity Home and 304 in Heaton Grange Maternity Home. The remaining 10 births took place in:—

Bealey Maternity Home, Radcliffe	...	...	...	1
Doriscourt Maternity Home, Manchester	...	...	...	1
Mayday Hospital, Croydon	...	...	...	1
Methodist Maternity Home, Manchester	...	...	...	1
Hope Hospital, Salford	...	...	...	1
Newland Maternity Home, Sidmouth	...	...	...	1
Newlands Nursing Home, Bolton	1
St Mary's Hospital, Manchester	2
Withington Hospital, Manchester	1
				<hr/>
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				<hr/>

Still Births

The number of still births in Bolton in 1951 was 61, giving a still birth rate of 24.05 per 1,000 total births.

Deaths

Bolton had 2,655 deaths (1,300 males, 1,355 females) in 1951, giving a crude death rate of 15.92 per 1,000 of the population.

During the year 679 persons, whose usual place of residence was in the area of this County Borough, died outside the Borough; of these, 555 died in the Bolton District General Hospital or Townleys Annexe and 21 died in Mental Hospitals and hospitals for mental defectives.

Non-residents who died in the area numbered 137.

Summary of the Principal Causes of Death, 1951

CAUSE OF DEATH	Total	Per-centage of Grand Total	Males	Fe-males	AGE																						
					0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70	70 to 75	75 to 80	80 to 85	85 to +	
Tuberculosis of Respiratory System	44	1.657	26	18	..	..	..	..	..	..	..	..	4	5	6	2	2	4	3	5	5	5	2	1	..	..
Tuberculosis, Other	4	.151	4	—	..	..	..	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..
Syphilitic Disease	6	.226	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	1	1	..	..	..	..
Diphtheria	—	—	—	—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	—	—	—	—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Meningococcal Infections	—	—	—	—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Acute Poliomyelitis	—	—	—	—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	2	.075	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Infective and Parasitic Diseases	4	.151	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malignant Neoplasm, Stomach	78	2.938	35	43	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malignant Neoplasm, Lung & Bronchus	48	1.808	41	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malignant Neoplasm, Breast	29	1.092	—	29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malignant Neoplasm, Uterus	20	.755	—	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Malignant & Lymphatic Neoplasms	185	6.968	94	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Leukaemia and Aleukaemia	1	.038	—	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diabetes	14	.525	3	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vascular Lesions of Nervous System	323	12.166	120	203	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Coronary Disease, Angina	279	10.508	186	93	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hypertension with Heart Disease	63	2.363	29	34	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Heart Disease	511	19.247	218	293	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Circulatory Disease	115	4.331	62	53	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Influenza	100	3.775	37	63	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia	107	4.039	50	57	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bronchitis	246	9.266	133	113	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of Respiratory System	43	1.619	23	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ulcer of Stomach and Duodenum	31	1.167	24	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gastritis, Enteritis and Diarrhoea	9	.339	3	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nephritis and Nephrosis	58	2.185	35	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hyperplasia of Prostate	14	.525	14	—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pregnancy, Childbirth, Abortion	5	.189	—	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Congenital Malformations	17	.638	10	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Defined and Ill-defined Diseases	226	8.512	95	131	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Motor Vehicle Accidents	16	.600	13	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
All other Accidents	39	1.471	22	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Suicide	17	.638	14	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Homicide and Operations of War	1	.038	1	—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	2655		1297	1358	101	5	4	3	4	7	3	4	11	16	19	33	46	75	125	150	270	371	400	483	335	190	

Deaths from Puerperal Causes

Maternal mortality is the number of deaths of women classed to pregnancy and child-bearing. It is expressed as the rate per 1,000 births (live and still).

There were five deaths from puerperal causes in 1951, giving a maternal mortality rate of 1.97. The rate for England and Wales was 0.79.

	BOLTON		ENGLAND & WALES
	Deaths	Rate per 1,000 total births	Rate per 1,000 total births
Puerperal sepsis	—	—	0.19
Other puerperal causes	5	1.97	0.60
Total	5	1.97	0.79

Death Rate of Infants under One Year of Age

The death rate of infants is expressed as the number of deaths under one year per 1,000 live births, and is called the infantile mortality rate. There were 101 such deaths during the year.

Bolton's infant mortality rate for 1951 was 40.8. The figure for England and Wales was 29.6.

Of Bolton's 2,475 live births, 2,403 were legitimate and 72 illegitimate.

The infantile mortality rate amongst the legitimate children was 39.5, and amongst the illegitimate 83.3.

The following table shows the number of Infant Deaths from various groups of disease during the year 1951.

Infant Mortality

DEATHS FROM STATED CAUSES AT VARIOUS AGES
UNDER ONE YEAR OF AGE, 1951

CAUSE OF DEATH	AGE AT DEATH					Total for each cause
	Under 4 weeks	4 weeks to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	
Bronchitis	—	2	3	—	1	6
Pneumonia	3	4	6	1	3	17
Other Respiratory Diseases ..	5	2	—	—	1	8
Gastritis and Diarrhoea	—	1	1	2	—	4
Prematurity	35	3	—	—	—	38
Congenital Malformations	8	1	1	—	—	10
Accidents	—	2	1	—	1	4
Violence and Other Causes ..	6	7	—	1	—	14
ALL CAUSES	57	22	12	4	6	101

The following table shows the Infant Mortality Rates under five groups of disease for the years 1942 to 1951 inclusive. It will be noticed that there has been a rise in the death rate due to respiratory disease in infants. The rate for gastritis and diarrhoea has made a dramatic fall during these years; that for congenital malformations fluctuates from year to year although the figure for 1951 is small. The death rate from prematurity has not fluctuated greatly during these years. It seems, therefore, that the main problem in Infant Mortality in Bolton is death from respiratory disease and there is much that can be done to reduce the number of such deaths.

Infant Mortality Rates for Selected Causes

CAUSE GROUPS	Year and Rates per 1,000 Live Births									
	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951
Respiratory ..	8.9	7.7	9.3	9.7	7.5	5.9	7.6	7.7	5.1	12.5
Gastritis and Diarrhoea ..	11.6	1.9	3.8	3.7	2.6	2.9	3.1	0.7	2.4	1.6
Prematurity ..	16.6	13.4	19.7	15.4	12.4	13.3	14.1	11.5	12.6	15.4
Congenital Malformations	11.6	11.1	10.1	4.9	8.2	7.7	4.5	6.6	9.1	4.0
All Other Causes	16.6	16.1	14.5	13.4	7.6	7.1	8.9	4.0	6.3	7.3
TOTAL RATE—Bolton	65.3	50.2	57.4	47.1	38.3	36.9	38.2	30.5	35.5	40.8
TOTAL RATE—England and Wales	49	49	46	46	43	41	34	32	29.8	29.6

Deaths under Four Weeks

The part of the infantile mortality which occurs in the first four weeks of life is called the neo-natal mortality. There were 57 deaths of infants under 4 weeks, giving a neo-natal mortality rate of 23.03 per 1,000 live births.

The causes of death during the first four weeks of life were as follows:—

CAUSES OF DEATH	0—7 days	8—14 days	15—21 days	22—28 days	Total under 29 days
Atelectasis	7	—	—	—	7
Birth Injury	3	—	—	—	3
Broncho-pneumonia	2	—	1	—	3
Congenital Malformations ..	8	—	—	—	8
Prematurity	31	1	3	—	35
Other diseases	—	1	—	—	1
TOTAL	51	2	4	—	57

Deaths from Cancer

The following table shows the death rates calculated as a rate per cent of the total deaths during the past ten years under the various common sites.

Localisation of Disease and Rates per cent of Total Deaths

SITE	YEAR																			
	1951	1950		1949		1948		1947		1946	1945		1944		1943		1942			
Stomach	78	2.938	74	3.135	53	2.343	69	3.123	60	2.618	62	2.769	57	2.634	61	2.740	66	2.839	48	2.169
Lung & Bronchus . .	48	1.808	39	1.652	41	1.812	35	1.584	35	1.527	30	1.339	24	1.109	17	.763	18	.774	13	.587
Breast	29	1.092	19	.805	31	1.370	37	1.674	37	1.614	38	1.697	33	1.524	33	1.482	31	1.333	31	1.401
Uterus	20	.755	17	.720	26	1.149	22	.995	15	.654	22	.983	15	.693	9	.404	19	.817	26	1.176
Other Sites	185	6.968	203	8.601	175	7.736	195	8.827	188	8.202	161	7.191	157	7.255	176	7.906	177	7.616	153	6.916
Total Deaths from Cancer.. . . .	360	13.559	352	14.915	326	14.412	358	16.206	335	14.616	313	13.979	286	13.216	296	13.297	311	13.382	271	12.251
TOTAL DEATHS (All Causes)	2655	2360	2262	2209	2292	2239	2164	2226	2324	2212										

MATERNITY AND CHILD WELFARE

Domiciliary Midwifery and Ante-Natal Work

The following figures give a statistical summary of the work in relation to domiciliary midwifery for the year:—

(a) CONFINEMENTS CONDUCTED BY DOMICILIARY MIDWIVES.

502 confinements were conducted by domiciliary midwives.

(b) CONFINEMENTS CONDUCTED BY MEDICAL PRACTITIONERS.

In 150 cases, medical practitioners were called in by the midwives.

The following table gives particulars of the domiciliary midwives' work during the year:—

No. of midwives who have practised	...	...	...	...	...	...	15
No. of cases attended	...	...	...	...	...	...	556
No. of cases receiving Gas and Air Analgesia	...	...	...	...	...	...	429
Average No. of cases per midwife	...	...	...	...	...	...	43
No. of calls for medical aid	...	...	...	...	...	...	150
Per cent of cases in which medical aid was sought	...	...	...	...	...	...	27.0%
No. of midwives on the register at the beginning of the year	...	...	...	...	...	...	16
No. who ceased to practise in Bolton	...	...	...	...	...	...	3
No. on the register at the end of the year	...	...	...	...	...	...	13

Included in the above are 21 cases attended by the midwives as maternity nurses.

The following 163 notifications were received from domiciliary midwives in accordance with the regulations of the Central Midwives Board:—

Summoning of medical assistance	...	...	...	...	...	...	150
Notification of still births	...	...	...	...	...	...	5
Commencement of artificial feeding	...	...	...	...	...	...	7
Notification of death of mother or child	...	...	...	...	...	...	1

Municipal Midwives

At the end of 1951 there were nine Municipal Midwives practising in the District.

During the year, 2 municipal midwives retired. The number of births attended by the midwives again fell. The midwives were booked for 491 cases, 463 as midwives and 28 as maternity nurses. They paid 16,027 ante-natal and post-natal visits to their patients during the year.

HEALTH VISITING

An additional Child Welfare Centre was opened in February at Astley Bridge to cater for the mothers and children in that area. This brought the number of Child Welfare sessions to 13 each week, 2 of these being at the Civic Centre, 1 at the School Clinic at Astley Bridge and the remaining 10 were held in church halls scattered throughout the Borough. A morning session was held as an experiment and has proved very successful.

Ante and post-natal cases referred by the domiciliary midwives were seen at the Consultant Clinic held weekly at the Civic Centre.

Co-operation with the Bolton District General Hospital has been maintained by the bi-weekly visits of one of the Health Visitors acting as liaison officer between the Department and the Paediatrician.

More requests have been made by the Bolton District General Hospital for visits to be paid to expectant mothers for investigation of home conditions to determine hospital or home confinement. Unfortunately, most of these cases had to be recommended for admission to hospital.

Problem families have taken up a good deal of the Health Visitors' time. Weekly and bi-weekly visits have been paid to some of these families, assisting them with the family budget, advice on "make do and mend" in children's clothing and practical instruction on cleaning the home. Response is slow and often very disappointing, but worthwhile continuing where there is a sign of improvement.

Visits to the aged and chronic sick, and after-care, were continued. Cases recommended for convalescent treatment were also visited, and a few weeks after their return from convalescence, a further visit was paid. In all cases, improvement in the general condition was reported.

The first 3 Student Health Visitors awarded bursaries commenced training at the Bolton Technical College in January and gained their practical experience in the Department. Assistance was also given in the training of students from other areas. The 3 Bolton students were all successful in the examination and commenced duty as qualified Health Visitors at the beginning of August. At the end of the year, two more students were midway through the course.

At the 31st December, the equivalent of 12 Health Visitors were engaged in Maternity and Child Welfare work.

In July, work was begun on an investigation into the use of a subcutaneous diphtheria-pertussis antigen, the object of the investigation being the use of such an antigen to reduce the risk of poliomyelitis following the injection of alum containing antigens. 300 children took part in the survey. Each child was to receive injections at monthly intervals, of a new combined diphtheria-pertussis prophylactic and twelve weeks after the completion of the course of three injections, each child was to return for a Schick test to determine their immunity to diphtheria.

By the end of the year, all the children had received the first injection, 293 had returned for the second injection and 250 had completed the full course of three injections. Of these children, 68 had returned for Schick testing.

Every child was seen by the Health Visitor 48 hours and 96 hours after each injection, and after the Schick test, either at the Civic Centre or in their homes. This entailed 693 home visits.

In addition to the regular visits to homes for the children, chronic sick and after-care patients discharged from hospital, the Health Visitors were in regular attendance at the clinics making 1,504 attendances at the Child Welfare Centres, 105 attendances at the Consultant Clinic, 115 attendances at the Immunisation Clinic.

They were also available at the Civic Centre between the hours of 9 a.m. and 10 a.m. and between 1.30 p.m. and 2 p.m. for interviewing and advising mothers. A large number of parents, including fathers, avail themselves of this opportunity to see their particular Health Visitor with a view to domestic problems being solved.

Groups of senior schoolgirls have been taken round the Department and some of the Infant Clinics by the Health Visitors in the hope of stimulating an interest in Maternity and Child Welfare work.

Mrs. J. Martin, M.B.E., Superintendent Health Visitor, retired from the Department at the end of May after twenty-one years' service. She came to Bolton as a Health Visitor in 1930 and was appointed Superintendent in 1939 when the staff comprised sixteen Health Visitors. This was increased to twenty-four in 1945 and to thirty by the time Mrs. Martin retired. In June 1949, she was awarded the M.B.E. for the work entailed in organising the Home Help Service.

The following table shows the work done by the Health Visitors:—

Visits by Health Visitors

First visits to newly-born babies	... ..	2,438
Visits to children, 1—5 years	... ..	11,987
First visits to expectant mothers	... ..	247
Subsequent visits to infants under 1 year	... ..	6,299
Subsequent visits to expectant mothers	... ..	40
Visits to cases of puerperal pyrexia	... ..	4
Visits to cases of ophthalmia neonatorum	... ..	—
Enquiries into deaths occurring in children (under 1 year of age)	... ..	80
Visits to cases of infectious disease	... ..	118
Visits to chronic sick	... ..	254
Visits to arrange after-care	... ..	47
Miscellaneous visits	... ..	1,497
Total Visits	... ..	<u>23,011</u>

Child Welfare Centres

CENTRE	Number of Sessions	Total Number of Attendances	Average Number of Attendances per Session
Civic Centre (1)	47	3316	70.6
Daubhill	51	2980	58.5
Halliwel	48	3223	67.1
Rosehill	49	2880	58.7
Civic Centre (2)	50	2753	55.1
Deane	48	2026	42.2
Chalfont Street	47	2209	47.0
Tonge Fold	47	2935	62.5
Delph Hill	49	2619	53.4
Tonge Moor	50	2957	59.1
Chorley Old Road	49	2820	57.5
High Street	51	3017	59.4
Astley Bridge	44	2241	51.0

Number of children who attended the Centres during the year	...	3,168
Total number of attendances at the Centres during the year	...	35,976
Number of children who first attended the Centres during the year, and who on the date of their first attendance were:—		
(a) Under 1 year of age	...	1,614
(b) Over 1 year of age	...	130

Massage and artificial sunlight treatment for Infants

During the year, six sessions weekly were held for massage with the exception of a six week period when an additional session was held to reduce the number of children waiting for treatment. The number of children treated was 667, of whom 153 were new cases. 2,362 treatments were given at 300 sessions.

Three sessions weekly were held for artificial sunlight. 594 children had treatment, of whom 289 were new cases. 4,144 treatments were given at 173 sessions.

In addition, 362 treatments were given to 52 tuberculous patients, 23 of whom were new cases.

An average of three sessions weekly was also held for medical examination of employees of other Corporation departments.

Premature Infants

Prematurity of birth was the direct cause of about two-thirds of the infant deaths in the first four weeks of life in Bolton and is a contributing cause to the death of other infants. Infants weighing less than 5½ lbs. at birth are regarded as premature. There were 189 premature births notified amongst the 2,475 total births in Bolton during the period under review. Thirty-five of the premature babies were born at home and 154 in hospital. Of the premature babies born at home, 8 were subsequently removed to hospital.

One of the premature babies born at home died in hospital during the first twenty-four hours of life. Twenty-six survived at the end of one month. Eighteen of the 154 premature babies born in hospital died during the first twenty-four hours of life and 120 survived at the end of one month. 88.9% of the premature babies born at home and 77.9% of those born in hospital survived the first month of infancy.

DAY NURSERIES

The following Day Nurseries are administered by the Health Committee in Bolton:—

<i>Name of Nursery</i>	<i>No. of Places available</i>
Arkwright Street	44
Newport Street	60
Shaw Street	50
Park House	50
Merehall	47
Cotton Street	50
Roxalina Street	50
Total places available	351

At the request of the Children's Committee under Section 13 (vi) of the Children's Act, twelve places at Park House Nursery are allocated for the use of the Children's Committee for the admission of resident children for short periods.

The total number of children attending the Day Nurseries during the year was 573 and the following gives an analysis of the reasons for attendance.

Children whose mothers are employed in clothing factories	...	...	52
" " " " " " cotton mills	...	...	347
" " " " " " domestic work	...	...	18
" " " " " " engineering works	...	...	16
" " " " " " as Home Helps	...	...	6
" " " " " " Nurses in hospital or			
nursery	...	...	12
" " " " " " in office work	...	...	11
" " " " " " as shop assistants	...	...	26
" " " " " " teachers	...	...	4
" " " " " " transport workers	...	...	2
" " " " " " in various other forms of			
employment	11
" " " " " " patients in Hospital or Sanatorium	56
" " " " " " deserted	4
" " " " " " deceased	8
<hr/>			
Total	573
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Thirty-eight of these mothers were separated from their husbands, nine were widows and forty-five were unmarried. The waiting list of children at the beginning of the year was 336 and at the end of the year 310. The Nurseries employed a total of 96 Nursing Staff and 35 Domestic Staff.

Medical Care

Routine medical inspections are carried out at the Nurseries and Diphtheria Immunisation is offered to every child.

Nursery Nurses' Training

In February, 1951, the new Training Centre at 40, Chorley New Road, was opened. These premises were used as a war-time nursery from 1940 to 1945 and more recently, as a hostel for Municipal Midwives. The rooms have been adapted to provide lecture and demonstration rooms for teaching. The decoration and furnishings are attractive throughout and heating is provided by means of gas fires and slow-combustion stoves. There is a garden at the back and front of the house in which the students take active interest with the help of the Biology Tutor. A full-time Cook-housekeeper and one Assistant are employed to carry out the household duties. A mid-day meal is provided for students at a reasonable charge.

During the year, 25 students were successful in obtaining the Certificate of the National Nursery Examination Board.

Nursery and Child-Minders Regulation Act, 1948

There are seven registered Industrial Nurseries which provide accommodation for 314 children. All these nurseries were inspected regularly and were satisfactory.

HOME NURSING SERVICE

The service has been extensively used during the year with a good variety of work. The new cases visited were 400 more than the previous year.

During January and February, the work was carried on under great difficulty. An influenza epidemic made great demands on the service and the difficulties became more acute when several members of the staff became ill and were off duty at the same time. An appeal was made to the public for volunteers to assist the depleted staff.

After this emergency was over, several of the volunteers remained on the staff as orderlies, thereby relieving the trained staff of some of their non-nursing duties.

At the end of the year the Nursing Staff employed was:—

6	Full-time Queen's Nurses
1	Full-time Queen's Male Nurse
1	Part-time Queen's Nurse
5	Full-time State Registered Nurses
1	Full-time State Registered Male Nurse
5	Part-time State Registered Nurses
1	Full-time State Enrolled Assistant Nurse
1	Part-time State Enrolled Assistant Nurse
5	Full-time Orderlies
1	Full-time Male Orderly
1	Part-time Orderly

Of these, two were resident in the Home and the remainder were non-resident.

The service is still under-staffed with trained nurses.

A total number of 3,273 patients were nursed, entailing 78,259 visits. Nurses were also present at 33 operations.

Three motor cars are available for use by the Home Nurses. In addition, two nurses possess motor cycles of their own and three use bicycles. The remainder of the staff use the normal transport within the Borough.

NEW CASES ARISING DURING THE YEAR

Adults	...	...	...	...	...	...	...	2,638
Children under 5	...	...	...	...	...	...	...	150
School Children 5-15	...	...	...	...	...	...	...	138
Total	...	...	...	...	...	...	...	<u>2,926</u>

SUMMARY OF NEW CASES NURSED BY THE HOME NURSES

ADULTS										No. of Patients
NURSING OF INFECTIOUS DISEASES:										
Conjunctivitis	...	...	...	...	...	...	...	...	...	6
Influenza	...	...	...	...	...	...	...	...	...	63
Pneumonia	...	...	...	...	...	...	...	...	...	152
Sore Throat and Quinsy	...	...	...	...	...	...	...	...	...	18
Tuberculosis	...	...	...	...	...	...	...	...	...	69

SURGICAL NURSING	299
ORTHOPAEDIC CASES	16
MEDICAL NURSING:	
Bronchitis	110
Cancer	144
Cardiovascular Disease	287
Cerebral Haemorrhage and Seizures (Under 60)	26
" " " " (Over 60)	109
Diabetes	32
Ear, Nose and Throat conditions	61
Enemata and Bowel Washouts	351
Gynaecological conditions	411
Hemiplegia (Under 60)	21
" (Over 60)	60
Pernicious Anaemia	47
Rheumatoid Arthritis	136
Rheumatic Diseases	9
Senility	130
Skin Diseases	31
Thread Worms	10
Other Medical Diseases	40
Total	<u>2,638</u>

CHILDREN	Under 5 yrs.	5-15 years
After-care of Tonsillectomy	7	10
Bronchiectasis	1	—
Bronchitis	9	21
Circumcision	8	1
Conjunctivitis	2	—
Constipation	11	7
Diseases of the Ear, Nose and Throat	11	21
Eczema	7	—
Infectious Diseases	15	3
Otitis Media	10	21
Pyelitis... ..	1	1
Pneumonia	17	4
Rheumatism	—	1
Surgical Dressings	26	24
Threadworms	24	20
X-Ray Preparations	1	4
	<u>150</u>	<u>138</u>
Total		<u>288</u>

DOMESTIC HELP SERVICE

On January 1st, 1951, there were 145 Domestic Helps (52 full-time and 93 part-time) and on December 31st there were 141 (35 full-time and 106 part-time).

The training classes at Clarence Street Institute have been continued during the year and 63 Helps have now attended and are entitled to wear the Domestic Help Service Badge. During the winter, evening lectures have been given by the Medical Officer of Health and other officers of the Health Department on hygiene and other medical subjects of importance to Domestic Helps.

There has been less demand for Domestic Helps for domiciliary confinements, consequently, fewer cases have received full-time service. Most sick people need and prefer help in the morning so we have been able to attend more cases adequately by engaging all new workers for morning service only. Owing to the shortage of beds in the chronic sick wards, there have been large numbers of requests from doctors for Helps to look after bedfast old people who are on the waiting list for hospital, and from almoners and welfare departments of the hospitals on behalf of aged and infirm patients who can return to their own homes only if they have the assistance of a Domestic Help. Every one of these cases has been attended, thus freeing hospital beds.

Many of these patients, however, such as those suffering from rheumatoid arthritis and similar chronic conditions, will never be able entirely to look after themselves and therefore, for them the Domestic Help Service is indispensable. From all quarters come requests for help and many of the cases notified by either the health visitors, the sick visitors connected with churches or "Over-Sixties" Clubs are people who, although able to do part of the housework are too frail to scrub floors, climb ladders or clean windows. Fortunately, in many of these cases, relatives help out but this is not always so. The department attempts to get co-operation from relatives wherever possible.

Many of the old people themselves co-operate and help to minimise their own difficulties. There is the story of Mr. X, aged 84, who at the first interview said that his grand-daughter could come so often and clean the upstairs rooms if we could provide help for him during the mornings to clean the rooms downstairs. The Help reported that she noticed that he never wore an overcoat even in the coldest weather and it was ascertained that the reason for this was that the only coat he had was too heavy for him to walk about in. A lighter one was found and the old man immediately gave up his heavy coat for someone else. It is this public spirit in so many of these old people that really assists the Domestic Help Service to get on with its work.

During the year under review, Domestic Helps assisted in 884 homes, including 646 for the first time. Of the new cases, 120 were maternity and 526 general sickness, infirmity, senility and tuberculosis.

Fees are recovered for the services provided in accordance with a Scale of Charges approved by the Council. The following tables show the number of new cases where the service was provided free of charge, at part cost or at full cost.

Maternity Cases supplied with Domestic Help

No. provided free of charge	...	...	...	...	...	9
" " and part cost recovered	...	...	...	...	...	81
" " " full " "	...	...	...	...	...	30
Total	...	...	...	...	...	120

Cases of Sickness and Infirmary supplied with Domestic Help

No. provided free of charge	...	...	...	...	...	284
„ „ and part cost recovered	...	...	...	...	...	160
„ „ „ full „ „	...	...	...	...	...	82
Total	...	...	...	...	...	<u>526</u>

AMBULANCE SERVICE

There was a further increase in the work of the Ambulance Service during the year, the mileage having increased to 88,063 from 83,957 in 1950 in respect of ambulances, and to 54,791 from 29,831 for sitting-case cars.

During the year two sitting-case cars (Austin 16 h.p.) and one ambulance (Austin 27 h.p.) were purchased. The present fleet, therefore, consists of:—

AMBULANCES:

<i>Make</i>	<i>H.P.</i>	<i>Reg. No.</i>	<i>Purchase date</i>
Austin	24	ABN 1	Taken over from the Fire Brigade in 1941.
Austin	16	CWH 606	20. 4.48
Austin	16	DBN 226	29.10.48
Austin	16	DBN 250	5.11.48
Bedford	26	DBN 287	30.11.48
Commer	14	DBN 386	30.11.48
Austin	16	DBN 444	20.12.48
Austin	16	DBN 555	20. 1.49
Austin	16	DBN 800	6. 4.49
Austin	27	EWB 345	23. 8.51

SITTING-CASE CARS:

Austin	10	CBN 168	1946
Austin	16	CWH 626	28. 4.48
Austin	16	EBN 355	4.10.50
Austin	16	EWB 111	4. 6.51
Austin	16	EWB 222	6. 6.51

The personnel at the 31st December consisted of:—

- Superintendent
- Deputy Superintendent
- 27 Drivers
- 4 Attendants
- 1 Foreman Mechanic
- 1 Mechanic
- 1 Full-time Clerk

The following table gives a brief summary of the work of the department.

		Total number of journeys made in the year	Total number of Patients carried in the year	Total number of Accident and other Emergency journeys incl. in Col. 2 (4)	Total Mileage during the year
(1)		(2)	(3)	(4)	(5)
Directly provided service	{ Ambulances	8,425	27,394	3,254	88,063
	{ Cars ..	3,772	8,029	262	54,791
Agency service for Turton area of Lancashire	{ Ambulances	943	1,236	166	10,233
	{ Cars ..	496	567	15	7,054

The following tables show the variety of work undertaken by the service.

Total mileage run in carrying patients resident in Bolton and Lancashire County (excluding Turton area) to and from hospitals and other routine journeys

MONTH	PATIENTS			MILES		
	Ambulance	Sitting Case Car	Total	Ambulance	Sitting Case Car	Total
January	2,385	443	2,828	8,215	2,989	11,204
February	2,329	413	2,742	7,199	3,730	10,929
March	2,403	530	2,933	7,520	3,514	11,034
April	2,685	571	3,256	6,992	4,619	11,611
May	2,716	601	3,317	8,589	5,036	13,625
June	2,181	674	2,855	7,678	4,596	12,274
July	1,981	837	2,818	6,907	4,553	11,460
August	2,162	838	3,000	8,090	5,292	13,382
September	1,728	781	2,509	5,806	4,670	10,476
October	2,185	872	3,057	6,944	5,022	11,966
November	2,469	764	3,233	7,886	5,082	12,968
December	2,170	705	2,875	6,237	5,688	11,925
TOTAL	27,394	8,029	35,423	88,063	54,791	142,854

The following table gives an analysis of emergency and other duties, apart from routine transport of patients, performed by the ambulance service month by month during the year. The figures are those of the number of patients in each category who were transported by ambulance and sitting-case car.

TYPE OF CASE	Jan	Feb	Mar	Apl	May	June	July	Aug	Sep	Oct	Nov	Dec	Total Patients
EMERGENCY:													
Collapse	44	22	27	35	17	22	15	30	28	18	25	35	318
Road Accident . . .	10	16	23	17	10	12	15	20	13	12	15	16	179
Industrial Accident .	21	18	22	26	23	25	21	25	14	16	21	21	253
Drowning, etc. . . .	—	—	—	—	—	1	—	—	2	—	—	—	3
Poisoning, Gassing, etc.	2	4	2	—	3	6	2	4	2	5	4	4	38
Burns and Scalds . .	5	6	8	11	5	5	1	4	9	4	9	8	75
Accidents in the Home	26	14	16	30	28	28	27	34	35	21	25	26	310
Epilepsy	3	—	5	3	8	5	3	8	8	2	5	4	54
Violence or Drunkenness	5	3	2	4	2	10	9	9	7	3	7	8	69
Attempted Suicide . .	1	—	1	—	2	—	1	—	1	—	—	—	6
Dead on Arrival . . .	—	—	3	—	1	1	—	1	—	1	—	—	7
Misc. Minor Accidents	50	30	37	51	45	30	49	54	50	47	51	58	552
Sudden Illness . . .	9	13	12	10	7	12	5	20	9	6	13	16	132
TOTAL EMERGENCIES . .	176	126	158	187	151	157	148	209	178	135	175	196	1,996
MATERNITY CASES:													
Bolton District General Hospital	113	87	85	93	108	93	86	100	67	69	77	72	1,050
Other Maternity Homes	54	63	68	36	46	63	66	68	53	54	58	60	689
Births in Ambulance	—	—	—	—	—	—	—	—	—	—	—	2	2
Born before arrival of Ambulance . .	5	4	—	1	3	—	3	1	2	—	3	1	23
TOTAL MATERNITY CASES	172	154	153	130	157	156	155	169	122	123	138	135	1,764
LONG JOURNEYS:													
(50 miles or more) . .	6	7	8	5	23	17	6	9	9	6	9	8	113
SUPPLY OF ANALGESIA APPARATUS TO CONFINEMENTS . .	32	47	50	25	33	45	35	43	39	40	36	27	452

Agency Arrangements

The Ambulance Service carries patients from the Turton area by arrangement with the Lancashire County Council. The following tables show the variety of work undertaken by the Ambulance Service for patients living in the Turton area.

Total Mileage run in carrying Patients to and from Hospitals, and Other Routine Journeys

MONTH	PATIENTS			MILES		
	Ambulance	Sitting Case Car	Total	Ambulance	Sitting Case Car	Total
January	114	32	146	920	449	1,369
February	95	40	135	750	534	1,284
March	110	40	150	1,027	398	1,425
April	122	43	165	1,368	835	2,203
May	81	50	131	685	693	1,378
June	73	50	123	615	596	1,211
July	111	64	175	861	878	1,739
August	76	64	140	704	633	1,337
September	54	58	112	456	780	1,236
October	149	50	199	1,078	503	1,581
November	125	47	172	825	435	1,260
December	126	29	155	944	320	1,264
TOTAL	1,236	567	1,803	10,233	7,054	17,287

The following table gives an analysis of the emergency and other duties, apart from routine transport of patients, performed by the Ambulance Service for persons living in the Turton area, during the year. The figures are those of the number of patients in each category who were transported by ambulances or sitting case cars.

TYPE OF CASE	Jan	Feb	Mar	Apl	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
EMERGENCY:													
Collapse	2	—	—	—	2	—	2	1	1	1	—	1	10
Road Accident	4	1	4	4	1	2	5	1	—	5	8	3	38
Industrial Accident . .	2	—	2	1	1	1	1	4	1	1	2	3	19
Poisoning, Gassing, etc.	—	—	1	—	—	—	—	—	—	—	1	—	2
Burns or Scalds . . .	—	—	—	—	1	—	—	—	1	—	—	—	2
Accidents in the Home	1	—	2	1	3	1	1	2	2	1	1	1	16
Epilepsy	—	—	—	—	1	—	—	1	—	—	—	—	2
Misc. Minor Accidents	2	—	5	1	2	—	2	—	2	4	—	—	18
Sudden Illness . . .	1	—	—	—	—	—	—	—	—	1	—	—	2
TOTAL EMERGENCIES . .	12	1	14	7	11	4	11	9	7	13	12	8	109
MATERNITY CASES:													
Bolton District General Hospital	2	4	12	4	4	5	6	1	6	6	4	4	58
Other Maternity Homes	4	2	5	3	—	3	4	3	—	1	—	9	34
Births in Ambulance	—	—	—	—	—	—	1	—	—	—	—	—	1
TOTAL MATERNITY CASES	6	6	17	7	4	8	11	4	6	7	4	13	93
LONG JOURNEYS: (50 miles or more) . .	—	—	1	2	—	1	—	—	1	—	—	—	5

NOTIFIABLE INFECTIOUS DISEASES

Prevalence and Mortality

The table below shows the number of cases of notifiable diseases notified in Bolton in 1951, and the deaths resulting from such diseases.

NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR 1951

<i>Disease</i>	<i>Total cases notified</i>	<i>Total Deaths</i>
Smallpox	—	—
Scarlet Fever	448	—
Diphtheria	12	—
Enteric Fever (including Paratyphoid) ...	3	—
Relapsing Fever (Undulant)	1	—
Food Poisoning	46	—
*Pneumonia	214	103
Puerperal Pyrexia	4	—
Meningococcal Infection	2	—
Acute Poliomyelitis	1	—
Acute Polioencephalitis	—	—
Encephalitis Lethargica	—	1
Dysentery	294	—
Ophthalmia Neonatorum	1	—
Erysipelas	24	—
Malaria	1	—
Measles	1,800	2
Whooping Cough	278	—

*The cases notified are Acute Primary and Acute Influenzal, but the deaths include all forms of Pneumonia.

For the purposes of comparison, the number of cases of Measles, Whooping Cough, Scarlet Fever, Diphtheria, Dysentery, Cerebro-spinal Fever and Meningococcal Infection, notified during the last ten years is shown in the following table.

	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951
Measles	1445	763	1076	1324	239	2082	2360	522	1881	1800
Whooping Cough	39	679	214	151	264	231	363	431	583	278
Scarlet Fever	421	289	410	308	182	229	636	296	149	448
Diphtheria	270	197	142	125	87	18	9	32	20	12
Dysentery	13	3	2	5	7	—	4	1	28	294
Cerebro-Spinal Fever	16	10	8	7	5	16	3	2	—	—
*Meningococcal Infection ..	—	—	—	—	—	—	—	—	3	2

*It will be noticed that following the Public Health (Acute Poliomyelitis, Acute Encephalitis and Meningococcal Infection) Regulations, 1949, Cerebro-spinal Fever is now notifiable as "Meningococcal Infection."

SCARLET FEVER

There was a rise in the number of notifications of Scarlet Fever received during the year, 448 as against 149 in 1950. Cases were spread over the town and occurred principally among children of school age. There was no obvious reason for the rise in number, and the disease remained extremely mild in character.

DIPHTHERIA

17 cases of Diphtheria were notified but in only 12 was the diagnosis confirmed. Most of these cases were due to an outbreak which occurred in a residential school. This outbreak commenced on the 29th October and ultimately involved 11 children between the ages of 7 and 13. One child developed a sore throat which, clinically, did not resemble diphtheria, but investigation of the throat swab showed the presence of the germ which was subsequently proved to be virulent. Nose and throat swabs were taken from the contacts of this child who slept in the same dormitory or were in the same class. Four more cases were brought to light by this method, although none of the children concerned was ill. These children were removed to hospital and no further cases of diphtheria occurred until the 13th December. On the 10th December one of the original cases returned from hospital. Two children had sore throats on the 13th and 14th and on bacteriological examination were found to be suffering from diphtheria. Unfortunately one of these children had been off colour for several days and had not been isolated. Examination of the contacts showed that four other children had positive swabs. All these children were admitted to hospital promptly, and no further case occurred.

None of the children who developed a positive swab had been immunised, and no child was seriously ill at any time.

In the investigation and control of this outbreak a total of 95 nose and throat swabs were taken, and the school was closed to visitors for one weekend.

Close liaison between the doctor responsible under the National Health Service for these children and members of the Public Health Department staff made the discovery, investigation and control of this outbreak possible.

The outbreak demonstrated once again the importance of immunisation, for none of the children who developed diphtheria had been immunised.

The other case of diphtheria occurred in a lady aged 35. She recovered completely.

MENINGOCOCCAL INFECTION AND POLIOMYELITIS

Only two notifications of Meningococcal Infection were received during the year. A girl aged four years was notified as suffering from Paralytic Poliomyelitis. She made a satisfactory recovery.

DYSENTERY

There was a steep rise in the number of notifications of Dysentery received during the year, 294 having occurred compared with 29 during 1950. All were due to *shigella sonnei*.

An outbreak of Dysentery occurred in May at a Residential School, and 53 children were removed to hospital. It appears that one of the children developed diarrhoea a fortnight before the main outbreak. The main outbreak was explosive in character and was brought under control by the prophylactic administration of sulphasuxidine to all the children in the school.

An outbreak occurred in June at an Industrial Day Nursery involving a total of 26 children under the age of five. This outbreak was explosive in character and followed a missed case. It was brought under control by the administration of sulphasuxidine to all contacts and the exclusion of all children with suspicious diarrhoea until three negative stool samples had been obtained.

A further outbreak occurred in a residential nursery and involved seven children, some of them attending daily and some of them resident. This was controlled by the examination of children with diarrhoea and the obtaining of stool specimens from all contacts. All children with positive specimens were promptly excluded.

Bacteriological examination is made of every case of Dysentery occurring in the borough, and of every member of the patient's family. A total of 4,219 specimens were taken, of which 470 proved positive. A total of 1,420 persons submitted specimens during the year.

MEASLES AND WHOOPING COUGH

Measles has continued to be a common disease during the year, 1,800 cases having occurred compared with 1,881 in 1950. Most of these cases resulted from a continuation of the severe epidemic occurring in the Autumn of 1950.

The number of cases of Whooping Cough has fallen during the year, a total of 278 having occurred compared with 583 during the previous year.

PNEUMONIA

Acute Primary and Acute Influenzal Pneumonia are the only forms notifiable. The rise in notifications (which numbered 214 compared with 56 in 1950) was mainly due to the Influenza epidemic which occurred in the first quarter of the year.

FOOD POISONING

46 cases of Food Poisoning were notified during the year, compared with 4 in 1950. 40 of these were due to an outbreak occurring in the middle of July among persons who had partaken of a meal at an Industrial Canteen. The symptoms varied from abdominal pains to severe vomiting and diarrhoea and came on over a range of 17 hours, although the first complaints were made by three people after only two hours. The majority of the patients were not incapacitated, only 4 being absent from work. It was not possible to isolate any pathogenic organisms, and it is probable that this outbreak was due to staphylococcal toxin. The food incriminated was steamed beef and its gravy. This was cooked during the afternoon of the day preceding its consumption and allowed to cool slowly overnight standing on the floor in the same pan. Six other cases occurred—one in the third quarter of the year, and five in the fourth quarter. Three of these cases were in the same family and due to *Salmonella* St. Paul. One was due to *Salmonella* Thompson, and in the remaining two no pathogenic organism was isolated.

Immunisation, 1951

Age	Completely Immunised	Reinforcing Injections	Total
0—1	698	—	698
1—2	670	—	670
2—3	76	—	76
3—4	60	16	76
4—5	46	85	131
Total 0—5	1550	101	1651
5—6	58	126	184
6—7	35	127	162
7—8	21	57	78
8—9	5	17	22
9—10	1	6	7
10—11	2	—	2
11—12	—	1	1
12—13	—	1	1
13—14	—	—	—
14—15	—	2	2
Total 5—15	122	337	459
15 years and over ..	6	6	12
Grand total	1678	444	2122

The estimated mid-1951 Population of children under 5 was 13,810. Of these, 6,964 had been immunised up to the 31st December, 1951, a percentage of 50.42.

The estimated mid-1951 Population of children aged 5—14 years was 21,534. Of these, 16,330 had been immunised up to 31st December, 1951, a percentage of 75.83.

The total estimated mid-1951 Population of children aged 0—14 years inclusive, was 35,344, and of these, 23,294 had been immunised up to 31st December, 1951, a percentage of 65.90.

It is of paramount importance that Diphtheria Immunisation is maintained at a high level.

The following table shows the number of children immunised during the past ten years.

DIPHTHERIA IMMUNISATION

Age at date of inoculation	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	TOTAL
Under 1 yr. . .	8	18	97	54	103	425	756	799	835	698	0—5 years 7,033
1—2 years . .	981	1017	844	1253	1121	1037	1115	657	606	670	
2—3 „ . .	669	281	179	243	171	101	103	124	94	76	
3—4 „ . .	681	267	75	120	128	67	59	48	72	60	
4—5 „ . .	753	257	53	68	105	69	75	58	53	46	
5—6 „ . .	513	206	58	53	54	36	100	114	93	58	5—10 years 8,002
6—7 „ . .	297	156	23	49	59	17	77	94	83	35	
7—8 „ . .	269	150	17	41	67	11	33	37	63	21	
8—9 „ . .	192	137	21	26	57	16	20	26	54	5	
9—10 „ . .	154	126	14	26	54	20	16	23	43	1	
10—11 „ . .	130	156	16	23	54	4	5	9	7	2	8,784
11—12 „ . .	125	171	19	6	43	5	3	—	9	—	
12—13 „ . .	78	214	21	15	35	2	1	1	2	—	
13—14 „ . .	117	187	20	16	12	1	—	—	—	—	
14—15 „ . .	27	69	8	2	2	1	1	—	1	—	
15 years and over . .	—	—	3	—	3	18	2	1	2	6	
TOTALS . .	4994	3412	1468	1995	2068	1830	2366	1991	2017	1678	23,819

Vaccination

Until the 5th July, 1948, when the National Health Service Act came into force, vaccination was compulsory for every baby unless the father claimed exemption on conscientious grounds. Since that date, however, vaccination is voluntary and the number of infants under the age of one vaccinated has fallen from 692 in 1946 to 510 in 1950 and 524 in 1951.

There are no arrangements for infants to be vaccinated at clinics and parents are advised to consult their family doctor. A letter is sent to the parents of every child born within the borough, or whose parents normally reside within the borough, advising them to consult their doctor about vaccination. In addition, the Health Visitors, on their visits to the home, advise parents about vaccination.

The following table shows the number of persons vaccinated or re-vaccinated during 1951:—

	AGE AT DATE OF VACCINATION					TOTAL
	Under 1 year	1 year	2 to 4 years	5 to 14 years	15 years or over	
Number vaccinated ..	524	32	39	48	194	837
Number re-vaccinated ..	—	—	10	26	404	440

The deaths in Bolton attributed to the various epidemic diseases are shown in the following table for the years 1942 to 1951:—

CAUSES OF DEATH FROM EPIDEMIC DISEASES

	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951
Smallpox	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	1	—	—	1	—	—	1	—	—	—
Diphtheria & Memb. Croup	13	6	5	2	3	3	—	—	1	—
Enteric Fever	—	—	—	—	—	—	—	—	—	—
Measles	5	4	5	10	—	3	1	—	1	2
Whooping Cough.. .. .	1	2	1	3	2	5	2	2	2	—
Diarrhoea and Enteritis under 2 years of age ..	34	6	12	8	8	10	6	2	5	5
Erysipelas	—	—	1	—	—	1	—	—	—	—
Puerperal Sepsis	—	3	3	—	2	1	—	—	—	—
Cerebro-spinal Fever	2	4	1	3	2	3	1	1	—	—
Encephalitis Lethargica ..	3	8	4	3	4	9	1	3	—	1
Influenza	21	88	24	7	28	11	2	29	26	100

TUBERCULOSIS

This report has been prepared by Dr. J. B. Mitchell, Consultant Chest Physician.

The total number of new cases notified in 1951 was 153 as compared with 105 in 1950. One hundred and twenty-four of the new cases were respiratory tuberculosis and 29 were non-respiratory tuberculosis.

AGE AND SEX DISTRIBUTION OF CASES OF TUBERCULOSIS NOTIFIED IN BOLTON IN 1951

RESPIRATORY TUBERCULOSIS NOTIFICATIONS

Sex	AGES											Total
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	
Males	—	—	1	1	4	12	8	10	13	17	7	73
Females	—	2	2	3	7	8	14	7	3	2	3	51
TOTAL	—	2	3	4	11	20	22	17	16	19	10	124

NON-RESPIRATORY TUBERCULOSIS NOTIFICATIONS

Sex	AGES											Total
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	
Males	—	2	1	1	1	1	4	4	—	2	1	17
Females	—	2	2	2	—	—	3	1	1	—	1	12
TOTAL	—	4	3	3	1	1	7	5	1	2	2	29

DEATHS FROM TUBERCULOSIS

Forty-eight Bolton residents were certified as having died of tuberculosis during 1951. This compares with 43 in 1950.

Twenty-five of these deaths took place in institutions.

The age and sex distribution of those who died from tuberculosis are given in these tables:—

RESPIRATORY TUBERCULOSIS DEATHS

Sex	AGES									Total
	Under 5	5 to 10	10 to 15	15 to 20	20 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	
Males	—	—	—	—	5	3	5	7	6	26
Females	—	—	—	—	10	2	—	3	3	18
TOTAL	—	—	—	—	15	5	5	10	9	44

NON-RESPIRATORY TUBERCULOSIS DEATHS

Sex	AGES									Total
	Under 5	5 to 10	10 to 15	15 to 20	20 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	
Males	1	—	—	1	1	1	—	—	—	4
Females	—	—	—	—	—	—	—	—	—	—
TOTAL	1	—	—	1	1	1	—	—	—	4

The outstanding feature of these figures is a 45% increase in the number of new cases notified (105 in 1950 and 153 in 1951). When figures over the past five years are examined it is evident that the change is less sudden.

	Number of new attendances	Number referred by Mass Miniature Radiography	Number notified	Number of deaths
1947	657	0	142	82
1948	890	163	157	70
1949	900	32	119	64
1950	901	4	105	43
1951	1255	4	153	48

Interpretation of such figures is notoriously uncertain but the large number of notifications in 1948 could reasonably be attributed to the work of mass miniature radiography and the increase last year to the increase in the number of attendances.

The reduction in the number of deaths could be due to an increase in the proportion of early cases seen but a more likely explanation is that the introduction of streptomycin in the treatment of tuberculosis (pulmonary) has saved a number of lives: it should be remembered that in other cases it has postponed the year of death and these deaths may swell the figures in subsequent years.

It is generally accepted that the most effective way of reducing the death rates is to find early cases; this also greatly reduces the period of disability in those patients who survive. There are three ways of finding early cases:—

- (1) Mass miniature radiography;
- (2) Examination of contacts;
- (3) Providing an efficient service for diseases of the chest so that practitioners will not hesitate to send patients with trivial symptoms.

This is the most important way. It is laborious because many such patients have to be examined before one is found to be suffering from pulmonary tuberculosis. It is well worth while because such cases are usually eminently treatable, the outlook is good for them, the period of expensive hospital treatment is greatly reduced as is the period of time lost from work, and a source of infection is removed from the community at an early date.

The number of attendances at Bolton Chest Clinic compared with other clinics suggests that it is too low and it is my impression that the proportion of early cases seen is also low.

	Bolton Population 168,000	Edgware, Middlesex Population 200,000	Cambridge Population 180,000
Total Attendances:			
1950	5,365	—	13,000
1951	6,772	32,000	—

CARE AND AFTER-CARE

Under Section 28 of the National Health Service Act, the responsibility for the provision of schemes for the Prevention of Illness, the Care of persons suffering from illness, mental defectiveness or the After-Care of such persons, falls upon the Local Authority.

The Local Health Authority is empowered to institute schemes which will have as their end the prevention of illness. Under this Section the Local Authority can institute schemes for B.C.G. Vaccination, convalescent homes for persons requiring such facilities, the care of mental defectives, and the provision of workshops for the rehabilitation of persons suffering from Tuberculosis (these are usually set up in conjunction with other local authorities).

In undertaking these schemes, it is necessary for the closest liaison to be maintained between the voluntary organisations, the Regional Hospital Boards and the local medical practitioners in order to prevent overlapping or duplication of services.

Admission to Convalescent Homes

Arrangements are made for the admission to Convalescent Homes of persons requiring a period of rest and convalescence after illness or due to ill-health. The responsibility for the provision of convalescent treatment for persons who will require some form of treatment rests with the hospital authorities but the local authority can make arrangements for holidays for persons who have suffered from some illness but who now no longer require any treatment.

During 1951, 43 persons were admitted to convalescent homes under arrangements made by the Health Department.

(a) BRENTWOOD RECUPERATIVE CENTRE FOR MOTHERS AND CHILDREN

Brentwood Recuperative Centre, Marple, caters mainly for mothers of limited resources with young children. Suitable cases for admission are those

who need a period of recuperation after treatment in hospital, or for mental and physical distress arising from difficult home circumstances, bad housing, etc.

The Centre provides for mothers accompanied by their children, below the age of seven. Provision is not made for women who require medical care or special diet, or who are epileptics. A doctor is available in emergency.

The period of residence varies according to the needs of each family from one to two months, and at present there is accommodation for only nine families. Extensions to the Centre are being planned.

The Local Health Authority recommended 22 families (22 mothers and 65 children) for admission to the Centre during 1951. Eight families were admitted, three of whom had been recommended for admission during 1950. Family income and expenditure is assessed and a charge is made according to the means. Most families are able to afford the charges and all the families accommodated in 1951 were able to make some contribution. Seven families cancelled their applications and made other arrangements. The remainder expect to be admitted during the early part of 1952.

Health Visitors recommending families for admission to Brentwood have paid great tribute to the work of the Warden and Staff. Families are encouraged to adjust their personal and domestic difficulties and to develop good social habits.

(b) OTHER HOMES

During 1951 eight adults and eleven children were recommended by the Local Health Authority for periods of convalescence of two to six weeks and accommodation was found for seven adults and six children in various Centres. The two men were admitted to the Grey Court Fellowship Guest House at Hest Bank and the Blackburn and District Convalescent Home at St. Annes. The five women were admitted to the John Reynolds Convalescent Home at Lytham, the Grey Court Fellowship Guest House at Hest Bank, the Estcourt Home at St. Annes and the Convalescent Home for Epileptics at Saxmundham. The six children were admitted to the John Reynolds Convalescent Home at Lytham and the St. Joseph's Convalescent Home at Freshfield.

One woman withdrew her application and made other arrangements. The applications of two children were cancelled on account of illness and the parents wishing to make other arrangements. The three children remaining unaccommodated at the end of the year will be admitted to Homes during the year 1952.

All applicants for convalescence are assessed on their income and expenditure and in one case the Local Health Authority has paid the full fees for accommodation.

Health Education

During the year, numerous lectures on the work of the Public Health Department and on the Prevention of Infection of Food were given to various organizations. Arrangements are being made to expand this service. In addition to lectures given by the staff, leaflets dealing with the best methods of preventing various illnesses are available within the Department for distribution to the public in general.

Community Care of the Mentally Ill

The After-Care and Mental Health Sub-Committee of the Health Committee consists of the Mayor, the Chairman and Vice-Chairman of the Health Committee and ten members of the Health Committee. The Sub-Committee meets at regular monthly intervals.

The Medical Officer of Health, who is responsible for the work of the Mental Health Section, was assisted by his medical staff, one Duly Authorised Officer (male) and one Assistant (female).

The liaison between the Mental Health Service, the Regional Hospital Board and Hospital Management Committees continues to function in a most satisfactory manner and any requests for reports on patients or of visiting patients, are carried out. There is no joint use of officers.

The duties arising from the care and supervision of patients suffering from mental illness and mental deficiency, under the National Health Service Acts, 1946-1949, may be summarised as follows:—

1. Domiciliary services, i.e., the ascertainment of cases of mental illness and mental deficiency;
2. The Statutory Supervision of defectives in the community, those on licence from institutions or under Orders of Guardianship.
3. The obtaining of detention and reception orders under the Lunacy and Mental Treatment Acts, 1890-1930, and the Mental Deficiency Acts, 1913-1938;
4. The conveyance of patients suffering from mental illness or mental deficiency to hospitals or institutions;
5. The obtaining of social histories of patients admitted into mental hospitals including statistical information;
6. The making of home reports on mental patients who are being considered for discharge from mental hospitals;
7. The making of reports on mental defectives who are about to be seen by the Statutory Visitors for the purpose of recertification in accordance with the requirements of the Mental Deficiency Acts;
8. Provision of an after-care service for patients who have been in hospital for mental illness;
9. Reports of the home conditions of mental defective patients in institutions who are being considered for holiday and long licence;
10. The making of statutory reports on those patients residing in the community or under orders of guardianship.

None of these is delegated to a Voluntary Association and during the year, no training of Mental Health Workers was carried out.

ACCOUNT OF WORK UNDERTAKEN DURING THE YEAR

(1) *Under the Lunacy and Mental Treatment Acts, 1890-1930.*

During the year, the Duly Authorised Officer received information from various sources of 132 persons (72 males and 60 females) requiring treatment for mental disorders. These were admitted into mental hospitals within the region under orders of the Lunacy Act as follows:—

	<i>Males</i>	<i>Females</i>
Section 16	17	25
Section 20	45	23
Section 21 (1)	10	12

Eight of these patients were later transferred by the Duly Authorised Officer to other mental hospitals.

Two other cases were notified and arrangements made for examination at their homes under Section 17 of the Lunacy Act. In one, the medical practitioner called in by the examining Justice of the Peace certified "not of unsound mind," and in the second, the Justice of the Peace refused to make a Summary Reception Order after the medical practitioner had certified the patient to be "a person of unsound mind."

The voluntary case procedure was used steadily during the year. Several cases notified by the family doctor to the Duly Authorised Officer for investigation were referred to the Regional Consultant Psychiatrist for attendance and examination at the local out-patients clinics, of which there are now two sessions weekly at each of the two hospitals. The time lag previously experienced between date of reference and date of attendance has been considerably reduced. Arrangements are also in operation for domiciliary visits by the consultant psychiatrist to patients physically unfit to attend the clinics. On the advice of the consultant psychiatrist, 143 such patients (63 males and 80 females) took advantage of the facilities under Section 1 of the Mental Treatment Act, 1930, and were admitted direct into mental hospitals.

With the inauguration of the Bed Bureau established by the Regional Hospital Board during the previous year, it was expected that during the year under review, accommodation in mental hospitals for female patients would be more easily obtained, but this has only proved so with regard to urgent acute cases and the number of beds available is still proving inadequate for the admission of aged female dementia patients who are reported to the Duly Authorised Officer. The effect of this delay in admission is placing extra work on the staff involving additional visits and interviews with worried and distraught relatives. If tragedies are to be prevented, further provision needs to be made for these cases.

During the year, the staff were responsible for obtaining information for various mental hospitals. This involved 84 visits made up as follows:—

Visits in connection with the completion of social histories of patients admitted into mental hospitals	28
Visits in connection with the completion of home reports for patients who are being considered for discharge from mental hospitals ...	12
Visits made to the homes of patients discharged from mental hospitals and reports made as to their welfare	44

In addition, 349 visits were made in connection with the preparation of case notes of persons alleged to be of unsound mind.

The number of all classes of mental patients certified, temporary and voluntary, receiving treatment in mental hospitals on the 31st December, 1951, was:

<i>Males</i>	<i>Females</i>	<i>Total</i>
238	318	556

(2) *Under the Mental Deficiency Acts, 1913-1930*

The following is a summary of the cases reported during the year and shows the action taken:—

(i) Particulars of cases reported during 1951:	<i>Under 16 years</i>		<i>16 years and over</i>	
	M.	F.	M.	F.
(a) Cases reported by the Local Education Authority, Sec. 57, Education Act, 1944...	1	3	5	3
(b) Cases reported by the police under Sec. 8 (1) (a) or as a result of other action by the Courts	—	—	1	—
TOTAL	1	3	6	3

(ii) Action taken:

(a) Placed under Supervision	—	3	4	2
(b) Admitted to Institutions	—	—	1	—
(c) Action not yet taken	1	—	1	1
TOTAL	1	3	6	3

Classification of mental defectives awaiting vacancies in institutions at the end of the year.

(iii) In urgent need:

(a) Cot and chair cases	—	2	—	—
(b) Ambulant low grade cases	4	2	—	—
(c) Medium grade cases	—	—	—	1
(d) High grade cases	—	—	—	1
TOTAL	4	4	—	2

(iv) Not in urgent need:

(a) Cot and chair cases	—	—	—	—
(b) Ambulant low grade cases	1	—	—	—
(c) Medium grade cases	—	—	—	1
(d) High grade cases	—	—	—	—
TOTAL	1	—	—	1

The position regarding accommodation in institutions for mental defectives is still far from satisfactory and great difficulty is always experienced in obtaining vacancies for all classes of cases.

188 visits were made during the year to the homes of mental defectives under Statutory and Voluntary Supervision and reports made on their general care and home conditions.

Visits were also made to obtain information for various institutions at the request of the Medical Superintendents, and reports duly furnished on the following matters:—

Visits to the homes of mental defectives who are being considered for holiday and short licence	44
Visits in connection with progress reports of mental defectives who are on long licence from institutions	35
Visits on home circumstances, etc., for patients who are about to be seen by the Statutory Visitors for the purpose of re-certification in accordance with the requirements of Section 11 of the Mental Deficiency Acts	91

On the 31st December, 1951, the number of mental defectives found subject to be dealt with who were under some form of supervision in the community, including those on licence from institutions, was 128 and the number of mental defectives under care in institutions and places of safety was 198, making a total of 326, summarised as follows:—

	<i>Under 16 years</i>		<i>16 years and over</i>		TOTAL
	M.	F.	M.	F.	
1. Under Statutory Supervision	11	14	45	40	110
2. Under Guardianship	—	—	1	1	2
3. In 'Place of Safety'	—	1	—	—	1
4. Institutions	7	12	96	82	197
5. Action not yet taken	1	—	1	1	3
6. On licence from Institutions	—	—	4	—	4
7. Under Voluntary Supervision	1	2	4	2	9
	20	29	151	126	326

WATER SUPPLIES

The Waterworks Engineer reports as follows:—

- (i) The water supply of the area and of its several parts was satisfactory both as regards quality and quantity.
- (ii) The water supply of the area is filtered at five filter stations. Normally samples of both the raw and filtered water are subjected to full bacteriological examination each week and to full chemical analysis each month by the Borough Analyst. Special examinations and analyses are made as circumstances require.

During 1951, 238 samples of raw and 242 samples of filtered water received bacteriological examination, and 60 samples of both raw and filtered water received chemical analysis. The results showed that general filtration and treatment of the raw water were necessary, and that the filtered and treated water was of excellent quality, B. Coli being absent in almost all cases in 100 mls. All water is filtered and treated before passing into supply.

- (iii) From tests made weekly the water was shown to have no plumbo-solvent action.
- (iv) No action was required to be taken in respect of any form of contamination.
- (v) The public water mains afforded a direct supply to a population of approximately 167,000 and 54,701 dwelling-houses—no supply was afforded to dwelling-houses by stand-pipes.

ATMOSPHERIC POLLUTION

Deposit Gauges

The following Table shows the results of Deposit Gauge analysis for 1951:—

Records of Deposits expressed as Tons per Square Mile per Month

Month	Tonge Fold Farm	Tonge Cemetery	Haver-croft	Bolton Royal Infirmary	Fever Hospital	Police Sports Ground	Astley Bridge Cemetery
January	25.77	—	17.32	38.70	26.35	39.03	33.25
February	28.71	—	13.43	21.05	23.75	25.13	34.37
March	23.20	—	20.28	27.68	*	26.42	29.93
April	20.74	—	12.44	23.08	7.70	34.32	20.54
May	24.00	—	19.97	18.02	12.61	11.13	20.45
June	24.87	—	14.94	29.10	19.07	32.09	15.88
July	11.12	—	7.07	11.59	12.50	19.68	13.97
August	23.47	—	18.03	19.67	30.94	26.67	20.48
September ..	*	—	11.16	16.75	16.71	33.49	16.34
October	—	17.04	11.73	24.33	19.03	21.05	20.25
November ..	—	32.15	31.68	26.79	24.73	53.00	22.29
December ..	—	44.43	28.49	36.18	40.58	*	37.82
TOTAL	181.88	93.62	206.54	292.94	233.97	322.01	285.57
MONTHLY AVERAGE	25.1		17.2	24.4	21.3	29.3	23.8
MONTHLY AVERAGE, 1950	22.9	—	11.9	21.2	21.1	44.9	19.9

*Bottle damaged.

With the exception of the results for the Police Sports Ground site, in which there is a marked reduction in deposited matter, the general trend appears to be towards a small but definite increase. This is further demonstrated in the average figures for the past four years (see Public Analyst's Report).

Volumetric Estimation of Smoke and Sulphur Dioxide (Town Centre)

SMOKE (in milligrammes per cubic metre)

	July	Aug.	Sept.	Oct.	Nov.	Dec.
Average Daily Value ..	0.400	0.326	0.312	0.560	0.393	0.512
Highest " " ..	0.756	0.773	0.872	1.302	0.723	1.257
Lowest " " ..	0.126	0.113	0.085	0.121	0.070	0.174

SULPHUR DIOXIDE (in parts per million)

	July	Aug.	Sept.	Oct.	Nov.	Dec.
Average Daily Value ..	0.044	0.068	0.079	0.128	0.092	0.130
Highest „ „ ..	0.084	0.099	0.169	0.270	0.143	0.339
Lowest „ „ ..	0.013	0.041	0.025	0.049	0.026	0.040

The smoke content of the atmosphere, as determined at the Civic Centre, is high, but results so far only cover a limited period (six months); moreover, considerable variations can occur within a short distance of the point of measurement.

Smokeless Zones

No further action was taken towards the creation of a Smokeless Zone in the Town Centre, the Health Committee having decided to await the outcome of the Public Inquiry into the proposed Smokeless Zones in Salford; this Inquiry was not held until October, 1951, and the Minister has not yet made known his decision.

“Prior Approval” of Boiler Plants

The Panel set up by the Health Committee in 1950 held five meetings during the year, to discuss four proposals submitted to the Corporation under Section 44 of the Bolton Corporation Act, 1949.

Two proposals were approved by the Panel, and certificates of approval were issued to the applicants; the schemes were as follows:—

- (1) Installation of two mechanical “sprinkler” stokers;
- (2) Replacement of existing mechanically-fired “Economic” boiler installation by a new Lancashire boiler equipped with mechanical “coking” stoker; on the advice of the Panel the effective grate area was reduced in order to increase the burning rate and so improve the efficiency of combustion.

One scheme was withdrawn following discussions between the applicants and the Panel, a revised scheme being submitted early in 1952; the fourth scheme is to be re-submitted after modification in the light of advice given by the Panel.

Smoke Observations

A total of 170 smoke observations was made, with the following results:—

<i>Black Smoke (minutes)*</i>	<i>No. of Observations</i>
Nil	102
Nil — $\frac{1}{2}$	20
$\frac{1}{2}$ — 1	11
1 — $1\frac{1}{2}$	9
$1\frac{1}{2}$ — 2	14
2 — 3	5
3 — 4	5
4 — 5	1
5 — 10	2
+ 10	1

*The Byelaw provides that an emission of black smoke for more than 2 minutes in any period of 30 minutes shall, until the contrary is proved, be deemed to be a smoke nuisance.

Statutory notices were served in five cases. At one of the factories concerned, this has resulted in an order being placed for a conversion from hand-firing of Lancashire boilers to mechanical "chain-grate" stokers.

Considerable improvement was effected during the year in regard to a long-standing nuisance from black smoke and grit in the Haulgh district, by the complete change-over from hand-firing to a modern form of mechanical coking stoker. Numerous visits to this area have shown that smoke emission has been greatly reduced. Besides the provision of mechanical stokers, this firm has also rebuilt the boiler flues, and provided instruments for combustion control. Further improvements contemplated include the provision of mechanical fuel elevators and automatic combustion control. It is noteworthy that the fuel saving through improved combustion is making a material contribution towards the cost of these improvements.

Grit Nuisances

A number of complaints of nuisance from grit were investigated during the year:—

- (a) An analysis of grit entering a workroom of a factory suggested that it originated from an industrial chimney, and investigations were carried out to ascertain its exact source;
- (b) At a spinning mill in respect of which a grit complaint was received it was found that coke breeze was one of the fuels being used; the firm concerned co-operated actively, and advice was given on the methods of reducing the nuisance;
- (c) A further nuisance was also found to be largely due to the burning of coke breeze, and the firm involved is endeavouring to reduce the percentage burned. Improvements are proposed to this boiler-house, and include the provision of instruments for combustion control, an indication of the firm's desire to operate efficiently and without causing nuisance;
- (d) A nuisance which was due partly to the type of fuel being burned (i.e., containing a large proportion of "fines") and partly to the method of mechanical firing in use, was aggravated by the employment of new and comparatively inexperienced firemen. Pending the installation of new equipment, advice has been given regarding draught control, etc.

Considerable investigation was necessary to enable the Department to prove beyond doubt the origin of some of these grit nuisances, and during the year a total of 612 grit samples were collected by the Petri Dish method and submitted to the Public Analyst for weighing.

Staff and Equipment

With a view to enabling greater attention to be paid to atmospheric pollution the Health Committee authorised the appointment of an additional Senior Sanitary Inspector for smoke abatement duties. The Committee also authorised the purchase of portable instruments for testing combustion efficiency (CO₂ analyser, flue gas thermometer, draught gauge) when investigating smoke emission problems, and to enable the Department to assist those firms whose boiler or furnace plants do not already incorporate such instruments. The first items of such equipment were received towards the end of the year.

Lectures to Stokers

During the year, a course of lectures for stokers was held at the Bolton Technical College. Most of the lectures were given by a local fuel technologist, but arrangements were made for two additional lectures to be given by the Public Analyst and the Chief Sanitary Inspector, on the chemical and public health aspects of fuel efficiency respectively.

SANITARY INSPECTION

The nature and extent of the work done by the Sanitary Inspectors is summarised in the following statement:—

INSPECTIONS, VISITS, ETC.	45,621
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ACTION TAKEN:

Verbal Notices issued	301
Informal Notices served	2,896
Statutory Notices served	3,057
	6,254

RESULTS OF ACTION:

Improvements secured in Dwelling-houses, Food Premises, Dairies, etc., are described in the relevant sections of this Report.

Miscellaneous improvements secured	537
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PLACES UNDER ROUTINE INSPECTION:

Common lodging-houses	3
Houses let in lodgings	163
Moveable dwellings	25
 Bakehouses	 380
Basement bakehouses	6
Fish friers	209
Registered premises (Sec. 14, Food & Drugs Act, 1938)	599
Industrial canteens	105
Other catering establishments	95
Miscellaneous food preparing premises	82
Ice Cream premises—manufacture	36
" " " sale only	340
Meat shops	217
Slaughterhouses (in use)	3
Dairies	30
Milk Shops	597
Food Shops	1,400
Licensed premises (On-)	285
" " (Off-)	55
Food stalls	150
Vehicles—Meat	15
" Milk	163
 Factories (Mechanical)	 1,071
" (Non-mechanical)	181

Shops	997
Outworkers' premises	16
Factory chimneys	205
Hairdressers' premises	209
Places of entertainment	42
Clubs	30
Offensive trades	14
Knackers' Yards	1
Registered premises (Rag Flock, etc., Act, 1951)	16

SANITATION

Conversion of Fixed Ashpits

The work of abolishing the fixed ashpits continued during the year, and 1,706 ashpits were abolished; 1,670 by contract, at a cost to the Health Committee of £2,680, and a further 36 at the expense of the Cleansing Committee. All the ashpits were disinfected prior to their abolition.

Some difficulty was experienced in the early months of the year, because of one of the Corporation's contractors defaulting on his agreement. His contract had subsequently to be terminated by the Corporation.

In August, an appeal was entered by the estate agent concerned in respect of a statutory notice under Section 75, Public Health Act, 1936, requiring him to provide a dust bin at a house in anticipation of the abolition of the fixed ashpit. The appeal was upheld, but no Order as to costs was made against the Corporation. The effect of this decision was to increase considerably the amount of administrative work involved, and to slow down the completion of the scheme which is now in its final stages.

Conversion of Waste Water Closets

As from the commencement of the new financial year, the payment of conversion grants was resumed, the maximum grant being £8 per house. Although financial provision had been made for 125 grants (£1,000), over five hundred applications were received. The Health Committee decided, in consequence, that the grants should be restricted to owner-occupiers who were widows, old age pensioners, or in receipt of retirement income only, or whose household included children below the age of eight years. The conversion was required to be completed within six months from the offer of the grant, and in all but four cases, this condition has been satisfied. Nine successful applicants subsequently cancelled their applications on the grounds of the expense involved. All the unsuccessful applicants have been registered for consideration when further grants are made available.

During the year, 172 waste water closets were converted to fresh water closets and grants of £8 per house were made in 124 cases.

Pail Closets—Barrow Bridge

During the year, the remaining pail closets in this area (42 houses) were abolished, and each house now has its own internal water closet. Grants of £8 per house were made in 18 cases, while the Health Committee contributed 50 per cent of the cost of the new sewers which had first to be provided in Third Street and Fourth Street.

Water Supplies—Smithills Estate

Forty-five samples were taken from springs supplying water to cottages and farms on the Smithills Estate; four samples were reported as "unsatisfactory." The results were notified to the Borough Engineer, who undertook the necessary work of cleansing and reconstruction of collecting chambers and pipe lines.

Housing

STATUTORY NOTICES SERVED DURING 1951:

Public Health Act, 1936: Sec. 39 (defective drainage)	342
Sec. 45 (defective closet accommodation)	113
Sec. 75 (provision of dust bins)	2,022
Sec. 93 (general defects)	510
Housing Act, 1936: Sec. 9 (general repairs)	1
Others	69
TOTAL	3,057
Statutory Notices complied with	2,965
Statutory Notices outstanding	92

WORK CARRIED OUT BY CORPORATION IN DEFAULT OF OWNERS:

Public Health Act, 1936	24
Housing Act, 1936	Nil

IMPROVEMENTS SECURED:

Repairs to floors, walls, ceilings, roofs, eavesgutters, etc.	2,036
Repairs to windows	327
Sinks renewed	17
Closet conversions... ..	172
Other sanitary accomodation improvements	362
Ashpits abolished	1,706
Dustbins provided	2,445
Drains cleansed or repaired	424
Yards repaired or drained	26
TOTAL	7,515

LEGAL PROCEEDINGS:

- (1) 261, 265, 277, 283 Radcliffe Road:
Nuisance Orders were made in respect of these houses, and a total fine of £4, plus 12/6 costs, was imposed.
- (2) 133 Clarence Street:
A Nuisance Order was made and 11/- costs were awarded.
- (3) 25 Commission Street:
A Nuisance Order was made and 19/6 costs were awarded.

Common Lodging Houses

The number of common lodging houses in Bolton at the end of the year was three; this is one less than in the previous year, the registration of one

house not having been renewed for 1951. The three remaining premises are used by males only, and accommodate a total of 268 men.

One case was discovered of premises being used as a common lodging house although not registered for the purpose. This use ceased after the owner's attention had been drawn to the contravention.

Houses Let in Lodgings

In accordance with the Health Committee's instructions, a special survey of Houses Let in Lodgings was carried out during the year for the purpose of enforcing the Council's Byelaws in respect of such houses. Out of over 300 houses visited, 151 (comprising no fewer than 663 separate lettings) were found to come within the scope of the Byelaws. Six basement dwellings were found during the inspections.

The work involved in the Survey was greatly increased by difficulties of access, due to tenants being out working, of language (numerous lettings being occupied by foreign workers), and also by the fact that very few owners had registered their premises, as required by the Byelaws.

Attention was directed mainly to (a) structural matters, (b) amenities, i.e., storage, preparation and cooking of food; sinks and water supplies; and clothes washing accommodation. Notices were served in respect of all the Byelaw contraventions discovered.

A copy of the report on the Survey is included in Appendix "A".

Legal proceedings were instituted against the owner of a house let in lodgings (11, Park Street) for obstructing the Deputy Chief Sanitary Inspector in an inspection of the house, and a fine of £5 was imposed. After being served with Formal Notice under the Byelaws, the same owner was subsequently fined £20 on ten charges of failure to comply with various Byelaw requirements; an appeal was entered against this conviction, but was later withdrawn.

Moveable Dwellings

Increasing attention has had to be paid to the supervision of moveable dwellings sites, notably to the Gas Street site, where considerable difficulty was experienced in tracing the ground landlords.

One application was received for permission to station a caravan and tent on a site in Halliwell, in accordance with Sec. 41, Bolton Corporation Act, 1926; permission was refused by the Council, however, and the dwellings were removed from the site shortly afterwards.

Two caravans were represented to the Health Committee for action under Sec. 11, Housing Act, 1936, following the rehousing of the tenants by the Corporation.

One site was the subject of an unsuccessful appeal by the owner, under the Town and Country Planning Act, 1947, against a refusal of planning permission to develop land as a caravan site.

Housing Act, 1936—Houses not capable of repair at reasonable expense

Demolition Orders were made under Sec. 11 of the Housing Act, 1936, in respect of 27 houses, while a further 5 houses were the subject of undertakings not to let for human habitation. Four of the houses were unoccupied, and it is expected that the tenants of the remaining houses (with one exception) will be re-housed by the Corporation.

BACTERIOLOGICAL SAMPLING OF MILK

Designation	Total Samples	Satisfactory	Unsatisfactory	
			Meth. Blue	Phosphatase
Pasteurised	167	160	4	3
Sterilised	130	130	—	—
Tuberculin Tested (Pasteurised) . .	158	152	5	1
TOTAL	455	442	9	4

An increased number of samples was reported as "unsatisfactory." Three of the unsatisfactory samples were produced outside the Borough; the local authorities concerned were notified in each case. A warning letter was sent in respect of one Methylene Blue Test failure. One Phosphatase Test failure, and two Methylene Blue Test failures, were shown to be due to mechanical faults (in the latter cases, to blockages of brine pumps following extensions to the cooling system).

In every case, subsequent samples have proved satisfactory.

BIOLOGICAL EXAMINATION OF MILK

Seventy-three samples of milk were submitted to the Pathological Laboratory at the Bolton Royal Infirmary for examination for the tubercle bacillus. One sample showed the presence of tubercle bacilli, and was referred to the Ministry of Agriculture Veterinary Service for action at the farm. An additional notification was made to the Ministry regarding a further sample of milk procured in a neighbouring area but produced in Bolton, and found to contain tubercle bacilli.

BACTERIOLOGICAL EXAMINATION OF MILK VESSELS

The following table shows the results of bacteriological examinations of "rinses" of milk vessels:—

Type of Vessel	Total Samples	Satisfactory	Unsatisfactory		
			Plate Count	B. coli	Churn "wet"
Milk churns	60	30	17	4	15
Milk cans	5	1	1	1	3
Milk bottles	44	40	4	—	—
TOTAL	109	71	22	5	18

Appropriate advice was given to the dairyman concerned in respect of all unsatisfactory results; subsequent examinations have given satisfactory results. The greatest difficulty in this respect has been to impress upon dairy employees the need for allowing a sufficient period of contact between the steam and the milk vessel to ensure proper sterilisation.

(b) Meat

CARCASES INSPECTED AND CONDEMNED

The following table shows the number of animals slaughtered and inspected at the abattoirs in the Borough, with the diseased conditions grouped under two heads:—

- (1) Carcases affected with disease other than tuberculosis; and
- (2) Carcases found to be affected with tuberculosis only.

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Total number killed and inspected.. . . .	4,735	6,159	5,148	30,881	6,457
All Diseases except Tuberculosis:					
Whole carcases condemned..	1	12	53	17	20
Carcases of which some part or organ was condemned..	452	1,902	—	1,142	8
Percentage of the number inspected affected with disease other than tuber- culosis	9.56	31.07	1.02	3.75	.43
Tuberculosis only:					
Whole carcases condemned..	4	167	5	—	9
Carcases of which some part or organ was condemned..	134	1,871	—	—	86
Percentage of the number inspected affected with tuberculosis	2.91	33.09	0.09	—	1.47

Ante-mortem inspection of all food animals is carried out at the Collecting Centre by a veterinary officer. Post-mortem inspection is carried out by Sanitary Inspectors holding special qualifications in Meat Inspection.

CYSTICERCUS BOVIS

All bovine carcases were subjected to routine examination for this parasite, which was found on eleven occasions during the year; the distribution of the lesions was as follows:—

	Heads	Hearts	Diaphragms
Active lesions	7	2	2
Degenerated or calcified lesions... ..	4	1	—
TOTAL	11	3	2

All the above offals were condemned; in addition, two of the carcases were refrigerated for three weeks prior to distribution.

DISEASED AND UNSOUND FOOD SURRENDERED AND DESTROYED

	Tons	cwts.	qrs.
Meat (Fresh)	116	12	—
Meat (Imported)	2	8	2
Boiled Ham (731 tins)	4	2	—
Poultry and Rabbits	1	8	1
Fish (Fresh)	1	8	1
Fruit and Vegetables (Fresh)	1	19	3
Canned Goods	8	4	1
Miscellaneous	—	15	1
TOTAL	136	18	1

(c) Food and Drugs Sampling for Chemical Examination

ACTION TAKEN IN RESPECT OF UNSATISFACTORY SAMPLES

MILK (42 samples). These samples were made up as follows:—

	No. of samples
Extraneous water (1.1%—4.2%)	25
Deficient in fat (2%—33.3%)	15
Contained extraneous water, also deficient in fat	2
	<hr/> 42 <hr/>

Legal proceedings were taken in respect of 10 samples of milk taken on delivery to a large dairy, and found to contain added water (varying from 1.1% to 3.0%); fines of £20 and costs of £6 6s. were imposed.

No action was taken where “appeal to cow” sampling showed the milk to be genuine, although of poor quality, or where the offence was of a minor character; in all other cases warning letters were sent to the offenders.

SAUSAGES (10 samples). Out of 13 samples purchased, 10 were found to be deficient in meat by amounts varying from 3.7% to 46.0%. In three instances, legal proceedings resulted in fines of £10, plus costs of 10/6, being imposed in each case. Warning letters were sent to the remaining offenders.

Two samples contained undeclared sulphur dioxide (160 and 175 parts per million respectively); warning letters were sent.

ICE CREAM (6 samples). Six samples were deficient in fat (varying from 4.0% to 54.0%); four of these samples were also deficient in milk solids-not-fat (varying from 20.0% to 34.0%). Warnings were given in each case; subsequent samples have given satisfactory results. The Order specifying the standard of composition only came into force in March, 1951, and it was found that many of the small producers were experiencing difficulty in calculating new recipes which would satisfy the prescribed standard; assistance was given in this direction.

CHEESE (2 samples). These samples contained about 75.0% of water and only 8.0% of milk fat, and consequently should have been sold as “Skimmed Milk Cheese”; a warning letter was sent to the vendor.

COOKING FAT (2 samples). These samples showed excess of acidity and rancidity and were pronounced unfit for human consumption. Warning letters were sent to the vendors.

JAM (2 samples). A sample of Strawberry Jam contained only 64.2% of soluble solids (i.e., sugar) instead of 68.5%; a warning letter was sent to the producer.

A sample of Blackcurrant Jam was found to be covered with a mould which had penetrated slightly into the mass of the jam. The retailer's stock was inspected, but no other cases of mould growth were found.

LEMON CURD (1 sample). This sample contained only 2.8% fat, as against the prescribed standard of 4.0%; a warning letter was sent to the manufacturer.

FLAKE TAPIOCA (1 sample). This pre-packed product was found to contain a dead beetle, fibrous matter, etc. The vendor was advised of the findings and voluntarily withdrew the remaining packets from sale.

WHISKY (1 sample). One sample was 40.4° under proof, equivalent to 8.2% of excess water; legal proceedings were taken and the vendor fined £3, and 10/6 costs.

HEALTH SALTS (1 sample). Analysis of this sample showed that the proportions of the various ingredients did not agree with the formula on the label. The packer agreed to re-label the product.

HEAD, NERVE AND FLU POWDER (1 sample). This article was labelled with an out-of-date and mis-spelled synonym of Caffeine Citrate; in addition, it had been prepared from Aspirin (92.5%) and Hydrated Caffeine (7.5%), instead of Caffeine Citrate; a warning letter was sent, and the manufacturer later submitted a new label for approval.

LEGAL PROCEEDINGS

Article	Adulteration	Fine and Costs
		£ s. d.
Milk (10 samples from one supplier)	Added water (ranging from 1.1% to 3.0%) ..	26 6 0
Sausage	22.0% deficient in meat*	5 10 6
Sausage	32.3% deficient in meat	10 10 6
Sausage	20.0% deficient in meat	10 10 6
Sausage	16.9% deficient in meat	10 10 6
Whisky	40.0% under proof=8.2% added water ..	3 10 6

*Sample purchased during 1950.

(d) Food Hygiene

BACTERIOLOGICAL SAMPLING OF ICE CREAM

Twelve samples (11 of which were manufactured in Bolton) were taken for bacteriological examination by the Methylene Blue Test and yielded the following results:—

	No. of samples
Grade I	11
„ II	1
„ III	—
„ IV	—

SURVEY OF FOOD PREMISES

The exhaustive Survey of Food Premises (begun in 1950 with an inspection of licensed premises) continued in 1951 with an examination of:—

- (a) Commercial catering establishments;
- (b) Registered clubs.

Special attention was paid to washing facilities (both for food preparation purposes and for personal ablutions); hot water supplies; dish-washing methods; and (in general) to food-handling methods, in addition to purely structural matters. The Report on the Survey is reproduced in Appendix “B.”

The completion of the Survey coincided with the publication of the Report of the Catering Trade Working Party and so enabled the Department's findings to be considered in the light of the Working Party's recommendations. A feature of especial interest is the similarity between the Working Party's “Target Code” and the Code of Practice for Catering Establishments, drawn up by the Bolton Hygienic Food Trades Guild.

The following improvements in Catering Establishments and Registered Clubs were secured as a result of the Survey:—

	Catering Establishments	Registered Clubs
Improvements to washing facilities and hot water supplies	25	11
Sterilants used in washing-up	10	9
Structural improvements	25	16
Improvements to lighting and ventilation ...	15	8
Re-decoration carried out (No. of rooms) ...	49	28
Improvements to sanitary and refuse accommodation, drainage, etc.	26	22
Miscellaneous improvements	37	6

The Survey has continued with an examination of the remaining Food Preparation Premises; this large group embraces over 600 separate premises, including bakehouses, fish friers' premises, cooked meats, etc., and it was not found possible to complete this work by the end of 1951.

LICENSED PREMISES

Enforcement of the notices served as a result of the Survey of licensed premises in 1950 has continued, the following improvements being secured:—

	No. of Premises
Glass-washing machine provided	1
Hot water supply provided	2
Hot water supply improved	36
Cold water supply provided in Bar	2
Sinks repaired or renewed	22
Sink waste pipes repaired or trapped	51
Beer lines renewed in approved materials	55
Cellars limewashed	51
Cellar floors repaired	39
Roofs, gutters, etc., repaired	7
Yards repaired	4
Repairs or improvements to drainage, refuse accommodation, etc.	20

	No. of Rooms
Floors repaired	13
Walls, ceilings repaired	20
Doors, windows repaired	8
Ventilation, lighting improved	9
Dampness remedied	17
Re-decoration carried out	140
Fittings, etc., improved	10

	No. of Improvements
Improvements to patrons' sanitary accommodation	189

Major reconstructions (including sanitary accommodation) were carried out at four houses, while at a further five houses the patrons' sanitary conveniences were completely modernised. Plans were also approved during the year for the reconstruction of four houses in accordance with the Department's requirements.

ROUTINE SUPERVISION OF FOOD PREMISES

The following improvements were secured during the year as the result of the Department's normal routine enforcement of the Food and Drugs Act, 1938, and the Food-handling Byelaws:—

Improvements to washing facilities and hot water supplies...	16
Structural improvements	75
Re-decoration carried out	85
Improvements to sanitary and refuse accommodation, drainage, etc.	35
Improvements to fittings, etc.	26
Miscellaneous improvements	76

LEGAL PROCEEDINGS

The drive for higher standards of cleanliness in food premises is reflected in the prosecutions instituted during the year, and in the penalties imposed by the magistrates:—

- (a) The first case (5 summonses) arose out of the sale of a steak pudding containing a cockroach; inspection of the premises at which the steak pudding had been manufactured showed them to be in an unsatisfactory state of repair, decoration and cleanliness; certain items of equipment were dirty, and there was no hot water available. . Penalties . . £35
- (b) The second case (8 summonses) occurred at a beer-bottling establishment, in which a urinal fitting had been fixed close to a pasteuriser. The other contraventions included: defective floor and wall surfaces; dirty floor, walls, ceiling and sink; absence of hot water, soap and towels. Penalties . . £35
- (c) The third case (10 summonses) concerned a small bakehouse at which, despite repeated warnings, due cleanliness was not being observed; summonses were served in respect of lack of cleanliness on the part of the occupier, and in respect of dirty walls, floor, ceiling, equipment and utensils, failure to provide washing facilities, and failure to protect foodstuffs from contamination. Penalties . . £50

(e) Bolton Hygienic Food Trades Guild

The Bolton Hygienic Food Trades Guild continued to act in an advisory capacity to the various sections of the food trade, and a Code of Practice was drawn up (in addition to those listed in last year's Report) in respect of Ice Cream Premises. The Code of Practice is included in Appendix "C."

Discussions also took place with a view to the formulation of a Code of Practice for Licensed Premises.

During the year, courses of lectures for food-handlers were arranged in conjunction with the Guild. Over 2,000 food firms and traders were circularised with a view to ascertaining the most suitable times for lectures, but replies were received in approximately 200 cases only.

Six courses, each consisting of four lectures, were held at the times most convenient to the traders themselves, as indicated on their enrolment forms.

The lectures in each course were given by:—

Medical Officer of Health (Food Infections);
 Chief Sanitary Inspector (Food Hygiene);
 Public Analyst (Chemical Contamination and Adulteration);
 Dr. G. B. Manning, Pathologist, Bolton Royal Infirmary
 (Bacteriology).

347 persons enrolled and attended some or all of the full series of lectures; 237 persons were awarded certificates by the Guild for full attendance.

Factories Act, 1937

1.—Inspections for purposes of provisions as to health (including inspections made by Sanitary Inspectors).

PREMISES	Number on Register	Number of		Occupiers Prosecuted
		Inspections	Written Notices	
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	181	41	4	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	1,071	288	67	—
(iii) Other Premises in which Section 7 is enforced by the Local Authority* (excluding out-workers' premises)	3	1	1	—
TOTAL	1,255	330	72	—

*Works of Building and Engineering Construction, Electrical Stations should be reckoned as factories.

2.—Cases in which defects were found.

PARTICULARS	Number of cases in which defects were found				Number of cases in which prosecutions were instituted
	Found	Remedied	Referred		
			to H.M. Inspector	by H.M. Inspector	
Want of cleanliness (S.1) ..	25	16	—	4	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Inadequate ventilation (S.4) ..	—	—	—	2	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary Conveniences (S.7):					
(a) Insufficient	4	5	—	9	—
(b) Unsuitable or defective	56	32	—	28	—
(c) Not separate for sexes..	2	—	—	—	—
Other offences against the Act (not including offences relating to Outwork)	13	9	1	3	—
TOTAL	100	62	1	46	—

Disinfection and Disinfestation

DISINFECTION:

Rooms disinfected	...	...	...	...	...	...	...	489
Beds disinfected	...	...	...	...	...	...	...	822
Articles disinfected	...	...	...	...	...	...	...	2,396
Articles destroyed	...	...	...	...	...	...	...	53

DISINFESTATION

The Disinfestation Service carried out the following work; all insecticides used contained D.D.T.:—

Dwelling-houses

Bed Bugs	...	...	...	...	...	...	...	108
Cockroaches	...	...	...	...	...	...	...	82
Fleas	...	...	...	...	...	...	...	13
Flies	...	...	...	...	...	...	...	2
Golden Spider Beetles	...	...	...	...	...	...	...	2
Crickets	...	...	...	...	...	...	...	2
Moths	...	...	...	...	...	...	...	1
"Precautionary" Disinfestation	41
TOTAL	251

Industrial Premises

All types of insect pests	90
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The service is now being expanded on a contract basis for the routine disinfestation of industrial and business premises. During 1951, 10 such contracts were in force covering 19 premises and yielding a revenue of over £200 per annum to the Corporation.

In addition to the houses disinfested by the Corporation, eight houses were disinfested by their occupiers in compliance with the requirements or advice of the Department.

MUNICIPAL MEDICAL BATHS

The following cases were treated during 1951:—

	<i>Adults</i>			
	<i>Males</i>	<i>Females</i>	<i>Children</i>	
Body Lice...	31	10	—	
Head Lice	20	7	343	
Pubic Lice	1	6	—	
Scabies	7	20	49	
Impetigo	—	6	20	
Miscellaneous	1	5	40	
TOTAL	60	54	452	

Destruction of Rats and Mice

PREVENTION OF DAMAGE BY PESTS ACT, 1949

	TYPE OF PROPERTY				
	Local Authority	Dwelling Houses	Agricultural	All other (including Business and Industrial)	Total
I. Total number of properties in Local Authority's District*	161	51,812	250	8,483	60,706
II. Number of properties inspected by Local Authority during 1951 as a result (a) of notification or (b) otherwise:—					
(a)	63	243	2	250	558
(b)	10	212	21	71	314
III. Number of properties (under II) found to be infested by rats:					
† Major	10	—	5	63	78
Minor	27	211	11	125	374
IV. Number of properties (under II) found to be seriously infested by mice	31	82	—	115	228
V. Number of infested properties (under III and IV) treated by the Local Authority	68	293	3	294	658
VI. Number of Statutory Notices served under Section 4:					
(1) Treatment	—	—	—	—	—
(2) Structural Works (i.e., proofing)	—	—	—	—	—
VII. Number of cases in which default action was taken by Local Authority following issue of notice under Section 4	—	—	—	—	—
VIII. Legal Proceedings	—	—	—	—	—
IX. Number of "block" control schemes carried out					5

* i.e., No. of properties separately entered in the Valuation Roll.

† A "Major" Infestation is one consisting of more than 20 rats.

Miscellaneous

HAIRDRESSING ESTABLISHMENTS

Legal proceedings were taken against a hairdresser for failure to register in accordance with Sec. 48 of the Bolton Corporation Act, 1949; a fine of £1 was imposed. Legal proceedings were also taken against a hairdresser for failing to use "neck-strips"; for using dirty "capcs" and a dirty "neck-square"; and for failing to display a copy of the Byelaws; fines totalling £2 10s. were imposed. These were the first prosecutions to be instituted under the Act and Byelaws since they came into force.

The following improvements were secured in hairdressing establishments during the year under review:—

	<i>No. of premises</i>
Wash-basins renewed	6
Drainage to wash-basins provided	7
Drainage to wash-basins improved	15
Hot water supply improved	1
Floors, walls, ceilings, etc., repaired	12
Rooms re-decorated	12
Ventilation improved	4
Neck-strips provided	121
Chair neck-rests protected	119
Proper receptacles for hair provided	95
Byelaws displayed	59

RAG FLOCK AND OTHER FILLING MATERIALS ACT, 1951

Twelve premises were registered in accordance with the Act, consisting of:—

Upholsterers' premises	7
Bedding manufacturers' premises	5

No samples were taken during the two months the Act was in force.

DISEASES OF ANIMALS ACTS

TUBERCULOSIS ORDER, 1938. 20 animals were slaughtered under the above Order; 12 carcasses were found to be affected with Generalised Tuberculosis and were totally condemned, while 8 were passed for consumption.

FOOT AND MOUTH DISEASE. From 24th January to 8th February, 1951, Bolton was in a "Controlled Area"; 246 movement licences were granted during this period, relating to 251 cattle, 188 calves, 1 sheep, and 250 pigs; 9 animals were subjected to special measures of control and observation, having been notified as possible contacts with infected animals in passing through cattle markets.

SWINE FEVER. A suspected outbreak of Swine Fever at a Bolton piggery was notified during the year; the existence of the disease, however, was not confirmed.

ANTHRAX. Two suspected cases of Anthrax were notified, but were subsequently reported negative.

POULTRY CARCASSES (IMPORTATION) ORDER, 1950. Legal proceedings were instituted against two local poulterers at the request of the Ministry of Agriculture and Fisheries in respect of an illegal sale of Polish geese; the defendants were fined £1 and 10/- respectively.

WARBLE FLY (DRESSING OF CATTLE) ORDER, 1948. 48 visits were made to farms in response to a circular of the Ministry of Agriculture and Fisheries requesting the assistance of local authorities in bringing the provisions of the Order to the notice of local stock-owners. No heavy infestations were observed.

FERTILISERS AND FEEDING STUFFS ACT, 1926

Sixteen samples (i.e., 8 fertilisers and 8 feeding stuffs) were taken during the year; 4 feeding stuffs and 3 fertilisers did not agree with the warranties; warning letters were sent to the manufacturers concerned, and the Ministry of Agriculture and Fisheries notified, in each case.

HOUSES LET IN LODGINGS

SURVEY REPORT

Following instructions by the Health Committee the circumstances existing in "Houses let in Lodgings" in Bolton, particularly as covered by the Corporation's Byelaws, have been carefully investigated following discussions with our solicitors (Town Clerk's Department) regarding standards of amenity in these houses. Enforcement action is being vigorously applied in the light of legal advice.

General

In order to cover as far as possible every house which is let in lodgings an exhaustive survey of nearly 300 premises has been carried out on the basis of the names of occupiers entered in the Register of Electors.

Quite a number of the houses visited on this basis proved to be "Boarding Houses" or premises in the occupation of members of one family due to the housing situation preventing married sons and daughters from taking separate accommodation. Such cases, of course, are outside the scope of the Byelaws and form no part of the subject of this report.

Finally, 151 houses were found to come within the scope of the Byelaws and most of them are concentrated in three areas—Brownlow Fold, Haulgh and Chorley New and Old Road districts.

In most cases the letting of apartment rooms is carried out by the owner himself who lives on the premises, there being few cases of resident "care-takers" appointed to carry out the landlord's obligations regarding the day-to-day care of communal facilities. Very few houses are under the control of estate agents.

In the 151 houses referred to above there were 663 separate lettings involving 843 private rooms as well as rooms used in common. The great majority of lettings consist of one room only and three large houses each provided shelter for thirteen families. Relatively few rooms were found to be unoccupied.

One of the major problems facing the sanitary inspectors has been the difficulty of contacting tenants due to working hours and the extent to which workers from the Continent of many nationalities have taken houses, thus creating for themselves small communities of their own folk. In this respect it is fitting to acknowledge the very ready and complete assistance given by the Chief Education Officer in allowing Mr. Moszczenski, of his Department, to act as an interpreter. This service has been of value not only in dealing with the tenants, but in making clear to foreign landlords their obligations under the Corporation's Byelaws.

RENTS

Conditions of letting vary widely from house to house as regards provision of furniture, services, light, fuel, etc., consequently it is impossible to give any clear picture of the rent structure of this type of accommodation. It was frequently found that the rent paid afforded no indication whatever to facilities provided in return.

OVERCROWDING

It is pleasing to report that generally statutory overcrowding was less than had been anticipated. Roughly one letting in every ten was found to be overcrowded to some extent, the percentage degree not usually exceeding 50%. This could occur, for example, in a one-room letting where the presence of only one child in addition to its parents is sufficient to create statutory overcrowding. The most serious case was one which has received some publicity and in which 21 persons (5 families) were occupying one house. In one room a family of eight were all sleeping. Notice has been served on the owner-occupier to abate the overcrowding.

AMENITIES—GENERAL

The most important matters covered by the Byelaws are those concerning the provision of adequate facilities for:—

- Storage of food;
- Preparation and cooking of food;
- Water supplies;
- Clothes washing.

(a) FOOD STORAGE. Many lettings were found to have no facilities whatever for food storage, whilst in others the means provided were unsatisfactory, being unventilated or ventilated only into the room itself; in many cases these rooms were combined living and sleeping rooms.

(b) PREPARATION OF FOOD. It is not generally realised that the Byelaws require facilities for the preparation of food in addition to cooking appliances; this involves the provision of sinks for vegetable preparation, etc. All too frequently occupiers were compelled to use portable wash-bowls or to avail themselves of such fitments as wash-basins situated in communal sculleries or bathrooms from which their water supply is derived. Food preparation or dish-washing in bathrooms is objectionable, particularly so where water closets exist in the same room.

(c) COOKING OF FOOD. Cooking appliances can only be regarded as adequate when roasting and baking as well as grilling and boiling can be carried out, and generally speaking only when these facilities are provided separately within each individual letting.

In three out of every four lettings the appliances provided were within the lettings themselves, in other cases communal rooms were available for this purpose, and occasionally cookers were found to be fitted on landings and in passages sometimes even on a different floor from the letting itself. In many cases cooking accommodation was of limited value, consisting only of open fires or grillers.

The sharing of cooking facilities is widely practised and in an extreme case seven lettings had only one cooker between them.

(d) WATER SUPPLIES. Special attention was given to the provision of sufficient water supply points; this is only completely adequate when provided within the letting itself or at least on the same floor as the letting. Supplies drawn from bathrooms containing water closets are unsatisfactory.

(e) CLOTHES WASHING FACILITIES. Many houses have no facilities at all, or only brick-built washing coppers, many of which are unusable.

PROTECTION AGAINST FIRE

The Public Health Act, 1936, requires "tenement" houses above the first floor to be provided in certain cases with means of escape in case of fire. Since so many lodging houses have been created by the sub-letting of large family houses, almost half the premises inspected were found to require consideration by the Fire Department; in all these cases full particulars have been supplied to the Chief Officer of that Department.

The increased number of fires, cooking points, etc., in these houses tends to increase the fire risk and the Byelaws therefore require fire-extinguishing apparatus to be provided on each floor above the ground floor, such provision was found to be virtually non-existent.

Faulty electrical wiring, which might also create a fire risk, has in all cases been reported promptly to the electrical authorities.

STRUCTURAL CONDITION

Attention was directed to structural items as well as Byelaw requirements and appropriate action has been taken in respect of the general defects found. Particular attention in this respect was paid to the good repair of all parts used in common, particularly staircases and as regards adequate lighting and cleanliness of communal rooms (kitchens, water closets, etc.).

OCCUPIER'S LIABILITY

The Byelaws require occupiers of individual rooms to keep them in a thoroughly clean condition, and in 51 cases notices were served on occupiers for the contravention of this particular Byelaw.

SANITARY AND REFUSE ACCOMMODATION

Generally these were adequate.

BASEMENT ROOMS

In a few cases basement rooms were found to be used for living or sleeping purposes. In certain conditions the occupation of such rooms is prohibited by the Housing Act, 1936. Special consideration is being given in due course to the occupation of these rooms in order that the Committee might be advised regarding the imposition of closing orders on such rooms.

SUMMARY

Statistical statement of conditions appears in the Appendix.

Conclusion

The survey revealed the scant regard which has been paid to the obligation of persons letting houses in lodgings to register the premises with the Local Authority. Frequently amenities provided were totally inadequate.

The clearance of tenants from "prohibited" basement rooms may well present a considerable problem.

Finally, the survey revealed circumstances in boarding houses which go far towards justifying the approach which certain local authorities are making to the Association of Municipal Corporations requiring the registration of such houses and the setting up of a Byelaw Standard for them.

Summary

										TOTAL
Number of Houses inspected		151 houses
Number of Lettings inspected		663 lettings
Number of Private Rooms inspected		843 rooms
Premises with 1 letting only		...	2	7	lettings	9	151 houses
2 lettings		...	27	8	"	...	...	...	3
3 "		...	28	9	"	...	...	...	2
4 "		...	32	10	"	...	...	...	1
5 "		...	28	11	"	...	...	...	1
6 "		...	15	13	"	...	...	...	3
<hr/>										151 houses
No. of 1-room lettings		527	663 lettings
2-room "		...	...	...	...	...	...	...	102
3-room "		...	...	...	...	...	...	...	25
4-room "		...	...	...	...	...	...	...	8
5-room "		...	...	...	...	...	...	...	1
<hr/>										663 lettings
OVERCROWDING										
No. of overcrowded lettings		68 lettings
Percentage of overcrowding—less than 25%		36	
25-50%		...	...	...	...	...	...	...	22
50-75%		...	...	...	...	...	...	...	2
75-100%		...	...	...	...	...	...	...	7
over 100%		...	...	...	...	...	...	...	1
<hr/>										
FOOD STORAGE										
Provided		132	663 lettings
Provided, but unsatisfactory		...	...	...	...	...	...	...	205
None provided		...	...	...	...	...	...	...	326
<hr/>										663 lettings
COOKING FACILITIES										
Provided in own letting		458	663 lettings
Provided in another lodger's letting		...	...	...	...	...	...	...	6
Provided on same floor but not in own letting		...	...	...	...	...	...	...	85
Provided on another floor		...	...	...	...	...	...	...	111
None provided		...	...	...	...	...	...	...	3
<hr/>										663 lettings
PRIVATE COOKING FACILITIES										
Fireplace only		38	458 lettings
Grillers		...	...	...	...	...	...	...	104
Cookers, fire-ranges, etc.		...	...	...	...	...	...	...	316
<hr/>										458 lettings
COMMUNAL COOKING FACILITIES										
Shared with 1 other letting in 56 cases										
" " 2 " " " 47 "		195 lettings
" " 3 " " " 58 "		...	...	...	...	...	...	...	...
" " 4 " " " 27 "		...	...	...	...	...	...	...	...
" " 5 " " " — "		...	...	...	...	...	...	...	...
" " 6 " " " 7 "		...	...	...	...	...	...	...	...
		

WATER SUPPLIES

Provided in own letting	196	
Provided on same floor, but not in own letting ...	295	
Provided on other floor, but not in own letting ...	172	
	—	663 lettings

COMMUNAL WATER SUPPLIES

Provided in bathrooms	43	
Provided in bathrooms with w.c.s	175	
Provided in sculleries	216	
Provided in wash-houses	9	
Provided on landings	24	
	—	467 lettings

CLOTHES-WASHING FACILITIES

None provided	66	
Gas or electric boilers	53	
Washing coppers	32	
	—	151 houses
Defective		22 houses

SANITARY ACCOMMODATION.	Inadequate	24 houses
	Defective	53 houses

BATHS. Provided: 119 premises. Defective: 37 premises.

REFUSE ACCOMMODATION.	Inadequate	39 houses
	Defective	17 houses

EXTERNAL STRUCTURAL DEFECTS

Defective roofs	25	Defective external walls	22
„ chimney stacks	14	„ soil-pipes	15
„ eavesgutters	41	„ waste-pipes	24
„ rainwater pipes	33	„ drainage	12

INTERNAL STRUCTURAL DEFECTS

Defective floors	20	Defective windows	100
„ walls	127	„ window fittings	149
„ ceilings	84	Unsatisfactory decorations	284
Inadequate lighting	29	Defective fireplaces, flues... ..	10
„ ventilation	43		

STAIRCASES, ETC.

Absence of secure handrails	37	Inadequate ventilation	58
Inadequate natural lighting	87	Unsatisfactory decorations	62
„ artificial lighting	60	Defective treads, etc.	6

FIRE PROTECTION

Premises subject to Public Health Act, 1936, S.60 (Means of escape in case of fire)		71 houses
Fire extinguishing apparatus provided	4	
„ „ „ provided, but inadequate	5	
„ „ „ not provided	141	
„ „ „ not required (ground floor only)	1	
	—	151 houses

CATERING ESTABLISHMENTS AND LICENSED CLUBS

The systematic survey of all food premises in the Borough has been continued, and this report relates to the circumstances existing in the catering trade premises in Bolton. Reference is also made to licensed clubs.

The completion of the survey coincides with the publication of the Report of the Catering Trade Working Party and accordingly, the findings are discussed in the light of the Working Party's recommendations.

(I) Catering Establishments

All premises in which full meals or snacks are served were inspected with the exception of temperance bars serving only soft drinks and such non-commercial undertakings as industrial canteens and school meals kitchens; these will receive attention as soon as possible.

In the premises inspected activities are not by any means restricted entirely to the provision of meals. Further, in many instances the premises are not laid out for this particular purpose. Three-fifths of the premises were of the "lock-up" type, the remainder being combined business and residential properties. Further, one-half are tenanted as being distinct from owner-occupied and this may to some extent restrict the occupiers in matters of alterations and improvements.

The defects generally associated with this class of trade, particularly as regards space limitation, are clearly seen in the Bolton survey. Very few of the establishments comprise four or more rooms, including those in which meals are taken.

Whilst the Working Party Report recognises that good methods are as important as good premises, it emphasises the fact that good layout and organisation are of considerable value in facilitating high standards of hygiene. It is clear that restricted and inadequate accommodation in many premises precludes any possibility of organising food handling as a whole on the lines recommended in the Report. This lack of space means that in certain cases domestic rooms, i.e., living rooms, kitchens and sculleries, have to be utilised for business purposes. The use of basement rooms was found to be very limited and restricted almost entirely to vegetable preparation or food storage.

WASHING FACILITIES AND HOT WATER SUPPLIES

The Working Party Report stresses the necessity for adequate washing facilities and hot water supplies, both for business purposes and personal cleanliness. Only the large establishments provided separate sinks for vegetable preparation or dish washing and in many cases the same sink(s) serve all these purposes. In nearly every case hot water was supplied over each sink, but in a few instances cold water only was available and in a few others neither hot nor cold water was available over individual sinks.

PERSONAL WASHING FACILITIES

The availability of personal washing facilities falls short of the Working Party's recommendations that such facilities are desirable not only in conjunction with sanitary conveniences, but also in the food preparing rooms. Beside the absence of such separate facilities, in many cases washing arrangements are insufficient in that some are badly sited in relation to sanitary ac-

commodation and food preparing rooms, in consequence of which a special journey is necessary to wash the hands after using the convenience. This does not encourage the regular practising of personal hygiene. In many cases the only water available over wash basins was a cold supply; soap and towels were generally available, but were not always situated at the personal washing points. The provision of hot water to the personal wash basins was not entirely satisfactory, numerous instances occurring in which the supply was not constant or instantaneously available.

DISH WASHING METHODS

The most detailed recommendations of the Working Party Report cover the cleansing and sterilising of crockery and cutlery. The Report suggests:—

- (a) the provision of dish-washing machines, or
- (b) the "two-sink" method of washing up,

followed in either case by air-drying as opposed to cloth-drying.

Very few dish-washing machines exist in Bolton at the present time; similarly, the "two-sink" method of washing and air-drying of crockery were almost non-existent. It must be appreciated, of course, that these are relatively new innovations in the trade and these comments particularly should be taken as a statement of fact as much as one of criticism.

Although neither of these practices is as yet covered by a specific legal requirement, it is not fully realised that the food-handling byelaws impose an obligation to cleanse crockery and cutlery in order to prevent risk of contamination of food. Consequently, it would appear that some such method as those stated above could reasonably be demanded. An alternative to these methods is the use of a chemical sterilising agent in the sink or in a special rinsing water. So far, such sterilants are being used in very few cases and in some places even the use of detergents is not practised.

EQUIPMENT

The desirability of refrigeration facilities in order to control the multiplication of bacteria in foods readily susceptible to infection is stressed in the Report.

The survey showed that the use of refrigerators is by no means general, and in many cases the existing appliances are used only for storing ice cream.

It was gratifying to find that in the majority of cases cooking equipment was heated by gas or electricity and the use of solid fuels was exceptional. In these latter cases the replenishing of fuel has to be done in the food-handling rooms, with consequent risk of contamination from dust and soiled hands.

STRUCTURAL CONDITIONS

Ventilation is particularly important in the catering trade, having regard to the heat, steam and oil vapours created, and cases were found in which ventilation needs improving. Apart from the discomfort of working under such conditions and the possibilities of rapid bacteriological increase in certain foods stored in these temperatures, deterioration of decorations is accelerated and the commonest faults structurally were defects to wall and ceiling plaster, together with unsatisfactory decorative condition of these surfaces.

The adequacy of lighting, both natural and artificial, were also taken into consideration, having regard to a new provision in the food-handling byelaws which requires lighting to be adequate for working purposes.

DRAINAGE—REFUSE ACCOMMODATION—YARDS

One matter of considerable difficulty was the absence of yards in numerous cases, and the sharing of yards with the occupiers of adjoining buildings. In these, the absence of adequate yard space inevitably creates difficulties. Swill has to be stored inside the premises for longer than is desirable whilst awaiting collection and removal.

The new byelaws require all waste arising from food preparation to be deposited in containers immediately produced and whilst awaiting removal to the exterior, where yard space allows of this. The majority of these internal storage containers were found to be defective or unsuitable.

Unsatisfactory or defective drainage arrangements were noted in some cases.

VERMIN

Attention was given to indications of infestation by rodents or insect pests. Some traders have their premises treated regularly by private extermination companies with a view to preventing nuisance in this way. Special attention is to be paid to the proofing of premises against the entrance of rats, and this can be done relatively easily as facilities for entrance generally arise from minor structural defects. It may not be generally realised that traders are under a legal obligation to notify the existence of rodent and insect infestations to the local authority. The Sanitary Inspectors are available to all food traders to advise on rat proofing and methods of dealing with insect pests and the Department also employs staff to deal with these pests upon payment at charges which are most reasonable.

DOMESTIC ANIMALS

The presence of domestic animals in food rooms is felt to introduce serious risks of contamination and infection, and the exclusion of animals from such rooms is recommended, not only in the Report of the Catering Trade Working Party, but also in that of the Manufactured Meat Products Working Party. Particularly undesirable is the practice of leaving animals, usually cats, on premises over the week-end.

METHODS OF HANDLING

Attention was also paid to handling of food in addition to the inspection of premises and equipment and the principal faults were:—

- (1) Exposure of food to handling by customers;
- (2) Contamination from dust, vegetables, solid fuels, etc.;
- (3) Insufficient attention to cleanliness of ranges, geysers, etc.;
- (4) Inadequate cleanliness of cloths.

SANITARY ACCOMMODATION FOR CUSTOMERS

The need for the provision of sanitary accommodation for customers varies considerably in each case, and in numerous instances restricted space makes the provision of adequate facilities difficult if not impossible.

(II) Licensed Clubs

Twenty-eight clubs were inspected and the findings compared closely with those reported upon following the Licensed Premises Survey. Details are not included in this report, but may be summarised as follows:—

Inadequate washing-up facilities and personal washing points.
 Unsatisfactory beer lines.
 Inadequate or defective sanitary accommodation.

The response by club committees in relation to these matters has been most satisfactory.

Recommendations of the Catering Trade Working Party

The Working Party's conclusions are reflected in two Codes of Practice which they have recommended for application to catering establishments:—

- (a) THE STANDARD CODE, recommended (with minor exceptions) for legal application to all premises as soon as amendment to the existing law can conveniently be made.
- (b) THE TARGET CODE, recommended for voluntary observance by all caterers.

THE STANDARD CODE closely follows existing legal requirements, but also specifies the use of:—

- (a) Dish-washing machines, or the "two-sink" method; and
- (b) An improved standard of food storage accommodation.

THE TARGET CODE goes beyond existing legal requirements and makes detailed recommendations on a wide variety of points.

Comparison of these Codes with that prepared by the Advisory Committee of the Bolton Hygienic Food Trades Guild shows that the local Code covers not only the additional requirements of the Standard Code, but also almost the whole of the Target Code, the resemblance extending even to form of presentation and, in some cases, of wording. The Advisory Committee may feel considerable satisfaction in that their own Code should have anticipated so closely the findings of the Working Party.

Further, the Working Party Report recommends that the catering trade should set up its own information service; this recommendation was anticipated several months ago in the Health Department when a start was made towards the collection of such information for the use of Food Guild members.

Action Taken

Notices are being served in respect of all relevant matters under existing legislation; in many cases work is known to have been put in hand and much has already been completed.

Catering Establishments

SUMMARY OF EXISTING CONDITIONS

	<i>No. of Premises</i>
Number of premises inspected	71
Number of premises with: Separate vegetable preparation rooms ...	14
Separate food storage rooms	20
Separate washing-up rooms	2

	<i>No. of Premises</i>
Number of premises utilising: Domestic rooms	12
Basement rooms	13
SINKS: Insufficient	3
Defective	9
Hot water supply inadequate or not provided	11
PERSONAL WASHING FACILITIES: Insufficient	4
None provided	29
Hot water supply inadequate or not provided	12
HOT WATER INSTALLATIONS: None provided	4
Inadequate	28
DISH-WASHING METHODS: Dish-washing machine provided	4
"Two-sink" method and air-drying practised	1
Detergent not used	6
Sterilant used	3
EQUIPMENT: Refrigerators provided—For ice cream only	24
For other foods	22
All cooking by gas and/or electricity	49
YARDS: No yard provided	27
Yard shared with other premises	7
DOMESTIC ANIMALS PRESENT (including 11 "lock-up" premises)...	28
	<i>No. of Rooms</i>
FOOD HANDLING ROOMS: Number inspected	260
Defective decorations	68
Defective walls and/or ceiling surfaces	27
Defective doors, windows, etc.	12
Defective floors	10
Inadequate lighting	31
Inadequate ventilation	14

PROPOSED CODE OF PRACTICE—ICE CREAM PREMISES

The following requirements are additional to those contained in the Food and Drugs Act, 1938, Ice Cream (Heat Treatment) Regulations, 1947-49, local Byelaws, or any other statutory powers for the time being in force in relation to the premises, and apply to all rooms used for the manufacture or handling of ice cream or purposes ancillary thereto:—

(a) Structure, Fittings, Equipment, etc.—Occupier's responsibility

1. Rooms used for the manufacture or handling of ice cream (other than its retail sale) or purposes ancillary thereto shall not be used for any other purpose. The manufacture and handling of ice cream shall so far as practicable be kept separate from the supporting operations.

2. Ice cream shall not be manufactured or handled on any premises in which it may in consequence be subjected to special risk of infection, or to contamination by dirty, dust-producing or odoriferous substances; unless the ice cream is so pre-packed as to afford adequate protection against such infection or contamination, and is handled only in the unopened wrappers or containers in which it is delivered to the premises.

3. The floors, and such portions of the walls as may be necessary, of all rooms used for the manufacture or handling of ice cream (other than those used, in relation to ice cream, for its retail sale only) shall be of a smooth, non-absorbent and easily washable construction; the other wall surfaces, and the ceiling surfaces, shall be smooth and hard, and capable of being easily cleaned or decorated; all wall and ceiling surfaces shall be painted, enamelled, washed or cleansed, as may be most appropriate, as often as may be necessary to maintain them in a state of good decoration or thorough cleanliness; suitable means of floor drainage shall be provided where necessary.

The floors, walls and ceilings of all other rooms (including rooms used only, in relation to ice cream, for its retail sale only) shall be of such construction and in such state of repair as to enable them to be kept thoroughly clean, and the walls and ceilings shall be kept in a good state of decoration.

Roof spaces, joisted and boarded floors, or the undersides of staircases shall be suitably underdrawn when situated over any of the foregoing rooms, other than rooms used only (in relation to ice cream) for the sale of completely pre-packed ice cream.

All other rooms or spaces through which ice cream may be conveyed shall be kept in a good state of repair and decoration, and adequately lighted and ventilated.

Yards shall be properly paved or surfaced and provided with proper means of drainage.

The premises shall be rat-proof.

4. Adequate natural lighting (standard = 1/10th of net floor area) shall be provided where structurally possible in all rooms. Adequate artificial light shall be provided in all rooms, suitably disposed with regard to food-handling operations, cleaning, maintenance, etc.

Adequate natural ventilation by opening windows (standard = 1/20th of net floor area) shall be provided where structurally possible in all rooms. If natural ventilation is inadequate, adequate mechanical ventilation shall be provided. Means shall be provided, where necessary, for exhausting steam, etc.

5. A sufficient number of sinks, wash-up troughs, etc., shall be provided for the cleansing of equipment, utensils, etc.

A sufficient number of wash-basins shall, in manufacturing premises, be provided in suitable positions (where possible adjoining the sanitary conveniences) for the sole purpose of personal ablution.

A sink shall be provided in every room in which ice cream is sold, as near to the sales point as practicable, except in the case of rooms where only completely pre-packed ice cream is sold.

Hot and cold water shall be provided over each sink, wash-up trough, wash-basin, etc., and soap, a nail brush, and a clean towel shall be provided at each washing point.

6. A hot-water installation shall be provided capable of supplying adequate hot water at a suitable temperature for all purposes for which it may be required.

7. In manufacturing premises, cloakrooms (which may consist of rooms not used for the manufacture or handling of ice cream or purposes ancillary thereto), cupboards or lockers shall be provided for the storage of outdoor clothing.

In non-manufacturing premises, outdoor clothing shall be so stored as not to come into contact with ice cream, or raw or auxiliary materials.

8. Adequate shelving, cupboard space, etc., shall be provided to permit of proper storage of utensils, equipment, raw materials, etc. Separate storage facilities shall be provided for cleaning materials, soap, disinfectants, tools, etc.

9. Suitable means shall be provided for the sterilisation of equipment, utensils, etc.

10. So far as practicable, working tables, benches, counters, etc., shall have smooth, non-absorbent upper surfaces. Equipment, utensils, etc., shall, so far as practicable, be of non-absorbent construction and capable of being easily cleaned.

11. All equipment, fixtures and fittings shall be so installed as to facilitate cleaning and maintenance.

12. **RETAIL SALE OF ICE CREAM.** Ice cream shall be sold only from conservators or refrigerators. Conservators and refrigerators shall be so sited as to obviate, so far as practicable, the risk of contamination by customers, and the tops of conservators shall be protected by suitable screens. Conservators shall not be used for domestic purposes, or for the storage of commodities other than ice cream, ice "lollies" or (where the ice cream is completely pre-packed) frozen foods. Refrigerators shall not be used for the storage of any other than completely pre-packed ice cream, unless used solely for that purpose.

Suitable dispensers shall be provided for the storage and protection of biscuits and cones at the sales points.

Suitable non-returnable scoops or spoons shall be supplied with all cartons of ice cream.

Where ice cream is sold for consumption on the premises, the tables, table linen, etc., shall be kept thoroughly clean at all times. Badly chipped crockery shall not be used. A sufficient number of ashtrays shall be provided.

13. The premises shall be kept free from vermin and insect pests. All infestations shall be reported to the Chief Sanitary Inspector.

(b) Personnel, Handling, etc.—Occupier's and Employees' Responsibility

14. An employee shall notify his employer if he is suffering from:—

Diarrhoea;

Sore throat;

Boils, sores, whitlows, or skin infections or diseases;

or if he is a close contact of a case of infectious disease.

An employer shall not allow any such person to take part in the preparation or handling of ice cream, and shall not take part himself or permit any member of his household to take part if he or she is so affected, except with the express approval of the Medical Officer of Health.

An employer shall take all reasonable precautions (independently of his employee's obligation) to ensure that no such employee prepares or handles ice cream.

Minor cuts and scratches shall be covered by suitable adhesive dressings (to be provided by the occupier) having a non-absorbent outer surface.

15. Every person engaged in the preparation or handling of ice cream shall:—

(a) thoroughly wash his or her hands after using the toilet for any purpose, and as frequently as may be necessary to maintain them in a clean condition;

(b) keep his or her finger nails short and clean.

Females engaged in the manufacture of ice cream shall not wear nail lacquer or varnish while so engaged.

No person shall carry out personal ablutions after visits to the toilet, except at the washing facilities provided for the purpose.

Personal ablutions on other occasions shall not be carried out at the working sinks, etc., while containing utensils in course of being washed.

Every person engaged in the manufacture of ice cream shall wear a clean washable overall and cap; the caps for females shall be of such design as effectively to enclose the hair. Every person engaged in the handling of ice cream shall wear a clean washable overall.

16. No person shall blow into paper wrapping bags, or lick or wet the fingers for manipulating wrapping paper.

All operations shall be so carried on as to reduce, so far as possible, contact of the hands with ice cream.

17. All apparatus, equipment, utensils, etc., shall be regularly sterilised.

Ice cream servers shall be washed and scalded as frequently as possible during use, or shall be kept immersed in a suitable sterilant rinse.

18. Raw materials shall be kept, so far as practicable, in rooms used solely for food storage purposes, and in covered non-absorbent containers.

Sacks of food shall be raised off the floor, and the contents of opened sacks shall be stored in covered non-absorbent containers.

19. Cutlery, crockery, cartons, wrapping paper, straws, etc., shall be properly stored, and protected against contamination by dust, etc.

ANNUAL REPORT OF THE BOROUGH ANALYST

FOR THE YEAR ENDED 31st DECEMBER, 1951

During the year 1951 there has been a considerable increase in the number of samples submitted for examination in the Borough Laboratories. It is the first occasion when over 1,000 samples of food and drugs have been examined in the course of one year—a figure considered essential for the adequate supervision of the quality of the food, and particularly milk, in a town of the size and importance of Bolton.

Although there has been an appreciable increase in the number of milk samples analysed, the percentage of unsatisfactory samples shows only a slight increase over that of the previous year (5.1% against 4.2% in 1950).

On the 1st March, 1951, a Food Standards Order came into force regulating the composition of ice cream. This Order included a standard for ice cream of not less than 5% fat, 10% sugar, and 7.5% milk solids other than fat, with some modification of this standard for ice-cream containing fruit, and for Kosher ice. This latter modification is necessary owing to the Jewish dietary law which prohibits the consumption of milk and meat at the same meal. These standards are to be regarded as "interim standards" and the ease with which they may be attained, particularly by reputable manufacturers, is illustrated by the results obtained in the analysis of this commodity, shown later in this report.

When these standards for ice cream were being considered, representations were made by your analyst to the Ministry of Food that provision should be made for a standard weight per gallon of ice cream, owing to the wide variation in the volume of air incorporated in ice cream. The Food Standards Division of the Ministry suggested that this question would be further examined when the interim standard is reviewed. The Minister "proposes progressively to improve the standard as supplies of ingredients become more plentiful."

In addition to this standard for ice cream, there are many standards of other foods controlled by Statutory Instruments and Orders, and in my opinion it is most desirable that such standards should be incorporated in the proposed new Food and Drugs Act.

During the year under review, the staff of the laboratory has been increased by one Senior Assistant, appointed at the request of the Waterworks Committee, to be responsible for the treatment and examination of the water supply at the various sources under the control of that Committee.

The work carried out in the laboratories during 1951 for the Health Committee, the Waterworks Committee, and other Departments and Authorities, may be summarised as follows:—

	No. of Samples
Food and Drugs	1,071
Bacteriological examination of milk	455
Bacteriological examination of ice cream	12
Rinses from milk bottles, churns, etc.	109
Atmospheric pollution samples of all kinds	997
Fertilisers and feeding stuffs	16
Private water supplies to farms, etc.	49
Swimming bath waters	26
Analyses for the Waterworks Committee	971
Analyses for other Departments and Authorities	82
Miscellaneous examinations	43
TOTAL	<u>3,831</u>

The following table shows, by comparison, the increase in the number of samples examined during the past five years, although it does not take into consideration the increase in the amount of work necessary, as the result of recent legislation and modern practice, on the individual samples of food and drugs.

	1947	1948	1949	1950	1951
Total No. of all samples examined... ..	1782	1701	2251	2577	3831
Food and drug samples	563	406	830	835	1071

Health Committee

SAMPLES SUBMITTED UNDER THE FOOD AND DRUGS ACT

FOODS:	Total	Genuine	Unsatisfactory
Milk	822	780	42 = 5.1%
Beef Suet	2	2	0
Butter	4	4	0
Cereals... ..	28	27	1
Cheese	12	10	2
Coffee	5	5	0
Condensed Milk	2	2	0
Cooking Fat	3	1	2
Cream	2	2	0
Desiccated Coconut	1	1	0
Dripping	1	1	0
Fish Products	6	6	0
Gelatine	2	2	0
Grape Juice	1	1	0
Gravy Browning	2	2	0
Ground Almonds	3	3	0
Herbs (Dried)	3	3	0
Ice Cream	37	31	6
Lard	4	4	0
Lemon Crystals	1	1	0
Malt Vinegar	3	3	0
Margarine	4	4	0
Meat Products:			
Luncheon Meat and Polony ...	7	7	0
Sausages	13	3	10
Tinned Meat and Soups ...	8	8	0
Other Meat Products	7	7	0
Meringue Mix	1	1	0
Mincemeat	3	3	0
Orange Squash	1	1	0
Potato Crisps	1	1	0
Preserves	13	10	3
Puddings (Cooked)	4	4	0
Sauces, etc.	4	4	0
Spices and Condiments	11	11	0
Spirits	6	5	1
Sugar	4	4	0
Sweets	7	7	0
Tea	5	5	0
Tinned Fruit and Vegetables ...	5	5	0
Total Foods	<u>1,048</u>	<u>981</u>	<u>67</u>

DRUGS:	Total	Genuine	Unsatisfactory
Bicarbonate of Soda	2	2	0
Borax	1	1	0
Epsom Salts	1	1	0
Friars Balsam	1	1	0
Fuller's Earth	1	1	0
"Germ" Ointment	1	1	0
Glycerine	2	2	0
Head, Nerve & Flu Powder	1	0	1
Health Salts	1	0	1
Indian Brandee	2	2	0
Olive Oil	1	1	0
Parrish's Chemical Food	1	1	0
Peppermint Elixir	1	1	0
Rasp. Vinegar and Olive Oil	1	1	0
Saccharine Tablets	1	1	0
Seidlitz Powders	1	1	0
Tea seed Oil	2	2	0
Zinc and Castor Oil Cream	1	1	0
Zinc Ointment	1	1	0
Total Drugs	<u>23</u>	<u>21</u>	<u>2</u>
Total Food and Drugs...	<u>1,071</u>	<u>1,002</u>	<u>69 = 6.4%</u>

The proportion of adulterated samples is only very slightly in excess of the corresponding figure for last year, viz., 6.4% against 5.7% for 1950, whereas there were 10.4% of adulterated samples in 1949.

UNSATISFACTORY SAMPLES:

MILK (42) 25 samples contained extraneous water in amounts ranging from 1.1 to 4.2%; 15 samples were deficient in fat, from 2.0 to 33.3%; and 2 samples contained extraneous water and were also deficient in fat.

No action was taken in a few minor offences, nor where appeal-to-cow samples confirmed the original sample to have been of inferior quality, but "as given by the cow." Warning letters were sent to other offenders, and in 10 cases legal proceedings produced £20 in fines, together with £6 6s. costs.

- ICE CREAM (6) 2 samples were deficient in fat, and 4 samples were deficient in fat and also in milk solids-not-fat. The fat deficiencies ranged from 4% to 54%, and the milk solids-not-fat deficiencies from 20% to 34%.

Warnings or advice were given in each case, and in all cases resulted in satisfactory products.

- CHEESE (2) Both these samples were from the same source, each containing about 75% of water, and only about 8% of fat in the dry matter. These samples should have been described as "Skimmed Milk Cheese" and a warning letter to that effect was sent to the vendor.

- SAUSAGES (10) A large proportion of these samples again were unsatisfactory owing to deficiencies in meat content, the deficiencies varying between 3.7 and 46 per cent in 8 of the sausages. In 3 cases legal proceedings were instituted, and in each case a fine of £10 plus 10/6 costs was inflicted.

Warning letters were sent in other cases and also where 2 samples contained 160 and 175 parts per million of sulphur dioxide as preservative, its presence not having been declared at the time of purchase.

- COOKING FAT (2) Each sample showed excess of acidity and rancidity rendering the fat, in my opinion, unfit for human consumption. Warning letters were sent to the vendors.

- JAM (2) Strawberry jam contained only 64.2% of soluble solids (sugar) instead of 68.5%—resulted in a warning letter being sent to the producer.

Blackcurrant jam covered with a mould which had penetrated to a small extent through the mass of the jam. Examination of the remainder of the retailer's stock showed this sample to have been the only one affected.

- LEMON CURD (1) One sample contained only 2.8% of fat instead of the prescribed 4%, and a warning letter was sent to the manufacturer.

- FLAKE TAPIOCA (1) This sample contained a small dead beetle, had a general dirty appearance and was therefore declared unfit for human consumption. Following representations to the vendor, the packer withdrew the remainder of the stock.

WHISKY (1) One sample 40.4 degrees Under Proof, equivalent to 8.2% excess water. Legal proceedings resulted in the infliction of a fine of £3 and 10/6 costs.

HEALTH SALTS (1) Bore a label including the formula, but analysis showed an entirely different proportion of the ingredients. After notification the packer agreed to withdraw the old label and issue a modified one.

HEAD, NERVE AND FLU POWDER (1) This sample was labelled with an out-of-date (and mis-spelled) synonym for caffeine citrate, and moreover, was prepared from 92.5% aspirin and 7.5% hydrated caffeine (not caffeine citrate).

After a warning letter, the manufacturer submitted a new label for approval.

MILK:

The following table shows the monthly variation in composition of all milk samples examined during 1951:—

	No. of samples	Milk Fat Per cent.	Solids-not-fat Per cent.	Water Per cent.
January	81	3.55	8.74	87.71
February	73	3.59	8.55	87.86
March	65	3.47	8.62	87.91
April	84	3.52	8.68	87.80
May	66	3.58	8.80	87.62
June	77	3.46	8.93	87.61
July	64	3.50	8.83	87.67
August	56	3.83	8.78	87.39
September	64	3.54	8.80	87.66
October	76	3.74	8.86	87.40
November	76	3.72	8.79	87.49
December	40	3.67	8.74	87.59

The average composition of all the milk samples submitted during the past four years, including adulterated samples, is given below:—

Year	No. of samples	Milk Fat Per cent.	Solids-not-fat Per cent.	Water Per cent.
1948	295	3.71	8.69	87.60
1949	655	3.62	8.79	87.59
1950	543	3.59	8.83	87.58
1951	822	3.59	8.76	87.65

Designated Milks examined by the tests specified in the appropriate regulations:—

<i>Designation</i>	<i>No. examined</i>	<i>Satisfactory</i>	<i>Unsatisfactory</i>
Pasteurised	167	160	7
Sterilised	130	130	0
T.T. Pasteurised	158	152	6
TOTAL	455	442	13

There has been an appreciable increase in the proportion of designated milks found to be unsatisfactory compared with previous years. Three samples of Pasteurised Milk and one of T.T. Pasteurised Milk failed in the Phosphatase test, indicating insufficient heating or admixture with raw milk. Also, four samples of Pasteurised Milk and five samples of T.T. Pasteurised Milk failed in the prescribed Methylene Blue test, which is a measure of the keeping quality of the milk, and a failure in the test is caused by the presence of excessive numbers of organisms.

ICE CREAM:

37 samples of ice cream were submitted during the year, of which 12 were subjected to the Methylene Blue test for provisional grading as recommended by the Public Health Laboratory Service, with the following results:—

No. of samples of	Grade 1 standard	...	11
„ „ „ „	Grade 2	„	1
„ „ „ „	Grade 3	„	0
„ „ „ „	Grade 4	„	0

Of the above 12 samples, 11 were obtained from Bolton manufacturers, and it is pleasing to report that all were satisfactory from a bacteriological standpoint.

While there is still no official bacteriological standard, the above test is considered to be the best available means of showing the comparative cleanliness of samples of ice cream.

The above-mentioned 37 samples of ice cream were examined chemically for composition, and as has already been mentioned, six samples failed to conform to the provisions of the present standard for ice cream:—

1 sample contained less than 2.5% of fat
7 samples contained between 2.6 and 5.0% of fat
12 „ „ „ 5.1 and 7.5% „ „
8 „ „ „ 7.6 and 10.0% „ „
9 „ „ „ 10.1 and 13.9% „ „

Average Composition	Fat Per cent.	Milk S.N.F. Per cent.	Sugar Per cent.	Total Solids Per cent.
All samples	7.50	8.83	12.25	31.37
29 samples produced in Bolton	6.67	8.73	12.40	30.56
8 samples produced by large manufacturers outside Bolton ..	10.48	9.20	11.71	34.3

CLEANLINESS OF MILK BOTTLES, CHURNS, ETC.:

44 milk bottles and 65 milk churns and kits were examined to determine the degree of efficiency of the methods used by local dairymen and dairies for the cleansing of their apparatus and utensils.

A small proportion of the milk bottles examined were found to be unsatisfactory in containing excessive numbers of organisms. A much higher proportion of the churns were unsatisfactory due to the presence of excessive numbers of organisms or coliform organisms—or both. In addition, a number of the churns were in a “wet” condition at the time of examination and therefore unlikely to remain in a satisfactory condition bacteriologically.

In nearly all cases, however, following advice given by officers of the Health Department, subsequent inspection and sampling showed a decided improvement in the condition of the bottles and churns.

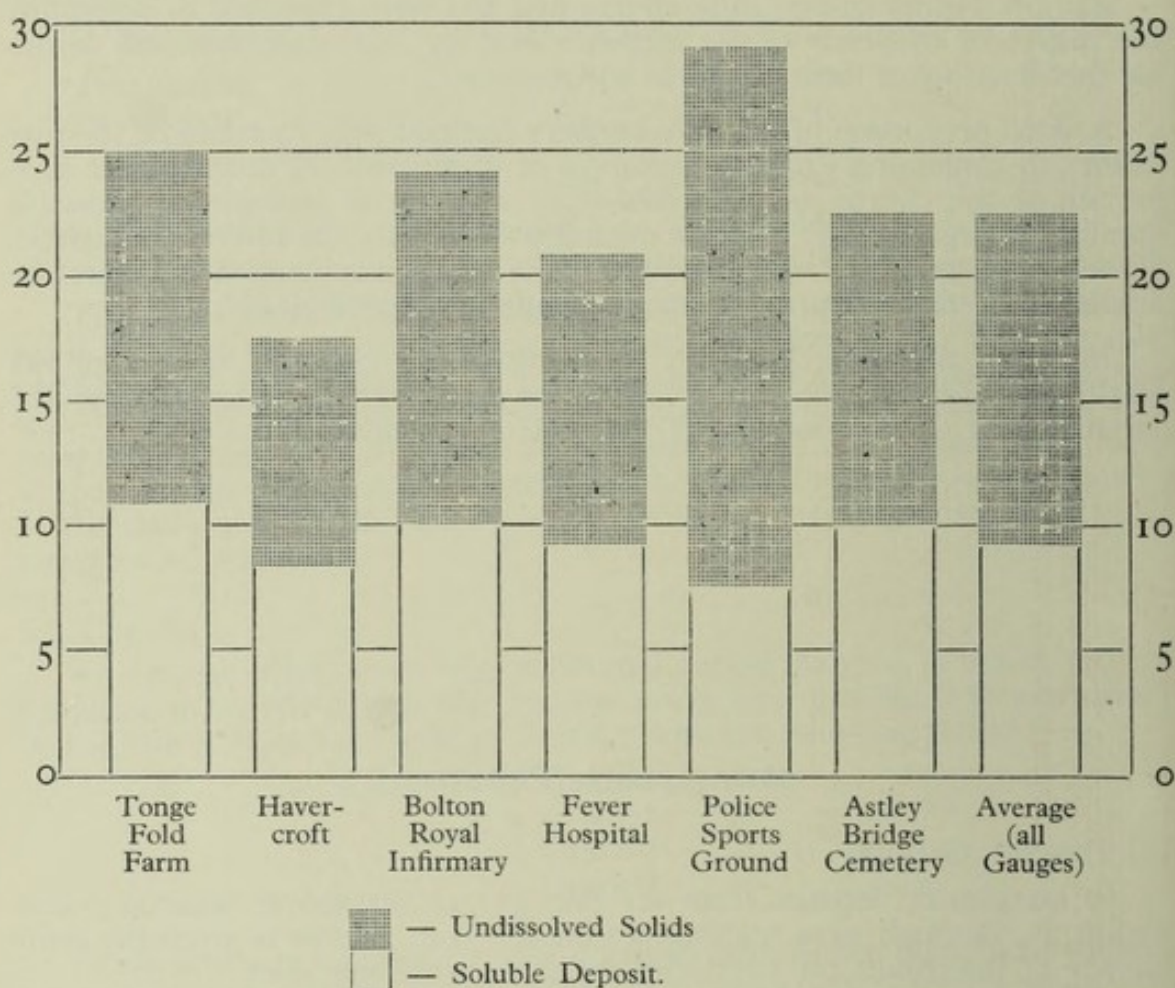
Atmospheric Pollution

(a) DEPOSIT GAUGES:

69 samples of deposits from the rain gauges situated at selected points within the Borough were analysed during the year. Below is given the comparison of the results for 1951 with the three preceding years.

SITE	Total Deposit in Tons per square mile			
	1948	1949	1950	1951
Tonge Fold Farm/Tonge Cemetery	20.6	25.4	22.9	25.1
Havercroft	10.0	9.7	11.9	17.2
Bolton Royal Infirmary	17.1	16.9	21.2	24.4
Fever Hospital	13.5	16.3	21.1	21.3
Police Sports Ground.. .. .	35.3	35.9	44.9	29.3
Astley Bridge Cemetery/Parochial Hall ..	24.9	23.0	19.9	23.8
AVERAGE OF THE 6 DISTRICTS	20.2	21.2	23.65	23.5

AVERAGE MONTHLY FIGURE FOR 1951—DEPOSIT IN TONS PER SQUARE MILE:



(b) SMOKE AND SULPHUR DIOXIDE DETERMINATION:

During the second half of the year, daily determinations were made of the concentration of the smoke and sulphur dioxide in the atmosphere of the town centre. Reports are forwarded monthly, along with reports on the deposit gauges, to the Superintendent of Observations for the Investigation of Atmospheric Pollution.

Comparative figures from other towns are not yet available, but the concentration of smoke is high, even for an industrial town. As may be expected, the lowest concentrations are obtained during week-ends (Saturday/Sunday).

The following is a summary of the results:—

SMOKE (Concentration in milligrammes per cubic metre).

	July	Aug.	Sept.	Oct.	Nov.	Dec.
Daily Average Value	... 0.400	0.326	0.312	0.560	0.393	0.512
Highest Daily Value	... 0.756	0.773	0.872	1.302	0.723	1.257
Lowest " "	... 0.126	0.113	0.085	0.121	0.070	0.174

SULPHUR DIOXIDE (Concentration in parts per million)

	July	Aug.	Sept.	Oct.	Nov.	Dec.
Daily Average Value	... 0.044	0.068	0.079	0.128	0.092	0.130
Highest Daily Value	... 0.084	0.099	0.169	0.270	0.143	0.339
Lowest " "	... 0.013	0.041	0.025	0.049	0.026	0.040

Fertilisers and Feeding Stuffs

16 samples submitted under this Act consisted of 8 Fertilisers and 8 Feeding Stuffs for animals.

7 of the samples examined did not agree with the declared composition on the statutory statement or warranty. Warning letters were sent and the Ministry of Agriculture and Fisheries notified in each of these cases.

Private Water Supplies to Farms and Cottages

49 samples of drinking water (from private springs and wells) being supplied to local farms and cottages, have been examined for purity. Four of these were classified as unsatisfactory, having shown evidence of undesirable contamination; one sample (taken from a milk cooler) contained a deposit which consisted of iron and algal growths. The remainder were satisfactory.

Swimming Bath Waters

26 samples of the water from the plunges at the Public Baths under the control of the Health Committee have been taken during periods of use by bathers.

In four instances the water showed a very high number of organisms present, in each case due to insufficient chlorination of the water.

Miscellaneous Examinations

FOR THE HEALTH DEPARTMENT:

- 5 samples of water for determination of fluorine content (for Medical Officer of Health).
- 4 wrappings from bacon contaminated during transport—3 with copper sulphate; 1 with iron oxide.
- 4 samples of water from cellars for sewage contamination.
- 3 atmospheric deposits—2 for combustible matter; 1 for general examination.
- 3 samples of milk from case of suspected mastitis—all free from pus cells.
- 4 samples of meat: 3 examined for bilirubin and found negative: 1 for suspected anthrax—negative.
- 2 sausages for departmental information.
- 2 ice creams for laboratory information.
- 1 zinc and castor oil cream for laboratory information.
- 3 packets of pastry mix: 1 from customer was discoloured and contained large number of living mites: 2 packets from retailer were satisfactory.
- 2 meat pies submitted by manufacturer contained staphylococcus albus organisms in the meat portion of the pie.
- 2 waters from local golf club were free from sewage contamination.
- 1 effluent from pig farm was condemned as unsuitable for discharge into a local stream.
- 1 sample of water (complaint) contained a deposit of iron salts, otherwise satisfactory.

- 1 sample of dried figs was infested with mites, and therefore unfit for human consumption.
- 1 sample of tinned boiled ham showed signs of decomposition and was condemned.
- 1 sample of condensed milk was slightly sour, but otherwise free from injurious ingredients.
- 1 sample of rum and peppermint contained 17% by volume of alcohol, but was otherwise free from deleterious ingredients.
- 1 sample of milk contained a deposit, found to be pus cells, but no pathogenic organisms.
- 1 sample of rags for cleanliness.

OTHER DEPARTMENTS AND AUTHORITIES:

- Ministry of Food ... 2 sweets
- Highways ... 1 cement/sand mixture for original composition.
1 plastic material for calorific value.
- Museums ... 9 waters from tanks in Aquarium (mainly for hardness determination).
- Watch Committee: 1 liquid from surface of lodge (for Fire Brigade).
- Atherton U.D.C. ... 24 deposits from atmospheric pollution gauges.
24 deposits from sulphur dioxide apparatus
1 water for chemical examination.
1 rag flock.
- Private ... 5 samples of water, etc. for cause of corrosion of metal pipes.
5 ingredients of meal for poisonous substances.
4 organs of horse (post-mortem) for poisons.
2 powders for poisonous substances.
1 drug for purity.
1 water for chemical and bacteriological examination.

Waterworks Committee

971 samples of water, etc., have been examined during the year, and reports issued to the Waterworks Department.

These consisted of:—

- (a) Weekly bacteriological examinations of the raw and filtered waters constituting the whole of the town's domestic supply.
- (b) Monthly analyses of waters from the same sources.
- (c) Examinations of effluents.
- (d) Various samples for special examinations:—
 - 1. Waters from various sources.
 - 2. Examination of lime and solution of lime used for treatment of water.
 - 3. Examination deposits in water and pipes.
 - 4. Examination of chemical weed killer.
 - 5. Examination of paste used for jointing of mains.

The following are the average results on the raw and filtered waters from all stations:—

BACTERIOLOGICAL:	RAW	TREATED AND FILTERED*
Total number of organisms on Agar at 37°C. per mil. of water	55	8
Number of B.Coli per 100 mls. of water	57	1
Percentage of samples showing coliform organisms in 100 mls. of water	88.5	13.1
Percentage of samples showing typical B.Coli in 100 mls. of water	43.5	5.1
Percentage of samples showing Cl. Welchii in 50 mls. of water	18.2	0.9

*These averages include the results of Samples from Crowthorne and Daddy Meadows supplies.

CHEMICAL:	RAW	TREATED AND FILTERED
Total solids parts per million ...	86.8	82.9
Free ammonia do. ...	0.04	0.04
Albuminoid ammonia do. ...	0.07	0.04
Nitrate nitrogen do. ...	0.27	0.29
Nitrite nitrogen do. ...	very feint trace	none
Chlorides (as Cl.) do. ...	11.1	11.3
Oxygen absorbed from Permanganate do. ...	1.36	0.70
Poisonous metals (lead, etc.) do. ...	none	none
Plumbo-solvency (24 hours) do. ...	2.4	0.8
Total hardness do. ...	29.4	31.3
Suspended matter do. ...	trace	none
Odour do. ...	none	none
Hazen number	23.8	10
pH value	6.1	7.0

These findings show the necessity for filtration and treatment of the raw waters, and that, in general, the filtered waters are of a highly satisfactory standard.

BATHS AND WASH-HOUSES

The following establishments are administered by the Health Department and they provide the under-noted services.

High Street Baths
 Bridgeman Street Baths
 Moss Street Baths and Wash-houses
 Rothwell Street Wash-houses
 Turkish Baths

SWIMMING FACILITIES:

BATHS	LADIES	GENTLEMEN	MIXED BATHING
HIGH STREET BATHS (1 Plunge)	Wednesday all day	Monday, Tuesday, Friday, Saturday	Thursday all day. Sunday morning.
BRIDGEMAN STREET BATHS (1 Large Plunge for men; 1 Small Plunge for Ladies)	Every day	Monday, Tuesday, Thursday, Friday, Sunday morning.	Wednesday all day. Saturday until 4.30 p.m.
MOSS STREET BATHS (2 Plunges)	Every day	Monday, Wednesday, Thursday, Friday, Saturday.	Tuesday all day. Sunday morning.

SLIPPER BATH AND TURKISH BATH FACILITIES:

BATHS	LADIES	GENTLEMEN
HIGH STREET BATHS (9 Baths including 1 Vapour Bath)	Wednesday all day	Daily except Wednesday Sunday morning
BRIDGEMAN STREET BATHS (5 Baths for Ladies, 20 Baths for Gentlemen)	Daily Sunday morning	Daily Sunday morning
MOSS STREET BATHS (6 Baths for Ladies, 12 Baths for Gentlemen)	Daily Sunday morning	Daily Sunday morning
ROTHWELL STREET WASH- HOUSES (10 Baths for Ladies, 5 Baths for Children)	Daily (except Sunday)	—
TURKISH BATHS (3 Hot Rooms, various types of Medicated and Foam Baths)	Monday and Wednesday 10 a.m. to 7.30 p.m.; Friday 10 a.m. to 1.30 p.m.	Tuesday and Thursday 10 a.m. to 12.45 p.m. 2 p.m. to 7.30 p.m.; Friday 2 p.m. to 7.30 p.m.; Saturday 10 a.m. to 12.45 p.m. 2 p.m. to 7 p.m.

PUBLIC WASH-HOUSES AND TRANSPORT SERVICE:

Open daily Monday to Friday, 7 a.m. to 7.30 p.m.

Saturday, 7 a.m. to 5 p.m.

MOSS STREET: Equipment comprises 12 hand-washing stalls and 6 electric rotary washing machines.

ROTHWELL STREET: Equipment comprises 20 hand-washing stalls and 8 electric rotary washing machines with all the necessary ancillary appliances.

For an additional charge, washing can be collected and delivered by the Department from individual houses.

NUMBER USING THE WASH-HOUSE TRANSPORT SERVICE:

	1951	1950	1949
Moss Street	1929	1623	1342
Rothwell Street	5019	4841	4744

SWIMMING:

The policy has always been to assist and encourage the art of swimming, but over the past fifteen years there seems to have been a decline in interest for which it is difficult to account. From April to October each year children from the schools of Bolton attend for swimming instruction. 55,524 attendances by children for this purpose were made during 1951.

The Health Committee present annually, free swimming tickets to 150 children between the ages of twelve and fourteen years who pass a qualifying examination. A free ticket for twelve months is also given to any resident of the town who gains the bronze medallion of the Royal Life Saving Society.

(a) STATISTICAL DATA:

The following table shows the attendances at the various establishments during the last three years.

	Number using Swimming Plunges			Number using Slipper Baths			Number using Wash-houses		
	1951	1950	1949	1951	1950	1949	1951	1950	1949
High St. Baths	57438	49628	63617	17791	17136	19896	—	—	—
Bridgeman St. Baths	75902	74966	75587	34245	32883	31608	—	—	—
Moss St. Baths and Wash- houses ..	77007	81788	84936	40312	38058	42401	30622	28441	28951
Rothwell St. Wash-houses	—	—	—	18486	17569	20428	48374	48548	45598

Number using the Turkish Baths

1951	1950	1949
4725	5022	5933

(b) COMMENT:

From the figures shown above, it will be seen that the number of persons using the plunge baths has increased since last year and so also has the number using the slipper baths. Both these figures are highly satisfactory and a positive proof that the baths are providing an essential public service.

Reference to the number of persons using the wash-houses shows that here too there was an increase in the number of persons using this most essential public service and it is difficult to imagine what the effect would be on public health if such a public service were not available. Indeed, it may well be that this is a service which will have to be extended.

The numbers attending the Turkish Baths showed a slight decrease, but it is well to remember that this is a public service and one which I am of the opinion should be continued, as many of the users would find it most inconvenient to travel elsewhere and would suffer if the service were not available.

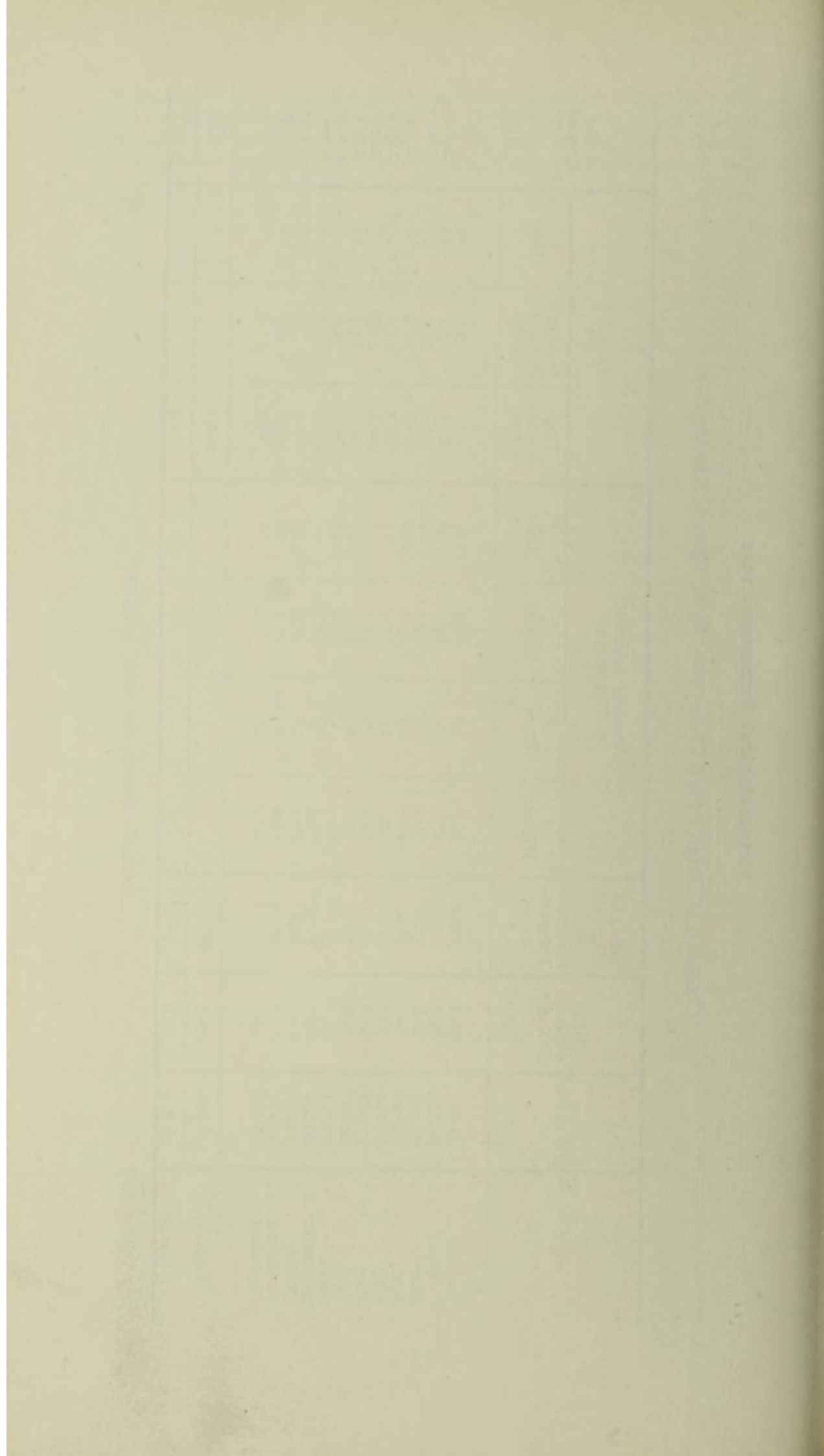
Name of Bath	1910-1911			1911-1912			Total
	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.	
Abdullah	1,200	1,100	1,000	1,100	1,000	900	3,000
Abdullah	1,100	1,000	900	1,000	900	800	2,700
Abdullah	1,000	900	800	900	800	700	2,400
Abdullah	900	800	700	800	700	600	2,100
Abdullah	800	700	600	700	600	500	1,800
Abdullah	700	600	500	600	500	400	1,500
Abdullah	600	500	400	500	400	300	1,200
Abdullah	500	400	300	400	300	200	900
Abdullah	400	300	200	300	200	100	600
Abdullah	300	200	100	200	100	0	300
Abdullah	200	100	0	100	0	0	100
Abdullah	100	0	0	0	0	0	0
Abdullah	0	0	0	0	0	0	0

Meteorological Summary, 1951

(Compiled at Queen's Park Observatory by E. HENDY, F.R.Met.S.).

1951	Barometer "	Mean Relative Humidity %	Mean of Maximum and Minimum Tempera- ture °	Absolute extremes of Temperature			Sunshine		Total Rainfall
				Highest °	Date	Lowest °	Date	Total Amount hours	
January ..	29.725	90.2	37.42	52.0	16	24.9	29	23.6	4.681
February ..	29.525	89.0	37.58	47.4	2	29.2	26	41.3	2.594
March ..	29.755	81.8	37.86	55.4	22	23.1	4	75.1	5.861
April ..	29.942	69.1	42.92	67.3	25	29.9	22	188.6	2.394
May ..	30.012	72.5	48.77	67.0	24	31.5	11	186.5	2.693
June ..	30.016	66.8	55.51	74.3	6	39.1	2	218.9	1.461
July ..	30.057	79.6	58.83	77.4	21	42.3	15	167.2	4.311
August ..	29.791	83.2	56.10	73.3	5	43.9	13	120.3	5.197
September ..	29.934	84.5	56.20	72.3	4	41.4	21	100.2	3.319
October ..	30.130	85.2	48.67	66.5	16	27.0	23	81.1	1.177
November ..	29.577	89.1	46.34	54.9	6, 10, 24	27.1	26	33.2	9.402
December ..	29.882	88.1	41.18	54.9	18	23.3	11	26.6	8.665
TOTALS ..	358.346	979.1	567.38					1262.6	51.755
AVERAGES ..	29.864	81.6	47.28					105.2	4.313

Rainfall—Average 1887-1951 = 44.696"



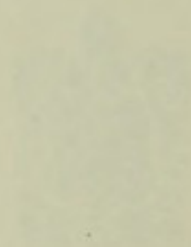
COUNTY BOROUGH OF BOLTON
EDUCATION COMMITTEE



ANNUAL REPORT
OF THE
School Medical Officer
FOR THE YEAR 1951

ALEXANDER HUTCHISON,
M.D., Ph.D., D.P.H., F.R.F.P.S.G., D.P.A.,
School Medical Officer and Medical Officer of Health.

JOINT BOARD OF COLLEGE
EDUCATION COMMITTEE



ANNUAL REPORT

School Medical Officer

FOR THE YEAR 1911

PRINTED BY THE
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8th May, 1952

ANNUAL REPORT

*To the Chairman and Members of the Special Services Sub-Committee
of the Bolton Education Committee.*

Ladies and Gentlemen,

I have the honour to present my report on the work of the School Health Service during the year 1951.

During the year the new clinic at Astley Bridge came into service. This clinic provides minor ailment clinics and a dental clinic. One half day is set aside for use by the Health Committee as an Infant Welfare Centre.

The School Dental Service has maintained its services, and the number of children inspected and treated has increased.

The number of children inspected at school has remained at the same low level as last year and, unfortunately, it has not been possible to raise this owing to difficulty in recruiting medical staff.

The Specialist Services have been maintained, and a close and happy liaison with the Hospital Management Committee has been of considerable help.

The Medical Research Council commenced trials with anti-tuberculosis vaccines, and although it is too early to comment on results the number of Bolton children taking part is satisfactory.

I am indebted to Mr. W. H. Hayward for the interesting reports on the Speech Therapy and Child Guidance Centres, and would like to take this opportunity of recording my thanks to him for the ready co-operation and support I have received during the year.

I appreciate deeply the support and encouragement of the Chairman and Members of the Committee, and the loyalty of the staff.

I am, Ladies and Gentlemen,

Your obedient servant,

ALEXANDER HUTCHISON,
School Medical Officer.

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STAFF OF THE SCHOOL HEALTH SERVICE

School Medical Officer	Alexander Hutchison
Deputy School Medical Officer	Hugh Bryant (Commenced 14th Aug., 1951)
Senior Dental Officer	Donald Davies (Commenced 1st Sept., 1951)
Assistant School Medical Officers	John Litt Jean B. Parker
Dental Officers	Stanley J. Bray Richard B. Keighley (Resigned 30th Nov., 1951) Bessie Wignall Dorothy Coates Alan Hodgkinson (Commenced 14th Nov., 1951)

Nursing Staff

There were 6 full-time school nurses, and 15 health visitors working part-time as school nurses at the 31st December, 1951. This gave an equivalent of 9 full-time school nurses.

Dental Attendants

There were 5 dental attendants at the 31st December, 1951. One of these commenced duty on the 6th December.

MEDICAL INSPECTION

The age groups subjected to periodic Medical Inspection are those prescribed by Regulation 49 (2) (a), (b) and (c) of the Handicapped Pupils and School Health Service Regulations, 1945:—

ENTRANTS: Children examined as soon as possible after admission to the school (i.e., at age of 5 years).

SECOND AGE GROUP: Children examined in Junior Departments who are in their last year of attendance at a Primary School (i.e., age 10 or 11 years).

THIRD AGE GROUP: Children examined who are in their last year of attendance at a Secondary School (i.e., at age of 14 years and over).

The pupils in Special and Nursery Schools are also inspected in accordance with the requirements of the Ministry of Education

**MEDICAL INSPECTION OF PUPILS ATTENDING
MAINTAINED PRIMARY AND SECONDARY SCHOOLS
(INCLUDING SPECIAL SCHOOLS)**

Periodic Medical Inspections

Number of Inspections in the prescribed Groups:

Entrants	...	...	...	...	...	...	...	...	...	...	1,391
Second Age Group	...	...	...	...	...	...	...	...	...	...	1,179
Third Age Group	...	...	...	...	...	...	...	...	...	...	2,368
TOTAL	...	...	...	...	...	...	...	...	...	...	4,938

Number of other Periodic Inspections 437

GRAND TOTAL 5,375

Other Inspections

Number of Special Inspections 7,855

Number of Re-inspections 7,315

15,170

Pupils found to Require Treatment

GROUP (1)	For defec- tive vision (excluding squint) (2)	For any of the other conditions recorded in the following Table (3)	Total individual pupils (4)
Entrants	173	213	331
Second Age Group	189	120	265
Third Age Group	346	191	486
Total (prescribed groups) ...	708	524	1,082
Other Periodic Inspections	27	74	96
GRAND TOTAL	735	598	1,178

Return of Defects found by Medical Inspection

in the year ended 31st December, 1951

Defect Code No.	DEFECT OR DISEASE (1)	Periodic Inspections		Special Inspections	
		No. of defects		No. of defects	
		Requiring treatment (2)	Requiring to be kept under observation but not requiring treatment (3)	Requiring treatment (4)	Requiring to be kept under observation but not requiring treatment (5)
4	Skin... ..	79	15	240	3
5	Eyes:				
	a. Vision	735	358	127	11
	b. Squint	85	34	32	5
	c. Other	20	8	48	1
6	Ears:				
	a. Hearing	30	47	83	100
	b. Otitis Media	51	11	145	4
	c. Other	88	18	171	35
7	Nose and Throat	71	246	325	129
8	Speech	16	35	46	39
9	Cervical Glands	1	54	31	14
10	Heart and Circulation	9	15	33	8
11	Lungs	36	47	84	32
12	Developmental:				
	a. Hernia	16	26	7	3
	b. Other	7	66	9	3
13	Orthopaedic:				
	a. Posture... ..	30	46	5	4
	b. Flat foot	10	11	6	3
	c. Other	48	85	45	11
14	Nervous system:				
	a. Epilepsy	3	17	17	8
	b. Other	—	4	2	—
15	Psychological:				
	a. Development	2	8	58	21
	b. Stability	6	16	23	17
16	Other	48	33	638	97

TREATMENT

The following clinics are available for school children:—

Charles Street Clinic, off Folds Road, Bolton.
 The Robert Galloway Clinic, Flash Street, Bolton.
 Astley Bridge Clinic, Moss Bank Way, Bolton.
 (Opened 12.2.52)

These clinics provide Minor Ailment Clinics
 Dental Clinics

and in the case of the first two Specialist Clinics
 Ophthalmic Clinics, and
 Ear, Nose and Throat Clinics.

Astley Bridge Clinic is used by the Health Committee as a Maternity and Child Welfare Clinic on one morning of the week.

Treatment Centres for the treatment of Minor Ailments are established at the following schools:—

Brownlow Fold; Gaskell Street; Top o' th' Brow and
 Whitecroft Road.

In addition, a Speech Training and a Child Guidance Centre are available, and arrangements made with the Hospital Management Committee provide for orthopaedic treatment at the Bolton Royal Infirmary.

Two Lip Reading Classes for the partially deaf are organised. Audiometric examination is also available at the Thomasson Memorial School.

The following tables show the number of children for whom treatment was initiated by the staff of the School Health Service.

Diseases of the Skin (Excluding uncleanliness)

	Number of cases treated or under treatment during the year	
	by the Authority	otherwise
Ringworm (i) Scalp	—	—
(ii) Body	7	1
Scabies	3	—
Impetigo	39	1
Other Skin Diseases	207	22
TOTAL	256	24

Eye Diseases, Defective Vision and Squint

	Number of cases dealt with	
	by the Authority	otherwise
External and other, excluding errors of refraction and squint	193	2
Errors of Refraction (including squint)...	1,200*	33
TOTAL	1,393	35
Number of pupils for whom spectacles were		
(a) Prescribed	1,055*	12
(b) Obtained	898*	12

*Including cases dealt with under arrangements with the Supplementary Ophthalmic Services.

Diseases and Defects of Ear, Nose and Throat

	Number of cases treated	
	by the Authority	otherwise
Received operative treatment		
(a) for diseases of the ear	—	2
(b) for adenoids and chronic tonsillitis	—	312
(c) for other nose and throat conditions	—	9
Received other forms of treatment ...	158	45
TOTAL	158	368

Orthopaedic and Postural Defects

(a) Number treated as in-patients in hospitals	—	87
(b) Number treated otherwise, e.g., in clinics or out-patient departments	By the Authority —	Otherwise 535

Child Guidance Treatment

	Number of cases treated	
	In the Authority's Child Guidance Clinics	Elsewhere
Number of pupils treated at Child Guidance Clinics	Nil	2

(A Child Guidance Clinic is a clinic where a child psychiatrist is available as well as an educational psychologist).

Speech Therapy

	Number of cases treated	
	By the Authority	Otherwise
Number of pupils treated by Speech Therapists	98	—

Other Treatment Given

	Number of cases treated	
	By the Authority	Otherwise
(a) Miscellaneous minor ailments... ..	5,431	—
(b) Lip-reading classes	11	—
TOTAL	5,442	—

AURAL CLINICS

Children are referred by the Assistant School Medical Officers from periodic inspections and the school clinics to the consultant at the aural clinic.

The aural clinics are held fortnightly at each clinic.

The following are the relevant figures for 1951:—

No. of children seen for the first time by the aural surgeon ...	369
Subsequent visits made by the children	156
Total number of attendances	525

OPHTHALMIC CLINICS

Children are referred by the assistant school medical officers from periodic and other inspections and the school clinics to the ophthalmic surgeon.

The ophthalmic clinics are held:—

Monday, morning	}	at the Robert Galloway Clinic
Wednesday, afternoon		
Friday, afternoon		
Monday, afternoon	}	at Charles Street Clinic.
Wednesday, morning		
Friday, morning		

The following are the relevant figures for 1951:—

No. of children seen for the first time by the ophthalmic surgeon	1,413
Subsequent visits made by the children	4,565
Total number of attendances	5,978

Details of the number of spectacles provided will be found in the tables concerning eye diseases under the heading of "Treatment."

ORTHOPAEDIC CLINIC

Children with orthopaedic defects are referred to the orthopaedic clinic at the Bolton Royal Infirmary for advice and treatment. Close liaison exists between the consultant and the physiotherapist at the hospital and the School Health Service.

535 children attended during 1951.

GENERAL CONDITION

The general condition of school children in Bolton remains satisfactory. Of the 5,375 children examined at routine inspection in school, 1,593 or 29.64% were in good condition, 3,702 or 68.87% fair, and 80 or 1.49% poor.

The following table shows details of age groups.

AGE GROUPS (1)	Num-ber of Pupils In-spected (2)	A (Good)		B (Fair)		C (Poor)	
		No. (3)	% of Col. 2 (4)	No. (5)	% of Col. 2 (6)	No. (7)	% of Col. 2 (8)
Entrants	1,391	310	22.29	1,043	74.98	38	2.73
Second Age Group	1,179	233	19.76	936	79.39	10	.85
Third Age Group	2,368	941	39.74	1,419	59.92	8	.34
Other Periodic Inspections...	437	109	24.94	304	69.57	24	5.49
TOTAL	5,375	1,593	29.64	3,702	68.87	80	1.49

UNCLEANLINESS

Arrangements are made for the cleansing of unclean and verminous children at the Municipal Medical Baths, Kingsgate. One full-time male and one full-time female attendant are employed.

During the year, 277 children were treated.

The following table shows the number of children found, on inspection at school, to be verminous and the action taken to ensure their cleanliness.

Total number of examinations in the schools by the school nurses or other authorised persons	41,221
Total number of individual pupils examined	21,432
Total number of individual pupils found to be infested ...	2,445
Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944)	175
Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944)	80

This return relates to individual pupils and includes all cases of infestation, however slight.

HANDICAPPED PUPILS

Handicapped Pupils are pupils who, by reason of a defect of the mind or body, require special educational treatment. The categories are defined in the Handicapped Pupils and School Health Service Regulations, 1945.

The following Handicapped Pupils have been ascertained during the year:—

(a) Blind	3
(b) Partially Sighted	1
(c) Deaf	1
(d) Partially Deaf	8
(e) Delicate	82
(f) Diabetic	—
(g) Educationally Subnormal	23
(h) Epileptic	—
(i) Maladjusted	1
(j) Physically Handicapped	3
(k) Pupils suffering from Speech Defects	96
TOTAL	<u>218</u>

On the 1st December, 1951, 262 Handicapped Pupils were receiving special educational treatment at the following Special Schools:—

CATEGORY OF HANDICAP	SPECIAL SCHOOL	NO. OF PUPILS	
		Boarders	Day
BLIND	Junior School for the Blind, Liverpool ...	5	—
	Royal Normal College for the Blind, Rowston Castle	1	—
PARTIALLY SIGHTED	Barclay School, Sunninghill, Berks. ...	1	—
DEAF	Thomasson Memorial School, Bolton ...	5	10
	Royal Schools, Manchester	1	—
	St. John's, Boston Spa	1	—
	Mary Hare Grammar School, Newbury ...	1	—
	Royal Cross School, Preston	1	—
	Lawns House School, Leeds	1	—
PARTIALLY DEAF	Thomasson Memorial School, Bolton ...	2	17
DELICATE	Lostock Open Air School, Bolton	115	—
PHYSICALLY HANDICAPPED	National Children's Home, Chipping Norton	1	—
	Margaret Barclay School, Mobberley ...	2	—
	Rudolf Steiner School, Aberdeen (Independent School)	2	—
EDUCATIONALLY SUBNORMAL	Woodside School, Bolton	—	90
	St. Francis School, Birmingham	2	—
EPILEPTIC	Maghull Homes, Liverpool	2	—
	Colthurst House School, Alderley Edge ...	2	—

There are three schools in Bolton for handicapped pupils:—

Woodside School

This school caters for the Educationally Subnormal Child and is at present a day school. Ultimately, it is hoped to adapt the present school premises as a boarding house and to construct a new school in the extensive grounds.

The following table shows the number of children who have been in attendance during 1951:—

	Boys	Girls
No. of children on the roll, December, 1951	45	45
No. of children admitted during 1951	13	14
No. of children discharged during 1951 ...	18	10

Thomasson Memorial School

This school is a residential school for the deaf or partially deaf. It draws its pupils from all over the country. Children who live in the borough or the surrounding area are, with a few exceptions, attending as day scholars. A medical officer visits the school weekly, and an aural surgeon paid 6 visits during 1951, examining 152 children.

The following table shows the number of children attending during 1951:—

BOLTON AREA:	<i>Boys</i>	<i>Girls</i>
No. of children on the roll, December, 1951...	21	13
No. of children admitted during 1951	3	4
No. of children discharged during 1951	1	1

OUTSIDE AREAS:

No. of children on the roll, December, 1951...	46	21
No. of children admitted during 1951	7	2
No. of children discharged during 1951	3	5

Lostock Open Air School

This is a residential open air school situated in pleasant surroundings on the outskirts of the borough.

The school admits pupils who are ascertained as requiring special educational treatment in an open air school.

An assistant school medical officer visits the school weekly.

The following table shows the number of children in attendance during 1951:—

	<i>Boys</i>	<i>Girls</i>
No. of children on the roll, December, 1950 and re-admitted January, 1951	48	46
No. of children admitted during 1951	49	41
No. of children discharged during 1951	40	39

EMPLOYMENT OF CHILDREN AND YOUNG PERSONS

Four hundred and sixty-two children were examined during 1951 for employment outside school hours in accordance with the Bye-laws made under the Children and Young Persons Act, 1933, and certificates issued in each case.

Eight children who had made application for Juvenile Performers' Licences under the Employment of Children in Entertainments Rules, 1933, were examined and licences granted in each case.

CHILDREN UNABLE TO ATTEND SCHOOL THROUGH PHYSICAL DISABILITIES

The arrangements under this heading remain the same as last year.

During the year, 14 children have been on the books of the teachers, and altogether 828 hours of actual instruction have been given to these children.

LIP-READING CLASSES

Lip-reading classes are held once a week at St. George's School and Folds Road School, respectively. A fully qualified teacher of the deaf is in charge of each centre. During the year, 11 Bolton children attended.

CHILDREN NOTIFIED UNDER SECTION 57 OF THE EDUCATION ACT, 1944

The Education Act provided for the notifying to the Mental Deficiency Authority of children who are incapable of receiving education at school, children who it is inexpedient to educate with others, and children who require supervision after leaving school.

The figures for 1951 are:—

	Boys	Girls
Sect. 57 (3) Children who are incapable of receiving education at school	1	3
Sect. 57 (4) Children who it is inexpedient to educate with others	—	—
Sect. 57 (5) Children who require supervision after leaving school	5	5
TOTAL	6	8

I am indebted to Mr. W. H. Hayward, Chief Education Officer, for the following interesting accounts of the work of the Speech Training Centre and Child Guidance Service.

Speech Training Centre, Gaskell Street

The clinic was re-opened for the treatment of patients on 12th February, 1951, therefore all the patients come under the heading of "New" patients.

1. Number of patients attending clinic	137
2. New patients	137
3. Number remedied	38
4. Number who have left to commence work	12
5. Number unable to benefit from treatment	4
6. Number who have left to attend Direct Grant Grammar Schools	1
7. Number who are unable to attend due to lack of escort ...	1
8. Number who have left to go abroad	3
9. Number continuing treatment	78

TYPE OF DEFECT TREATED:

1. Stammering	62
2. Dyslalia (Simple, Multiple or General)	56
3. Dysarthria	3
4. Aphasia	3
5. Cleft Palate Speech	11
6. Spastics	2
TOTAL	137

TYPE OF DEFECT REMEDIED:

1. Stammering	...	...	...	...	...	...	...	...	...	17
2. Dyslalia (Simple, Multiple or General)	...	...	...	...	...	...	...	...	...	17
3. Dysarthria	...	...	...	...	...	...	...	...	...	2
4. Aphasia	...	...	...	...	...	...	...	...	...	1
5. Cleft Palate Speech	...	...	...	...	...	...	...	...	...	1
TOTAL										<hr/> 38 <hr/>

REPORT ON THE WORK OF THE CHILD GUIDANCE SERVICE

September, 1950, to August, 1951.

During the educational year under review there has been an extension in the type of work done and an increased number of cases assisted.

New Cases

195 new cases have been examined by the Educational Psychologist, 130 at the Centre in Mawdsley Street and 65 in school or at home. In addition, a further large number of children have been examined in school by group tests of intelligence and attainment as a preliminary to more individual study and treatment of selected children needing special educational help in ordinary schools.

Child Guidance Centre

Of the children seen at the Centre, a large number attended for only a few occasions for examination and advice, but 42 continued for treatment over a period, as well as 14 old cases needing continued attendance. A number of old cases have from time to time been followed up by single attendances or home visits by the Social Worker. The number of children taken on for individual treatment has to be limited by various factors, especially by the time needed for work in connection with psychological work in schools.

A proportion of the children referred on account of behaviour problems or nervousness require examination by a medical psychologist or psychiatrist, and of such children some need prolonged psychiatric treatment. Since the end of May, we have been fortunate in having a fortnightly visit from Dr. Leyberg, Consultant Psychiatrist to the Bolton Royal Infirmary to examine such cases. This aspect of the service, however, really needs the part-time services of a psychiatrist for two or three sessions a week. Experience this year has shown that it is not possible to obtain this psychiatric assistance from the Child Guidance Clinics of nearby Authorities.

Adjustment Classes and Remedial Groups

The chief extension this year of psychological work in schools has been in the provision of 3 adjustment classes for backward children in Junior Schools and remedial teaching groups in six secondary modern schools.

In the Junior classes, a small number of children has been transferred to an adjustment class where with smaller numbers and more individual attention their educational retardation can be attended to more adequately. The results, both in improved attainments and less measurable characteristics such as confidence and initiative have been very satisfactory.

In recent years, increasing attention has been paid to those boys and girls in secondary schools whose achievements in the basic subjects of reading and English fall well below the level expected for their ability and age. In some cases, they are found to be able to read only as well as an average six or seven year old child. The causes of this are numerous—absences in the infant school, ill-health, emotional unsettlement, poor intelligence and weaknesses in the special abilities required in learning to read. It is widely recognised that this type of problem needs intensive individual tuition which is not easy to give in a class of normal size, and that the successful treatment of such a child requires a careful study of his individual circumstances, abilities and interests.

In September, 1950, two teachers were assigned to the work of remedial teaching in four secondary modern schools and a third teacher started remedial work in two other boys' schools in January, thus covering all the secondary modern schools for boys. In the secondary schools for girls, there was already additional staff provided to do this type of work. In each school, group tests of intelligence and reading were given to select the most retarded readers and from these, after more individual examinations, were chosen those most in need of special help. As much information as possible was collected about each child, including at least one visit by the Social Worker to the child's home to discuss the child's failure and to try to set up a more favourable home attitude to the problem. Each child spent 40 minutes a day with the remedial teacher in a group varying from three to six in number. As the year progressed, and the most serious initial difficulties were overcome, it was possible to enlarge some of the groups and so deal with more cases. A total of 98 children aged between 11 and 15 years have attended regularly for remedial teaching.

Results

The rate of improvement in reading varies according to the extent of the child's special difficulties, his level of intelligence and the presence of emotional disturbances. On the average, three terms of remedial teaching have resulted in about 1½ years' improvement in Reading Age, and the increase for children who have attended groups for one or two terms averages about a year. Averaging of course does not indicate the extremes—those who made two or more years of improvement or those whose special difficulties were such that less than a year's improvement was shown. Nor do averages reveal the increased happiness and confidence gained by children who can now begin to read for pleasure.

A number of boys left school at Easter and a small evening class has been started experimentally to carry on their tuition and will be carried on for summer leavers still needing assistance.

The success so far achieved is the result of close and cordial co-operation between the staffs of the Centre and of the Schools and is a tribute to the quiet but inspiring leadership of the Educational Psychologist, Mr. Gulliford, who recently left to join the staff of the University of Birmingham.

Table I. Sources of Referral

Head teachers	96
School Medical Officers	62
Parents	10
Special Services Department	6
School Attendance Department	5
Other Departments Education Offices	7
Children's Department	6
Doctors	3
TOTAL	195

Table II. Analysis of Cases

SEEN AT THE CENTRE.

Behaviour Problems	34
Nervous... ..	34
Backward Children:—	
(i) Out-of-school or Pre-school	16
(ii) At school	37
Other cases	9

130

ANALYSIS OF CASES SEEN AT SCHOOL.

Backward	41
Children in Special Classes	17
Other cases	7

65

TOTAL	195
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**Table III. Reading Improvement in Years of Reading Age.
(Schonell's Graded Reading Test).**

Improvement in Years of Reading Age.	NO. OF PUPILS	
	Attended for 3 terms	Attended for 1 or 2 terms
2½ to 3 years	2	—
2 to 2½ years	12	2
1½ to 2 years	14	7
1 to 1½ years	13	13
½ to 1 year	6	20
0 to ½ year	1	5
	48 cases	47 cases

INFECTIOUS DISEASES IN SCHOOLS

Scarlet Fever

There were a considerable number of children of school age who developed scarlet fever during the year, but the cases were spread over the town and there was no obvious major outbreak. The disease remained mild in character, and few complications developed in any of the patients.

Diphtheria

An outbreak of diphtheria occurred in Lostock Open Air School. This outbreak commenced on the 29th October and involved 11 children. The outbreak started with one child who developed a sore throat. On bacteriological examination it was found the child was suffering from diphtheria. Nose and throat swabs were taken from the contacts, particularly those who slept in the same dormitory, or were in the same class. This resulted in four more cases being brought to light, although none of the children concerned was ill. All these children were removed to infectious diseases hospitals, and no further cases occurred until the 13th December. On the 10th December, one of the original cases returned from hospital. On the 13th and 14th two children developed sore throats which, on bacteriological examination, were found to be due to diphtheria. Unfortunately, one of these children had been off colour for a few days and had not been isolated. Nose and throat swabs were taken from the contacts of these two children, and by this method four more were found to be suffering from diphtheria. These children were admitted to hospital promptly, and no further cases occurred.

No child was seriously ill at any time. None of the children affected had been immunised, and the school was closed to visitors for one week-end.

The investigation of this outbreak involved a total of 95 nose and throat swabs.

I would like to record here my appreciation of the most helpful co-operation received from the medical officer responsible for the General Practitioner service at the school. His help did much to bring the outbreak quickly under control.

The outbreak demonstrated the importance of immunisation, particularly in a residential school.

Dysentery

An outbreak of dysentery occurred at Lostock Open Air School and 53 children were removed to hospital. It appears that one of the children at the school developed an attack of diarrhoea a fortnight before the main outbreak. This outbreak was explosive in character, but was brought under control by the prophylactic administration of sulphasuxidine to all the children and staff in the school.

IMMUNISATION

122 school children received primary inoculation against diphtheria. 337 children who had already been immunised received a reinforcing dose during their first year at school.

SPECIAL INVESTIGATION

Tuberculosis

The School Health Service is co-operating with the Medical Research Council in carrying out extensive trials of anti-tuberculosis vaccines.

In brief, the scheme is that children leaving secondary modern schools at the end of the Christmas Term, 1951, and the Easter and Summer Terms, 1952, are given certain special examinations, including X-ray. Following these, they are given an injection of an anti-tuberculosis vaccine and the follow-up of these children over a period of years is being arranged.

This scheme started in Bolton in November, 1951, and the response from the parents has been very good.

The following table shows the work carried out to date, but it will not be possible to give any definite results for some considerable time.

	Christmas Leavers 1951	Easter Leavers 1952
No. of school leavers	249	244
No. of acceptances	158	137
Percentage of acceptances	63.4%	66%
No. attending 1st test	153	137
No. excluded as cases or contacts... ..	1	3
No. of Acceptors attending 1st test but not completing examination	2	8
No. completing examination and ad- mitted to trial	150	126
% " " " "	60%	51%
Total Positive Mantoux tests	83	59
" " to 1/3000	61	46
" " to 1/100	22	13
Total Negative Mantoux tests	67	67
Total given B.C.G. Vaccine	23	26
Total given Vole Vaccine	17	23
Total Control (not vaccinated)	27	18

NURSERY SCHOOLS

There are two nursery schools in the borough, and the following tables show the admissions and discharges during 1951:—

Kay Street Nursery School

No. of children on the roll, December, 1951...	...	...	...	83
No. of children admitted during 1951	...	...	...	53
No. of children transferred to primary schools	...	...	...	23
No. of children removed by parents	...	...	...	19

Pikes Lane Nursery School

No. of children on the roll, December, 1951	...	...	...	95
No. of children admitted during 1951	...	...	...	64
No. of children transferred to primary schools	...	...	...	57
No. of children removed by parents	...	...	...	11

DENTAL SERVICE

At the end of 1951 the number of dental officers engaged in the School Dental Service was 5, compared with 4 in December, 1950. During the year one part-time officer was appointed temporarily on a sessional basis from the 7th August to the 13th September, and two whole-time appointments were made, including that of Senior School Dental Surgeon, a staff improvement unfortunately offset by the resignation of Mr. R. B. Keighley in December. An additional dental attendant was also appointed.

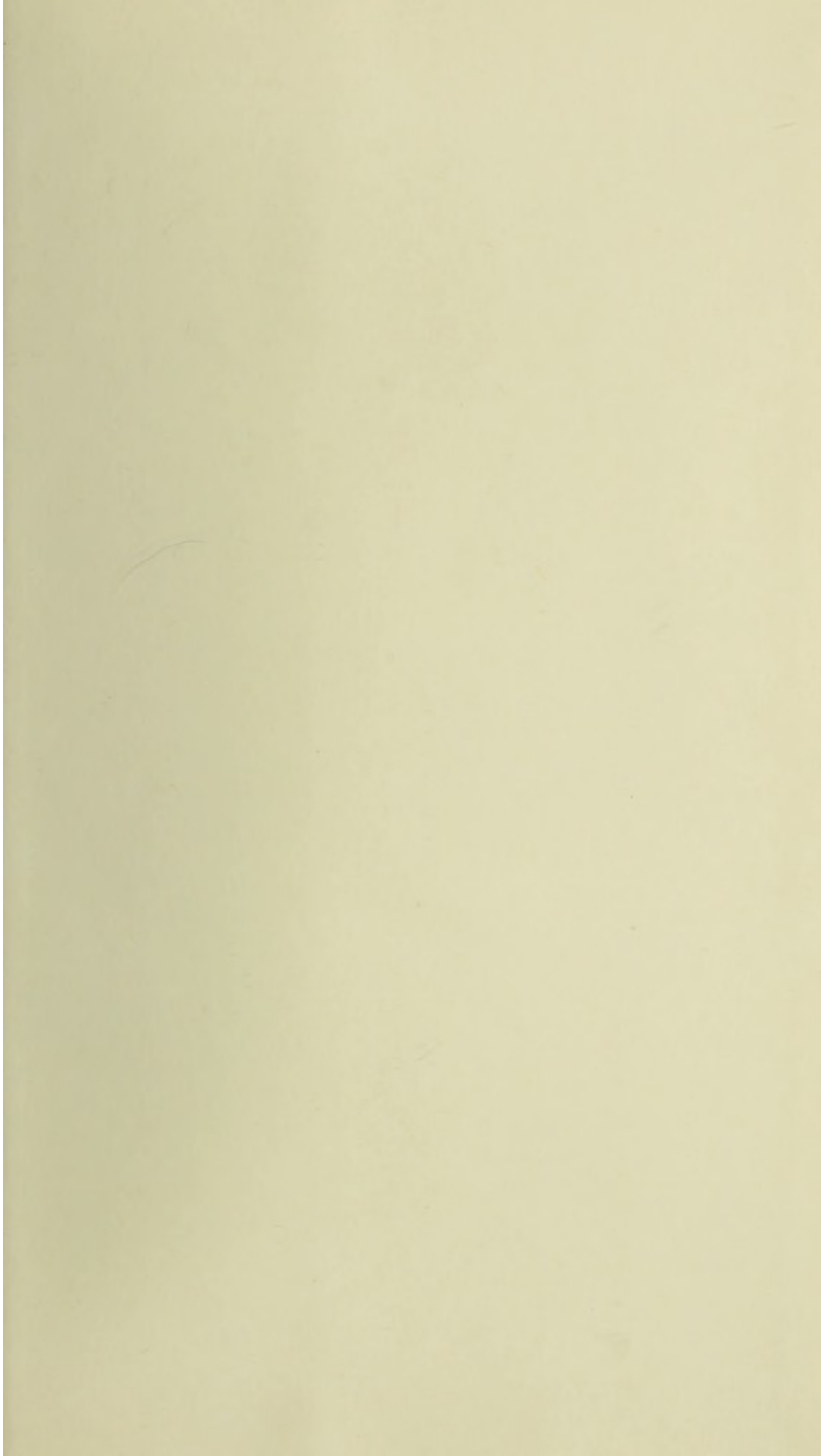
The new Dental Clinic at Astley Bridge began the systematic inspection and treatment of school children on the 30th April on a part-time basis, and in December was able to open full-time, the officer at this clinic having charge of some 3,000 children.

During the year, 19,581 children were inspected, 9,681 were referred for treatment and 6,794 received treatment.

Dental Inspection and Treatment carried out by the Authority

(1) Number of pupils inspected by the Authority's Dental Officers:—

(a) Periodic age groups	...	...	...	...	...	...	...	16,907
(b) Specials	...	...	...	...	...	...	...	2,674
TOTAL (1)	...	...	...	...	...	...	...	19,581
(2) Number found to require treatment	...	...	...	...	...	...	...	11,187
(3) Number referred for treatment	...	...	...	...	...	...	...	9,681
(4) Number actually treated	...	...	...	...	...	...	...	6,794
(5) Attendances made by pupils for treatment	...	...	...	...	...	...	...	10,166
(6) Half-days devoted to: Inspection	...	...	...	...	...	...	...	119
Treatment	...	...	...	...	...	...	...	1,625
TOTAL (6)	...	...	...	...	...	...	...	1,744
(7) Fillings: Permanent Teeth	...	...	...	...	...	...	...	3,813
Temporary Teeth	...	...	...	...	...	...	...	1,216
TOTAL (7)	...	...	...	...	...	...	...	5,029
(8) Number of teeth filled: Permanent Teeth	...	...	...	...	...	...	...	3,106
Temporary Teeth	...	...	...	...	...	...	...	1,094
TOTAL (8)	...	...	...	...	...	...	...	4,200
(9) Extractions: Permanent Teeth	...	...	...	...	...	...	...	1,189
Temporary Teeth	...	...	...	...	...	...	...	8,855
TOTAL (9)	...	...	...	...	...	...	...	10,044
(10) Administration of general anaesthetics for extraction	...	...	...	...	...	...	...	1,354
(11) Other operations: Permanent Teeth	...	...	...	...	...	...	...	1,048
Temporary Teeth	...	...	...	...	...	...	...	653
TOTAL (11)	...	...	...	...	...	...	...	1,701



Summary of Dental Inspection and Treatment rendered by the Army

(1) Number of people inspected by the Army's Dental Corps

 (a) Total inspected

 (b) Special

 Total (c)

(2) Number of people actually treated

(3) Number of people actually treated

(4) Number of people actually treated

(5) Number of people actually treated

(6) Number of people actually treated

 Total (d)

(7) Number of people actually treated

(8) Number of people actually treated

 Total (e)

(9) Number of people actually treated

(10) Number of people actually treated

 Total (f)

(11) Number of people actually treated

(12) Number of people actually treated

 Total (g)

(13) Number of people actually treated

(14) Number of people actually treated

 Total (h)

