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City of Salford

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ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

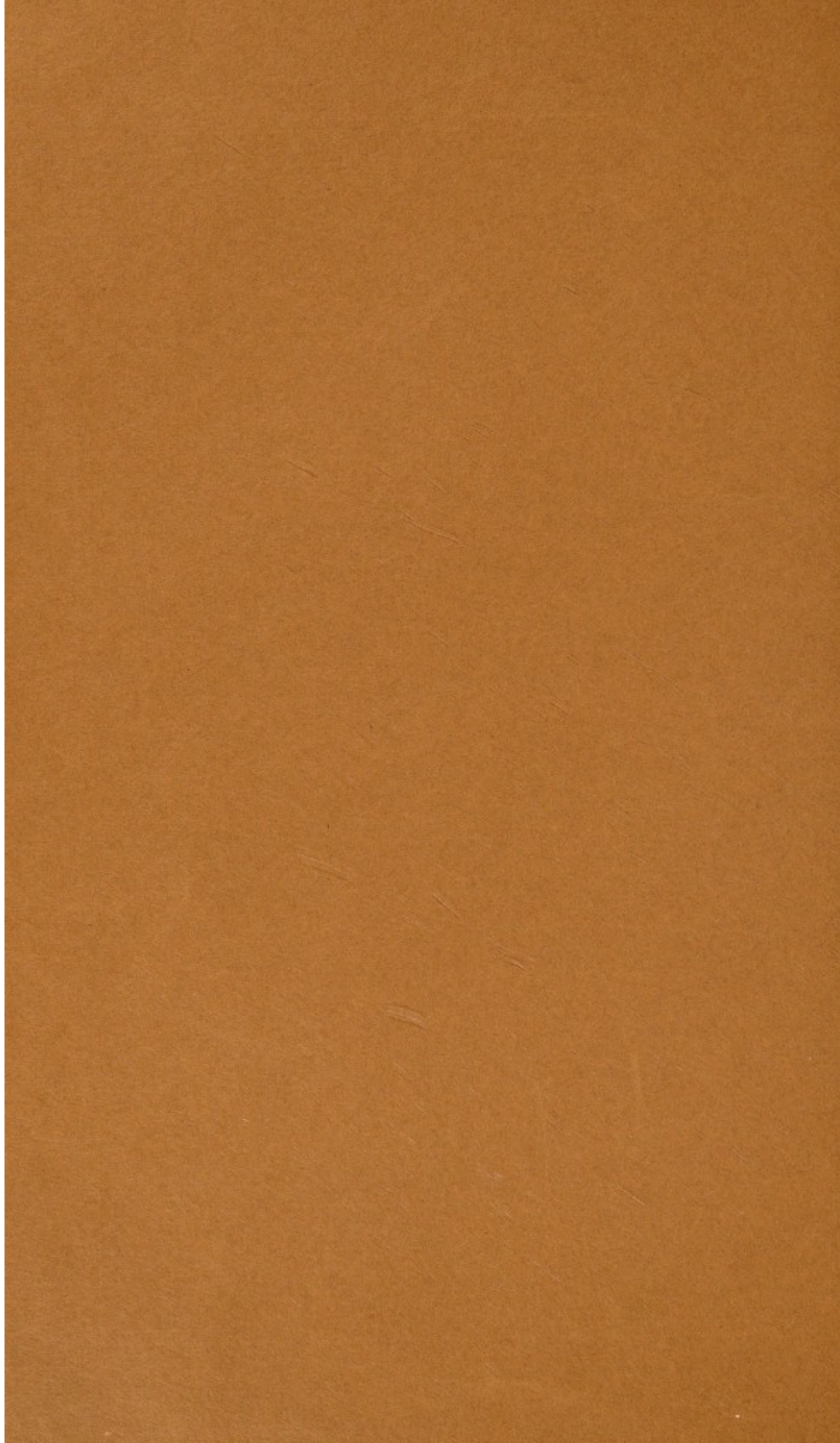
1941

BY

J. L. BURN,

MEDICAL OFFICER OF HEALTH.







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## Members of the Health Committee, 1941-42.

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Alderman J. A. WEBB, J.P., M.B.E., *Chairman to 16th July, 1942.*

Councillor C. R. V. HAYNES, J.P., *Chairman from 16th July, 1942.*

Councillor H. KITCHIN, *Deputy-chairman to 16th July, 1942.*

„ W. W. CRABTREE, *Deputy-chairman from 16th July, 1942.*

Alderman J. PARK, J.P.  
(*Mayor*).

Councillor CROOKELL, J.P.  
(*Deputy-Mayor*).

Alderman CUTTIFORD, J.P.

„ HIGGINBOTTOM.

„ SANDS, J.P.

„ WEBB, L.

Councillor BELL.

„ BINNS.

„ FEARNEHOUGH.

„ HAMPSON.

„ JOHNSON, G.

„ OPENSHAW, J.P.

„ SHLOSBERG.

The following members were co-opted upon the undermentioned Sub-Committees, viz. :—

Maternity and Child Welfare Sub-Committee—Mrs. WADE, representing the Manchester and Salford Women Citizens' Association; Mrs. HARGREAVES, representing the Ladies' Public Health Society; and Mrs. MARKEY, representing the Women's Co-operative Guild.

## INTRODUCTION.

TO THE HEALTH COMMITTEE OF THE CITY OF SALFORD.

This report has been seriously abbreviated as compared with former years in accordance with the express wish of the Ministry of Health in order to economise in paper. It must not be assumed, however, that the work of the Health Department underwent a similar curtailment during the year under review—nothing could be further from the truth. Not only were the whole of the peacetime services of the Department in operation, but, in addition, the War-time Nursery Scheme made a handsome début by presenting the City with the Nursery at Hope Hospital, which was opened on 8th December, and with plans for several Nurseries in other parts of the City.

The catastrophic ending of the year 1940, combined with the raids experienced during the first five months of 1941, brought about a state of unprecedented difficulty in the Salford Public Health Services. Not only the necessity for coping with the daily problems created by a succession of raids of varying intensity, but the state of uncertainty as to the effects of future raids seriously affected the outlook of Committee and Officials alike. Foremost among these difficulties were those produced at Hope Hospital and Ladywell Hospital (at both of which considerable damage was caused)—at Hope Hospital on several occasions, in addition to the tremendous blow endured at the end of 1940, and at Ladywell Hospital by the raid in March, 1941. By great good fortune the casualties suffered at the Hospitals during 1941 were light, but it is with great regret that I have to record the addition to the death roll of the name of Mr. Hedley Harding, Stoker, who was killed while fire-watching at Ladywell Hospital on 11th March, 1941.

A great strain was thrown in particular upon the staff of Hope Hospital, who were required to maintain the ordinary functions of the Hospital during all this period as well as to overcome administrative difficulties created by the loss of a large part of their accommodation. They were labouring, too, under the serious handicap of the loss of the whole of their records.

The position at Ladywell Hospital was not so severely felt because the Hospital had not been fully occupied for some considerable time, and the immediate reaction of the Committee to the March raid was to evacuate such patients as remained on account of the Institution's dangerous situation.

The complete destruction of the Ambulance and Disinfecting Station at Mode Wheel, which occurred in December, 1940, was a severe blow to the Department, but improvised arrangements for the carrying on of these services were made at Ladywell Hospital, where they have continued to function. The conditions under which these services are operated suffer from the usual faults of using premises which have had to be adapted instead of being specially designed for a particular purpose, and it is felt that the time may have arrived when the Committee should consider the desirability of erecting new permanent quarters for these important activities.



The Health Offices themselves having been damaged on several occasions in 1940 and 1941, it was realised that they stood in an exceptionally dangerous area, with the result that early in the year the Maternity and Child Welfare and School Medical Sections of the Department were moved temporarily to the Pendleton and Broughton Clinics respectively.

Briefly, therefore, the first half of 1941 may be regarded as a period of upheaval and uncertainty.

The spell of freedom from air raids enjoyed since the beginning of June, 1941, however, enabled the Department as a whole to undergo a course of gradual rehabilitation with the result that by the end of the year considerable progress had been made towards the reconstruction of many of its activities on a footing comparable with that of peacetime. The damage suffered during the latter part of 1940 and the early months of 1941 could not, of course, be repaired in a few months, but the wheels had been set in motion and at the end of the year there was every reason to hope that, given continued freedom from raids, the machine would soon be running in top gear once again.

In addition to the Health Committee's own activities the Department was responsible for administering on behalf of the Civil Defence Emergency Committee, a considerable Casualty Service which gave an excellent account of itself in the several air raids on the City. Furthermore, great efforts were involved in the organisation of the internal administration of Air Raid Shelters, the work in connection with which reached its peak in 1941.

Great pride is taken by the Staff of the Department in the fact that in spite of the series of difficulties endured as an aftermath of the raids of late 1940 and early 1941, never for a single day was any section of the Department unable to function adequately.

The Mortality Statistics for the year will be found on page 6. I do not intend to dwell upon them in this introduction because the conditions under which they developed were so abnormal that in my opinion no useful purpose would be served by comparison with former years.

The Committee are aware that I did not take up duties in Salford until 21st July, 1941; nevertheless, I have had an opportunity of appreciating the magnificent work done by the medical, nursing and administrative staffs in time of exceptional difficulty; in particular, I should like to associate myself with the tribute paid by the Council when they recorded their high appreciation of the services rendered during this time by Mr. E. Wood, the Chief Administrative Assistant.

J. L. BURN,

Medical Officer of Health.



## SECTION I.

# Mortality Statistics.

### STATISTICAL SUMMARY, 1941.

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

**Population.**—(Registrar-General's Estimate at Mid-year, 1941)..... 159,720

„ (Census, 1931)..... 223,438

**Density.**—The Mean Density of the City is equal to 30·7 persons per acre.

Live Births	Legitimate	1,195	Males,	1,182	Females	2,377
	Illegitimate	80	„	61	„	141
Total						2,518

Annual Rate of Births per 1,000 of the Population..... 15·8

Still Births { Males 67 } Total..... 109  
                   { Females 42 }

Annual Rate of Still Births per 1,000 Total Births..... 41·5

Deaths { Males 1,435 } ..... 2,682  
           { Females 1,247 }

Annual Rate of Mortality per 1,000 of the Population..... 16·8

Percentage of total deaths occurring in Public Institutions..... 50·4

**Deaths from Puerperal Causes :—**

	Deaths.	Rate per 1,000 Total Births.
Puerperal Sepsis.....	...	...
Other Puerperal Causes.....	10	3·8
Total	10	3·8

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

Legitimate, 90. Illegitimate, 177. Total.....	96
Deaths from Measles (all ages).....	1
„ „ Whooping Cough (all ages).....	38
„ „ Diarrhoea (under 2 years of age).....	44

## **SANITARY INSPECTORS' DEPARTMENT.**

The year 1941 was unique in the history of the Sanitary Inspectors' Department. The air attacks on the City at the end of 1940 and again in June, 1941, left many and varied problems to be faced, the chief among which were war damage and repairs to property, equipment and supervision of public air raid shelters, rat infestation and drainage, and the clearance of debris.

### **War Damage and Repairs to Property.**

The repair of war damage by the local authority was delegated to the City Engineer. All complaints, therefore, which came to the Sanitary Inspectors' Department regarding defects in property had to be very carefully investigated with the war damage aspect continually in mind. Close co-operation was maintained with the City Engineer, but decisions as to whether a defect was or was not war damage caused much administrative complication. In many cases it was only after receipt of a Statutory Notice served under the Public Health Acts that the owners themselves claimed the defects to be due to war damage. This led to much delay in the enforcement of Statutory Notices. Shortages of labour and materials also presented many problems. Despite the difficulties of the times, however, much useful work was accomplished.

### **Equipment and Supervision of Public Air Raid Shelters.**

The use of shelters took on a new aspect as a result of the long air raids, and the equipment of public shelters as "dormitories" became imperative. Bunks, sanitary accommodation, water supply, heating, lighting, ventilation and canteen facilities, had to be provided wherever possible and without delay. Four Sanitary Inspectors were specially detailed for the investigation and supervision of this work and eight men were engaged for erecting the bunks supplied by the Ministry of Works and Buildings. It was a colossal task, but by the end of the year the work was well in hand. The problems of maintenance are too numerous to mention in detail, but wilful damage and the fouling of shelters with refuse of every description were the main causes of concern to the shelter staff.

### **Rat Infestation and Drainage.**

As a result of damaged drains rats have appeared in many parts of the City. The entire drainage system was severely shaken and it will take many years to discover and remedy the full extent of the damage. Here again the question of war damage caused many administrative difficulties, and very careful investigation into each case was essential.

With regard to dangerous buildings which had to be demolished, the sealing of drains on the sites was a matter of fundamental importance. In numerous cases where the drains were not sealed rats appeared on the sites and in adjacent property.



### **Clearance of Debris.**

The public streets were soon cleared of debris after the raids, but since that time there has been one continuous stream of complaints regarding accumulations of debris on private land and property. There were few straightforward cases and much investigation had to be done to trace the owners, occupiers, or persons responsible. In many cases where responsible persons could not be found the Local Authority had to enter private premises and remove the debris themselves. By far the largest number of complaints concerned contractors who had done repairs and either left the building debris on the premises or "dumped" it without any consideration of the trouble it would cause.

Other significant matters this year were atmospheric pollution, food substitutes, and enforcement of Ministry of Food Orders.

### **Atmospheric Pollution.**

The pollution of the atmosphere by smoke from industrial chimneys has become a matter of great concern. At the present time, however, there seems to be little that can be done as the Ministry of Home Security have encouraged industrialists to produce as much smoke as they can as an added protection against enemy air attacks. The legislation relating to atmospheric pollution cannot now be enforced. It is to be hoped that this state of affairs will be reversed at the earliest possible moment.

### **Food Substitutes.**

The appearance of food substitutes of every description has called for special attention and the sampling officer has taken 34 samples for analysis by the City Analyst. Prosecutions were made under the Food and Drugs Act for falsely describing egg substitute, for selling orange substitute not of the nature, substance and quality demanded, for falsely describing orange substitute and for selling salad oil which contained a mineral oil. Fines were imposed in each case.

### **Ministry of Food Orders.**

The department is assisting the Ministry of Food in the enforcement of numerous Orders which are closely allied to the peace-time work of Sanitary Inspectors. Three Sanitary Inspectors are appointed Enforcement Officers for the Ministry of Food and have carried out 220 investigations during the year in connection with overcharging on meat and other food stuffs, the establishment of new businesses, the allocation of cooking fats, illicit slaughtering of cattle, etc. Two persons were prosecuted for overcharging on the sale of meat, and six others were prosecuted in connection with the illicit slaughtering of cattle. Three offenders received terms of imprisonment in connection with the illicit slaughtering of cattle, and the others were fined.

### INFECTIOUS DISEASES.

The number of cases of Infectious Diseases notified during 1941 was 3,225 as compared with 5,495 during 1940. This decrease was mainly due to the fact that during the year 1940 there was an epidemic of Measles during which 3,601 cases were notified, as compared with 668 during 1941. In addition, there have been decreases in the numbers of cases suffering from the undermentioned notifiable diseases :—

Disease.	1940	1941
Scarlet Fever.....	298	255
Erysipelas.....	66	49
Cerebro-Spinal Meningitis .....	71	64
Dysentery.....	8	3

There were several increases as follows :—

Disease.	1940	1941
Whooping Cough .....	182	762
Enteric Fever .....	7	15
Diphtheria .....	379	506
Acute Primary Pneumonia .....	436	470
Pemphigus Neonatorum .....	3	16



### TREATMENT OF TUBERCULOSIS.

The Tuberculosis Scheme continued to function on normal lines during 1941, with the exception that owing to black-out conditions it was thought advisable to discontinue the evening Clinics during the winter months so that the patients would be able to travel to their homes before darkness set in completely.

617 patients (including non-pulmonary cases) were referred to the Tuberculosis Officers for examination during the year by General Practitioners, School Doctors and Hospitals.

The accommodation at Nab Top Sanatorium was not affected by the war and was fully available throughout the year. The total number of patients treated in that Institution during 1941 was 277, while the average daily number of patients maintained there was 90.

Ladywell Hospital, however, was not able to provide more than 50 beds for tuberculosis patients, as compared with 72 beds in peacetime. The number of tuberculosis patients treated in Ladywell Hospital during 1941 was 181, the average daily number of patients being 20.

### LADYWELL HOSPITAL.

Six wards were occupied until 11th March, 1941, when, owing to enemy action, all wards except A 1 were quickly evacuated. In September, cases of Tuberculosis were re-admitted. In November, A 2 Ward was re-occupied and later, in December, C 3-1 Ward was opened for Diphtheria cases.

At the beginning of the year there were 117 patients in Hospital; these, with the 515 admitted during the year, made a total of 632 cases under treatment. Of this total, 470 were discharged, 71 died and 91 were in Hospital at the end of the year. The number of cases treated, 632, compares with 1,648 in 1940, and with 2,276.6, the average number of cases treated for the previous five years 1935-39.

The cases treated were as follows :—

Scarlet Fever .....	17
Mixed Infections .....	11
Measles.....	39
Enteric Fever .....	13
Diphtheria .....	121
Erysipelas .....	26
Puerperal Fever .....	8
Tuberculosis .....	181
Other Diseases .....	216
	—
	632
	—

The number of cases admitted from \*Out-Districts was 141, as compared with 461 in 1940. The daily average number of patients in 1941 was 44.8, the highest being 137 on 8th March, and the lowest 6 on the 6th May. The daily average number of Out-District patients was 8.9, compared with 38.8 in 1940, and with 55.7 for the previous five years 1935-1939. 515 patients were admitted during the year as compared with 1,603 in 1940, and with 2,020.2, the average for the previous five years 1935-1939.

\* Eccles, Farnworth, Irlam, Stretford, Urmston, Manchester Port Sanitary Authority and Service patients.

### VENEREAL DISEASES SCHEME.

#### New Cases.

The number of new cases dealt with during the year 1941 was 1,764. Out of this number, 981 were found to be suffering from venereal diseases and the remaining 783 from conditions other than venereal. There was an increase of 100 V.D. cases during the year as compared with 1940.

There has been an increase in the number of Syphilis, 93 (45%), and Gonorrhœa, 19 (3.4%).

#### Sex Incidence.

There were 797 male and 184 female patients suffering from venereal diseases during the year. Compared with 1940 there is an increase in both sexes. The ratio between the sexes is about 4 to 1, that is to say, for every woman suffering from venereal disease there are four men with the same condition.

#### Fresh Infections.

A "Fresh Infection" is defined as one in which the disease is less than twelve months old, and an "Old Infection" is one where the disease has been in existence for more than a year.

Of 684 new male venereal cases during the year 646 were infections of less than twelve months' duration. Of 179 new female venereal cases 152 were infections of no longer duration than one year.

#### Attendances.

The total number of attendances during 1941 was 42,904. The total number of attendances at the Clinic since it opened is 1,126,884. The average annual number of total attendances during the past fourteen years is 80,492. The



intermediate attendances are now almost equal to the Medical Officers attendances. In the pre-sulphonamide days this state of affairs would have caused anxiety. The advent of chemotherapy has reduced the period of treatment for gonorrhœa cases from three months to three weeks, or even less. In addition, the Clinic was not open in the evenings during the first 2½ months of the year on account of black-out difficulties. These facts explain the figure of total attendances for the year under review.

#### **Defaulters.**

All patients suffering from venereal diseases do not, as a rule, complete their treatment. A certain number of these default. In the year under review 268 (10·26 per cent.) defaulted. The majority of these were undergoing tests for cure or were non-infectious. A small number (70 patients) ceased to attend during the infectious stage of the disease. The dangerous defaulter rates at the Salford Municipal Clinic are—females 7·22 per cent. and males 1·26 per cent.

#### **Syphilis.**

There were 219 new cases of Syphilis who attended for the first time and had not been diagnosed at other treatment centres. Two-thirds of this number were cases of early-infectious Syphilis. It is important to observe that the sero-positive primary stage heads the list in the male sex, and that late-secondary heads that of the female sex. Another significant point is that there is a steady increase in the incidence of Syphilis in both sexes. This is the second year since the Clinic opened in which the number of fresh acute Syphilis cases has exceeded the number of new cases in the chronic stages of the disease.

#### **Congenital Syphilis.**

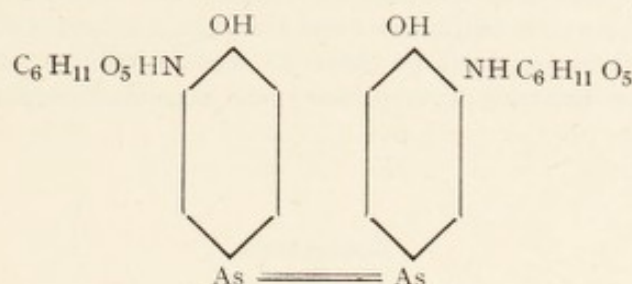
During the past eleven years there were 239 patients suffering from Congenital Syphilis. The highest number was recorded in 1931 and the lowest in 1940.

#### **Treatment of Syphilis.**

The remedial agents in routine use for the treatment of acute stages are—Arsphenamine Diglucoside (Stabilarsan-Boots) and Oil Soluble Bismuth (Stabismol-Boots). These are given alternately, without rest periods.

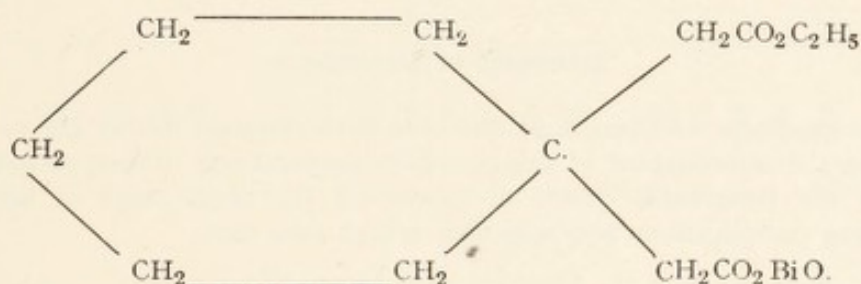
Stabilarsan is a compound consisting of one molecule of Arsphenamine base linked up with two molecules of Glucose. It is a preparation in solution issued in ampoules ready for use, and on this account it is very useful in a busy Clinic. Time is saved and the risk of contamination is avoided as there is a minimum amount of manipulation.

It has the following structural formula :—



#### Arsphenamine Diglucoside (Stabilarsan).

The oil soluble Bismuth-Stabismol is a lipoid chemical preparation and its chemical name is Basic Bismuth Cyclohexane—1 : 1 diacetic mono ethyl ester. This can be represented by the following formula :—



This substance is given intramuscularly twice weekly in doses of 0.1 gramme per injection. Stabismol is a powerful therapeutic agent and is indicated in all stages of Syphilis, but its usefulness is particularly indicated in primary and secondary Syphilis.

After the second injection Spirochaetes disappear from the primary and secondary sores, and its effect on Blood Wassermann is excellent. Usually the Wassermann reaction is negative after four or five weeks of treatment with Stabismol.

The agents in routine use for the treatment of chronic Syphilis are Stabilarsan, Novarsenobillon, Tryparsamide, Orarson, Bismuth Oxychloride and Iodo-Bismuthate of Quinine (Quinostab). These are prescribed according to the stage of the disease and the condition of the patient. Tryparsamide and Orarson are pentavalent organic arsenical preparations and are given to cases suffering from Neuro-Syphilis. Tryparsamide is given intravenously, 1-3 grammes weekly for eight weeks. Orarson (Acetarsol B.P.) is given orally in tablet form, the dose being 0.25 grammes daily for eight weeks. This preparation is useful in Congenital Syphilis, and the dose has to be reduced according to the age and weight of the patient.



The treatment of patients suffering from the acute stages of Syphilis does not present difficulties, and satisfactory results are obtained in the majority of cases. In order to reduce Jaundice and Dermatitis following Neoarsphenamine and Bismuth Therapy, Ascorbic Acid 50 mgms. daily is prescribed to the majority of cases suffering from primary and secondary Syphilis.

### **Gonorrhoea.**

In the year 1941 there were 550 fresh cases of Gonorrhoea, 433 male and 117 female patients. Compared with 1940 there is an increase of 21 male and 2 female patients. The average number of male and female patients suffering from Gonorrhoea in both stages—fresh and old infections—during the past 14 years has been 671 per annum.

### **Treatment of Gonorrhoea.**

The treatment of Gonorrhoea has been revolutionised during the past five years by the introduction of sulphonamide preparations. These preparations produce the remarkable effects of shortening the acute stage of infection, preventing complications and achieving a high cure rate.

There is no doubt that drugs of the Sulphonamide group constitute an important advance in the treatment of this prevalent disease.

The principal preparations in use for the treatment of Gonorrhoea are Sulphapyridine and Sulphathiazole. Unfortunately Sulphathiazole has been unobtainable during the year. On account of this, two new preparations, Acetyl-Sulphathiazole and Sulphadiazine have been investigated. Both these preparations appear to be powerful anti-gonorrhoeal agents. Acetyl-Sulphathiazole is issued in tablet form, each tablet containing 0.50 gramme of the drug and the dose is two tablets four times daily for five days. The total amount given is 20 grammes in five days. Local therapy is carried out in the form of irrigations, in addition to the administration of Acetyl-Sulphathiazole. It will be seen from Table XI that out of 18 patients carefully observed and controlled only one relapsed, and that in 15 cases the urethral smears were negative after 24 hours.

A cure rate of 94.5 per cent. was achieved with Acetyl-Sulphathiazole.

The investigation with Sulphadiazine is not yet complete.

TABLE XI. (Acetyl-Sulphathiazole).

Serial No.	Patient's No.	A—Anterior, B—Posterior, GC—Urethritis.	Dose of Drug.	Total amount given in grammes.	Number of days with +GC smears during treatment.	Toxic Reactions.	Complications due to GC.	Cured.	Relapsed.	Remarks.
1	B 5741	A	2 tablets 4 times daily	40	1	Nil.	Nil.	Cured.	—	—
2	B 5750	A	Do.	40	1	Nil.	Nil.	Cured.	—	—
3	B 5794	A	Do.	40	1	Nil.	Nil.	Cured.	—	—
4	B 6716	A	Do.	40	1	Nil.	Nil.	?Cured.	—	Transferred out during tests of cure.
5	B 6730	B	Do.	40	2	Nil.	Nil.	Cured.	—	—
6	B 6748	B	Do.	40	1	Nil.	Nil.	Cured.	—	—
7	B 6750	B	Do.	40	1	Nil.	Nil.	Cured.	—	—
8	B 6754	A	Do.	40	1	Nil.	Nil.	Cured.	—	—
9	B 6761	B	Do.	40	2	Nil.	Nil.	Cured.	—	—
10	B 6776	A	Do.	40	1	Nil.	Nil.	Cured.	—	—
11	B 6781	A	Do.	40	1	Nil.	Nil.	Cured.	—	—
12	B 6792	A	Do.	40	1	Nil.	Nil.	?Cured.	—	Ceased to attend on tests of cure.
13	B 6793	B	Do.	40	1	Nil.	Nil.	Cured.	—	—
14	B 6794	A	Do.	40	1	Nil.	Nil.	Cured.	—	—
15	B 6806	B	Do.	40	2	Nil.	Nil.	Cured.	—	—
16	B 6816	B	Do.	40	1	Nil.	Nil.	Cured.	—	—
17	B 6811	B	Do.	40	1	Nil.	Nil.	?Cured.	—	Transferred out during tests of cure.
18	B 6779	A	Do.	40	1	Nil.	Nil.	—	Relapsed.	Docker. Eventually cured by ordinary methods.



### **Chancroid—Soft Sore.**

There were 100 patients suffering from Chancroid during 1941. This shows a decrease of 12 cases during the year. The majority of these cases are seamen. All soft sores are searched for *Treponema Pallidum* and blood tests are carried out. Whenever possible these patients are observed for three months in order to exclude Syphilis. Patients suffering from soft sores respond well to chemotherapy.

### **In-Patient Accommodation.**

There are two small wards at Hope Hospital equipped for cases in need of hospital treatment. Each ward contains eight beds, and these have been in great demand. The V.D. Officer visits Hope Hospital twice weekly. A large number of skin and V.D. cases are referred to him for examination and advice.

## **PATHOLOGICAL LABORATORY.**

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The total number of specimens examined during 1941 was 35,409, including 166 from the boroughs of Prestwich, Whitefield and Hazel Grove.

There was only one outbreak of food poisoning, which occurred at a home for refugees, about the middle of August.

Twenty-six out of forty people were affected with vomiting and diarrhoea. The only article suspected was fried plaice cooked on Friday and consumed at the evening meals on Saturday and Sunday.

Nearly all those affected took ill early Sunday morning, though some took ill on Monday.

The outbreak was notified on Tuesday. No samples of the fish or other foods were available. Five cases were still suffering from diarrhoea. Samples of faeces from one of these cases gave an organism allied to but not identical with the Newcastle Dysentery bacillus.

This organism was agglutinated by the sera of four of the convalescent cases and not agglutinated by the sera of controls who had not suffered from the attack.

It did not, however, correspond to any of the known types of Dysentery or *Salmonella* organisms.

About ten cases of Paratyphoid B. were detected during the summer by Widal and faecal examinations. No definite source of these infections was found but a fairly widespread epidemic of Paratyphoid B. was prevalent in surrounding districts at the same time.

The results of Swimming Bath water examinations are tabulated as in previous reports :—

GOOD—Conforming to Ministry of Health standard.

FAIR—Moderately below this.

BAD—High bacterial count, *i.e.*, over 3,000 per c.c.

The Salford Branch of the Manchester and Salford Blood Transfusion Scheme is still being maintained at Hope Hospital, and has been considerably extended, as apart from air raid casualties, there is an ever growing demand for blood transfusions in the treatment of surgical, gynæcological and medical cases. During the year, blood was collected from 1,604 donors. Towards the end of the summer of 1941 arrangements were made to bleed approximately 100 donors weekly, in accordance with the Ministry of Health Regional Blood Transfusion Scheme.

Plasm is drawn off from all of this blood, apart from that kept for immediate hospital needs, and sent to the drying depot at the Manchester Royal Infirmary where it is made into a powder, and as such is available as a reserve supply for our Armed Forces.

#### CITY ANALYST'S REPORT.

During the year 1941, the following analyses and tests have been made :—

Food and Drugs Act Samples from the City of Salford.....	1,296
Food and Drugs Act Samples from the Borough of Eccles.....	153
Food and Drugs Act Samples from the Borough of Stretford ....	164
Milk Samples, "Appeal to Cow," from all sources .....	2
Fertilisers and Feeding Stuffs Act Samples .....	6
Pharmacy and Poisons Act Samples .....	8
Miscellaneous Samples .....	276
Sunlight Tests .....	1,928
Volumetric Sulphur Tests .....	247
Total .....	4,080

War-time conditions have resulted in many new regulations being issued by the Ministry of Food ; these have, in the case of a number of commodities, appreciably increased the work necessary on each sample.

Mention should also be made of the large number of food substitutes which appeared on sale during the year under review, several of the following paragraphs contain accounts of the more interesting substitutes which have been examined in this Laboratory.



1,296 samples have been examined for the City of Salford under the Food and Drugs Act, 1938, of these 93 were reported upon as adulterated, corresponding to 7·2 per cent. adulteration. This figure is in close agreement with the corresponding figures for the last four years. As will be noted from a study of the analysis of milk adulteration given later in this report, a big proportion of the samples reported upon as adulterated consisted of milks showing deficiencies in fat content or solids not fat, of less than 10 per cent. or 3 per cent. respectively, offences which were not of a very serious nature, and these were dealt with by letters of caution. Legal proceedings were, however, instituted in 12 cases, ten of these being under the Food and Drugs Act, 1938, and the remaining cases were taken under the Pharmacy and Poisons Act, 1933. The fines (including costs) inflicted in these cases amounted to £142.

### Milk.

883 samples of milk were examined during the year, 386 being samples of farmers' milk taken in the course of delivery to wholesalers and retailers in Salford.

The average butter fat content of all milk for the whole of the year was 3·69 per cent., that of farmers' milk being 3·71 per cent., and that of milk from all other sources 3·67 per cent. the farmers' milk, therefore, showing if anything a very slightly higher figure for butter fat.

A striking feature has again been the unusually large number of milk samples which were poor in solids not fat compared with the presumptive limits of the Sale of Milk Regulations, 1939, but which nevertheless adjudged genuine on the Hortvet freezing point test. 61 samples of milk came under this heading. These samples were distributed over the whole of the year; 12 being taken in the March quarter, 30 in the June quarter, 11 in the September quarter and 8 in the December quarter.

Fifty samples of milk were reported upon as adulterated during the year. These samples were all below either the presumptive limits of 3 per cent. butter fat or that of 8·5 per cent. solids not fat of the Sale of Milk Regulations, 1939. Before a milk was reported upon as adulterated due to deficiency in solids not fat it was submitted to the Hortvet freezing point test, any samples passing this test were certified as naturally deficient. The above figure represents a percentage adulteration of 5·7.

The figure for milk adulteration throughout England and Wales during the last 12 years varied from 6·4 per cent. to 8·2 per cent., so that in the light of this the Salford figure cannot be considered unsatisfactory. In the following table will be found particulars of various types of adulteration and the number of samples under each heading:—

Milks deficient in fat only .....	20 or 2.3 per cent.
Milks containing added water only.....	26 or 2.9 per cent.
Milks deficient in fat and containing added water...	4 or 0.5 per cent.
	<hr/> 50 or 5.7 per cent. <hr/>
Milks containing more than 3 per cent. added water	10 or 1.1 per cent.
Milks 10 per cent. or more deficient in fat.....	10 or 1.1 per cent.

No samples of milk contained colouring matter or preservative.

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

#### **Milk—Sample No. A 7371.**

This formal sample of loose milk purchased from a roundsman employed by a large dairy company was found upon analysis to contain only 2.57 per cent. of fat and 7.88 per cent. of solids not fat. These figures correspond, on comparison with the minimum presumptive limits of the Sale of Milk Regulations, 1939, to deficiencies in fat of 14.3 per cent. and solids not fat of 7.3 per cent. The deficiency in solids not fat was due to the presence of extraneous water and part of the fat deficiency was due to the same reason, the deficiency due to abstraction being 7.3 per cent. The freezing point of the sample also indicated the presence of extraneous water. The sample consisted of mixed milk, *i.e.*, it was the mixed product of a number of herds and should, therefore, have been of good quality.

A summons was issued against the dairy company who then laid an information, under Section 83 (1) of the Food and Drugs Act, 1938, against one of their employees as being the person responsible for the offence. The Company was dismissed from the prosecution on payment of £1 1s. costs. The employee was fined £1 10s. (Total £2 11s.).

#### **Curry Powder—Sample No. B 240.**

This informal sample was found upon analysis to contain 40 parts per million of lead. During the last few years a number of samples of curry powder taken in various parts of the country have been reported as containing excessive amounts of lead. This is apparently due to the fact that turmeric root, which is one of the constituents of curry powder, is sometimes rubbed with lead chromate to improve its appearance. This practice is one which cannot be too strongly condemned, and there is no legitimate excuse for the presence in curry powder of lead even in quantities of much less than the amount in the present case. The shopkeeper's remaining stock of seven tins has been surrendered for destruction. The attention of the packers has also been drawn to the question of lead in curry powder and they have been requested to exercise greater control over the quality of the ingredients used.



### Curry Powder—Sample No. B 467.

This informal sample was also found upon analysis to contain lead to the extent of 85 parts per million.

The shopkeeper's stock of 10 cartons was surrendered to this Department for destruction and the attention of the packers was drawn to the quantity of lead in this curry powder.

### Salad Oil—Samples Nos. B 778 and A 7283.

These were informal and formal samples of the same product which bore a label containing the words "Wholesome Salad Oil," and in much smaller print "not all vegetable oil." Upon analysis the samples were found to consist of a flavoured mixture of rape oil and mineral oil, the amounts of the latter in the two samples being 52 per cent. and 51 per cent. respectively. Mineral oil has, of course, no nutritive value and is not normally a constituent of salad oil. It is felt that the declaration "not all vegetable oil" is a very misleading indication of the true nature of the product and would normally be interpreted as meaning that a certain amount of animal fat was present; there was, in the opinion of the Public Analyst, no indication that half the product consisted of a substance which is totally inert as far as nutritive value is concerned. Salad oil usually consists of olive oil or some other edible form of vegetable oil. The institution of legal proceedings was authorised against the manufacturers of Sample No. A 7283 and they were fined £5 and £4 4s. (costs £9 4s. in all).

### Egg Substitute Powder—Samples No. B 370 and A 7053.

These are informal and formal samples, respectively, of the same brand of egg substitute powder, which was found upon analysis to contain 14.8 per cent. protein, 1.4 per cent. fat and 0.02 per cent. organic phosphoric acid. Liquid whole egg contains 14.8 per cent. protein, 10.12 per cent. fat and 0.38 per cent. organic phosphoric acid. These figures correspond to deficiencies in the samples of 86 per cent. in fat and 94 per cent. in organic phosphoric acid. It is generally recognised that egg substitute powders consist of coloured baking powder, etc., and contain no eggs. In this case, however, an advertisement relating to this product contained the sentence ". . . has all the nutritive value of real eggs," and the label on the tin also included the statement "every ounce equals six eggs." It will be apparent from the above figures that both these statements, at least as far as nutritive value is concerned, are incorrect. In view of the difficulty in obtaining eggs, this department takes a very serious view of advertisements of this type, and legal proceedings were instituted against the packers of Sample No. A 7053 and the defendants were found guilty of being a party to the advertisement falsely describing this product and were fined £40 and £5 5s. costs (£45 5s. in all).



### Dried Egg Mixture—Sample No. B 554.

This informal sample was found upon analysis to contain  $3\frac{1}{2}$  ounces of a mixture of wheat flour, dried egg, etc., which contained 20.3 per cent. protein, 11.2 per cent. fat and 0.14 per cent. organic  $P_2O_5$ . The label bore the words "contains real eggs" and "Half Dozen size." Six shelled eggs would weigh approximately  $10\frac{1}{2}$  ounces and would contain at least 12 per cent. protein. Calculating on the amount of protein present the contents of the packet were only equivalent to 6oz. of liquid egg, whereas six (shelled) eggs of average size would weigh  $10\frac{1}{2}$  ozs. Similarly the fat and organic phosphoric acid were also deficient compared with the total amount present in six eggs. The manufacturers have been communicated with and requested to delete the reference to "half dozen size" from their label.

### Egg Powder—Sample No. B 660.

This informal sample was found upon analysis to have usual composition of an egg substitute powder, *i.e.*, it was a mixture of baking powder, starches and colouring matter. Each packet weighed approximately 1oz. and was stated to equal two eggs. The amount of total carbon dioxide found to be present was only 3.7 per cent. against the usually accepted minimum standard for baking powder of 8.0 per cent. The packers were interviewed and they agreed to label their product "Egg Substitute Powder" with the word "substitute" printed in letters of equal size to those of the word "egg," to delete any reference to the product equalling any specified number of eggs, and to increase the carbon dioxide content to the minimum standard indicated above.

### Egg Substitute Powder—Samples No. B 685 and A 7231.

These are informal and formal samples of the same brand of egg substitute powder. The label on the product bore a declaration in the following words: "Contents equivalent in use to 12 eggs." Instructions inside the packet gave directions for the use of the powder for baking purposes. On analysis the product was found to contain protein 25.8 per cent., fat 10.2 per cent and organic phosphoric acid (as  $P_2O_5$ ) 0.18 per cent. Comparison of the contents of one packet against the constituents of 12 eggs showed the sample to be deficient as far as nutritive value was concerned to the extent of 63.3 per cent. protein, 78.8 per cent. of fat and 90 per cent. of organic phosphoric acid. The packers were communicated with with regard to this product.

### Egg Mixture—Sample No. B 753.

This informal sample contained a pamphlet headed "Egg Mixture," and below this "Dried New Laid Eggs." Upon analysis it was found to consist approximately of two-thirds dried egg and one-third of soya bean meal. It was not considered that the statements quoted above were sufficient indication of the presence of another constituent, *i.e.*, soya bean meal, and the Town Clerk communicated with the packers with a view to a revision of the declaration.



#### **Lemon Substitute—Sample No. B 551.**

This informal sample was found upon analysis to consist of 30 mls. of liquid which contained 565 international units of Vitamin C. The label on this sample bore the words "When packed each bottle contains 750 international units of Vitamin C" and "the contents equal the juice of six fresh lemons." The amount of Vitamin C found to be present was reasonably satisfactory taken in conjunction with the first sentence quoted. The juice of six fresh lemons, however, would probably contain at least 1,440 international units of Vitamin C, approximately twice the amount indicated as being present. The packers were communicated with and asked to amend the label, either by raising the Vitamin C content or by deleting the reference to six lemons. This product is no longer manufactured.

#### **Lemon Substitute—Sample No. B 555.**

This informal sample was found upon analysis to consist of 60 mls. of liquid containing 78 international units of Vitamin C. The label bore the words, ". . . contains Vitamin C" and "this bottle contains the equivalent properties of 16 squeezed lemons." The juice of a lemon would contain at least 240 international units of Vitamin C, equivalent, for 16 lemons, to 3,840 international units. On the basis of the wording on the label the sample was, therefore, deficient in Vitamin C to the extent of 98 per cent. A formal sample of this product could not be obtained. The packers have, however, been communicated with with regard to this informal sample.

#### **Lemon Substitute—Sample No. B 646.**

This informal sample bore a label which stated, "Taken the place of fresh lemons for all purposes" and ". . . fortified with Vitamin C." On analysis one fluid ounce of this liquid was found to contain only 20 international units of Vitamin C. This quantity of fresh lemon juice would contain at least 250 international units of Vitamin C. The manufacturer of this product was interviewed and he declared that when packed each fluid ounce contained 500 international units of Vitamin C. He agreed to withdraw stocks from sale and to relabel as a flavour only, without reference to Vitamin C content.

#### **Lemon Juice—Samples No. B 932 and A 7350.**

These represent informal and formal samples respectively of the same brand of prepacked lemon juice. The label on the bottle bore the following statement, "Prepared from the concentrated juice obtained from fresh lemons and diluted to about the concentration of ordinary lemon juice. This product of unique quality can be used for all purposes where the juice of fresh lemons is required." Upon analysis both samples were found to have the following composition: Total solids, 2.5 per cent., including acidity (as citric acid) 2.35 per cent., sugars (as invert sugar) 0.10 per cent., mineral matter 0.05 per

cent., nitrogen 0.002 per cent. and Vitamin C 0.5 milligrams per 100 grams of the sample. Fresh lemon juice of average composition has the following approximate composition: Total solids 10.0 per cent., including acidity (as citric acid) 7.50 per cent., sugar (as invert sugar) 1.50 per cent., mineral matter 0.35 per cent., nitrogen 0.05 per cent. and Vitamin C 50 milligrams per 100 grams of the juice. Comparison of these results shows the samples to be deficient in Vitamin C to the extent of 99 per cent. and to be deficient in citric acid and other constituents of fresh lemon juice to the extent of at least 68 per cent. It follows, of course, that the statement on the label which is quoted above is incorrect. Legal proceedings were instituted against the packers of Sample No. A 7350, alleging contravention of Section 6 of the Food and Drugs Act, 1938 (giving a label falsely describing the food sold and giving a label calculated to mislead), and they were fined £10 and £21 costs (£31 in all).

#### **Orange Substitute Powder—Sample No. B 684.**

The label of this informal sample bore a statement to the effect that three-quarters of a teaspoonful was equal to the juice of one fresh orange and also claimed that the product was rich in Vitamin C and contained glucose, Vitamin D and essential mineral salts. Upon analysis the sample was found to contain glucose 51.3 per cent., citric acid 19.6 per cent., mineral matter 4.8 per cent., consisting chiefly of salts of calcium including phosphates, and in three-quarters of a teaspoonful there was present 116 international units of Vitamin C. The minimum amount of Vitamin C which would be present in a fresh orange is 320 international units, on this basis, therefore, the sample was deficient in Vitamin C to the extent of 64 per cent. The deficiency might be due either to the correct amount of Vitamin C not being added during manufacture or to its decomposition in the packet.

#### **Orange Substitute Powder—Sample No. A 7248.**

This represents a formal sample of the same brand of Orange substitute powder as Sample No. B 684.

Upon analysis the composition of the formal sample was found to be substantially the same as that of the informal sample. The Vitamin C content equalled 97.5 international units per three-quarter teaspoonful of the powder, which corresponds on the basis of a minimum of 300 international units for the juice of a fresh orange to a deficiency to 67.5 per cent. Legal proceedings were instituted against the packers of this sample and they were fined a total of £7 and £3 3s. costs (£10 3s. in all).

#### **Onion Juice—Samples No. B 757 and A 7258.**

These represent informal and formal samples of the same product which were labelled "Genuine Onion Juice." Upon analysis the samples were found to contain only 0.06 per cent. and 0.10 per cent. respectively of soluble solids,



whereas genuine onion juice contains approximately 7 to 10 per cent. of soluble solids, consisting of natural sugars, mineral salts, flavouring substances, etc. Comparison of these figures shows that the samples under discussion were merely "onion flavourings" and were deficient in real onion juice to the extent of 99 per cent. and 98.6 per cent. respectively. The packers of this commodity have been interviewed by the Medical Officer of Health and outstanding stocks have been withdrawn from sale.

#### **Onion Juice—Stretford Sample No. 399.**

This is a formal sample corresponding to an informal sample, No. 386, reported upon previously. It was found upon analysis to contain only 0.2 per cent. of soluble solids and gave no reaction for the presence of sugars. Comparison of this figure with the figure for soluble solids of genuine onion juice indicates that the sample was deficient in onion juice to the extent of 97 per cent. Owing to the fact that this commodity had changed hands upon eight different occasions and to the difficulties arising therefrom, no legal proceedings have been taken by the Stretford Authority. The attention of the Ministry of Food, the Ministry of Health and the Food and Drugs Authority of the place at which it was originally manufactured has been drawn to this matter.

#### **Milk Substitute—Stretford Sample No. 392.**

This informal sample purchased as the result of a complaint was found to consist of a mixture of starches and salt, etc., and had the following composition: Moisture 12.3 per cent., fat 2.2 per cent., protein 12.8 per cent., salt 7.1 per cent., other mineral matter 0.4 per cent., reducing sugars 4.2 per cent., starch, etc., 61.0 per cent. Compared with full cream milk powder it was deficient in fat to the extent of 92 per cent. and protein to the extent of 52 per cent. This sample was sold with a printed copy of directions for use, which indicated that it was to be used for baking purposes. Certain of the statements were, however, liable to be very misleading, *i.e.*, "it also replaces in use milk in baked custards . . ." There is no doubt that baked custards made from this product would be very inferior in food value to those made with milk. A formal sample of this product could not be obtained.

#### **Vitamin Concentrate—Samples No. B 895, B 909 and A 7345.**

The first two samples are informal and the last a formal sample of the same brand of Vitamin Concentrate which was labelled to contain Vitamins A, C and D. The following statement appeared on the label: "Contains in each teaspoonful the equivalent in Vitamin potency to one teaspoonful of finest Cod Liver Oil and one teaspoonful of fresh orange juice in a glucose and sucrose syrup." The first sample contained only 0.68 mgm. of Vitamin C per teaspoonful and was also infested with mould. Five bottles of this product showing the presence of mould were surrendered to this Department for destruction by the shopkeeper. Sample No. B 909 was a further informal



sample from a more recent delivery which was found upon analysis to contain only 0.40 mgm. per teaspoonful of Vitamin C, and the corresponding formal sample, No. A 7345, contained only 0.30 mgms. of Vitamin C per teaspoonful. Fresh orange juice of average Vitamin C potency would contain approximately 2.0 mgm. per teaspoonful. The three samples under discussion were, therefore, deficient in Vitamin C to the extent of 66 per cent, 80 per cent. and 85 per cent. respectively. Legal proceedings were instituted against the vendors of Sample No. A 7345. At the hearing of the summons the Stipendiary Magistrate decided that in view of the small proportion of Vitamin C present the product was not a Vitamin concentrate nor was it a proprietary medicine as argued by the Counsel for the Defence. The manufacturers were fined £5 and £5 5s. costs (£10 5s. in all).

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#### MATERNITY AND CHILD WELFARE DEPARTMENT AND THE SUPERVISION OF MIDWIVES.

All the pre-war activities of the Maternity and Child Welfare Department, including the Municipal Midwifery Service, were carried on during 1941, and, in addition, the staff was made responsible for several war-time services.

Foremost among these was the establishment, staffing administration and medical supervision of War-time Day Nurseries, the first of which was opened in December, 1941, at Hope Hospital Annexe. Evacuation of expectant mothers, which had practically ceased during 1940, was resumed, and mothers were sent to a reception area for confinement at regular fortnightly intervals throughout the year.

Priority certificates required by the Ministry of Food in connection with the supply of milk and eggs have been issued in large numbers at the Clinics, and the Department has been made responsible to the Board of Trade for distribution of Supplementary Clothing Coupons to all expectant mothers in the City.

Maternity and Child Welfare premises are now being used by Ministry of Food officials for the distribution of Cod Liver Oil and Vitamins, National Milk Scheme application forms are issued and signed by the Maternity and Child Welfare staff, and National Dried Milk is stocked and sold at all Clinics and Centres.

A scheme for the special supervision of children in the care of "daily minders" was devised during 1941, and carried out by the Health Visitors. Under the scheme, children of women who are out at work are kept under careful observation and are visited more frequently than they would be if they were in their own mothers' care.



**Maternal Deaths, 1941.**

Thirteen maternal deaths occurred in Hope Hospital during 1941, of which six were not Salford cases. Two Salford women died in Crumpsall Hospital. The cause of death in the nine Salford cases were as follows :—

1. I Carcinoma of Cerebellum.  
II Parturition.
2. Acute Yellow Atrophy of Liver.
3. Uræmia : Sub-acute Nephritis : Abortion.
4. (a) Pneumonoccal Peritonitis : (b) Pneumonococcal Pneumonia :  
(c) Puerperium.
5. Puerperal Septicæmia following Abortion.
6. Obstetric Shock : Forceps Delivery : Primary Uterine Inertia.
7. Obstetric Shock.
8. Retained Placenta : Post-partum Hæmorrhage and Acute Dilatation of Stomach.
9. Feruncula of Nose : Cellulitis of Face. Pregnancy, five months.

TABLE C.W. 2.  
ATTENDANCES AT MATERNITY AND CHILD WELFARE CLINICS AND CENTRES DURING 1941.

Clinics and Centres.	No. of New Cases.			No. of New Cases.			Total Attendances.				Grand Total.
	Children.			Mothers.			Children.		Mothers.		
	Under 1 year.	Over 1 year.		Expectant.	Nursing.		Under. 1 year.	Over 1 year.	Expectant.	Nursing.	
Regent Road .....	261	139		492	49		2,046	1,810	2,415	98	7,310
Broughton .....	396	133		318	12		4,066	2,921	1,649	16	9,511
Police Street .....	436	178		284	—		4,398	3,288	1,296	—	9,880
Ordsall .....	160	53		7	—		2,120	1,113	7	—	3,460
Encombe Place .....	221	50		—	—		2,250	746	—	—	3,267
Seedley .....	282	60		—	—		3,896	1,279	—	—	5,517
Height.....	120	34		1	1		1,991	1,400	1	1	3,549
Hope Hospital .....	—	—		—	—		—	—	4,630	222	4,852
Royal District Nurses' Home.	109	—		238	—		290	7	696	—	1,340
Total .....	1,985	647		1,340	62		21,057	12,564	10,694	337	48,686



The following table shows the number of visits by the Health Visitors during 1941 :—

TABLE C.W. 1.

Wards.	First Visits to Children under 1 year.	Total Visits to Children under 1 year.	Total Visits to Children 1 to 5 years.	First Visits to Ex- pectant Mothers.	Total Visits to Ex- pectant Mothers.	Total Visits.
Albert Park.....	165	1311	1610	99	172	3093
Charlestown .....	174	681	1461	40	45	2187
Claremont .....	165	923	1514	69	97	2534
Crescent.....	190	1433	1474	47	61	2968
Docks.....	194	1052	1931	55	73	3056
Kersal .....	178	1366	1914	56	86	3366
Langworthy .....	173	807	1790	64	69	2666
Mandley Park.....	170	1053	2293	58	82	3428
Ordsall Park.....	214	1404	2000	81	93	3497
Regent .....	80	217	388	20	28	633
St. Matthias' .....	140	1505	2005	77	131	3641
St. Paul's.....	168	933	1843	35	38	2814
St. Thomas'.....	157	824	1455	70	73	2352
Trinity .....	175	1871	1936	79	95	3902
Weaste .....	73	313	794	30	50	1157
	2416	15693	24408	880	1193	41294

#### Public Health Act, 1936—Child Life Protection.

The following is a report of work done in the administration of the Act during 1941 :—

Cases on Register at end of 1940.....	19
New Registrations during 1941 .....	11
Children removed from Register .....	18
Children remaining on Register, December, 1941 .....	12
Total Visits paid during 1941 .....	195
No. of registered Foster Mothers .....	10

## SUPERVISION OF MIDWIVES.

### MUNICIPAL MIDWIFERY SERVICE.

The Scheme provides for the employment of 23 midwives, 19 being employed directly by the Corporation, 3 by the Salford District Nursing Association and one by arrangement with the St. Mary's Hospital Board, Manchester.

During the year 1941, 1,387 births were attended by midwives alone and 86 were attended by doctors with midwives acting as maternity nurses.

The following tables give details of the notifications received from midwives during 1941 :—

#### Medical Assistance.

During the year, 824 notifications of a midwife having sent for medical assistance were received, the causes being as follows :—

Deformed Pelvis .....	1
Abnormal Presentations .....	39
Placenta Prævia .....	5
Ante-partum Hæmorrhage.....	36
Post-partum Hæmorrhage .....	29
Uterine Inertia.....	56
Obstructed Labour, or requiring instrumental assistance	113
Retained Placenta or Membranes .....	15
Ruptured Perineum .....	225
Rise of Temperature .....	33
Premature Birth .....	11
Miscarriage and Abortion .....	8
Inflammation of Eyes .....	117
Other causes relating to Mother .....	70
Other causes relating to Child .....	66
Total.....	824

#### Contact with Infectious Disease.

Three notifications of contact with infectious disease were received from midwives during 1941. In each case the midwife was disinfected at her own home as instructed.



### Investigation of Stillbirths.

Thirty-three stillbirths were notified by midwives in domiciliary practice during 1941. Each case was thoroughly investigated and the cause found to be as follows :—

- 2 Abnormal Presentation.
- 7 Premature Birth (3 of which were macerated).
- 2 Ante-partum Hæmorrhage.
- 5 Difficult Labour.
- 6 Deformities of Fœtus (1 of which was macerated).
- 2 Toxæmia of Pregnancy.
- 3 General ill-health of mother (1 of which was macerated).
- 3 Macerated Fœtus.
- 3 Cause unknown.

In three of these cases there had been no ante-natal supervision.

### Ophthalmia Neonatorum.

Fifteen cases were notified during the year. Three cases were removed to Manchester Eye Hospital for treatment; in one of these cases the onset of the disease was on the 17th day, when there was no midwife in attendance, the remaining twelve cases were slight and all fifteen recovered.

### Pemphigus Neonatorum.

Sixteen cases were notified during the year. Of this number, five were midwives' cases delivered at the patient's own home and eleven occurred at Hope Hospital.

### Puerperal Pyrexia.

Thirty-six cases were notified during the year.

- 16 cases occurred in Hope Hospital.
- 17 cases occurred in the domiciliary practice of midwives (8 were removed to hospital).
- 3 cases occurred in the practices of doctors (2 were removed to hospital).

All district cases were thoroughly investigated by the Non-Medical Supervisor of Midwives and every precaution taken to prevent the spread of the disease. This includes the temporary suspension of the midwife and disinfection of her person, bag and clothing, and the careful supervision of other cases then being attended by her.

As the Regulations require prompt notification of any rise of temperature, special attention, and if necessary, the services of a consultant are quickly available.

Bacteriological examinations of lochia and blood are made on request at the Municipal Laboratory.

#### **Investigation of Infant Death.**

Eighteen Notifications of Infant Death were received during 1941, the causes being as follows :—

- 5 Prematurity and Debility.
- 1 Congenital Malformation.
- 3 Congenital Heart Disease.
- 3 Convulsions.
- 3 Pulmonary Atelectasis.
- 1 Icterus Neonatorum.
- 1 Pneumonia.
- 1 Marasmus.

#### **Artificial Feeding of Infants.**

During the year 1941, 25 Notifications of the substitution of Artificial or Supplementary Feeding for Breast Feeding were received, the reasons given being as follows :—

- In 7 cases artificial feeding was ordered by the doctor in attendance.
- 10 mothers had insufficient secretion of breast milk.
- 2 mothers refused to feed their babies.
- 3 mothers were unable to feed their babies owing to general debility.
- 1 was artificially fed on account of hare lip and cleft palate.
- 1 mother was suffering from tuberculosis.
- 1 mother was returning to work.



## HOPE HOSPITAL.

### General.

During the year 1941, the Hospital had to face almost continuously varying and considerable problems affecting the reconstruction and reorganisation of its resources. The beginning of the year found the Hospital with its fabric shattered and its organisation disrupted, the result of the tragic damage to staff and buildings sustained by enemy action at the end of December, 1940. The majority of its patients had been evacuated, and on 1st January, 1941, there were but 74 patients in the Hospital receiving treatment. The remaining beds of the 256 available for use at that time were standing by for possible use for further air raid casualties. Temporary repairs had been made to the various services, all of which had been put out of action, and the Hospital was able to function as a complete unit in the undamaged New Extension.

From that stage the work of reconstruction was commenced. Accommodation had to be found for those sections of the Hospital which had been lost, *e.g.*, offices for the administrative staff, out-patient department, plaster room, receiving ward, stores, churches, sewing room, etc. Stores and equipment had to be salvaged from the damaged wards, and accommodation found for the storing of these articles. The difficulties encountered were innumerable and discouraging, but they were surmounted, and gradually the various sections were fitted into an orderly arrangement which allowed the Hospital to function effectively. This process of gradual evolution of order took time, because the conception of the scope of the future activities of the Hospital had necessarily to remain fluid, and re-adjustments had to be made throughout the year. By the end of the year the Hospital could provide accommodation for 779 patients, and every department was in active use, with increasing demands on all the services provided by the Hospital. Although the hospital suffered from enemy action on two further occasions during the year—on March 11th, when numerous fires had to be dealt with, and on May 9th when nearby bombs caused further damage to the Nurses' Home—in neither case was the damage sufficient to interfere to any degree with the normal activities of the Hospital.

Perhaps the most significant achievement in the reconstruction was the completion in December of the temporary corridor between C. Pavilion and E. Pavilion, which allowed the two separated segments of the Hospital to be once more united into one single unit. The ruins of D. Block were demolished and the demolition of C. Pavilion was commenced towards the end of the year. The work proceeded under the direction of the City Engineer, who was also responsible for the repairs to the buildings and the restoration of the various services which had been damaged earlier.

The gas decontamination unit which had been established in the old concert hall was completely reorganised and re-equipped in the light of new instructions from the Ministry of Health. Gas practices were carried out each week in order to train the members of the staff in the detailed use of this



department. Ward G. 1 was fitted up and equipped as a resuscitation ward of 30 beds. By concentrating special equipment available in the hospital in this ward and filling the gaps with new equipment a generously equipped and efficient unit was provided. No opportunity occurred for its use during the year in air raids, but on the 30th December, when 48 patients were admitted to the hospital as the result of the Eccles train accident, it demonstrated its effectiveness in no uncertain fashion. By the use of the resuscitation unit the hospital was able to carry out the treatment of these patients thoroughly, expeditiously and completely. The knowledge and experience gained on this occasion in dealing with a large number of seriously injured accident cases, all admitted in a short space of time, provided a valuable lesson in the use and value of the resuscitation unit.

As a result of the reduction of the beds the number of the Medical Staff was reduced. The post of Assistant Obstetrical Officer was considered redundant, and the number of Assistant Medical Officers reduced from seven to five. The services of the Visiting Physician, Dr. G. J. Langley, were terminated in August.

Throughout the year there were constant changes in the Nursing Staff—depleted of many of its trained nurses by the demands of the services. Following the damage to the Hospital great difficulty was experienced in getting recruits as probationers and pupil midwives, and this added to the difficulties in providing staff for the various departments as they were re-opened or extended towards the latter part of the year. The interruption in the flow of recruits is likely to have its repercussions in the next few years, when these probationers would have completed their training and been ready to fill the gaps in the ranks of the trained nurses.

In the early part of the year when the Hospital was stunned by the disaster which had overtaken it, with its future dark and uncertain, and many of the nurses transferred to Winwick and Calderstones Emergency Hospitals and to other institutions, the most determined efforts were made to continue the preparation of those due to sit for the next State Examination. The results in April were a triumph for all those concerned. In the Preliminary Examination, of 35 candidates 24 passed, and in the Final, of 29 candidates no less than 28 were successful. In September, the results were not up to this standard but this finding was reflected in the results generally throughout the country at this period, and could be ascribed to air raids and other disturbing factors.

Owing to the limitations of space it is not possible this year to give a detailed description of the work done in the various departments. In general, throughout the year there was a steady increase in the work done, *e.g.*, in the last quarter the volume of work would approximate to that accomplished in a normal year with a normal number of beds and staff.



This increase demonstrated quite clearly that the number of beds available was insufficient for the demands on the accommodation, in spite of extra beds which had been provided for children. The admission of cases had to be restricted, although this often entailed hardship on patients and relatives. As far as possible these restrictions were applied to the less acute type of case.

The problem was not made easier by the difficulty of finding accommodation for elderly destitute people who had been treated in the Hospital, and who were ready for discharge but could not be sent out as they had no homes to go to. Twenty-seven extra beds were set up in the wards, an undesirable though necessary procedure, adding to the difficulties of nursing and treating patients in wards where the ventilation was already impaired by black-out and often bricked-up windows.

But it was in the earlier months that the most severe trials were imposed on all members of the staff—the clearing up, the salvaging, and the restoration of the Hospital.

The most exacting demands were made on the staff and these met with a generous response, often in the face of increasing difficulties and discouragement. That the Hospital was able in the second last day of 1941 to undertake one of the most difficult tasks it had ever been called on to face—the treatment of a large number of train casualties—and to do so with complete efficiency, was a fitting termination to a year of constant progress, and a tribute to the determination, resource and ungrudging efforts contributed by all members of the staff throughout a most difficult year.

## STATISTICS RELATING TO HOPE HOSPITAL, 1941.

1. NUMBER OF PATIENTS TREATED DURING THE YEAR 1941 .....	6,744
2. X-RAY DEPARTMENT—	
Number of patients treated .....	4,196
3. DEPARTMENT OF ELECTRO-THERAPEUTICS AND MASSAGE—	
Number of treatments: Massage .....	10,236
Electro-therapeutics .....	9,523
4.—OUT-PATIENTS DEPARTMENT—	
Number of dressings and treatments .....	9,064
,,       ,, consultations .....	8,892
	<hr/>
	17,956
5. SURGICAL WARDS—	
Number of Operations performed .....	2,337
Orthopædic Department—New admissions .....	290
Out-Patient attendances .....	1,190
Ear, Nose and Throat Department—Operations performed....	431
6. MEDICAL WARDS—	
Out-Patients treated .....	2,320
7. MATERNITY DEPARTMENT—	
Number of deliveries .....	574
8. GYNAECOLOGICAL DEPARTMENT—	
Number of admissions .....	350
Number of operations .....	338
9. V.D. WARDS—	
Number of cases treated .....	66
10. CHILDREN'S DISEASES CLINIC—	
Number of cases treated .....	43
11. PRE-MENTAL CLINIC—	
Number of cases treated .....	500
12. CANCER—	
Number of cases dealt with .....	46



