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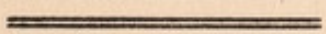
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Public Health



City of Salford



ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

1948

BY

J. L. BURN, M.D., D.Hy., D.P.H.,

MEDICAL OFFICER OF HEALTH



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MEDICAL OFFICER OF HEALTH

Members of the Health Committee
1948

Alderman W. W. Crabtree, Chairman
Councillor G. H. Goulden, Deputy-Chairman

Alderman J. Brentnall, J.P.
(Mayor)
" T. Clarke, J.P.
(Deputy-Mayor)
" Lemmon, J.P.
" Sands, G.W., J.P.
" Shlosberg, J.
" Webb, J.A., J.P., M.B.E.

Councillor Bell
" Brookes
" Butler
" Clarke
" Cooper
" Haynes, J.P.
" Mallinson
" Maron
" Openshaw, J.P.

INTRODUCTION

“ ‘ In the constitution of the World Health Organisation, health is defined not as being merely the absence of disease and infirmity, but as a state of complete physical, mental and social well-being.’ ‘ The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being, without distinction of race, religion, political belief or economic or social condition.’

“ . . . Public health and medicine . . . perhaps possess one of the keys that will unlock the door to a brighter future. For health is something that all men desire and there is no limited supply for which nations must compete. Public health work carries no threat to anybody, anywhere.”

*R. B. FOSDICK : President,
Rockefeller Foundation.*

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

Mr. Chairman, Ladies and Gentlemen.

The year 1948 was a notable one in the history of the city, so far as the Health Services are concerned.

The National Health Service Act, 1946, which came into operation on 5th July, 1948, brought about a revolutionary change in the Health Service of the country. So far as Salford was concerned, the changes included the transfer of the administration of the hospital and specialist services to the Manchester Regional Hospital Board, but against the loss of these curative functions had to be set off the addition to the responsibilities of the Health Committee of a number of almost entirely preventive services, details of which are given in this Report.

The year was primarily one of transition—the changeover taking place almost exactly half way through the year. In addition, the Health Committee's responsibilities for the administration of a number of activities on behalf of the Regional Hospital Board on an “ agency basis ” continued until almost the end of the year.

Generally speaking, it can be claimed that the transference of functions and the operation of the new services has worked smoothly and harmoniously, thanks to the good sense and co-operation of the responsible authorities and their staffs.

Whether the separation of the hospital services from the preventive services will, in the long run, be to the advantage of the community as a whole, time alone can tell. I have always taken the view that there must

be, sooner or later, unification of the authorities which work for the maintenance of health and prevention of disease. A unity of hospital services, general practitioner services and public health services is needed, to resolve the difficulties and dispose of the divisions between us.

I do not think that this opportunity should be allowed to pass without expressing thanks to the staffs of the hospitals, formerly controlled by the Committee, for their many years of loyal and devoted service to the Corporation, and voicing the hope that the link between the hospital and other health services will be as strong and binding in the future as it was before the 5th July, 1948.

In spite of the great material benefits which the National Health Service Act may bring to the people in the cure of disease, the truth will stand that prevention is better, cheaper and happier, than cure. Among the many significant (and forgotten) triumphs of preventive medicine are the closure nowadays of many isolation hospitals or the use of the beds therein for cases of non-infectious disease, and the dramatic diminution in deaths from diphtheria, which now causes only one-tenth of the loss of life it caused ten years ago.

It might be thought, with the hospital functions of local authorities being taken away, that Public Health services had in some way failed the people. But these services have, for many years, had a succession of triumphs which have gone almost unnoticed. Our aim still remains—firstly, to serve the family and the people in their homes; secondarily, and as a corollary to the first, to empty the hospitals. As has been mentioned, we had a large measure of success in a radical reduction of the need for infectious diseases hospitalisation; we aim to achieve similar results in the whole field of hospitalisation. For many reasons we must try and keep people (particularly old folk and infants), out of hospital, for in both of these groups there are possible dangers and certainly heavy cost involved. Unless hospital admission is necessary for treatment which cannot be given at home, it is better that these patients should remain at home and have all the resources of the hospital and specialist services brought to them.

The job which faces the Public Health Service is to maintain, and indeed enhance, the health of the people; to prevent disease and disorder; and to rehabilitate, or at least alleviate, those suffering from the burden of disease.

All is not well in this "bottle of medicine" age. In Salford alone, in one recent month, over 110,000 prescriptions were dispensed at a cost of over £16,000. Salford people get on an average six prescriptions, each one costing an average of 2s. 7d., per year.

You can be rightly proud of the low death rate (the lowest in our recorded history) of 11·8, but this must not blind us to the toll of illness. We must remember that, beneath the surface of a static or declining death rate from any specific cause, revealed to us by reliable statistics, there is submerged an illness incidence which no statistical system has yet correctly fathomed. Hence, whilst gastric and duodenal ulceration has a very low death rate, it must be borne in mind that this is, after all, but the surface

state of affairs, and that we must look below the surface if we are to gauge the depth of suffering that lies in the incidence of illness from this cause. Thus we find that there are well over 2,000 patients in Salford who are in receipt of extra milk allowance on account of gastric and duodenal ulceration, whereas there were only 22 persons who died in 1948 from this cause. These and other facts show that a good job has been done in reducing the number of deaths from disease, but disease processes are still at work and it will need more than the weapons we have at our command for public health to win a victory over disease in the same way as it has succeeded in postponing death.

Details of the various services controlled by the Health Committee are given in the following pages, but I desire to draw special attention to certain features which are discussed below:—

THE POPULATION OF SALFORD. Some statistics of local interest emerge from a report of the Registrar General.

On the 31st December, 1947, it was reliably estimated that the population of Salford, excluding men and women on National Service with the Armed Forces, was 175,600. Out of this total we find that there were 11,392 (or 6·4 per cent.) more women than men, a pointer perhaps to the hardiness and longevity of the "gentler sex," as well as an indication of the male casualties suffered during two world wars.

That more boys are born each year than girls has been an accepted fact for many years now (the proportion has almost invariably been 104 boys to each 100 girls born each year) but, due to a higher mortality rate amongst boy babies, by the time the fourth birthday was reached the proportion between the sexes invariably adjusted itself to round about 96 boys to each 100 girls. In the last few years, however, a changing trend has become apparent; now, at the age of four, there is a small though definite disparity in numbers in favour of the boys. In Salford at the beginning of 1948 there were 8,079 boys under the age of five, compared with some 7,680 girls. Those figures are a pointer to one of the triumphs of preventive medicine—the saving of the lives of many boy children who previously were doomed to die during their early months of life. It is something over which the child welfare services can take justifiable pride.

Studying further, a levelling process can clearly be seen—of the children in Salford between the ages of five and fourteen, the advantage in numbers is possessed by the girls—there are 33 more girls than boys in that age group, out of a total of some 22,000 children.

Progressing still further, but ignoring the ages of 18 to 24 when many of the men are absent on National Service, we notice a slight but growing increase in the number of women compared with the men until we reach the age groups of 45 onwards, when the disparity increases by over 2,000 in each 10-year age group up to the age of 75, giving a difference of 6,643 more women than men between the ages of 45 and 75. This pronounced difference in sex distribution is a pointer now, some thirty years afterwards, to the heavy toll of male lives levied by World War No. 1, as well as to the increased longevity and resistance to disease of women. Many of these 6,000 women were the "surplus" women of which so much was heard in the period between the wars, women who were widowed after a short period

of married life or who, through the death of fiancé or friend in the war, lost their chance of married life and were left to face the future alone. It is of general interest to learn that in Salford there are almost 400 men and women over the age of 85, amongst whom women are more than twice as numerous as the men.

Studying the older age groups in detail, we find that there are in Salford some 16,500 "old people" (i.e. over the age of 65), whilst approaching retirement age (i.e. from 55 to 65), are a further 18,000 men and women. There is no doubt that there is a growing tendency for the age balance of the population to be increasingly weighted with the older age groups. This tendency brings in its train its own problems which are by no means peculiar to Salford alone, but to the country as a whole.

Many old people to-day live under conditions of neglect and suffering; there are insufficient houses specially planned for old people, and in the past little has been done to cater for the care and happiness of this increasing proportion of our population. The needs of old people are often very simple and can easily be satisfied, but they do need, and must have, companionship, allied with privacy, together with assistance in the often perplexing problems of present-day life. Old people's clubs; suitable houses or flats, or self-maintenance homes for those who need them; the advice and assistance of an Old People's Visitor specially trained and having a genuine liking for social work with old people, who is accepted by them as a friend and almost as a member of the family; home helps; such provisions as these go a long way to meeting the needs of the elderly.

We must keep an eye to the future, giving due regard to the needs of this increasing section of our population and seeing to it that, though they are advanced in years, we do, as far as our abilities allow us, ensure that "age shall not weary them."

VITAL STATISTICS. The birth rate in Salford for 1948 was 21·1 compared with 24·2 for 1947, and 17·9 for England and Wales in 1948. This reduction was regarded as inevitable as the great increase which took place after the war could not be maintained. I have no doubt that succeeding years will see further reductions in the birth rate.

MORTALITY. The annual rate of mortality per 1,000 of the population fell from 13·3 to 11·8. This reduction is in line with that which is taking place over the whole country and is merely another indication that people are living longer and that the average age of the population is tending to increase. As has been mentioned above, the death rate for 1948 was the lowest in our recorded history.

The infantile mortality rate fell from 61 in 1947 to 42 in 1948. This is the lowest infantile mortality rate ever recorded in the city, and compares with an average for the whole country of 34. Actually, it is a tremendous achievement and holds out much hope for the future. Even as recently as 1941 the corresponding rate was 96 so that in seven years 54 more children out of every 1,000 may be expected to survive to the age of one year.

It is not possible to be certain as to the relative value of the factors involved in this great improvement in the vital statistics of the city. It is probably due to a variety of factors, e.g., a better and more sensible standard of nutrition amongst all classes of the community, a better understanding of the rules of health, and the better education of parents in the management of their infants. Improvement in nutrition, especially in children, is due largely to the better facilities provided at Maternity and Child Welfare Centres for the sale of special foods, orange juice, etc., and to the extension of the School Meals and Milk Services during the years in question.

Let us take the DENTAL SERVICES. The blunt fact must be faced that the National Health Service Act has done harm to the dental care of those for whom we have laboured so long—the priority classes, the expectant and nursing mother and the child. This is an unpopular statement but it needs saying.

It is sad to see the present state of the preventive dental services, built up over many years struggling to provide better dental care for those in whose hands lies the future of the nation—the mothers and children. Now the teeth of those are being neglected and our ability to provide preventive care is being lessened in the rush for dentures by adults. (Some older folk already had dentures but they, not unnaturally, seized the opportunity, provided by the new Act, of another set). This was understandable and in many cases desirable, but it is serious when it is done at the expense of the limited amount of time which the dental services can give to the mothers and children, where there is the greatest need for good dental care. Something had been done to provide dental care in the past and it is a principle of good dental treatment that care should be continuous over a period of years.

Now we see our preventive services and our dental staff depleted. Yet an ounce of prevention is worth a ton of cure. In the very group where the need is greatest; e.g., the children, the supply of dental services is least. Children represent the future wealth of the country and it is deplorable that the dental resources, so limited in man-power, should be allowed to be diverted away from the needs of the future. It is another sad example of the direction in which time and money are being spent—on therapeutic treatment and patching-up, rather than prophylactic measures; on the provision of appliances rather than on preventive treatment; on cure rather than prevention; on hospitals rather than public health. If only we got away from this placebo policy towards public health, if only we spent on public health services but one-tenth of the increase of money now being spent on hospital services, we should, in a generation, secure a vast improvement in public health and, at the same time, bring about a reduction in the costly, weary queue at the hospital. But this sad queue will continue, and be replenished, whilst public health services are restricted by finance. So long as the vast amount of money continues to flow in the direction of appliances and cures, with the hospital as its main destination, so too will the populace flow with that stream, to the same destination. A tragedy of our times is that so much is being spent on negative health; so comparatively little on positive health. Oh, the pity of it—the pity of it!

IMMUNISATION AGAINST DIPHTHERIA. The high standard of the immunisation service was maintained and even improved during 1948. Not only were 79.8 per cent. of children under five years of age protected by the

end of the year, but great efforts were made to extend the field of protection amongst school children. It is satisfactory to note that by the end of the year 94.9 per cent. of school children had been protected.

Immunisation represents a very real and positive advance in preventive medicine which has taken place in less than a generation. Immunisation of the public was not commenced in Salford until 1929, and it is no exaggeration to say that the results have been almost miraculous. In 1948 only five cases of diphtheria occurred in the city as compared with 678 in 1929. Ladywell Infectious Diseases Hospital which 20 years ago was usually well filled with cases of infectious disease is now occupied to a considerable extent by chronic cases imported from Hope Hospital, while the demand for beds for cases of diphtheria has almost entirely ceased.

VACCINATION. It cannot be said that the alteration in the law relating to vaccination has so far, at any rate, been advantageous in this city, except to persons who do not believe in vaccination. Before 5th July, 1948, more than 70 per cent. of the city's population were vaccinated. Since then, the percentage of infants vaccinated has fallen to about 34 per cent. My comments are set out at greater length on pages 103-5 of this report, but I find that even with its low rate of vaccination, Salford has the fourth highest rate of vaccination amongst County Boroughs. The condition of protection of the country as a whole is far weaker than is desirable.

DAY NURSERIES. It is regretted that in spite of a very long waiting list it was not possible to provide new day nurseries during 1948. It is not generally realised that day nurseries are intended to provide a partial solution of the labour problem by allowing mothers of young families to go out to work. Only the children of mothers who are actually in employment are accepted in the nurseries, and there can be little doubt that the vast majority of the children are far better looked after in the nurseries than they would have been under the old "minder" system. The system of routine medical inspection and immunisation against diphtheria and whooping cough is of great value, and the general high standard of health of children attending the nurseries is obvious. It is hoped that during 1949 it will be possible to proceed with the erection of the additional nurseries in accordance with the policy established by the Health Committee.

MIDWIVES' SERVICE. I am glad to be able to note that the Midwives' Service was able to cope with the demands made upon it during the year, in spite of the still high number of births. All midwives employed had training in gas and air analgesia and so were able to take advantage of the unique facilities provided in Salford for the conveyance of the apparatus to the homes of the patients.

With the co-operation of the Housing Committee, to whom grateful acknowledgment is paid, it was found possible to overcome housing difficulties which are inevitable with a frequently changing staff.

HEALTH VISITING. The proposals approved by the Ministry of Health provided for a considerable increase in the staff of Health Visitors in order to cope with their additional responsibilities under the National Health Service Act. These officers are now concerned with the health of every

household in the city instead of as hitherto only with that of the expectant and nursing mother, and children under five years of age. It is intended, by degrees, to augment the staff so as to enable the service to carry out its new responsibilities.

DOMESTIC HELP. This new branch of the Health Services, although not medical in character, will have an important bearing upon the general health service. Hospital beds are insufficient and expensive to maintain. A Domestic Help in a household where the sick person does not need frequent medical care renders hospital treatment unnecessary. Apart from the fact that the patient, in most cases, prefers to stay at home, the advantages of restricting the demands upon medical staff and hospital accommodation to acute cases are obvious.

MENTAL HEALTH. The Salford Authority was among the few in the country who were in a position to set up a reasonably complete Mental Health Service on 5th July, 1948. They were fortunate in being able to secure the services of experienced staff.

The Health Committee set up a Mental Health Sub-Committee which has taken a keen interest in the work, and through which the service is constantly being developed. It is hoped that in 1949 it will be possible to establish another Occupation Centre in south Salford. Details of this service will be found on pages 108-113.

HEALTH EDUCATION. Although it was not possible for the Health Education Officer appointed towards the end of 1948 to take up duties in Salford until early in 1949, the education of the public in health matters was not neglected. The distribution of leaflets dealing with diphtheria immunisation, the display of posters in the windows of the Health Offices and elsewhere, and the giving of lectures to organisations of various kinds was continued. In addition, Salford was one of the first authorities to issue to the public, particulars of the alterations in the Health Services which took place on 5th July, 1948. As the Committee will realise, there is vast scope for health education in an industrial area like Salford. It is my belief that if the possibilities of avoiding disease by the cultivation of sound habits and proper dieting can be really brought home to the public, the need for medical attention and hospital accommodation will be greatly reduced.

CLINICS. It was hoped that it would be possible to announce in the Annual Report for this year the establishment of several new clinics, especially one in the premises originally built for use as the Seedley Library. It is regretted, however, that for various reasons it has not been possible to realise this hope. I trust that 1949 will see a change in this respect and that some of the new clinics so badly needed in Salford will be provided.

HOUSING. Little progress was made in housing in 1948, conditions remaining as indicated in my Report for 1947. It would greatly benefit Salford and many other industrial areas if more power and financial aid could be given to modernise existing houses. The public is caught up with the glamour of new housing. We hear of the number of *new* houses provided, but this is a very small improvement of Salford's housing position. For

example, well over 25,000 Salford houses have no hot water supply, yet this is an elementary need in personal cleanliness and comfort and in bringing up a family. We need a Housing Reform on the lines of the great Sanitary Reform in the years following the First World War—when the water carriage system was installed and abolished the old "privies." This reform was carried out by the landlord, the local authority and the government bearing, roughly, equal share of the cost. We need a revolution of present procedure in order to make life more worth living for many thousands of our people; clearly, we must modernise the thousands of houses which will remain up for many years even if the present new housing programme is fully realised.

I wish to pay tribute to the very fine work done by medical, nursing and administrative staff during the year. Whilst I realise that it is sometimes invidious to single out individuals for especial mention, I feel that I am in duty bound to incur such a risk on this occasion, and record my grateful appreciation of the staunch and able service rendered by the Chief Administrative Assistant, Mr. E. Wood. I have been impressed by, and most thankful for, his careful attention to the responsibilities of the post he holds, and his faithful discharge of any work I have delegated to him.

I have the honour to be,

Your obedient Servant,

J. L. Brown

Medical Officer of Health.

HEALTH DEPARTMENT,
143, REGENT ROAD,
SALFORD, 5.

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STATISTICAL SUMMARY, 1948.

—The City of Salford has a total area of 5,202 acres.

Population.—(Registrar-General's Estimate at Mid-year, 1948).....	178,100
„ (Census, 1931)	223,438

City.—The Mean Density of the City is equal to 34.2 persons per acre.

Births	{	Legitimate	1,850 Males,	1,720 Females.....	3,570	
		Illegitimate	99 „	92 „	191	
		Total				3,761

Annual Rate of Births per 1,000 of the Population	21.1
---	------

Births	{	Males	63	} Total.....	104	
		Females	41			

Annual Rate of Still Births per 1,000 Total Births	26.9
--	------

Deaths	{	Males	1,102	}	2,104	
		Females	1,002			

Annual Rate of Mortality per 1,000 of the Population	11.8
--	------

Percentage of total deaths occurring in Public Institutions	51.0 per cent.
---	----------------

Deaths from Puerperal Causes:—	Deaths.	Rate per 1,000 Total Births.	Years.
Puerperal Sepsis .....	...	...
Other Puerperal Causes	3	0.8	
	Total	3	0.8

Death-rate of Infants under one year of age per 1,000 live births:—

Legitimate, 41. Illegitimate, 52. Total.....	42		
Deaths from Measles (all ages)	3		
„ Whooping Cough (all ages)	6		
„ Diarrhoea (under 2 years of age)	24		

1938....
1939....
1940....
1941....
1942....
1943....
1944....
1945....
1946....
1947....
1948....

SHOWING
P
C

Years.

1938 ...
1939 ...
1940 ...
1941 ...
1942 ...

Average

1943 ...
1944 ...
1945 ...
1946 ...
1947 ...

Average

1948 ...

TABLE M. 4.

SHOWING THE BIRTHS IN THE CITY OF SALFORD, DEATHS OF LEGITIMATE AND ILLEGITIMATE INFANTS UNDER ONE YEAR OLD AND THE PROPORTION OF DEATHS UNDER ONE YEAR OF AGE PER 1,000 BIRTHS DURING THE YEARS 1938 TO 1948.

Years.	Births.			Percentage of Illegitimate Births to Total Births.	Deaths under One Year.			Porportion of Deaths under One Year per 1,000 Births.		
	Total.	Legit.	Illegit.		Total.	Legit.	Illegit.	Total.	Legit.	Illegit.
1938.....	3145	3037	108	3.4	233	213	20	74	70	185
1939.....	2925	2808	117	4.0	202	194	8	69	69	68
1940.....	2884	2742	142	4.9	219	209	10	76	75	70
1941.....	2518	2377	141	5.5	240	215	25	96	90	177
1942.....	2823	2632	191	6.8	217	203	14	77	77	73
1943.....	3085	2863	222	7.2	214	203	11	69	71	50
1944.....	3251	3025	226	7.0	202	182	20	62	63	88
1945.....	3022	2749	273	9.0	183	168	15	61	61	55
1946.....	3849	3610	239	6.2	205	180	25	53	50	104
1947.....	4220	3973	247	5.9	258	240	18	61	60	73
1948.....	3761	3570	191	5.1	157	147	10	42	41	52

TABLE M. 5.

SHOWING THE BIRTH-RATES, ALSO RATES OF MORTALITY FROM ALL CAUSES, FROM THE SEVEN PRINCIPAL ZYMOTIC DISEASES, AND FROM TUBERCULOSIS OF RESPIRATORY SYSTEM, CANCER, NERVOUS DISEASES, HEART DISEASES, BRONCHITIS, PNEUMONIA AND THE INFANT MORTALITY RATE DURING THE YEARS 1938 TO 1948.

Years.	Population.	Rates per 1,000 Population from									Deaths under One Year to 1,000 Births.	Marriage Rate.
		Births.	Deaths, All Causes.	Seven Principal Zymotic Diseases.	Tuberculosis of Respiratory System.	Cancer.	Nervous Diseases.	Heart Diseases.	Bronchitis.	Pneumonia.		
1938 ...	199,400	15.8	13.1	0.3	0.9	1.7	0.8	2.8	0.6	1.0	74	...
1939 ...	196,600	14.9	14.3	0.2	0.9	1.8	0.7	3.8	0.7	1.0	69	...
1940 ...	173,200†	16.6	19.1	0.3	1.1	2.0	1.1	5.3	1.7	1.2	76	...
1941 ...	159,720†	15.8	16.8	0.4	1.1	1.7	1.1	4.3	1.1	1.2	96	...
1942 ...	153,300†	18.4	14.5	0.4	0.9	2.2	1.0	3.4	0.9	0.8	77	...
Average 5 years		16.3	15.6	0.3	1.0	1.9	0.9	3.9	1.0	1.0	78	...
1943 ...	153,000†	20.2	15.7	0.3	1.0	2.2	0.9	2.7	1.9	0.9	69	...
1944 ...	155,810†	20.9	14.6	0.4	0.9	2.1	0.9	2.4	1.9	0.6	62	...
1945 ...	157,300†	19.2	15.5	0.2	0.9	2.0	0.8	2.2	2.9	0.8	61	...
1946 ...	169,470	22.7	13.3	0.2	0.8	1.9	0.9	1.8	2.0	0.6	53	...
1947 ...	174,070	24.2	13.3	0.4	0.8	2.0	0.5	2.1	1.9	0.6	61	...
Average 5 years		21.4	14.5	0.3	0.9	2.0	0.8	2.3	2.1	0.7	61	...
1948 ...	178,100	21.1	11.8	0.2	0.8	2.1	0.7	1.6	1.4	0.4	42	...

† Civil population.

SANITARY CIRCUMSTANCES.

With special comments on the following matters :—

Housing.
 Smoke Abatement.
 Survey of School Premises.
 Washing Facilities for Outdoor Food Handlers.
 Hot Water Installations in Sub-standard Dwellinghouses.
 Insect Disinfestation.
 Shop Acts.
 Survey of Retail Food Shops.
 Supervision of Meat Contracts.
 Propaganda on Food Infections.
 Ice Cream.
 Sale of Horseflesh.
 Salford Cattle Market.
 The Milk Supply.

Housing.

The position with regard to Salford's deplorable housing conditions remains, in general, much the same at the close of 1948. There is hope, however. Building operations which have been suspended for many years can be seen taking place in different parts of the town and the City Engineer reports that 255 new houses were erected by the Corporation, and 48 new houses were erected and 32 houses converted into flats by private enterprise during the year. As the wheels begin to turn again there is no doubt that the building of new houses will be speeded up, and given freedom from national disaster, the face of this City can and will be changed.

Hopes thus engendered have inspired us to make our plans for the first post-war clearance area. This time, however, there are to be no little bits and pieces. In consultation with the City Engineer a large area has been defined containing some 500 unfit dwellings. It has been chosen to fit closely the planning proposals and the site should eventually become the new "Neighbourhood Unit No. 1."

Other areas are being surveyed with a view to clearance and their accord with the schemes of the planning authority. Progress will naturally depend upon the rate of new building and ultimately on the local authority's ability to find new building sites outside the town. However, one step at a time is usually a wise policy and it is hoped that we shall be able to write off the first clearance area within the next two years.

Alongside this broad planning there must inevitably be the special case : odd houses or blocks of houses here and there which do not come within the immediate scheme. Such cases must of necessity be dealt with as individually unfit houses under Section 11 of the Housing Act. Fifteen of these cases were dealt with during the year. This meant provision of alternative accommodation by the Housing Committee and an agreement was reached to allot two houses per month for this purpose. Subsequent experience has shown this to be totally insufficient to meet the growing number of individually unfit houses which are in such a condition as to demand immediate action.

A true sense of balance will be needed in apportioning accommodation for the various housing needs but it is felt that a greater reserve of accommodation should be kept for the many unfit houses which become immediately dangerous to life and limb, or in which conditions become so desperately bad as to warrant the removal of the tenants forthwith.

Smoke Abatement.

For many years the National Smoke Abatement Society has advocated adoption of the " smokeless zone " principle in populous area, and two years ago the Fuel and Power Advisory Council, in its report to the Minister, also gave its blessing.

The Council, after expressing the view that " the pall of smoke which does so much to make life in our great cities unpleasant, depressing and unhealthy, is largely due to the domestic chimney, which is responsible for about half the total smoke in the atmosphere," and having considered evidence of the success attendant upon the now famous St. Louis (U.S.A.) experiment in 1940, recommended the passing of legislation to enable smokeless zones to be established, and also that " a few such zones should be declared, mainly for experimental purposes."

Acting on a sure conviction that such a policy is essential to further progress in securing a cleaner atmosphere, the Salford Corporation, at the first opportunity, took steps to implement those views. Parliamentary consent was forthcoming in July this year in the form of Section 27 of the Salford Corporation Act, 1948. Much spadework remains to be performed before it can be applied.

The areas which appear to lend themselves most readily to the project are being surveyed to ascertain the types of heating appliances in use and the fuel needed to make them smokeless ; and to ensure reliable comparisons smoke pollution recording stations will be set up when the necessary equipment is available.

Present endeavours are to make May, 1950, the " deadline " for eliminating smoke production in several parts of the city. The Minister of Health's recent instruction to install smokeless fuel burning appliances in all new housing schemes is a step in that direction, and as these appliances are produced in still greater quantity, it may soon be possible to apply this condition to all new privately built houses.

A further advance in promoting greater smokelessness of industrial plant can also be here recorded. Under new local powers it now becomes an offence to install a furnace which is not capable, so far as practicable, of being operated continuously without emitting smoke. A " prior approval " scheme has been instituted for all new furnaces and it is now possible for architects and manufacturers to submit their proposals to the Corporation for " vetting." Approval of a proposed installation by the Corporation automatically confers immunity from the penalties prescribed for breaches of the clause. Mechanical methods of stoking will, of course, receive greater recognition than hitherto and creation of new sources of smoke production avoided.

Individual nuisances continue to be detected and, in spite of the difficulties encountered, complete cures are usually effected through the co-operative efforts of my staff and works managements. Only occasionally is it necessary to serve notices on offenders, and more rare still to institute legal proceedings to secure abatement. Two such prosecutions, however, were unavoidable. Industrial managements must realise that, whilst recourse to court proceedings is not lightheartedly applied, it must and will be resorted to in cases of gross carelessness and neglect.

During the year 42 cases of black smoke emission were reported to the Health Committee, abatement notices being authorised in 12 of them. The remainder were cautioned. In six of these cases smoke emission has so improved that the notices have been allowed to lapse, four others are in abeyance because of improvements in hand or in progress, and the remaining two have already been referred to. One firm is renewing three of its old Lancashire boilers and making other improvements ; another has replaced an overloaded vertical boiler by a Lancashire boiler with mechanically produced draught and completely

cured a serious smoke and grit nuisance of long standing ; whilst in other cases less expensive repairs and improvements or additional care in stoking has brought about the desired result.

It is not always appreciated that a smoke nuisance can arise, even when the smoke is not black. Five such cases have been dealt with. They concerned low chimneys at two garages, a dairy, a laundry and a garment factory. Two were persuaded to use smokeless fuel ; the chimneys were raised in two other cases, one of which now also achieves better results from less fuel ; whilst the garment factory no longer burns cloth clippings in its central heating boiler but sells them to a salvage dealer instead.

In a general sense the quality of the coal supplied to industrial undertakings has improved over the twelve months under review, but it must be a long while yet before boiler-plants are able to receive the particular grade of coal for which they were designed.

Reference has been made in previous reports to a proposed modern boiler-plant in the Higher Broughton district. This is now nearing completion and will replace five ancient Lancashire boilers now operating well above capacity purely in the interests of our dollar exchange position, but greatly to the disadvantage of surrounding residents. The new plant, reputed to cost nearly a quarter of a million pounds, should ensure preservation of the area as a natural playground and beauty spot, as it has been for hundreds of years.

Another feature during the year has been the national atmospheric pollution survey conducted by the National Smoke Abatement Society, the object being to more accurately ascertain the origin and extent of pollution from all sources. The society expressed its thanks and appreciation for the co-operation given by Salford and a full report of its findings will be published in due course.

Tribute must again be paid to the usefulness of the North West Regional Committee of the National Smoke Abatement Society. During the year it has succeeded in focussing attention on the volumes of black smoke freely emitted by many colliery chimneys in South East Lancashire and the National Coal Board is now discussing the matter at high level in an endeavour to find a remedy.

Survey of School Premises.

A survey of all school premises was carried out during the year. 64 schools, 29 school canteens and 3 central kitchens were inspected by the Sanitary Inspectors.

The most serious sanitary defects were :—

- (1) insufficient and primitive sanitary accommodation ; there are still numerous trough closets existent ;
- (2) insufficient water supplies, both hot and cold ;
- (3) absence of satisfactory cloakroom and washing facilities ;
- (4) overcrowding of classrooms ;
- (5) bad heating, lighting and ventilation ;
- (6) dirty walls and ceilings ; and
- (7) playground surfaces defective and dangerous.

Full details were reported to the Education Committee and considerable progress has been made in remedying these defects.

With housing conditions what they are in Salford it is felt that the least we can do for our children is to make school conditions attractive and a source of inspiration.

Washing Facilities for Outdoor Food Handlers.

The outdoor food handler certainly presents us with a first-rate problem in food hygiene. Unlike his counterpart in the shop he has no facilities for personal comfort or cleanliness and no Food and Drugs Act or Shops Act to help him.

In June this year the Health Committee decided to offer free washing facilities to all outdoor food handlers. Permits were issued, entitling the holders to the use of hot water, soap and a personal towel, free of charge at all the City's Public Conveniences.

It is believed that this is the first service of its kind in the country for this purpose and many letters of appreciation were received from food manufacturers, whose employees use the service. The men themselves are pleased to have this privilege.

So successful has been this innovation that plans are now being made to extend the facilities to the general public. It is believed that the educational effect of a free wash and the protection afforded to the public through free washing facilities for food handlers well justifies the expenditure of public money in this way. Many other towns throughout the country have written for details of the scheme.

Hot Water Installations in Sub-Standard Dwellinghouses.

There are 30,000 houses in Salford without hot water systems. The drudgery of having to boil every drop of hot water in a kettle in a vain endeavour to keep a sub-standard house clean is unthinkable. There are hundreds of thousands of such houses throughout the country which will have to be lived in for 15 to 20 years. They are unsuitable for the procedure outlined in the new Housing Bill inasmuch as they cannot be satisfactorily reconditioned to last for 30 years and are certainly not worth the immediate expenditure of £100, the minimum amount which will rank for Exchequer contribution. They might be referred to as "sub-sub-standard houses." In other words, they are almost dead, but must wait the convenience of the local undertaker before they can die outright. Their real worth can be assessed by the fact that many owners are offering them to the Local Authority, gratis.

In spite of the fact that they are not worth the planned expenditure of £100, an amenity such as a gas or electric hot water geyser would make life more tolerable for the tenants. It would also re-educate some of them for better conditions when they are available. As landlords and tenants both wait upon the Local Authority for alternative accommodation it would seem reasonable that the Local Authority should be in a position to contribute towards amenities which are in the public interests even though they do not amount to £100 or are capable of lasting for 30 years. It is maintained that the new Housing Bill should be amended to include such provisions and representations have been made through the local Members of Parliament for such provisions to be included.

At the present time there is a purchase tax on these installations of 60/100 per cent. and it is maintained that this should be removed. "Filthy or verminous premises or articles and verminous persons" are an offence under the Public Health Act, 1936, and yet the means for cleanliness are taxed. There is apparently some injustice here and the matter has been taken up with the Chancellor of the Exchequer.

Few Gas and Electricity Departments have easy payment schemes for these installations at the present time and the Ministry of Fuel and Power are being requested to arrange easy payment schemes in the public interests. In Salford it is believed that such a scheme will soon be in operation as a result of the Department's representations.

Hot water is a fundamental hygienic requirement in any home and much of the propaganda on domestic hygiene is useless until such provision is made.

Insect Disinfestation Service.

In the twelve months period just ended, insect control operations have been more extensive than heretofore. The results recorded have given every satisfaction.

Reference to the tables attached to this report will show that owners and occupiers of domestic premises have freely availed themselves of the Council's service, the existence of which, and its efficiency, are now well known.

But it will also be seen that, in addition to fulfilment of orders received for disinfestation treatment of domestic premises, certain special operations to safeguard the public health were embarked upon by controlling the activity of disease-bearing insect pests in buildings of special types such as canteens, kitchens, food shops, nurseries, hospitals and schools. The treatment with insecticides of school canteens was carried out by arrangement with the Director of Education.

Treatment of grocers', greengrocers', butchers' and other food-shops has been accomplished as a result of propaganda during the course of a survey of these establishments by the Department's Food Section. It is envisaged that annual flyproofing treatment of shops from which food is sold will become a routine proceeding.

All the stable buildings and manure receptacles in the City have received treatment with insecticide with the object of scotching the house-fly menace at the principal source.

Swill bins, ashbins and yard walls were sprayed with insecticide from machines supplied to the Director of Public Cleansing ; he also dealt with the matter of school outbuildings.

Although the expenditure incurred in the execution of some of these operations cannot be recovered, the cost to the public of these worthwhile operations will be repaid with incalculable interest if risk of outbreaks of infantile paralysis, enteric fever, food poisoning, etc., is thus averted.

There are certain interesting features of the year's work which are worthy of note. There is a noticeable decline in incidence of bug infestation in Corporation houses and flats. Routine inspections by visitors during the past twelve months brought to light only 69 cases of infestation, whereas last year 232 Corporation houses were referred for treatment and in the previous year 487.

In 16 cases, the statutory obligation to delouse verminous persons free of charge has been fulfilled.

At various times during the summer, insects have been submitted to the Department for identification. Three were brought in by the Police who had received them as a result of publicity focussed upon the Colorado Beetle. Other local authorities have submitted specimens ; there was one interesting case of *Drosophila pupæ* adhering to the interior surface of a full milk bottle.

In the recorded cases of earwigs, moths, furniture beetles and wasps, infestation had reached extensive proportions. Even though these creatures are not classifiable as vectors of disease, action was warranted.

Two large wasp nests located in gardens in the Kersal district were destroyed ; in one of these cases a girl had been savagely attacked by a swarm of the insects.

The furniture beetle is widespread and causes enormous damage to the structural timbers of buildings of every description. The Department's service has proved that this insect's activities may be successfully countered by means of chemical insecticide properly applied.

With reference to food spoiled by insects in shops and stores the following details of foodstuffs surrendered as unfit for human food are of interest:—

- 3 cwts. of beans in sacks and packets affected with Bruchidæ (weevils).
- 180 lbs. split peas affected with moth, moth larvæ and web.
- 1 cwt. dried milk affected with Arachnida (mites).
- 60 lbs. flour affected with Tribolium Confusum.
- One sack semolina affected with Arachnida (mites).
- Numerous packages of biscuits and dried fruit affected with Stegobium Paniceum.
- 70 lbs. bacon—fly blown.

A bakehouse in the Pendleton district was discovered to be very extensively infested with beetles. At the conclusion of careful examination a small van load of spoiled confectionery was surrendered for destruction and the premises were immediately disinfested.

Proceedings were instituted in respect of the sale from a shop of meat pies which were maggoty.

A large flour mill in the Ordsall Lane district has been fumigated with HCN gas under Departmental supervision as a measure against Mediterranean flour moth infestation.

Adverting to the matter of disinfestation of domestic premises it is recorded that of the 609 privately-owned premises treated, 19 jobs were carried out free of charge, 451 were charged to owners' orders, 138 to orders from occupiers and in one case disinfestation treatment was administered by default after service of notice under Section 83 of the Public Health Act, 1936.

The final detail of report concerns staff, equipment and materials.

During the winter months only one man was employed but there was sufficient work (principally cockroach infestation) to keep him busily employed all day every day. By the end of April, when the general insect breeding season had begun, demands upon the service warranted the engagement of a second permanent operator, and as the summer season advanced the volume of work to be carried out had so increased that it proved necessary to engage two additional temporary men; they commenced work in July and continued to operate until the end of September. The number of premises treated by these men totals up to 1,188.

The service has had the exclusive use of a Morris light van.

New spraying equipment has been acquired and old machines have been repaired. The Four Oaks spraying machine has been persevered with in the absence of any of superior pattern. Insecticide dust is still distributed by means of hand insufflator.

The insecticide used throughout the past year is DDT obtained from Messrs. Geigy. Many formulations have been exploited having regard to the insect attacked and type of premises treated:—DDT in kerosene solution; DDT emulsifiable in water; DDT suspended in water; DDT in dry form mixed with Kaolin—a finely ground dust.

The insect control campaign is a comparatively new feature of Salford's public health services but its beneficial results become increasingly apparent. It is likely that the scope of operations will widen in the next year or two but that ultimately the City's insect pest problem, which has been so grave, will be controlled down to the point where there will be minimum risk of insect-borne disease.

Statistical Tables of Operations.

TABLE 1.

	<i>Type of premises treated.</i>	<i>Number.</i>
A.	<i>Domestic premises—</i>	
	(1) Corporation-owned Houses (occupied)	47
	" Flats " 	22
	Corporation removals entailing disinfection	104
	(2) Privately-owned Houses (occupied).....	582
	" Flats " 	6
	" House and Shop	7
	" Houses Let-in-Lodgings	9
	" Common Lodging Houses	2
	" Caravan.....	1
	" Public House	1
	" Doctor's Surgery	1
B.	<i>Non-domestic Buildings—</i>	
	Factories and Office Buildings	7
	Public Baths	2
	Barracks	1
	Public Convenience	1
	Food Store.....	1
C.	<i>Special Insect Control Operations—</i>	
	Canteens and Kitchens under the control of the Director of Education	39
	Canteens in Factories and Hostels.....	16
	Food Shops and Restaurants	95
	Stable Premises	55
	Schools Outhouses	82
	Nurseries	20 visits.
	Hospitals	40 "
	Houses cleansed from vermin prior to demolition (S.17, H. Act)...	25
	Spraying of ashbins and swill bins	49,000 approx.
D.	<i>Verminous persons cleansed</i>	16

TABLE 2.

<i>Insects attacked.</i>	<i>Premises treated.</i>
Bedbug	492
Cockroaches (Oriental and German)	436
Housefly and Blowfly	288
Body Louse	12
Pubic Louse.....	2
Fleas.....	5
Cricket	1
Earwig	2
Wasp.....	2
Larder Beetle	1
Silverfish.....	2
Furniture Beetle.....	8
Moths	8
Total	1,259

Shops Act.

Health and Comfort of Shop-Workers.

The requirements regarding sanitary conveniences, washing facilities and meal facilities and the maintenance of a reasonable temperature, were enforced. New legislation is required to abolish the ambiguous position of shops where no assistants are employed.

Early Closing of Shops.

Post-war conditions have affected the closing of shops more than the pre-war legislation, as numerous shops such as butchers, drapers, shoe retailers and multiple grocers close at hours earlier than required by the law ; the position insofar as mixed shops and hairdressing establishments is concerned still means that supervision is required.

Young Persons.

The 48-hour working week for adolescents which was enacted in the 1934 Act, is now operative by reason of the fact that in the vast majority of shops such hours now apply to adults.

At the annual conference of Shops Acts Inspectors the Chairman of the Health Committee spoke on the need for an urge or stimulus for young shop assistants to avail themselves of the cultural and educational facilities available.

Sunday Employment.

There appears to be an increase in the Sunday employment of shop assistants due to the number of snack bars which have been opened and supervision regarding compensating holidays for such employment is very necessary.

Survey of Retail Food Shops.

A detailed survey was carried out of the City's 1,500 retail food shops. Every aspect of personal hygiene, including medical histories, and conditions in the shop premises was investigated.

One thousand and sixty-seven letters were written pointing out contraventions of Section 13 of the Food and Drugs Act, 1938. The main defects encountered were lack of personal cleanliness and cleanly habits, absence or insufficiency of hot water, dirty or unsuitable wall and ceiling decorations, dirty counters, floors and utensils, unsuitable storage and protection of foodstuffs, and fly and rodent infestations. There was one prosecution (see tabulation of cases heard before the Magistrate).

A special feature was made of the installation of gas geysers as the most reliable and economical means of complying with the law, and in this matter the local Gas Department gave excellent co-operation.

It is estimated that over 600 gas geysers have now been installed in shops which had unsuitable or insufficient means for the supply of hot water. As pointed out in the article on Hot Water Installations in Sub-Standard Dwellinghouses, there is an apparent injustice in that food shops are compelled by law to have a sufficient hot water supply and yet the means for achieving this requirement are taxed to the extent of 60 to 100 per cent. of their cost price. For this reason the matter of hot water installations has not been pursued legally to any great extent, but by encouragement great things have been done and there is no doubt that if purchase tax were to be removed and easy payment schemes arranged by the Gas Undertaking, every shop would be fitted with a geyser in a very short space of time. In general, the idea is acceptable to the shopkeepers and those who have already had gas geysers installed are well pleased and grateful for the Department's suggestion.

Another feature of the survey was the recommending of light-coloured oil paints for food shops. This was introduced from the psychological as well as the hygienic point of view and was well received by shopkeepers even to the extent of asking the Department's views on a particular shade or colour scheme.

Flies and rodents were of course attacked with violence and the Department's Insect Disinfestation Service and the Free Disinfestation Service against Rats and Mice, which is under the Director of Cleansing, were well used.

Excellent work can be achieved with the will to do it, but it is felt that there will never be really efficient control of food premises until they are all subject to registration carrying with it the power to cancel registration in cases of default.

Supervision of Meat Contracts.

A piece of excellent inter-departmental co-operation has been achieved in the appointment of a Food Inspector with special experience in butchering to supervise meat contracts on behalf of the Education Committee in respect of deliveries to school meals kitchens and canteens. The Inspector is under the direction of the Department's Food Section and part of the administrative expenses are paid by the Education Committee.

Since the scheme commenced on November 15th, 1948, 80 consignments of meat were examined in the remaining six weeks up to the end of the year. Numerous adjustments were made in the accounts and on one occasion a consignment of meat which was found to be tuberculous was condemned by the Food Inspector.

It is felt that a service of this kind is a very necessary safeguard for the Corporation, the contractor, and the community at large, and in the hands of the Food Inspector has the dual significance of disease prevention and price control.

Propaganda on Food Infections.

The Department has again endeavoured to focus attention on the dangers of food infection. Lectures were given to women citizens and trade organisations who promised their full support in cleaning up the City's food premises.

A personal letter was written to each of 2,000 proprietors of food premises in the City and information as to necessary hygienic precautions was given.

There is no doubt that this propaganda did a great deal to stimulate action in connection with the various surveys undertaken later.

Ice Cream.

Departmental representatives spent some time formulating Codes of Practice with other local authorities in the area in consultation with the Ice Cream Alliance. The Codes of Practice cover all hygienic aspects in connection with the manufacture, storage and sale of ice cream and have been adopted by the City Council as a working basis for registration and inspection.

Excellent as this effort is, it has no legal standing. Whilst the Department co-operated with other authorities in this matter it is still thought that the formulation of Byelaws would have been a more positive step and the Department is considering this measure for the future.

Sale of Horseflesh.

The sale of horseflesh for human consumption increased considerably during the year. This was no surprise and, despite the sentimental outlook on this matter, in many cases it is quite a helpful supplement to the otherwise low protein diet. There is also very little communicable disease in horseflesh as compared with that of cattle.

Two additional shops have been opened making a total of three in all. The same standard of hygiene is demanded for them as for the ordinary butchers' shops and they are regularly inspected.

Salford Cattle Market.

The demolition of Salford's public slaughterhouses should be recorded if only that it marks the end of an interesting period in our history. Salford Cattle Market was renowned throughout the country and its passing completely severed our connections with rural England. There is not a farm left and not a resident ox or sheep in the town.

In recent times the slaughterhouse buildings were used as knackers' yards except for one booth which was retained for the slaughter of horses for human consumption and was technically a slaughterhouse. The Education Committee however decided to purchase the site for a school and the leasees of the knackers' yards were given notice to quit, and the buildings demolished.

Part of the site is occupied by a covered market and there are numerous food stalls which are regularly inspected by the Food Inspectors. The opening of this market on Saturdays has considerably increased activities and constant vigilance is necessary to preserve the standard of foodstuffs sold.

Milk Supply.

All milk sold in the City is produced at farms outside the district so that supervision consists chiefly of sampling and inspection of dairies.

The number of farms supplying milk is approximately 220 and these are situated in Lancashire, Derbyshire, Cheshire and Staffordshire.

In addition to the individual farm supplies, a large quantity of bulked milk is supplied to the dairies by the Milk Marketing Board.

A considerable quantity of the milk purveyed in the City is retailed by dairymen registered with other authorities. There are 766 registered purveyors of milk within the City.

Two hundred and thirty-five visits to dairies and milk shops have been made during the year, special attention being paid to the methods of cleansing and sterilising utensils and milk bottles, and to the general structure and sanitation of the premises.

An interesting and very satisfactory feature is the increased sale of Tuberculin Tested Milk (Pasteurised) in the City from approximately 140 gallons to 320 gallons per day and there are prospects of further rapid increases in 1949.

Three hundred and eighty-four samples of milk were obtained at the time of delivery to the dairies and submitted for bacteriological examination for tubercle bacilli, 16 of which gave a positive result. The Medical Officers of Health of the various authorities concerned were written and reports received showed that in 11 cases the affected cows had been slaughtered.

Complaints regarding the milk supply have been few and far between this year and it would appear that there has been a general improvement in its safety and cleanliness. About 98 per cent. of the milk supply is heat treated and a careful control is kept on these supplies. During 1948, 270 samples of heat treated milk have been examined with the following results :—

Phosphatase Test.

Salford Suppliers—Samples submitted ...	129	Failures ...	4
Out-district „ „ „ ...	141	„ ...	3
	—		—
	270		7 or 2.6 per cent.
	—		—

Methylene Blue Test.

Salford Suppliers—Samples submitted ...	129	Failures ...	8
Out-district „ „ „ ...	141	„ ...	28
	—		—
	270		36 or 13.3 per cent.
	—		—

The Staff, &c.

Staff difficulties have eased considerably this year. This is in part due to the Department's Scheme for Student Sanitary Inspectors which was instituted in 1947. Two newly qualified Sanitary Inspectors were obtained by this means.

Another fruitful source was the Ministry of Labour's Scheme for ex-servicemen at the Royal Technical College, Salford. The Department co-operated with the College Authorities in this matter and a Doctor and eight Special Inspectors were appointed to give lectures and to take part in the practical training of the men. Four of the students became Sanitary Inspectors in Salford.

Additional qualifications are encouraged and during the year four Inspectors obtained the Food Certificate, two obtained the Sanitary Science Certificate and one the Smoke Inspector's Certificate of the Royal Sanitary Institute and Sanitary Inspectors' Examination Joint Board. Probably the most effective staff stimulant was an all-round increase in salaries which undoubtedly served to attract and retain the men.

The staff at the end of the year consisted of Chief, Deputy, eight Special Inspectors and eight District Inspectors, making a total of 18 as compared with a full establishment of 21. It is hoped that full establishment will be reached next year.

The effect of these staff increases is apparent in the numerous special surveys we have been able to undertake and the grand total of inspections.

Water.

(In accordance with Circular 3/49 of the Ministry of Health.)

The water supply is obtained from the Manchester Corporation's reservoir at Longendale and Thirlmere. In general the supply has been satisfactory in quantity and quality. For further details relating to quality see the City Analyst's report and the City Pathologist's report.

All dwellinghouses in the City and the entire population are supplied with water on the constant system laid on from the mains direct to the houses.

There are 47,329 dwellinghouses in the City and a population of 178,300.

Summary of Food Poisoning Outbreaks, 1948.

(In accordance with Circular 3/49 of the Ministry of Health).

Total number of outbreaks.	Number of cases.	Number of deaths.	Organisms or other agents responsible with number of outbreaks of each.	Foods involved with number of outbreaks of each.
3	53	0	Enterococci— 2 outbreaks.	Cream trifle— 2 outbreaks. Sweets— 1 outbreak.

Unsound Food.

The following articles of unsound food were condemned during the year as unfit for human consumption :—

<i>Article.</i>	<i>Weight.</i> lbs.
Meat (canned)	1,813
Soups (canned)	2,564
Fish (canned)	1,234
Jams (canned)	1,543
Cereals (canned).....	266
„ (loose)	3,722
Dried Fruits	554
Fruits (canned)	2,843
Dried Milk	644
Milks (canned).....	1,344
Vegetables (canned)	8,923
„ (loose)	1,206
Sauces	77
Butter	130
Bacon.....	207
Meat	1,212
Miscellaneous	374
	28,656 lbs.

The miscellaneous articles include various small quantities of eggs, confectionery and sweets.

Total weight of food condemned :—12 tons, 3 cwt. 96 lbs.

Factories Act, 1937.

(In accordance with Circular 3/49 of the Ministry of Health.)

1. INSPECTIONS for purposes of provisions as to health.

Premises.	No. on Register.	Number of		
		Inspections.	Written Notices.	Occupiers prosecuted.
(1) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	124	43	10	—
(2) Factories not included in (1) in which Section 7 is enforced by the Local Authority	914	426	128	—
(3) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	—	—	—	—
TOTAL	1,038	469	138	—

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)	26	12	—	—	—
Overcrowding (S.2).....	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Inadequate ventilation (S.4)...	6	2	—	—	—
Ineffective drainage of floors (S.6)	1	1	—	—	—
Sanitary conveniences (S.7)—					
(a) insufficient.....	10	4	—	10	—
(b) unsuitable or defective...	97	49	—	16	—
(c) not separate for sexes...	3	—	—	3	—
Other offences against the Act (not including offences relating to outwork)	9	2	6	—	—
TOTAL	152	70	6	29	—

Outworkers.

Section 110—

Number of outworkers in August list required by Section 110 (1) (c)...	313
Nature of work—Making, etc., of wearing apparel	144
Brass and brass articles	169
Number of cases of default in sending list to the Council.....	Nil
Number of prosecutions for failure to supply lists	Nil

Section 111—

Number of instances of work in unwholesome premises	Nil
Number of notices served	Nil
Number of prosecutions in respect of outworkers' premises	Nil

Statistics.

The following tables are included to give some idea of the nature and extent of the work carried out during the year and a comparison is made with last year's figures:—

<i>Nature of Inspections.</i>	<i>Totals.</i>	
	1947.	1948.
Sanitary Defects (roofs, gutters, drains, etc.) under Public Health Act and Housing Act	39,292	45,960
Sublet Houses	68	138
Seamen's Lodging Houses	36	14
Common Lodging Houses	13	25
Van Dwellings	41	18
Factories.....	287	530
Shop Acts Inspections	64	2,786
Schools	98	112
Cinemas	7	10
Public Conveniences	497	584
Stables	18	138
Tips	2	2
Dairies	189	149
Milk Shops.....	31	86
Food Manufacturing Premises.....	34	69
Butchers' Shops	59	159
Fish and Chip Shops.....	30	49
Restaurants.....	10	26
School Meals Kitchens	11	93
Factory Canteens	22	12
Bakehouses	26	69
Ice Cream Shops	44	93
Ships <i>re</i> Importation of Dogs and Cats.....	16	18
Diseases of Animals Act Visits.....	6	27
Piggeries	11	31
Dysentery Cases	12	82
Food Poisoning	4	79
Unsound Food	573	606
Special Survey of Food Shops.....	—	1,480
	-----	-----
Total Inspections	43,154	53,445
	-----	-----

List of Samples Taken.

Food and Drugs Act Samples other than Milk.....	461	433
Milk for T.B. Test	360	384
" Phosphatase Test.....	270	337
" Methylene Blue Test.....	270	337
" Fats and Solids-not-Fats, &c.	1,190	1,309
Fertiliser and Feeding Stuffs Act Samples	8	4
Pharmacy and Poisons Act Samples.....	3	5
Water Supply Samples	87	149
Swimming Bath Water Samples	176	128
	2,825	3,086

Complaints, Notices, Letters, etc.

Complaints Received	14,866	12,129
Statutory Notices Issued	8,732	11,112
" " Abated	6,425	9,532
Intimation Notices Issued.....	2,803	1,824
" " Abated	2,826	1,693

Cases Heard before the Magistrate.

Offence.	No. of Cases.	Decision of Magistrate.
PUBLIC HEALTH ACT, 1936..... For failing to comply with the requirements of Notices under Section 93 of the P.H.A., 1936, to remedy nuisances at dwellinghouses.	228	1 fined £1 and order to abate made. 48 orders to abate with 11s. 6d. costs in each case. 61 orders to abate without costs. 30 cases adjourned <i>sine die</i> . 87 cases withdrawn. 1 case dismissed.
FOOD AND DRUGS ACT, 1938..... For applying false labels to articles of food, calculated to mislead as to the nature and quality of the article demanded.	2	1 fined £20 with £1 16s. 9d. costs. 1 fined £5 with £2 2s. 0d. costs.
For making a false statement as to the mineral content of a food.	1	Fined £10 with £1 16s. 9d. costs.
For selling milk deficient of milk fat....	3	Fined £4 0s. 0d. with £1 1s. 0d. costs in each case.
For selling Borax and Honey deficient of 97 per cent. honey.	1	Fined £10 with £1 1s. 0d. costs.
For keeping insanitary food premises....	1	Fined £10.
For selling tea adulterated with 15 per cent. foreign leaves.	1	Fined £15 with £2 2s. 0d. costs.

The total number of cases heard before the Magistrate was 237 as compared with 76 in 1947.

MUNICIPAL CHEST CLINIC REPORT.

On the 5th July, 1948, the Salford Chest Clinic Service passed to the Regional Board. Both hospital and dispensary duties became the concern of the new Board, but certain specified functions relating to tuberculosis remain with the Local Health Authority, viz.:—prevention, care and after-care, and rehabilitation.

The figures contained in the following report therefore relate only to the period 1st January, 1948, to the 4th July, 1948.

Six hundred and ninety-nine (699) new cases were referred to the chest clinics from General Medical Practitioners and other sources.

As in former years an appreciable proportion of cases referred to the clinics showed abnormality other than tuberculosis. By giving as much help as possible in diagnosis of this type of case one hopes to encourage practitioners to refer cases freely so that tubercle may be discovered in as early a stage as possible.

(a) Sputum Examinations.

Two hundred and fifty-seven (257) samples of sputum were examined.

All sputum examinations desired by Medical Practitioners are made free of charge at the Department of Pathology and special sterile containers are provided for the collection of the specimens.

(b) Contacts.

The Department continued to make a special effort to induce more contacts, especially children, to attend for examination. A single contact examination is not considered sufficient; three-monthly examination is carried out on all contacts who can be induced to attend. Six hundred and fifty-five (655) contact examinations were made during the period under review. Four of these were found to be suffering from pulmonary tuberculosis.

It will be seen that contact examination entails a large volume of work in proportion to the number of cases of tubercle found, but as tubercle is sometimes found at an early stage the work seems worth while.

(c) X-ray Examinations.

The X-ray equipment, consisting of a two-valve set, used chiefly for screening purposes, and a four-valve set, fitted with a Rotating Anode Tube, continue to give excellent service and the quality of the films is maintained at a high standard.

As in previous years a considerable number of pregnancy X-rays were taken for the Maternity and Child Welfare Department.

Three thousand, five hundred and forty-four (3,544) X-ray examinations were made from 1st January to 4th July, 1948.

(d) Treatment by Artificial Pneumothorax.

This method of treatment has been carried out in all cases where it was considered that benefit could possibly accrue. There have been several cases of bilateral artificial pneumothorax.

Analysis of Cases given Artificial Pneumothorax Treatment.

From 1st January to 4th July, 1948, twenty-one (21) new cases commenced treatment by artificial pneumothorax, fourteen (14) at Ladywell Hospital, and seven (7) at Nab Top Sanatorium, fifty-one (51) patients continued their refills at the Dispensary, twenty (20) of whom are working with completely quiescent disease. The number of artificial pneumothorax refills carried out at the Chest Clinic, Ladywell Hospital and Nab Top Sanatorium during the same period, was as follows:—

Chest Clinic	825
Nab Top Sanatorium	96
Ladywell Hospital	107
	<hr/>
	1,028
	<hr/>

(e) Thoracic Surgery.

During the year Mr. Graham Bryce continued to give his valuable aid as consulting Thoracic Surgeon, making monthly visits to Nab Top Sanatorium and Ladywell Hospital. In addition to his help in the surgery of tuberculosis, he has been good enough to expedite the treatment of non-tuberculous chest cases.

(f) Non-pulmonary Tuberculosis.

The total number of primary and informal notifications of non-pulmonary or surgical tuberculosis received up to 4th July, 1948, was twenty-five (25), ten adults and fifteen children of school age. These are made up of cases suffering from glands, bones, joints, abdomen, meninges and other forms. Many of these patients are not seen at the Chest Clinic for the first time as they are often sent direct by the General Medical Practitioners to the local hospitals for diagnosis and treatment. Others, of course, are sent in the first instance to the Chest Clinic by General Practitioners, and in the case of children some are referred by the School Medical Officers.

Cases requiring surgical treatment are usually sent by the Clinical Medical Officers to the Municipal Hospital, in some instances, having already been seen by Salford Royal Hospital. Where sanatorium treatment is likely to be of benefit the patients are sent by the Tuberculosis Officers, at the request of the Hospital Medical Officers, to Nab Top Sanatorium. When considered suitable, patients are referred for treatment at the Artificial Sunlight Clinic.

(g) Treatment of Tuberculous Skin Diseases.

Special arrangements have been made with the Manchester and Salford Hospital for Skin Diseases for the treatment of lupus. During the year, treatment of tuberculous skin lesions by Vitamin D₂ has been continued at the Manchester Skin Hospital with gratifying results.

The number of visits paid by patients to the Skin Hospital for treatment was one hundred and eighty-six (186), and the total number of tuberculous skin patients treated was twenty-one (21).

All suitable cases are treated at our own Artificial Sunlight Clinic. In this way many patients, who had previously been treated at the Manchester and Salford Hospital for Skin Diseases, now attend our own Sunlight Clinic where the treatment is carried out at a much cheaper rate. Twenty-two (22) patients have received treatment at the Sunlight Clinic with a total number of attendances of two hundred and sixty-five (265).

TABLE 1.

SUMMARY OF WORK DONE AT THE CHEST CLINIC DURING THE PERIOD 1ST JAN. TO 5TH JULY, 1948.

Diagnosis.	Pulmonary.				Non-Pulmonary.				Total.			
	Adults.		Children.		Adults.		Children.		Adults.		Children.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A. New cases examined during the period—												
(a) Definitely tuberculous.....	56	32	3	...	1	1	1	4	57	33	4	4
(b) Doubtfully tuberculous.....	...	...	...	...	...	...	...	...	4	3	4	...
(c) Non-tuberculous ..	...	...	...	...	...	...	...	...	254	235	51	50
B. Contacts examined during the year—												
(a) Definitely tuberculous.....	1	...	...	1	...	...	...	1	1	...	...	2
(b) Doubtfully tuberculous.....	...	...	...	...	...	...	...	...	...	...	...	...
(c) Non-tuberculous ..	...	...	...	...	...	...	...	...	49	75	41	39
C. Cases written off Dispensary Register as—												
(a) Recovered	2	4	1	...	1	1	4	1	3	5	5	1
(b) Diagnosis not confirmed or non-tuberculous.....	...	...	...	...	...	...	...	...	303	310	92	89
D. Number of persons on Dispensary Register on July 1st—												
(a) Diagnosis completed	452	364	35	31	31	44	58	42	483	408	93	73
(b) Diagnosis not completed.....	...	...	...	...	...	...	...	...	4	3	4	...
1. No. of persons on Dispensary Register on January 1st....	1050											
2. No. of patients transferred from other areas and "lost sight of" cases returned...	45											
3. No. of patients transferred to other areas and cases "lost sight of"	50											
4. Died during the year (Dispensary cases)	75											
5. No. of attendances at Dispensary (including contacts).....	3685											
6. No. of consultations with medical practitioners—												
(a) Others	597											
7. No. of visits by Tuberculosis Officers to homes.....	26											
8. No. of visits by Nurses or Health Visitors to homes for Dispensary purposes...	1468											
9. No. of—												
(a) Specimens of sputum &c., examined.....	257											
(b) X-ray examinations made in connection with Dispensary work	3544											
10. No. of "TB plus" cases on Dispensary Register on July 4th	339											
11. No. of insured persons under Domiciliary treatment on July 4th	652											
12. No. of "Recovered cases" restored to Dispensary Register .....	...										

TABLE 2.

SHOWING PERIOD ELAPSING BETWEEN NOTIFICATION AND DEATH
IN FATAL CASES OF PULMONARY TUBERCULOSIS.

	<i>Number.</i>	<i>Percentage.</i>
Not notified before death.....	9	10·7
Notified within three months of death	10	11·9
„ from three months to one year before death	22	26·2
„ from one year to two years before death	10	11·9
Over two years.....	33	39·3

Total number of deaths, 84.

Ratio of non-notified cases to total fatal cases, 9—84.

TABLE 3.

NEW CASES AND MORTALITY DURING PERIOD 1ST JAN. TO 5TH JULY, 1948.

Age Periods.	New Cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0	—	1	...	...	...	...	...	...
1	2	4	2	3	...	...	3	3
5	2	1	5	3	...	...	1	...
10	1	1	1	1	...	...	1	1
15	3	8	3	2	...	1	...	3
20	6	12	1	...	2	6	...	...
25	14	13	1	1	3	12	1	1
35	13	5	...	...	12	6	1	...
45	12	2	...	1	12	2	2	1
55	15	1	1	...	19	2	1	...
65 and upwards.....	4	1	...	...	7	...	1	...
TOTALS	72	49	14	11	55	29	11	9

TABLE 4.

OCCUPATIONS OF THE 121 CASES OF PULMONARY TUBERCULOSIS
NOTIFIED.

MALES.

1. Painters	1	8. Ex-Armed Forces	4
2. Labourers and Navvies...	12	9. Motor Drivers	4
3. Clerks.....	3	10. Scholars	3
4. Railway Workers	1	11. Miscellaneous Occupations	21
5. Makers of Wearing Apparel	1	12. No Occupation	10
6. Timber Trade.....	1		—
7. Mechanics and Engineering Workers	11	TOTAL	72

FEMALES.

1. Clerks and Typists.....	2	6. Box Makers.....	1
2. Makers of Wearing Apparel	6	7. Miscellaneous	7
3. Housewives	22	8. No Occupation	7
4. Scholars	2		—
5. Domestic	2	TOTAL	49

Up to 5th July, 1948, 25 new notifications of non-pulmonary tuberculosis have been received.

The new cases of non-pulmonary tuberculosis notified are classified in the following table :—

	Glands.	Bones.	Abdo- men.	Skin.	Men- inges.	Other forms.	Totals.
Under 10 years	3	3	4	—	2	1	13
10 to 20 years.....	1	4	2	—	—	—	7
20 to 30 „	—	1	—	—	—	—	1
30 to 40 „	1	1	—	—	—	—	2
Over 40 „	—	—	—	—	—	2	2
TOTALS.....	5	9	6	—	2	3	25

NAB TOP SANATORIUM.

As in the past, Nab Top Sanatorium has been used for the treatment of early and intermediate cases of pulmonary tuberculosis. Owing to the fact, however, that Ladywell Hospital, due to shortage of staff, cannot accept their full complement of patients, we have admitted some advanced cases of pulmonary tuberculosis, who, although not likely to improve, were at least taken away from their homes, and the possibility of infecting other members of the household thus lessened. There are no facilities for admitting doubtfully tuberculous children, or delicate children who would benefit by removal from a household in which there is serious open infection.

During 1947 an assistant occupational therapist was appointed and thus more time is being devoted to bed patients. The occupational therapist also looks after the education of the children in the Sanatorium.

Occupational Therapy Classes were continued at the Nab Top Sanatorium and provided diversional therapy for the patients. The attendance at these classes was very satisfactory; there being an average attendance of 14 male and 7 female patients each session.

The classes are held Monday to Friday for adults, and as there is only one room available for this purpose, the lack of suitable accommodation proved a handicap. In order to overcome this difficulty the women attend in the morning and the men in the afternoon, while each Saturday the room is used by the children.

The ability to obtain materials has become increasingly difficult but leather work, rug making and embroidery proved the most popular crafts. Owing to the shortage of materials the work produced was both limited in quality and quantity but it is hoped that in the future, supplies will be more plentiful and thus enable the range of articles made to be appreciably extended.

The new portable X-ray set, used in conjunction with a vertical screening stand, continues to give satisfactory results and is vastly superior to the old plant which had become quite inefficient.

The following tables give figures as to the work carried out at Nab Top Sanatorium during the period under review.

TABLE A—(Nab Top Sanatorium).

SHOWING THE NUMBER OF ADMISSIONS, ETC., AND THE NUMBER OF
 "PATIENT-DAYS" DURING THE PERIOD 1ST JANUARY TO 5TH JULY, 1948.

	Total Adults.		Children under 15.			Totals.		
	Males	Females	Males	Females	Both	Males	Females	Both
Number of Patients admitted prior to 1948 who remained in Sanatorium for some part of 1948	23	25	1	2	3	24	27	51
Number of "Patient days" in 1948 for patients admitted prior to 1948 who remained in Sanatorium for some part of 1948.....	1463	1324	186	277	463	1649	1601	3250
Total admissions.....	41	35	—	—	—	41	35	76
Total discharges and deaths.	30	31	—	2	2	30	33	63
Number of "Patient-days" for persons admitted during period	920	648	—	—	—	920	648	1568
Total number of "Patient-days" for period.....	2383	1972	186	277	463	2569	2249	4818
Average number of patients in Sanatorium each day during period ...	13.0	10.6	1.0	1.5	2.5	14.0	12.1	26.1

NOTE.—The term "Patient-days" represents the product of the number of patients and the number of days spent by those patients in the Sanatorium.

The following tables give figures as to duration and results of residential treatment at Nab Top Sanatorium from 1st January to 5th July, 1948.

TABLE B.—PATIENTS DISCHARGED FROM NAB TOP SANATORIUM DURING PERIOD 1ST JANUARY TO 5TH JULY, 1948.

Condition at Time of Discharge.	Duration of Residential Treatment in Institution.														
	Under 3 Months, but exceeding 28 days.			3 to 6 Months.			6 to 12 Months.			Over 12 Months.					
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.			
Quiescent.....	...	...	...	...	1	...	2	3	2	2	...	...	
Not Quiescent.....	7	7	...	6	7	...	4	5	...	4	2	1			
Died	3	2	...	...	...	...	...	...	...	...	...	...
TOTALS	10	9	...	6	8	...	6	8	2	6	2	1			
Quiescent.....	...	...	...	...	...	...	...	...	...	...	...	...
Not Quiescent.....	...	...	...	...	...	...	...	...	...	...	...	...
Died .....	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS ....	...	...	...	...	...	...	...	...	...	...	...	...
Observation for Purposes of Diagnosis															
Tuberculous.....										Under 4 weeks.			Over 4 weeks.		
Non-Tuberculous.....															
Doubtful.....															

LADYWELL HOSPITAL (TUBERCULOSIS SECTION) REPORT.

The tuberculosis blocks at Ladywell Hospital are still used for the most part for advanced cases of pulmonary tuberculosis. Owing to the shortage of Nursing and Domestic staffs, now approximately only fifty (50) beds out of seventy-two (72) have been available. Even this reduced number has thrown a very considerable strain on the Nursing staffs concerned.

The tuberculosis blocks at Ladywell Hospital, originally designed for advanced cases, are now used a good deal for induction of A.P. in patients who are only retained in hospital a short time, being discharged once the pneumothorax is established.

This policy has been adopted so that patients who are suitable may have the benefit of early collapse therapy instead of being kept on a waiting list for ordinary sanatorium treatment.

A number of moderate or early cases of pulmonary tuberculosis accompanying pregnancy or illness of a non-tuberculous nature have been treated in the Ladywell Wards.

LADYWELL HOSPITAL.

TABLE SHOWING THE NUMBER OF ADMISSIONS, ETC., AND THE NUMBER OF "PATIENT-DAYS" FOR PERIOD 1ST JANUARY TO 5TH JULY, 1948.

TUBERCULOSIS CASES.

	Males.	Females.	Totals.
Total Number of Admissions during period.....	37	33	70
Number of Persons Admitted prior to 1948 who remained in Hospital for some part of 1948.....	21	17	38
Total Number of Discharges and Deaths during period	40	33	73
Patients in Hospital on the 4th July, 1948.....	18	17	35
Number of "Patient-days" for Persons Admitted during period	2,225	1,616	3,841
Number of "Patient-days" (in 1948) for Persons admitted prior to 1948 who remained in Hospital for some part of 1948	1,447	796	2,243
Total Number of "Patient-days" for period.....	3,672	2,412	6,084
Average Number of Patients in Hospital each day during period	19.7	13.0	32.7

PROBLEM FAMILIES.

A considerable number of problem families have been assisted during the year in conjunction with the Family Service Unit.

Most of them have been serious cases and intensive visiting has been required. The Unit has been concerned with the problems of child neglect and family disintegration and has based its work on the belief that the problems can only be dealt with effectively by means of an intimate friendly relationship between the caseworker and the whole family, combined with a willingness to undertake any form of assistance for them. The Unit has tackled the whole of the families' problems, and help has been given in cleaning their houses, disinfecting bedding, repairing furniture and equipment, decorating, and helping with removals. It has also undertaken the escorting of children to clinics and hospitals for medical treatment which otherwise might be neglected, and has arranged summer outings, holidays, and Christmas parties.

In addition, it has acted as a channel by which assistance from the wider community could effectively be directed to the families.

As a result, marked improvement has been shown in the living conditions of a number of families and in some instances it has been possible to cease visiting altogether.

HOME ACCIDENTS.

Accidents in the home, which cause a greater annual loss of life, in England and Wales, than road accidents, have received close attention throughout the year. Health Visitors and Sanitary Inspectors have been asked to be observant, in the homes they visit, of any factors which are potential causes of accidents, and to draw them to the attention of householders, and give advice as to the best means of making for safety in the home. In addition, Health Visitors investigate home accidents which come to their knowledge, and give advice as to what precautions should be taken to prevent the occurrence, in the future, of accidents of a similar nature.

The facts of some of the home accidents which have recently occurred in Salford are given below:—

1. F.L.B. (1½ years).

Mother reports that she made a huge fire of coke. The fireguard was in position but the curb, which fits outside the guard, became very hot from the heat of the fire. Child was wearing wet napkin, stumbled and sat on the curb. Sustained burns and scalds of buttocks.

Advised to purchase smaller curb to fit within the fireguard, and to change napkin when wet.

2. P.E. (1½ years).

Child was playing with bricks, but suddenly stood up and pulled table-cloth, and jar of fat fell on him. He was alone in the room. Mother had just clarified the fat and gone into the kitchen. Burns face and left hand—died in hospital five hours later.

The table-cloth should not have hung down as it did. Mother should have poured the fat into the jar in the kitchen.

3. M.W. (2½ years).

Accident happened during breakfast-time. Teapot, with cosy, on table. Whilst mother was in back kitchen the child knelt on chair and pulled at the cosy. Teapot fell over and scalded right arm.

Mother advised to move teapot to a safe place, or to take child from the table whilst she is out of the room.

4. K.B. (4½ years).

Boy pulled over a pan of hot water from stove in back kitchen, and sustained deep scalds, back.

Mother advised to turn in handles of pans on stoves.

5. B.C. (4½ years).

Mother left this girl and sister, aged seven, alone in the room whilst she did some shopping. Several minutes later she heard son, aged nine, who had just returned from school, shouting that B. had been burned. Mother ran home and found neighbour attending to burned child. Sister, who was present at the time of the accident said B. lit a page of a comic paper by holding it in the fire, which was a low one. She tried to throw the paper away, but it stuck to her fingers and set her dress alight. Girl died in hospital next day.

There was no fireguard. The mother could have remained with younger child and sent older one to do shopping, or taken child with her.

6. L.G. (1½ years).

Mother was preparing child for bed. She had undressed him except for his woollen vest, and then she remembered she had left some napkins in the kitchen. She left the child alone in the room for two minutes while she went to collect these. She returned to find the child in flames. The parents have no knowledge of how the accident happened. Burns—arms, hands, face and chest.

The accident could easily have been prevented by having a fireguard in the room. Both parents had been warned about this on the previous day by the health visitor. They have now got one.

7. M.L. (6 months).

Boy was attending own doctor for bronchitis. He had received cough medicine. Mother gave baby something in mistake for medicine. Internal burns, slight.

Advised to have internal medicines separate from poisons.

8. R.C. (1 year).

Baby was in kitchen with an older brother, aged 13. Mother and grandmother in other parts of the house. Baby crawled into the hearth and put his hand on the fire. Burned back of hand. No doctor called—treated by mother.

A fireguard was obtained afterwards.

9. B.N. (5 months).

Baby had not slept very well in the early hours of the morning. Mother put the baby in bed with her. She made her a feed and then went to sleep with her. Baby was overlaid and suffocated.

10. W.S. (4 years).

Child fell through space in railings on front door steps, to cellar floor below, and fractured right clavicle. This accident has apparently happened before, to other children, but the house is condemned and alterations such as bricking or boarding up the side of the steps had not been considered.

11. E.J. (2 years).

Family had just moved to new address. Workmen were fixing electricity upstairs. They had left the wires uncovered for the night. The child got hold of the wires next morning and was thrown across the room. Mother was getting breakfast ready. Burns to hands. Treated at hospital.

The workmen were at fault for leaving the wires uncovered when the children were in the house, but they protested that they had no idea that the wires were "alive."

CITY PUBLIC HEALTH LABORATORY.

Report for Period 1st January to 4th July, 1948.

The appended table gives a list of the examinations carried out at the City Public Health Laboratory from January to July, 1948. Fifteen thousand, two hundred and thirty-two specimens were examined, including 81 from outside boroughs.

This total number of specimens is equivalent to 35,509 pathology units. In addition, 20,175 specimens were examined in the Clinical Laboratory at Hope Hospital, equivalent to 77,968 units.

This gives a grand total of 113,477 units for both laboratories.

Food Poisoning.

Only one outbreak of food poisoning occurred during the above period. Towards the end of June, the laboratory was called on to investigate the cause of an outbreak of diarrhoea and vomiting which occurred among the guests at a wedding in Salford. The onset was sudden and occurred within two to seven hours of eating the wedding breakfast. Nineteen out of 28 people were affected and although four of the affected guests were admitted to hospital, all the victims had recovered in three to four days.

No pathogenic organisms were isolated from the faeces of any of the affected persons. Similarly, no pathogenic organisms or staphylococci were isolated from any of the samples of food submitted for examination but a sample of trifle showed very gross contamination with enterococci which were isolated in pure culture. The attention of the sanitary inspector was drawn to this and fairly conclusive evidence that the trifle was the cause of the outbreak was produced as follows:—

A young man, a friend of the family, who called round and heard that the trifle was suspect defied all warnings and insisted on eating a portion. Several hours later he had a typical attack of vomiting and diarrhoea.

On visiting the confectioners who had prepared the trifle, it was found that it had been made in three separate layers and the lower layer was at least three days old. It had been standing at room temperature during this time and as the weather was warm there is no doubt that multiplication of enterococci had taken place. This was in accordance with the bacteriological findings as the lower layer of the trifle was heavily infected with enterococci, the middle layer much less infected and the top layer of cream practically free.

The above findings suggest an outbreak of food poisoning due to an enterotoxin.

Although it does not seem to have been definitely proved that the enterococcus produces an enterotoxin, previous outbreaks of food poisoning have been recorded in which the enterococcus has been suspect.

Dysentery.

Commencing early in February and continuing until the end of March, a small outbreak of Sonne dysentery occurred in the Day Nurseries at Wilmur Avenue, Summerville Road and Fitzwarren Street. A very minor outbreak occurred later in June at the Eccles Old Road Day Nursery. The figures below, which show the number of times Dysentery Sonne was isolated from specimens give a rough idea of the magnitude of the outbreaks.

Wilmur Avenue	64
Summerville Road.....	21
Fitzwarren Street	6
Eccles Old Road	7
Hulme Street	2
Specimens submitted by private practitioners.....	6

Water Examination.

The appended table shows the results of the examinations made on the City Water Supply from January 1st to July 4th, 1948.

In all, 28 samples were taken and the sampling points so varied that each supply to the City was sampled regularly. Because B. Coli has been present on previous occasions the supplies at the Blackfriars and Regent Road area were sampled more frequently than the Pendleton supply which has been consistently good and still maintains its high quality during the period under review.

Swimming Baths.

The appended table gives the results of bacteriological examination of swimming bath water, January to July, 1948.

Good = Bacterial count under 1,000 per m.l.—0 B. Coli per 100 m.l.

Fair = Bacterial count 1,000-3,000 per m.l.—1 to 5 B. Coli per 100 m.l.

Bad = Bacterial count over 3,000 per m.l.—over 5 B. Coli per 100 m.l.

Examinations made in the Pathological Laboratory, 143, Regent Road.

From January 1st to July 4th, 1948, inclusive.

	No. of Specimens.	Units.	Total.
Hæmoglobin Estimations	961	1	961
Investigations for Rh. Factor	897	3	2,691
Determinations of Blood Group	127	2	254
Widal Reactions	20	7	140
Wassermann Tests	3,964	2	7,928
Kahn Tests	6,633	2	13,266
Gonorrhœa Complement Fixation Tests	478	2	956
Smears for Gonococci.....	27	2	54
Urine for Gonococci	1	7	7
Gonococcal Cultures.....	305	3	315
Milk Methylene Blue Tests	145	2	290
„ Bacillus Coli Tests	154	3	462
„ Bottles for Sterility	4	3	12
Examination of swabs for C. Diphtheria	514	5	2,570
„ „ „ „ Hæmolytic Streptococci....	11	5	55
„ „ „ „ Organisms	4	5	20
„ Sputa for M. Tuberculosis.....	354	2	708
„ Fæces for M. Tuberculosis	1	2	2
„ Urine	8	3	24
„ Fæces	363	7	2,541
„ Rectal Swabs	6	7	42
„ Drinking Water	31	10	310
„ Swimming Bath Water	60	10	600
„ Hair for Ringworm Parasite	1	2	2
„ Various Foods for Food Poisoning Organisms	16	24	384
„ „ Pleural Fluid.....	3	5	15
„ „ Pus	1	3	3
Rideal Walker Tests	14	20	280
Ascheim-Zondeck Tests	9	10	90
Virulence Tests.....	11	10	110
Typing of Coliform Organisms.....	28	4	112
	15,151	...	35,204

EXAMINATIONS MADE FOR OTHER AUTHORITIES.
January 1st to July 4th, 1948, inclusive.

	Prestwich.	Eccles.	Whitefield.	Total No. of Specimens.	Unit Value.	Total.
Examination of Swabs for C. Diphtheria	17	...	1	18	5	90
" Sputa for M. Tuberculosis	5	...	...	5	2	10
" Drinking Water	2	...	...	2	10	20
" Swimming Bath Water .....	...	2	...	2	10	20
" Various Foods for Food Poisoning Organisms.....	6	...	...	6	5	30
" Smear for Gonococci	1	...	...	1	2	2
Milk Counts.....	13	...	...	13	4	52
" Methylene Blue Tests	21	...	...	21	2	42
" Bacillus Coli Tests	13	...	...	13	3	39
	78	2	1	81	...	305

EXAMINATIONS ON SWIMMING BATH WATER.
From January 1st to July 4th, 1948, inclusive.

Bath.	Good.	Bad.	Fair.	Total.
Seedley, 1st Class.....	7	...	...	7
" Female	5	...	2	7
" 2nd Class	5	...	...	5
Pendleton, Large	3	1	1	5
" Small	6	...	...	6
Blackfriars, Male	5	4	...	9
" Female.....	5	4	...	9
Regent Road, 1st Class	4	1	1	6
" 2nd Class.....	5	...	1	6
	45	10	5	60

EXAMINATION MADE ON THE CITY WATER SUPPLY
From January 1st to July 4th, 1948.

Date.	Blackfriars.	Regent.	Pendleton.
	B. Coli per 100 m.l.	B. Coli per 100 m.l.	B. Coli per 100 m.l.
January	Chapel St. 0 *Blackfriars Street 0 Blackfriars Road 0 Crescent ... 0		
February ...		Regent Rd. 0 Regent Rd. 0	Eccles Old Road 0
March	Chapel St. 0 Crescent ... 1		Eccles Old Road 0
April.....	*Blackfriars 1 Crescent ... 0 Chapel St. 1	Regent Rd. 0 Regent Rd. 0	Eccles Old Road 0
May	Chapel St. 1 Crescent ... 1	Regent Rd. 1 Regent Rd. 0 *Prince's Bridge 0	Eccles Old Road 0
June	Crescent ... 0 Chapel St. 0 *Blackfriars 1 Road 1	Regent Rd. 3 Regent Rd. 0	Eccles Old Road 0

* Sample collected from a stand-pipe.

FOOD AND DRUGS ACT, 1938.

The following table (Table 1) contains particulars of 1,742 samples examined for the City of Salford under the Food and Drugs Act 1938, during the year 1948.

TABLE 1.

FOODS.

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
Milk	1,309	—	67	5·1
Apple Purée	2	—	2	100
Baking Powder	8	—	1	12·5
Becona (Oat Preparation)	1	—	—	—
Brisling Paste.....	1	—	1	100
Butter	46	—	—	—
Cake Mixture.....	3	—	—	—
Cheese	46	—	—	—
Chocolate Spread	2	—	—	—
Cocoa	3	—	—	—
Coffee	4	—	—	—
Coffe and Chicory	2	—	—	—
Coffee and Chicory Cubes	1	—	1	100
Condensed Milk.....	3	—	—	—
Cooked Spaghetti	1	—	—	—
Cooking Fat	46	—	—	—
Cornflour.....	1	—	—	—
Crab Paste	1	—	—	—
Culinary Lemon.....	1	—	—	—
Curry Powder.....	1	—	—	—
Custard Powder	8	—	—	—
Dessert Mould	1	—	—	—
Dried Egg	1	—	1	100
Effervescing Drink Powder	1	—	—	—
Fat Extender	1	—	—	—
Fish Cakes	3	—	—	—
Flavoured Desserts (Starch, etc.)	2	—	—	—
Fruit Malt Syrup	1	—	—	—
Gelatine	2	—	—	—
Golden Raising Powder	1	—	—	—
Gravy Browning	3	1	—	33
Lime Juice Cordial	1	—	—	—
Macaroni	3	—	—	—
Malt Vinegar	2	—	—	—
Margarine.....	46	—	—	—
Marmalade—				
(Full Fruit Standard)	2	—	—	—
(Special Standard).....	2	—	—	—
Maté	1	—	—	—
Meat Tenderiser.....	1	—	—	—
Mixed Fruit Dots (Sweets)	2	—	2	100
Non-Brewed Vinegar.....	9	—	3	33
Onion Flakes	1	—	—	—
Pastry Mix.....	1	—	1	100
Pearl Barley	3	—	—	—
Pepper.....	7	—	—	—
Plain Flour	1	—	—	—
Pre-packed Fish Paste	1	—	—	—
Pre-packed Fish and Tomato Paste	1	—	—	—
Pre-packed Meat Paste	1	—	—	—
Prepared Suet.....	2	—	—	—

TABLE 1—Continued.

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
Self-raising Flour	4	—	—	—
Starch Reduced Bread	1	—	—	—
Sugar	46	—	—	—
Tea	25	—	1	4.0
"Tea-time Tablets"	1	—	1	100
Tinned Cod Roe	1	—	—	—
Tinned Milk	2	—	—	—
Tinned Tomato Sauce	1	—	—	—
Tomato Flavour Ketchup	1	1	—	100
Tomato Juice	2	—	—	—
Tomato Sauce	1	—	—	—
Total Foods	1,679	2	81	4.9

DRUGS.

Anti-germ Ointment	1	—	—	—
Bicarbonate of Soda	2	—	—	—
Borax and Honey	3	—	2	66
Camphorated Oil	2	—	—	—
Castor Oil	4	—	—	—
Compound Glycerine of Thymol....	2	—	1	50
Cough Cure	2	—	—	—
Cream of Tartar	1	—	—	—
Epsom Salts	2	—	—	—
Exsiccated Epsom Salts	1	—	—	—
Extract of Malt with Cod Liver Oil.....	4	—	—	—
Fever Mixture	1	—	1	100
Glauber's Salt	4	—	2	50
Glycerin of Borax	1	—	—	—
Glycerin, Borax and Honey	1	—	—	—
Ground Ginger	1	—	—	—
Honey and Borax	1	—	—	—
Indian Brandy	1	—	—	—
Medicated Sweets	2	—	1	50
Olive Oil	3	—	—	—
Parrish's Chemical Food B.P.	1	—	—	—
Phenolphthalein Preparations	3	—	—	—
Refined Oils	2	—	2	100
Rochelle Salts	3	—	—	—
Rubbing Oil	1	—	—	—
Seidlitz Powders	3	—	—	—
Seidlitz Powders, Extra Strong....	4	—	—	—
Technical Olive Oil	1	—	—	—
Tincture of Iodine	1	—	—	—
Zinc and Castor Oil Cream	3	—	—	—
Zinc Ointment	2	—	—	—
Total Drugs	63	—	9	14.3
Total Foods and Drugs	1,742	2	90	5.3

TABLE 2.

PERCENTATION OF ADULTERATION—SALFORD.

Year.	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Percentage of Adulteration ...	7.1	6.9	7.2	6.1	3.7	3.1	3.9	3.3	3.0	5.3
Total Samples....	1,353	1,344	1,296	1,512	1,555	1,513	1,628	1,742	1,651	1,742
Formal Samples	377	406	427	464	499	427	385	389	315	289
Informal Samples	976	714	753	884	833	891	1,077	1,205	1,178	1,289
Private Samples	—	224	116	164	223	195	166	148	158	164
No. of Samples per 100,000 of the population	679	685	748	946	1,014	989	1,045	1,022	942	985

Calculated on civil population only from 1941 onwards.

TABLE 3.

ADULTERATION OF MILK—SALFORD.

Year.	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
No. of Samples...	923	919	883	995	1,107	1,074	1,147	1,275	1,190	1,309
Percentage of Adulteration ...	6.5	5.4	5.7	6.2	3.1	1.9	3.5	3.6	2.6	5.1

TABLE 4.

AVERAGE COMPOSITION OF ALL MILK (EXCLUDING APPEAL-TO-COW SAMPLES).

Month.	Number of Samples.	Total Solids per cent.	Fat per cent.	Solids-not-fat per cent.
January	103	12.01 { 12.10 11.92 12.00	3.36 { 3.43 3.31 3.34	8.65 { 8.67 8.61 8.66
February	102			
March	93			
April	98	12.15 { 12.01 12.11 12.28	3.38 { 3.38 3.30 3.44	8.77 { 8.63 8.81 8.84
May	88			
June	133			
July	119	12.30 { 12.21 12.27 12.41	3.51 { 3.47 3.49 3.56	8.79 { 8.74 8.78 8.85
August	89			
September	129			
October	124	12.45 { 12.58 12.50 12.27	3.63 { 3.72 3.65 3.52	8.82 { 8.86 8.85 8.75
November	107			
December	120			
	1,305	12.24	3.48	8.76

TABLE 4—Continued.

AVERAGE COMPOSITION OF ALL MILK (INCLUDING APPEAL-TO-COW SAMPLES).

Number of Samples.	Total Solids per cent.	Fat per cent.	Solids-not-fat per cent.
1,309	12.24	3.48	8.76

TABLE 5.

AVERAGE COMPOSITION OF FARMERS' MILK (EXCLUDING APPEAL-TO-COW SAMPLES).

Month.	Number of Samples.	Total Solids per cent.	Fat per cent.	Solids-not-fat per cent.
January	58	11.96 { 12.09 11.84 11.93	3.35 { 3.42 3.26 3.46	8.61 { 8.67 8.58 8.47
February	55			
March	12			
April	36	12.21 { 11.98 12.26 12.28	3.46 { 3.40 3.53 3.45	8.75 { 8.58 8.73 8.83
May	33			
June	84			
July	58	12.34 { 12.24 12.25 12.56	3.58 { 3.54 3.53 3.66	8.76 { 8.70 8.72 8.90
August	22			
September	36			
October	52*	12.48 { 12.65 12.54 12.27	3.65 { 3.79 3.67 3.51	8.83 { 8.86 8.87 8.76
November	36			
December	51			
	533	12.25	3.51	8.74

TABLE 6.

AVERAGE COMPOSITION OF MILK OTHER THAN FARMERS' MILK.

Month.	Number of Samples.	Total Solids per cent.	Fat per cent.	Solids-not-fat per cent.
January	45	12.04 { 12.12 12.03 12.01	3.37 { 3.45 3.37 3.33	8.67 { 8.67 8.66 8.68
February	47			
March	81			
April	62	12.10 { 12.03 12.03 12.27	3.31 { 3.37 3.16 3.42	8.79 { 8.66 8.87 8.85
May	55			
June	49			
July	61	12.28 { 12.19 12.27 12.35	3.47 { 3.40 3.48 3.52	8.81 { 8.79 8.79 8.83
August	67			
September	93			
October	72	12.42 { 12.52 12.48 12.28	3.61 { 3.67 3.64 3.53	8.81 { 8.85 8.84 8.75
November	71			
December	69			
	772	12.23	3.46	8.77

TABLE 7.

AVERAGE COMPOSITION OF ALL MILK—SALFORD.

Year.	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Fat.....	% 3.61	% 3.66	% 3.69	% 3.66	% 3.63	% 3.64	% 3.59	% 3.55	% 3.52	% 3.48
Solids-not-fat.....	8.79	8.70	8.65	8.63	8.69	8.73	8.66	8.70	8.71	8.76
Total Solids	12.40	12.36	12.34	12.29	12.32	12.37	12.25	12.25	12.23	12.24

In Table 8 will be found details of sixty-five samples of milk and in Table 11 twenty-five samples other than milk, all reported as "adulterated or otherwise giving rise to irregularity." The overall percentage adulteration as shown in Table 1 is 5.3. (This figure includes two "Appeal-to-Cow" samples of milk as detailed in the Special Observations on Milk Sample No. A1940). A high proportion of the samples reported as adulterated consisted of milks showing deficiencies in fat of less than 10 per cent., or in solids-not-fat of less than 3 per cent., of the respective minimum limits. Most of the cases were dealt with by letters of caution.

In some other cases, however, legal proceedings were instituted, resulting in the infliction of penalties totalling £70 13s. 0d. (including costs).

"Appeal-to-Cow" Samples.

The results of these samples are included in Tables 1, 2 and 3, but not in Tables 8 and 10. Full details of these samples will be found under Milk Sample No. A1940.

TABLE 8.

MILK ADULTERATION.

No.	Nature of Adulteration, etc.	Action taken.	Remarks.
B269	Deficient 13.3% milk fat	} Formal samples taken.....	See Samples A1910, A1912, A1913, A1914, A1915, A1917 below.
B270	Deficient 8.3% milk fat		
B280	Deficient 6.6% milk fat	Farmer written.....	Subsequent samples genuine.
A1910	Deficient 6.6% milk fat	} Farmer written.....	See special observations.
A1912	Deficient 5.0% milk fat		
A1913	Deficient 5.0% milk fat		
A1914	Deficient 6.6% milk fat		
A1915	Deficient 8.3% milk fat		
A1917	Deficient 3.3% milk fat		
B304	Deficient 16.6% milk fat .....			} Farmer written.....	See special observations.
B306	Deficient 1.6% milk fat		
B307	Deficient 11.6% milk fat		
B309	Deficient 3.3% milk fat		
B363	Deficient 10.0% milk fat	Farmer written.....	See special observations.
B364	Deficient 13.3% milk fat	Further samples taken	See Samples B373 and B378 below, and special observations.
B373	Deficient 3.3% milk fat	} Farmer written.....	See special observations.
B378	Deficient 6.6% milk fat		
A1940	Contained 7.3% extraneous water. Freezing point (Hortvet) —0.490°C.	Farmer written.....	See special observations.
B470	Deficient 3.3% milk fat	Further samples taken	See B594, B595, B596.
A1967	Deficient 6.6% milk fat	Dairy visited.....	Sterilised milk in crown cork bottle. See special observations.

TABLE 8—Continued.

No.	Nature of Adulteration, etc.	Action taken.	Remarks.
A1972	Deficient 10% milk fat	} Farmer written.....	See special observations.
A1973	Deficient 1.6% milk fat		
A1980	Contained 1.4% extraneous water. Freezing point (Hortvet) —0.521°C.	Further samples taken.....	See special observations.
B594	Deficient 10% milk fat	} Farmer written.....	See special observations.
B595	Deficient 15% milk fat		
B596	Deficient 11.6% milk fat		
B617	Deficient 3.3% milk fat	Dairy written.....	School milk. (See special observations.)
B643	Deficient 6.6% milk fat	Further samples taken	See Samples B757 and B762.
B645	Deficient 13.3% milk fat	Further samples taken	See Samples B763, B765 and B766.
B649	Deficient 3.3% milk fat	} Further samples taken	See Sample B790.
B651	Deficient 3.3% milk fat		
B684	Deficient 21.6% milk fat	} Formal samples taken.....	See Samples A1999, A1002, A1003, and special observations.
B685	Deficient 21.6% milk fat		
B686	Deficient 21.6% milk fat		
B687	Deficient 20.0% milk fat		
B688	Deficient 21.6% milk fat		
B690	Deficient 23.3% milk fat		
B691	Deficient 21.6% milk fat		
B692	Deficient 21.6% milk fat		
B694	Deficient 21.6% milk fat		
A1999	Deficient 21.6% milk fat .....			} Prosecution .....	Fined £4 in each case together with £3 3s. 0d. costs—£15 3s. 0d. in all. See special observations.
A1002	Deficient 21.6% milk fat		
A1003	Deficient 21.6% milk fat		
B757	Deficient 3.3% milk fat	} Farmer written.....	See special observations.
B762	Deficient 1.6% milk fat		

TABLE 8—Continued.

No.	Nature of Adulteration, etc.	Action taken.	Remarks.
B763	Deficient 8.3% milk fat	} Farmer written.....	See special observations.
B765	Deficient 6.6% milk fat		
B766	Deficient 10% milk fat		
B790	Deficient 1.6% milk fat	No further action.....	Average fat content of consignment good.
B1010	Deficient 30% milk fat	} Further samples taken	See B1025, B1028, B1029, B1031.
B1011	Deficient 0.5% solids-not-fat		
B1012	Deficient 2.9% solids-not-fat	} Further samples taken	See Sample B1023.
B1013	Deficient 0.7% solids-not-fat and 6.6% milk fat		
B1016	Deficient 1.8% solids-not-fat	Formal samples taken.....	Further samples genuine.
B1023	Deficient 1.7% solids-not-fat	Further samples taken	See B1025, etc., below.
B1025	Deficient 10% milk fat	} Farmer written.....	See special observations.
B1028	Deficient 1.1% solids-not-fat		
B1029	Deficient 1.7% solids-not-fat		
B1031	Deficient 1.1% solids-not-fat		
B1099	Deficient 20% milk fat	Farmer written.....	See special observations.
B1139	Deficient 3.3% milk fat.....	Formal samples taken.....	Hospital milk. See special observations.
B1513	Deficient 5.0% milk fat.....	Formal samples taken.....	See Sample A1161 and special observations.
A1161	Deficient 6.6% milk fat.....	Farmer written.....	See special observations.
B1619	Deficient 5.0% milk fat.....	} Formal samples taken.....	Formal samples genuine.
B1620	Deficient 1.6% milk fat.....		

MILK.

One thousand, three hundred and nine samples of milk were examined during the year, 533 being samples of farmers' milk taken in course of delivery to wholesalers and retailers in Salford. As will be noted from Tables 4, 5 and 6, the average butter-fat content of all milk for the whole year was 3.48 per cent., that of farmers' milk being 3.51 per cent., and that of milk taken from all other sources 3.46 per cent. The farmers' milk therefore showed, if anything, a very slightly higher figure for butter-fat than retail milk.

The number of milk samples which were poor in solids-not-fat when compared with the presumptive limit of the Sale of Milk Regulations 1939, but were nevertheless adjudged genuine (apart from any deficiency in fat) on the Hortvet freezing point test, totalled 41. These results are set out in Table 10. Of these, twenty-four occurred in the March quarter, twelve in the June quarter, three in the September quarter and two in the December quarter. The numbers of such milks in the five preceding years were as follows:—1943, 36 samples; 1944, 17 samples; 1945, 39 samples; 1946, 41 samples; 1947, 25 samples.

TABLE 9.

AVERAGE BUTTERFAT CONTENT OF MILK—SALFORD.

Year.	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
All Milks	3.61	3.66	3.69	3.66	3.63	3.64	3.59	3.55	3.52	3.48
Farmers' Milks...	3.62	3.70	3.71	3.71	3.62	3.74	3.65	3.60	3.54	3.51
Other than Farmers' Milks	3.60	3.64	3.67	3.64	3.64	3.62	3.57	3.52	3.51	3.46

Sixty-seven samples of milk were reported upon as "adulterated or otherwise giving rise to irregularity" during the year. Before any milk was reported upon as adulterated, as judged by deficiency in solids-not-fat, it was submitted to the Hortvet freezing point test (unless souring had occurred), and any samples passing this test were reported as naturally deficient. The above figure represents a percentage adulteration of 5.1, but in the majority of adulterated milk samples during the year the degree of adulteration has been slight.

In the following table will be found the various types of adulteration and the number of samples under each heading:—

Milks deficient in fat only	55 or 4.2%
Milks containing added water only	11 or 0.8%
Milks deficient in fat and containing added water	1 or 0.1%
	67 or 5.1%
Milks containing more than 3 per cent. added water	3 or 0.2%
Milks 10 per cent. or more deficient in fat	26 or 2.0%

No samples of milk contained colouring matter or preservative.

TABLE 10.

The following samples of milk showed figures for solids-not-fat below the presumptive limit of 8.5 per cent. solids-not-fat of the Sale of Milk Regulations 1939, but were adjudged genuine (apart from any deficiency in fat) on the Hortvet freezing point test:—

Serial Number.	Total Solids per cent.	Fat per cent.	Solids-not-fat per cent.	Freezing Point °C. (Hortvet).	Acidity °Richmond.
B234	11.30	3.00	8.30	—0.537	17
B280	11.14	2.80	8.34	—0.548	18
A1910	11.18	2.80	8.38	—0.540	20
A1915	11.11	2.75	8.36	—0.546	19
A1919	11.60	3.40	8.20	—0.538	17
B306	11.15	2.95	8.20	—0.543	16
B307	10.81	2.65	8.16	—0.543	19
B309	11.09	2.90	8.19	—0.548	16
B311	11.44	3.10	8.34	—0.544	18
B328	11.35	3.05	8.30	—0.547	17
B329	11.31	3.00	8.31	—0.547	19
B333	11.32	3.00	8.32	—0.549	19
A1921	11.63	3.20	8.43	—0.542	20
A1931	11.74	3.30	8.44	—0.536	18
B363	10.95	2.70	8.25	—0.536	17
B364	11.02	2.60	8.42	—0.542	17
B374	11.43	3.00	8.43	—0.538	16
B390	11.35	3.10	8.25	—0.535	17
A1941	11.66	3.30	8.36	—0.532	19
A1942	11.51	3.20	8.31	—0.537	19
B464	11.57	3.30	8.27	—0.543	18
B467	11.76	3.50	8.26	—0.540	17
B469	11.29	3.10	8.19	—0.543	17
B470	11.09	2.90	8.19	—0.547	19
B578	11.81	3.50	8.31	—0.538	16
B580	12.43	4.20	8.23	—0.543	16
B582	11.71	3.45	8.26	—0.538	16
B583	11.51	3.20	8.31	—0.538	17
B594	10.74	2.70	8.04	—0.544	16
B595	10.68	2.55	8.13	—0.542	16
B596	10.65	2.65	8.00	—0.536	16
B597	11.49	3.15	8.34	—0.544	17
B598	11.41	3.15	8.26	—0.544	17
B647	11.57	3.25	8.32	—0.540	17
B648	12.02	3.65	8.37	—0.548	17
B651	11.20	2.90	8.30	—0.534	17
B1030	12.15	3.85	8.30	—0.557	20
B1094	11.90	3.50	8.40	—0.550	18
B1104	12.32	3.95	8.37	—0.553	18
B1619	11.22	2.85	8.37	—0.547	18
B1620	11.28	2.95	8.33	—0.546	18

Samples with letter A are formal samples, and with letter B informal samples.

The next paragraphs give brief accounts of the more interesting adulterated samples. They refer to those samples indicated in Table 8 by the words " See special observations " in the Remarks column.

Samples A1910, A1912, A1913, A1914, A1915, A1917, Milk.

These formal samples represented six out of eight cans of milk consigned together by a farmer to a City dairy. On analysis the eight samples were found to be of the following composition :—

<i>Sample No.</i>	<i>Non-fatty Solids.</i> <i>per cent.</i>	<i>Fat.</i> <i>per cent.</i>
A1910	8.38	2.80
A1911	8.60	3.05
A1912	8.54	2.85
A1913	8.51	2.85
A1914	8.58	2.80
A1915	8.36	2.75
A1916	8.71	3.10
A1917	8.75	2.90

In six cases the percentage of fat fell below the minimum presumptive limit (namely, 3.0 per cent.) fixed by the Sale of Milk Regulations 1939, and the deficiencies amounted respectively to 6.6, 5.0, 5.0, 6.6, 8.3 and 3.3 per cent. of the said minimum limit. Further, in two cases the percentage of non-fatty solids fell below the minimum presumptive limit (namely 8.5 per cent.) fixed by the Sale of Milk Regulations. In these two cases the Freezing Point Test indicated that the deficiency was due to naturally poor milk and not to the presence of extraneous water. (Please see A1910 and A1915 in Table 10.) Only two (namely A1911 and A1916) of the above eight samples passed the limits of the Regulations. The farmer was strongly urged by letter to seek advice from his local Agricultural College, and to take active steps to improve the milk of his herd.

Samples B304, B306, B307 and B309, Milk.

These four informal samples of milk were four out of six samples (numbered consecutively B304 to B309) each representing one of six cans consigned together by a farmer to a City dairy. On analysis the six samples gave the following results :—

<i>Sample.</i>	<i>Non-fatty Solids.</i> <i>per cent.</i>	<i>Fat.</i> <i>per cent.</i>
B304	8.59	2.50
B305	8.50	3.60
B306	8.20	2.95
B307	8.16	2.65
B308	8.60	3.45
B309	8.19	2.90

In the four samples B304, B306, B307 and B309, the percentage of fat fell below the 3.0 per cent. presumptive minimum limit fixed by the Sale of Milk Regulations 1939, and the respective deficiencies in fat amounted to 16.6, 1.6, 11.6 and 3.3 per cent. of the said minimum. Three of the samples, B306, B307 and B309, also appear in Table 10 as being naturally poor in non-fatty solids. A letter was written to the farmer urging him to seek advice and to take active steps to improve the quality of the milk of his herd.

Sample B363, Milk.

This informal sample represented one can only of a number of cans consigned together by a farmer to a City dairy. On analysis it was found to contain only 2.70 per cent. of fat, corresponding to a fat deficiency of 10 per cent. when compared with the 3.0 per cent. minimum presumptive limit for fat fixed by the Sale of Milk Regulations. The sample also appears in Table 10. Accordingly, samples were taken on a later date from each of the same farmer's cans in course of delivery. On this occasion each of the four samples was found on analysis to exceed the minimum requirements for fat. One of the

samples, however (B390), appears in Table 10 as being naturally poor in non-fatty solids. A letter was written to the farmer urging him to take steps to ensure that each can of milk consigned by him should reach a satisfactory standard of quality.

Sample B364, Milk.

This informal sample appears in Table 10 as being naturally poor in non-fatty solids. Its fat-content of 2.6 per cent. corresponds to a deficiency of 13.3 per cent. below the 3.0 per cent. required by the Regulations. As this sample represented only one of several cans of milk consigned together, further samples were taken on a later date, one from each of the farmer's seven cans. (Please see next paragraph.)

Samples B373 and B378, Milk.

Seven informal samples were taken as described in the last paragraph in course of delivery at a City dairy, and were numbered consecutively B373 to B379. The results of analysis were:—

<i>Sample No.</i>	<i>Non-fatty Solids.</i> <i>per cent.</i>	<i>Fat.</i> <i>per cent.</i>
B373	8.58	2.90
B374	8.43	3.00
B375	8.70	3.10
B376	8.65	3.00
B377	8.70	3.40
B378	8.80	2.80
B379	8.75	3.65

In the two samples B373 and B378 the percentage of fat fell below the 3.0 per cent. required by the Regulations and the deficiencies were respectively 3.3 per cent. and 6.6 per cent. One of the samples, B374, appears in Table 10 as being naturally poor in non-fatty solids. The farmer was urged by letter to improve the quality of the milk of his herd.

Sample A1940, Milk.

This formal sample represented a very small consignment of milk in course of delivery to a City dairy. Figures of analysis are given in Table 11. The freezing point indicated the presence of about 7 per cent. extraneous water (genuine milk does not freeze nearer to zero than -0.529°C . Hortvet). This conclusion was supported by the percentage of ash, for which a normal figure in genuine milk is about 0.72 per cent.

"Appeal-to-Cow" samples were accordingly taken and results are given in Table 11 (see A1943 and A1944). From the results of analysis there is no reasonable doubt that by some means extraneous water had been introduced into these milks. Milking was taking place at the same time in two different cow-houses and at one point there was difficulty in keeping all milk vessels under continuous observation. In the circumstances it was regarded as of extreme importance to obtain further "Appeal-to-Cow" samples and this was done without delay (see A1945 and A1946). The four "Appeal-to-Cow" samples represented four successive milkings. The figures for the second pair of "Appeal-to-Cow" samples are fully consistent with the view that they are genuine milks naturally rather poor in non-fatty solids. During the visits necessary for the second "Appeal-to-Cow" samples, the farmer requested that samples be taken from one cow which he thought was giving poor milk, and these samples are given in the table as M55 and M56. Though very poor in both fat and non-fatty solids these samples easily passed as genuine both on the freezing point and on the percentage of ash.

As the farmer was only required to consign a small fraction of his total yield to the City, and it had been shown that some of his cows were giving milk low in fat, it was felt that the fat deficiency of the original sample could not be taken into consideration. Having regard to all the circumstances, and to the smallness of the consignment, it was deemed advisable in this instance to issue a very strong warning by letter as to the seriousness with which extraneous water is regarded.

TABLE 11.

Sample Number.	Fat %	Non-Fatty Solids %	Ash %	Freezing Point °C. (Hortvet)	Acidity °R.	Remarks
A1940	2.45	7.65	0.65	-0.490	16	Original formal sample of farmer's milk.
A1943	3.30	7.72	0.63	-0.495	16	Night { 1st " Appeal Morning { to Cows."
A1944	3.60	7.77	0.62	-0.501	16	
A1945	3.60	8.31	0.71	-0.544	16	Night { 2nd " Appeal Morning { to Cows."
A1946	3.80	8.36	0.72	-0.548	17	
M55	1.65	7.10	0.73	-0.554	13	Fore milk, one cow.
M56	2.25	7.67	0.73	-0.552	14	Full milking, same cow.

Sample A1967, Milk.

This formal sample represented a one-pint crown-corked bottle of sterilised milk on sale by retail. On analysis the sample was found to contain only 2.80 per cent. of fat, corresponding to a deficiency of 6.6 per cent. of fat when compared with the 3.0 per cent. limit fixed by the Regulations. A visit was made to the sterilising dairy (in a neighbouring local authority's area) and at the invitation of the firm, the plant was seen and suggestions made with a view to the production of uniformly satisfactory sterilised milk.

Samples A1972 and A1973, Milk.

These two formal samples of milk represented two cans of milk in course of delivery from a farmer to a City dairy. The two cans constituted the whole of the farmer's daily consignment. On analysis the samples were found to contain only 2.70 per cent. and 2.95 per cent. of fat respectively, corresponding to deficiencies in fat to the extent of 10 per cent. and 1.6 per cent., on comparison with the 3.0 per cent. minimum limit for fat fixed by the Sale of Milk Regulations. It was deemed sufficient to write to the farmer urging him to take steps to improve the quality of his milk supply.

Sample A1980, Milk.

This formal sample represented a one-pint disc-covered bottle of milk purchased in a shop. On analysis it was found to contain only 8.40 per cent. of non-fatty solids, and on comparison with the 8.5 per cent. minimum limit for non-fatty solids fixed by the Sale of Milk Regulations, the deficiency in non-fatty solids corresponded to the presence of 1.4 per cent. of extraneous water. The presence of extraneous water was confirmed by the Freezing Point Test. Next day four corresponding samples were procured from the vehicle taking milk to the same shop from the dairy company. These samples were found to be genuine.

Samples B594, B595 and B596, Milk.

These three informal samples were included in five samples numbered respectively B594 to B598, representing five cans of milk in course of delivery at a City dairy. The composition of the samples is given in Table 10 where all the samples appear as being naturally poor in not-fatty solids. On comparison with the 3.0 per cent. minimum presumptive limit of the Sale of Milk Regulations, Samples B594, B595 and B596 were respectively deficient in fat to the extent of 10.0 per cent., 15.0 per cent. and 11.0 per cent. of the said minimum limit. The farmer was advised by letter to seek advice from his local Agricultural College and to take active steps to improve the milk of his herd.

Sample B617, Milk.

This informal sample was one of six samples taken at random from milk in course of delivery at schools. On analysis the sample was found to contain only 2.90 per cent. of fat, and was therefore 3.3 per cent. fat-deficient on comparison with the 3.0 per cent. limit. The other samples contained respectively 3.3 per cent., 3.7 per cent., 3.6 per cent., 3.35 per cent. and 3.5 per cent. of fat, and were therefore relatively rich though variable in fat content. The figures suggested insufficient mixing at the dairy, and the suppliers were accordingly notified of the deficiency, and were asked to improve the mixing of their milk.

Samples B684, B685, B686, B687, B689, B690, B691, B692 and B694, Milk.

Twelve informal samples each representing one can of milk from a large consignment of "accommodation" milk in course of delivery to a dairy were numbered respectively B684 to B695. Of these twelve samples, three were found to be genuine, while nine were deficient in fat (when compared with the 3.0 per cent. minimum for fat set by the Sale of Milk Regulations). Seven of the samples were found on analysis to contain only 2.35 per cent. of fat (a deficiency of 21.6 per cent.), one sample contained only 2.30 per cent. of fat (a deficiency of 23.3 per cent.) and one sample contained only 2.40 per cent. of fat (a deficiency of 20.0 per cent.). A request for formal samples was quickly made (see next paragraph).

Samples A1999, A1002 and A1003, Milk.

Delivery of the consignment of milk mentioned in the last paragraph had been completed, but several cans were still intact at the dairy and there was good reason to believe that they were in an unaltered state. Four formal samples, each representing one can, were procured and numbered respectively A1999, A1001, A1002 and A1003. Sample A1001 was found to be genuine. Each of the other three samples was found to contain only 2.35 per cent. of fat, and the samples were certified to be deficient in fat to the extent of 21.6 per cent. Proceedings were instituted under Section 83 (3) of the Food and Drugs Act, against the suppliers of the milk, and at the hearing a plea of guilty was entered. In view of a forty year record without previous conviction, fines were imposed of £4 on each of three summonses, together with 3 guineas costs (£15 3s. 0d. in all).

Samples B757 and B762, Milk.

In order to follow up Sample B643, which was found to be 6.6 per cent. deficient in fat, each can of the same farmer's consignment (nine in all) was sampled informally in course of delivery to a City dairy, and the samples were numbered consecutively B754 to B762. On analysis seven of the nine samples were found to be genuine; but samples B757 and B762 contained only 2.90 per cent. and 2.95 per cent. of fat respectively, and were therefore deficient in fat when compared with the 3.0 per cent. presumptive minimum limit fixed by the Sale of Milk Regulations 1939, to the extent of 3.3 per cent. and 1.6 per cent. of the said minimum. The farmer was urged by letter to make sure that each can of his supply would satisfy the Regulations.

Samples B763, B765 and B766, Milk.

Another unsatisfactory sample (namely, B645, Milk, 13.3 per cent. deficient in fat) led to the complete sampling of a farmer's consignment just as described in the last paragraph. In this case fifteen informal samples were taken and were numbered consecutively B763 to B777. Of these samples, twelve were found to be genuine, but in Samples B763, B765 and B766, the percentages of fat were found to be only 2.75, 2.80 and 2.70 respectively, corresponding to fat-deficiencies of 8.3 per cent., 6.6 per cent. and 10.0 per cent. of the minimum limit. This farmer was similarly urged by letter to make sure that each can of milk complied with the Regulations.

Samples B1010 and B1011, Milk.

These two informal samples represented two cans of milk in course of delivery from a farmer to a Salford dairy. On analysis they were found to have the following composition :—

<i>Sample No.</i>	<i>Non-fatty Solids</i>	<i>Fat</i>
	%	%
B1010	8.68	2.10
B1011	8.45	3.50

On comparison with the presumptive limits fixed by the Sale of Milk Regulations 1939 (namely, fat 3.0 per cent., non-fatty solids 8.5 per cent.), Sample B1010 was deficient in fat to the extent of 30.0 per cent. of the said minimum, while Sample B1011 was slightly deficient in non-fatty solids. Accordingly, next day informal samples were procured in the same way from each can (seven in all) of this farmer's consignment. (Please see next paragraph).

Samples B1025, B1028, B1029 and B1031, Milk.

The seven samples procured, as stated in the last paragraph, were numbered consecutively B1025 to B1031. On analysis they gave the following results :—

<i>Sample No.</i>	<i>Non-fatty Solids</i>	<i>Fat</i>
	%	%
B1025	8.52	2.70
B1026	8.55	3.15
B1027	8.40	4.30
B1028	8.40	3.55
B1029	8.35	3.35
B1030	8.30	3.85
B1031	8.40	3.30

Sample B1025 was thus deficient in fat (on comparison with the presumptive minimum) to the extent of 10.0 per cent., while Samples B1027, B1028, B1029, B1030 and B 1031 fell below the 8.5 per cent. presumptive limit for non-fatty solids. In my opinion Sample B1027 does not show any deficiency in non-fatty solids if due allowance is made for the high fat content. It should be noted that Sample B1030 appears in Table 10 as being naturally poor in non-fatty solids. In other cases where the non-fatty solids fell below 8.5 per cent. it was not practicable to carry out a useful Hortvet freezing point test (owing to the intensely hot weather and to the consequent high acidity of the milk at the time of receipt in the laboratory). It would be reasonable to suppose that the low non-fatty solids figures were not due to the presence of extraneous water. In the circumstances it was deemed sufficient to draw the attention of the owners of the farm (a limited company) to the deficiencies, particularly in fat, and to urge them to distribute strippings and fore-milk more evenly in future among their several cans of milk.

Sample B1099, Milk.

On analysis this informal sample was found to contain only 2.40 per cent. of fat, and was thus deficient in fat to the extent of 20.0 per cent. when compared with the 3.0 per cent. presumptive minimum for fat. The sample was one of seven samples representing a complete consignment of seven cans of milk, and was taken in course of delivery from a farm to a City dairy. The other samples were satisfactory or comparatively rich as regards fat. Two of the samples, however, appear in Table 10 as being naturally poor in non-fatty solids. A letter was written to the limited company operating the farm, urging them to seek advice with a view to the production of milk of more satisfactory quality.

Sample B1139, Milk.

This private sample represented milk on delivery at a Salford hospital. On analysis it was found to contain only 2.90 per cent. of fat, and on comparison with the 3.0 per cent. presumptive minimum limit fixed by the Sale of Milk Regulations, the sample was deficient in fat to the extent of 3.3 per cent. of the said minimum. Next day formal samples were taken and were found to be genuine.

Sample B1513, Milk.

This informal sample of milk was taken during general sampling of farmers' milk in course of delivery at a City dairy. It represented only one of several cans from a farm, and on this occasion the remaining cans were not sampled. The sample was found on analysis to contain only 2.85 per cent. of fat and was thus deficient in fat when compared with the 3.0 per cent. presumptive minimum limit for fat fixed by the Sale of Milk Regulations 1939. The deficiency was equivalent to 5.0 per cent. of the required minimum. Accordingly a formal sample was taken from each of the cans (five in all) from this source on a subsequent day. Please see the next paragraph.

Sample A1161, Milk.

This formal sample was one of five taken as described above. It was found to contain only 2.80 per cent. fat, and was thus deficient in fat to the extent of 6.6 per cent. of the required minimum. The other four samples were satisfactory, or in some cases rich in fat-content. It was deemed sufficient to urge the farmer by letter to ensure that each can of milk produced by him should satisfy the requirements of the Sale of Milk Regulations.

TABLE 12.

SAMPLES (OTHER THAN MILK) ADULTERATED OR OTHERWISE GIVING RISE TO IRREGULARITY.

No.	Description.	Nature of Adulteration or Irregularity.	Remarks.
B1311	Apple Purée	Contained 0.021% saccharin	Referred to Ministry of Food. See special observations.
A1109	Apple Purée	Contained 0.017% saccharin	
B1165	Baking Powder.....	Deficient 24% available carbon dioxide....	Vendor interviewed. Damp-affected stock. Withdrawn from sale.
B655	Borax and Honey.....	Honey replaced by cane-sugar syrup.....	Formal sample taken. (See A1004 below.)
A1004	Borax and Honey.....	Honey replaced by cane-sugar syrup.....	Prosecution and conviction. Fined £10 and £1 1s. 0d. costs. £11 1s. 0d. in all.
B699	Brisling Paste (packed abroad).....	Does not comply with British requirements.	Referred to Ministry of Food. See special observations.
B1425	Coffee and Chicory Cubes	Unsatisfactory label	Referred to Ministry of Food. See special observations.
B224	Dried Egg	Contained 32% sucrose	"Sugar dried egg." Formal sample unobtainable. See special observations.
B200	Fever Mixture.....	Deficient 37% in nitric acid.....	Packers written. Stocks withdrawn. Manu- facture of product discontinued. See special observations.
B1342	Glauber's Salt	Was Exsiccated Glauber's Salt	Vendors cautioned.
B1356	Glauber's Salt	Was Exsiccated Glauber's Salt	Vendors cautioned.
B570	Glycerin of Thymol.....	Reduced glycerin (war-time) formula	Packers written pointing out latest B.P.C. requirements (7th Addendum).
B198	Gravy Browning.....	Contained 130 parts per million benzoic acid.	Packers written. Stocks withdrawn.

TABLE 12—Continued.

No.	Description.	Nature of Adulteration or Irregularity.	Remarks.
B967 B969 B992	Non-Brewed Vinegar Non-Brewed Vinegar Non-Brewed Vinegar	Deficient 7% acetic acid..... Deficient 11.5% acetic acid..... Deficient 4% acetic acid.....	} Action suspended pending Appeal Court decision as to standard for non-brewed vinegar.
B1209	Pastry Mix	Unsatisfactory label	
B573	Refined Oil	Unsatisfactory label. Product was a light liquid paraffin.	
A1986	Refined Oil	Unsatisfactory label	Formal sample taken. (See A1986 below.)
A111	Sweets	Contained over 70% chalk, 0.12% saccharin.	Prosecution and conviction. Fined £5 and £2 2s. 0d. costs. £7 2s. 0d. in all. See special observations.
A222	Sweets	Contained over 70% chalk, 0.12% saccharin.	Manufacturers prosecuted and convicted on two offences. Total fines and costs £20 5s. 0d. See special observations.
A333	Sweets	Contained 0.029% saccharin	No separate legal action taken. Circumstances similar to A111.
A1951	Tea	Contained 15% foreign leaves (maté).....	Referred to Ministry of Food.
B1272	" Tea-time Tablets "	Unsatisfactory label	Vendor prosecuted and convicted. Fined £15 and £2 2s. 0d. costs (£17 2s. 0d. in all).
B1399	Tomato Flavour Ketchup	Contained 160 p.p.m. sulphur dioxide. Unsatisfactory label.	Ingredients not declared in correct order. Packers written. Label later amended. Preservatives declared but not in accordance with Preservative Regulations. Manufacturers cautioned.

SAMPLES OTHER THAN MILK.*Special Observations on samples reported as not genuine.***Sample B200, Fever Mixture.**

This informal sample of pre-packed medicine was contained in a "medicine bottle" bearing a label which included a declaration of ingredients as required by the Pharmacy and Medicines Act, 1941. The chief and almost the sole ingredients was stated as "Nitric Acid B.P. 1.53 per cent. (by volume)." On analysis the nitric acid was found to be deficient to the extent of 37 per cent. of the declared amount. An interview was arranged with a director of the firm of packers, and he admitted responsibility for an error in making up the formula. The firm has undertaken in writing to recall unsold stocks, and has on its own initiative decided to discontinue the manufacture of this product so as "to keep in step with modern ideas."

Sample B224, Dried Egg.

This informal sample was taken from a confectioner's stock in consequence of his own complaint. He stated that the material was part of his regular dried egg allocation invoiced as "dried egg" and he had formed the opinion from its properties in actual use that it was a substitute. On analysis the sample was found to be dried egg with the addition of 32 per cent. of ordinary sugar. It was, in fact, a commodity known in the trade as "sugar dried egg." Owing to the effect of the regulations governing allocations it was found impracticable to secure a formal sample on delivery from the supplier.

Sample B699, Brisling Paste.

This foreign pre-packed product was contained in a "tin" shaped like a "sardine tin." The label bore a list of ingredients. On analysis of the paste, the fish content was found to be not more than 55 per cent., a figure lower than that required for home-produced fish paste by the Meat Products and Canned Meat Order, 1947 (which governs fish pastes. The attention of the Ministry of Food (Food Standards and Labelling Division) was drawn to this product, and their investigation brought to light a defect in the construction of the current Meat Products and Canned Meat Order. The defect arose from the positioning of Article 10 (b) in the Order, and there is a doubt whether the prescribed minimum fish content of 70 per cent. can legally be held to apply to imported fish pastes. The Ministry declared their intention to control the fish content of imported fish paste temporarily by inserting a requirement of 70 per cent. fish in all import licences, and later by seeking an alteration in the Order at the next opportunity.

Sample A1986, Refined Oil.

This formal sample represented a product packed by a firm of wholesale pharmaceutical suppliers in ten-ounce bottles. The label bore the words "Refined Oil" without further description. The sample was procured by retail purchase in a grocer's shop. On analysis the sample was found to be a white mineral oil of very low viscosity. It was clearly not a food; and also did not comply with the requirements of the British Pharmacopœia for use as medicinal paraffin. There was evidence that the article had been used for cooking by members of the public. The packers were prosecuted for giving with a drug a misleading label (Food and Drugs Act, 1938, Section 6) and were fined £5 and ordered to pay two guineas costs (£7 2s. 0d. in all).

Samples B1311 and A1109, Apple Purée.

These samples were informal and formal respectively, and represented a product sold in "jam jars" sealed with metal caps. The jars were labelled "APPLE PUREE Artificially Sweetened." On analysis the samples were found to contain saccharin, and no other sweetening substance (apart from any natural sugars in the apples) was detected. Such use of saccharin in a manufactured food appeared to be a breach of the Saccharin

Order, 1944. The matter was accordingly referred for action to the Ministry of Food whose duty it is to enforce the Saccharin Order, and at the same time the Ministry's attention was called to the failure to declare saccharin on the label, as required by the Labelling of Food Order. The Ministry have since stated in a letter that they have taken up with the manufacturers the necessity of declaring the presence of saccharin, which the Ministry permits under a licence granted to the manufacturers for the use of saccharin in "Bottled Fruit."

Sample B1425, Coffee and Chicory Cubes.

This informal sample consisted of jelly cubes adhering together to form a block like a "jelly-square," wrapped and contained in a printed carton. The carton bore the words "These cubes are composed of Coffee and Chicory Essence with the addition of Gelatine." On analysis the sample was found to have the composition of a genuine (sugar-sweetened) liquid coffee and chicory essence, to which sufficient gelatine had been added (about 7 per cent.) to form a firm jelly. Sulphur dioxide was present in small quantities (less than 32 parts per million). A full report of this sample was sent to the Ministry of Food for any action they might deem proper. The Ministry ruled that the label was unsatisfactory but that (as regards statement of ingredients for the purposes of the Labelling of Food Order) it would have been sufficient if, in addition to the words printed, there had been a declaration of the presence of sulphur dioxide.

Sample A111, Sweets. "Mixed Fruit Dots."

This formal sample was purchased in a small general shop following complaints that some school children had been unwell after eating the sweets. Deliveries were traced through a wholesale firm in a Lancashire town to the manufacturers in London.

First of all a thorough examination was made for "poisons" including metallic impurities, and arrangements were made for bacteriological tests to be done. The results were all negative and it was concluded that the illness of the children was not food poisoning as commonly understood. The examination had showed, however, that a very high proportion of chalk was present, and a certificate was issued showing the sample to contain 73 per cent. of chalk (precipitated calcium carbonate) and 0.12 per cent. of saccharin. The certificate included the opinion that the sample was adulterated to the extent of at least 70 per cent. with chalk, and also that twelve of the "sweets" (about $\frac{1}{4}$ oz.) contained the maximum adult dose of chalk prescribed by the British Pharmacopœia, 1948.

The manufacturers were summoned to appear at the Salford City Magistrates' Court on two charges; first under Section 3 of the Food and Drugs Act 1938 (for selling a food not of the nature, substance and quality demanded), and second (with the consent of the Ministry of Food) under Regulation 1 (2) of the Defence (Sale of Food) Regulations 1943 (for publishing an advertisement calculated to mislead). The shopkeeper from whom the sample was purchased, and the manager of the wholesale firm supplying the shopkeeper, appeared as witnesses and produced invoices covering the transactions. They both said that there had been nothing to show them, either with the articles or on the invoices or in any other way, that the "Mixed Fruit Dots" were not "ordinary sweets." The sweets were, however, "unrationed," which witnesses took to mean that for some technical reason they escaped the sweets rationing orders; and the wholesale manager said that he therefore expected the sweets to contain no sugar.

Cartons produced in court had a display card bearing the words "Mixed Fruit Dots. Not on Sweet Ration." The contents of the cartons resembled coloured aspirin tablets in size and shape. In cross-examination, the public analyst said that a limited number of the tablets would probably relieve "indigestion," if the indigestion was caused by excessive acidity. Asked by the City Stipendiary Magistrate whether the sweets could be harmful, the public analyst said that half-an-ounce taken in the course of one or two hours would probably interfere with the digestion of the next meal.

Counsel for the defence submitted that he had no case to answer because the product was not offered as a "sweet" or as a food. The product was sold to the public under a name newly devised and so the public had not learned to expect a particular composition for the article. He submitted, therefore, that the court could not "fix a standard." As to the label, he submitted that the words were simply true, and that they indicated only that the product was not controlled by the Chocolate and Sugar Confectionery Order. In other words, the label made it clear to anyone that the product contained no sugar. It was ruled that there was a case to answer on both counts.

For the defence, one of the directors said that Verva Limited had made tablets to the same formula under the name "Mixed Fruit Digestive Tablets" for some years and nothing had been said against them. A few months ago, however, they had changed the name, after being advised that they could thus escape liability to Purchase Tax. In cross-examination he said that he regarded the product as having no food value. The nearest parallel he could give was chewing-gum, which has only "entertainment" value. The flavours used in "Mixed Fruit Dots" were genuine fruit flavours made from fruits.

The prosecuting solicitor pointed out the definition of "food" in the Defence (Sale of Food) Regulations, particularly the words "an article shall not be deemed not to be a food by reason only that it is also capable of being used as a medicine."

It was said in mitigation that upon the first suggestion that there was anything wrong with the sale of this product under the name "Mixed Fruit Dots," sales had been completely suspended and the firm had gone to a great deal of expense in recalling unsold stocks.

The City Stipendiary Magistrate found both charges proved. He inflicted a fine of £5 with five guineas costs on the first charge, and a fine of £10 on the second charge, £20 5s. 0d. in all.

BOROUGH OF ECCLES.

During the year 146 samples were received from the above Borough for examination under the Food and Drugs Act, 1938.

Details of the above samples are given in the following table:—

TABLE 13.
SAMPLES EXAMINED.

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
FOODS.				
Milk	95	—	5	5·3
Baking Powder	2	—	—	—
Cake Mixture.....	1	—	—	—
Coffee	2	—	—	—
Cooking Fat	1	—	—	—
Cooking Oil.....	1	—	—	—
Custard Powder	5	—	2	40
Gelatine	2	—	—	—
Gravy Browning	4	—	—	—
Jelly	1	—	—	—

TABLE 13—Continued.

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
Jelly Crystals	1	—	—	—
Junket Powder	1	—	—	—
Lemon Cheese.....	1	—	—	—
Lemon Curd	1	—	—	—
Malt Vinegar	2	—	—	—
Mincemeat (Fruit, etc.).....	2	—	—	—
Mixed Spice	2	—	—	—
Mustard	2	—	—	—
Oatmeal	2	—	—	—
Pepper.....	2	—	—	—
Scone Flour.....	1	—	—	—
Skim Milk Powder	1	—	—	—
Soya Flour	2	—	—	—
DRUGS.				
Borax	2	—	—	—
Glycerine	2	—	—	—
Ground Ginger	2	—	—	—
Indian Brandy	2	—	1	50
Liquid Paraffin	2	—	—	—
Olive Oil.....	2	—	—	—
Total Foods and Drugs...	146	—	8	5.5

TABLE 14.

AVERAGE COMPOSITION OF ALL MILK.

Month.	Number of Samples.	Total Solids per cent.	Fat per cent.	Solids-not-fat per cent.
January	7	11.95 { 12.06 11.72 12.10	3.41 { 3.39 3.34 3.50	8.54 { 8.67 8.38 8.60
February	9			
March	8			
April	7	11.97 { 11.85 12.02 12.02	3.28 { 3.34 3.23 3.31	8.69 { 8.51 8.79 8.71
May.....	13			
June	6			
July	8	12.32 { 12.55 12.20 12.24	3.62 { 3.84 3.55 3.43	8.70 { 8.71 8.65 8.81
August	11			
September	5			
October	8	12.21 { 12.36 12.11 12.19	3.51 { 3.55 3.47 3.55	8.70 { 8.81 8.64 8.64
November	9			
December	4			
	95	12.11	3.45	8.66

TABLE 15.
MILK ADULTERATION.

No.	Nature of Adulteration.	Action Taken.	Remarks.
1178	Deficient 1·6% milk fat	} Farmer written.....	Following Sample 1175. See Table 16. See special observations.
1179	Deficient 5·0% milk fat		
1215	Deficient 10% milk fat...	Vendor interviewed.....	See Samples 1230, 1232, and special observations.
1230	Deficient 13·3% milk fat	} Farmer cautioned	See special observations.
1232	Deficient 5·0% milk fat		

In the following table will be found particulars of various types of milk adulteration and the number of samples under each heading :—

Milks deficient in fat only	5 or 5·3%
Milks containing added water only	Nil.
Milks deficient in fat and containing added water	Nil.
	5 or 5·3%
Milks containing more than 3% added water.....	Nil.
Milks 10% or more deficient in fat	2 or 0·2%

No samples of milk contained colouring matter or preservative.

TABLE 16.

The following samples of milk showed figures for solids-not-fat below the presumptive limit of 8·5 per cent. solids-not-fat of the Sale of Milk Regulations 1939, but were adjudged genuine (apart from any deficiency in fat) on the Hortvet freezing point test :—

Serial Number.	Formal or Informal.	Total Solids per cent.	Fat per cent.	Solids-not-fat per cent.	Freezing Point °C. (Hortvet).	Acidity ° Richmond.
1175	Formal	11·03	3·00	8·03	—0·542	15
1178	Formal	10·97	2·95	8·02	—0·536	14
1179	Formal	11·28	2·85	8·43	—0·544	16
1180	Formal	12·01	3·90	8·11	—0·538	15
1196	Formal	11·83	3·35	8·48	—0·536	19
1205	Formal	11·72	3·50	8·22	—0·537	16
1288	Formal	11·63	3·30	8·33	—0·540	16
1289	Formal	11·60	3·15	8·45	—0·543	16

The next paragraphs give brief accounts of the more interesting adulterated samples.

Samples 1178 and 1179, Milk.

These formal samples were taken to investigate further the quality of a farm supply from which was taken Sample 1175 (reported as genuine milk of poor quality, see Table 16). Four samples numbered 1177, 1178, 1179 and 1180 were taken from the supply at the dairy, and represented respectively four cans of milk; being the whole daily consignment. The composition of three of the samples may be seen in Table 16. The fourth sample, No. 1177, was found to contain 8·55 per cent. solids-not-fat and 3·80 per cent. fat. In the circumstances it was deemed sufficient to draw attention by letter to the deficiencies, and to suggest that steps be taken to improve the quality of the milk.

Sample 1215, Milk.

This formal sample represented a can of milk on a retailer's van. On analysis it was found to contain only 2.70 per cent. of fat, and was therefore deficient in fat to the extent of 10 per cent. when compared with the minimum presumptive limit for fat of 3.0 per cent. fixed by the Sale of Milk Regulations, 1939. The vendor claimed that it was in the same condition in which it was received from the farmer supplying him. (See next paragraph).

Samples 1230 and 1232, Milk.

The whole consignment of milk (five cans in all) from the farmer supplying the vendor of Sample 1215 above, was sampled formally in course of delivery two days later, and the samples were numbered consecutively 1229 to 1233. Three of the samples were genuine, but samples 1230 and 1232 were found to contain only 2.60 per cent. and 2.85 per cent. of fat, and were therefore respectively deficient in fat (compared with the 3.0 per cent. presumptive limit) to the extent of 13.3 per cent. and 5.0 per cent. A warning letter has accordingly been sent to the farmer by the Town Clerk.

TABLE 17.

SAMPLES (OTHER THAN MILK) ADULTERATED OR OTHERWISE
GIVING RISE TO IRREGULARITY.

No.	Description.	Nature of Adulteration or Irregularity.	Remarks.
1191	Custard Powder	Contained self-raising ingredients.	See Sample No. 1207.
1207	Custard Powder	Consisted of wheat flour at least 80%, with a small admixture of self-raising ingredients.	Formal sample. Referred to Starch Division of the Ministry of Food. See special observations.
1265	Indian Brandy	Deficient at least 90% of stated Liquid Extract of Rhubarb.	Packers written. See special observations.

Special Observations on samples reported as not genuine.

Sample 1207, Custard Powder.

This formal sample was taken at the request of the Starch Division of the Ministry of Food, to whom were sent the results of examination of informal sample 1191, Custard Powder, reported to contain self-raising ingredients. The formal Sample 1207 represented an article displayed in a shop window and marked "Custard Powder," and after analysis was certified to contain at least 80 per cent. of wheat flour and to contain an admixture of self-raising ingredients. It does not appear to be a "Custard Powder" prepared mainly from "starch" as defined by the Starch Food Powders Control Order, 1944. The results of analysis of the formal sample have also been communicated to the Starch Division of the Ministry of Food.

Sample 1265, Indian Brandy.

This pre-packed article bore a label giving quantitative particulars of its ingredients and these included "Ext. Rhei. Liq. 0.65." From the context, the figure was a percentage. Examination showed that the proportion of liquid extract of rhubarb was less than 0.05 per cent. and thus that the deficiency was at least 90 per cent. of the stated amount. A letter has been written to the packer pointing out the deficiency and asking for an assurance that similar stocks will be withdrawn from sale.

BOROUGH OF STRETFORD.

During the year, 182 samples were received from the above Borough for examination under the Food and Drugs Act, 1938.

Details of the samples are given in the following table:—

TABLE 18.

SAMPLES EXAMINED.

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
FOODS.				
Milk	123	—	3	2·4
Arrowroot.....	2	—	—	—
Bakewell Tarts.....	1	—	—	—
Cakes.....	1	—	1	100
Canned Herrings.....	1	—	—	—
Canned Kippers.....	1	—	—	—
Chicken Broth Concentrate.....	1	—	—	—
Chocolates	1	—	—	—
Cocoa	4	—	—	—
Coffee	4	—	—	—
Fish Paste.....	2	—	—	—
Fruit Cake	2	—	—	—
Gelatine	2	—	—	—
Gravy Browning	2	—	—	—
Lemon Squash	2	—	—	—
Malt Extract	2	—	—	—
Malt Extract with Caramel.....	1	—	—	—
Malt Tablets	1	—	—	—
Malt Vinegar	2	—	—	—
Mineral Waters	2	—	—	—
Onion Flakes	1	—	—	—
Salad Cream	1	—	—	—
Salad Dressing	1	—	—	—
Salad Oil.....	1	—	—	—
Strained Plums.....	1	—	—	—
DRUGS.				
Californian Syrup of Figs	1	—	—	—
Camphorated Oil	2	—	—	—
Castor Oil	2	—	—	—
Compound Glycerin of Thymol	2	—	—	—
Compound Syrup of Figs	1	—	—	—
Cream of Tartar	2	—	—	—
Glycerin, Lemon and Honey ...	2	—	—	—
Gregory's Powder	2	—	—	—
Olive Oil.....	2	—	—	—
Seidlitz Powder	2	—	—	—
Tincture of Iodine.....	2	—	1	50
Total Foods and Drugs	182	—	5	2·7

TABLE 21.

The following samples of milk showed figures for solids-not-fat below the presumptive limit of 8.5 per cent. solids-not-fat of the Sale of Milk Regulations 1939, but were adjudged genuine (apart from any deficiency in fat) on the Hortvet freezing point test:—

Serial Number.	Formal or Informal.	Total Solids per cent.	Fat per cent.	Solids-not-fat per cent.	Freezing Point °C. (Hortvet).	Acidity ° Richmond.
443	Informal	11.77	3.40	8.37	—0.535	19
446	Formal	11.60	3.25	8.35	—0.529	17
451	Formal	12.00	3.70	8.30	—0.533	16
453	Informal	11.10	2.75	8.35	—0.537	18
478	Formal	11.52	3.20	8.32	—0.529	16

The next paragraphs give brief accounts of the more interesting adulterated samples.

Sample 453, Milk.

This informal sample was one of three samples, representing three cans of milk consigned together by a farmer to a dairy. On analysis it was found to contain only 2.75 per cent. of fat corresponding to a deficiency of 8.3 per cent. of the minimum presumptive limit (namely, 3.0 per cent.) fixed by the Sale of Milk Regulations. The sample also appears in Table 21 as being naturally poor in solids-not-fat. The two other samples were of good quality. It was deemed sufficient to write to the farmer pointing out the deficiency and urging him to take steps to improve the supply.

Sample 455, Milk.

This informal sample was one of five samples representing a farmer's consignment of five cans. The fat percentage was found to be 2.95 per cent. corresponding to a deficiency of 1.6 per cent. of the required amount. The other four samples were of good quality. The farmer was requested by letter to prevent deficiencies in future.

Sample 522, Milk.

This formal sample of pasteurised milk was found on analysis to contain only 8.46 per cent. of non-fatty solids, and on comparison with the 8.5 per cent. presumptive minimum limit fixed by the Sale of Milk Regulations 1939, the deficiency in non-fatty solids was equivalent to the presence of 0.4 per cent. extraneous water. The freezing point test also indicated the presence of a small proportion of added water. In this case it was deemed appropriate to write to the dairy company responsible, drawing their attention to the failure to comply with the Regulations.

TABLE 22.

SAMPLES (OTHER THAN MILK) ADULTERATED OR OTHERWISE GIVING RISE TO IRREGULARITY.

No.	Description.	Nature of Adulteration or Irregularity.	Remarks.
491	Cakes.....	Fatty matter contained 58% unsaponifiable.	Informal sample. Confectioner warned. See special observations.
533	Tincture of Iodine.....	Deficient 0.06% iodine....	No action taken. See special observations.

*Special Observations on samples reported as not genuine.***Sample 491, Cakes.**

This informal sample of cakes was taken in consequence of a complaint of a slightly abnormal oily flavour. The percentage of total fatty matter in the cakes (described as a sponge mixture) was only 2·8 per cent., but of this fatty matter 58 per cent. was found to be unsaponifiable and resembled yellow soft paraffin. On investigation at the bakehouse similar yellow soft paraffin was found to be in use as a tin greaser. A letter was written to the baker expressing disapproval of the use of this material even as a tin greaser.

Sample 533, Tincture of Iodine.

On analysis this informal sample of pre-packed tincture of iodine was found to contain only 2·39 per cent. of iodine. On comparison with the B.P. limits of 2·45 to 2·55 per cent. iodine, the sample contains 0·06 iodine less than the required minimum. This deficiency was regarded as slight, and no further action was taken.

PHOSPHATASE TESTS.

(City of Salford).

Since the issue of the Heat-treated Milk (Prescribed Tests) Order 1944, four full calendar years of regular sampling of heat-treated milk from "all purveyors" have been completed. Though the percentage of samples failing to comply fully with the phosphatase test is slightly higher than last year, it will be seen from the table below that there has been a progressive reduction in "failures" from the commencement of regular sampling.

PROPORTION OF FAILURES TO TOTAL SAMPLES.
(CITY OF SALFORD).

	1945	1946	1947	1948
Total samples (including pasteurised, H.T.S.T. and sterilised milk)	198	285	276	325
Failures	14·1%	9·8%	4·0%	4·6%

Phosphatase Tests on Milk Samples submitted by the City of Salford.

In addition to the milk samples examined under the Food and Drugs Act 1938, 325 samples were submitted for examination by the phosphatase test. The results obtained on these samples are tabulated below :—

Type of Milk.	No. of Samples.	Sufficiently heat-treated.	Insufficiently heat-treated.	Grossly under-treated.
Pasteurised.....	301	286	11	4
Heat-treated	2	2	—	—
Sterilised.....	22	22	—	—
	325	310	11	4

Phosphatase Tests on Milk Samples received from the Borough of Eccles.

In addition to the milk samples examined under the Food and Drugs Act 1930, 24 samples were submitted for examination by the phosphatase test. The results obtained on these are tabulated below :—

Type of Milk.	No. of Samples.	Sufficiently heat-treated.	Insufficiently heat-treated.	Grossly under-treated.
Pasteurised.....	24	23	1	—

Phosphatase Tests on Milk Samples received from the Borough of Stretford.

In addition to the milk samples examined under the Food and Drugs Act 1938, 73 samples were submitted for examination by the phosphatase test. The results obtained on these are tabulated below :—

Type of Milk.	No. of Samples.	Sufficiently heat-treated.	Insufficiently heat-treated.	Grossly under-treated.
Pasteurised.....	33	33	—	—
Heat-treated	37	37	—	—
Sterilised.....	3	3	—	—
	73	73	—	—

Phosphatase Tests on Milk Samples submitted by the Borough of Prestwich.

Nine samples of milk were submitted during the year by the Borough of Prestwich for examination by the phosphatase test. All these samples were found to be sufficiently heat-treated.

FERTILISERS AND FEEDING STUFFS ACT, 1926

Four samples of fertilisers have been examined during the year. All samples could be regarded as satisfying the requirements of the Act.

PHARMACY AND POISONS ACT, 1933.

Five samples have been examined during the year. These consisted of one sample of disinfecting fluid and four samples of ammonia solution. The disinfecting fluid was satisfactory. One sample of ammonia solution was found to contain less than 5 per cent. by weight of ammonia (NH_3). The sample was therefore exempt from the requirements of the Act and Rules, but the label stated in error that the solution contained 5% W/W NH_3 , and also that no licence was required for resale. The packer was requested by letter to amend the label so as to be consistent with the Act.

The composition of the other three samples of ammonia was satisfactory but the packer of one was advised to modify some comparatively minor details of his label.

MISCELLANEOUS SAMPLES

(from all sources).

Balsam of Aniseed.....	1
Blackcurrant Syrup	1
Celluloid	1
Coffee Essence.....	1
Contract Samples	55
Coroner's Samples (including organs and exhibits).....	2
Fat Extender	1
Human Milk.....	1
Ice Cream Powder.....	1
Jellies, etc. (food poisoning investigation)	8
Milk	7
Milk Products (including baby foods)	3
Pepper	1
Petrol (Police).....	3
Pork Sausage Meat.....	1
Sago Starch.....	1
Solvents (Petroleum Act)	2
Soot Gauges.....	48
Sulphur Dioxide Candles	24
Sweets	2
Tablets (Police).....	1
Tea.....	1
Tinned Goods	5
Water, Drinking.....	83
Water, Stream.....	2
Water, Swimming Bath.....	144

	400

The table shows that the laboratories are proving increasing useful in many directions other than the statutory requirements of the Food and Drugs Act. Samples were submitted by the Police, Weights and Measures Department and other Corporation Departments. A new feature is the examination of "red" petrol under the Motor Spirit Regulations, 1948. The Public Analyst is increasingly indicated in recent legislation as the proper person for the analysis and identification of a variety of substances mentioned therein.

Contract Samples.

Baking Powder	6
Cocoa.....	4
Cornflour	4
Custard Powder	4
Floor Polish.....	4
Furniture Cream.....	3
Jam	3
Lavatory Cleanser	3
Liquid Metal Polish.....	3
Lysol	3
Meat Extract	4
Scouring Powder.....	5
Scouring Tablets.....	1
Sweeping Compounds.....	6
Turpentine Substitute	2

	55

The above fifty-five samples were examined on behalf of the Purchasing Committee. The consumers of the materials are the various Corporation Departments and samples are examined primarily to ascertain whether the items are in accordance with specification.

New items requiring more detailed and searching examination are being added yearly. Indeed, the working out of suitable specifications, and the analysis of samples in relation to them, are now among the most exacting duties of the City Analyst's laboratory, and strict analytical control is exerted over an increasing value of purchases.

DRINKING WATER.

Eighty-two samples of drinking water (including three from the Borough of Prestwich) were examined during the year. This number includes twenty-five samples submitted for the usual monthly full chemical analysis of the public supply. Other samples included in the total were examined only for the presence of free chlorine which was of interest in relation to bacteriological samples taken at the same time, or were examined for special purposes such as the presence of metals, fluorides, etc.

Water is supplied by Manchester Corporation Water Works from service reservoirs at Prestwich (Thirlmere water) and at Gorton Lower (Longdendale water). An area round Chapel Street receives water from service reservoirs at Audenshaw. This water either resembles the Longdendale water in composition, or corresponds to a mixture of Longdendale and Thirlmere water. Average figures of analysis, compiled from monthly analyses, are as follows:—

TABLE 23.

(All results except pH value are expressed as parts per 100,000).

	PRESTWICH SUPPLY.	GORTON LOWER SUPPLY.	MIXED SUPPLY.
Area of distribution.....	Pendleton and Broughton.	Salford, Regent Road.	Salford, Crescent.
Total Solid Matter.....	4.0	9.1	5.8
Nitrates (as N).....	0.03	0.06	0.05
Nitrites (as N).....	Trace	Trace	Trace
Combined Chlorine (as Cl).....	0.72	1.12	0.87
Available Chlorine (as Cl).....	0.005	0.006	0.005
Free and Saline Ammonia (as N)	0.001	0.005	0.003
Albuminoid Ammonia (as N).....	0.004	0.004	0.005
Oxygen absorbed from } 15 mins.	0.028	0.035	0.046
acid permanganate } 3 hrs.	0.055	0.078	0.082
Temporary Hardness.....	1.5	1.4	1.5
Total Hardness.....	2.1	4.2	2.2
pH Value.....	7.1	6.8	6.9
Physical Characteristics.....	Clear, very slightly yellow. Faint earthy odour when warmed. Very slight or negli- gible deposit.	Faintly turbid or opalescent, slightly yellow. Faint earthy odour when warmed. Slight deposit.	Faintly turbid or opalescent, slightly yellow. Faint earthy odour when warmed. Slight deposit.
Microscopical Appearance of Deposit.....	(Typically). A few diatoms and algal cells.	(Typically). Fine mineral parti- cles, a little vegetable debris, a few diatoms and algal cells.	(Typically). Fine mineral parti- cles, a little vegetable debris, a few diatoms and algal cells.

The pH value of the waters has generally been well maintained near 7.0. Lead has been determined on several occasions in the water after standing overnight (approximately 12 hours) in lead pipes, and also directly after running for ten minutes from the tap. The maximum figure obtained on standing overnight was 0.4 parts per million; after running ten minutes, the lead amounted to less than 0.1 parts per million in all cases.

The amounts of lead found were therefore satisfactorily low, indicating that the water was not dangerously plumbo-solvent. The waters have been tested for fluorides, and the amount was found not to exceed 0.1 parts per million.

Judged on chemical composition, the water supplies may be accepted as wholesome.

SWIMMING BATH WATERS.

At nearly all the public baths in Salford the system of continuous purification is in use, and samples were examined with the Ministry of Health recommendations in view ("Purification of the Water of Swimming Baths," 1929).

It is now generally recognised that the upper recommended limit (namely, 0.5 parts per million of free chlorine) is not sufficient to counteract the effect of large numbers of bathers (*e.g.*, during "heat waves"); and particularly since the general application of "break-point chlorination" to swimming bath waters it has been recognised that 1 or 2 parts per million (or even slightly more) of actual free chlorine (as distinct from chloramines) may be regarded as a desirable "reserve" at the time the baths are opened on a busy day. It has been found here that a direct test for free ammonia on the samples is a very useful quick indication whether chlorination is keeping pace with pollution due to bathers.

One hundred and twenty-eight samples were examined during the year. Samples were taken from the baths in use fortnightly during the summer period and monthly during the rest of the year.

In addition to the 128 samples examined for the City of Salford, sixteen samples were examined from the Borough of Eccles. Twenty-three samples showed slight variation from the standard alkalinity. Figures of analysis were communicated to the Baths Superintendent and any noteworthy divergencies were promptly brought to his attention.

ATMOSPHERIC POLLUTION.

Measurement of Daylight.

Since 1926, experiments and tests have been carried out daily in these laboratories to find suitable methods for the estimation of the loss of daylight and ultra-violet radiation caused by the smoke pall overhanging an industrial area.

The present tests in operation are the Campbell Stokes Sunshine Recorder, the acidulated potassium iodide method, the nitrite method of Gillam and Morton and the Ashworth U.V. Meter.

In the following table will be found some details of the figures recorded by these tests and comparisons with outside places.

TABLE 24.

1948. Month.	Bright Sunshine (hours) Campbell Stokes Daily Average.		Acidulated Potassium Iodide. Mgms. I liberated. Daily Average.			U.V. Intensity Ashworth Units. Daily Average.		
	Salford.	South- port.	Regent Road.	Lady- well.	Nab Top.	Salford.	South- port.	Roch- dale.
January.....	0.3	1.5	2.8	4.5	3.2	8.3	10.8	5.5
February.....	1.1	2.3	4.3	7.3	6.2	13.0	21.4	13.1
March.....	2.0	5.6	7.5	8.1	9.5	18.5	32.4	30.1
April.....	2.8	5.9	8.8	10.6	9.3	46.7	62.3	54.0
May.....	4.6	9.2	11.0	11.8	10.4	58.4	157.7	114.2
June.....	2.9	6.2	10.5	10.5	11.5	87.0	128.7	86.4
July.....	3.3	5.8	7.4	9.5	10.9	53.0	124.0	80.8
August.....	2.2	3.6	6.3	8.9	8.7	40.7	118.4	30.8
September.....	2.1	3.1	5.1	8.0	7.6	50.5	70.4	16.4
October.....	2.2	2.9	4.1	6.7	7.5	25.6	39.8	13.5
November.....	1.1	1.8	2.3	4.6	4.6	10.4	16.5	4.8
December.....	0.8	1.6	1.5	4.6	5.3	6.2	10.0	3.1

The nature and number of "Sunlight" Tests made during 1948.

Bright Sunshine (Campbell Stokes)	247
Acidulated Potassium Iodide.....	1,034
Gillam and Morton nitrite test.....	297
Ashworth's U.V. test.....	293
Total	1,871

As a result of extended trials in comparison with other methods, I have formed the opinion that the Gillam and Morton method and the potassium iodide method do not sufficiently specifically measure any very useful factor or "band" in the total radiation from the sky. There are grave difficulties in controlling the conditions of test when it is desired to compare "intensities" at two places miles apart at the same time. The chemical and physical operations involved should be carried out in exactly the same manner by persons trained for the work. Where measurements are made involving transport of materials to, and subsequent examination in the laboratory, serious errors may arise.

It appears to me, therefore, that the Gillam and Morton test should now be abandoned, and that the potassium iodide method should only be continued at this laboratory where it is under direct daily supervision. At other points a method such as the Ashworth ultra-violet meter would be preferable.

ATMOSPHERIC POLLUTION.

Salford's first soot deposit gauge for measuring atmospheric pollution was established in 1923 and by the end of that year three stations were in operation, shortly afterwards the number was increased to four, and though changes have occurred in the location of the instruments, the examination of the deposits has been carried out monthly since that date.

This method estimates most of the impurities in the air, in particular the tarry matter (soot) and the mineral impurities. Owing to differing climatic conditions any conclusions depend on long term observations, so that Salford has an advantage in being among the first Authorities to make regular measurements and to keep records.

Sulphur dioxide and other acidic gases are found in the neighbourhood of large towns and though constituting an apparent small percentage of the atmosphere possess a powerful chemical action which could impair health and be harmful to building materials. The volumetric estimation of these gases (returned as sulphur dioxide) was commenced in 1932 and in conjunction with this method the measurement of smoke or suspended impurity was put into operation in April, 1948. This method consists of the passage of a known volume of air through a white filter-paper to separate the solid impurities and to collect them as a grey or black stain which is matched against a set of standard stains calibrated at the National Physical Laboratory. It is proposed to install this latter method in the "smokeless zones" to be instituted in this City.

The gravimetric or lead peroxide method which estimates sulphur dioxide more specifically was commenced in 1935 and results are available from that date.

Monthly reports of these methods are forwarded to the Department of Scientific and Industrial Research and appear in their monthly compilation, the "Atmospheric Pollution Bulletin."

Examination of Soot Gauge Deposits.

The results of the examination of the deposits in the special gauges located in various places in the City are given below. Standard gauges are situated at Broughton Modern Secondary School; Ladywell Hospital; Drinkwater Park; and at Nab Top Sanatorium at Marple, Cheshire.

In uniformity with the results expressed by other stations, of which there are a number scattered throughout Great Britain, the results are expressed in metric tons per square kilometre. The metric ton is equivalent to slightly more than the English ton, and there are 2.59 square kilometres to the square mile, so that to convert metric tons per square kilometre to English tons per square mile, it is necessary to multiply by 2.55, or roughly $2\frac{1}{2}$.

Table 25 shows the average monthly results that have been obtained during the year. It will be observed that the deposits collected at Broughton Modern Secondary School, Ladywell Hospital and Drinkwater Park are very similar in amount and indicate a considerable amount of atmospheric pollution, whilst, as to be expected, the deposit collected at Marple shows that the air there is relatively purer.

TABLE 25.

SOOT GAUGE OBSERVATIONS.
Monthly Averages—Metric Tons per Square Kilometre.

	Salford : Broughton M.S. School.	Salford : Ladywell Hospital.	Salford : Drinkwater Park.	Marple : Nab Top Sanatorium.
Rainfall in millimetres	65.4	66.0	71.7	66.3
Tar.....	0.13	0.10	0.08	0.06
Carbonaceous matter } Insoluble other than tar..... }	2.04 } 5.68	2.19 } 6.45	1.40 } 3.80	0.63 } 1.48
Ash	3.51	4.16	2.32	0.79
Soluble Matter	2.70	3.39	2.82	1.91
Total Solids	8.38	9.84	6.62	3.39
Sulphates } Included in soluble Chlorides } matter	1.00	1.29	1.16	0.74
pH	0.59	0.60	0.65	0.38
	4.5	4.2	4.1	4.4

Perhaps the most noticeable feature of the results is the acid nature of the deposits. This is shown by the pH value of the water collected. The pH due to the carbonic acid in the air would be about 5.5. Figures below this, therefore, indicate an acid deposit, and the higher figures an alkaline deposit. Considering that the Marple gauge is fairly well in the country and shows a general record better than those obtained in the City, its acid rainwater is noteworthy. This shows how widespread may be the drift of acid smoke from the cities.

TABLE 26.

pH VALUES FOR THE FOUR STATIONS.

Month.	Broughton M.S. School.	Ladywell Hospital.	Drinkwater Park.	Nab Top Sanatorium.
January	3.7	3.9	3.8	4.0
February	4.0	3.7	3.8	4.6
March.....	3.8	4.0	6.2	4.3
April	5.0	4.7	3.8	5.3
May	6.0	3.9	4.2	4.1
June	5.6	5.3	5.3	4.3
July	4.2	3.8	3.9	3.9
August	5.8	5.0	4.0	4.5
September	3.5	4.1	3.9	4.3
October	5.8	4.7	4.4	4.6
November	3.4	3.6	3.2	4.6
December	3.4	4.0	3.6	3.9
Average for 1948	4.5	4.2	4.1	4.4

SULPHUR POLLUTION.

Two hundred and eighty-two tests have been carried out during the year at Regent Road by the volumetric sulphur method and twenty monthly tests at Regent Road and Ladywell Hospital by the lead peroxide method. In the former process the sulphur dioxide present in the air is returned as parts per million, while in the latter method, atmospheric sulphur pollution is returned as milligrammes of sulphur trioxide per 100 square centimetres of exposed surface. Both processes show a very striking rise in the winter months, and the volumetric process, by which daily determinations are made, shows exceptionally high figures on foggy days, thus demonstrating the tenacity with which smoke pollution hangs over the City during these periods. See table below.

TABLE 27.

Month.	Milligrammes Sulphur Trioxide per 100 sq. cm. Daily Average.		Parts Sulphur Dioxide per million of air. Daily Average.
	Regent Road.	Ladywell Hospital.	Regent Road.
January	3.55	3.29	0.182
February	3.32	3.38	0.166
March.....	3.34	3.30	0.230
April	2.46	2.49	0.136
May.....	2.40	2.17	0.120
June	2.63	—	0.104
July	—	—	0.095
August	—	2.05	0.095
September	3.35	2.30	0.089
October.....	3.18	3.03	0.147
November	5.26	3.41	0.278
December	4.32	2.86	0.211

CARE OF MOTHERS AND YOUNG CHILDREN, DOMICILIARY MIDWIFERY, ETC.

The year 1948 may be described as a year of change and of gradual expansion of the service. New legislation has imposed new duties on the Department and transferred others.

The Appointed Day for the operation of the National Health Service Act, 1946, came and went with apparently no appreciable change in the working of the Department. Maternity and Child Welfare Centres continued. Midwives delivered babies and Health Visitors continued to visit them in their homes. However, as the year advanced, it soon became evident that things were not quite the same. The greatest change occurred in the work of the Health Visitor. She gradually took on the additional duties imposed upon her by Section 24 of the Act, and her visits were now not confined to the child under five, the school child and the tuberculous, but extended to the whole family. An important part of her work is now devoted to the "following-up" of the sick, particularly of cases discharged from hospital.

The co-operation which existed between the staff of Hope Hospital and the Department has, if anything, become closer. A detailed report on all cases discharged from the Children's Ward is sent by the Resident Medical Officer. This service which was inaugurated by Dr. Attwood during his period of residence at the Hospital, has proved most valuable and helpful both to the Medical Officers of the Department and Health Visitors. In return, it has been possible for investigations of and reports of home conditions to be sent from this Department to the members of the hospital staff.

In accordance with the proposals set out in the Development Plan, efforts have been made to find new or more suitable clinic premises. Negotiations have been commenced for the establishment of a new centre for Irlams-o'th'-Height at "Ingleside" in Oakwood Park. Approval has been obtained from the Ministries of Health and Education for the taking over of the unfinished Seedley Library and converting it into a combined Maternity and Child Welfare and School Medical Clinic. This will take the place of the new Centre which was to have been built in this area, but which had to be abandoned because of the outbreak of war.

Plans have also been prepared for the erection of two new Day Nurseries, one in Pendleton and one in Broughton.

An additional Ante-Natal session has been established at the Ordsall Centre and a Midwives' Ante-Natal Clinic at Encombe Place.

Unfortunately, it has not been found possible to improve the Dental Service for mothers and young children owing to lack of staff and suitable premises. Work on the new Dental Clinic at Encombe Place is proceeding.

An entirely new service taken over the the Council was that of Home Nursing. By arrangement with the Manchester and Salford District Nursing Institution, the district nursing service carried on at the Royal District Nurses' Home in Salford was taken over by the City Council on the Appointed Day. A report on the working of this service appears elsewhere in this Report.

Under the Children Act of 1948, which became operative on 23rd November, 1948, all the work in connection with adoptions and foster children was handed over to the Children's Officer in November.

The Nursery and Child Minders Act gave Local Authorities supervisory powers over Day Nurseries established in connection with factories and limited powers over people who day-minded young children.

The Training School for Part II of the Certificate of the Central Midwives Board, formerly carried on at the Royal District Nurses' Home, was also taken over.

One other new feature of which Salford may claim to be a pioneer was the inauguration of a Night Service for the Domiciliary Midwives. Details of this service are given later in this report.

Statistics.

The high birth rate which was a feature of the statistics for 1947 was not maintained this year. The total number of births was 3,761, as compared with 4,335 in 1947, giving a birth rate of 21.2 per 1,000 population (24.2 in 1947).

The Infantile Mortality Rate shows a new low record—42 per 1,000 live births—the lowest ever recorded in the City. The total number of infant deaths was 154, of which 86 (55.8 per cent.) occurred in the first month of life. Forty-one (47.6 per cent.) of these Neo-Natal deaths were certified as being due to prematurity, 25 (29 per cent.) to congenital debility and congenital defect and 10 (11.6 per cent.) were due to respiratory infections. Seventy-four of these deaths occurred in the first week of life and 32 in the first 24 hours.

The total number of stillbirths occurring in the City was 101, giving a stillbirth rate of 26.9 (27.4 per cent. in 1947).

Twenty-eight were notified by the Domiciliary Midwives and the remainder occurred in Hospitals and Nursing Homes.

Maternal deaths occurring in the City numbered seven, giving a Maternal Mortality Rate of 0.8, this is a very slight increase on that of 1947 (0.7).

DOMICILIARY MIDWIFERY SERVICE.

Twenty-six midwives were employed during the year. These include three midwives employed at the Royal District Nurses' Home and later taken over by the City Council on 5th July, and one temporary relief midwife. Two part-time maternity nurses were employed to assist in the nursing of lying-in mothers.

The number of confinements attended by these midwives was 1,790, as compared with 2,228 in 1947. In 138 cases (7.7 per cent.) the midwives were acting as maternity nurses. Gas and air analgesia was administered in 296 cases.

Making allowances for the amount of time lost by annual leave, sick leave, analgesia training, and attendances at refresher courses (195 weeks in the year), the average number of cases taken by each midwife was 81.8.

In addition to attendance at the actual confinements, the midwives also carried out the following duties :—

Ante-natal visits in the homes	6,528
Visits during the puerperium	34,145
Special visits	1,647

Attendances at midwives ante-natal clinics were 9,955.

Night Service.

This service, which commenced on December 3rd, is intended to obviate the necessity for the midwives to be on call each night in the week and also to prevent her being disturbed when she is off duty. It is also an advantage for the mothers and their relatives as they need telephone only one number between the hours of 9 p.m. and 9 a.m. in order to secure the services of a midwife.

Each midwife in turn takes one week's night duty at a central office. During this period of duty she receives all calls for the services of a midwife, calls out the midwife concerned, and arranges transport when necessary. She keeps a register of all calls received and submits a report to the Supervisor of Midwives each morning.

The remainder of the staff carry out their ordinary duties but are placed on rota for night calls, each midwife being "on call" on an average of about two nights per week.

Many expressions of appreciation have been received from members of the public and for the midwife it means that she is sure of at least four nights undisturbed rest in the week.

Notifications by Domiciliary Midwives.

The following notifications were received from the domiciliary midwives:—

<i>Medical Aid.</i> (a) For Mother.....	500
(b) For Infant	186
	—
Total	686
	—

A list of the conditions for which medical aid was sought is appended:—

For the mother :	Abnormal presentation	20
	Delayed first stage of labour	19
	" second " " 	61
	Placenta prævia	4
	Ante-partum hæmorrhage	27
	Post-partum hæmorrhage	17
	Uterine inertia	29
	Obstructed labour	16
	Ruptured perineum	179
	Retained placenta and membranes	16
	Rise of temperature	23
	Miscarriage or abortion	14
	Other causes for the mother	75
For the baby :	Premature birth	21
	Discharge or inflamed eyes	87
	Blisters or rash.....	5
	Other causes for baby	73

Stillbirths—28.

The causes of these stillbirths were as follows:—

Prematurity	5 cases.	(These included one macerated foetus and one anencephalic foetus.)
Macerated foetus.....	5	„
Hydrocephalus.....	3	„
Prolapse of cord.....	2	„
Difficult forceps delivery	1 case	
Toxæmia of pregnancy	1	„
Asphyxia due to inhaled meconium	1	„ (Post mortem performed.)
Cause unknown.....	10 cases	(Post mortem performed in one case.)

Neo-Natal Deaths—25.

The causes of these were as follows:—

Prematurity	13 cases	
Congenital debility.....	4	„
Congenital defect.....	2	„
Birth injury	1 case	
Pneumonia	3 cases	
Convulsions	1 case	
Other causes.....	1	„

Artificial Feeding of Infants.

Seventy-three notifications of the adoption of artificial feeding were received during the year, as compared with 43 the previous year. The reasons given were as follows:—

Poor lactation	39
Malformed nipples	10
Medical advice	9
Poor condition of mother.....	8
Previous breast abscess.....	1
Mother to resume work.....	2
Mother refuses to feed baby	4

Other Notifications in Connection with the Maternity Service.*Ophthalmia Neonatorum.*

Only 14 cases of Ophthalmia were notified during the year as compared with 23 in 1947.

Ten notifications were for cases attended by domiciliary midwives, one case was notified by one of the Assistant Medical Officers, and three were notified from Hope Hospital.

All recovered without any damage to vision and there were no cases under treatment at the end of the year.

Pemphigus Neonatorum.

Three cases were notified during the year. Two were removed to Ladywell Hospital and one was nursed at home. All three recovered.

Puerperal Pyrexia.

Thirty-seven cases were notified during the year. These included 30 from Hope Hospital, four cases attended by domiciliary midwives, and three notified by general medical practitioners as being due to abortion. Seven of the cases notified from Hope Hospital were also stated to be following abortion.

MATERNAL DEATHS.

The total number of maternal deaths occurring among Salford women was seven.

The causes of these deaths were as follows :—

1. Congestive heart failure.
Mitral stenosis.
Pregnancy and labour.
- *2. Uræmia.
Pyelo-nephritis.
Tenth day of puerperium.
- *3. Shock following cæsarean operation.
- *4. Congestive heart failure.
Sub-acute nephritis associated with pregnancy.
5. Cerebral hæmorrhage.
Eclampsia.
6. Pulmonary œdema.
Congestive heart failure.
Mitral stenosis in puerperium.
- *7. Mitral stenosis.
Ruptured ectopic pregnancy.

*A post-mortem examination has been carried out in cases marked thus.

CARE OF MOTHERS AND YOUNG CHILDREN.**Maternity and Child Welfare Centres.****Ante-Natal Clinics.**

There are now eight ante-natal sessions attended weekly by Medical Officers of this Department, and two sessions monthly at the Royal District Nurses' Home. There are also eight midwives ante-natal sessions weekly and two monthly at the Royal District Nurses' Home.

The total attendances at these sessions were :—

Medical officers sessions	7,043
Midwives sessions	9,955

Each mother at her first attendance at the ante-natal clinic has a specimen of blood taken for Kahn test, test for the Rhesus factor, and for Hæmoglobin estimations. One single specimen of blood is taken from each individual for all three purposes.

The total number of specimens taken during the year was 1,687.

If the Kahn test is found to be positive, then a Wassermann test is carried out and, if this is positive, a second specimen for a repeat Wassermann reaction is taken and clinical notes sent to the Pathologist. On receipt of a positive result the mother is sent for treatment. Twelve mothers (0·7 per cent.) were found to be positive on the repeat test.

One hundred and fifty-nine (9·4 per cent.) mothers were found to be Rhesus negative.

Results of the Hæmoglobin estimations were as follows:—

<i>Range of percentage of Haemoglobin.</i>	<i>Percentage of Mothers.</i>
40—49	0·5
50—59	1·5
60—69	5·5
70—79	18·0
80—89	48·3
90—99	21·6
100—110	4·1
110—	0·5

Post-Natal Clinics.

Nineteen post-natal sessions are held monthly. These are combined with ante-natal sessions, as the attendances for post-natal examinations do not justify, as yet, a full session being devoted to this work. The number of women attending for post-natal examination was 326, as compared with 248 in 1947.

This number is still too low. Much needs to be done to educate mothers on the necessity of a medical examination between the sixth and eighth week after confinement in order that any debility or defect resulting from the confinement can be treated or corrected.

The special post-natal clinic held at the District Nurses' Home for mothers delivered by midwives and pupils of Part II Training School continues to function. Of the 284 mothers who attended the ante-natal clinic, 116 attended for post-natal examination.

Since April, medical practitioners called out to the assistance of domiciliary midwives are required in certain cases to submit a report of a post-natal examination made at or about the sixth week after delivery—189 of these reports have been received.

Care of the Premature Baby.

A new premature baby nurse was appointed in October, 1947, and the following is a summary of the work for the year.

Number of babies referred by midwives	86
Number of babies referred by health visitors.....	33
	—
Total number of babies visited	119
	—
Number of babies fully breast fed when transferred to health visitors...	50
Number of babies partially breast fed when transferred to health visitors	7
Number of babies artificially fed when transferred to health visitors	42
	—
Total number of babies transferred to health visitors.....	99
	—
Number of babies transferred to hospital.....	9
Number of deaths in hospital	2
Number of deaths at home whilst premature baby nurse was visiting...	10
Total number of visits paid	1,559

The total number of babies notified by domiciliary midwives and nursed entirely at home was 84, and the following table gives birth weights and the number and percentage living at end of 28 days.

Birth Weight.	Number	Survived 28 days.	Percentage living at 28 days.
Below 2½ lbs.....	6	—	—
2½ lbs. to 3½ lbs.....	4	2	50%
3½ lbs. to 4½ lbs.....	19	16	84%
4½ lbs. to 5½ lbs.....	55	52	94·5%
All weights	84	70	83%

It is interesting to note the incidence of prematurity in the City as shown by the following table :—

Total births.	Total premature births.	Live births.	Live premature births.	Total incidence of prematurity.	Percentage of live premature births.
3,865	307	3,761	262	per cent. 7·8	6·9

Breast Feeding Clinic.

The number of mothers who have attended the clinic in 1948 is 209—an increase of 12 (6 per cent.) on the previous year.

The report deals with 77 mothers of babies born between July 1st to December 31st, 1947, and 132 mothers of babies born between January 1st and June 30th, 1948. Breast feeding was considered successful if continued up to the sixth month; failed if no breast feeds given after the second month, and fairly satisfactory if the baby was partly breast fed up to the sixth month.

	July-Dec., 1947.	Jan.-June, 1948.	Total.	Percentage.
Breast fed	20	44	64	30·62
Failed.....	24	54	78	37·32
Fairly satisfactory	24	17	41	19·63
No report	9	17	26	12·43
	77	132	209	100·00

Only two mothers are recorded as having failed to attend the clinic and both failed to breast feed.

Thirty-two mothers attended *once* only and of these :—

Breast fed	13 (39·4%)
Failed.....	14 (42·4%)
Fairly satisfactory	3 (9·1%)
No record	3 (9·1%)

Three babies developed pyloric stenosis and received hospital treatment. The mother of one was able to continue breast feeding after the baby was discharged, and the others failed to breast feed, but both had been giving complementary feeds before treatment in hospital.

There have been seven premature babies whose mothers attended the clinic and of these :—

Breast fed	1 (14·3%)
Failed.....	4 (57·1%)
Fairly satisfactory	1 (14·3%)
No record	1 (14·3%)

Of the four mothers who failed to breast feed their premature babies, one only failed to attend after the first visit, and all four mothers had been complementing the feeds before being referred to the clinic. One mother was advised by her own doctor to wean the baby and the others were able to partly breast feed their babies for six weeks, eight weeks and ten weeks.

Of the 209 babies who attended the clinic, one baby died at the age of six months after being admitted to hospital with broncho-pneumonia. It had been partly breast fed with complementary feeds until admittance to hospital.

Only one jaundiced baby is reported as having been referred to the clinic. It was fully breast fed but was admitted to hospital for investigation. No further details could be obtained, the mother having removed to an unknown address.

Child Welfare Centres.

Twenty-two child welfare sessions are held weekly, the total number of attendances being :—

Children under one year	34,335 (34,774 in 1947)
Children over one year.....	9,820 (8,472 in 1947)

The number of individual children who attended was 6,071.

The number of consultations held by Medical Officers was 9,168 for children under one year old, 4,026 for children over one year.

I am glad to be able to report that some progress has been made in securing other premises for use as child welfare centres.

The Minister of Health has approved the use of the partially completed library at the junction of Liverpool Street and Langworthy Road as a combined maternity and child welfare and school medical clinic.

Negotiations have been proceeding with the Parks Department and the Oaklan Social Club (who rent the premises) for the use of "Ingleside," Oakwood Park for two sessions per week.

Psychological Clinics.

Miss Schofield submits the following report on the work carried on by her at the two clinics at Regent Road and Broughton Centres :—

The two psychological clinics have been held on Mondays and Wednesdays throughout the year at Murray Street and Regent Road Centres. Very few mothers failed to attend when appointments were made, except when weather conditions were severe.

Number of patients seen—

	<i>New.</i>	<i>Subsequent Visits.</i>
Regent Road Clinic	91	135
Murray Street Clinic.....	99	90

Visits were made to the Great Clowes Street Nursery School and Wilmur Avenue Nursery to advise the staffs in cases of difficult children whose mothers were unable to attend clinics.

Sometimes it was possible to give talks to small groups of mothers in the weighing and waiting rooms. On several of these occasions, advice was given on individual problems and quite often a mother would ask for an appointment to talk over a problem privately. Most parents were co-operative. In a few cases, the less intelligent parents asked such questions as " But don't you give medicine or tablets ? "

Several health visitors have talked over problems on the districts, where mothers cannot or do not wish to attend the clinic.

Many over-anxious mothers with one child brought the largest proportion of problems, but often they were much happier after talking things over. New babies in the home accounted for many cases of jealousy, biting, aggression, etc. For many a family, the housing shortage makes conditions difficult, but even the frustrations of two women wanting the use of one stove at the same time, can be eased with an effort to understand each other's need and some adjustments made. Discussions on such problems have been helpful in a number of cases. Usually when a family gets into its own home, many problems vanish quickly.

There are still parents who think a child cannot be happy without expensive toys. On numberless occasions advice has been given on the use of simple things as toys and the part they play in the emotional development of a child.

Quite a number of neurotic parents have responded to treatment and recently three husbands have come with their wives, when off-duty, to thank me for help given. Each showed real willingness to help and to try to understand the psychological development of the family. There are still parents who look upon psychological treatment as suitable for mentally retarded or psychotic patients.

I feel that we ought to emphasise that these clinics are primarily " teaching clinics " where mothers can be taught to help in building children who are mentally and emotionally healthy and happy.

Birth Control.

Forty-eight mothers were referred for advice to the Manchester, Salford and District Mothers' Clinic. Thirty-four attended. The figures for 1947 were 49 referred and 27 attended.

Physiotherapy.

The year 1947-1948 has been on the whole a successful one for the Physiotherapy Department. There was and still exists an acute shortage of Physiotherapists, but the position was better than it had been since the end of the war, and it is possible that before long it will still further improve. Lack of accommodation still means longer waiting lists for children requiring treatment, especially in the Pendleton area, but when the new clinic is opened in Langworthy area, it should do much to remove this problem.

Artificial Sunlight, Remedial Exercises and Neumann-Neurode Exercises.

Attendances for the above forms of therapy have been well maintained. Unfortunately, there is still a waiting list and except in urgent cases children cannot be accepted immediately for treatment. Irregular attenders contribute to the delay by failing to complete the course and prolonging their treatment. "Follow-up" is maintained by written invitations and where necessary by home visiting. The conditions for which children are referred are :—

- Rickets :—Genu varum, genu valgum, late dentition.
- Respiratory diseases :—Recurrent bronchitis, recurrent upper respiratory catarrh.
- Cervical adenitis.
- General debility.
- Recurring sepsis.

During most of the year it had been possible to maintain four sunlight sessions weekly at Regent Road and Murray Street clinics, and two sessions at Police Street. This allowed a considerable number of schoolchildren and babies to receive treatment, but to enable each child to have treatment as soon as ordered by the Medical Officer, twice this number of sunlight sessions would be required, as during the winter months there might be a waiting period of as long as three months. Unfortunately, during the last year there appeared to be an increase in the number of knock-knee and bow-leg cases requiring treatment, and due to the urgency of these cases it was important that the children should receive treatment at once.

As so many mothers are now working it has been found desirable not to keep separate sessions for babies and school children, but to endeavour to fit in with the mothers' free time even if it means coming to a Monday or Thursday evening clinic.

The total number of cases attending the department were as follows :—1,784 for artificial sunlight, 654 for Neumann-Neurode exercises, and 663 for remedial exercises and massage.

The majority of the children who attended showed marked improvement. Forty-five failed to show any improvement owing to unsatisfactory attendance.

Ante-Natal and Post-Natal Exercises.

Classes for these exercises have been held throughout the year. Attendances are gradually improving.

Ladies' Public Health Society.

The members of this Association continued the service of dinners at Ordsall and Pendleton Centres. The Association are experiencing great difficulty in getting suitable helpers to serve the meals. At Ordsall Centre the Committee consists of one member who has "carried on" for several years with scarcely any help. She has notified me that she will not be able to continue the work after March next year as she cannot get any help and the number of mothers attending for dinners have become very much less.

The attendances at Pendleton Centre are better, but, here too, difficulty is experienced in getting suitable help.

The members of the Society have arranged a rota for the service of tea to the mothers attending the Ante-Natal Clinics at Regent Road on Thursday afternoons. This service is very much appreciated by the mothers and it is proposed to extend it to other Ante-Natal Sessions.

DAY NURSERIES.

The total number of places provided in the six Nurseries is 265—115 for children under two and 150 for children from two to five years.

The demand for accommodation in the Nurseries continues to grow. At the end of this year there were 519 names on the waiting lists. Although only priority cases are admitted, the number of these show a marked increase. In addition to the demand for places for children of unmarried mothers, widows, deserted wives and husbands, there has been an increasing demand for places from families who have removed into new houses with higher rents. With the removal to the new houses, new commitments in the way of hire-purchase payment for furniture are undertaken. To maintain these payments many of the mothers have gone out to work and seek accommodation in the Day Nurseries for their younger children.

With the present number of Nurseries it is impossible to meet the demand. Approval has been obtained for the erection of two more Nurseries at Hayfield Terrace in Pendleton and at Bradshaw Street, Broughton, and it is hoped that building of these will be started in the New Year.

Parents' Clubs.

During the year successful Parents' Clubs were formed at each of the Nurseries. Meetings are held at least once monthly and the attendances are good as far as mothers are concerned.

At one Nursery, meetings have been held once weekly during the winter months and the mothers helped in making decorations and wrapping parcels for Christmas and sewing and mending for the Nursery. Social evenings are held at intervals and are much enjoyed by both mothers and staff. Most of the evenings are quite informal. The Matron of the Nursery reports that these meetings have made a difference in the mothers' outlook on the Nursery. They are more co-operative and have done their utmost to help.

Another Matron reports that a successful Film Show was held at one of the parents' meetings. The films shown were "The Double Thread," "Playing with Fire" and "Old Wives' Tales." A discussion followed the showing of the films.

The Nursery staffs have found that mothers like to hear of the children's activities during the day and to tell the staff what the children do at home.

One of the Parents' Clubs had a very successful outing to Cheshire.

It is hoped that these Clubs will result in better understanding between the staff and the parents of the children attending the Nurseries.

Nursery Students.

During the year ten students completed their course of training and entered for the examination of the National Nursery Examination Board. Nine were successful and obtained posts as trained Nursery Nurses in Municipal Day Nurseries, Factory Nurseries or private homes.

Medical Inspection.

During the year 1948, the Day Nurseries have been visited each month.

Every child under the age of 15 months has been examined at each inspection and every child over 15 months old attending the Day Nursery has been seen regularly every three months until the age of three years, and then at six-monthly intervals unless progress was unsatisfactory or illness had occurred.

Every child attending the Day Nurseries has been immunised against Diphtheria and Whooping Cough, and a further safety injection has been given before the child leaves for school.

The general health of the children remains satisfactory but many of the babies under a year fail to gain weight steadily—the average weight of the one-year-olds being between 19 and 20 lbs.

The most noticeable health defects are :—

1. Minor respiratory ailments.
2. Enlarged tonsils.
3. Minor degrees of Genu Valgum and Flat Foot.

The condition of the teeth is satisfactory, being noticeably good in the children who have entered the nurseries as babies.

Parents are still not attending the clinics for special treatment—particularly those for Massage and Exercises and for Strabismus. This is due, in the majority of cases to difficulty in getting time away from work.

The children in the Day Nurseries have benefited from the U.V.R. treatment which has been given by the Matron in each of the Nurseries. Neumann Neurode Exercises have been given with good results to all the children in the Day Nurseries under the age of two years and to those over that age when recommended at the medical inspections. It has been possible to arrange for massage and exercises to be given in the nurseries for a few cases when the defect has been pronounced and the parent has been unable to attend the Special Clinic.

Cleanliness is good on the whole—verminous heads occur mostly in the same children. There have been very few cases of impetigo.

Incidence of Infection.

	Number of Cases.	Incidence. per cent.
Mumps	2	.74
Whooping Cough	3	1.3
Measles.....	99	33.3
German Measles	7	2.5
Chickenpox	11	4.1
Dysentery	51	19
Scarlet Fever.....	1	.4

THE UNMARRIED MOTHER.

During the year, 102 women expecting illegitimate children were notified and interviewed. Fourteen of these were married. That these do not represent all the cases which exist in Salford is shown by comparing the figure of illegitimate pregnancies known to the Department and the actual number of illegitimate births which occurred in the City.

	<i>Registrar-General.</i> <i>Number of illegitimate births recorded.</i>	<i>Health Department.</i> <i>Number of illegitimate pregnancies known.</i>
1946.....	239	101
1947.....	284	102
1948.....	217	102

The sources of notification were as follows:—Hope Hospital (49), Maternity and Child Welfare Medical Officers (9), Midwives (4), Welfare Officers (16), Civic Welfare Department (1), Welfare Associations (1), General Practitioners (1), own accord (21).

It is interesting to note that there is a slight increase in the number of women who came of their own accord—21, as compared with 15 in 1947.

The following table shows the incidence of illegitimate pregnancies amongst the age groups:—

Age Group.	Single Women.				Married Women.							
	No.	1st preg.	2nd preg.	3rd preg.	No.	1st preg.	2nd preg.	3rd preg.	4th preg.	5th preg.	6th preg.	7th preg.
16 years and under	5	5	...	...	...	...	...	...	...	...	...	...
17-18 years	12	12	...	...	...	...	...	...	...	...	...	...
19-20 years	18	17	...	1	...	...	...	...	...	...	...	...
21-25 years	26	23	3	...	5	4	1	...	...	...	...	...
26-30 years	18	9	8	1	2	2	...	...	...	...	...	...
Over 30 years.....	9	6	3	...	7	3	1	...	1	...	...	1

Of the 102 women interviewed prior to the birth of their child, 22 made application for the child to be adopted when born, nine cancelled their applications after the birth, one child was stillborn, and one pregnancy ended in abortion.

Fifty-four women had their babies and kept them.

Seventeen women were married prior to the birth of the baby.

Five women removed out of the area.

Three were referred to Oakhill Salvation Army Home.

Three were referred to St. Teresa's Home.

Two babies were stillborn.

Two women had abortions.

Four were not born by December 31st, 1948.

Twenty of these mothers have been successful in obtaining affiliation orders and two have cases pending.

The orders vary as follows :—

2	were	made	for	£1	per	week.
3	..	..	..	15s.	0d.	per week.
4	..	..	..	12s.	6d.	..
1	was	..	..	12s.	0d.	..
8	were	..	..	10s.	0d.	..
1	was	..	..	7s.	6d.	..
1	..	..	..	5s.	0d.	..

Twenty-seven mothers were interviewed for the first time *after* the birth of the baby.

Of these :

- Thirteen made application for adoption. (Nine children were eventually adopted.)
- Thirteen kept their babies.
- Four removed from the area.
- One child was placed in a Residential Nursery.

Of the 22 births pending from 1947 :

Twenty-one were born alive and one was stillborn.

Of these :

- Six married before the birth of the baby.
- One married afterwards.
- Eleven kept their babies.
- Two were placed in Residential Nurseries.
- Two applied for adoption, and one was adopted.

The need in Salford for a Hostel for the unmarried mother and her child is still very urgent. This need is for a non-religious hostel for short-term accommodation, e.g., three months.

- (a) For the expectant mother in unsuitable lodgings or turned out of her parent's home.
- (b) For the mother and child on discharge from the hospital until the mother can be rehabilitated, or until suitable lodgings can be found, or a residential post found where the mother can keep her child, or arrangements be made with relatives.

Accommodation is still provided by " Oakhill " Salvation Army Home and by St. Teresa's Convent, but there are many cases such as married women, widows, divorcees, girls with second illegitimate children, who are debarred by the conditions of admission from obtaining hostel accommodation at these two Homes.

The Illegitimate Child.

During the year 249 names have been added to the register of illegitimate children.

This makes a total of 848 illegitimate children in the City known to this Department.

The scheme for notifying the Medical Officer of Health of the area concerned when an illegitimate child moves there has been continued, and the majority of these removals have been confirmed.

ADOPTIONS, INFANT LIFE PROTECTION AND FOSTER CHILDREN.

On November 23rd, 1948, all the work in connection with Adoptions, Infant Life Protection and Foster Children was transferred to the Children's Officer appointed under the Children Act.

Adoptions.

During the year until November 23rd :—

- Forty-seven applications for assistance with adoption were received.
- Thirty-two were pre-natal applications.
- Twenty-four children were placed for adoption.
- Two mothers reclaimed their children.
- Ten were unsuitable for adoption.
- Fifteen cancelled their applications.
- Fifty-two applications from prospective adopters were received.
- Sixteen prospective adopters were deemed unsuitable.
- Twenty-four couples had children placed with them.
- Four applications were cancelled.
- Twenty-nine adoptions were made legal.

Foster Children.

In Individual Homes.

In January, 1948, there were eight registered children in individual homes.

During the year seven were removed from the register and twelve were added.

Thirteen children remained on the list on November 23rd.

In St. Teresa's Home.

At the beginning of the year there were 14 children in St. Teresa's Home.

During the year 14 children have been admitted and 10 children discharged, leaving 18 children in St. Teresa's on November 23rd.

REPORT BY SENIOR DENTAL OFFICER ON DENTAL TREATMENT FOR EXPECTANT AND NURSING MOTHERS AND YOUNG CHILDREN.

Nursing and expectant mothers are referred by the doctors in the ante-natal clinics, and arrangements are made by the dentists to undertake the necessary treatment. At present, the treatment is confined to operative procedures as facilities for the provision of dentures are not available. The majority of extractions are carried out under general anæsthetics administered by a specialist anæsthetist.

Plans are in hand for a routine dental examination of all ante-natal mothers to be made by a dentist at their first visit to the ante-natal clinics, but in view of the staff difficulties this will have to be deferred until there is considerable improvement in this direction.

During the year, 101 nursing and expectant mothers were referred for treatment and 93 were treated. Three hundred and thirty-three extractions were made and 27 fillings were inserted. Sixty-one general anæsthetics were administered.

Three hundred and ninety-seven pre-school children were examined of whom 187 were referred for treatment. Two hundred and ninety-eight extractions were made and 161 fillings were inserted.

HEALTH NURSING SERVICE.

Resignations.

Seven Health Visitors resigned during the year, three to take up similar appointments in Lancashire County, one each appointed to Hendon and Bristol and one for domestic reasons. One part-time Health Visitor (married) left after one week's service as her baby could not adapt herself to Day Nursery life.

Four Clinic Nurses left the service, one to be married, another to take up the appointment of Mental Health Visitor in Manchester, one transferred to the Student Health Visitor's Training Scheme, and the appointment in one case was terminated after prolonged sick leave and a report from the Medical Referee.

The Social Worker for Care of the Unmarried Mother and Her Child resigned for domestic reasons.

Appointments.

Seven full-time and one part-time Health Visitor and nine Clinic Nurses were appointed.

National Health Service Act, 1946.

Transfer of Staff.

One member of the staff was transferred to the Regional Hospital Board, Mrs. E. Robinson, Clinic Nurse in the Tuberculosis Dispensary.

Increased Duties.

Under Section 24 of the National Health Service Act, 1946, the work of the Health Visitor was extended to include care of the health of the household as a whole, a term which embraces a tremendously wide field, and includes close co-operation with General Practitioners and the visiting of their patients, co-operation with Specialists who need foreknowledge of the home and community lives of their patients to aid diagnosis; follow-up of certain cases after discharge from Hospital, special visiting of the aged and infirm, of handicapped persons, and of problem families. The Health Visitor is also expected to play a much greater part than she has done hitherto in the matter of health education.

Increase in Establishment of Health Visitors.

In view of the increased demands to be made upon the Health Visiting Staff in implementing the above-named Act, the appointment of six additional Health Visitors was approved.

Student Health Visitors.

All four student Health Visitors who completed their training in May, 1948, passed the Health Visitor's examination, and are serving as Health Visitors according to the requirements of the Salford Training Scheme.

The number of Health Visitors trained annually under the Scheme was increased from four to eight. It was felt that as repeated advertisements for Health Visitors failed to procure even one application, the only way to obtain sufficient staff to implement the National Health Service Act would be through the Health Visitor's Training Scheme. Under the new scheme, four students are trained in Manchester and Salford, and four at any training school of their own choosing. All are bound under contract to serve as Health Visitors in Salford for the same period of time after qualification.

The financial terms of the agreement were also revised and increased, and the period of compulsory service after qualification increased from six to twelve months, with an option on the Student's services for a further period of six months if the Corporation so desires. Conditions relating to salaries and increased length of service to take effect from April 1st, 1949.

It is of interest to note that, apart from the fact that Student Health Visitors are bound under contract to serve as Health Visitors for a certain length of time after qualification, a good proportion apply for posts on the permanent staff. Particulars relating to this aspect of the Scheme since its inception in 1943 are given below :—

Number of students trained	22
1. Left after fulfilling contract :—	
(a) To take up similar post in this county.....	2
(b) To take up public health nursing abroad.....	1
(c) To return to hospital nursing.....	1
(d) To take up a senior public health nursing post	1
(e) To get married	1
2. Applied for cancellation of contract after obtaining Health Visitor's Certificate	2
Applied for permanent posts on Salford Health Visiting Staff	14

Use of Clinic Nurses in Health Visiting Field.

Although the Health Visitors' Training Scheme has been of inestimable value in recruiting Health Visitors to Salford, the increase in staff needed to implement the National Health Service Act could not be met by this means alone. The Minister of Health therefore granted to the Council a dispensation until December, 1948, for six Clinic Nurses to undertake certain Health Visiting duties in relation to children over the age of 18 months. It is likely that a further dispensation will be sought until 1950 when it is hoped that sufficient trained Health Visitors will become available through the training scheme.

Handicapped Children.

Handicapped children are now receiving special care, and are visited more frequently than in recent years. A Health Visitor visits the Occupational Centre in Broughton each week and takes an active interest in the welfare of all those attending.

Home Visiting Maternity and Child Welfare.

Visiting to mothers and children under five years has been curtailed somewhat, but has been carried out well despite the extension of the Health Visitors' duties into other fields. It is the routine home visiting which suffers when new proposals are put into operation. During 1948 there were 42,403 home visits paid by the Health Visitors.

Maternity and Child Welfare Clinics.

The work of the Health Visitor in the Clinics has been revised to include the individual advice to every mother attending the Centre. This has not been possible in all Centres owing to pressure of other work. It is hoped that the appointment of Clinic Helpers, envisaged for 1949, will relieve the Health Visitor of such duties as weighing of children, acting as receptionist to Medical Officers and like duties, and so enable her to fulfil her proper function, that of adviser and teacher, in the Centre.

Tuberculosis Visiting.

Visiting of new and old patients suffering from Tuberculosis has been carried out as in former years.

Ambulance Sessions.

Health Visitors or Clinic Nurses accompanied the ambulance 120 times during the year. This work entails the Nurse sitting in the ambulance during journey to and from Sanatoria, to and from Sanatoria to Out-Patient Departments of other hospitals, and to and from patients own homes to the Tuberculosis Dispensary for X-ray. Each occasion averages half-a-day's work, and means that the equivalent of full-time work for 11 weeks has been spent by a trained Nurse acting as Ambulance Attendant—work which could quite well be done by a trained Attendant.

Refresher Courses.

Refresher Courses have taken place as follows :—

Manchester Public Health Department—Week-end Course, April 10th, attended by 18 Health Visitors.

Lancashire County Council—Two-day Course in March, attended by one Health Visitor.

The Superintendent Health Visitor visited Denmark to study the public health and social services of that country. The visit was arranged through the Royal College of Nursing.

Special Investigations.

A follow-up survey was made in respect of the babies born during the week March 3rd to 9th, 1946, who were the subject of a special investigation arranged by the Royal College of Obstetrics and Gæyncologists Population Investigation in that year.

Care of the Aged and Infirm.

It is generally agreed that given proper home care, many aged persons could be prevented from becoming bed-ridden, and thus save hospital beds for more acute cases. Problems arising from this work during the half-year include care of ambulant incontinent patients who have become careless in personal and domestic hygiene, particularly those who live either alone, or who let rooms; care of patients living alone not seriously ill, but who should not be left alone at night; care of patients living alone who need hospital care but are waiting for beds. It is intended that the Health Visitor to be appointed in 1949 for the Care of the Unmarried Mother and Her Child shall undertake the special visiting and social work connected with these aged people.

The main apparently insoluble problem is to find

- (a) Home Helps willing to tackle the indescribably dirty conditions in some cases; and
- (b) someone willing to remain all night with aged people who cannot safely be left alone and who either refuse Institutional care, or are waiting for hospital beds.

HOME NURSING SERVICE.

Under Section 25 of the National Health Service Act the duty of providing a Home Nursing Service has been imposed upon all Local Health Authorities.

In accordance, therefore, with proposals submitted to and approved by the Minister of Health, the District Nursing Service formerly carried on at the Royal District Nurses' Home by the Manchester and Salford District Nursing Institution was taken over by the City Council on the Appointed Day. In the arrangements made for the transfer of the Service, it was agreed that the Royal District Nurses' Home should continue to be affiliated to the Queen's Institute of District Nursing and should retain its status as a Key Training Home for Queen's District Nurses.

Staff.

On the Appointed Day the staff included the Superintendent, two assistant Superintendents, and eleven Nurses (nine female and two male), seven of whom were fully qualified Queen's Nurses and four were Queen's Nurse Students.

For the purpose of the Service, the City is divided into eleven districts as follows :—

1. Lower Broughton.
2. Higher Broughton.
3. Bury New Road.
4. Albert Park.
5. Broad Street No. 1.
6. Broad Street No. 2.
7. Charlestown.
8. Irlams-o'th'-Height.
9. Weaste.
10. Ordsall.
11. Greengate.

One Nurse is allocated to each district.

The average number of patients cared for by each Nurse is 20, and as morning and evening visits have to be paid in some cases, this is considered the maximum number of cases each Nurse can take. The time spent on a visit varies from a few minutes to 1½ hours. Some patients are visited twice daily, some once daily, some twice weekly, and some weekly depending upon the nature of the illness.

Summary of Work carried out from 5th July to 31st December.

The number of patients on the books on the Appointed Day was 158. During the period 5th July to 31st December, 848 cases were attended by Home Nurses, the total number of visits paid being 15,445.

On December 31st, there were 195 patients being visited.

Queen's Student Nurses.

Three candidates were successful in the examination for the Queen's Roll, and two were accepted for training.

Night Service.

Arrangements were made for one member of the staff to be available for urgent night visits, and all Medical Practitioners were notified of this extension of service.

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ALMONER'S REPORT FOR 1948.

The operation of the National Health Service Act has affected the administration of the Almoner's Department in several ways. Two of the Departments served, namely, Venereal Diseases and Tuberculosis have, since the 5th July, 1948, become part of the Regional Hospital Board services and the Home and Domestic Help Schemes have been consolidated into one Grant-Aided Service administered by the local authority. The social work in connection with patients suffering from Venereal Diseases and Tuberculosis has been retained by the local authority and forms part of the "Prevention of Illness, Care and After-care" Scheme.

Venereal Diseases.

A statement of the follow-up work done in connection with V.D. patients will be found elsewhere in this report.

Tuberculosis Department.

With regard to Tuberculosis, the effects of the change-over have been rather far-reaching and it might be of interest to compare the former service in Salford with that now operating.

The Almoner was, from September, 1943, until 4th July, 1948, responsible for the administration of the Government's scheme of allowances to patients suffering from this disease. The allowances were paid only to patients accepting or awaiting approved treatment. All changes in the family's financial circumstances were reported to the Almoner and as a result she was brought very frequently into contact with patients and, as was equally important, with their families. This gave countless opportunities to help, advise and encourage patients throughout their treatment. It is now the concern of the Ministry of Insurance and National Assistance Board to make financial provision for patients who have "given up remunerative work in order to undergo treatment," but payment is not conditional upon a patient accepting that treatment. Variations in the family's financial circumstances are now reported to the Assistance Board with the result that the patient is seen less often by the Almoner.

The practice of interviewing all new patients, of course, continues; regular co-operation with the health visiting staff and the Assistance Board is maintained. Visits are paid whenever necessary and the staff is always available to meet patients or relatives. Nevertheless, it cannot be denied that it is much more difficult now than formerly to establish and keep that friendly, trusting spirit between the Almoner and the patient's household which had, since 1943, been so useful and rewarding a feature of the work, and saved patients much unnecessary worry.

After-Care Fund.

Another effect of the Act has been the moderation of the uses of the Committee's After-Care Fund. This formerly provided for occasional expenditure of small sums of money for clothing, bedding, removals, emergency expenses, etc. Occasionally loans were made when various statutory payments had, for some reason, been delayed. In no case was the amount given very large but it was always closely related to treatment or rehabilitation and was given promptly when the need was observed. It secured the patient's friendly co-operation—for example, the provision of pyjamas frequently hastened a patient's admission to the sanatorium, thus securing his isolation and enabling him to start his treatment without delay. The purchase of a pair of shoes or trousers sometimes kept a man at Nab Top Sanatorium when he was threatening to take his own discharge because his own were worn out. Whilst the National Assistance Board staff are always most helpful when a special need is brought to their notice, their help is financial, and is not accompanied by any advice. It is not evidence of someone's personal interest in their treatment or rehabilitation.

Home Help Service.

Sir Wilson Jameson, Chief Medical Officer to the Ministry of Health, said recently that the present shortage of hospital accommodation and housing difficulties made the need for an adequate Home Help Service a matter of great urgency. Housing difficulties were being solved and would probably overtake the solution of hospital troubles. It was therefore very necessary to use the Home Help Service (a) to keep people out of hospital, and (b) to allow quicker discharge for those who were in. The Home Help Service, he said, would meet with universal support in that it was not confined to any social class but was being required and used by all.

In Salford, every effort is made to have regard to individual and public needs and to use the Helps available to the greatest advantage, e.g.—

(1) Elderly bed patients who are not in need of treatment have often been cared for by a Home Help and a District Nurse's time or a hospital bed has been saved.

(2) Single women having the care of an elderly mother or father have been enabled to carry on with their own work or profession. In one case, a teacher would certainly have been obliged to remain at home to care for her bedfast mother had no Home Help been supplied.

(3) In the case of younger people, the service had often enabled a husband to continue with his work, secure in the knowledge that his home and children were being cared for during his wife's illness or confinement.

(4) In post-operative cases, particularly mothers of young children, the skill of surgeons and nurses has been made more effective by the patient having adequate help with her household duties on discharge from hospital.

The Service increased during 1948, both in respect of the number of women employed and in the greater variety of cases served. Requests for help have been received from a wider circle of sources, including employers of labour, officers of all social services, both official and voluntary, general practitioners and church workers. Perhaps the most gratifying requests are those received from members of the public who have had good reports of the assistance given to their neighbours or relatives. There is no better recommendation than that of a "satisfied customer" and it is now felt that the Service advertises itself.

The Almoner is very keen to select, as Helps, only women of sound character, with a capacity for understanding. There has of necessity been a certain amount of trial and error in this connection. Unfortunately, it is not possible to select the type of household to be served and more than one Home Help, who was herself an excellent housewife, has been so appalled by the dirt and squalor of the house to which she was sent that she decided she was unable to continue in the Service. Happily, most of the householders served are so very grateful that the Home Help feels well repaid for her efforts and stimulated to give of her best to help the family over their difficulties. The gratitude of some elderly people is almost pathetic; often their illness has been much aggravated by intense loneliness and the visit of the Help is eagerly awaited. This is particularly noticed during the winter months when bad colds, rheumatism, etc., prevent the old folk from getting out. Much kindly "welfare" work is performed gratis by the Helps—particularly for the aged, e.g., an occasional visit to the cinema; a child sent along to do a little shopping on the day that the Home Help is engaged elsewhere, and on one occasion a Home Help leaving a dance and visiting her old lady during a storm because she had heard her say that she was "frightened of thunder."

It is pleasing to learn that the local W.V.S. is anxious to establish a "Meals on Wheels" service in the City. The staff of the Home Help Service will be happy to be associated with them and very much hope that a start may be made before the winter of 1949.

It is proposed during 1949 to arrange for a short course of training for Home Helps with a view to filling the gaps in their knowledge of housecraft and making them good "all-rounders." Some instruction will be given in the care of young children and invalids. It is also hoped that by means of talks given by various officers engaged in the Health Services, the Helps will learn of the many facilities available to help the families they serve.

The welfare of the Home Helps is constantly borne in mind by the Almoner. It is sometimes found that women are more willing than able to undertake the work. A careful watch is therefore kept upon their health and the duties are frequently rearranged so that no Help will be kept too long on a trying case. Meetings are arranged at which the Helps may meet each other and discuss any matters which will help the service to be more effective. Helps are encouraged at all times to bring their views to the notice of the Almoner and her assistants and considerable effort is made to make them feel that they are important members of the health team.

The following figures indicate the extent of the work done during 1948:—

Home Helps.

Cases assisted—

Maternity	157
Pregnancy	8
Mothers with young children	27
Elderly and infirm patients.....	77
Tubercular patients	6
Miscellaneous	2
Number of investigations into financial circumstances.....	439
Visits to homes of applicants	643

Tuberculosis.

Interviews re—

Food Priorities.....	1,097
Free milk	366
Rehousing.....	33
Clothing	42
Miscellaneous	86
Allowances (prior to 5th July, 1948).....	256
National Assistance (since 5th July, 1948)	87
Visits to homes of Tubercular patients.....	182
Nursing equipment loaned	11
Patients assisted with beds and bedding	4
" " " spectacles	1
" " " dentures	2
" " " removal expenses	1
" " " clothing	50

Convalescence.

School children	168
Pre-school-age children.....	5
Mothers with one child.....	5
" two children	7
" three children	4
" four children	2
Interviews	290

Assistance with Clothing (excluding Tubercular Patients).

Children	75
Adults	19

Maternity and Child Welfare.

Miscellaneous help and advice	25
Arrangements for care of children whilst mother in hospital....	6

VACCINATION.

have to report the following particulars in respect of persons vaccinated (or vaccinated) in Salford during the period 5th July, 1948, to 31st December, 1948:—

at 31st Dec., 1948.	Under 1.	1 to 4.	5 to 14.	15 or over.	Total.
, born in years	1948.	1944 to 1947.	1934 to 1943.	Before 1934.	
Number vaccinated	612	28	2	4	646
Number re-vaccinated	—	—	1	33	34

For comparative purposes, the following particulars are submitted:—

Number of children under 14 who were successfully vaccinated in Salford during six months ended 30th June, 1948	899
Number of certificates of vaccination received during the year 1947.....	2,879

It should be noted that the vaccinations carried out during 1947 represented 74.6 per cent. of the total births and that the corresponding percentage for the period from July, 1948, to 31st December, 1948, was only 34.4.

Under the National Health Service Act, 1946, vaccination ceased to be compulsory throughout the country as from 5th July, 1948. Prior to this date Salford had been for many years a "well-vaccinated" area, about 70 per cent. of the infant population being vaccinated each year.

On the appointed day, local health authorities were presented with exactly similar problems to those which they had overcome during the last 20 years in relation to immunisation against diphtheria. The success of this campaign depended largely upon individual persuasion but, with this difference, that the dangers of diphtheria were comparatively fresh in the minds of the public, many of whom had personal recollections of sicknesses and deaths of friends and relations. On the other hand, smallpox was a disease of far-off days and distant countries and the voice of the anti-vaccinator had long been unheard in the land.

Discussion

The results of the present study are in agreement with those of other workers who have reported that the incidence of disease is higher in the winter months. This is probably due to the fact that the majority of the population is indoors during this time, and the spread of infection is facilitated. The results also show that the incidence of disease is higher in the urban areas than in the rural areas. This is probably due to the fact that the urban areas have a higher population density and a higher incidence of contact between individuals.

VACCINATION

The results of the present study are in agreement with those of other workers who have reported that the incidence of disease is higher in the winter months. This is probably due to the fact that the majority of the population is indoors during this time, and the spread of infection is facilitated. The results also show that the incidence of disease is higher in the urban areas than in the rural areas. This is probably due to the fact that the urban areas have a higher population density and a higher incidence of contact between individuals.

Year	Urban		Rural	
	1950	1951	1950	1951
1950	10	12	5	8
1951	15	18	10	12

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The proposals relating to infant vaccination in Salford approved by the Ministry of Health provided for the following :—

- (a) (1) Recording the condition as to vaccination of all infants in the area, including infants vaccinated by general practitioners.
- (2) Issuing notifications to attend clinics, etc., for the purpose of vaccination.
- (3) Preparation of lists of infants who have not been vaccinated, for suitable action by the medical and nursing staff of the department.
- (4) Supplying the data necessary for the preparation of statistics required by the Minister of Health or for other purposes.
- (5) The issuing to parents or guardians of infants, to registrars of births, general practitioners and other interested persons, of documentary information relating to vaccination.
- (6) Controlling the obtaining and issuing of material for vaccination.
- (7) Notifying the parents or guardians of all infants in the area of the facilities available for vaccination by way of both organised sessional arrangements and through general practitioners performing individual vaccination. In the case of children born in the area this notification to be given by means of :—
- Documents issued by registrars of births to person registering births.
 - Documents forwarded to parents or guardians during the first four months of life of the children under their control.
 - By personal advice given to parents or guardians by medical and health visiting staffs at clinics, centres, etc.
- (8) All practitioners in the area to be given an opportunity of taking part in the vaccination service.
- (9) The aim of the vaccination service will be to secure the protection against smallpox of as large a section of the infant population of the area as possible.

(b) Facilities for vaccination to be available at specified times at specified maternity and child welfare clinics and centres. The sessions to be so arranged as to meet the needs of the whole area from the points of view of both geography and time.

(c) The aid of health visitors, midwives, teachers in nursery schools and other officers holding similar positions of influence with parents or guardians to be used to the utmost possible extent for the encouragement of vaccination.

Periodical meetings to be held at which progress will be reviewed and new methods of propaganda and persuasion explored. Appropriate statistics to be brought to light before the notice of the individual groups, the members of which will be impressed with the desirability of using all their influence to encourage vaccination.

Health Visitors to visit the homes of infants and to attempt to persuade the mothers or guardians to allow their children to be vaccinated.

(d) and (e) Information as to facilities for vaccination, including national publicity material to be kept before the public by the methods indicated in paragraph (a) above, and periodical notices in the press and by the display of public notices from time to time, to be found to be necessary.

The success of the campaign for immunisation against diphtheria had given rise to the belief that similar good results would ensue if vaccination became voluntary instead of compulsory. Up to the present, as will be seen from the figures quoted above, results have been disappointing and it is interesting to consider the reasons for the poor results up to date.

Under the Vaccination Acts, the only method of avoiding vaccination was through the making of a statutory declaration of conscientious objection to vaccination by a parent. Furthermore, most parents had come to regard vaccination as a recognised practice which could be accepted in the interests of their children. Public vaccinators, too, were glad to encourage vaccination in their own interests as well as in those of their patients.

The mere fact that vaccination was compulsory had helped to create in the minds of most members of the public, a belief, not merely in its efficacy, but also in its necessity, in spite of the reduction in outbreaks of smallpox and the relative mildness of cases.

It is probable that the sudden sweeping away, by a stroke of the pen, of the compulsory factor, has removed from the minds of the public the sense of urgency and desirability which had been developed during the long period of operation of the Vaccination Acts.

The number of general practitioners who have agreed to take part in the vaccination service in Salford is 130 and these gentlemen have loyally observed their agreement and furnish records in the form prescribed by the Minister of Health. It was understood, however, that the Minister would settle the fees to be paid to practitioners by local health authorities in respect of the furnishing of the records. Up to the present, however, the fees have not been fixed and it is open to doubt whether, in these circumstances, the maximum amount of zeal in the field of vaccination can be expected from the practitioners concerned.

It will have been noted that one of the proposed methods of notifying parents and guardians of infants of the facilities available for vaccination was by means of documents issued by registrars of births to persons registering births with them. The Minister of Health has taken the view, however, that the occasion of registering the birth of a child is an ill-chosen time for effectively impressing upon the parents, pre-occupied with other more immediate matters and problems attendant on the birth, the importance of thinking about vaccination when the baby is a few months old. He has also indicated that the Registrar General would not see his way to arrange for local registrars to issue special vaccination leaflets. In view of the difficulty which is being experienced in prevailing upon parents to allow their infants to be vaccinated, it is regretted that this avenue of approach has been closed.

For various reasons it has not been possible to provide facilities for vaccination at clinics maintained by the local health authority. It is possible that had such arrangements existed more infants might have been vaccinated. Staffing and other difficulties, however, stood in the way. But it is certain that every means of using personal persuasion by health visitors and others has been used to the utmost in the endeavour to realise the aim of the vaccination service, i.e., to secure the protection against smallpox of as large a section of the infant population of the area as possible.

The general acceptance of vaccination for so many years has probably developed in the minds of many people a partial blindness to the fact that it is not a practice encouraged for its own sake but as a definite protection of the individual and, through the majority of individuals, of the nation, against the scourge of smallpox.

The people of these islands, through long immunity from outbreaks of disease on a large scale (due almost entirely to the operation of the Vaccination Acts), do not realise that only a few generations ago smallpox was a plague, probably as widespread as measles is to-day, but incalculably more dangerous to the lives and appearance of its victims. If at any time the majority of the population are unvaccinated, it is possible that smallpox, the risk of the introduction of which from foreign countries has been increased by air travel, may gain a strong foothold before the emergency mass-vaccination schemes of local health authorities can take effect.

The staff of the Health Department will do all they can to encourage the practice of vaccination in Salford but, while admitting that the period of trial of the new methods has been short, it is felt that the latter may have the effect of reducing the standard of vaccination to a new low level. If this unfortunately should prove to be the case, smallpox may well regain some of its old power and virulence.

IMMUNISATION.

The immunisation scheme which had been so successful in previous years was continued during 1948 with good results. Nine Diphtheria immunisation sessions were held in clinics and centres each week in addition to which Health Visitors and Clinic Nurses immunised in the homes of children in cases where clinic attendance was impossible.

During the past year the number of Salford children immunised continued to rise and the following satisfactory percentages have been attained.

Four thousand one hundred and five children were immunised increasing the percentages from 84.6 per cent. at 31st December, 1947, to 88.91 per cent. at 31st December, 1948.

The following chart shows the results of the year's work.

	0-5 Years.	5-15 Years.	0-15 Years.
Number immunised during 1947	4,264	1,008	5,272
Number immunised during 1948	3,760	345	4,105
Decrease	504	663	1,167
Total number immunised at 31st December, 1947	11,589	22,098	33,687
Total number immunised at 31st December, 1948	12,782	22,875	35,657
Increase	1,193	777	1,970
Per cent. immunised at 31st December, 1947.....	74.80%	90.90%	84.60%
Per cent. immunised at 31st December, 1948.....	79.87%	94.92%	88.91%
Per cent. increase	5.07%	4.02%	4.31%

Immunisation of Children 0-5 Years.

In the 0-5 age group the number immunised was 504 below the 1947 figure but the percentage increased by 5.07 per cent. A large proportion of this number can be accounted for by the fact that there were 455 fewer children born in Salford in 1948 than in 1947, therefore there were less to be immunised. To maintain the 1947 percentage of 74.8 per cent. approximately 2,570 immunisations were necessary. As 3,760 children were immunised the percentage rose by 5.07 per cent.

As 79.87 per cent. has been reached in this group it leaves few to be immunised as there is always 10 per cent. of the children under five years who are too young for diphtheria immunisation.

Since June, 1945, when the present scheme commenced, a card has been made out for every child born in the city. Of the total of 13,333, 9,394 have been immunised, 1,881 were not old enough for diphtheria immunisation, 277 have received their first injection, 50 have been postponed for various reasons and 290 or 2.1 per cent. are definitely against immunisation and are most consistent in their refusal. The remainder have either removed from the city or died.

The Minister of Health has asked for 75 per cent. of children under five years to be immunised by the end of 1949. This target was passed in Salford early in 1948.

Immunisation of School Children 5-15 Years.

The number of children immunised in this age group was 345, showing a decrease of 663 on the comparable figure for 1947. At the same time the percentage has risen from 0.9 per cent. to 94.92 per cent., an increase of 4.02 per cent. This again is due to the fact that there are few children aged between 5 and 15 years who have not been immunised. The population figure for this group for 1948 showed a decrease of 202 on the 1947 figure, so as the percentage is based on the population figure there was bound to be an increase in the percentage of children immunised.

The Education Authority have continued to supply names of all children entering school at five years. Diphtheria immunisation records are then checked and letters sent to the parents of all children, immunised in infancy, who now require a reinforcing dose. One session per week has been devoted to this work and during the year 1,224 reinforcing doses were given. This is an increase of 941 over the number given during the previous year.

Of the 4,105 children immunised during the year, 158 were immunised by general practitioners, 18 in day nurseries, four in hospitals, 1,491 in their own homes, 2,091 in child welfare centres, 336 in schools and seven in school clinics.

Another year has passed during which there have been no deaths from diphtheria in the city and a new low record has been established for notifications of diphtheria. Only five cases were notified during the year and in no case had the child been immunised. This would be a creditable achievement in any city, but in one such as Salford which is essentially an industrial area and where there is so much over-crowding, it is most praiseworthy.

In addition to diphtheria immunisation, 773 children under five years have been immunised against whooping cough, an increase of 245 over 1947.

SCABIES.

During the year 1948, treatment was given to 328 adults, 213 school children and 5 children under five, making a total of 636 persons treated at the Scabies Treatment Centre.

Notifications. There has been a considerable drop in the notification of Scabies during the past four years as will be seen from the following figures.

1945	...	219	notifications.
1946	...	160	"
1947	...	68	"
1948	...	33	"

HEALTH EDUCATION.

During the year Health Education activities consisted in the main of the production of an explanatory booklet dealing with the Health Services provided by the Corporation under the National Health Service Act, 1948. This booklet, of which some 5,000 copies were produced and distributed, described simply and yet fully the provisions of the new National Health Service, and was, we believe, much appreciated by many people, who, in spite of public notices and announcements, tended to be very confused over the many details of the service.

Colourful displays were maintained in the four exhibition windows of the Regent Street offices of the Health Department, the subjects varying from Diphtheria Immunisation, Vaccination, Maternity and Child Welfare to a typical children's Christmas scene. Talks and lectures were regularly given by health visitors at the various clinics and a provision for a new form of parentcraft lessons was made for the senior girls of one of the schools. The enthusiasm with which these talks were received shows that there is a pronounced need for this type of health teaching and similar courses are planned for both boys and girls in 1949.

A full-time Health Education Officer was appointed in November but did not take up his duties until January, 1949. In making this appointment it is felt that Salford is well in the forefront in recognising in a practical way the increasing emphasis which is being placed upon the modern conception of "positive health."

The following Agency has received the following information in its report dated 10/1/50. The information was obtained from the files of the Agency and is being furnished to you for your information. The information is being furnished to you for your information and is not to be used for any other purpose.

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TABLE

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1945	115
1946	120
1947	125
1948	130

HEALTH EDUCATION

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MENTAL HEALTH SERVICE.

The National Health Service Act, which came into operation on 5th July, 1948, placed upon the Local Health Authority the responsibility for providing an efficient Mental Health Service within its area.

The responsibilities thrown upon the Local Health Authority by this enactment are as follows:—

(a) The initial care and removal to hospital of persons who are dealt with under the Lunacy and Mental Treatment Acts.

(b) The ascertainment and (where necessary) removal to institutions of mental defectives, and the supervision, guardianship, training and occupation of those living in the community.

(c) The preventive care and after-care of all types of patient so far as this is not otherwise provided for.

For the purpose of carrying out these duties, the following detailed arrangements are necessary.

1. The provision of the services of "Duly Authorised Officers" for the purposes Sections 14, 15, 16 and 20 of the Lunacy Act, 1890.

2. The provision of the services of "Duly Authorised Officers" for the purposes the appropriate sections of the Mental Treatment Act, 1930.

3. For the following purposes, under the Mental Deficiency Act, 1913:—

Section 30 (a): The duty of ascertaining what persons within their area are defectives subject to be dealt with under the Act.

Section 30 (b): The duty of providing suitable supervision for defectives ascertain in accordance with paragraph (a), and, if supervision affords insufficient protection, of taking steps to secure that they are dealt with by being sent to institutions or placed under guardianship.

Section 30 (c): The duty of providing suitable training or occupation for defectives who are under supervision or guardianship.

Section 30 (d): The duty of making provision for the guardianship by orders under the Act.

For the purpose of carrying out its duties under the above-mentioned arrangements, the Health Committee have appointed a Mental Health Sub-Committee which consists of the whole of the members of the Health Committee.

The Health Committee also appointed the undermentioned staff who commenced duty on 5th July, 1948, namely:—

- One Senior Mental Welfare Officer and Duly Authorised Officer.
- One Duly Authorised Officer and Mental Welfare Visitor (Male).
- One Duly Authorised Officer and Mental Welfare Visitor (Female).
- One Mental Health Visitor.
- One Supervisor of an Occupation Centre.
- One Assistant Supervisor of an Occupation Centre.

The whole of the staff mentioned above had the advantage of considerable experience in the Mental Health Service prior to their appointment by the Corporation. The first of these officers were engaged individually and housed in the Public Health Department, 143, Regent Road, Salford, where the headquarters of the service is situated. The

staff of the Occupation Centre were engaged as part of the transference of the Occupation Centre at the Broughton Union Church Rooms, Salford, 7, which, prior to 5th July, 1944 had been maintained by the Lancashire Mental Hospitals Board.

The scope of the activities controlled by the Mental Health Service for Salford may be gauged from the following table which gives details of the numbers of patients in various categories, namely :—

Mental Illness—	Male.	Female.	Total.
In Mental Hospitals	353	416	
Home Supervision	16	35	
After-care	108	122	
	<hr/>		1,050
 Mental Deficiency—			
In Certified Institutions	142	91	
Under Statutory Supervision.....	265	174	
Voluntary Supervision.....	155	109	
Attending Occupation Centre	13	14	
Under Guardianship	2	1	
On Licence	6	13	
	<hr/>		985

The duties arising from the care and supervision of these patients may be summarised as follows :—

1. The tabulating and recording of patients already known to the Department.
2. Domiciliary services, i.e., the ascertainment of cases of mental illness and mental deficiency.
3. The statutory supervision, training and occupation of defectives in the community, those on licence from institutions, or under Orders of guardianship.
4. The obtaining of detention and reception orders under the Lunacy and Mental Treatment Acts, 1890-1930, and the Mental Deficiency Acts and Regulations, 1913-1948.
5. The conveying of patients suffering from mental illness, or mental deficiency, to hospitals or certified institutions.
6. The maintenance of a home supervision service for those patients who, by the co-ordination of the doctor, relatives and the Department, can be cared for at home and thus prevent, wherever possible, admission to hospital.
7. Provision of an after-care service for patients who have been in hospital for mental illness.
8. The maintenance of a service outside ordinary office hours in order to deal with cases requiring urgent attention.
9. The obtaining of statistical ascertainment and neurological reports of patients admitted to hospitals or institutions.
10. The making of reports on patients granted leave of absence on trial from hospital, prior to a probable discharge.
11. The making of reports on home conditions and prospects of employment relating to patients who are due to appear before the respective hospitals committees with a view to being discharged.
12. The making of reports regarding patients from certified institutions who are allowed absence on licence for the purpose of taking up employment, or for those granted short holiday licence.
13. The making of statutory and periodic reports.
14. The making of statutory reports on those patients residing in the community or under Orders of Guardianship.

Appointment of Doctors for Examining Patients.

During the period under review, the Committee found it desirable to appoint several doctors for the purpose of examining patients under Section 13 of the Lunacy Act, 1890, and Section 5 of the Mental Treatment Act, 1930. These appointments have expedited the admission to hospital of those patients to whom the legal provisions in question applied.

Home Supervision—Care and After-Care.

Special attention has been given to the after-care of patients who have been discharged from hospitals, following mental illness, or institutions. Those who have never suffered from these complaints may find it difficult to realise the confusion which is likely to arise in the minds of patients discharged from such institutions upon their return to the normal life of the community.

In some aspects the conditions of life have changed considerably especially for this class of patient. For example, applications for monetary help have now to be made to the National Assistance Board instead of the Public Assistance Committee. Sickness benefit is paid under the National Insurance Scheme instead of by an approved society. The use of a ration book is not always readily understood. In the home, too, unexpected difficulties may arise; the long separation of husband and wife or other members of the family have severed bonds of sympathy and common interest between the patient and those remaining at home. It is in matters such as this that the guidance of an experienced social worker may prove to be of inestimable benefit by applying his or her knowledge to similar cases, the aim being to avoid the necessity for re-admitting the patient to hospital. In the vast majority of cases, it has been found that by assisting the patient to adjust himself to the new conditions met with outside a hospital or establishment, he can, in time, fit himself into the ordinary life of the community. If this can be brought about, there is a three-fold gain—firstly, to the patient himself who can enjoy life more fully—secondly, to the community who gain by his contribution to industry—and thirdly, a gain to the community by avoiding the necessity and expense of maintaining such a patient in a mental establishment.

It gives the writer much satisfaction to be able to report that out of 51 patients dealt with in the period 5th July to 31st December, 1948, no fewer than 37 have been able to remain at home and to carry out their normal daily duties.

Aged Patients.

The writer reports with regret that, for far too long, it has been common for aged people to be admitted to the Mental Observation Wards of Public Assistance Institutions under an order of the Lunacy Act, and there to spend their remaining years. Many so-called mental wards are full of such aged people who could be adequately cared for in "Aged People's Homes." Quite often this practice causes much unhappiness to the patients and their relatives, and it has the effect, of course, of reducing the accommodation available for cases which definitely need mental treatment.

At this point, it is thought desirable to refer to the serious delays which sometimes occur in securing the admission of patients to hospitals, particularly in the case of female patients. It is understood that these delays, which are increasing rather than diminishing, are due largely to the shortage of nursing staff rather than to the lack of physical accommodation, and as long as there does not seem to be any possibility, in the near future, of an increase in hospital staffs, any method of reducing the demands upon mental hospital accommodation should be explored. The effect of such demands upon the patients themselves, and their relatives, are, by ordinary standards, extremely harmful. In the waiting

period the patient may change for the worse, relatives may be unable to leave their homes or even to follow their employment. Instances have arisen where the conduct of the patient has caused a relative to attempt to commit suicide. Where the household contains children, the effect upon their minds of the presence of a mental patient who is seriously ill can well be imagined.

Mental Deficiency.

Mental deficiency can be defined as "a state of incomplete mental development of such a kind and degree that the individual is incapable of adapting himself to the normal environment of his fellows in such a way as to maintain existence independently of supervision, control, or external support."

On 5th July the number of mental deficients for which the Local Health Authority accepted responsibility was 956. On this basis the proportion of mental deficients per 1,000 members of the population is eight, which compares favourably with the whole of the country the average for which is eight to ten per 1,000.

In 1948 there was much leeway to make up owing to the fact that the war years and their aftermath had made it impossible to devote full attention to the work of supervision. Visiting had reached a low level with the result that in a large number of cases records were incomplete, and in some cases patients who had removed had not been traced. During the period under review your officers made every effort to bring their records up to date as the basis of their future work.

It is satisfactory to note that many patients who had been notified to the Authority by the Education Committee, and who later came under "Statutory Supervision" had been found to be living normal lives. In a number of cases, patients had married and produced families who were attending school with success. Others again had served in the various branches of the Forces during the war.

Licences.

It is the practice for mentally deficient patients, who appear to the authorities of a certified institution to be able to live normally outside the institution, to be allowed to be absent on licence for specified periods. Should such patients conduct themselves in a satisfactory manner while on licence, and learn how to fully care for themselves, they are usually discharged from the Order under the Mental Deficiency Act.

The patients are kept under supervision by the staff of the Local Health Authority both at their homes and in their occupations. Occasionally, of course, a patient misbehaves and, in such cases, is returned to the institution; but it is satisfactory to be able to report that the issuing of the licences, in the majority of cases, was proved to be justified. During the period under review, the number of patients allowed to be absent on licence in this area was 23.

Occupation and Training.

As previously intimated, the Local Health Authority accepted from the Lancashire Mental Hospitals Board the maintenance of an Occupation Centre for mental defective at the Broughton Union Church Rooms, Great Clowes Street, Salford, 7, on 5th July, 1948

The number of patients on the register on 5th July, 1948, was 13, which by the end of the year had increased to 27. The staff at the date of transfer consisted of one Supervisor and one Assistant Supervisor. The Centre was open each day from Monday to Friday inclusive (apart from the school holidays) from 10.0 a.m. to 4.0 p.m. The types of training given being as follows:—

Habit training, sense training, physical training, speech training, handwork, music and movement, story telling, training in simple domestic tasks, table manners, etc., provision for periods of free play and of rest and relaxation.

Although most of the patients attending the Centre were low-grade defectives, quite a number showed marked improvement in gait, posture, simple spelling and writing, hygiene and behaviour. By arrangement with the Education Authority a mid-day meal was supplied for each child at a daily charge of 5d. per head, subject to reduction in cases of necessity, in accordance with the scale adopted by the Council.

The Local Health Authority have not arranged a special transport service for conveying children to the Centre, but have left it to the parents of the children attending to bring them by the public transport service. In suitable cases, i.e., where the parents have a low income, travel tokens for use on the public transport service have been issued to parents.

There is no doubt that Occupation Centres for Mental Defectives serve a very real need in that they ensure that these children, who might otherwise suffer from lack of attention or contact with their own kind, are given some hope of living reasonably happy lives. There is always the hope too, that the training which they receive at the Centre may lay the foundation for enabling them to earn their own livings in some simple form of occupation as they grow older.

It is hoped that, during 1949, it may be possible to provide an additional Centre in Liverpool Street, Salford, 5, which would be attended by approximately 30 children living in that part of the city.

Special attention is being given to the cases of those patients who, by reason of disability, are unable to leave their homes in order to attend an Occupation Centre, and who, therefore, are not in receipt of any tuition. The writer has under consideration the question of recommending the Committee to appoint a Home Teacher for such patients.

STATISTICS.

The following table shows the number of new cases dealt with under the Lunacy and Mental Treatment Act, and the Mental Deficiency Act during the period 5th July to 31st December, 1948:—

Mental Illness.			
	Males.	Females.	Total.
Admitted to Mental Hospitals	49	40	
Admitted as temporary patients	—	—	
Admitted as voluntary patients	19	16	
Admitted as private patients.....	—	1	
Admitted under Urgency Order	—	1	
Removed from one hospital to another nearer home to allow of relatives visiting.....	2	2	
After-care patients.....	34	30	
Home supervision.....	16	35	
Reported to Civic Welfare for admission to "Homestead".....	8	6	
Awaiting admission to hospital.....	2	3	264

The first part of the report is devoted to a general survey of the situation in the country at the end of 1917. It is found that the country is in a state of general depression, and that the people are suffering from want and distress.

The second part of the report deals with the question of the land. It is found that the land is in a state of general neglect, and that the people are suffering from want and distress.

The third part of the report deals with the question of the labour. It is found that the labour is in a state of general neglect, and that the people are suffering from want and distress.

The fourth part of the report deals with the question of the industry. It is found that the industry is in a state of general neglect, and that the people are suffering from want and distress.

The fifth part of the report deals with the question of the commerce. It is found that the commerce is in a state of general neglect, and that the people are suffering from want and distress.

The sixth part of the report deals with the question of the education. It is found that the education is in a state of general neglect, and that the people are suffering from want and distress.

The seventh part of the report deals with the question of the health. It is found that the health is in a state of general neglect, and that the people are suffering from want and distress.

State of Affairs

The state of affairs in the country is generally one of depression and distress. The people are suffering from want and distress, and the country is in a state of general neglect.

1	2	3
4	5	6
7	8	9

The report concludes with a summary of the findings and a recommendation that the government should take steps to improve the situation in the country.

Mental Deficiency.

1. Admitted to institutions.....	6	—	
2. Admitted to Place of Safety.....	—	1	
3. Placed on "Licence" in the community	2	7	
4. Allowed Short Holiday Licence.....	3	2	
5. Renewal of "Order of Guardianship"	—	1	
6. Escape from licence and returned to the institution	—	1	
7. Patients reported to the Authority by the Educa- tion Committee	6	3	
8. Awaiting admission to institution.....	3	2	37
			—
			301
			—

The number of visits and reports made from the 5th July to the 31st December is as follows :—

These figures include the whole of the Department.

Visits.....	1,127
Reports.....	579
New case records completed	184

AMBULANCE SERVICE.

From the 1st January, 1948, up to and including the 4th July, 1948, the Ambulance Services for the City, both for emergency and infectious diseases purposes, were controlled by the Health Committee. The services were controlled and situated as follows :—

- (a) *General Ambulance Service*—by the Central Garage Department, on behalf of the Health Committee, at Buile Hill Park, where two ambulances were situated.
- (b) *Infectious Diseases Service*—by the Health Department, at Ladywell Hospital, where three ambulances were situated.
- (c) *Accident, etc. Service.* The Police Ambulance Service remained responsible for the following types of case :—
 1. Street accident cases.
 2. Emergency cases in which there was a possibility that proceedings on criminal charge might follow or where there were reasonable grounds to believe that a death had not been due to natural causes.

On 5th July, 1948, the National Health Service Act, 1946, laid upon Local Health Authorities a new duty, namely, "to make provision for ensuring that ambulances and other means of transport are available, where necessary, for the conveyance of persons suffering from illness or mental deficiency, or expectant or nursing mothers, from places in their area, to places in or outside their area."

In Section 79 of the Act, illness is defined as including "mental illness and any injury or disability requiring medical or dental treatment or nursing."

The new duty referred to other means of transport as well as to ambulances, and thus enabled the authority to provide cars for sitting cases.

Two points of special importance relating to the new service are :—

- (1) that the service is to be free ; and
- (2) that the responsibility for providing a suitable vehicle rests upon the Local Health Authority in whose area the need arises.

The proposals of the Salford Local Health Authority for the performance of their duty under the Act, as approved by the Minister of Health, included the following provisions :—

The Local Health Authority to maintain the following services—

I. *General Ambulance Service—to be consolidated and maintained at the Central Garage, Buile Hill Park, Salford.*

- (a) Service maintained at the Central Garage, Buile Hill Park, Salford, prior to 5th July, 1948.

This service comprised two Buick 35 h.p. chassis converted to ambulances and one Austin h.p. car.

- (b) The service maintained at Hope Hospital, Salford, prior to 5th July, 1948.

This service comprised one Morris 25 h.p. ambulance and one Austin 27 h.p. ambulance.

- (c) The ambulances formerly attached to the Police Ambulance Service.

The ambulances transferred from the police comprised one Humber 27 h.p. ambulance ; one Bedford 27 h.p. ambulance ; one Ford 22 h.p. ambulance ; one Ford 24 h.p. ambulance.

II. *Infectious Diseases Ambulance Service—to be maintained at Ladywell Hospital, Salford.*

The service maintained prior to 5th July, 1948, at Ladywell Hospital, Salford.

This service comprised three Ford V-8 22 h.p. ambulances.

The proposals also provided that the service maintained at the Central Garage would be operated by the Central Garage Committee at Buile Hill Park, on behalf of the Local Health Authority, in accordance with arrangements made by the Health Committee. It was further provided that mutual assistance would be provided in case of necessity in conjunction with the Lancashire County Council and the Manchester Corporation.

At the request of the Lancashire County Council, the Salford Ambulance Service has continued to operate in a portion of this area. Suitable financial arrangements have been made.

I have pleasure in reporting that an efficient Ambulance Service has been maintained in Salford as from the "appointed day," i.e., 5th July, 1948, in spite of the initial difficulties attending the inauguration of the new General Ambulance Service.

The public have been provided with a service which has met every eventuality which has arisen and there is no doubt that the new service must have proved an immense boon to the public, particularly to those who have needed to make frequent visits to hospitals for out-patient treatment. Looking backwards, it is difficult to understand how, before the introduction of the service, patients contrived to make their way to hospitals, some of which were situated long distances from their homes.

Although many long journeys have been made by the public service, there is no evidence to suggest that it has been abused to any material extent or that medical practitioners or others in responsible positions have failed to exercise their judgment, as to need and urgency, in asking for the use of ambulances and other vehicles for their patients.

It is understood that in certain areas differences of opinion have arisen between authorities as to which ambulance service should deal with certain classes of patients, but it is not too much to say that in their dealings with surrounding areas Salford has had no experiences of this nature. Any such difficulties which might have arisen have been obviated by commonsense and tact on the part of the responsible officers.

The following statistics show the extent of the work carried out by the Ambulance Service between 5th July and 31st December, 1948.

Period 1st January to 4th July, 1948—

Ambulances.....	5
Total number of calls	4,629
Total mileage	26,041

Period 5th July to 31st December, 1948 :—

	<i>Ambulances.</i>	<i>Cars.</i>
Number of vehicles	11	2
Total number of calls	7,549	1,298
Total mileage	62,454	17,866

SENIOR STAFF.

Health Department—1948.

Medical Officer of Health J. L. BURN, M.D., D.Hy., D.P.H.

Maternity and Child Welfare Medical Officers	}	M. SPROUL, M.B., Ch.B., D.P.H.
		K. M. BOYES, M.B., Ch.B., D.P.H.
		M. MAXWELL-REEKIE, M.B., Ch.B.
		E. P. BROWN, M.B., Ch.B.

Public Analyst A. N. LEATHER, B.Sc., F.R.I.C.

Chief Administrative Assistant E. WOOD, C.R.S.I.

Chief Sanitary Inspector P. PILGRIM, C.R.S.I.

HEALTH DEPARTMENT,
143, REGENT ROAD,
SALFORD, 5.

SCHOOL HEALTH SERVICE REPORT.

TO THE CHAIRMAN AND MEMBERS OF THE EDUCATION COMMITTEE.

Mr. Chairman, Ladies and Gentlemen,

"Is it well with the child?"—2 Kings, 4. 26.

You will expect me as School Medical Officer to give a clear answer to this age-old question. It is difficult to do so for I do not pretend that the means at my disposal enable me to give a complete estimation of the health of the children. So much of the health care is given by medical practitioners and our opportunities and techniques for assessing the real health of the children are, as yet, inadequate. I am glad to say that some endeavour is being made in Salford regarding research into the problem of discovering more exact and refined tests of health of the school child.

I can, however, give a summary of some impressive facts:—

1. Ninety-three per cent. of the children were regarded by the school medical staff as being of good and average nutrition (37 per cent. "good" and 56 per cent. "average"), whilst 7 per cent. were classified "poor."

2. Over 95 per cent. of our school children are immunised against diphtheria (I would like to be able to claim the credit for my staff in this achievement but I cannot entirely do so. Our task is much easier nowadays. Public enlightenment is greater and the backing which the Ministry of Health has given in a national immunisation campaign has "softened up" the resistance against immunisation). Over 1,200 children received a "boosting" or strengthening dose to keep their immunity against diphtheria at a high level.

3. There was no visitation of epidemic disease during the year and, in particular, no outbreak of polio as in the previous year.

4. Mass miniature radiography of school leavers resulted in the discovery of one case only of pulmonary tuberculosis.

5. I can say that many of our services improved in size, scope and efficiency, e.g., there was an increase of attendances at our foot clinics of 400 per cent. A big development of the year was the provision of "*clinics on school premises*". Thus, during the year, in ten schools, we took the clinic service to the child and avoided bringing the child to the clinic, saving a great deal of school time (and perhaps some truanting?) and the risk of road accidents. Much more important, the change brought a much larger number of children into the net cast by the School Health Service. Whenever we open a clinic in a school, the numbers attending jump up. This is all to the good. Teachers are encouraged to send children, not merely for treatment of "spots," but to ask the advice of the nurse. There is thus fostered a closer link between teacher, nurse and school health service.

An interesting development was the use of the *rapid survey*, not only by medical officers, but by selected school nurses, who visited the school, saw perhaps a hundred children per session, noted those who were below par or suffering from more obvious ailments, e.g., otorrhœa, squint, a scabies rash, impetigo, children "not feeling well," and children referred by the teacher for listlessness. A rapid survey by nurses is a new departure, justified, it is claimed, by its results. In all cases an appointment was made specially for the medical officer to examine these children at the clinic, when the medical officer has better facilities and more time to devote to the individual child. Whilst this work is on a very small scale at present, I consider it is a new and efficient screen through which our children should regularly pass. By it we can separate those children who are not well and get a thorough examination done. There is no waste of time of the child or of the doctor in examining numbers of fit children who form the large majority. Of course, all children are examined at routine inspections; nevertheless, the regular rapid "screening" of children is valuable.

The work of *specialist clinics* (established during the time when the hospitals were under the control of the local authority) continue to give good and great service. Close link was maintained with the *hospital* service, following the change-over. Some of our children need *cure* as well as care. I am sure you would like to thank all members of the hospital staffs who have contributed to the health of the children who have come under their attention. It must be of the greatest satisfaction for you to know that over 26,000 children under your care can have, if it is needed, specialist attention of the best quality—and only the best is good enough for our children. I will give an example—the *special investigation clinic*, where arrangements have been made, for some years, for school children suffering from various conditions which need investigation to be examined by a Consultant Physician.

In the past, school medical officers have, quite understandably, "played for safety," sometimes excluding many children from games and exercises. But with the aids of modern science (such as electro-cardiography) and, above all, the advice of the consultant, over 80 per cent. of the children formerly excluded from school games have been allowed to resume, and no harmful consequences have followed. This change must have meant much to the child. Here is one example of the help which modern aids to diagnosis benefit the school child; for exclusion from games, or even from school itself, did much harm to the child's mind in making him feel he was "different" from others. Years ago, one or two children have been literally, as well as metaphorically, wrapped up in cotton wool on account of a suspected heart lesion. The school medical staff welcome the authoritative opinion which allows these children to take full part in school activities.

A venture which will find its place as a permanent feature in our service was the establishment of a *special class* (in an ordinary school) for *partially deaf children*. From the words and pictures in the text you will read of the work done (page 33). The provision of this class resolved a dilemma which often faced the School Health Service in the past—whether, on balance of all

the factors involved, it would be better to send the child to a residential school for the deaf (with the consequent separation from home and family life, which we believe so fundamental to child health and happiness) or to leave him in an ordinary class (one of perhaps 40 children) in an ordinary school, where the teacher could not hope to give him much individual teaching and care. Already we have been able to withdraw one child from a residential school and allow her to attend the special class, and live at home; the child has benefited educationally and in every other way. This child could never have been left in an ordinary school. This does not imply any criticism of residential special schools which will always have a very real place in our services, particularly with children suffering from total or very severe deafness; but I would like to plead for an extension of the special class system. It is remarkable how some of the children have responded to greater individual care, . . . their personality "blossomed," according to another observer's opinion.

This class also has a useful function to serve in that some children may be sent for a short time to see precisely how deaf they are. Accustomed and enthusiastic as we are in the use of mechanical aids such as the audiometer, we are not afraid of confessing to the limitations of any form of mechanical testing. It is necessary, in the occasional case, to have some weeks' observation before arriving at a satisfactory decision.

The benefits of this type of class should not be restricted to the deaf but might also be copied in the case of other handicaps, such as the partially sighted, and in wider provision for the educationally sub-normal. This class, with its specially qualified teacher, also serves as a meeting place for the weekly teaching of lip reading for children from other schools who have defective hearing. It is very wise that these children should learn lip reading in early life, when learning is easier, as many of them will have to rely on lip reading later on.

Five hundred and twelve *tonsillectomies* were done during the year. This number is too high. I am anxious to improve our arrangements for the care of children referred for tonsillectomy. This operation has been done in rather a wholesale way in the past. Now has come the time to give each child individual and thorough clinical investigation, not merely of the state of the tonsils but also of the whole physical health. At the time of writing a weekly pre-tonsillectomy clinic has been established, where each child is reviewed by a pædiatrician (on the staff of the Department of Child Health, University of Manchester, thanks to the co-operation of Professor Gaisford) and the consultant for ear, nose and throat diseases.

I am glad that you have appointed a *travelling teacher* for the few "home-bound" children that we have. We have nine children in Salford who, on account of such conditions as major epilepsy, severe spastic paralysis, hydrocephalus, congenital deformities and severe rheumatic disorders, are unable to attend school; so school should be brought to them.

Investigations on lines of previous working were carried on, of the amount of *noise in schools*, using a special noise meter (page 48). This work is of interest in showing how noisy schools are. In one school you will see that traffic noises

interfere considerably with the education of the children, whilst noise from a nearby railway station—the shunting of engines and “letting off steam”—interrupts the lessons.

Instead of concentrating *orthopaedic services* entirely at hospitals, an orthopaedic clinic was established on school medical clinic premises, before the appointed day. This move was much appreciated by all concerned, particularly by the parents and those children who have to attend frequently to see the surgeon and the physiotherapist staff.

During the year we find that the more *special surveys* we do, the greater the need is shown for more care for the children. It is not sufficient to wait for defects in school children to turn up, we must go out to seek them. Thus, special surveys have been held on the incidence and type of foot defects, of scabies and louse infestation, on audiometric testing of hearing.

Your *foot health services* expanded greatly. Much preventive as well as curative work has been done. Chiropodists are not merely corn-curers. Feet are sometimes badly treated by the makers and sellers of shoes. Yet it is worth while doing something about it, for the child will have the same pair of feet throughout life and it is remarkable how the feet respond to sensible care. Photographs in the text show how deformities can be corrected.

Verminous infestation surveys and services were continued. We hope we have reached the hard core of the infestation problem which still defeats our efforts to wipe it out. It is a sad and sobering thought that although we have paid more attention than most authorities to the eradication of these conditions, and conducted campaigns, we cannot claim a total victory over them. For these disorders, we have certain methods of diagnosis, first-class remedies and treatment services, and a good follow-up of the family in every case; yet our special surveys of every school child carried out yearly still continue to show a small but persistent number of difficult cases (who are not always the same children). It is a source of wonder (and disappointment) to me that this should be so, for if this be true of simple disorders, how much more difficult it will be to eradicate some other more serious diseases. We must realise clearly that although much has been done, much remains; all the talk nowadays of the School Health Service having achieved its initial objects is silly.

In spite of the advances made, our needs are great and urgent. We have scarcely touched the problem of the *hygienic environment* of the child in school. Last year our *sanitary inspectors* carried out a *survey* of 66 schools and canteen and kitchen equipment, revealing, as was expected, the great deal to be done to bring these premises up to a reasonable standard. A list of 14 foolscap pages of closely typed facts indicated the vast amount of work required. Our premises are possibly neither better nor worse than those of any other industrial area, yet, in spite of the war and post-war difficulties, it is not fair to the child that the environmental conditions should remain without drastic action being taken. Highfalutin' phrases about social medicine are all very well; we in Salford still have the school lavatories to attend to.

However, much as we may deplore the condition of a few of our schools, let us extract comfort from a historical note (compiled by William Axon, member of the Salford School Board in 1883) showing how they must have improved greatly in the last century :—

“ The common day schools in the year 1835 were run under appalling conditions, many were dark and ill-furnished and some even exposed to noxious effluvia. One master closed the shutters, locked the door and marched triumphantly to the beer shop, where he spent most of his time during the following fortnight. In one school of about 30 scholars, were neither forms nor desks, the place of forms being taken by an old bed (for it was parlour, kitchen and all) to which was added an assembly of old boxes turned upside down. The place of the desk was supplied by an old three-legged table, at which sat the master and where there was barely room for three to write at once.”

Over a hundred years ago, the beautiful children we see portrayed by the great artists were much more likely to be those from wealthy and aristocratic families.



Nowadays, by first-class health services, such children may be found, if not round every street corner, certainly in every school.

To get the proper perspective it is good to note the progress made in the physical condition of the children. Take Margaret McMillan's description of children in 1894, in Bradford :—

“ Children in every stage of illness, children with adenoids, children with curvature, children in every stage of neglect and dirt and suffering. The condition of the poorer children was worse than anything described or painted ; the half-timers slept exhausted at their desks and from courts and alleys children attended school in all states of physical misery.”

How difficult it is to reconcile descriptions of children such as these, which must have applied in some measure to Salford children, with their present physical development. Take the picture of the schoolboys' football team who



beat all comers. It is not easy to recognise these boys as the product of mean streets, of smoke evil, the grime and gloom of a city, and the poor social and economic conditions of the inter-war period.

It is of interest to note that functional tests such as the Hanging Bar Test carried out on the children in the so-called poor schools have shown that their muscular development seems superior to that of other children, although there was a clear impression in the minds of the investigators of a deficiency in weight and height. A further report is being compiled on this.

It is unusual in school medical reports to describe the work of *sanitary inspectors*. They have, however, made many improvements, not only by a new system of detailed inspection of the meat and foods used in school meals, but by the keeping of school premises free from various forms of infestation from the fly and beetle and, among other matters, in the supervision of the purity of the *milk supply*. During the year, 111 visits of inspection were made to pasteurising plants operated by suppliers of milk to schools; 126 samples were taken for chemical analysis; 26 samples were taken for test of correct pasteurisation.

The appointment of a *food inspector*, to deal with the food which is sent into the school canteens, has been of real value. Once an amount of meat showing tuberculous infection had slipped past the barriers of inspection elsewhere. Our experience has proved the value of having food inspected at the place where the food is consumed, and not merely to rely on an inspection somewhere else.

Our *Parents' Club* is flourishing and growing in numbers. Many new ventures and visits were successfully arranged (page 36). The first Christmas Party for handicapped children was held in the Art Gallery, and gave much happiness to those who attended. Father Christmas's visit rounded off an exciting afternoon. We remember the lines of Masfield:—

" And he who gives a child a treat,
Makes joy-bells ring in Heaven's street . . ."

During the year there has been a big increase in the *provision for convalescence*. A party of Salford children benefited greatly through the kindness of the Swiss and Belgian peoples—kindness which breaks through barriers of space and country. Their hosts sometimes were poor people, but they received our children into their homes and their hearts.

A new feature of our work was the sending of 72 *handicapped children* for a summer holiday at the Prestatyn camp. I cannot speak too highly of the usefulness and pleasure given to these children. Many of them had never been away from home; one pathetic problem child, for example, suffering from a severe mental and physical defect had been in its parents' daily care since birth—surely in such a case a holiday is needed by *both* the parents as well as the child. Three members of our school nursing staff travelled with the children to give every care. I am glad to say that plans are made for an extension of this happy provision in the coming year.

I would refer your particular attention to the analysis which was carried out during the year of the incidence of handicapped children in the various categories, compared with the figures of the Ministry of Education (page 27). I have extracted our figures of the incidence of handicaps in Salford, and compared them with those of the Ministry, estimated for the whole of the country. Perhaps the most striking item is the apparent low incidence of educationally subnormal children in Salford (1 per cent.) compared with the 10 per cent. estimate of the Ministry of Education—I would hasten to point out that this apparent discrepancy indicates the urgent need for adequate ascertainment and investigation of our children.

The *mass miniature radiography* examination of school leavers was continued. Approximately 1,200 school leavers were examined. Only one case of early pulmonary tuberculosis was discovered in a girl aged 14 years, who is now receiving treatment in a sanatorium. All the work involved was worth it when this one case was discovered. It is good to know of the satisfactory condition of the chest in the other children.

The incidence of *tuberculosis* in school children is one which must receive greater attention; the raising of the school-leaving age to 15 means that school children come within an age group more susceptible to tuberculosis. The recent increase of cases in children elsewhere must be an "alert" for us all, and emphasises the need for watching the nutrition and welfare of the child. The overcrowding which occurs in many classrooms is detrimental to health, and the watch must be maintained against sanitary defects, some of which, for example, have been found as a result of a recent survey.

I feel that in recording the services provided I am giving far too glowing an account of the facilities which exist for the health of the school child. But the staff are very conscious of the *defects* of your services. There is a long way to go before even a satisfactory stage in school hygiene and health services is achieved.

Among the *improvements* which might be effected are an improvement in health education services; the reduction of common infestation (surely now practicable with use of modern remedies?); improvement in premises, both school and clinic; ample facilities for routine medical inspection—there is need for time and opportunity to confer with parent and teacher on the greater care of individual children. We must not care for children in a "mass" way.

Much investigation is required to illuminate the links between mental and educational retardation, and physical defect. Much precise knowledge is needed on the why and how of the differences in health between children of parents in the poor economic group as compared with those in a more fortunate group.

One of our greatest needs is the extension of *health education* in our children. Disquieting incidents (of which one example is that, of the number of unmarried mothers who were confined in Salford in 1947, there were three who were *under sixteen* years of age), occurred in some adolescents, showing the great need for more and better instruction in fundamental health facts. I am disappointed (and, frankly, not a little frightened) by the perils and opportunities of error which face our children when they enter adult life. When they go into the world, they must be armed with the weapons to fight such health hazards as may confront them. The appointment of a *Health Education Officer* may focus more attention on this problem. I am glad to say that provision was made for a new form of parentcraft lessons to senior girls and we plan similar courses for both girls and boys in 1949. I end, as I began, on a biblical note—we should "train up the child in the way he should go and he shall not depart from it."

The introduction to my report is longer than usual; this is in consequence of a remark I heard that people never *read* school medical reports, they merely glance at the introduction.

I wish sincerely to record my appreciation of the work done by all members of the staff, medical, specialist, nursing, auxiliary and administrative. This report really is *their* report. I am particularly grateful for the courtesy shown us by the administrative and teaching staff of the Education Department (Director: F. A. J. Rivett, Esq., M.Sc.). We call on them sometimes when it isn't terribly convenient, and we realise that the work we do in schools could not be contemplated, much less accomplished, without their cordial help. We look after a "family" of 26,500 children, and in King Alfred's phrase, "We hold all equally dear."

I have the honour to be,

Your obedient Servant,

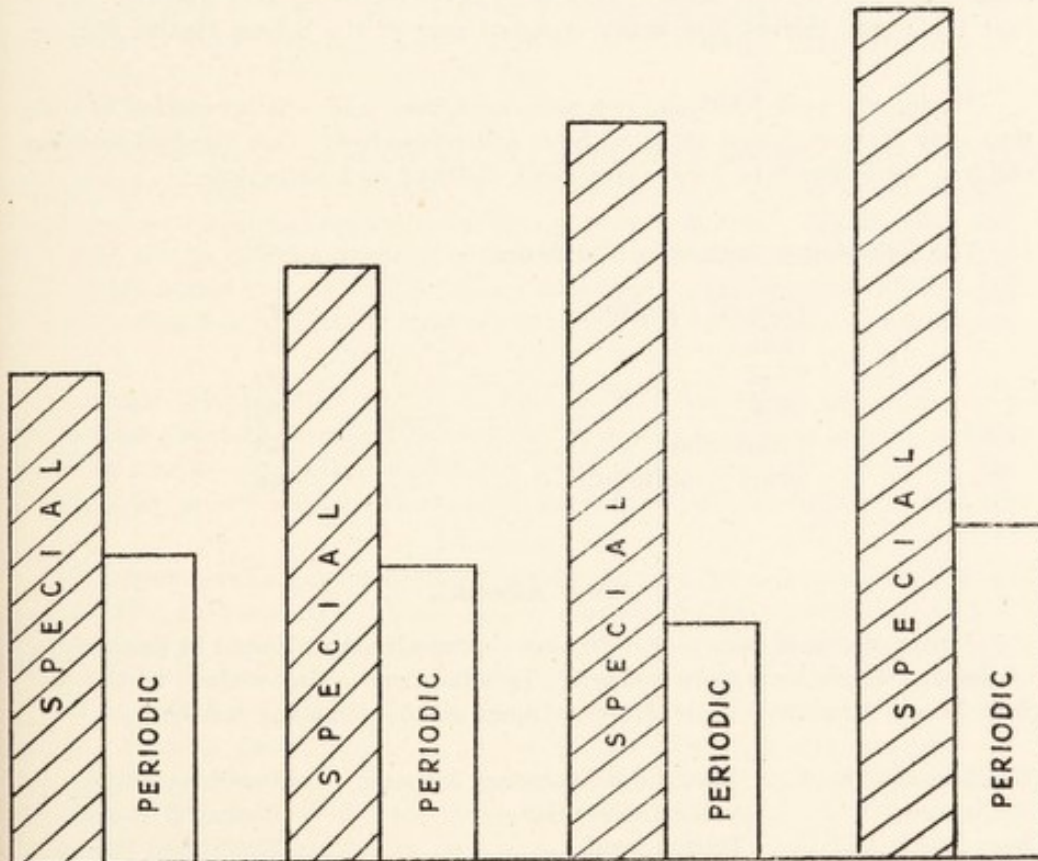
J. L. Brown

School Medical Officer.

Routine and Special Inspections.

The number of children examined at Routine Inspections increased from 5,256 in 1947 to 7,319 in 1948, and the number of children examined at the school clinics increased from 16,278 in 1947 to 18,708 in 1948. This was carried out in spite of staffing difficulties. The following statistics and graph indicate the increase in the numbers of children examined since 1945.

	1945.	1946.	1947.	1948.
Periodic Inspections.....	6,798	6,553	5,256	7,319
Special Inspections and Re-inspections.....	10,933	13,141	16,278	18,708



Parents Present.

It is depressing to note that only 6.7 per cent. of the parents of the boys in the "leavers" group were present at the medical inspections. The following

table shows the decline in the parental interest as the children grow older. This may be due to the fact that as a child grows older there is a feeling of independence.

	Boys.	Girls.	Total.
Entrants	81.1%	83.6%	82.4%
Intermediates	49.9%	55.5%	52.9%
Leavers	6.7%	15.2%	11.1%
Others	87.4%	86.4%	87%

Rapid Survey.

In addition to the Periodic Medical Inspection by the Medical Officers, Rapid Surveys are now carried out by the School Nurses. At this survey each child in school is examined superficially and all defects noted. Children are referred, if necessary, to the School Medical Officers and Specialists, and it has been found that several cases of Otorrhœa have cleared up very quickly. I feel that the Rapid Survey is a really essential part of the School Health Service.

During the year 3,593 children were examined, and it is interesting to note that only 30 were found to be without a handkerchief. One hundred and ten children were found to have insufficient clothing and footwear.

The following defects were also found :—

General condition	242
Skin	11
Eyes	80
Ears.....	56
Infestation	63
Other conditions.....	448

Minor Ailments.

During the past year a considerable increase has been noted in the number of defects which have been treated. This increase is due mainly to the fact that Minor Ailments Clinics are now open at the following schools :—

Marlborough Road.	Broughton Secondary Modern.	Pendleton High.
St. Ambrose.	Salford Grammar.	Lancaster Road.
Barr Hill O.A.S.	Halton Bank.	Wellington Street.
Blackfriars Road.	Langworthy Road.	

The clinic nurses attend daily and children suffering from minor injuries, cuts, etc., are treated. These children in the past did not attend the clinics because the injuries were thought to be of such a trivial nature that it was not "worth while" attending the clinic.

The opening of Minor Ailments Clinics in schools, not only saves the children from crossing dangerous roads to attend the clinics, but avoids loss of precious school time. The clinic nurse is able to attend two schools in the mornings and two schools in the afternoons and only defects of a more serious nature are referred to the three main clinics.

An investigation of the general nutrition of Salford school children has been carried out during the year by Medical Officers of the Ministry of Health. The investigation is continuing and the results are not yet to hand.

Report on the Work in the Ear, Nose and Throat Clinic.

Dr. Florence Cavanagh reports :—

This year we have been able to hold regularly three sessions for E.N.T cases in addition to the weekly clinic for patients with catarrh. Five hundred and one new cases have been seen and in all 3,015 children have attended for examination. (In 1947 we saw 2,023 cases.)

This is, therefore, an advance in the work of the previous years—but in spite of this we have not yet achieved the position where a child who needs the opinion of an Aurist can expect to be seen in a week or two. Urgent cases are, of course, always referred to the next session. It is the child who has no serious or dramatic symptom—but who is nevertheless having his health or his hearing impaired—who has to wait for some weeks or months before starting treatment.

Another disappointing feature is that children who need operation have still to wait about 18 months. During this time they may have several periods of illness causing much discomfort and even misery—to say nothing of the absence from school with its subsequent lowering of educational achievement.

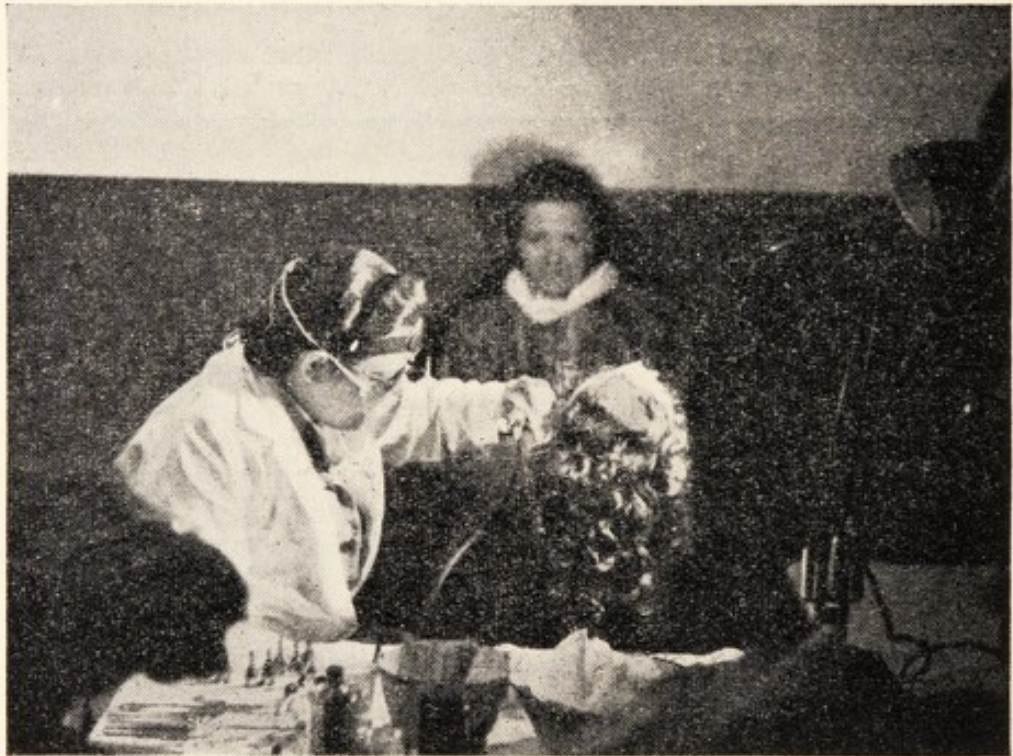
To offset these disappointments is the splendid step taken in opening a special class for the partially deaf. This class is a small one at present but we feel that its value to the children is inestimable. There are many cases who, though not seriously deafened, are yet handicapped enough to make average progress in a normal school impossible. As the child slips further back in his work, he often becomes discouraged. If he can be moved to this new class he will have individual attention—given by a teacher with special training, who understands his difficulty. With this intensive help the child quickly overcomes much of his backwardness and in time he is able to return to the normal school fortified now by his successes. The increase in the happiness of these children is most gratifying. Others, more seriously handicapped, can remain in the special class for the whole of their school life.

As there is only one such class for the whole of Salford it means that some children would have to make long and difficult journeys from their homes.

Because of this, some cases who need the help have been unable to benefit. To me, it seems a pity that transport could not be arranged for all those who could be helped.

This year we have tried to make the work of dressing ears more interesting to the nurses. We have arranged for one nurse at a time to attend the Otologist's sessions. She has then watched demonstrations of different methods of treatment, has been shown interesting cases and has been able to ask questions. This has been found to have a stimulating effect and the standard of dressings has improved.

Nothing is static in medicine and each year we hope to improve the E.N.T. services to the children of Salford.



Ear, Nose and Throat Clinic.

Ear, Nose and Throat Clinic (*Nasal allergy Sub-section*).

The report from Dr. E. Travers, who is a research worker engaged on investigation of nasal allergy, shows that of a total of 153 children seen, 86 were new cases. Positive evidence of allergy was shown in 68 cases. Nineteen children were recommended for desensitisation, most of whom received injections.

Observation over a prolonged period will be necessary before a report can be made as to the success which has attended this desensitisation.

The Ophthalmic Clinic.

Dr. John Scully reports that during the past year this Clinic has been held five times weekly at the Education Offices. Children attend this clinic who suffer from defective vision, squint and external diseases of the eye. They are referred by the School Medical Officers in their routine inspection of the schools, by general practitioners and opticians, by the teachers and in increasing numbers by the parents themselves. Children of all ages, from birth to leaving school, including secondary schools, are referred for treatment.

The clinic has been without an Orthoptist since 31st July, 1948, so that Orthoptic training has had to be temporarily discontinued; however, the children suffering from a squint are still attending periodically for occlusion treatment. Operative treatment in the absence of an Orthoptist has had to be temporarily discontinued, but it is proposed to commence operating on the cosmetic squints, i.e., those not requiring orthoptic training.

REFRACTION CLINIC. Children attend who are suspected to be suffering from some defect of vision. The normal attendance is three visits. At the first, a test of vision is taken and any squint or other external abnormality is noted. If a defect of vision is found, mydriatic eye drops are given for daily application for a week. These drops affect the sight of the child for reading and close work, but the distant vision is unaffected, so the children can attend school but are unable to read. In the case of Grammar School children drops are only given for one or two days so as to avoid interference with their studies. At the second visit a refraction and complete examination of the eyes is made and a subjective test with lenses is completed, and finally a prescription for glasses is given where the children are illiterate and are too young to do the "E" test. The children who know their letters or are able to do the "E" test are asked to make a third visit to the clinic when a post-mydriatic test is done and a prescription is made.

In accordance with the National Health Insurance Act the parents are instructed, on receiving the O.S.C.2 form, to take this and the child to any optician on the National Health Insurance list. When the glasses are fitted and supplied by the optician, the child is asked to attend again for a test of visual acuity.

By arrangement, the opticians are notifying the clinic when the glasses are fitted, so that the further supervision is ensured.

Artificial eyes are now supplied free of charge, and it is gratifying to note that none of the few children to whom this applies has been without an "eye."

A high percentage of cases referred attend this clinic and are accompanied by their parents or a responsible adult, and this number is increasing. The parents are invariably co-operative and willingly follow the instructions and advice given, obtaining glasses if recommended. There is a noticeable diminution in prejudice against the wearing of glasses since they were provided free. This minimum prejudice from parents and children is generally due to fear of accidents

and breakages, or fear of teasing from other children; but most frequently prejudice is unspecified against the wearing of glasses. This is overcome where the advantage to be gained by better sight is demonstrated.

All repairs and adjustments are dealt with immediately and are not placed on the waiting list. All cases sent as "urgent" by the teachers and doctors are given an early appointment, also Child Welfare cases and older children accompanied by parents who are concerned about their children's sight.

The number of glasses prescribed, 1,412, may seem high—it should be noted that these are not all new cases, many being a change of prescription from that which the child has previously been wearing. The number of repairs is similar to that in previous years and these are now attended to more promptly and effectively. Glasses are never prescribed unless essential for the good of the child's sight and for the alleviation of symptoms.

There are a number of children at present in ordinary schools who would be better accommodated in special sight-saving classes. These number 31. They are composed of children with high myopia, and other children with diseases or degeneration of the retina. Steps are now being taken to accommodate such handicapped children.

Increasing advantage has been taken during the year of referring cases for further treatment to the out-patient department at the municipal hospital.

DEFECTIVE VISION. Children with defective vision may be divided into hypermetropes, myopes and squints.

HYPERMETROPIA (Long Sight).

These form the majority of cases and may be divided into simple hypermetropia and compound hypermetropic astigmatism. They are defects from birth, and are due to the shape of the eye being short in length from before backwards; and in the case of the astigmatics the curvature of the cornea is not equal over the whole of the surface. Symptoms may be caused at any time in life, but are most frequent when there is increased close work, and consist of headaches, difficulty with close work, reading, sewing, etc., and an inability to see accurately what is written on the board when in school. Glasses are usually prescribed for all the time in school and close work at home, but in the higher degrees, they may have to be worn constantly. There is a tendency to improve as the child grows older and troublesome symptoms are avoidable when glasses are worn.

MYOPES (Short Sight).

These include cases of simple myopia and compound myopic astigmatism. Myopia usually shows itself in the slightly older child from 10 years upwards. It is generally due to an increase in length from the front to the back of the eye, and tends to increase during the growing years, especially in the teens, usually ceasing to deteriorate when general growth stops. In some cases it is hereditary

and then shows itself at a much earlier age, and is consequently more serious. The main symptom is difficulty with distant vision, seeing the board in school, destinations of buses, though reading and close work may be quite clear. In the early stages headache may be present but not always. Thus the condition is often definitely established before any complaint is made. Glasses are invariably prescribed in these cases and advice is given to wear constantly, because though the children can see to read quite well, excessive close work tends to aggravate the condition. These children are warned against reading too much and especially for too long a time. In early cases one sometimes has to insist on the child wearing glasses as he or she does not realise what good distant vision may mean.

Much time is spent with children suffering from myopia in making sure that the parent and child understand instructions. Typed copies of instructions are handed out in each case. Myopia is more prevalent in the Secondary Schools because of the extra study these schools entail, and because of the longer school life—this being especially the growing period of life, the usual time for Myopia to increase. It is important to try to arrest the progress of the Myopia in the early stages as these children often wish to continue their studies at college or elsewhere—many professions are closed to applicants with a high degree of Myopia. Myopes are invited every six or twelve months, re-examined and their lenses changed according to the progression of the Myopia.

STRABISMUS (Squint).

These patients may be Hypermetropic or Myopic (usually the former) and one eye may turn inwards or outwards (usually the former). The defect is obvious to the parent, who usually seeks advice soon after its commencement. Glasses are invariably prescribed in these cases and constant wear is advised, whatever the age of the child, provided the child is stable on its feet. Parents are usually quite willing to obtain glasses however young the child. After the child has obtained the glasses he/she is referred to the Orthoptist for treatment. This consists in occlusion of the "good" eye in order to improve the vision of the squinting eye, because a squinting eye invariably has defective sight. This treatment may start as early as three years old. The child is seen every 2-4 weeks, and the vision of the two eyes noted. When the vision of the two eyes is equal, occlusion ceases, and then at seven years of age treatment on the synoptophore is started, to develop binocular vision. Often by this time the squint has disappeared, certainly whilst wearing the glasses. In cases where the squint is still present whilst wearing glasses and after a course of Orthoptic treatment, an operation may be necessary to straighten the eye and so cure the squint but this will not improve the vision of the squinting eye if still defective. Operations are now being performed at Hope Hospital fortnightly. The children are admitted for two weeks, then if everything is satisfactory, they are sent home and referred to the clinic for post-operative treatment. They are also seen after operation by the surgeon at Hope Hospital Out-patients' Department. They do no close work for another two weeks, and do not attend school. Then they may resume normal school and home life but are examined frequently until the eye has completely settled down. In some cases they are able to leave off wearing their glasses, but this depends entirely on the state of the vision.

There has been again a large attendance of children under school age. Many of these have squints, and if constant, and the child is safely walking, glasses are prescribed. Thus the child with a squint is seen early, and treatment started. By the time the child goes to school and starts close work, the squint has often disappeared and so the incidence of squint in later life is considerably lessened. If the squint is not constant in these tiny children and only seen occasionally, Mydriatic drops (dilating) are given for the "good" eye and the child is seen at intervals of two to four weeks. The squint frequently improves and may even disappear.

INTERNAL EYE DISEASES.

These are discerned on internal examination of the eyes under Mydriatic drops, and are comparatively rare. Treatment is advised, and the child is seen frequently. As these are often due to general causes, the child is referred to special departments such as the Municipal Clinic, Tuberculosis Department or to Hospital, for further treatment which cannot be given at the clinic.

EXTERNAL EYE DISEASES.

These comprise external diseases of the eyes and lids, and are often referred from other clinics. The number of cases varies with the time of the year, such diseases being more prevalent in the spring and autumn when there are cold winds and variable weather. General health is usually lower in spring following the winter. The children are examined, treatment advised and given, and they are seen regularly until cured.

Cases of chronic Blepharitis are becoming rarer, due to modern methods of treatment which are applied regularly, and because of persistence in treatment after an apparent cure. It is also due in many cases to the wearing of spectacles for correcting astigmatism. The more serious types of inflammation such as phlyctenular conjunctivitis and ulcers of the cornea, both of which are likely to lead to defects of vision, are also not so frequent. This again is due to modern medicine clearing up the condition more quickly, before permanent injury is done to the eye, and also to the children's persistence in the treatment both during and after the attack. In many cases these are due to low general health, and the children are referred to the Sunlight Clinic and ordered vitamins, Cod Liver Oil and Malt.

The acute suppurative conditions are rarely seen now because the child is treated in the early stages before the deeper tissues are involved.

"Styes" are not seen so frequently now, and the milder infections of lids and conjunctivæ are treated and cured before they involve deeper tissues and the condition becomes chronic.

The milder conditions of Conjunctivitis are still seen, but quickly clear up under regular treatment, and leave no after-effects.

These children are rarely advised to be absent from school, as experience teaches that the condition clears up quicker when the child attends school and attends the clinic regularly, which they tend not to do if absent from school. The risk of infection to other children is very remote, except in the rare cases of acute suppurative conditions.

In many cases both parents are at work during the day leaving the children to play unsupervised in dirty surroundings, and aggravate their condition by rubbing the eyes. In school, however, under more regular supervision such aggravation is often avoided.

Babies are referred to the clinic from the Child Welfare Department with lachrymal obstructions and slight infections of the eyes dating from birth or the early weeks of life. These quickly clear up with modern treatment when applied regularly by the mother, and more permanent damage to the eyes is prevented.

Consultant Skin Clinic.

This service exists in order to provide readily accessible clinics where consultant facilities are available for Salford school children suffering from any type of skin disease. Work has continued during the year 1948, the clinic being held once weekly, each Thursday afternoon at 2-30 p.m. at Regent Road, and attended there by the consultant dermatologist, Dr. A. J. Gill.

A dermatological out-patient clinic is also held at Hope Hospital each Wednesday at 10-30 a.m. and the work of the two clinics is correlated. For example, where a case is seen at Regent Road and hospital facilities are needed, i.e., preparation of vaccines, specimen for biopsy, X-ray or in-patient accommodation, this can readily be arranged at Hope Hospital.

From July 5th, the hospital services have been administered by the Regional Board, but I am confident that the close co-operation which has hitherto existed between hospital and local authority services will be maintained.

In my report for 1947 I noted a large decrease in the numbers of cases of Scabies and Impetigo, the two commonest skin disorders of children. This has been maintained. Intensive treatment of the whole family in each case of Scabies has had an excellent result in diminishing the numbers of concomitant impetiginous infections which often follow a scratched and infected Scabies. These cases are dealt with in the School Clinic, and it is now much less common to see the generalised severe impetiginous infections which were so common three or four years ago.

Work has been carried out now for over one year in the treatment of strawberry naevi, by Thorium X (alpha rays in a varnish base). Six to eight monthly applications may be necessary for the larger lesions, with or without CO₂ Snow, and the final results in all cases have been very good. The response of total Alopecia to this treatment is still under review, but to date has been disappointing.

An increased number of cases of Molluscum Contagiosum has been seen, particularly towards the end of the year. This is a virus disease, analogous to the common verruca and plantar wart and most of the cases appear to have followed repeated visits to the swimming baths. They are successfully treated by incision, evacuation of the lesion and cauterisation with Phenol.

The type of Urticaria following sensitivity to drugs (i.e., Penicillin) has been treated by the anti-histamine preparations, i.e., Benadryl, Anthisan, with a fair degree of success and at present " Phenergan " a new, much more potent, preparation of this type is under trial.

During the year under review 344 new cases were seen and 368 old cases, making a total of 712. Of the 344 new cases, 300 were children of school age or infants.

Dental Report.

Submitted by Mr. L. H. Pollitt, L.D.S.

The work of the Dental Clinics during the past year has been carried out in face of considerable difficulties arising from staff shortage, changes and illness. I regret to report the death, after a long illness, of Miss M. G. Macleod, who joined the staff in 1930, and the resignation of Mr. J. R. Clayton after five years' service.

The number of children inspected in schools was 8,702, and 597 cases were referred by the school medical officers, and of these, 6,434 were found to require treatment. The total number of children who received treatment during the year was 6,702.

As in the past, nearly all extractions were done under a general anæsthetic, 3,660 administrations given for the extraction of 7,071 temporary teeth and 1,531 permanent teeth of which 205 were extracted for orthodontic reasons. The number of permanent teeth filled was 2,763 and temporary teeth 506, and in addition, 1,886 operations were carried out on permanent teeth, and 931 on temporary teeth.

The orthodontic service is very popular, but is being carried out under difficulties of accommodation which it was hoped would have been eased by the opening of the new clinic at Encombe Place. This, however, still awaits the approval of the Ministry. During the year, 391 visits were made by children.

Under the new Health Act it will be necessary to make provision for the treatment of ante-natal and nursing mothers and pre-school children. The aim of the service will be to make a complete dental examination a part of the routine examination of all ante-natal cases on their first visit and to follow up with the necessary treatment including the supply of dentures. This will necessitate an extension of the present staff and accommodation and the provision of a dental laboratory and mechanic. The new clinic at Encombe Place will, it is hoped, provide for some of these requirements.

Foot Health Clinic.

The past year has shown the outstanding increase of 338 per cent. in the number of attendances. This, of course, is due to the extensive surveys carried out between the year 1946-1947 and the early part of this year.

As a result of these surveys both the teaching staff, the parents, and even the children themselves have become foot conscious and, in consequence, a far greater number of children have been directed to the clinic for treatment. In addition, this service resulted in the early diagnosis of many minor deformities both congenital and acquired, enabling corrective treatment to be undertaken at a time when the most satisfactory results can be achieved.

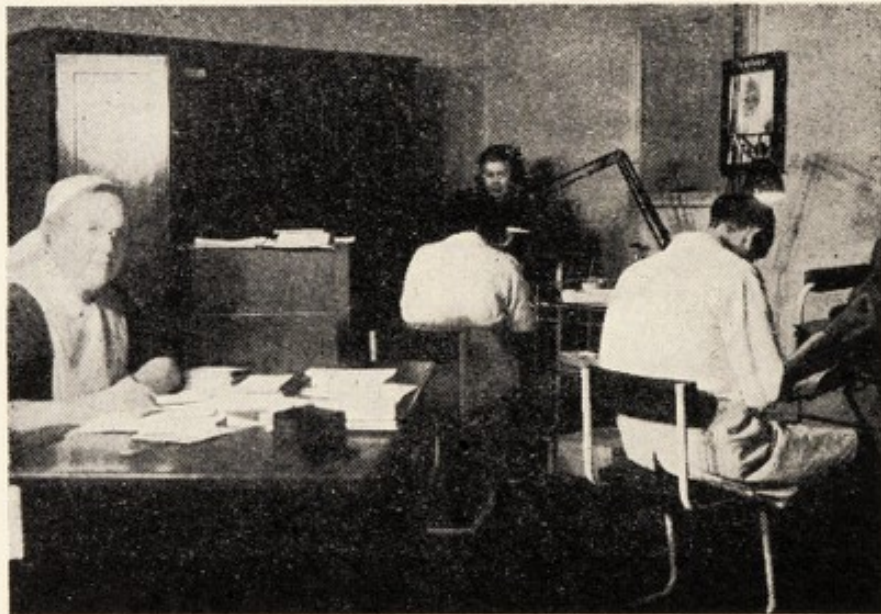


Simple traction sling for overlying fifth toe.

In treating weaknesses and minor deformities, simple and ingenious appliances have been introduced so that the increased convenience and comfort would encourage the fullest co-operation of the patient. The contraction toe splints and traction slings for overlapping, underlapping toes have produced most gratifying results and experiments in the use of strip rubber have at long last resulted in a satisfactory corrective appliance for hallux valgus, an acquired deformity very prevalent among adolescents.

A particularly gratifying feature of the work during the past year has been the increasing interest and co-operation of the parents, a large proportion of whom have earnestly tried to carry out our instructions. Many of the defects such as hallux valgus, pronated feet and defects of the lesser toes are the direct result of tight footwear and tight hose, and have been cured because of the interest shown by the parents. A definite advance has been made in the remedy of this fault and in co-operation with corrective treatment there is every reason to hope that many children will commence adult life with sound feet who would otherwise have entered business and industrial life handicapped by painful and defective feet.

Whilst hallux valgus does not appear to represent a high percentage of the total cases treated, this fact is very deceptive as the incidence of hallux valgus is found to be very high in the age groups 14-16. This is as a result of the wearing of footwear defective both in size and design, in other words, most of these children are wearing adult footwear with heels that are too narrow and too high, often backless shoes much too short in which the heels of the patient are protruding over the backs of the shoes.



Children receiving treatment at the Foot Clinic.

As in the case of hallux valgus, percentages are again deceptive with regard to pronated feet. The number of cases of varying degrees of pronation met with amongst the adolescents is exceptionally high, the etiological factors being in the main, those associated with hallux valgus.

The encouragement and practical help of the orthopaedic surgeon, coupled with the ready co-operation of the physiotherapists has gone a long way towards introducing satisfactory remedial treatment for such conditions and already the results are most encouraging.

Analysis of the recording of patients during 1948 show the following percentages.

Hallux valgus.....	5.55%
Defects of lesser toes	9.8%
Bunions .....	.92%
Corns.....	6.85%
Metatarsalgia	2.22%
Defects of medial arch	6.2%
Nail defects	9.7%
Verrucae	27.22%
Chilblains.....	.74%
Callosities	4.74%
Talipes various .....	.55%
Other congenital deformities .....	.37%
Other conditions.....	22.18%
Referred to orthopædic surgeon	2.96%

The rapid expansion in the activities of the Foot Health Service during the concluding months of the year have taxed existing facilities to the fullest extent of its capacity and there is every reason to believe the forthcoming year will tax to the limit the skill and ingenuity of the staff.

Speech Therapy.

On January 14th, work in connection with the Speech Clinics was restarted. A questionnaire was sent to the head teachers of all Salford schools in the form of an addendum to the weekly circular, asking for information concerning those children who had received speech treatment previously, and any other new cases in need of treatment.

Between the 19th and 27th of January all schools and departments were visited.

Interviewing of children began on February 2nd at the four Centres where speech clinics have subsequently been held. These are: Broughton Modern School, Encombe Place, Regent Road School and Halton Bank School (but the Clinic at the latter was transferred on May 4th from Halton Bank to Langworthy Road Girls' School as the accommodation at these premises was found to be more suitable for use as a speech clinic). Interviewing and taking of case histories continued for a fortnight, after which the schools closed for the half-term holiday. Treatment of the children began on February 19th.

Various equipment, in the way of mattresses and blankets for relaxation, and other items, were supplied to each of the four centres. In June, a new portable H.M.V. gramophone was purchased by the Education Department for use in the clinics. This has proved helpful for rhythmic exercises, expressive movement and also as an occasional aid to relaxation. In addition, a picture (large, beautifully-coloured etching, depicting a farm scene) was purchased

with money out of Dr. Burn's "special fund." Material for 27 loose covers for mattresses was ordered in October, and grateful thanks are due to those Salford mothers who so willingly responded to a request by the speech therapist for assistance in the machining of these covers. They completed their task as rapidly as possible.

During the year 66 home visits were made; and in addition to the initial visit to all the schools in January, a further 25 visits were carried out during the year.

On October 29th, a talk on the work of the speech therapist (with particular reference to the problem of stammering), followed by a demonstration of relaxation, was given to a group of student Health Visitors at the Health Department, Regent Road.

Hope Hospital.

During the year, children attending the special school for spastics at Hope Hospital were visited once a week from the beginning of February until June, when, owing to pressure of work in connection with the speech clinics in the various areas, visits to Hope Hospital had to be curtailed to once fortnightly. These children have, however, been visited in their homes on several occasions.

Report of the Asthma Clinic of the School Health Service during 1948.

1. The task of the Asthma Clinic during 1948 had changed from the original purpose of the survey undertaken in 1946. At that time, it was necessary to make a primary assessment of the condition of health of those children listed by the Authority as handicapped by virtue of asthmatic attacks, appropriate treatment being recommended when children were not already receiving this.

All these children, together with new cases referred by the School Medical Officers, have been seen at least once, the majority of them on two or more occasions. Since asthma in childhood tends naturally towards recovery, the statistics appear at first to be encouraging. Because of this we have concentrated in the past twelve months on the examination and follow-up of those children who have not shown adequate improvement. Some of these have had more detailed investigation and a few have been admitted to Hope Hospital for close observation.

It was felt that clinic time would best be spent on these difficult cases and that in children in whom steady improvement was taking place, routine review at yearly intervals would be adequate.

The attitude of the children and their parents continues to be encouraging, their convenience being considered in that appointments are given and kept.

2. GENERAL STATISTICS OF ATTENDANCE.

Weekly sessions have been held throughout most of the year except for the early summer months when the pressure of work allowed monthly sessions. It has been found to be impossible to keep pace with the routine reviews with monthly clinics and therefore weekly sessions have been held since September.

Twenty-four sessions have been held during twelve months, at which 195 consultations have been given. One hundred and twenty-three children have been examined and assessed—41 children for the first time and 164 children for the second or subsequent occasion.

The number of new cases is naturally less this year, but new cases have been seen more than twice, if necessary, for investigation and early review. Many of the difficult cases have been seen three or four times in the year.

3. ASSESSMENT OF PROGRESS.

One hundred and twenty-three children have been seen at least once for assessment of progress (75 boys, 48 girls).

A general clinical assessment was made in each case at every consultation, by discussion of the history with the parent, by questioning the child and by clinical examination including measurement of the chest expansion and, occasionally, of the vital capacity. Assessment was given in general terms as "improved," "no change" or "worse."

Nineteen children were discharged as free from asthma (8 boys, 11 girls). A few of these were over school age though may have had symptoms.

Seventy-four children were improved or had maintained improvement (45 boys, 29 girls).

Twenty-four children showed no change (17 boys, 7 girls).

Six children were worse (5 boys, 1 girl).

Twenty-four children have been selected from the list of all children seen to date for special attention in that they are not making satisfactory progress or require further investigation and treatment (16 boys, 8 girls).

4. INVESTIGATION OF CASES.

These have been carried out on new cases and certain cases seen for review, as occasion demanded. All new cases received a full examination as described in a previous report, all follow-up cases were examined and progress discussed with the parent. In some cases, facts brought to light by further questioning, demanded a more detailed investigation. Radiographs of the chest and skin tests were done in the Health Department but radiography of nasal sinuses, blood counts, etc., were referred to Hope Hospital. A few cases were referred to the Out-Patient Department at Hope Hospital for full investigation and some were admitted to the wards for observation.

<i>Investigation.</i>	<i>Boys.</i>	<i>Girls.</i>	<i>Total.</i>
Radiography	9	4	13
Blood count	10	4	14
Skin tests.....	14	5	19
Referred to otologist	10	3	13
Referred to psychiatrist	1	2	3

5. MANAGEMENT OF TREATMENT.

The scope of treatment available remains as last year. Many of these children are receiving regular treatment from the family doctor or from a hospital. Attention was therefore paid to measures of regimen and physiotherapy, and particular note made of social circumstances regarded as detrimental. In the few purely allergic subjects some specific treatment was attempted with desensitisation and with the use of anti-histaminics. Regarding the use of the latter, only trial periods of treatment were given. If a child benefitted markedly from the administration of such drugs, the fact was communicated to the family doctor with a request that he should continue further treatment.

The following is an analysis of the methods of treatment advised:—

	<i>Boys.</i>	<i>Girls.</i>	<i>Total.</i>
Breathing exercises	22	4	26
Open-air school	2	1	3
Convalescence.....	2	1	3
Housing priority.....	4	3	7
Vitamin supplements.....	5	6	11
Ultra-violet light	1	0	1
Desensitisation	3	0	3
Anti-histaminics.....	15	2	17
Hospitalisation	4	0	4

Certain children have been selected from the cases seen during the year as requiring urgent attention because their condition was deteriorating.

Urgent housing priority and open-air school accommodation has been recommended in some cases.

Special mention must be made of one boy, J.T. This child is perhaps the worst case on the asthma register. He has suffered for many years and is now grossly under-developed physically and considerably retarded in his schooling by frequent absence. He has had convalescence at Taxal and benefitted thereby but he always relapses on return to Salford. Home circumstances are extremely poor and he is either orphaned or has only a father. Consultations at a high level appear to be necessary.

6. GENERAL CONCLUSIONS.

The general implications of the year's work are very much the same as last year, though the emphasis has shifted somewhat.

The need for adequate open-air school and convalescent school facilities is still as pressing and the ever-present housing shortage constitutes a major difficulty.

The general tendency of the asthmatic child towards recovery can again be seen and it is certain that such children make steady progress on simple treatment with some regimen, i.e., breathing exercises which enables the patient

to learn mastery of the symptoms. As the child's personality matures the need for the asthma syndrome recedes and the patient becomes adjusted.

In certain children there is little or no improvement with the simpler regimes and attention has been devoted to these. Certain factors prevent improvement: the persistence of a marked allergic state in a child with a "genetic" predisposition, the persistence of deep-rooted anxiety state related to the parental (usually maternal) situation, the persistence of impossible social circumstances causing chronic infections, debility and subnormal physique. Of all these causes, the last is the least important.

The figures in the report show the shifting emphasis, since certain of the allergic subjects have been more carefully investigated and some treatment given, further social recommendations have been made and, lately, an attempt has started to assess the importance of the emotional situation in certain children with a view to recommending psychiatric advice and treatment.

Handicapped Pupils.

	No. of Handicapped Children.	Ministry of Education Estimate.	Percentage of 26,500.
1. Blind.....	5	0.2 to 0.3 per 1,000	0.2 per 1,000
2. Partially sighted	34	1.0 per 1,000	1.30 per 1,000
3. Deaf	20	0.7 to 1.0 per 1,000	0.08 per 1,000
4. Partially deaf	84	1.0 upwards per 1,000	3.30 per 1,000
5. Delicate (including Asthma)	408	1 to 2 per cent.	1.53 per cent.
6. Diabetic.....	6	No estimate	0.03 per 1,000
7. Epileptic.....	41	0.2 per 1,000	1.50 per 1,000
8. Educationally subnormal	225	10 per cent.	.85 per cent.
9. Maladjusted	37	1.0 per cent.	.14 per cent.
10. Physically handicapped— Various	215	5 to 8 per 1,000	8.10 } per 1,000
Cerebral Palsy.....	42		1.60 }
11. *Speech	180	1.5 to 3 per cent.	.68 per cent.
12. Multiple defects	109		.44 per cent.

* The number of children ascertained as suffering from Speech Defects is gradually increasing as the work of the Speech Therapist develops.

During the year 30 children were recommended to be notified to the Local Authority as being ineducable.

Handicapped Children—Record Cards.

It is obviously important to keep a careful check on those of our pupils listed as "handicapped," i.e., who may be asthmatic, blind, deaf, delicate, diabetic, educationally subnormal, epileptic, maladjusted, rheumatic, crippled, or who may suffer from speech defects, heart disease, etc.—and because of this need the Copeland-Chatterson (Cope-Chat) system has been instituted. Good administration and a good recording system are synonymous, so that easy and complete tabulation of information regarding these children helps to ensure that they are receiving all available assistance to overcome or alleviate their handicaps.

The Cope-Chat card (as illustrated) contains hand-written information on the body of the card, with coded lists of selected facts round the edges. These are pre-punched with small holes and then clipped appropriately. Details of personal and family medical history, environment and economic circumstances are shown, together with the nature of the handicap, the age of the child at onset and by whom the defect was originally diagnosed and first treated. Notes and dates of subsequent treatment are given, including specialist treatment by oculist, aurist, mental specialist and others.

The back of the card is used for recording medical examinations, and treatment at schools and/or clinics and the health visitor's periodic calls at the child's home. Dates of reference to special schools or classes for handicapped children, to voluntary agencies and almoner, together with dates of admission to special school or special class, if arranged, are also entered on the back of the card, as are details of final "disposal."

The card used in Salford provides for the recording of 12 main handicaps, subdivided into 17 types. Thus a child suffering from cerebral palsy would have his card indented first at "physically handicapped" and then "palsy." Sex, year of birth, vaccination and immunisation, home and economic circumstances, overcrowding and legitimacy are all shown round the edges of the card, and can be indicated by clipping the designated holes.

The fact that a child is fit to attend ordinary school or is recommended admission to open-air school, special boarding school, special class, or is home-bound, can also be shown in this manner, as the recommendations are coded 1, 2, 3, 4 and 5, under the section marked "School." A number of "spare" holes simplifies the recording of any additional items found necessary.

When information is required, a long needle is passed through the appropriate hole and all the clipped cards are shaken gently off the needle, and counted. This process can be repeated as often as is necessary.

Details on the cards are kept up-to-date by progress reports received from the health visitor. She is notified periodically that a visit is due, by a "reminder slip" sent out by the clerk in charge of the handicapped pupils' register. In this way no child is forgotten, and close supervision is kept over his progress. In addition, much valuable information is always readily available to meet sudden demands for facts, and for inclusion in routine reports.

SEX		5		7		ON		A		VACCN.		IMMUN.	
SCHOOL		4		3		3		3		3		3	
SURNAME		JONES		CHRISTIAN NAME(S)		JOHN		ADDRESS		12, EVE ST, SALFORD, 6		52	
DATE OF BIRTH		D M Y		DATE REFERRED		D M Y		CATEGORY		DATE FIRST SEEN		D M Y	
HOUSE		28 10 37		ST. JAMES' R.C.		17 4 39		HEALTH VISITOR		PHYS. HAND.		24 4 39	
REPAIR CLEARLINESS		FAIRLY SATIS		NO ADULTS		NO CHILD		MOTHERING		CLOTHING		DIET	
MOTHER		AVE.		OTHER REL.		ECON. CIRC.		EMPLOYT. RESOURCES		FATHER		MOTHER	
PARENTS		AVE.		-		-		F and M WORKING		ADEQUATE		FAM. MED. HISTORY	
CHILD'S MED. HIST.		VACC. INR.		BIRTH WT.		BIRTH COND.		MEASLES		WH. COUGH		S.F.	
1937		1938		8 1/2 lbs.		DEFECTIVE		1938		1938		-	
HIST. OF DEFECT		AGE AT ONSET		DING. BY		TREATED BY		OTHER HISTORY		CEREBRAL PALSY		-	
ACTION TAKEN		REF. Oculist		REF. AURIST		REF. MEN. SPEC.		REF. Ortho. Spec.		REF. Hosp		OTHER ACTION	
1st. EXAM.		D M Y		D M Y		D M Y		D M Y		D M Y		D M Y	
1st. TREAT		A		A		A		A		A		A	
ENTER IN SPACES ABOVE THE FIRST DATES ON WHICH CHILD ATTENDED SPECIALIST OR HOSPITAL FOR (A) EXAM. (B) TREAT.		1		2		3		4		5		6	
1 UNCL.		2 MONG.		3 CRET.		4 PART D.		5 DEL.		6 DIAB.		7 ED. S.M.	
8 EP		9 MALAD.		10 PHYS H.		11 SPEECH		12 MULY D.		13 ASTHMA		14 CON D.	
15 TUB OR.		16 TALIPES		17 PALSY		18 PARAL.		19 OTH. OR.		20 DULL		21 BACK	
22 H.D. ED		23 H.D. INE		24 INB.		25 IDIOT		26 MONG.		27 CRET.		28 MOR D.	
29 UNCL.		30		31		32		33		34		35	
36		37		38		39		40		41		42	
43		44		45		46		47		48		49	
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57		58		59		60		61		62		63	
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71		72		73		74		75		76		77	
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85		86		87		88		89		90		91	
92		93		94		95		96		97		98	
99		100		101		102		103		104		105	

Cope Chat Card.

**What Happens to our Handicapped Pupils after
Leaving School ?**

We thought it worth while to follow up the history and after-care of some of our handicapped children who have left school. So little interest seems to be taken in these children once they leave the care of the School Health Service. Our efforts have, however, been hampered by the poor state of the past records of these cases, but the results of the investigations which we were able to carry out proved most interesting. A few examples are quoted:—

One young man, aged 21 years, and treated during his school life for rheumatism and heart disease, died only a few days before the visit was made.

A young lady suffering from the same handicap was found to be in fairly good health, and expecting to be married shortly. She has changed her occupation on the advice of her doctor, and attends hospital for periodic observation.

An epileptic boy was found to have grown into a healthy man who served in the Army throughout the war, married, and had three bonny children.

It was curious to find, on visiting a 34-year-old woman with a history of epilepsy in childhood, that she nor her relatives recollected her having fits or other illness. She is a thin, worrying type, inclined to "nerviness" and bronchitis.

Unfortunately, the story of another epileptic is one of deterioration instead of improvement. After leaving school, this woman was in Maghull Institution until she was 16 years old. She then had two years at home, but the severity of her fits increased, so that she was admitted to another epileptic colony, where she is at present. She works as a laundry maid and takes part in such active recreations as dancing; her mental powers, however, have also worsened.

One young man who, as a boy, had been notified to the Local Authority as ineducable, is working well as a labourer, but another, likewise ineducable, has no occupation. He is content to play all day long with small toys, whilst waiting for an adult occupational centre to be opened.

A young lady, suffering from the same defect, has married and is proving to be a good mother and housewife.

It is only when such visits are made that details of the end-results of the intensive treatment provided for our handicapped children, up to the time of their leaving school, come to light.

Hope Hospital School.

The numbers on the school roll have increased considerably this year, but many of the children admitted into hospital have been short-term cases. There have been, however, more long-term orthopædic cases, especially among the younger children, and of the children suffering from rheumatism and chorea, there have been many more girls than boys.

Altogether, 348 children have been admitted to the Hospital School during the year, but again this represents only a fraction of the children who have been given educational help, as, owing to increasing medical skill and improved methods of treatment, a child's stay in hospital is, on the average, of much shorter duration than it was a very few years ago, and children who are only in hospital for a short time are not placed on the school roll, but are given educational attention whenever possible.

With regard to these short-term patients, not a great deal of progress can be expected, but the children are kept in touch with school work and methods and must be considerably less backward when they return to normal school life than they would be without this help.

Of the long-term cases, surprisingly good progress has been made in very many cases. By co-operating with the school which the child originally attended, pupils are enabled, as far as possible, to follow an uninterrupted scheme of work according to methods to which they are accustomed, and although the curriculum is necessarily rather more limited than that of a normal school, every effort is made to keep the child in touch with "out-of-hospital" activities.

In January, a show by local pantomime stars was given on each of the children's wards and this was greatly enjoyed by all the children. Early in the year, too, a party of boys went to see a performance of "Treasure Island" at the Intimate Theatre.

In April, a puppet show, given by the girls of the Walkden Modern Secondary School, was enjoyed by all the children who were in any way mobile, and it is hoped that this may be repeated at an early date.

Owing to the bad weather during the summer months it was not possible to undertake as much out-of-door work as usual, but whenever the weather has permitted, children who are at all fit have had lessons in the open air and have been taken out of the hospital building whenever possible.

THE SPASTIC CLASS.

We were fortunate enough in January to obtain for this class the services of Miss A. Little, a teacher who has had considerable experience in dealing with children of this type, and under her guidance the class has made steady and satisfactory progress.

Despite the limitations of short school hours, physical handicap, lack of space and unsuitable furniture, great strides have been made in school subjects and character training.

Most particularly are the children learning to be independent, and this class offers to the children what appears to be a rare opportunity of learning to help themselves, for here there is greater parity between the members of the class, and the usual but misguided adult attitude of undue helpfulness, actuated by pity or expediency, can be avoided and the children encouraged to attain a greater measure of unaided achievement and the satisfaction that this brings.



Story time for members of the Spastic Class.

The following brief individual reports show what work is being done :—

W.A.C.—Good progress has been made—is able to write on paper numerals, letters, own name and simple words, and is ready to approach formal reading and number exercises. Is now more friendly, better mannered and cleaner in personal habits than formerly. Still shy and unwilling to speak to strange adults.

A.H.—Improved behaviour continues. Attention span still short but is able to concentrate for very short periods, and as a result is making some progress. Attempts to reproduce blackboard illustrations are improving and counting is accurate. Recognises all small letters and

some words. Very interested in story lesson. Unsteady gait and head movements persist, but recently able to walk to ambulance unaided and without falling.

G.H.—Considerable improvement in reading. More accurate and confident. This increased reading ability has enabled her to tackle simple problems—she is not now as daunted when faced by page of print. Writing not yet good—too hasty. Very neat handwork. Has good sense of colour and design. Stammer reappeared. Had difficulty in finding any reason for this, especially in school situation. After speech therapist's home visit we came to the conclusion that it is possibly the result of intense strain, occasioned by desire to do things for herself before her mother or younger sister can do them for her.

W.S.—Is not a good reader, but guesses less. He worked better with numbers this term. Learned new processes with less difficulty but generally lacks number experience and the understanding this brings. Writing is improving in style and speed, but practice is considered irksome. Very enthusiastic about handwork and results good. Still does not use right hand, preferring a mechanical aid, e.g., metal clip fixing work to desk. Since visiting Prestatyn Camp his health has been much better and his general attitude less fretful. He has not been as difficult as in the summer term, and tackled work with more enthusiasm and independence.

Special Class for the Partially Deaf.

In the autumn of 1948 a day special class for "hard of hearing" children was opened at Regent Road School, which is an ordinary school. A qualified teacher of the deaf was appointed to be in charge of the ten children (the maximum number allowed). Results of the work so far have been most gratifying.

The class performs a valuable function in the more exact ascertainment of the amount of hearing and of intelligence which the border-line child possesses. It is not as easy as is thought, to be certain as to how much children can effectively hear. I believe in mechanical aids to diagnose such loss—the use of the audiometer with which, for many years, we have had experience in this area. Because of that experience, the limitations of audiometry, in some cases, are realised. It is wise that some weeks should elapse before the degree of defective hearing in a border-line child is definitely ascertained.

Most of the children have some useful hearing, but owing to their defect, have fallen behind in the scholastic training under normal school classroom conditions. The result is that they lack confidence in themselves, are disappointed in their efforts to keep level with their fellows in class, and, if allowed to continue in this state, may eventually become morose.

There is no doubt that the child with partial hearing (even of 20-40 decibels loss) suffers greatly when he is only one among 45 children, and I know there is real need for a class of this type.

The ages of the children range from seven to eleven, and the length of time they spend in this class depends on their ability to assimilate the special training afforded them. Some may require only six months; others a year, but the ultimate aim is that they shall be able to return to their own schools and take their places once more with their normal classmates.



Use of Hearing Aid in the Special Class.

In order that they may do this they are taught to lip-read and use a hearing aid intelligently. Their self-confidence is restored by individual attention to their difficulties and encouragement to make full use of their own particular abilities, which often may be quite latent. Defects of speech are remedied, where possible, and a general liveliness of manner and outlook encouraged.

The classroom set aside at Regent Road School is being specially adapted to give every assistance to the "hard of hearing." When completed it will have sound-proofed walls and a treated floor designed to deaden extraneous noise liable to be picked up and amplified by the hearing aids. Fluorescent shadowless lighting has been installed to facilitate good lip-reading, and bright, modern classroom furniture is to be provided to encourage a feeling of well-being among the children.

One child, a girl, has been transferred from a special residential school for the deaf, where she has spent most of her school life amongst totally deaf children. Now she is at home with her parents in Salford, attending school in normal hours, and thoroughly enjoying her new life. At the Christmas Party,

organised for the Infants' Department of the Regent Road School, she delighted the children by acting Father Christmas and distributing presents. We believe here heartily in family life, and it is only in the most exceptional cases of the severest hearing loss or bad home life that we recommend residential schooling. The staff of the residential schools do their valiant best, but no amount of self-sacrificing effort can replace the home.

Four boys have returned to their own schools. Here are extracts from the record card of one of them :—

" From being a very retarded silent child has made much progress to a talkative child. (Often in trouble for pranks and misdemeanours !) Very normal in attainment and behaviour. Health improved considerably. Quite lively and becoming a ' leader ' in childish enterprises."

This boy's persistence and sociability rose from Grade E to Grade A. This, to my mind, shows how care of the individual child is well worth while, and how in some cases the child can return, after this care, and hold his own in the stream of life and of education.

From time to time the children participate in classwork and activities with the normal children of the school, and this helps to break down the feeling that " there is something the matter with them." At a recent performance of a school play, two " hard of hearing " children mystified other members of the audience during an interval, by carrying on a discussion across the hall. Not a sound was uttered by either party, who were delighted by their " superiority " over their normal neighbours, to whom lip-reading is a " dead language."

Owing to the small size of the class it is possible, as part of the curriculum, to pay visits to places of interest. Two visits have been made to the City Art Gallery at Peel Park, one to the Manchester Museum, Zoology Section, and one to an exhibition at the Manchester Central Library. The children on each occasion derived both pleasure and enlightenment from the experience.

Each Wednesday a lip-reading class for children over twelve is conducted by the same teacher after school hours. This aims to assist the child who may become more acutely deaf or who, in the opinion of the aural clinic, will benefit in later life by having a knowledge of the art. At present, numbers in attendance are small, but as the service becomes more widely known it is hoped that this will be adjusted.

There is no doubt that a very necessary section has been added to the services available to the children of Salford, and we may look forward with confidence to its growth and success in 1949.

Jewish Fresh-air Home and School, Delamere.

Members will be interested to learn of progress made by some Salford children in the Jewish Fresh-air Home and School, Delamere. Here are some actual cases :—

M.L. Diagnosis—Catarrh, nervous debility and old rickets.

This child has become emotionally much more normal since the successful operation on her eye. Increase in weight slow, but she does gain. Basal expansion improving and general bearing better.

S.F. Diagnosis—Malnutrition, catarrh and nervous debility.

Very slow gain in weight, but general improvement. This child comes from an exceedingly poor home and it is taking her some time to catch up with the years of underfeeding and poor housing, etc.

S.O. Diagnosis—Rheumatism, anæmia, marginal blepharitis.

A difficult and maladjusted child as well as a delicate one. History of fits from six months to four years old, and rickets. Jealous of sister, aged two years. Difficult with other children when admitted, but less so now ; affectionate to the staff. Has had one fit of hysteria, at the end of which she expressed her animosity against her baby sister. Since then has spoken lovingly about her, but at intervals still makes spiteful remarks about her. Restless in school, where she works well ; intelligent, but retarded. Big gain in weight, eyelids have cleared ; still subject to skin troubles.

L.W. Diagnosis—Pre-tuberculous, cervical adenitis, nervous debility and chronic bronchitis.

Contact T.B. case. Gain in weight continued. Freer and more confident and this is having a marked effect on his physical condition. Still a delicate child, but no longer the pathetic specimen we admitted. Has a splendid appetite, chest expanding, posture improving.

I.C. Diagnosis—Anæmia and nervous debility.

A pale, thin boy. He is growing, gaining very slowly, but steadily. Still has occasional evening temperature. Moody and requires much encouragement. He is eating better than when admitted, but has not yet a healthy boy's appetite.

Parents' Club.

Membership of the Parents' Club (parents of handicapped children) continues to grow, and several educational and social events were held during the year.

In March, a meeting was arranged at Hope Hospital, at which the Almoner gave an explanation of her work. This was followed by an address by the Head Mistress of the Delamere Fresh-air Home and School, prior to the showing of a beautifully coloured film about the school.

On the evening of the 5th April, members met in the Town Hall to hear Henry P. Weston, Esq., M.A., secretary to the British Council for the Welfare of Spastics, and Miss M. I. Dunsdon, of the National Foundation for Educational Research. These talks were warmly received by the club members, particularly those with children suffering from cerebral palsy. Many questions were asked, and advice given, and Miss Dunsdon was invited by a representative of the parents to meet them again when next she visited this area. Miss Dunsdon herself was gratified to find so much interest by parents in the welfare of the handicapped child.

One hundred and fifty parents and children attended the summer picnic held in the Cafe, Buile Hill Park. The Mayor spoke to the parents on the need for further special school accommodation in Salford. Representatives from voluntary organisations were present, including Mrs. E. Lambert, of the local branch of the Infantile Paralysis Fellowship, who spoke with sincere feeling of her difficulties, as the mother of a son stricken with infantile paralysis, in getting him suitable training and employment. Miss M. Mather, herself one who has overcome the handicap of cerebral palsy, gave a talk on the importance of "mind over matter." Songs were included in the programme, and a conjuror, after which tea was served.

A children's outing to Worsley was arranged during July. There they played games before returning to a nearby Sunday School for tea. Many voluntary helpers from St. John's Ambulance Brigade, Toc H., and a local Scout troop, were present and welcomed on this day.

A social evening was held shortly after. There was a display of country dances, followed by whist and ballroom dances; several dances have been organised by Committee members during the year.

On December 23rd the first Handicapped Children's Christmas Party was held in the Art Gallery. Over 250 children and their parents were present—some of them, being home-bound, had to be brought by ambulance. Music for carols and community singing was provided by the Salford City Police Band. A display of ballet and tap dancing was given, and entertainment by a ventriloquist and conjuror. The end of tea brought the arrival of Father Christmas who, under the lights of the huge Christmas tree, distributed bags of fruit and nuts, a sweet and a toy, to each child before leaving. For many of these children it was their first real Christmas party. One boy in particular was very thrilled—it was the only time for over a year that he had been outdoors to any social event.

Report on Child Guidance Clinic.

Dr. Muriel Hughes reports :—

1948 has been in all respects a satisfactory year. There have been no interruptions in the work of the Clinic, thus enabling us to maintain a steady rate of progress.

There have been no changes in staff. In addition to Clinical work the Clinic is making its contribution to the University training scheme for Psychiatric Social Workers, and we have also made a contribution to other training courses such as those offered by the University to ex-service men and women in the various branches of social work.

Three members of the staff attended the International Congress on Mental Health in August, 1948. The North of England Child Guidance Group has held two meetings in the Salford Clinic during 1948, and the offices of Chairman and Hon. Secretary for 1949 have passed to the Salford Clinic.

The numbers of patients referred to the Clinic show a slight increase, whilst the numbers of those actually under treatment have been increased owing to an increase in psychiatric sessions during the latter half of the year. This has enabled us to maintain the treatment waiting list at a slightly lower level than the previous year.

The Child Guidance Clinic has become more and more a part of the community life in Salford—an indication of this is the steady increase in citizens who themselves seek our help. This frequently leads to the acceptance of children as patients with the very willing co-operation of parents. There were 19 such patients placed on the waiting list in 1948, as compared with seven in 1947. Another interesting point is the large number of children of unusually high intelligence.

Special Investigation Clinic.

During the year 151 school children were examined by Dr. W. Mackay at this clinic. Of these, 145 reported for the first time.

Eighty-five of the children were seen because of suspected or real heart lesions, 12 were diagnosed as suffering from chorea, 26 (complaining of various pains) came for investigation of possible organic disease and rheumatism, five were cases of enuresis, five had abnormalities of physical development, and the remaining 18 were advised and treated for other conditions.

Of the children suffering from definite cardiac lesions, 71·7 per cent. were regarded as fit to take part in school life as if they were "normal" healthy children.

Of all the children attending the clinic 82·8 per cent. were thought to be fit to attend ordinary school and take part in routine drill and exercises.

Report of Physical Education in Salford

submitted by the Organisers of Physical Education.

During the year progress has been maintained. The presence of the 15-year-old group of children in the schools has required the extension of facilities for physical education in all branches with provision for more advanced

work in the physical training lessons, the need for more advanced swimming instruction and more accommodation at playing fields and public parks for organised games. The year's work is reviewed under the following heads:—

- (1) Physical Training.
- (2) Organised Games.
- (3) Dancing.
- (4) Swimming.
- (5) Out-of-School and Youth Club Activities.

(1) PHYSICAL TRAINING.

To derive the benefits desired from the day-to-day physical training lesson small classes are aimed at, free practices with some choice of activity and progress of the individual rather than appearance of the mass, with unobtrusive teacher control and participation.

One problem has been the provision of the right type of lesson for the 15-year age group. The physical training for these children should include the use of gymnastic apparatus for agility work which requires indoor accommodation which at present is most difficult to find in most of our schools. The boys' work generally shows some progress, to which the emergency-trained teachers have made a very helpful contribution. Many of these teachers are interested in physical education, making their effect on the work of some consequence. There is a shortage of suitable women teachers for work with the girls.

Recreative physical training classes have been held throughout the year for both men and women teachers which were well attended and much benefit was derived by all the teachers who attended these classes. Women teachers' instructional classes have been held in games coaching and umpiring and various types of dancing, including Scottish, English Country, and simple dances suitable for teaching to young children in school.

(2) ORGANISED GAMES.

Organised games are included in the timetable of all schools with the exception of Infants' Departments, and more children have taken part in organised games on the Committee's playing fields and park lands during and out of school hours than ever before. All the available facilities have been fully utilised. These, however, are not yet adequate to allow for all children to enjoy a weekly visit during school hours to a grass-covered playing area, but this should be much improved when the Crescent land and other park land is fully developed, and the Education Committee's playing field at Stott Lane becomes available. During school hours, attention has been concentrated on teaching the skills for the major team games, leaving the out-of-school activities to cater for match play between schools in rugby and association football, athletics, netball, hockey, rounders and swimming.

(3) DANCING.

Dancing in some form constitutes part of the work in all Infants' Departments.

The majority of the junior departments also include one period a week devoted to this subject, the boys taking part in several schools. In addition, the all-standard and senior girls' schools include the subject as part of the curriculum. In the main, types of dancing taught are English and Scottish Country Dancing, Scandinavian and Folk Dances from many lands, easy combinations of steps which are built up into simple dances, and in one or two junior departments the children are experimenting to make up their own dances, and build them into plays to interpret stories by means of dances.

(4) SWIMMING.

The Committee's policy is that as many children as possible should be given the opportunity to learn to swim, so the scheme of instruction in the schools is to concentrate on learners during the summer months when the bath facilities are greater than during the winter months which are used for teaching more advanced swimming and life-saving. The instruction is given by two full-time qualified instructors (one man, one woman) assisted by three male and two female instructors employed in a part-time capacity during the summer months.

In this branch of physical education, good progress can be reported, which reflects great credit on the Committee's swimming instructors assisted in so many cases by keenly interested Head and Assistant Teachers. Swimming certificates awarded by the Education Committee this year numbered 2,193, against 1,349 in 1947, and 811 free season tickets awarded by the Baths Committee to children taught to swim during the current season, against 593 awarded in 1947. Many of the 14-15-year age group were entered for the awards of the Royal Life-Saving Society and a total of 309 awards were gained during the twelve months, against a total of 205 awards during 1947. In addition, all of the awards offered by the Humane Society of the Salford Hundred were gained, i.e., eight medals to boys and four medals to girls.

The swimming galas promoted by the Salford Schools Sports Federation and the Salford Baths Committee were all most keenly contested by large numbers of competitors, and it was most encouraging to note the improved standard of swimming shown by the competitors. In addition, several schools held their own swimming galas.

(5) OUT-OF-SCHOOL AND YOUTH ACTIVITIES.

Many varied types of physical activities have been undertaken during summer evenings and Saturdays throughout the year, mainly promoted by the Salford Schools Sports Federation. These activities included association and rugby football, cricket, swimming, netball and rounders leagues and athletic sports meetings. All sections report an increase in the number of schools taking part, and the standard of achievement reached in the various sections has been good. This reflects great credit on the large number of teachers who give so much of their own time voluntarily, so that a very large number of children play competitive games.

Owing to the raising of the school-leaving age, most sections have attempted to cater for the older child by further competitions. An extra athletic sports meeting was held during June for this age group.

Physical activities both indoor and outdoor cover a big field in connection with the arrangements of the Youth Committee of this Authority for an age range of boys and girls between 15 and 20 years of age.

Physical training instruction is provided by ten classes for boys and nine for girls. Mixed Country Dancing is encouraged in preference to Ballroom Dancing, and instruction is now provided in five youth organisations. A girls' netball league provides competitive play for 12 club teams, and in the boys' football league 22 clubs take part. A youth cricket league provides a summer activity for eight clubs, and in the table tennis tournament, held during the winter months, 30 clubs took part.

Five instructional swimming classes for boys and girls were conducted during the year and at the end of the season a very successful swimming gala was held, in which 12 youth clubs competed. An athletic meeting was held during July, and about 700 competitors took part, all drawn from some 15 youth clubs. Camping, cycling, youth hostelry, hockey and tennis tournaments formed part of the many activities by youth clubs throughout the year.

Almoner's Report.

During 1948 the School Medical Officers have continued to refer to the Almoner cases where the Almoner's advice and help might be useful.

The number of convalescent cases dealt with during the year was 168, an increase of 66 on the previous year. In most of these cases, the convalescence was arranged through voluntary organisations and one would like to express thanks to Miss Agnew, the secretary of the I.C.A. Association, for her unfailing courtesy and willing co-operation in placing Salford children in suitable convalescent homes.

Unfortunately it is difficult to secure accommodation during the summer months without several weeks' delay. Nevertheless, with two exceptions, all the children referred during 1948 were duly accommodated. The exceptions were two children for whom special nursing care was required and the Homes deemed suitable for them had no vacancies until early 1949.

In some of the cases referred for convalescence, one has felt that a holiday rather than a period of treatment was required. In many instances the Salford Poor Children's Holiday Camp has met this need and there is little doubt that if this service could be increased much ill-health in school children might be prevented and, indeed, much good health promoted.

Every effort is made to ensure that the child derives the maximum benefit from the treatment given.

In all cases referred to the Almoner by School Medical Officers, a careful note is kept of family circumstances and this often links up with other information in the Almoner's possession about the same family.

Advice and help with clothing have frequently been given. In a few cases it has been necessary to pay the fares of children and/or escorts to Convalescent Homes.

Holidays for School Children in Switzerland.

Arrangements were made for the medical examination of a group of children to spend three months' holiday in Switzerland at the invitation of the Swiss Red Cross. Fifty-six children under 10 years of age enjoyed this holiday and returned showing great improvement in their bodily health.

There was a marked improvement in the nutrition of most of the children and their general condition was considerably better on their return. Three children gained 12 lbs. in weight, one gained 11 lbs. and one gained 10 lbs. The average gain in weight of all the children was $5\frac{1}{2}$ lbs.

An interesting point is that a girl aged 6 years 3 months, who was of poor nutrition, gained 12 lbs.

Twenty-five children who were selected to spend a short holiday in Belgium were medically examined.

Salford Poor Children's Holiday Camp.

Each week during the summer months, 40 children spent a holiday at the Prestatyn holiday camp. Each child was medically examined for cleanliness before going. Altogether, 550 children enjoyed a week's holiday at the camp. Of this total there were 72 handicapped school children and three members



Fun at Prestatyn Holiday Camp.



Games at Prestatyn Holiday Camp.

of the nursing staff accompanied them and remained with them during the holiday. The holiday camp is maintained by voluntary contributions and does not involve the parents in any expense.

Convalescent Homes.

Arrangements were made for 221 children to receive convalescent treatment for a period of not more than four weeks.

Mass Radiography.

Numbers of school children and students examined :—

	Males.	Females.	Total.
Age 14.....	392	427	819
Age 15.....	124	113	237
Age 16 and over	221	97	318
	737	637	1,374

Of the children aged 14, three were referred to Tuberculosis Dispensaries for further investigation. Of these, one has been diagnosed as a case of active pulmonary tuberculosis, one has been classified as inactive, and the remaining case is still under observation. All these three were resident in Salford.

Of the children aged 15, none was diagnosed as suffering from active pulmonary tuberculosis, nor referred to Tuberculosis Dispensaries for observation.

Of the students aged 16 or over, three were referred to Tuberculosis Dispensaries for further observation. Of these, one, resident in Salford, has been diagnosed as a case of active pulmonary tuberculosis. The remaining two both resident in the Lancashire County area, have not yet been finally classified.



Mass Radiography of Adolescents.

Diphtheria Immunisation.

The state of children aged 5-15 years is given in the following table:—

Number immunised during the year 1948	345
Total number immunised up to 31st December, 1948.....	23,005
Percentage immunised up to 31st December, 1948	95.05%
" " " " 1947	90.9%
" increase.....	4.15%
Safety injections given, 1948	1,164

In children under eight years, immunisation is carried out by two injections of A.P.T. 0.5 c.c. A.P.T. is given at each injection with an interval of one month between the injections. For the children over eight years immunisation is given by three injections of T.A.F. The interval between the first and second is two weeks and between the second and third is one month. Each dose of T.A.F. is 1 c.c. For all safety injections one dose of 1 c.c. T.A.F. is injected. The first safety injection is given just before or immediately after the child enters school.

Scabies Survey.

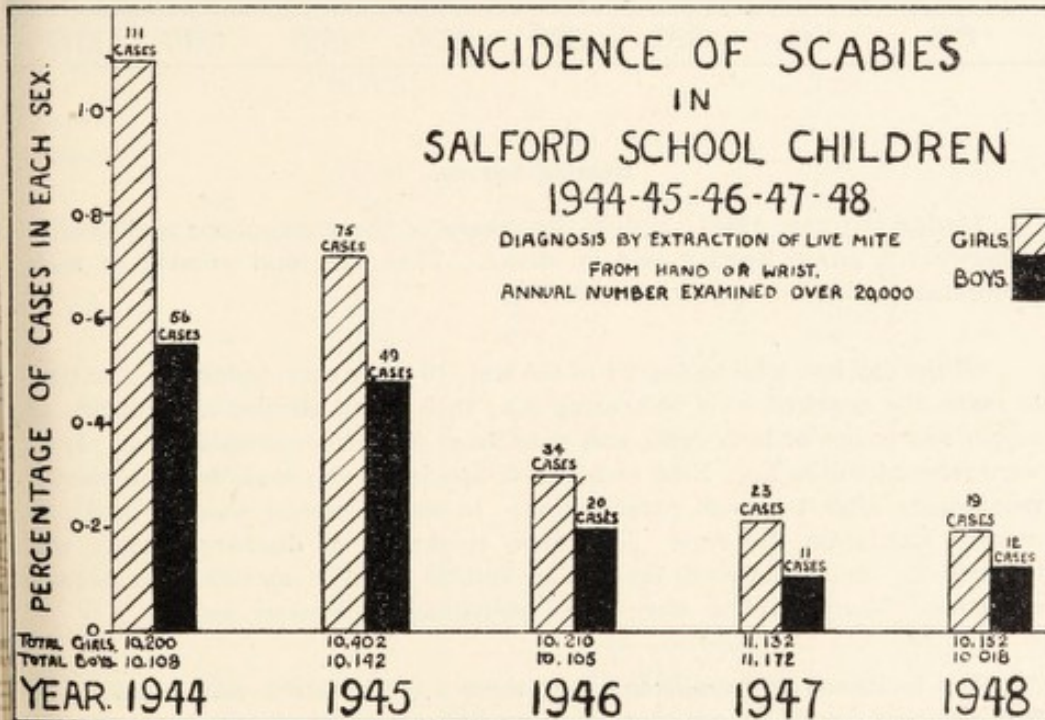
The annual examination of Salford school children was carried out in the autumn term, 1948, by a trained worker. The usual procedure was for the children to file past whilst he sat near a window in the best possible light, the actual examination of their hands taking approximately 15 seconds per child. In cases where the worker was suspicious, a watchmaker's lens was used to aid the inspection and diagnosis was confirmed by the removal of a live sarcoptes.

A total of 20,170 children were examined in this way and only 31 positive cases of scabies were found—an incidence of 0.15 per cent., the figure for the boys being 0.12 per cent. and for the girls 0.19 per cent.

The percentage with scabies in schools according to social groupings of schools, was as follows :—

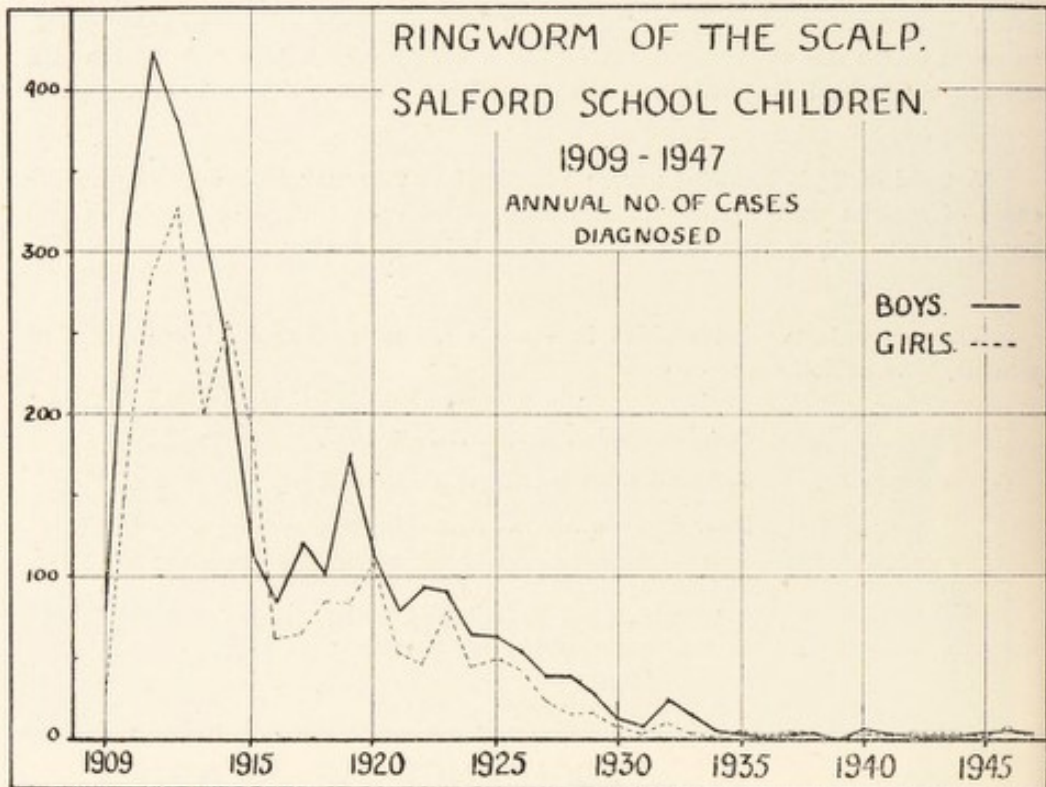
Good schools	0.10%
Average schools	0.16%
Poor schools	0.19%

The number of treatments given to school children during the year 1948 was 213, compared with the figure of 431 for the previous year.



Ringworm.

Investigations are proceeding into the incidence of ringworm. It is of interest to note the incidence of this disease over the past years.



Hearing Survey.

During the year 1,643 children, by means of the gramophone audiometer, underwent a group hearing test in school. Thus the total number of tests performed in Salford is now over 20,000.

Of the children who took part in the test, 10.5 per cent. failed, after re-test, to reach the required level of hearing (i.e., their result showed a 9 decibels or higher loss in one or both ears), and were listed for further investigation. They were referred to the Ear, Nose and Throat Specialist who made suitable recommendations after thorough examination. In some cases it was necessary to remove wax from the ears; in others, treatment of discharging ears was imperative. Some required lip-reading tuition or even special class accommodation. Many children were given individual audiometer tests.

The incidence of tonsillectomy in these 1,643 children was found to be 26.5 per cent., and 7.4 per cent. of them had a history of otorrhœa.



Testing hearing by means of the Individual Audiometer.

RESULTS OF GRAMOPHONE AUDIOMETER TESTS.

Average Hearing Levels for each Age Group expressed in Decibels.

Age in years.	BOYS.			GIRLS.		
	No.	Right Ear.	Left Ear.	No.	Right Ear.	Left Ear.
6	1	0	6	—	—	—
7	15	2.4	2.0	24	2.4	3.9
8	206	2.2	1.9	196	3.8	3.0
9	342	2.6	2.1	341	2.1	2.1
10	227	1.3	1.4	135	0.9	1.0
11	46	2.9	2.1	66	0.5	0.1
12	12	3.8	4.5	9	1.7	0.3
13	6	0	2.5	8	-2.2	-0.8
14	2	-3	-1.5	4	0	0
15	1	-3	-3	2	0	0
Totals	858			785		

Health and Social Survey.

In association with the Department of Social Studies, Manchester University, a health and social survey of the Ordsall area was begun, and the following preliminary facts were brought to light. Facts about child health are always of interest. Some may, at first sight, seem of trivial importance, for example, the provision of handkerchiefs, but it is necessary for hygiene and to prevent the spread of infection that children should have some form of handkerchief.

Holidays. Holidays are of obvious importance for the health of the child, and there is urgent need for the provision of facilities for family holidays for families from this area. Of 473 children between the ages of 10 and 14 years, questioned about holidays, 6 per cent. had never left the area, and 27 per cent. had had only day trips. It was estimated that 20 per cent. of the younger children had never been away from home.

After questioning 219 children at random, it was noted that 113 of them had mothers who went out to work. When *over half* of the mothers go out to work, child care becomes of greater importance.

In spite of strenuous efforts made over past years to cleanse the children, almost 11 per cent. of 3,400 examined were infested with live lice or larvæ.

Forty-two per cent. of these children were unable to produce a handkerchief, and 13.5 per cent. admitted they had no toothbrush.

Averages of the times stated to be spent by them in bed gave an even reduction from 12 hours at the age of seven to 10½ hours at the age of 14.

Only two of a survey of 24 houses had hot and cold water installed. Fifteen of these had the old type brick "copper" boilers, four of which were unusable.

The survey is still continuing and will take some years to reach completion.

Survey of Noise in Schools.

These investigations, by means of a portable Subjective Noise Meter (Metropolitan-Vickers Electrical Company Limited) were continued. Examples of measurements taken in some schools are given. To aid comparison, here is a scale showing every-day noises and their measurements, in decibels or phons:—

Phons or Decibels (db.)

80	Quiet car (30 m.p.h.) at 20 feet.
70-80	In busy main street.
70	Loud conversation.
60	Quiet conversation.
50	In suburban train, window open.
40	In quiet residential street.

Measurements were taken in two classrooms in *Halton Bank School*. The first room, on the first floor, was separated from the hall and another classroom by wooden partitions, and had open windows on the third wall, overlooking

the playground. At the time the measurements were done, there was a group of children having country dancing, in the hall, to music from a gramophone. The noise level was 70 db., which dropped to 60 db. when the dancing continued without the help of the gramophone. Not much traffic noise penetrated this classroom, the worst disturbance, from the teacher's point of view, being caused by activities in the hall, and in the school yard.

The second room visited was on the ground floor; this also had windows opening on to the school playground. The door led into a short passage to the hall. During the observation period, the infants were crossing the yard on their way home, and the measurement of noise, with windows closed, was 65 db. This increased by 5 decibels when the windows were opened. The teacher of the class experienced difficulty in making himself heard when the infants were going home, or at play in the yard, and always gave written work to the class during these periods.

At *St. James' School, Broughton*, recordings were made on the first floor, in a classroom whose windows looked on to the main road. Traffic noises were the most distressing, according to the teacher, and necessitated closing the windows. With the class working quietly at arithmetic, the measurement was 50 db.

The measurements taken at *St. Thomas' School, Pendleton*, were from a classroom at the end of the building where the road branches into two routes—each bordering a side of the school. Only the width of the pavement separates the school building from the roadway. Traffic noises were again the cause for general complaint, but most disturbing were the sounds from the nearby railway station, particularly the engines "letting off steam." This occurs several times a day, and seriously interrupts the lesson which is in progress. Unfortunately, for our measurements, we were not able to record the loudness intensity level of this noise. The background sounds were estimated to be 55 db.

One room at *Regent Road School* is being used by the special class for partially deaf children. It was thought that it might be of interest to take noise measurements in this room before and after sound-proofing tiles were applied to the walls. The class is on the first floor, with windows facing a fairly busy side road, and the railway. The teacher complained of reverberation in the room, the walls of which were of plaster-covered brick, and half-tiled. During the recording, children were walking about in handicraft lesson. 65 db. were measured, with the windows closed. Traffic noises and the infants' afternoon departure for home were said to be the loudest noises experienced. A comparative measurement will be taken when the room has been sound-proofed.

Staff.

During the year several changes have taken place. Mr. J. A. Darbyshire, Chief Clerk, retired on the 8th January. Dr. Harold Heathcote, Senior Assistant School Medical Officer, retired on the 30th June after 29 years' service. Miss M. G. Macleod, a School Dental Officer, died on the 13th April, 1948, after 18 years' service. Mrs. R. Stocks, Superintendent School Nurse, retired on the 31st December, 1948, after 29 years' service.

STATISTICAL TABLES.

TABLE I.

Medical Inspection of Pupils Attending Maintained Primary and Secondary Schools.

A.—PERIODIC MEDICAL INSPECTIONS.

Number of Inspections in the prescribed Groups—	
Entrants	2,954
Second Age Group	2,621
Third Age Group	1,223
TOTAL	6,798
Number of other Periodic Inspections	521
GRAND TOTAL	7,319

B.—OTHER INSPECTIONS.

Number of Special Inspections	6,634
Number of Re-Inspections	12,074
TOTAL	18,708

C.—PUPILS FOUND TO REQUIRE TREATMENT.

NUMBER OF INDIVIDUAL PUPILS FOUND AT PERIODIC MEDICAL INSPECTION TO REQUIRE TREATMENT

(excluding Dental Diseases and Infestation with Vermin).

Group. (1)	For defective vision (excluding squint). (2)	For any of the other conditions recorded in Table II A. (3)	Total individual pupils. (4)
Entrants	25	648	665
Second Age Group	235	474	639
Third Age Group	133	182	295
TOTAL (prescribed groups) ...	393	1,304	1,599
Other Periodic Inspections ...	...	139	139
GRAND TOTAL	393	1,443	1,738

TABLE II.

A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR
ENDED 31ST DECEMBER, 1948.

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	133	101	856	1
5.	Eyes—				
	(a) Vision	393	53	59	4
	(b) Squint	100	62	55	2
	(c) Other	82	27	247	4
6.	Ears—				
	(a) Hearing	50	76	146	17
	(b) Otitis Media	82	124	762	23
	(c) Other	69	14	379	34
7.	Nose or Throat	465	645	1,931	279
8.	Speech	38	58	68	8
9.	Cervical Glands	42	324	407	67
0.	Heart and Circulation	48	124	232	57
1.	Lungs	80	206	486	110
2.	Developmental—				
	(a) Hernia... ..	10	22	18	...
	(b) Other	6	31	3	1
3.	Orthopædic—				
	(a) Posture	81	101	85	6
	(b) Flat Foot	52	36	27	...
	(c) Other	174	118	137	17
4.	Nervous System—				
	(a) Epilepsy	3	8	16	7
	(b) Other	30	40	97	24
5.	Psychological—				
	(a) Development	7	26	25	10
	(b) Stability	15	53	35	1
6.	Other	282	186	2,182	379

E.—CLASSIFICATION OF THE GENERAL CONDITION OF PUPILS INSPECTED
DURING THE YEAR IN THE AGE GROUPS.

Age Groups.	No. of Pupils Inspected.	A. (Good).		B. (Fair).		C. (Poor).	
		No.	% of Col. 2.	No.	% of Col. 2.	No.	% of Col. 2.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Entrants	2,954	956	33%	1,751	59%	247	8%
Second Age Group	2,621	976	37%	1,455	56%	190	7%
Third Age Group	1,223	554	45%	599	49%	70	6%
Other Periodic Inspections	521	206	39%	295	57%	20	4%
TOTAL	7,319	2,692	37%	4,100	56%	527	7%

TABLE III.

TREATMENT TABLES.

GROUP I.—MINOR AILMENTS (EXCLUDING UNCLEANLINESS).

	No. of Defects treated, or under treatment during the year.
SKIN—	
Ringworm—Scalp—	
(i) X-ray Treatment	1
(ii) Other Treatment	9
Ringworm—Body	4
Scabies	178
Impetigo	183
Other Skin Diseases	186
Eye Disease (External and other, but excluding errors of refraction, squint and cases admitted to hospital)	582
Ear Defects	1,344
Miscellaneous (e.g., minor injuries, bruises, sores, chilblains, etc.)	5,958
TOTAL	8,445
 Total number of attendances at Authority's minor ailments clinics	 <u>80,148</u>

GROUP II. DEFECTIVE VISION AND SQUINT

(Excluding Eye Disease treated as Minor Ailments—Group I).

	No. of Defects dealt with.
Errors of Refraction (including squint)	4,166
Other defect or disease of the eyes (excluding those recorded in Group I)	822
TOTAL	<u>4,988</u>
No. of pupils for whom spectacles were (a) Prescribed	1,412
(b) Obtained	<u>1,412</u>

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

	Total number treated.
Received operative treatment—	
(a) for adenoids and chronic tonsillitis	512
(b) for other nose and throat conditions	12
Received other forms of treatment	222
TOTAL	<u>746</u>

GROUP IV.—ORTHOPAEDIC AND POSTURAL DEFECTS.

	Total number treated.
(a) Number treated as in-patients in hospitals or hospital schools	111
(b) Number treated otherwise, e.g., in clinics or out-patients departments	572

GROUP V.—CHILD GUIDANCE TREATMENT AND SPEECH THERAPY.

	Total number treated.
Number of pupils treated—	
(a) under Child Guidance arrangements	189
(b) under Speech Therapy arrangements	86

TABLE IV.

DENTAL INSPECTION AND TREATMENT.

(1) Number of pupils inspected by the Authority's Dental Officers—	Total number treated.
(a) Periodic Age Groups	8,702
(b) Specials	597
(c) TOTAL (Periodic and Specials)	<u>9,299</u>
(2) Number found to require treatment	6,434
(3) Number actually treated	6,702
(4) Attendances made by pupils for treatment	8,792
(5) Half-days devoted to—	
(a) Inspection	69
(b) Treatment	1,324
TOTAL (a) and (b)	<u>1,393</u>
(6) Fillings—	
Permanent Teeth	2,763
Temporary Teeth	506
TOTAL	<u>3,269</u>
(7) Extractions—	
Permanent Teeth	1,531
Temporary Teeth	7,011
TOTAL	<u>8,542</u>
(8) Administrations of general anæsthetics for extraction ...	3,660
(9) Other operations—	
(a) Permanent Teeth	1,886
(b) Temporary Teeth	931
TOTAL (a) and (b)	<u>2,817</u>

TABLE V.

INFESTATION WITH VERMIN.

(i) Total number of examinations in the schools by the school nurses or other authorised persons	61,756
(ii) Total number of individual pupils found to be infested	8,047
(iii) Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944) ... ..	...
(iv) Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944) ... ..	...

Child Guidance Clinic Statistics, 1948.

Number referred in 1948.....	214
By—	
Schools	20
School Welfare Department	22
School Medical Officer.....	82
Hospitals	14
Private doctors	5
Court.....	6
Parents	19
Other	7
Outside	39
Brought forward from 1947	113
Referred for—	
Enuresis.....	55
Stealing and truancy	44
Failing at school	12
Stammer	2
Fears	5
Food fads, &c.	3
Sleep disturbances	20
Other difficulties—sex, solitary, &c.	71
Advice <i>re</i> placement	2
Disposal—	
New cases seen	131
For treatment	95
Diagnosis.....	29
Supervision	7
Of those diagnosed only—	
Recommended for placement	10
Unsuitable because of low intelligence.....	13
Referred to other agencies.....	3
Leaving Salford	2
Improved since referred	1
Intelligence of cases seen—	
Below 70.....	15
70+.....	9
80+.....	29
90+.....	23
100+.....	16
110+.....	14
120+.....	13
130+.....	5
140+.....	7
Number on waiting list	108

Closed—not examined—

Parent seen by Psychiatric Social Worker in the Clinic...	4
After home visit	53
Parents unco-operative.....	1
After school visit only	5
After correspondence	9
Referred to other agencies.....	5
	—
	77
	—

Many of these cases had a school visit as well as a home visit.

Treatment—

Number of children treated	84
In treatment at end of December.....	43
Actual <i>children</i> seen	189

Details of Children who have received treatment at the Speech Clinics during the past year.

At Halton Bank (and later at Langworthy Road)—

Stammerers with Dyslalia	1
Cleft Palate	1
Stammerers.....	15
Nasal Speech	1
Deaf	1
Dyslalia	7
	—
Total	26
	—

At Regent Road—

Stammerers with Dyslalia	4
Cleft Palate	1
Deaf	1
Dyslalia	3
Stammerers.....	13
	—
Total	22
	—

At Encombe Place—

Stammerers.....	4
Nasal Speech	1
Dyslalia	12
	—
Total	17
	—

At Broughton Modern School—

Dyslalia	6
Athetosis	1
Spastic	1
Stammerers.....	13
	—
Total	21
	—
General Total....	86
	—

Total number of attendances, 1,519

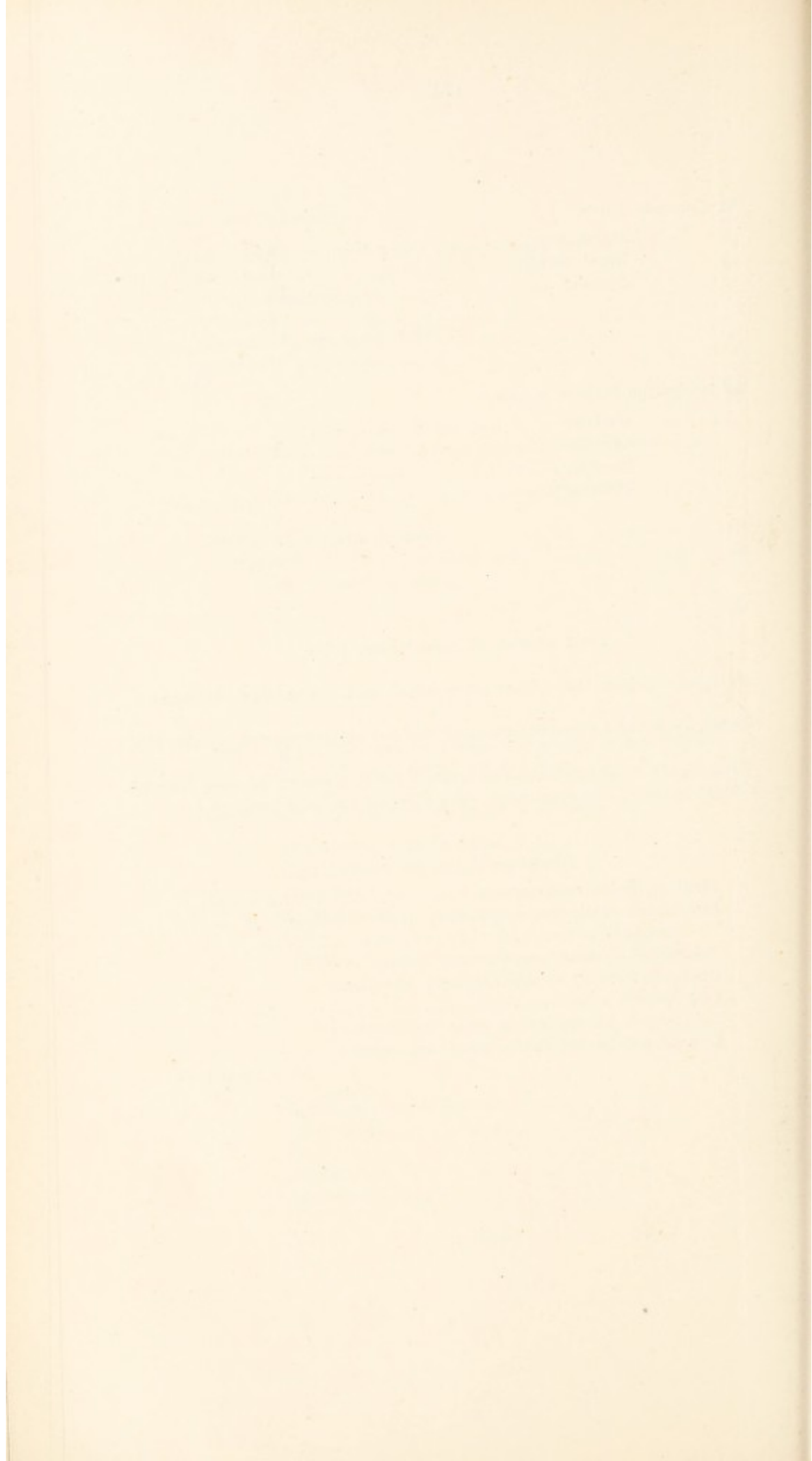
Sixty-four children have been interviewed, and are waiting admission.

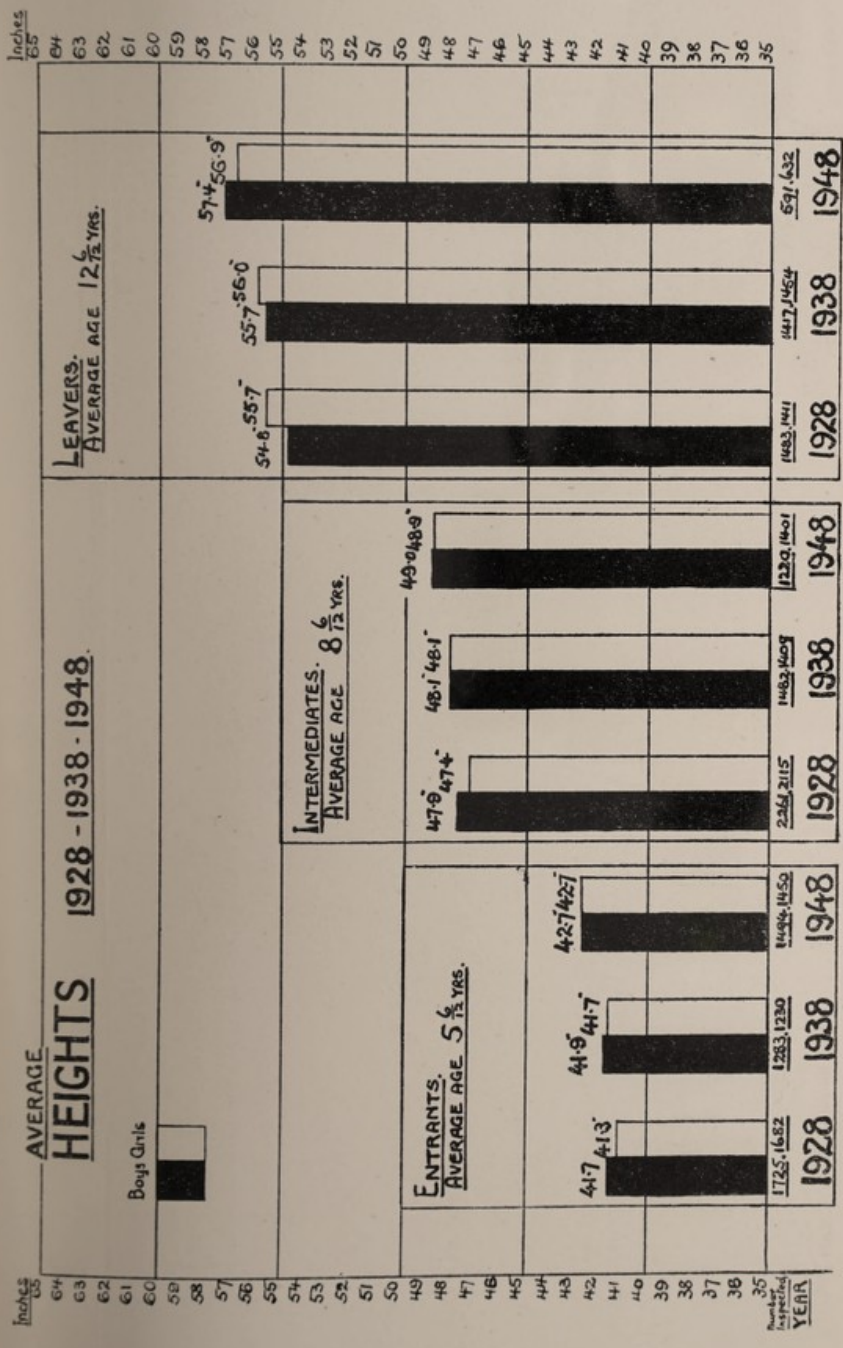
Children referred for speech treatment, and not yet interviewed, number 220.

With regard to all the cases put forward for treatment: 82 were referred by medical officers; the remainder being referred by head teachers.

Discharges during the year.

Final discharge—satisfactory	10
Provisional discharge—satisfactory (and awaiting final discharge)	2
Discharged because improvement unlikely	3
Discharged owing to unsatisfactory attendance	2
Left Salford area	3
Left school, having shown great improvement	3
Left school, having shown some improvement	2
	—
Total.....	25
	—





Average HEIGHTS of children inspected during 1948, with comparative figures showing excess of 1948 over 1938 and 1928 averages, in three main age groups.* (See note below.)

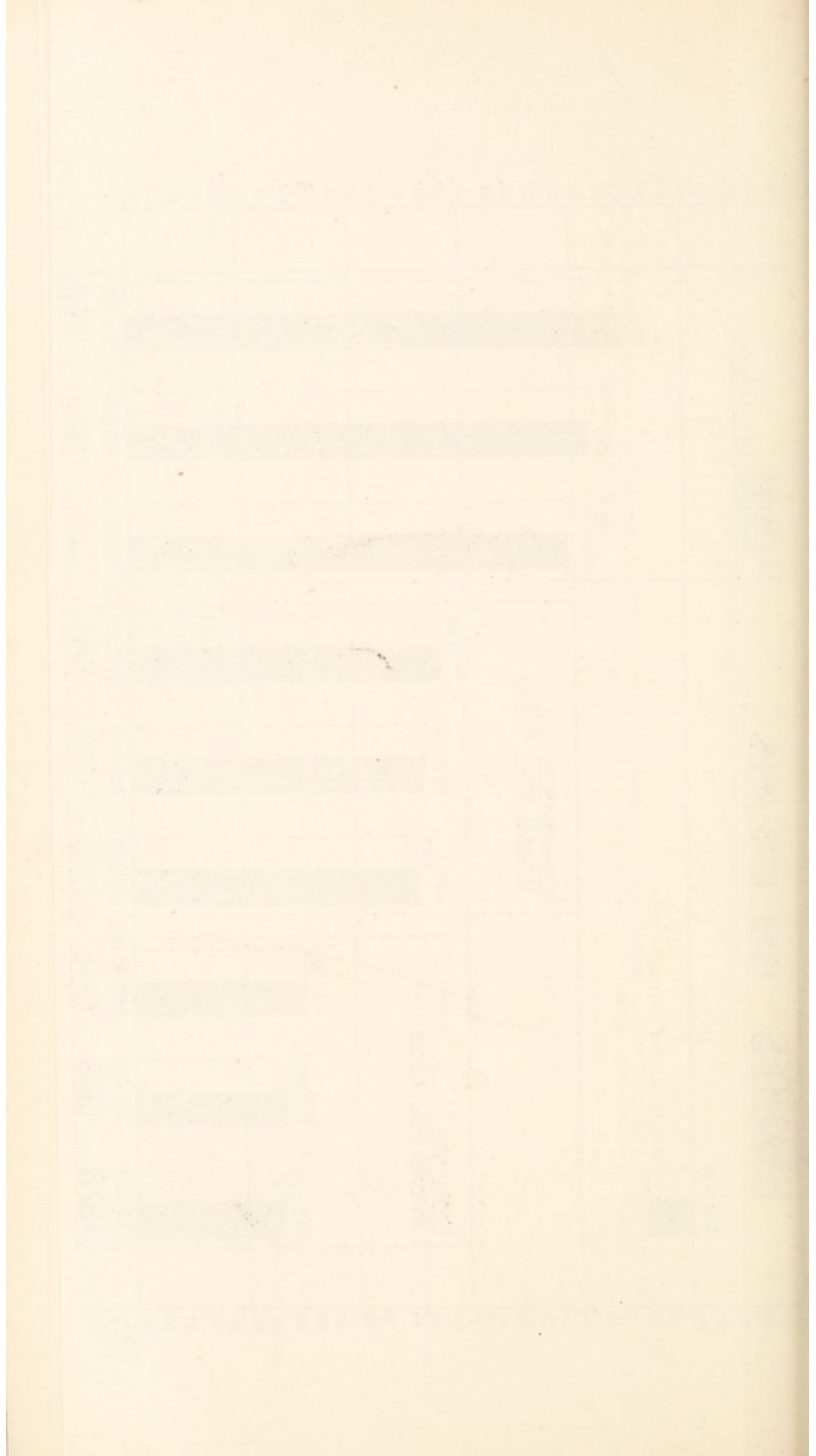
Year	Entrants (5 6/12 yrs. ave.)	Intermediates (8 6/12 yrs. ave.)	Leavers (12 6/12 yrs. ave.)
1948	Boys 42-7 in.	Boys 49-0 in.	Boys 57-4 in.
	Girls 42-7 in.	Girls 48-9 in.	Girls 56-9 in.
1938	Boys 41-9 in.	Boys 48-1 in.	Boys 55-7 in.
	Girls 41-7 in.	Girls 48-1 in.	Girls 56-0 in.
1928	Boys 41-7 in.	Boys 47-9 in.	Boys 54-8 in.
	Girls 41-3 in.	Girls 47-4 in.	Girls 55-7 in.

Height increases.
 Excess of 1948 average heights over
 Entrants 5 6/12 yrs.
 Intermediates 8 6/12 yrs.
 Leavers 12 6/12 yrs.

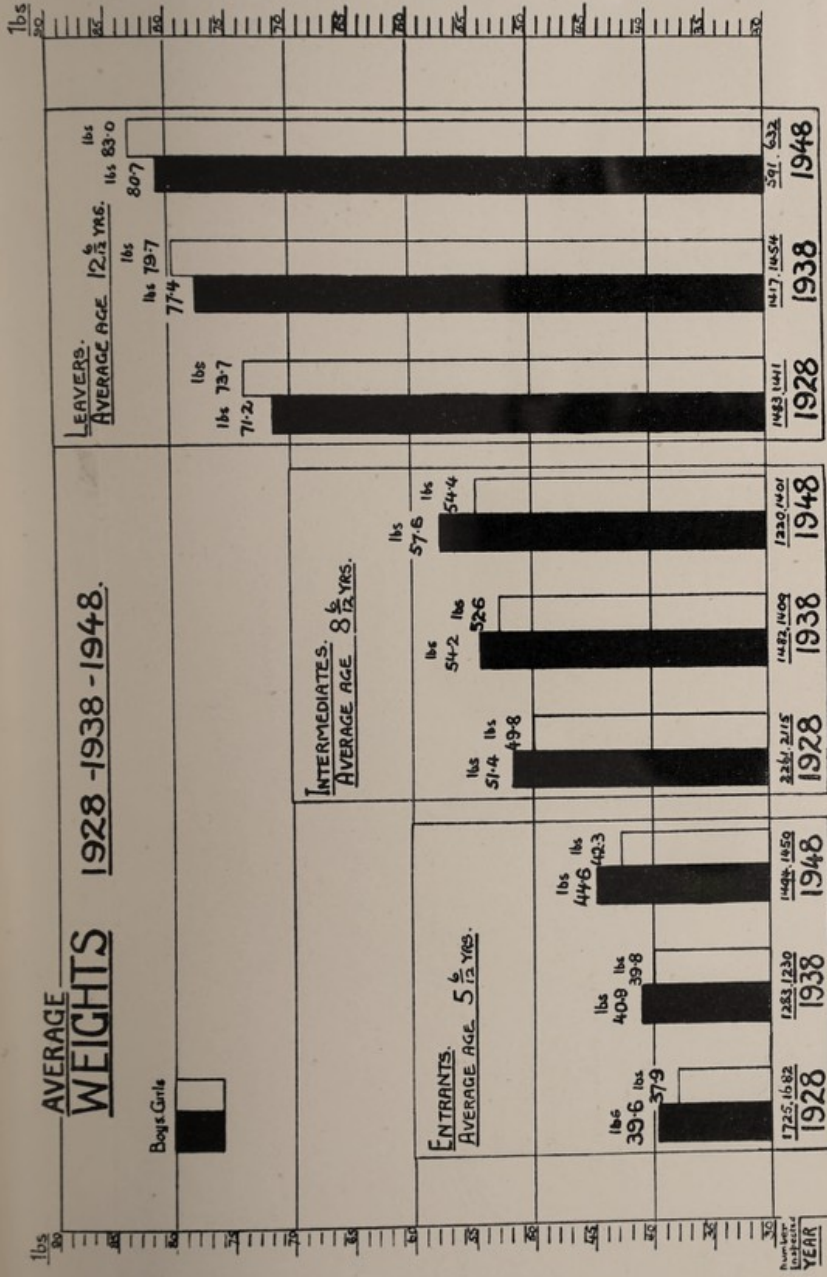
Number of children measured (1948). All the children were measured without footwear.

Nursery Classes	Entrants		Intermediates		Leavers		Total.
	Boys	Girls	Boys	Girls	Boys	Girls	
(Average age 4 6/12 yrs.)	271	1,494	1,220	1,220	591	591	3,576
(Average age 5 6/12 yrs.)	250	1,460	1,401	1,401	632	632	3,743
(Average age 8 6/12 yrs.)	521	2,954	2,621	2,621	1,223	1,223	7,319

* The 1928 and 1938 average ages were Entrants 5 6/12 yrs., Intermediates 8 6/12 yrs., Leavers 12 6/12 yrs. For the purpose of comparison these ages have been taken as the standard. It will be noted that the 1948 average ages in the three main age groups are substantially higher than those of 1938 and 1928. To enable direct comparisons to be made, the 1948 averages for the three age groups are estimates obtained by interpolation of 1948 averages.



AVERAGE WEIGHTS 1928-1938-1948.



Average WEIGHTS of children inspected during 1948, with comparative figures showing excess of 1948 over 1938 and 1928 averages, in three main age groups.* (See note below.)

Entrants (5 1/2 yrs. ave.)	44.6 lbs.	Intermediates (8 1/2 yrs. ave.)	57.6 lbs.	Leavers (12 1/2 yrs. ave.)	80.7 lbs.
1948 { Boys	42.3 lbs.	1948 { Boys	54.4 lbs.	1948 { Boys	83.0 lbs.
1938 { Boys	40.9 lbs.	1938 { Boys	54.2 lbs.	1938 { Boys	77.4 lbs.
1928 { Boys	39.8 lbs.	1928 { Boys	52.6 lbs.	1928 { Boys	79.7 lbs.
1948 { Girls	39.6 lbs.	1948 { Girls	51.4 lbs.	1948 { Girls	71.2 lbs.
1938 { Girls	37.9 lbs.	1938 { Girls	49.8 lbs.	1938 { Girls	73.7 lbs.

Weight increases.

Excess of 1948 average weights over		Average Age.	
Entrants	.....	5 1/2 yrs.	+ 3.7 lbs.
Intermediates	.....	8 1/2 yrs.	+ 3.4 lbs.
Leavers	.....	12 1/2 yrs.	+ 3.3 lbs.

Number of children weighed (1948). All the children were weighed with a minimum of clothing and without footwear.

Nursery Classes		Entrants		Intermediates		Leavers		Total.
(Average age 4 1/2 yrs.)		(Average age 5 1/2 yrs.)		(Average age 10 1/2 yrs.)		(Average age 14 1/2 yrs.)		
Boys	271	1,494	1,220	591	3,576			
Girls	250	1,460	1,401	632	3,743			
	521	2,954	2,621	1,223	7,319			

* The 1928 and 1938 average ages were Entrants 5 1/2 yrs., Intermediates 8 1/2 yrs., Leavers 12 1/2 yrs. For the purpose of comparison these ages have been taken as the standard. It will be noted that the 1948 average ages in the three main age groups are substantially higher than those of 1938 and 1928. To enable direct comparisons to be made, the 1948 averages for the three age groups are estimates obtained by interpolation of 1948 averages.

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THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

PHYSICS 309

PROBLEM SET 1

DATE: _____

NAME: _____

SECTION: _____

INSTRUCTOR: _____

TA: _____

PROFESSOR: _____

ASSISTANT PROFESSOR: _____

LECTURER: _____

ADVISOR: _____

GRADER: _____

TEACHING ASSISTANT: _____

LABORATORY ASSISTANT: _____

RESEARCH ASSISTANT: _____

STUDENT ASSISTANT: _____

GRADUATE ASSISTANT: _____

POSTDOCTORAL FELLOW: _____

PROFESSOR EMERITUS: _____

PROFESSOR OF EMERITUS: _____

PROFESSOR OF PHYSICS: _____