

**[Report 1941] / Medical Officer of Health, Glasgow.**

**Contributors**

Glasgow (Scotland)

**Publication/Creation**

1941

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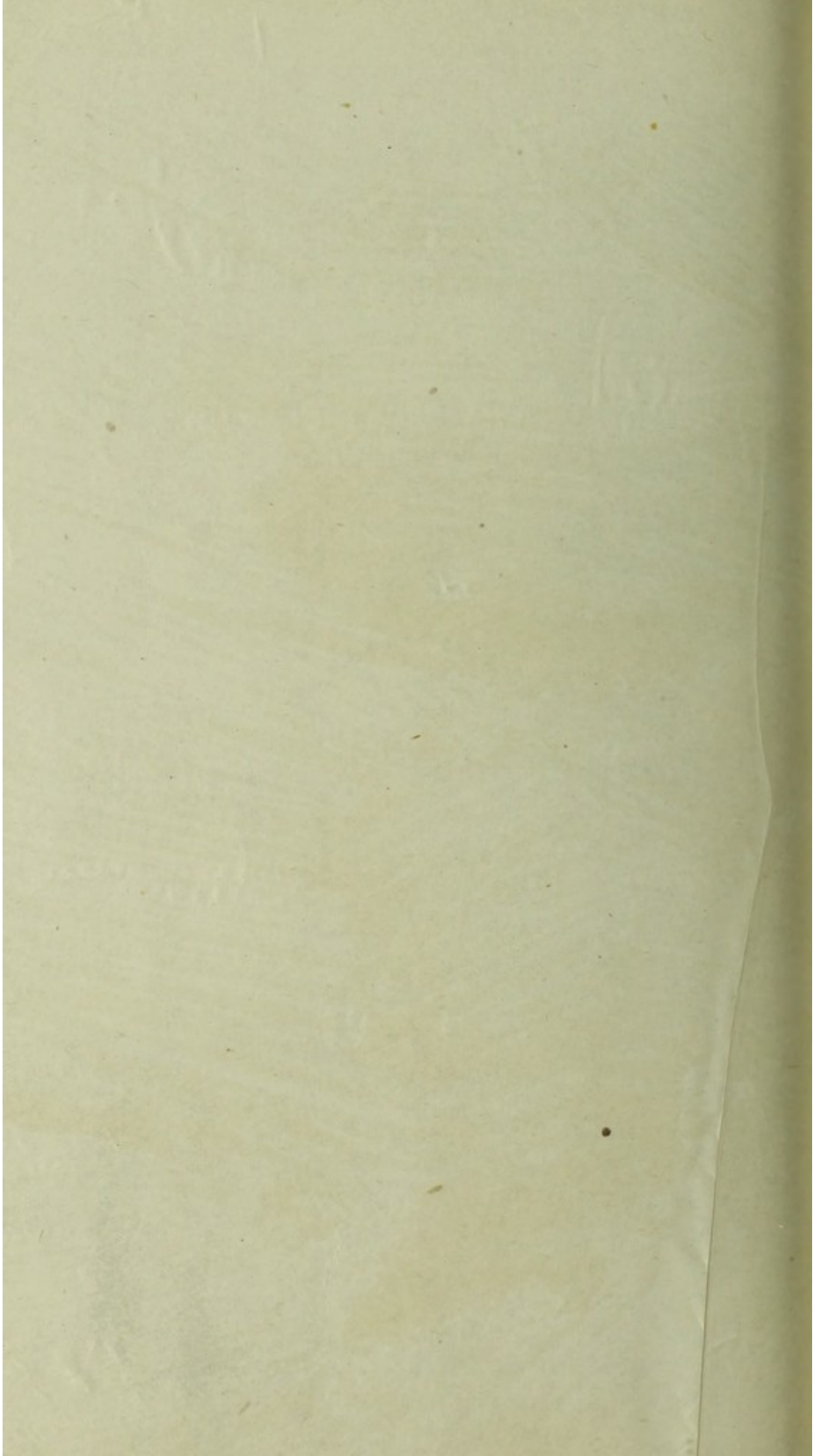
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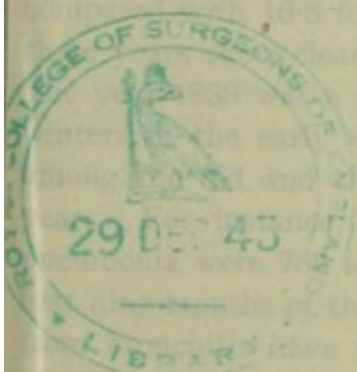
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CORPORATION OF GLASGOW



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# REPORT

OF THE

## Medical Officer of Health

### City of Glasgow

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# 1941

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ORDERED BY THE COMMITTEE ON HEALTH TO BE PRINTED

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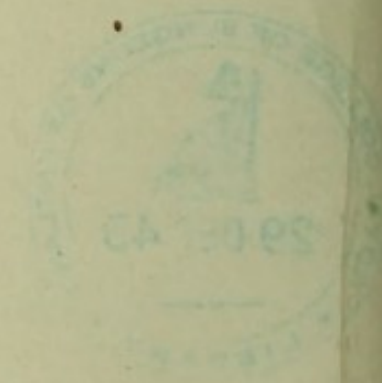
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## PREFACE.

THE ANNUAL REPORT for 1941 is more a summary of facts than a review of circumstances, which will be undertaken at a later time. The Preface has been reduced to a few introductory notes.

The experience of 1941 and of this year shows that the health of the city has been well maintained ; in some respects progress has been made. The general death-rate was 15·6 per thousand of the population, compared with 16·8 for 1940 and 13·3 for 1939. Comparisons between these years show clearly the effect of weather conditions on mortality. The year 1939 was a good year in the climatic sense, while the severe winters in the early weeks of 1940 and 1941 increased the mortality among the old and the very young during the first quarters of these years. For instance, the deaths per million of the population from pneumonia were 768 in 1939, 1,197 in 1940, and 961 in 1941 ; for the first nine months of this year (1942) 581 deaths have occurred. Deaths from bronchitis have followed the same general trend. For the same climatic reason deaths due to pulmonary tuberculosis during the first quarter of 1940 and 1941 exceeded those during the same period of 1939 by 25 per cent. and 20 per cent. respectively ; this year was not marked by a similar increase.

As will be gathered from the summarised figures in the Report, the communicable diseases have varied in incidence from year to year. In 1941 scarlet fever was at a low level, but is now increasing rapidly while maintaining its mild type and small death rate. Measles was low in 1941 ; the usual biennial outbreak appeared in 1942, but its incidence and death rate were much lower than usual. Whooping-cough, on the other hand, was unusually prevalent and severe in young children in 1941, accounting for 11,000 cases and 286 deaths. This year it has died away. Cerebro-spinal fever, an infection which usually prevails in war-time, caused 408 cases and 84 deaths in 1941 ; this year it is tending to decline. Pulmonary tuberculosis increased rapidly in 1940, when it rose by 21 per cent. over the figure for 1939. The mortality from this disease in 1939 was 861 per million of the population and 1,131 in 1940 ; in 1941 it fell slightly to 1,105 per million. The indications are that the rate will be lower this year. The wave of diphtheria, which was gathering force before the war, reached its peak in Glasgow in 1940, since when the number of cases has declined from 5,190 in 1940 to 4,039 in 1941. The deaths fell from 163 to 155. This year, during

the first nine months, some 2,500 cases with 63 deaths have occurred, so that the force of the wave is not yet spent. The position is still serious, and the need for pressing immunisation is still great.

In Glasgow, so far, 103,000 school children and 23,000 pre-school children have been immunised, equivalent to 60 per cent. of the former and 40 per cent. of the latter group. Propaganda is proceeding in the ways described in the Report in order to increase these percentages and to maintain immunisation as a permanent measure of protection for as many children as possible at special clinics, at welfare centres, and in the schools. The influence and interest of headmasters and teachers have been forthcoming, and are of outstanding value in this protective policy. A beginning has been made with immunisation against whooping-cough on a small experimental scale, an offer which has a special appeal to mothers of young children.

The health of children as a whole has prevailed against increasing overcrowding and the influence of the black-out, with its adverse effect on the ventilation of small houses. The milk priority scheme, in which 90 per cent. of children partake, food rationing, and the issue of vitamins and "protective" foods have more than offset these disadvantages of environment, as is attested by the child welfare medical staff and by the health visitors. Observations on the physical condition of school children are reassuring. In the last school medical report for the year ending in July, 1941, the group of school entrants at five years of age showed definite increases in average height and weight. Dr. Miller Young says that "apart from minor ailments, the school children, especially the infants, are in better physical condition than in previous years." The minor ailments referred to are mostly skin affections, principally scabies, which is still occurring at the rate of about 300 to 400 cases per week.

While these are important generalisations, it should be pointed out that infant life has suffered from two successive severe winters and from a more than usually large and severe outbreak of whooping-cough. For these and other reasons the infant mortality rates for 1940 and for 1941 were respectively 95 and 111 per thousand births. This latter rate was highest in the first quarter of the year, when respiratory diseases and whooping-cough were at their worst. Again, deaths due to premature birth and immaturity have tended to increase since the war began. These causes of death were noticeable during the air raids of 1941, but

have continued since then at a somewhat higher rate than formerly for some reason which eludes explanation. Congenital syphilis has declined to a low and almost negligible level. Although there has been an increase in gonorrhoeal ophthalmia, no eye defects have resulted. A striking but little known result of modern preventive medicine has been a remarkable decline in blindness and serious eye defect, which formerly were frequent sequels of a variety of infections.

Scabies increased rapidly during the past two years, to such an extent that a new and, it is hoped, temporary service had to be set up involving special treatment and bathing facilities at eight centres, with auxiliary facilities at sixteen school clinics, along with a special home visiting staff of twenty nurses. There are at present some 3,500 known cases of scabies in the city. The indications are that the peak has been reached.

On the maternity side it has become increasingly difficult to provide sufficient indoor ante-natal and lying-in accommodation. Expectant mothers are making use of the ante-natal clinics in increasing numbers, and the demand for confinement in hospital is difficult to meet, so much so that greatly augmented provision for this purpose should be undertaken as soon as possible when opportunity offers. To relieve the position a post-confinement unit has been provided at Lennox Castle Emergency Hospital, an experiment which has found favour and is worthy of development as a permanent feature of the maternity services. At present indoor facilities are sufficient for about 40 per cent. of the annual confinements; this figure should be increased to 60 per cent. at least.

The hospitals have had to meet emergency conditions. At one period in 1940 no less than 1,000 beds were required for diphtheria alone. At present 500 are in use for this affection, while considerable accommodation will be required for scarlet fever. The increase of venereal disease has made it necessary to provide two wards for male patients at Belvidere Fever Hospital, instead of one; and two at Ruchill Fever Hospital for female patients to replace the loss of accommodation due to the closure of the Lock Hospital. By arrangement with the Department of Health for Scotland, additional beds for tuberculosis have been provided, so that the available accommodation is now greater than it was in peace-time, although there still remains a considerable waiting list. These adjustments have contracted the accommodation available for pneumonia and general diseases, and hospital accommodation is subject to great pressure. Fortunately the nursing situation,



which was at one time serious, has greatly improved. The demand on accommodation for lunacy and mental deficiency is difficult to meet, and these institutions are much overcrowded.

The public health services have, generally speaking, been maintained as well as possible in spite of substantial losses of staff. The welfare centre at Sandy Road was completed and occupied, as was also the extension at Avenuepark Street. The clinic for venereal diseases at the Bellahouston Dispensary was destroyed in an air raid, but has been replaced by the Managers of the Victoria Infirmary. A new clinic to replace that at Broomielaw is nearing completion. At Ruchill Hospital a centre for chest surgery has been established, and a joint arrangement entered into with the University and the Voluntary Hospitals for a neuro-surgical unit at Killearn Emergency Hospital, which is administered by the Department of Health for Scotland. There are now eighteen war-time nurseries, with accommodation for about 800 children under five years, with several others in preparation or in prospect.

In the various health services of the Corporation the members of the First Aid Posts and Party Depots have rendered invaluable aid. The casualty ambulances are freely used to transport patients to hospital. The personnel of the First Aid Posts have co-operated in the treatment of scabies, distribution of vitamins to mothers and children, in delousing, in the vaccination campaign against smallpox, and in the scheme for immunisation against diphtheria. But for their assistance it would scarcely have been possible to carry through these measures.

A. S. M. MACGREGOR,

*Medical Officer of Health.*

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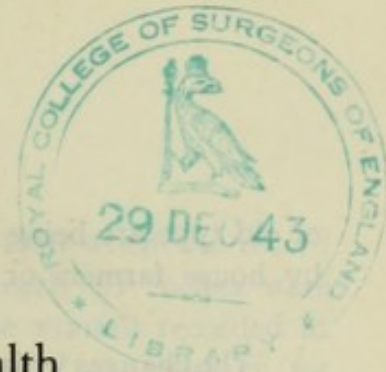
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# REPORT

OF THE

## Medical Officer of Health

FOR THE YEAR

1941

PART I

SECTION I

No estimate of the population is made for the year 1941. Apart from the unreliability of such estimates, references to population, etc., are not permitted. For the purposes of the present abridged report the population has been taken as static, and the ward factors retained for the calculation of local statistics.

In Table I of the Appendix information as to the number of occupied and empty houses in each municipal ward for 1941 is compared with the corresponding figures for 1940. The total number of occupied houses in 1941 as at Whitsunday was 282,805, compared with 284,045, a decrease of 1,240. No linings have been granted for new houses, so that, apart from the completion of a few houses, the principal reason for increases in particular wards is the multiple occupancy of larger houses. Parkhead Ward has increased by 232, and Pollokshields by 328 houses. Decreases are more numerous, principally because of enemy bombing, although some houses became uninhabitable because of their dangerous structure. The largest decreases occur in Yoker and Knightswood with 611, Kingston with 380, Maryhill with 191, Kinning Park with 189, and 185 in Kelvinside.

These reductions are not wholly due to enemy bombing, for there is an increase in the number of empty houses in certain wards, especially in Yoker and Knightswood, where the number is 139 compared with only 14 in 1940. In Kelvinside there are now 453 empty houses compared with 370 for the preceding year, and in Park Ward there are 161 against 113. In Pollokshields, however, there are now only 78 empty houses compared with 108 in 1940. It would appear that large houses

of old type are being devoted to various service purposes or made down by house farmers or left empty because of present difficulties.

The changes which have taken place in the various sizes of unoccupied houses as compared with a year ago are given in the following summary :—

	1940	1941
One Apartment ... ..	258	393
Two Apartments ... ..	127	189
Three Apartments ... ..	105	231
Four Apartments ... ..	90	187
Five Apartments ... ..	699	736
	<u>1,279</u>	<u>1,736</u>

The largest decrease is 125 in Yoker and Knightswood Ward, of which there were 55 more unoccupied three-apartment houses, 37 four-apartment houses, and 27 of larger size. These reductions are due very largely to bombing or the effects of blast resulting from enemy action. Similar reasons largely explain a decrease of 83 in Kelvinside, 57 in Partick East, 56 in Whiteinch, and 47 in Park. In the last-mentioned ward there were 28 fewer empty houses of five apartments and upwards, an indication of the tendency to sub-divide large houses into furnished apartments for occupancy by separate families.

*Dean of Guild Linings.*—No linings were granted for the erection of houses during the year. This is the second year in succession in which this has occurred. During the last war there was only one blank year in this respect, namely 1917.

#### METEOROLOGY.

Although the weather conditions during 1941 were generally favourable, it was a year of contrasts. The rainfall was well below the average, but there was much cloud, so that the hours of bright sunshine totalled only 1,035 compared with 1,111 hours for the preceding year. In June, where the maximum is possible, the number of hours of sunshine recorded was only 185 against 256 for the preceding year, and September had only 73 compared with 125; in October, on the other hand, the hours of sunshine were 92 against 25 for the previous year. There were, however, only 204 wet days, and a total recorded rainfall of 33·34 inches, both of which are well below the averages of the past ten years, namely 221 wet days and 38·9 inches respectively. This was the sixth driest year of the century, and may be compared with 1932 when the rainfall

was only 29 inches, and the Exhibition year of 1938 when the record was 50 inches at Springburn Park, although nearly 57 inches were recorded in Queen's Park during that year. The rainfall recorded at Springburn Park is probably a better indication of the average for the city, because of the prevailing south-west winds. The wettest month was August with 23 rainy days and 5.09 inches of rain, and the driest month was January with 0.76 inches.

This low record for January was associated with a period of cold frosty weather, when the temperature went down to 12°F., while the average mean temperature for that month was under 30. The average mean temperature for the first six months of the year continued below the respective mean temperature of the preceding year, which was one of the coldest winters on record. The average temperature for the year was 46.3°, compared with 46.5° in 1940, the highest temperature being 80° in June and the lowest 12° in January.

*Health Lectures.*—With the continuation of the black-out there was no resumption of propaganda in the form of Health Lectures during the winter. Various health talks for guilds, social organisations, etc., on a reduced scale have been undertaken by the members of the medical staff.

*Legislation.*—Most of the Regulations, Circulars, Orders, etc., issued during the year were concerned with air raid precautions, emergency medical services, control of foodstuffs, etc. Many others relative to the work of the Department were Circulars dealing with milk, housing, scabies, maternity services, and tuberculosis. There were also Circulars on louse-borne typhus fever, lice and cerebro-spinal fever.

## VITAL STATISTICS.

### SUMMARY.

	1939	1940	1941
Acreege ... ..	39,725	39,725	39,725
Number of Inhabited Houses ... ..	283,011	284,045	282,805
Death Rate per 1,000 Living—All causes	13.30	16.84	15.59
Birth Rate per 1,000 Living ... ..	19.21	19.08	18.53
Deaths under One Year—			
After correction ... ..	1,737	1,983	2,267
Per 1,000 Births ... ..	88.80	95	111



The birth rate for 1941, the lowest on record, was 18·5 per thousand of population, compared with 19·1 for the preceding year and 19·2 in 1939. The birth rates in each ward are given in Table IV of the Appendix, which shows that the highest rate was 26·5 in Gorbals, followed by 25·1 in Cowcaddens and 23·7 in Govan. The lowest rate was 8·8 in Kelvinside, followed by 11·0 in Cathcart. The number of illegitimate births has increased. There were 1,340 in 1941, which represents 6·6 per cent. of the total births, against 5·7 for 1940, a figure which is about the average for pre-war years. The percentages in each ward compared with the corresponding figure for the previous year are given in Table IV of the Appendix.

There were 12,757 marriages in 1941, compared with 14,615 in 1940 and 13,214 in 1939. In pre-war years the marriages varied between 10,000 and 11,000 per annum.

*Deaths.*—The death rate for the city was 15·6 in 1941, compared with 16·8 for the preceding year which was the highest recorded since 1919. The latter high death rate was, however, associated with the exceptional spell of cold weather in the early months of 1940, but, as stated above in referring to Meteorology, the continued low average temperature of the first half of 1941 was also the cause of a heightened mortality, especially among young children and old people.

The ward death rates are given in Appendix Table IV. The highest rates were 23·4 in Blythswood Ward, 20·6 in Calton, and 20·4 in Gorbals. The lowest rate was 10·9 in Yoker and Knightswood, followed by Partick West with 12·6, Fairfield with 13·0, and Pollokshields with 13·2. These rates, however, do not include deaths due to enemy action, which, according to instruction from the Registrar-General, are excluded. The following table shows the death rates since 1881 :—

GLASGOW.—ALL CAUSES.—DEATH RATE PER 1,000 LIVING.

1881-1890 ... ..	24·22	1936 ... ..	14·65
1891-1900 ... ..	21·53	1937 ... ..	14·63
1901-1910 ... ..	19·56	1938 ... ..	13·31
1911-1920 ... ..	16·36	1939 ... ..	13·30
1921-1925 ... ..	15·49	1940 ... ..	16·84
1926-1930 ... ..	15·04	1941 ... ..	15·59
1931-1935 ... ..	13·88		

## CAUSES OF DEATH.

The principal causes of death are summarised in the following table:—

## SUMMARY OF DEATH RATES PER MILLION FROM PRINCIPAL CAUSES.

	1939	1940	1941
General Diseases—			
(a) Infectious ... ..	614	748	891
(b) Tuberculous—			
(1) Phthisis ... ..	861	1,131	1,105
(2) Others ... ..	225	316	324
(c) Malignant (Cancer, etc.) ...	1,427	1,693	1,736
Diseases of the Nervous System ...	1,232	1,611	1,513
Diseases of the Circulatory System ...	3,707	4,453	3,864
Diseases of Respiration ... ..	1,245	2,081	1,553
Congenital defects and malformations (including Premature Birth) ...	718	817	942
Violence ... ..	683	842	876
All other causes ... ..	2,589	3,148	2,790
All causes ... ..	<u>13,301</u>	<u>16,840</u>	<u>15,594</u>

This statement shows the principal causes of death as rates per million of the population, based on the short International Classification of Deaths as given in Appendix Table V. This summary shows a comparison between a year of low mortality in 1939, high mortality in 1940, and the present year 1941. The mortality from infectious diseases was higher with a rate of 891 per million of the population, compared with 748 for the preceding year, because of the considerable increase in the death rate from whooping cough, which amounted to 274 compared with 19 in 1940; the mortality from measles, however, was only 11 compared with 93 in 1940. The diphtheria death rate was considerably reduced, being 148 against 216.

The mortality from pulmonary tuberculosis was 1,105 in 1941, compared with 1,131 in 1940, the average rate being about 850 in preceding years. The relatively high mortality of the past two years, which has not been exceeded in the past twenty years, is associated with war conditions, but is also in part due to the severe weather of the last two winters. The number of deaths in the first quarter of the year may be taken as an indication of this relationship, for during the three years 1939-40-41 the numbers of deaths were 287, 394, and 325 respectively.

The death rate from non-pulmonary forms of tuberculosis was 324, against 316 in 1940 and 225 in 1939, mostly due to the increased mortality from tubercular meningitis. For one thing it would appear that this affection is being more accurately diagnosed.

Mortality from diseases of the nervous system—1,513 per million of the population—is lower than that for 1940, which was 1,611. The trend cannot be computed because of the changes in the rules of International Classification, which preclude comparison with former years. Cerebral haemorrhage forms a great bulk of deaths in this group, but this cause of death is not now shown separately in the short classification. Arterio-sclerosis is now included in this group, so that the rates given in the above summary for 1940 and 1941 are not comparative with 1939 or earlier years.

The death rate from diseases of the circulatory system—3,864—was not so high as the rate of 4,453 for the preceding year, but as the older classification has been altered it is not possible to estimate the trend with any accuracy, because deaths from arterio-sclerosis are now transferred to diseases of the nervous system. Of the total death rate in this group 3,654 were due to heart disease, against 4,131 for the preceding year.

Although the mortality from diseases of the respiratory system showed a marked reduction compared with 1940—*i.e.*, 1,553 against 2,081—it was still well above the average of previous years. This group is largely dominated by deaths from pneumonia, the rate for which in 1941 was 961, against 1,197 in 1940 and 768 in 1939. The death rate from bronchitis was 458 against 680, and for other forms of respiratory disease 134 against 204.

The death rate from violence was again higher at 876 against 842 in 1940, rates which may be compared with an average of about 550 before the war. A more detailed analysis of this group shows that there have been a larger number of motor accidents. Deaths from other violence, accidents, etc., show a very large preponderance of males from 45 years of age upwards, a feature which reflects activity in the heavy industries and the absence of younger men in the Services.

The mortality due to malignant disease was 1,736 in 1941, against 1,693 in 1940 and only 1,427 in 1939. A table showing the site of lesion and sex is given below, compared with the corresponding figures for

the preceding year. In 1941 the deaths among males were 921, against 894 among females. In former years female deaths usually exceeded male deaths because of malignant disease in the female generative system, which this year does not show any increase. In 1941 there was still a considerable preponderance of cancer of the buccal cavity amongst males, although the figure of 66 is lower than that of 71 for the previous year. Disease of this site among females has increased during the war, there being 19 deaths last year compared with an average of about 10 in pre-war years. Increase in disease of the digestive system is evident in the higher incidence of cancer of the oesophagus and in other digestive organs, apart from the stomach, rectum, liver, etc.

GLASGOW: DEATHS FROM CANCER.

Site of Lesion.	Year 1941.			Year 1940.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Buccal Cavity and Pharynx	66	19	85	71	12	83
Digestive Organs and Peritoneum—						
(a) Oesophagus ... ..	51	27	78	48	19	67
(b) Stomach and Duodenum	202	163	365	217	177	394
(c) Rectum ... ..	87	44	131	70	55	125
(d) Liver and Biliary Passages	31	38	69	41	39	80
(e) Pancreas ... ..	24	23	47	22	24	46
(f) Peritoneum ... ..	1	—	1	8	1	9
(g) Other Digestive Organs...	160	144	304	112	153	265
Respiratory Organs ... ..	146	50	196	124	43	167
Uterus ... ..	—	121	121	—	118	118
Other Female Genital Organs	—	32	32	—	32	32
Breast ... ..	—	156	156	4	144	148
Male Genito-Urinary Organs	55	—	55	54	—	54
Skin ... ..	11	7	18	14	9	23
Other or Unspecified Organs	87	70	157	88	71	159
Totals ... ..	<u>921</u>	<u>894</u>	<u>1,815</u>	<u>873</u>	<u>897</u>	<u>1,770</u>

*Age and Sex Distribution of Deaths.*—The age and sex distribution of deaths is given in Appendix Table VI. Male deaths numbered 8,751 and females 7,550, compared with the respective figures for the preceding year of 9,252 and 8,351. The excess of male deaths occurs principally in pulmonary tuberculosis, heart disease (2,013 against 1,806), respiratory diseases (945 against 679), violence (633 against 283), and diseases of infancy. The females are in excess in whooping cough (167 against 119), diabetes (122 against 47), and diseases of the reproductive system.

With regard to age of death, the males exceed the females at most of the age periods with the exception of -2, -20, -25, -35, and also at ages above 75 because of the large excess of females surviving to old age.

Deaths occurring in the city and transferred to other authorities numbered 1,872, and inward transfers 1,038, compared with the respective figures of 1,930 and 675 for the previous year.

The deaths occurring in hospitals, nursing homes, and other institutions compared with the respective figures for the preceding year were as follows :—

	1941	1940
Local Authority General Hospitals and Poor-houses ... ..	3,818	3,845
Local Authority, Fever Hospitals and Sanatoria	1,449	1,525
Local Authority Mental Hospitals ... ..	382	192
Voluntary Hospitals and Infirmaries ... ..	2,324	2,405
Nursing Homes, etc. ... ..	377	416
Totals ... ..	<u>8,350</u>	<u>8,383</u>
Percentage of all deaths ... ..	51·2	47·5

## SECTION II.

### MATERNITY AND CHILD WELFARE.

During 1941 there was continued activity in all branches of the Maternity and Child Welfare Section, with expansion of some and new development in others.

The new Centre at Sandy Road, Partick, which replaces old shop premises, was opened during the year, as was the extended premises in Avenuepark Street, Maryhill. In these Centres there is excellent and attractive ante-natal and child welfare provision, and both Centres are proving very popular.

After the heavy enemy raiding of March and April large numbers of mothers and young children left the city. It is extremely gratifying, therefore, to note the large number of attendances at the ante-natal clinics. The number is 10,673, compared with 10,370 in 1940. There is only a very slight decrease in the number who attended the clinic at the Royal Maternity Hospital. In all the number of patients supervised at ante-natal clinics represents about 60 per cent. of the total births.

A noteworthy point is the demand by women for ante-natal supervision at an ante-natal clinic followed by a hospital confinement. Year by year this demand has been increasing, and now the maternity accommodation is taxed to its limits. To extend this provision accommodation in Lennox Castle Emergency Medical Service Hospital (about 20 miles from Glasgow) was made available for Glasgow patients. With very little alteration a block was converted into excellent lying-in accommodation for about 30 patients. A certain number of women are each week transferred after confinement from one or other of the Corporation maternity units and spend the puerperium in beautiful rural surroundings. This provision has proved most popular and patients are eager to take advantage of it.

An analysis of the attendances at the infants and toddlers sessions shows a still further decrease in the number of young children under supervision at the various centres. Some decrease during 1941 was

inevitable owing to the large-scale evacuation in March and April, but there is no doubt that the main reason for the decrease is the employment of many mothers with the consequent lack of time and opportunity to attend the welfare centre with their children. This large-scale employment of women with young children, with consequent disruption of the home, is causing all child welfare workers no little anxiety. The scheme for daily guardians, proposed by the Department of Health for Scotland, has met with little success in Glasgow. This is not surprising for two main reasons. Firstly, the Public Health Department in Glasgow does not operate the Child Life Protection Section of the Children's Act; consequently in the mind of the public the Department has no connection with foster-parents or guardians. Secondly, the whole conception of the scheme has been found unsuitable for this large industrial city.

The provision of war-time day nurseries is developing steadily; there are now 16 in operation, with 7 more in process of adaptation. In addition 20 nursery centres are being carried on by the Education Department. In all some 1,700 children under five years are now catered for in these institutions. One condition of entry is inoculation of the child against diphtheria and whooping-cough. The medical supervision of all these children is the responsibility of the Maternity and Child Welfare Section, and a visit is paid by a child welfare medical officer to each nursery and nursery centre at least once weekly.

Continuous study of the effects of war on the state of health of the children has been carried out. In particular a detailed survey has been made of the records of over 20,000 children under two years visited by the health visitors during the first three months of 1939 and 1941. This survey shows (a) that the incidence of rickets for the city as a whole was actually smaller during the latter period, *i.e.*, under war-time conditions, and (b) that there was a fractional increase of mild rickets in certain of the poorer localities; these cases are occurring among families whose standards are low and who earn little or nothing by experience.

#### INFANT MORTALITY.

The number of infant deaths after correction for transfers was 2,267, compared with 1,983 for the previous year. This figure represents an infant mortality rate for the year of 111 deaths per 1,000 births, compared with 95 for the preceding year. This rate has only been

exceeded on one occasion since 1925, namely 112 in 1932, a year in which there was a heavy outbreak of influenzal pneumonia. The rates for the past seven years are given in the following summary, which shows that the lowest rate ever recorded in the city was 80 two years ago :—

1935	-	98	1939	-	80
1936	-	109	1940	-	95
1937	-	104	1941	-	111
1938	-	87			

The infant death rate was highest in the first quarter of the year, due to a combination of adverse circumstances. Weather conditions, which were severe, along with a cyclical epidemic of whooping-cough together caused a marked increase in the number of infant deaths due to whooping-cough, pneumonia, and enteritis. Such a combination of circumstances was quite an unusual experience.

Analysis of the death rate shows that the number of deaths from prematurity rose quite sharply during the year, and there was also an increase in the deaths from other congenital causes. These deaths are closely related to both the physical and the psychological state of the mother during her pregnancy and labour and to the standard of care she receives both before and during childbirth. Such an increase does suggest that the war conditions may be affecting adversely both the health of the mother and the standard of our maternity services.

The following statement shows the causes of infant mortality according to sex since 1911 :—

MALES—	RATE PER 1,000 BIRTHS.							
	1911-15	1916-20	1921-25	1926-30	1931-35	1936-40	1940	1941
I. Immaturity ... ..	46	46	40	43	43	44	45	53
II. Diseases of Respiratory System ... ..	30	27	30	32	30	25	28	26
III. Diseases of Digestive System ... ..	23	18	15	15	17	19	16	22
IV. Diseases of Nervous System ... ..	10	8	7	6	4	4	5	8
V. Tuberculous Diseases	6	3	3	2	1	1	1	1
VI. Infectious Diseases	18	11	15	14	12	6	5	8
VII. Suffocation ... ..	1	—	—	—	—	—	—	—
VIII. All other causes ... ..	12	10	9	7	7	6	6	7
All causes ... ..	146	123	119	119	115	105	106	125



FEMALES— CAUSES OF DEATH.	RATE PER 1,000 BIRTHS.							
	1911-15	1916-20	1921-25	1926-30	1931-35	1936-1940	1940	1941
I. Immaturity ... ..	36	36	32	33	33	35	35	41
II. Diseases of Respiratory System ... ..	24	21	22	24	23	21	23	21
III. Diseases of Digestive System ... ..	19	14	10	11	12	13	12	13
IV. Diseases of Nervous System ... ..	8	6	5	4	3	3	3	6
V. Tuberculous Diseases	4	3	2	2	1	1	1	2
VI. Infectious Diseases...	18	11	14	12	11	6	4	9
VII. Suffocation ... ..	1	—	1	—	—	—	—	1
VIII. All other causes ... ..	9	9	7	6	5	4	5	3
All causes ... ..	119	100	93	92	88	83	83	96
Ratio—Males to 100 Females	123	123	128	128	131	126	128	128

The largest increase is in the immaturity group, the rate per 1,000 male births being 53 against 45 in 1940 and 42 in 1939; the corresponding rates for females are 41, 35, and 32. The increase since the war began has been between 25 and 30 per cent. In Table VIII in the Appendix is given the number of deaths in each of the sub-groups under this heading. Other congenital causes are responsible for 139 deaths compared with 99 in 1940. These causes alone account for an increase of 7 in the total infant mortality rate.

Diseases of the respiratory system are the next most fatal cause of infant mortality, the rate for males being 26 and for females 21 compared with 28 and 23 respectively for 1940. Respiratory disease is also largely responsible as a complication of mortality from other classified causes of infant deaths. Inclement weather is an important factor. Child mortality from respiratory disease is much lower in other towns with which a reasonable comparison can be made. Some relative figures are: Edinburgh 11.0, Birmingham 9.3, and Manchester 12.2. In New Zealand the rate is 2.4. Digestive diseases are third among the causes of death in early infancy, and although respiratory disease is an important element in these deaths the principal cause may be ascribed to enteritic conditions associated with feeding. The female mortality—13—is only one above the rate of 1940, but the male rate is higher by 6 at 22 per 1,000 births.

The mortality from nervous diseases is also higher, being 8 for males and 6 for females, compared with 5 and 3 respectively for the preceding year; indeed these rates are the highest since the last war. The male deaths numbered 79, and the female 57. Deaths from infectious diseases were also more numerous, because of the prevalence of whooping-

cough, the deaths from which numbered 133 against 12 in 1940. Cerebro-spinal fever continues to be prevalent, and the deaths were 28 compared with 29 in the previous year.

The mortality among male infants was 125 against 96 for females, while the ratio of male mortality to 100 females was 128.

*Infant mortality in Wards.*—This information is given in Appendix Table VII. The rates in most of the wards are higher. In a few wards only has there been a decrease—Dalmarnock 118 (124), Calton 73 (74), Pollokshields 63 (64), and Cathcart 50 (55)—the 1940 rates are in parentheses. There have been some considerable increases. The highest rates were 163 in Calton and Gorbals Wards, followed by 151 in Blythswood, 150 in Partick East, and 137 in both Exchange and Govan Wards. In 22 of the 38 wards the rate was over 100.

#### NOTIFICATION OF BIRTHS.

*Still-Births.*—The number of still-births known to occur in Glasgow usually averages about 4 per cent. of the total births. During 1941 there were 860 still-births, equal to a rate of 4.2 per cent. Of the medically attended births there were 159 still-births among home cases, representing a rate of 3.5, and 491 in institutions, equal to a rate of 6.4. Together the rate indicated is 5.3. Among non-medically attended births there were 210, which is equivalent to a rate of 2.7.

#### CHILD WELFARE SCHEME.

The number of child welfare centres is 15, and the number of weekly sessions carried on in them is 91. These include 30 ante-natal clinics, 56 child welfare, and 5 for ultra-violet ray treatment.

In addition to these, clinics continue to be conducted at Elderpark Child Welfare Centre and the Royal Maternity Hospital. The timetable of clinics is now as follows:—

## LIST OF MATERNITY AND CHILD WELFARE CLINICS.

	9 a.m.	1.30 p.m.
MONDAY,	15 Glenbarr Street, Provan. 106 Orr Street. 150 Wellshot Road, Shettleston. 26 Florence Street (-1 year). 2 Summertown Road, Govan (Ante-natal). 20 Arklet Road, Elder Park (Ante-natal). 33 Richard Street (Ante-natal). Sandy Road, Partick (-1 year). 26 Florence Street (Ante-natal)	15 Glenbarr Street, Provan (Ante-natal) 33 Richard Street Sandy Road, Partick (Ante-natal). 60 Avenuepark Street. 106 Orr Street. 150 Wellshot Road, Shettleston (Ante-natal). 26 Florence Street (-1 year). 2 Summertown Road, Govan (Ultra Violet Ray). 614 Dobbie's Loan (Ante-natal). 194 Fernbank Street, Springburn. 15 Glenbarr Street (Ultra-Violet Ray).
TUESDAY,	33 Richard Street (1-5 years). 194 Fernbank Street, Springburn. 60 Avenuepark Street (Ante-natal). 150 Wellshot Road, Shettleston. 15 Glenbarr Street, Provan. 2 Summertown Road, Govan. 106 Orr Street. 614 Dobbie's Loan. 33 Harriet Street	33 Richard Street (Ante-natal). Sandy Road, Partick (-1 year). 614 Dobbie's Loan (Ante-natal). 106 Orr Street. 150 Wellshot Road, Shettleston. 26 Florence Street (Ante-natal). 20 Arklet Road, Elder Park (Ante-natal). 194 Fernbank Street, Springburn. 26 Florence Street.
WEDNESDAY,	33 Richard Street (-1 year). 60 Avenuepark Street. 614 Dobbie's Loan. 18 Plean Street, Blawarthill (1-5 years). 106 Orr Street (Ante-natal). 132 Weir Street. 2 Summertown Road, Govan (Ultra-Violet Ray). 150 Wellshot Road, Shettleston. 15 Glenbarr Street, Provan.	18 Plean Street, Blawarthill (Ante-natal). 194 Fernbank Street, Springburn (Ante-natal). 106 Orr Street. 26 Florence Street (Ante-natal). 2 Summertown Road, Govan. 150 Wellshot Road, Shettleston. 33 Harriet Street.
THURSDAY,	614 Dobbie's Loan. 106 Orr Street (Ante-natal). 15 Glenbarr Street (Ante-natal). 26 Florence Street (1-5 years). 132 Weir Street. 33 Richard Street (-1 year). 2 Summertown Road, Govan (Ante-natal). 194 Fernbank Street, Springburn. 112 Ingram Street. Sandy Road, Partick (Ante-natal).	Sandy Road, Partick (1-5 years). 60 Avenuepark Street (Ante-natal). 614 Dobbie's Loan. 106 Orr Street. 150 Wellshot Road, Shettleston (Ante-natal). 26 Florence Street (-1 year). 132 Weir Street. 2 Summertown Road, Govan (Ante-natal). 26 Florence Street (Ante-natal). 15 Glenbarr Street (Ultra-Violet Ray).

	9 a.m.	1.30 p.m.
FRIDAY,	18 Plean Street, Blawarthill (—1 year).	614 Dobbie's Loan.
	194 Fernbank Street, Springburn (Ante-natal).	106 Orr Street.
	614 Dobbie's Loan (Ante-natal).	2 Summertown Road, Govan (Ultra Violet Ray).
	60 Avenuepark Street.	20 Arklet Road, Elder Park.
	106 Orr Street (Ante-natal).	15 Glenbarr Street, Provan.
	150 Wellshot Road, Shettleston.	33 Harriet Street (Ante-natal).
	26 Florence Street (1-5 years).	18 Plean Street, Blawarthill (Ante-Natal)
	2 Summertown Road, Govan.	
	15 Glenbarr Street, Provan.	
	33 Richard Street.	

Elderpark Infant Consultations—Monday, Wednesday and Thursday at 1.30 p.m.

Maternity Hospital Ante-Natal Clinics—Daily, Monday to Friday, at 1.30 p.m.,

Saturday, 9.30 a.m. —1 Year Clinics, Monday, Wednesday and Friday, 9 a.m.

Vaccination is also done at 20 Cochrane Street on Tuesdays at 12 noon.

The number of consultations held during 1941 was 3,050, compared with 3,141 for the preceding year, and the total number of attendances at these consultations was 108,791, compared with 166,390 during 1940. The number of infants under one year attending for the first time was 8,694, compared with 9,579 for the preceding year, while the corresponding figures for subsequent attendances were 69,137 and 88,632. The number of children over one year attending for the first time was 1,517, compared with 1,987, and the subsequent attendances numbered 29,443, against 66,192.

The following table gives the attendance at each consultation centre during 1941, with the corresponding total figures for the previous year:—

#### ATTENDANCES AT INFANT CONSULTATIONS, 1941.

	No. of Con- sulta- tions held.	Children—1 year.		Children+1 year.		Total No. of Attendances.		1940—Total No. of Attendances.	
		No. of Attendances.		No. of Attendances.		Attendances.		Attendances.	
		Prim.	Sub.	Prim.	Sub.	Prim.	Sub.	Prim.	Sub.
orbals ...	345	1,237	8,962	209	3,872	1,446	12,834	1,895	25,076
owcaddens ...	257	546	4,053	112	2,046	658	6,099	882	11,396
lder Park ...	201	586	4,707	100	2,297	686	7,004	748	9,869
rovan ...	256	632	5,194	170	2,630	802	7,824	874	11,914
ovan ...	156	387	2,454	64	1,282	451	3,736	621	8,572
rr Street ...	354	1,154	9,839	148	2,938	1,302	12,777	1,601	19,960
aryhill ...	152	600	4,597	82	1,193	682	5,790	709	9,440
artick ...	151	384	3,100	65	1,192	449	4,292	494	6,263
ichard Street	255	423	3,352	82	1,609	505	4,961	576	8,760
ettleston ...	308	898	9,413	166	4,575	1,064	13,988	1,149	18,952
Veir Street ...	178	328	2,749	72	1,384	400	4,133	553	7,539
gram Street	51	75	591	30	833	105	1,424	207	3,512
pringburn ...	203	710	5,483	72	1,924	782	7,407	694	8,443
lawarthill ...	103	399	2,246	50	798	449	3,044	531	4,974
ollockshaws ...	80	335	2,397	95	870	430	3,267	32	154
	3,050	8,694	69,137	1,517	29,443	10,211	98,580	11,566	154,824
		77,831		30,960		108,791		166,390	

*Supply of Milk to Mothers and Children.*—Since August, 1940, supplies of liquid milk for expectant and nursing mothers and children under five years of age have been distributed under national arrangements, and the only function falling upon the department in connection with that scheme is to hand out application forms through the Child Welfare Centres. Vitaminised dried milk continues to be supplied from the Centres, and the following table shows the number of applications and grants therefor during 1941:—

Applications granted free ... ..	231
Applications refused (income over scale) ...	18
	<hr/>
	249
	<hr/>
Applications granted—	
Nursing and expectant mothers ... ..	2
Children under 1 year ... ..	201
Children aged 1-5 years ... ..	28
	<hr/>
	231
	<hr/>

The total number of packets supplied free was 1,294, representing a cost of £102 5s. 8d.

In addition 51,758 packets were supplied at cost price to mothers and children where family income was above the scale of necessity.

Dietary supplements as shown below were also issued from the Centres:—

	Lbs.	Cost.
Cod Liver Oil ... ..	7,365	£845
Cod Liver Oil Emulsion ... ..	9,837	628
Chemical Food ... ..	2,385	278
Sundry Foods ... ..	154	12
	<hr/>	<hr/>
	19,741	£1,763
	<hr/>	<hr/>

The booklet "Health of Mother and Child," in its enlarged form, continued in demand at the Centres, and 6,614 copies were sold during the year. Large numbers were supplied to other Local Authorities in England and Scotland by special arrangement.

*Ante-Natal Consultations.*—Sessions at ante-natal clinics numbered 1,518, compared with 1,498 for the preceding year. The total attendances were 51,487, compared with 50,267 in 1940; primary attendances were 8,905, or 195 less than in the previous year, but subsequent attendances numbered 42,582, an increase of 1,415. Consultations and attendances at each of the Centres are shown in the following table:—

## ATTENDANCES AT ANTE-NATAL CLINICS, 1941.

	No. Clinical Sessions.	Number of Attendances.		
		Primary.	Subsequent.	Total.
Partick ... ..	99	425	1,893	2,318
Cowcaddens ... ..	152	503	2,212	2,715
Maryhill ... ..	103	527	2,565	3,092
Springburn ... ..	105	620	3,016	3,636
Bridgeton ... ..	156	1,078	5,500	6,578
Shettleston ... ..	99	864	4,047	4,911
Gorbals ... ..	204	1,623	7,914	9,537
Govan ... ..	150	1,010	4,413	5,423
Elderpark ... ..	100	595	3,674	4,269
Anderston ... ..	100	532	1,977	2,509
Blawarthill ... ..	100	372	2,013	2,385
Provan ... ..	99	557	2,412	2,969
Pollokshaws ... ..	51	199	946	1,145
	<u>1,518</u>	<u>8,905</u>	<u>42,582</u>	<u>51,487</u>

In addition to the above, ante-natal consultations were carried on at the four municipal hospitals out-patient departments, namely, Stobhill Hospital, Southern General Hospital, Eastern District Hospital, and Western District Hospital. The attendances at the consultations increased considerably during 1941, being 1,768 new cases with 7,853 attendances, compared with 1,274 and 5,240 in 1940 respectively.

The total number of cases attending the ante-natal dispensary of the Maternity Hospital for the first time was 3,278, compared with 3,640 in 1940; the total attendance was 15,494, against 15,592. Of the 2,422 cases treated to a termination in delivery 712 were treated in their own homes. There were 1,503 admissions to the ante-natal wards. At the infant consultations held at the hospital there were 2,819 attendances, as compared with 3,088 in 1940.

Among the 8,190 patients whose pregnancy terminated in 1941 (excluding abortions) 30 deaths occurred, giving a death rate of 3·7 per 1,000 births, compared with 5·6 for the year 1940. There were in addition 8 deaths from puerperal septic conditions. Other deaths among these 30 patients were as follows:—

Haemorrhage of Pregnancy ... ..	2
Haemorrhage of Childbirth and the Puerperium ...	7
Puerperal Toxemias ... ..	5
Other Accidents of Childbirth ... ..	2
Pulmonary Tuberculosis ... ..	3
Dysentery ... ..	1
Cancer of other Female Genital Organs ... ..	1
Intercranial Lesions of Vascular Origin ... ..	1
Heart Disease ... ..	2
Pneumonia and other Respiratory Diseases ... ..	3
Nephritis ... ..	1
Violence ... ..	1
All other Causes ... ..	1

Excluding 14 deaths which had little association with the puerperal state, the maternal death rate of mothers attending the clinics would be 2.0, compared with 5.9 for the City as a whole.

*Dental Treatment of Expectant Mothers.*—The scheme approved by the Corporation in 1935 to provide dental treatment for necessitous and partly necessitous mothers in need of treatment was continued. Applications for treatment numbered 650, a decrease of 257 from 1940. This was due mainly to higher incomes in many households owing to war conditions, but after the Corporation in May raised the scale of necessity by £2 per week the number of applications began to increase gradually. Of these 418, or 76.4 per cent., were wholly or partly necessitous. The charges made in partly necessitous cases are determined by a scale of necessity approved by the Corporation. Attendances totalled 1,853, of which 474 were first attendances; 2,851 extractions were made, and 409 dentures completed. Scaling, filling, dressing, and other work necessitated over 597 attendances of patients.

*Maternal Mortality.*—The following statement showing the maternal mortality deaths and rates is from figures supplied by the Registrar-General:—

STATEMENT SHOWING MATERNAL DEATHS AND RATES PER 1,000 BIRTHS  
IN GLASGOW AND SCOTLAND IN THE YEARS 1937—1941.

	Deaths.					Rate per 1,000 Births.				
	1937	1938	1939	1940	1941	1937	1938	1939	1940	1941
Accidents of Pregnancy ...	9	6	8	5	6	0.40	0.27	0.37	0.23	0.28
Puerperal Haemorrhage ...	15	14	25	24	22	0.68	0.64	1.15	1.10	1.03
Puerperal Septicaemia, including Post-abortive sepsis ... ..	46	51	25	33	52	2.07	2.32	1.15	1.51	2.44
Toxaemia of Pregnancy, Albuminuria Convulsions	21	24	11	27	21	0.95	1.09	0.51	1.23	0.98
Other Puerperal Diseases	19	30	31	19	20	0.86	1.36	1.43	0.86	0.94
Totals—Glasgow ... ..	110	125	100	108	121	49.96	5.68	4.61	4.93	5.67
Scotland ... ..	424	432	390	379	439	4.82	4.87	4.49	4.20	4.69

During the year 121 deaths occurred from maternal causes, equivalent to a rate of 5.67 per 1,000 live and still births, which compares with a rate of 4.93 for the previous year. The rates prior to 1940 are based on the live births only.

#### ULTRA-VIOLET RAY CLINICS.

No alteration has taken place in the arrangements for light treatment of children suffering from rickets, malnutrition, etc.

The installation and the results of treatment have been fully dealt with in previous reports, so that only the records of numbers treated are here given in respect of 1941:—

#### RECORD OF ATTENDANCES AND CONSULTATIONS DURING 1941.

	Number of Clinics held.	Children —1 year. Number of Attendances.		Children +1 year. Number of Attendances.		Mothers. Number of Attendances.		Total Number of Attendances.	
		Prim.	Sub.	Prim.	Sub.	Prim.	Sub.	Prim.	Sub.
Provan ... ..	99	30	276	366	4,791	9	63	405	5,130
Govan ... ..	151	34	205	257	5,435	8	74	299	5,714
	250	64	481	623	10,226	17	137	704	10,844
		545		10,849		154		11,548	



### INFANT VISITATION.

Under the scheme of infant visitation every birth is visited if the notification does not state that a medical practitioner has been in attendance, and the following table shows the record of those visited together with certain information obtained:—

	1939.	1940.	1941.
Inquiry Cards returned ... ..	17,497	16,824	15,480
Full information obtained ... ..	17,137	16,503	15,045
Doctor found in attendance ... ..	2	—	—
Wrong address ... ..	—	—	—
Others ... ..	358	321	435
Inquiry Cards issued ... ..	17,623	16,695	15,401

### VISITATION BY NURSES.

Altogether the health visitors made 203,597 home visits during the year, compared with 210,368 during the preceding year. Of these totals the respective numbers for infants under one year of age were 73,618 and 77,780. First visits numbered 14,611. In addition 69,375 visits were made to houses in respect of toddlers, while 15,817 other toddlers were seen during the course of routine visitation of infants. Other visits were made for special enquiries, etc., as shown in the following table:—

#### VISITS MADE BY NURSES.

	1940.	1941.
Infants under one year—Primary visits ...	16,997	14,611
Infants under one year—Subsequent visits ...	60,783	59,007
	<hr/> 77,780	<hr/> 73,618
Children one to five years ... ..	69,402	69,375
Children seen while visiting infants ... ..	17,017	15,817
Ophthalmia Neonatorum ... ..	5,756	5,827
Puerperal Fever ... ..	1,040	58
Maternal Deaths Enquiries ... ..	213	30
Infant Deaths ... ..	50	63
Ante-natal Visits ... ..	5,747	6,110
Venereal Diseases ... ..	368	236
Light Treatment ... ..	191	170
Pneumonia ... ..	288	128
Other Visits ... ..	2,094	1,754
Houses Shut ... ..	30,422	30,411
	<hr/> 193,351	<hr/> 187,780
Infants or Children brought to Central Clinic for treatment, etc.—		
Child Welfare ... ..	660	454
Venereal Diseases ... ..	82	69
Others ... ..	755	488
	<hr/> 1,497	<hr/> 1,011

In addition to home visitation the nurses attend the Child Welfare and other consultations in their own districts. They thus have an opportunity of reporting to the doctor any illness or condition requiring medical treatment and following up cases afterwards to see that the treatment recommended is carried out.

*Domestic Helps.*—During 1941 28 individual helps attended 145 cases for a total of 1,535½ days. This is an average of 10½ days per case. The amount paid in fees was £208 18s. 6d. The helps are remunerated at the rate of 5s. per day, so that the balance falling to be met by the Corporation was £174 19s.

*Maternity Bundles.*—These bundles or part bundles to the number of 2,016 were supplied, in respect of which part payment received amounted to £198 0s. 6d.

*Day Nurseries.*—The attendances at the three Day Nurseries which were reopened during 1940, viz., Cowcaddens, Kingston, and Bridgeton, were as follows:—

Nursery.	Number of Days open.	Total Attendances during the year	Average.	Maximum number in one day.	Accommodation for.
Bridgeton ...	249	10,665	42	56	40
Kingston ...	254	6,171	24	36	36
Cowcaddens ...	255	9,195	31	50	50

#### MIDWIVES (SCOTLAND) ACTS.

During 1941 there was a decrease of 68 in the number of midwives who notified their intention to practise, so that there are now 129 on the register. The number of those entitled to registration by examination is 117, while the number of those registered as having been in practice in 1914 is now 8. The number who notified their intention to practise for the first time was 9.

During the year there were 1,374 occasions on which medical help was called by midwives, which represents 30·5 per cent. of the total births occurring in the practice of midwives. Details of the nature of emergency are not given this year, but the following indicates the period during which medical assistance was called:—

	1939	1940	1941
In all cases in which a woman during pregnancy, labour, or lying-in appears to be dying or is dead ... ..	—	—	—
PREGNANCY.—In cases of a pregnant woman, where there is any abnormality or complication ...	53	30	34
LABOUR.—In the case of a woman in labour at or near term, when there is any abnormality or complication ... ..	1,449	1,248	1,006
LYING-IN.—In the case of a lying-in woman, when there is any abnormality or complication ...	188	164	123
THE CHILD.—In the child, when there is any abnormality or complication ... ..	242	213	207
Cannot be classified ... ..	6	8	4
Total ... ..	<u>1,938</u>	<u>1,663</u>	<u>1,374</u>

Fees to doctors attending emergency cases amounted to £977 16s., and during the year £440 17s. 2d. was recovered, £7 17s. withdrawn from medical practitioners' accounts, and accounts of 5s. were deleted.

*Municipal Midwives.*—The service carried out by these midwives continues to increase in popularity, and the number of the midwives has been increased from 28 to 29. These nurses paid 9,733 ante-natal visits and 19,887 visits during the puerperium, and 4,151 visits to the babies until the age of one month. This continuity of supervision for the first four weeks has many advantages, particularly with regard to the establishment of breast-feeding. The municipal midwives are having a striking success in this connection. Of the 1,337 confinements attended 32 terminated in a still-birth. In three instances the call to the confinement was an emergency one, and the foetus was macerated. Two maternal deaths occurred, and again in both instances the midwife attended as an emergency and had no previous knowledge of the case.

*Nursing Homes Registration (Scotland) Act, 1938.*—Five applications for registration of nursing homes were made during the year. Four of these were granted, and the remaining case was still under consideration at the end of the year. Two of the applications were for new certificates consequent upon a change of management; one was a fresh application on the home being reopened under the same management; and two were new applications.

Seven certificates were withdrawn. Two were in respect of the homes mentioned above in which there had been a change of management; in three cases intimation was received that the premises had been given up entirely, and in two cases the owners died.

No fresh applications for exemption were received.

The following table shows the position of nursing homes at 31st December, 1941 :—

	Registered.	Exempted.
Maternity Hospitals ... ..	—	2
General Infirmaries and Hospitals ...	1	9
Nursing Homes ... ..	40	4
	<u>41</u>	<u>15</u>

#### OPHTHALMIA NEONATORUM.

During the year 543 cases of ophthalmia neonatorum were notified, compared with 617 in 1940. Analysis of these notifications indicates that the greater number of the cases are reported by institution nurses and midwives.

#### CASES OF OPHTHALMIA NEONATORUM ACCORDING TO NATURE OF ATTENDANCE AT BIRTH.

Doctors ... ..	14
Institutions ... ..	93
Institution Nurses ... ..	289
Midwives ... ..	147
	<u>543</u>

Routine examination for the causative organism was made in every case reported as showing signs of catarrhal inflammation. The number of cases of gonococcal ophthalmia neonatorum was 32, as compared with 19 in 1940. This increase is a reflection of the increase of cases of acute gonorrhoea in the general population—an increase which is causing no little concern. Of the total cases 63 were removed to hospital, 31 attended hospital for outdoor treatment and made 52 attendances; the others were treated at home or at child welfare centres by health visitors, who made 5,827 visits in this respect.

The total number of admissions to hospital was 70, including 7 cases occurring outwith Glasgow. Of these 7 cases 2 were gonococcal in origin. The Wassermann test for syphilis was performed in the 70 cases and in no case was the test positive and in none of the children was there any evidence of syphilitic infection.

## PUERPERAL FEVER AND PUERPERAL PYREXIA.

During the year there were registered 363 cases of puerperal fever and 275 cases of puerperal pyrexia, compared with 419 and 255 respectively for the preceding year. All but 11 cases of puerperal fever and 41 pyrexias were removed to hospital or other institution.

Deaths from puerperal fever numbered 42, which is equal to a case rate of 11.6 per cent., compared with 6.0 for the previous year. Including 9 deaths from puerperal sepsis, the combined death rate for puerperal fever and pyrexia becomes 8.0, as against 5.8 for the preceding year.

## SECTION III.

## INFECTIOUS AND OTHER DISEASES.

The total number of cases of infectious disease registered was 34,835, including a further 1,492 cases that were ultimately diagnosed as non-infectious. For the previous year the corresponding figures were 33,610 and 1,676. The larger number of cases for the year 1941 was due to the greater prevalence of whooping-cough, whereas in the former year measles was the principal cause of the excess.

The diseases registered throughout the year are given in Table X of the Appendix, which shows also the numbers removed to fever hospitals, Corporation general hospitals, and other institutions.

*Smallpox and Vaccination.*—There was no case of smallpox during the year, and few contacts were notified as arriving at ports in the country. The percentage of children born in 1940 who were successfully vaccinated was 43·2, compared with 39·6 for the previous year. During 1941 the number of cases reported by registrars as not having lodged certificates for conscientious objection to vaccination under the Act was 5,812, as against 5,904 for the preceding year. As a result of action taken children vaccinated numbered 1,686, while the number postponed was 1,973, and 77 were certified as not susceptible. Medical certificates on behalf of 213 children were forwarded to the Department of Health for Scotland as not fit subjects for vaccination. The number of children vaccinated at Child Welfare Centres was 2,060, compared with 2,209 during the previous year.

TABLE SHOWING RESULTS OF PRIMARY VACCINATION OF CHILDREN BORN DURING SEVERAL YEARS.

(From the Detailed Annual Reports of the Registrar-General.)

Year.	Successfully vaccinated. Per cent.	Insusceptible of vaccine disease. Per cent.	Died before vaccination. Per cent.	Conscientious objection to vaccination. Per cent.	Vaccination postponed. Per cent.	Unaccounted for. Per cent.
1906	... 82·9	0·5	10·6	0·2	0·8	5·0
*	*	*	*	*	*	*
1914	... 51·7	0·9	12·1	25·1	1·8	8·4
*	*	*	*	*	*	*
1937	... 40·3	1·7	8·6	43·5	1·1	4·8
1939	... 39·6	2·3	7·4	41·6	1·6	7·5
1940	... 43·2	1·8	8·0	36·5	1·6	8·9

These percentages indicate that more than half the child population is unprotected against smallpox.

*Enterica Infections.*—Typhoid fever continued at a low level, there being only 19 cases recorded during the year, of which all but one were removed to hospital. The cases were more or less evenly distributed throughout the year, and in no instance was there more than two cases recorded in any one ward of the city. With regard to paratyphoid, there were only 61 cases, compared with 339 during the preceding year when an outbreak occurred in various parts of the city during March and April. In 1941 there was a small midsummer prevalence comprising 23 cases in the Eastern Division, and 6 in an adjacent county area, the source of which remained untraced despite extensive investigation of milk and other articles of food. There were only two deaths.

*Dysentery.*—The annual total (319 cases) has been exceeded only in 1940, but the disease remained mild. Seasonal incidence was as follows:—

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
Home Infections ...	13	29	75	79	196
Institutional ...	62	21	20	20	123

A large general hospital yielded 70 cases during the year; a majority of these sickened in the January milk-borne outbreak described in last year's Report.

*Malaria.*—The number of cases of malaria registered was 25, compared with 50 for the preceding year, which however was the highest since the years immediately following the last war.

*Scarlet Fever.*—Scarlet fever, which had been declining during the past four years, showed a definite tendency during the last quarter of 1941 to rise in incidence. This rise may be taken as the beginning of the long term wave. Altogether there were 1,914 cases, compared with 1,874 during 1940. Of the total cases, 743 were registered from October to December. The seasonal incidence is given in Appendix Table IX. The highest number of cases occurred in wards with large child populations, such as Shettleston, Provan, Ruchill, Hutchesontown, etc. Of the total cases, 1,537 were removed to hospital. There were only 7 deaths, not more than one being recorded in any ward; the fatality rate was very low, *i.e.* 0.3 per cent., compared with fatalities of 5 to 7 per cent. at the end of last century.

*Diphtheria.*—Diphtheria had been increasing in prevalence since 1936; the highest number recorded in recent times occurred in 1940 when there were 5,190 cases. During 1941 there was a marked reduction, when the cases registered numbered 4,039, of which 4,018 were removed to hospital.

The disease was more or less prevalent throughout the city, and although there were no definite local outbreaks the highest prevalences occurred in wards with large child populations, such as Ruchill where there were 269 cases, Govan with 215, Cowcaddens with 190, and Provan with 185 cases. The following table shows the variations that have taken place in the age distribution of the cases and the effect of immunisation of large numbers of the susceptible child population:—

	—1	—5	—15	—25	25+
1914 ... ..	3.5	38.7	38.3	12.0	7.5
1917 ... ..	3.0	37.7	39.5	12.3	7.5
1921 ... ..	3.2	27.4	50.1	12.0	7.3
1924 ... ..	3.3	35.6	43.1	10.6	7.4
1940 ... ..	0.8	28.1	51.1	14.3	5.7
1941 ... ..	1.5	27.0	46.0	18.1	7.4

The numbers immunised as at 31st December were as follows:—

	—5	—15	15+	Not Stated.	Total.
	22,539	87,143	2,968	469	113,119
Percentage ...	26	52	—	—	—

*Diphtheria Immunisation Scheme.*—The diphtheria immunisation campaign which was inaugurated in 1940 was further extended during 1941. Twelve permanent “Tuesday” clinics were established where diphtheria immunisation was given free. In addition, immunisation was carried on at all child welfare centres, and children in their first year at school were given the opportunity of having the inoculations at their first school medical examination. Various forms of propaganda were carried out, and as a result the large increase in the numbers attending the clinics necessitated the opening of other centres. In all 40 weekly clinics were held at 35 different centres. Propaganda was carried out in the following ways:—



- (a) Home visitation by the health visitors.
- (b) Talks were given at child welfare and ante-natal clinics.
- (c) The Ministry of Information film "Defeat Diphtheria" was shown at fifteen child welfare centres.
- (d) Birthday Letters.—If the health visitor finds on visiting a child who has just become a year old that he has not been inoculated against diphtheria a letter is sent from the Medical Officer of Health to the mother explaining the danger of further delay and telling her where and when she may have the child inoculated during the course of the following week.
- (e) A mobile unit working in conjunction with a mobile film unit visited certain area of the city. It was staffed by a doctor and four nurses, who visited the families in their homes offering immunisation in cases where the children were not already done. During the two months the unit was in operation 2,127 inoculations were given.
- (f) The co-operation and support of various organisations such as the Churches, Glasgow Infant Health Visitors' Association, and Society of Social Service were obtained.

Although it would appear that a much higher percentage of the susceptible child population would require to be immunised to effect a marked reduction in the case incidence of the disease, there was a very definite reduction in the mortality, the rate being 148 in 1941 against 216 in 1940; as a matter of fact, there was only one death among immunised children who contracted the disease. The improvement which has been effected in this respect is shown in the following table giving age distribution of the deaths compared with the preceding year.

	Case Mortality per cent.						
	1941.			1940.			
	Males.	Females.	Total.	Males.	Females.	Both Sexes.	
—1 year ...	12.9	13.8	13.1	10.3	27.2	15.0	
—2 years ...	11.6	3.9	8.7	7.4	16.9	11.5	
—5 years ...	9.0	5.2	7.1	6.7	10.5	8.5	
—10 years ...	2.9	4.6	3.8	3.4	4.1	3.8	
—15 years ...	0.9	1.4	1.2	0.8	1.7	1.2	
15+ years ...	0.9	1.0	1.0	1.1	5.8	0.8	
All Ages ...	<u>4.5</u>	<u>3.3</u>	<u>3.8</u>	<u>3.8</u>	<u>4.7</u>	<u>4.3</u>	

*Erysipelas.*—Cases recorded during the year numbered 672, compared with 656 for the preceding year. Some 341 were removed to fever hospitals and 8 to general hospitals. Deaths numbered 6, which is equivalent to 6 per million of the population, compared with 11 for the preceding year; this is the lowest on record; in the years immediately preceding the war the rate averaged from 40 to 50 per million.

*Diseases of the Central Nervous System.*—The incidence of cerebrospinal fever has remained high for the second year in succession, there being 408 cases in 1941 against 457 in 1940. As indicated in the report for last year, this is the highest prevalence since the disease was made notifiable in 1907. All but 17 of the cases were removed to hospital. The season of highest incidence was again the spring, when 70 cases occurred in February—somewhat earlier than usual. There were no outbreaks of the disease, the wards with the highest numbers being those with large child populations, such as Provan with 22 cases and Parkhead with 21; there were 35 cases in institutions. The disease was most prevalent among very young children, 77 cases occurring in children under one year and 49 in children from one to two years. The incidence tended to rise again among the population between 20 and 40 years of age. There were 280 male and 188 female cases. The deaths numbered 84, and the fatality rate was 21 per cent. in both sexes—the same figure as last year.

Seven cases of encephalitis lethargica compared with three for the preceding year were recorded, some of which were chronic when notified. There was one case of acute polio-encephalitis. Acute poliomyelitis accounted for 47 patients, compared with 33 for the preceding year; 38 were removed to hospital. There were 25 male cases and 22 female, and all but two of the cases occurred in children under 15 years of age. There was only one death.

*Measles.*—The last epidemic of measles began in the summer of 1940 and reached its maximum towards the end of June. It was one of the minor outbreaks of the disease, with only 11,028 cases. This relatively small epidemic left a considerable number of susceptible children in the community so that it lingered on at a low level throughout the first six months of 1941, when most of the 1,613 cases registered during the year occurred. The seasonal incidence of the disease is given in Appendix Table IX.

The mortality was also low, the death rate being 11 per million of the population, compared with 93 in 1940 and only 2 in 1939. The mortality over the three years since the war began has been on the average definitely below the mortality of preceding years.

*German Measles.*—Fewer cases of the disease were recorded—234 in 1941 against 653 during the preceding year.

*Whooping-cough.*—This infection was present in epidemic form during the first half of the year, and continued thereafter in sporadic form, as shown in Appendix Table IX, which gives the seasonal distribution. The total number of cases registered was 10,987, which is the highest number recorded in any one year since 1925. As whooping-cough even more than measles is a disease of cold weather, epidemics usually start in the autumn and carry on into the spring of the following year, so that normally half the cases in each epidemic fall into consecutive years. In 1940 there were only 875 cases, so that practically all of the cases in this epidemic are referable to the year 1941. The largest number of cases occurred in heavily populated and closely built wards with large child populations, such as Shettleston, Parkhead, Dalmarnock, Provan, Cowcaddens, Ruchill, Hutchesontown, and Gorbals; Provan was the most heavily affected ward, where 696 cases were recorded. All the cases with the exception of 162 occurred under the age of ten years. It was among these ages that all the deaths occurred, deaths among males being 119 and 167 among females. The death rate in 1941 was 274 per million of the population, compared with 19 for 1940. The fatality rate was 2·6 per cent. against 2·3 for the preceding year.

*Chickenpox.*—The prevalence of chickenpox usually remains steady, but while in 1940 the number was only 2,047, in 1941 the number rose to 4,094, of which 204 were removed to hospital.

*Diarrhoea and Enteritis.*—The mortality from these digestive disorders was higher, the death rate per million of 341 being recorded among children under two years of age, compared with 294 for the preceding year. Of the total deaths, 222 occurred among males and 135 among females, and all but 8 in each instance took place in the first year of life.

*Anthrax.*—One case was recorded during the year; the patient was a woman employed as a hair spinner.

*Leprosy.*—One case of leprosy was admitted to Knightswood Hospital on 2nd June from one of the general hospital dispensaries. The patient was a Mohammedan aged 27 who arrived as a passenger from a district 400 miles east of Calcutta and who had been residing in a model lodging-house. He was later repatriated by the shipping company.

### RESPIRATORY DISEASES.

*Pneumonia and Influenza.*—The mortality from respiratory diseases usually fluctuates every second or third year because of the variations in the prevalence of pneumonia, especially of the influenzal type. In 1941 pneumonia was less fatal than it was during the preceding year, but the death rate—961 per million of the population—was higher than that of 1939, when a figure of 768 was recorded, which was the lowest on record. The year 1940 was one of influenzal prevalence though not of major proportions. The death rate was comparatively low during 1941, especially when it is remembered that the temperature for the first six months of the year was definitely below the corresponding record for the preceding year.

The influenza mortality rate was even more favourable, and at 119 per million of the population reached a comparatively low minimum. In only two years since the last war has the mortality been less.

Bronchitis, however, would appear to have been affected by the more rigorous weather conditions mentioned, for the death rate—458 per million of the population—though much lower than the rate of 680 for the preceding year, was higher than most of the rates recorded during the past decennium. The age and sex distribution of deaths is given in Appendix Table VI, which shows the increased mortality from 45 years upwards. It may be that there is some association with the sustained mortality from tuberculosis of the respiratory system at a time when industrial employment is continuing at a high level.

The following abstract gives death rates from respiratory diseases for 1941 compared with the two preceding years:—

	1941.	1940.	1939.
Influenza ... ..	119	431	182
Bronchitis ... ..	458	680	341
Pneumonia ... ..	961	1,197	768
Others .... ..	134	204	136
	<u>1,672</u>	<u>2,512</u>	<u>1,427</u>

Fully fifty per cent. of the deaths from pneumonia occurred in the first quarter of the year. The highest death rate occurred in Blythswood Ward with 2,257 per million of the population, followed by Exchange with 1,663 and Gorbals with 1,596. The mortality from influenza was also highest in Blythswood with 451, followed by Cathcart with 273.

The total number of cases of acute primary pneumonia notified was 6,186, compared with 5,516 for the preceding year. Of the total cases 2,697 were removed to fever hospitals, 1,046 to general hospitals, and 210 to other institutions. The seasonal distribution is given in Table IX of the Appendix.

### TUBERCULOSIS.

During the year the number of notifications of pulmonary tuberculosis marked a further rise in incidence, there being reported 2,066 cases as compared with 1,908 in 1940, an increase of 158 cases. The number of non-pulmonary cases was 661, a decrease of 8 from the previous year. In the case of pulmonary tuberculosis the under 15 age group in both sexes showed a marked increase, as did the over 45 age group in males. There is little change to be noted in the deaths from pulmonary tuberculosis for the past two years. In fact the returns for 1941—at 1,155—show a decrease of 27 as compared with 1940. The death rate for non-pulmonary tuberculosis was 3 per cent. above the 1940 figure. The following comparative table shows the trend of notifications of non-pulmonary tuberculosis compared with previous years for various types of the disease:—

	Involvement of Bones and Joints.	Involvement of Meninges.	Other Non-Pulmonary Lesions.	Total.
1920 ...	361	172	652	1,185
1925 ...	289	140	686	1,115
1930 ...	254	214	579	1,047
1935 ...	181	140	353	674
1938 ...	236	157	307	700
1939 ...	185	140	236	561
1940 ...	208	189	272	669
1941 ...	223	182	256	661

Meningeal tuberculosis still remains relatively high, while bone and joint lesions again show an increase. A few more abdominal cases have been notified, but again the Senior Food Inspector reports no increase in the number of samples of Glasgow milk containing tubercle bacilli. In fact only 18 out of 301 samples of transport milk examined

during 1941 showed the presence of tubercle bacilli—that is 6 per cent., as contrasted with 6.3 per cent. for 1940 and 9.4 per cent. for 1939.

During the year a detailed investigation into the occupations and working hours of the cases of pulmonary tuberculosis notified to the department was carried out, the results being fully analysed and published in the *British Medical Journal*. Briefly, it was found that the increase among young people of both sexes under 15 years of age was only partly accounted for by an increased proportion of home contacts, and that the previous contention that overwork and long hours were playing a major part in the increased number of recorded cases since the war was fully supported. One outstanding feature was that little increase had occurred among the professional and commercial classes, whose hours of work alone remained within reasonable limits. It was observed that whereas less than 20 per cent. of the commercial class exceeded the recommended maximum hours of work, 67 per cent. of the workers in heavy industries and well over 40 per cent. of the medium heavy industries were working in excess of this standard. It was also found that nearly 40 per cent. of the housewives notified during the year were employed in part-time war work in addition to their household duties. This is a new feature entirely associated with war conditions which may account for the increased number of cases in this group.

Further beds in emergency hospitals were released during the year, but even these have not succeeded in keeping down the growing waiting list. There were 1,374 cases of pulmonary tuberculosis undergoing treatment in various institutions at December, 1939, compared with 1,588 at December, 1940, and 1,650 cases at December, 1941. The number of domiciliary visits paid by tuberculosis health visitors was 54,708, of which 39,324 were to cases of pulmonary tuberculosis and the remainder to cases of non-pulmonary tuberculosis. The total number of medical consultations at the six dispensaries was 1,034, and here 1,850 males and 1,484 females attended for the first time, while the subsequent visits to dispensary numbered 30,130. Of the 2,066 new cases of pulmonary tuberculosis 1,158 were treated in hospital and 908 at their own homes. In addition 117 cases notified in previous years were also admitted to hospital.

To review the position briefly,—in December, 1940, there were 5,600 registered cases of phthisis in the city, of whom some 2,733 cases had tubercle bacilli in their sputum, as contrasted with 5,659 cases

with 2,608 with a positive sputum in 1941. The corresponding figures for the number of cases of non-pulmonary tuberculosis at December, 1940, and December, 1941, were 2,295 and 2,196 respectively.

It is worthy of attention that there has been a considerable increase in the number of cases of pulmonary tuberculosis receiving modern surgical treatment at both Robroyston and Ruchill Hospitals, the results of which have been most satisfactory.

#### BAIRD STREET ACTINOTHERAPY CLINIC.

The number of patients attending this clinic at the end of 1941 was 203, compared as with 128 at the end of 1940. The following table summarises the results of treatment in 176 patients who were dismissed during 1941 from the general clinic and excludes details of 10 patients who had less than one month's treatment.

	Number of Patients.				Average Duration of Treatment in Months.		
	Healed.	Improved.	Not Improved.	Total.	Healed.	Improved.	Not Improved.
Superficial Adenitis	7½	43	12	127	7·6	4·3	1·8
Lupus Vulgaris ...	3	8	3	14	10·3	24·0	3·0
Abdominal Tuberculosis	5	3	1	9	5·6	8·0	2·0
Bone and Joint Tuberculosis	6	4	1	11	7·2	5·3	17·0
Other Tubercular Conditions	—	2	3	5	—	4·5	1·3
Miscellaneous—							
(a) Hilum Adenitis	3	—	—	3	6·3	—	—
(b) Bronchitis ...	2	1	—	3	6·5	2·0	—
(c) Others ...	—	3	1	4	—	5·3	2·0
	<u>91</u>	<u>64</u>	<u>21</u>	<u>176</u>			

At the special lupus clinic 81 patients attended on 2,557 occasions and were given 4,552 hours of treatment from Finsen-Lomholt lamps. Of these, 39 were still on treatment at the end of 1941, 28 were regarded as probably healed, 2 were evacuated to a reception area, 3 were admitted to hospital, and 9 defaulted. Of the 3 cases of lupus classified as "Healed" in the table, 2 received a full course of treatment from a Finsen-Lomholt lamp, and of the 8 cases listed as "Improved" 2 received an incomplete course of treatment from a Finsen-Lomholt lamp; none of the 3 cases which showed no improvement was treated by this lamp.

## GORBALS X-RAY CLINIC AT FLORENCE STREET.

During 1941, its first complete year of operation, this clinic has continued to function well. The equipment has proved to be satisfactory in use and has produced films of a consistently good quality. One change in staff occurred—the Sister resigning to go on active service and her place being taken by a female radiographer; thus the X-ray staff now consists of the radiologist and two radiographers, one male and one female.

The work done shows a relative increase over that of the nine months of 1940 in which the clinic was open. During the year X-ray examinations were carried out on a total of 1,019 cases—846 from the Tuberculosis Clinic and 173 from the Ante-Natal and Child Welfare Clinics—an average of 23 for each of the 44 sessions. The average for 1940 was 18. Of the 846 cases sent from the Tuberculosis Clinic 99 or almost 12 per cent. were examined under the National Service (Armed Forces) Acts.

The 173 cases from the Ante-Natal and Child Welfare Clinics give an average of practically 4 cases per session, a marked increase on the corresponding average for 1940 (2·2), and it is satisfactory to note the increased use of the X-ray clinic in this type of work. It is evident that this clinic is proving to be a useful adjunct to the main out-patient X-ray clinic at Ruchill, and that increased advantage has been taken of the facilities which it provides.

### X-RAY WORK.

The following table shows the amount of work done at the various institutions:—

Institution	Number of Patients Skiagraphed.		Number Skiagraphs taken.	Number of Screen Ex- aminations only.	Total Patients
	Indoor	Outdoor			
Ruchill ...	2,542	5,709	10,645	4,912	13,163
Robroyston ...	1,532	21	3,434	—	1,553
Mearnskirk ...	3,727	777	9,642	452	4,956
Baird Street ...	—	—	—	4,455	338
Bellefield ...	293	—	—	946	181



## VENEREAL DISEASES.

There was a further marked increase in the incidence of venereal disease, both in males and females, during 1941. Seamen patients continue to account for a certain proportion of the rise in the incidence of both syphilis and gonorrhoea, as can be seen from the following table :

### BLACK STREET AND BROOMIELAW CLINICS.

#### NEW AND TRANSFERRED IN-PATIENTS.

#### *Proportion of Seamen to Total Cases.*

	Early Syphilis.			Acute Gonorrhoea.		
	All.	Seamen.		All.	Seamen.	
1939 ...	265	54	20.4%	1,133	75	6.6%
1940 ...	403	133	33.0%	1,210	224	18.5%
1941 ...	793	434	54.7%	1,671	539	32.3%

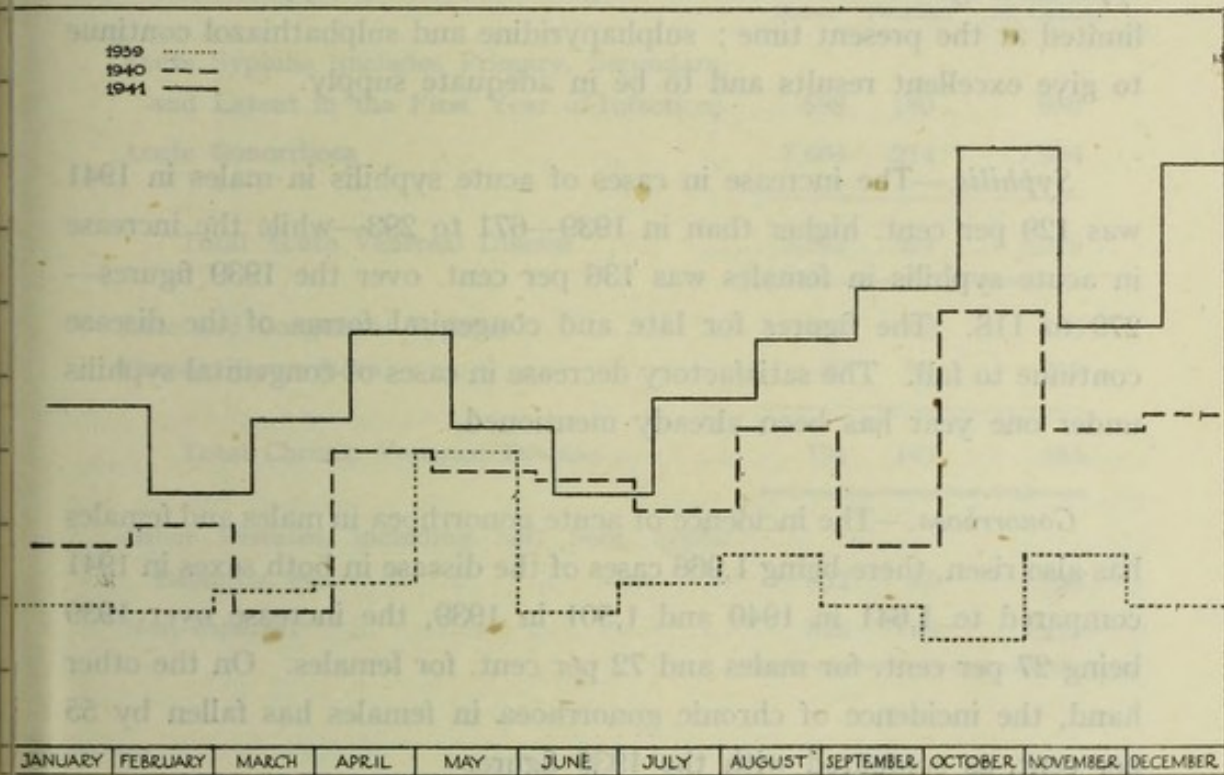
The work of treating male venereal disease had to be carried out at Black Street and Broomielaw Clinics as Bellahouston Clinic was out of action for the greater part of the year. It was found necessary to provide indoor accommodation in Ruchill Hospital for the treatment of patients formerly admitted to the Lock Hospital, the loss of which has been felt. Additional accommodation is required for the indoor treatment of males, and it is proposed to take over another pavilion in Belvidere Hospital for this purpose. The rise which has taken place in the incidence of venereal diseases in males is shown in the graphs on the opposite page.

The incidence of early syphilis and acute gonorrhoea has risen, but the numbers of cases of chronic gonorrhoea and congenital syphilis continue to fall, the figure of the new cases of congenital syphilis under one year—15—being the lowest yet recorded. The very marked decrease in congenital syphilis during the last twenty years can be seen from the following table:—

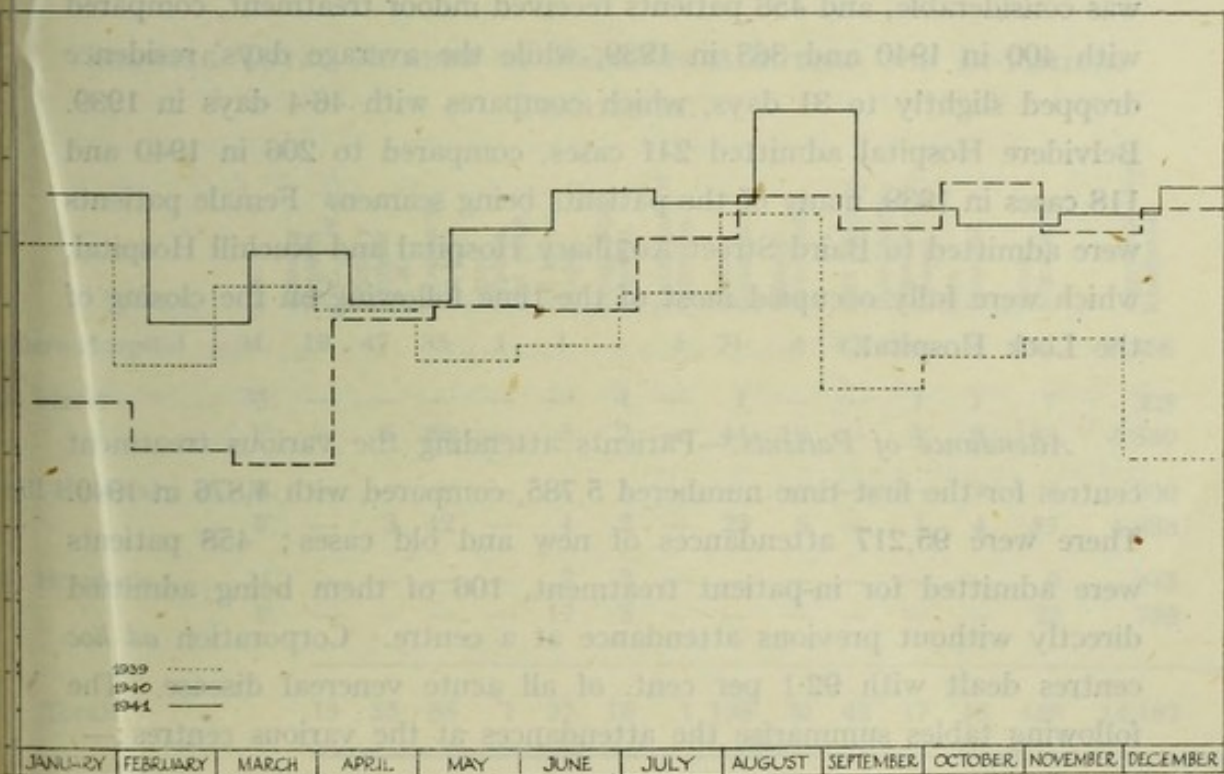
#### CONGENITAL SYPHILIS UNDER ONE YEAR.

					Cases.	Rate per 1,000 Live Births.
1922 ...	...	...	...	...	335	12.8
1927 ...	...	...	...	...	119	5.0
1932 ...	...	...	...	...	72	3.2
1937 ...	...	...	...	...	36	1.6
1941 ...	...	...	...	...	15	0.75

GLASGOW.—INCIDENCE OF EARLY SYPHILIS IN MALES IN 1939, 1940 AND 1941.



GLASGOW.—INCIDENCE OF ACUTE GONORRHOEA IN MALES IN 1939, 1940 AND 1941.



Another product, sulphadiazine, has been added to the sulphanilamide type of drugs for the treatment of gonorrhoea, but supplies are rather limited at the present time; sulphapyridine and sulphathiazol continue to give excellent results and to be in adequate supply.

*Syphilis.*—The increase in cases of acute syphilis in males in 1941 was 129 per cent. higher than in 1939—671 to 293—while the increase in acute syphilis in females was 136 per cent. over the 1939 figures—279 to 118. The figures for late and congenital forms of the disease continue to fall. The satisfactory decrease in cases of congenital syphilis under one year has been already mentioned.

*Gonorrhoea.*—The incidence of acute gonorrhoea in males and females has also risen, there being 1,966 cases of the disease in both sexes in 1941 compared to 1,641 in 1940 and 1,501 in 1939, the increase over 1939 being 27 per cent. for males and 72 per cent. for females. On the other hand, the incidence of chronic gonorrhoea in females has fallen by 55 per cent. as compared with the 1939 figure.

*In-Patient Treatment.*—The pressure on institutional accommodation was considerable, and 458 patients received indoor treatment, compared with 400 in 1940 and 363 in 1939, while the average days' residence dropped slightly to 31 days, which compares with 46·4 days in 1939. Belvidere Hospital admitted 241 cases, compared to 206 in 1940 and 118 cases in 1939, many of the patients being seamen. Female patients were admitted to Baird Street Auxiliary Hospital and Ruchill Hospital, which were fully occupied most of the time following on the closing of the Lock Hospital.

*Attendance of Patients.*—Patients attending the various treatment centres for the first time numbered 5,785, compared with 4,876 in 1940. There were 95,217 attendances of new and old cases; 458 patients were admitted for in-patient treatment, 106 of them being admitted directly without previous attendance at a centre. Corporation *ad hoc* centres dealt with 92·1 per cent. of all acute venereal disease. The following tables summarise the attendances at the various centres:—

	Ad Hoc Treatment Centres		Glasgow : All Centres.
	Males.	Females.	
Acute Syphilis (includes Primary, Secondary, and Latent in the First Year of Infection)	598	180	950
Acute Gonorrhoea ... ..	1,694	214	1,966
<b>Total Acute Venereal Disease ... ..</b>	<b>2,292</b>	<b>394</b>	<b>2,916</b>
Late and Congenital Syphilis ... ..	111	60	356
Chronic Gonorrhoea ... ..	80	87	209
<b>Total Chronic Venereal Disease ... ..</b>	<b>191</b>	<b>147</b>	<b>565</b>
Other Diseases, including Soft Sore, Septic Balinitis, etc. ... ..	932	95	1,292
Non-Venereal ... ..	826	186	1,126

*In-Patient Treatment.*—The following table shows admission of patients to the hospitals of the Local Authority and elsewhere for the treatment of venereal disease:—

SHOWING TOTAL NUMBER OF PATIENTS ADMITTED FOR IN-PATIENT TREATMENT.

	Sex.	Primary Syphilis D.G. + W.R.	Primary Syphilis W.R. +	Secondary Syphilis.	Latent Syphilis. (1st year).	All Later Stages.	Congenital Syphilis.	Extra-genital Infection.	Acute Gonorrhoea.	Chronic Gonorrhoea.	Soft Chancre.	Non-Specific Venereal Disease.	Non-Venereal.	Total Admissions.	Aggregate Days' Residence.	Average Days' Residence.
Belvedere Hospital	M.	19	47	35	1	4	—	1	71	4	42	14	3	241	6,356	26.4
Belvedere Street	M.	—	—	—	—	—	4	—	1	—	—	1	1	7	323	46.1
	F.	—	5	38	—	5	2	—	44	18	—	1	5	118	4,530	38.4
Mill Hospital	M.	—	—	—	—	—	1	—	—	—	—	—	3	4	200	50.0
	F.	—	3	12	—	4	2	—	23	8	—	1	4	57	1,688	29.6
Other Hospitals	M.	—	—	—	—	7	2	—	—	—	—	—	—	9	345	38.3
	F.	—	—	—	—	17	5	—	—	—	—	—	—	22	755	34.3
<b>Totals</b>	...	<b>19</b>	<b>55</b>	<b>85</b>	<b>1</b>	<b>37</b>	<b>16</b>	<b>1</b>	<b>139</b>	<b>30</b>	<b>42</b>	<b>17</b>	<b>16</b>	<b>458</b>	<b>14,197</b>	<b>31.0</b>

The following table shows the amount of arsenical treatment given to cases of early syphilis that have been dismissed as cured or who have defaulted during the year:—

Less than One Course of "914" ... ..	107
One Course ... ..	110
Two Courses ... ..	66
Three Courses ... ..	6
Four or more Courses ... ..	9
Total ... ..	<u>298</u>

*Incidence of Jaundice during Treatment.*—Observations were continued during the year on the incidence of jaundice in new cases under treatment at Black Street Centre. There was a marked rise in the incidence of jaundice of all degrees among new cases of early and late syphilis. Of 366 cases of early syphilis 17·2 per cent. developed jaundice, while out of 49 cases of late syphilis 10·2 per cent. developed this complication.

*Issue of Salvarsan Substitutes to Medical Practitioners.*—Twenty-three medical practitioners received free supplies of salvarsan substitutes for the treatment of private patients. The total number of doses issued was 827, compared with 1,033 in 1940 and 914 in 1939.

*Report of the Nurse Almoner.*—During the year the Nurse Almoner visited 358 female patients on 466 occasions, and persuaded 51·4 per cent. of the patients to resume treatment. Eleven of the patients were found to have been evacuated, 18 had gone away, and 46 had given a wrong name and address.

*Follow-up Letters.*—542 follow-up letters were sent to 306 male patients who had defaulted during treatment; 68·3 per cent. of the patients resumed treatment, but 50 per cent. of the original number finally defaulted. The percentage of patients giving wrong name and/or address amounted to 6·9 per cent.

## SECTION IV.

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### PORT HEALTH AUTHORITY.

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By an order given under the Seal of the Secretary of State for Scotland on 14th March, 1941, the Port Health Authority of Glasgow's jurisdiction was extended to include "The Estuary of the River Clyde between the Western boundary of the Port of Glasgow, as defined in the Treasury Warrant dated 19th April, 1859, and an imaginary line drawn across the said Estuary from the Cloch Lighthouse to Dunoon Pier, including the Holy Loch, Loch Goil, Loch Long, and the Gareloch, but excluding the harbours and docks within the jurisdiction of the Local Authority of the Burgh of Greenock, under the Public Health (Scotland) Act, 1897."

This extension of the Port of Glasgow by the Secretary of State for Scotland has been rendered necessary by the formation of the new Clyde Anchorages Emergency Port.

During the year there were 1,457 arrivals from foreign ports, and 151 from the Irish Free State, a total of 1,608 ships. Of the vessels from foreign ports 330 came from or called at infected ports, 227 direct, and 103 via a home port, the remaining 1,127 being from non-infected ports. The tonnage of the 1,457 ships from foreign ports was 5,708,387, as compared with 4,847,063 tons for the 1,533 ships arriving during the previous year. The number of vessels and their crews arriving from foreign ports is given in the following table:—

Nationality.	Number of Vessels.		Number of Crew.	
	1941.	1940.	1941.	1940.
British ... ..	1,077	1,058	85,601	66,658
Norwegian ... ..	167	150	6,444	3,687
Danish ... ..	1	41	16	833
Dutch ... ..	69	35	4,018	839
Finnish ... ..	6	19	153	395
Swedish ... ..	34	54	936	1,295
French ... ..	3	39	132	1,951
Greek ... ..	39	50	1,161	1,601
Esthonian (1), Yugo-Slav (1), Polish (18), Belgian (27), and Panamanian (14) ... ..	61	89	4,657	3,688
<b>Total ... ..</b>	<b>1,457</b>	<b>1,533</b>	<b>103,118</b>	<b>80,945</b>

The above table does not include vessels arriving from the Irish Free State ports, which are also boarded by officers of the Port Health Authority at Greenock and Glasgow. These vessels are dealt with in the same manner as ships from overseas ports with regard to health and cargoes.

The number of ships arriving from foreign and Irish Free State ports during the year 1941 is given in the following summary, together with the corresponding numbers for the previous years.

	1941.			1940.		
	Ships.	Crews.	Passen- gers.	Ships.	Crews.	Passen- gers.
<i>From Infected Ports—</i>						
Class A (Direct) ...	227	21,654	20,294	199	12,508	934
Class B (Coastwise) ...	103	6,920	21	187	12,577	11
<i>From Non-Infected Ports—</i>						
(Direct and Coastwise)	1,127	74,544	80,056	1,147	55,860	20,271
<b>Total from Foreign Ports ...</b>	<b>1,457</b>	<b>103,118</b>	<b>106,371</b>	<b>1,533</b>	<b>80,954</b>	<b>21,216</b>
<b>Eire ... ..</b>	<b>151</b>			<b>366</b>		

It will be observed that the number of ships arriving from infected ports has increased—227 against 199 in the previous year. There was a decrease from 187 to 103 in ships arriving coastwise. With regard to the nationality of ships, British numbered 1,077 in 1941 as against 1,058 in the preceding year.

INFECTIOUS DISEASES.—The total number of infectious and other illnesses found on board ships arriving at Glasgow was 315, which is 12 more than in 1940. Malaria and venereal disease show sharp increases from 44 to 71 and from 61 to 113 respectively. Cases of measles have fallen from 55 to 12. Scabies has risen—23 compared with 11.

Disease.	Removed to Hospital.	Sent Home.	Referred to Clinic.	Left on Ship.	Total.
Scarlet Fever ... ..	3	—	—	—	3
Diphtheria ... ..	31	—	—	—	31
Enteric Fever ... ..	2	—	—	—	2
Measles ... ..	12	—	1	3	16
Erysipelas ... ..	3	—	—	1	4
C.S.F. ... ..	3	—	—	—	3
Dysentery ... ..	1	—	—	—	1
Malaria ... ..	22	—	—	49	71
German Measles ... ..	2	—	—	2	4
Pneumonia ... ..	15	—	—	1	16
Mumps ... ..	10	—	—	—	10
Tuberculosis (Pulmonary)	4	—	2	1	7
Tuberculosis (Other Forms)	—	—	—	1	1
Scabies ... ..	1	5	—	17	23
Venereal Disease ... ..	3	—	11	99	113
Chickenpox ... ..	3	—	—	—	3
Leprosy ... ..	2	—	—	—	2
Other Illnesses ... ..	5	—	—	—	5
<b>Total ... ..</b>	<b>122</b>	<b>5</b>	<b>14</b>	<b>174</b>	<b>315</b>

MEDICAL ATTENTION AT THE CLYDE ANCHORAGES.—This is a scheme which provides medical attention for merchant seamen on board ships lying in the anchorages. To meet the requirements of this scheme an ambulance launch has been built, at a cost of some £4,700. This vessel, which was launched in June and came into commission in July, has removed 534 cases. Since the inauguration of the scheme 1,181 patients have received attention, the majority of these suffering from non-infectious disease.



Disease.	Removed		Referred		Total.
	to Hospital.	Sent Home.	to Clinic.	Left on Ship.	
Scarlet Fever ... ..	1	—	—	—	1
Diphtheria ... ..	4	—	—	—	4
Enteric Fever ... ..	2	—	—	—	2
Measles ... ..	1	—	—	—	1
Erysipelas ... ..	1	—	—	—	1
C.S.F. ... ..	4	—	—	—	4
Dysentery ... ..	1	—	—	—	1
Malaria ... ..	11	49	—	6	66
German Measles ... ..	1	—	—	—	1
Pneumonia ... ..	14	—	—	1	15
Mumps ... ..	12	—	—	—	12
Rheumatic Fever ... ..	1	—	—	—	1
Tuberculosis (Pulmonary)	17	1	2	2	22
Tuberculosis (Other Forms)	1	—	—	—	1
Scabies ... ..	23	2	1	50	76
Venereal Disease ... ..	25	2	27	25	79
Accidents ... ..	118	5	2	76	201
Other Illnesses ... ..	287	28	1	345	661
Influenza ... ..	5	—	—	2	7
Food Poisoning ... ..	1	—	—	24	25
Total ... ..	530	87	33	531	1,181

VENEREAL DISEASE.—The number of merchant seamen attending the clinics in the City showed a sharp increase with 1,399 cases compared with 265 in the year 1938. The disease and numbers were as follows :—Gonorrhoea, 611 ; syphilis, 523 ; chancroid, 32 ; non-specific, 124 ; non-venereal, 109 ; total, 13,99.

ALIENS ORDER, 1919.—The medical inspection of all aliens arriving at the Port was carried out as formerly, and during the year 228 ships and 5 aeroplanes, with a total of 4,264 aliens aboard, arrived at the Port.

PARROTS (PROHIBITION OF IMPORT) REGULATIONS (SCOTLAND), 1930.—During the year 16 ships arrived with 27 birds—19 parrots and 8 love-birds—which were dealt with under the Regulations. The birds were all re-exported.

RAT DESTRUCTION.—During the year 129 Deratisation Certificates and 326 Deratisation Exemption Certificates were issued. Of the ships deratised during the year 17 were done by SO<sub>2</sub>, 106 by HCN, and 6 by

trapping. Of the Exemption Certificates, 34 were issued to new vessels sailing on their maiden voyage. The following table shows the number and classification of the certificates granted :—

	Deratisation			Exemption.	Total.
	SO <sub>2</sub>	HCN.	Trapping.		
From Infected Ports ...	11	55	2	112	180
From Non-Infected Ports	6	51	4	214	275
	17	106	6	326	455

The total number of rats caught on ships was 5,860 ; while 799 more were caught in sheds, stores, and other premises adjacent to the harbour. Of the 5,680 caught on board ships 406 were trapped, 4,671 were found dead after fumigation with HCN, and 783 after SO<sub>2</sub>. Of the total 6,659, 426 were submitted to the Bacteriologist for examination for plague infection, with negative results.

**INSPECTION OF CREWS' QUARTERS.**—In the vessels being built at present more attention is being given to the crews' quarters, particularly with regard to the situation, fittings, provision of mess-rooms, drying rooms, running hot and cold water to wash basins in wash-places, etc., suitable W.C. basins and shower sprays with temperature regulator. Vermin in the quarters are still as bad as ever, bugs and cockroaches being the most common. Fumigation or spraying with a suitable insecticide is employed when this condition is discovered, with more or less satisfactory results. Most of the insecticides on the market are good, and are generally capable of the powers claimed for them. It is in the application that they fail, and it is not the fault of the insecticide but, partly, the method of application and, mostly, the person applying it.

The complete eradication of the bug from ships is a difficult problem which is closely related to bugs in seamen's homes, lodging-houses, and houses. While there are bugs in their homes or lodgings there will be bugs in their quarters, and vice-versa, and the only solution to the problem is continual warfare both in their homes and in their quarters on board ship, aided by disinfestation measures by fumigation and the use of insecticides.

**INSPECTION OF SHIPS.**—In the year under review the number of inspections and re-inspections of vessels in the Port was 2,475. The visits to overseas steamers numbered 1,457, and the re-visits 451, while

513 coasting steamers were examined, 54 of which were re-visited. Nine hundred and two verbal warnings were given to masters where nuisances of a minor nature were found, and 82 intimations (under the Public Health Act) were served where defects existed. Two hundred and twenty-nine verbal instructions were given, and 105 notices served on masters of vessels *re* locking up of water closet accommodation while vessels were in port. The nuisances discovered numbered 2,445—in forecastles, rooms, etc., 699, and water-closets, wash-houses, etc., 628, while structural defects were found in 584 instances—384 within crews' quarters and 200 in water-closet and lavatory compartments. General complaints were recorded in 534 instances.

**RAGS, HAIR, HIDES, AND BONES.**—The following shows the importation of rags, hair, hides and bones:—75 ships carrying 70 bundles of rags, 3,078 bundles of hair, 296,596 bundles of hides, and 4,290 bags of bones.

**ANTHRAX.**—Twenty samples of imported hides were examined by the Bacteriologist for the presence of anthrax bacillus following suspected cases of anthrax in live animals from the Irish Free State, and imported hides from Argentine. One male patient who resided outside the City and who had been handling cases of corned beef on which animal hides had been stowed during the voyage was admitted to hospital suffering from anthrax.

**FOOD INSPECTION.**—The total quantity of foodstuffs arriving from overseas amounted to 1,269,124 tons—this being approximately 500,000 tons more than has been imported in any one of the past ten years. This figure does not include imported frozen meat.

**PUBLIC HEALTH (IMPORTED FOOD) REGULATIONS, 1937; PUBLIC HEALTH (PRESERVATIVES, ETC., IN FOOD) REGULATIONS, 1925-1941.**—During the year 301 samples of imported foodstuffs were submitted to the City Analyst, who reported 263 satisfactory and 38 unsatisfactory. In addition to the above, four samples were examined by the City Bacteriologist and reported fit for human consumption. Approximately 90,553 cwts. of foodstuffs were condemned as unfit and destroyed or disposed of for purposes other than human consumption.

The articles and the respective weights destroyed are as follows :—

Articles.	Weight.		Articles.	Weight.	
	Cwts.	Qrs.		Cwts.	Qrs.
Butter ... ..	2,469	1	Nuts ... ..	100	—
Cheese ... ..	20	—	Oranges ... ..	1,336	—
Eggs ... ..	10	—	Oranges (bitter) ... ..	60	—
Fruits (dried) ... ..	1,021	—	Oats ... ..	48,007	—
Flour ... ..	871	—	Prunes ... ..	1,283	—
Fish and Fowl ... ..	30	2	Rice ... ..	5	—
Lard ... ..	35	—	Tea ... ..	185	2
Marmalade ... ..	132	—	Tomatoes (canned) ... ..	15	—
Milk (canned) ... ..	87	2	Wheat ... ..	34,765	—
Meats ... ..	119	3			

FOREIGN MEAT REGULATIONS.—The Veterinary Surgeon has reported on the quantities of meat examined under these Regulations and states that the following were condemned ;—

Beef (bags) ... ..	2,894	Ox Liver (bags) ... ..	10
Beef (quarters) ... ..	2,878	Ox Liver (lbs.) ... ..	50
Beef (cwts.) ... ..	521	Ox Kidneys (bags) ... ..	2
Beef (lbs.) ... ..	20,140	Ox Tongue (lbs.) ... ..	1
Beef Sundries (bags) ... ..	2,784½	Lamb Hearts (lbs.) ... ..	7
Mutton and Lamb (c'cases) ... ..	37½	Pig Hearts (bags) ... ..	1
Mutton and Lamb (cwts.) ... ..	23	Pig Kidneys (cases) ... ..	1
Mutton and Lamb (bags) ... ..	12½	Pig Livers (boxes) ... ..	4
Mutton and Lamb (lbs.) ... ..	3,855	Bacon (lbs.) ... ..	70
Pork (lbs.) ... ..	233	Rabbits (crates) ... ..	208

## SECTION V.

### HOUSING.

The housing activities of the Corporation were further reduced during 1941, when only 791 houses were completed compared with 980 in 1940, 2,227 in 1939, and 2,936 in 1938.

The number of houses represented to the Housing Committee as uninhabitable was reduced to 52 in 1941, all the properties having been previously regarded by the Master of Works as dangerous buildings. Owing to the cancellation of new buildings it is unlikely that any action can be taken against unsatisfactory houses until the termination of hostilities.

Statistics of decrowding in relation to houses vacated by families removing to new houses are shown in a table which follows. Out of 11,976 houses inspected subsequent to the transfer of the occupants to Corporation houses since the passing of the Housing (Scotland) Act, 1935, 18·8 per cent. were found to be again overcrowded, compared with 18·2 per cent. in 1940 and 18·1 per cent. in 1939.

With regard to the rehousing of tuberculous families, 236 recommendations were made to the City Improvements Department during 1941, of which 30 families have since been rehoused. In addition 30 families recommended in previous years were rehoused in 1941. This compares with a total of 52 families rehoused in 1940.

Applications by tenants for certificates under the Rent and Mortgage Interest Restrictions Acts, 1920-1923, during the year 1941 amounted to eight, four of which were granted and four refused. There were no applications by house factors for reports.

The following tables summarise the more important aspects of public health operations under the Housing Acts:—

## DECROWDING OPERATIONS.

CONDITION OF VACATED HOUSES SINCE THE COMING INTO FORCE OF  
THE HOUSING (SCOTLAND) ACT, 1935.

Size of House.	No. of Houses inspected.	Over-crowding removed.	Over-crowding reduced.	Over-crowding unchanged.	Over-crowding increased.
1 Apartment ... ..	2,585	1,952	561	43	29
2 Apartments ... ..	7,367	5,978	970	179	240
3 Apartments ... ..	1,847	1,640	120	29	58
4 Apartments and up ...	177	155	17	—	5
Total ... ..	11,976	9,725	1,668	251	332
		81·2%	13·9%	2·1%	2·8%

## HOUSING ACTS.

## NUMBER OF HOUSES REPRESENTED SINCE 1923 AND ACTION TAKEN.

Year.	Number of Houses represented.			Number of these Houses actually closed in each Year.		
	Under Slum Clearance Schemes	Under Closing and Demolition Orders	Together.	Slum Clearance Schemes.	Closing and Demolition Orders.	Together.
1917-1937 ... ..	8,635	8,278	16,913	8,545	7,605	16,150
1938 ... ..	—	467	467	89	914	1,003
1939 ... ..	36	275	311	2	347	349
1940 ... ..	—	157	157	—	213	213
1941 ... ..	—	52	52	—	74	74
Totals ... ..	8,671	9,229	17,900	8,636	9,153	17,789

## HOUSES DEALT WITH UNDER CLOSING AND DEMOLITION ORDERS.

Year.	NUMBER OF HOUSES.						
	No. of Houses represented.	Closed.	Demolished.	Converted to Business Premises.	Rendered Fit and Occupied.	Still Occupied	
1924-1930—							
(Under 1925 Act) ... ..	448	75	366	7	—	—	
1930—							
(Under 1930 Act) ... ..	127	34	85	—	8	—	
1931-1935 ... ..	6,073	1,731	4,217	43	43	39	
1936 ... ..	402	229	162	10	1	—	
1937 ... ..	1,228	295	911	22	—	—	
1938 ... ..	467	69	396(i)	11	—	—	
1939 ... ..	275	166(ii)	148(iii)	1	—	—	
1940 ... ..	157	80	47	—	—	30	
1941 ... ..	52	39	9	—	—	4	
Totals ... ..	9,229	2,718	6,341	94	52	73	

Includes houses dealt with by city after boundary extension.

(i) = 9. (ii) = 2. (iii) = 38.

## INSPECTION OF REHOUSING SCHEMES.

## (a) Condition as to Cleanliness.

The number of houses in the various rehousing schemes reported on is 14,731.

Number of tenants under supervision at 1st January, 1941 ...	14,643	
Of which evicted or left owing rent during 1941 ...	129	
Of which left voluntarily during 1941 ...	178	307
Of which remaining at 31st December, 1941 ...		14,336
Number of tenants obtaining entry during 1941 ...	363	
Of which evicted or left owing rent during 1941 ...	—	—
Of which left voluntarily during 1941 ...	4	4
Of which remaining at 31st December, 1941 ...		359
Total number of tenants remaining as at 31st December, 1941 ...		<u>14,695</u>

During 1941 the nurse-inspectors made 41,990 primary visits, the condition of the houses being recorded at the time of the visits as "Clean" 26,111, "Fair" 14,683, "Unsatisfactory" 1,075, and "Dirty" 121. Further visits numbering 2,060 were made to the less satisfactory tenants.

At the beginning of the year 14,643 households were under supervision, and at the end of the year 14,695, an increase of 52. The number of new tenants was 363. There were 311 removals, or 2.1 per cent. of the total occupancies.

The changes in the condition of the 14,336 households under supervision throughout the whole year are as follows:—

Condition at Beginning of Year	Condition at end of Year.			Totals.	Group Percentages.
	Clean.	Fair.	Dirty.		
Clean ... ..	9,160	490	—	9,650	67.3
Fair ... ..	213	4,255	81	4,549	31.7
Dirty ... ..	—	4	133	137	1.0
Totals ... ..	<u>9,373</u>	<u>4,749</u>	<u>214</u>	<u>14,336</u>	<u>100.0</u>
Group Percentages ... ..	65.4	33.1	1.5	100.0	—

A similar table is given for the 359 tenants who obtained entry during the year and who were still resident in the schemes at the close.

Condition at Date of Entry—	Condition at end of Year.			Totals.	Group Percentages.
	Clean.	Fair.	Dirty.		
Clean ... ..	130	30	—	160	44.6
Fair ... ..	16	171	1	188	52.4
Dirty ... ..	3	5	3	11	3.0
Totals ... ..	149	206	4	359	100.0
Group Percentages ... ..	41.5	57.4	1.1	100.0	—

The condition prior to removal of the houses occupied by families which were evicted or left owing rent and by tenants removing voluntarily during the year is compared in the following table:—

Condition at Date of Entry—	Tenants Evicted during 1941.		Tenants Removing Voluntarily during 1941.	
	Group		Group	
	Number.	Percentages	Number.	Percentages.
Clean ... ..	35	27.1	123	69.1
Fair ... ..	80	62.0	52	29.2
Dirty ... ..	14	10.9	3	1.7
Totals ... ..	129	100.0	178	100.0

Of the 14,695 houses occupied at the end of the year, 9,522 were recorded as "Clean," 4,955 as "Fair," and 218 as "Dirty," representing 64.8 per cent., 33.7 per cent., and 1.5 per cent. of the total. The corresponding percentages for occupancies at the end of 1940 were 67 per cent., 31.9 per cent., and 1.1 per cent.

(b) *Bug Infestation.*

The total number of houses in which evidence of the presence of bed bugs was found was 210, or 1.4 per cent., which is the lowest percentage recorded. An analysis of this figure shows that only a "trace" of bed bugs was found in 51 houses, or 0.3 per cent., compared with 0.4 per cent. in 1940. In this group of houses only old hatched eggs or bug casts but no living bugs or eggs were found in the beds or furniture, pictures, or other household belongings. In 65 houses, or 0.4 per cent., compared with 0.5 per cent. in 1940, a "medium" degree of infestation



was found, and by this is meant that living bugs or eggs were found in beds or on furniture, pictures, or other household belongings but not in the structure of the building itself. This condition is readily remedied by the tenants by applying the ordinary methods of household cleansing under the direction of the nurse-inspectors. In 94 houses, or 0·7 per cent., compared with 1·2 per cent. in 1940, a "serious" degree of infestation was found. In these houses living bugs or eggs or both were found in beds, on furniture, or on pictures, and also in the structures of the apartments, such as picture rails, skirting, and door facings. The eradication of bugs in these houses requires the co-operation of the tradesmen from the Maintenance Section of the Housing Department, whose procedure is to remove the infested woodwork from the walls and apply the blow-lamp directly or a contact insecticide. In the great majority of these houses infestation was detected at a fairly early stage by the nurse-inspectors. This is very important, because it reduces to a marked degree the amount of interference with structures which has to be carried out by the tradesmen. In no houses throughout the year was fumigation by a lethal gas adopted.

The table submitted herewith shows the progress made during the past eight years in the prevention of bug infestation, which has fallen from 10·7 per cent. in 1934 to 1·4 per cent. in 1941. It should be noted that the serious infestation has fallen progressively during that period from 7·1 per cent. to 0·7 per cent. throughout the rehousing schemes. This progress is further proof that the preventive system which has been practised in Glasgow during the past decade is thoroughly sound, as it depends for its success upon the cleanliness of tenants and the supervision by them of the nurse-inspectors, who are specially trained in the work of prevention of infestation by the bed bug.

#### PROGRESS OF BUG INFESTATION PREVENTION IN REHOUSING SCHEMES.

Year.	Number of Houses Inspected.	Number of Houses in which Bed Bugs were found.				Percentage of Total Number of Houses			
		Trace.	M.I.	S.I.	Total.	Trace.	M.I.	S.I.	Total
1934	8,670	104	210	612	926	1·2	2·4	7·1	10·7
1935	10,576	218	368	378	964	2·1	3·5	3·6	9·2
1936	12,803	220	296	295	811	1·7	2·3	2·3	6·3
1937	13,676	253	165	304	722	1·8	1·2	2·2	5·2
1938	14,416	138	69	240	447	0·9	0·5	1·7	3·1
1939	14,609	79	62	168	309	0·5	0·4	1·2	2·1
1940	14,669	55	75	185	315	0·4	0·5	1·2	2·1
1941	14,731	51	65	94	210	0·3	0·4	0·7	1·4

Trace—Trace of Bugs.

M.I.—Medium Infestation.

S.I.—Serious Infestation.

## SECTION VI.

## BACTERIOLOGICAL LABORATORY.

The specimens submitted and reported upon in 1941 numbered 44,311, the figure for the previous year being 46,050. The sources of the specimens were Public Health Department (29,140), Medical Practitioners (15,057), and other Local Authorities (114). The category "Medical Practitioners" comprises private practitioners (the majority) and certain institutions in the City other than those of the Corporation.

DIPHTHERIA.—During the year 11,439 swabs were examined for the presence of the diphtheria bacillus, and were derived from patients, from contacts, and from children as a preliminary to admission to the Corporation Country Homes; 18.3 per cent. of the suspected cases and 4.7 per cent. of the contacts were found positive.

BIOLOGICAL AND CULTURAL TESTS.—During the year 131 diphtheria-like cultures were examined; 94 of these proved to be *B.diphtheriae* culturally and 23 were biologically virulent. Thirty nasal, 25 throat, and 1 ear cultures were reported positive and considered virulent on clinical grounds; 15 were non-virulent diphtheria cultures; while 37 were proved by cultural means to be corynebacteria other than *B.diphtheriae*.

TYPES OF DIPHTHERIA BACILLUS.—The rise in the frequency of occurrence of *B.diphtheriae gravis* was maintained. Of 1,491 strains of *B.diphtheriae* examined during the year 60 per cent. were of the *gravis* type, compared with 57.6 per cent. last year. The monthly incidence varied from 54.8 per cent. in October to 64.6 per cent. in April. The relative percentages of *B.diphtheriae intermedius* and *B.diphtheriae mitis* were both a little lower than last year, and anomalous strains were very few.

ENTERICA GROUP.—*Examination of Blood.*—Agglutination tests for the diagnosis of typhoid and paratyphoid fever were done with 110 specimens of blood from 108 persons, and of these only 19 gave a positive result.

*Examination of Secretions.*—The total number of specimens examined from cases, convalescents, contacts, and carriers was 1,723 (faeces 882, urine 841). The positive results in the total number of specimens were 35 for *B.typhosus* and 263 *B.para.B.*

DYSENTERY AND FOOD POISONING.—*Dysentery*.—From 57 persons the Flexner type of dysentery bacillus was isolated, and the Sonne type from 54 persons; 1,104 specimens in all were examined, including contacts and repeats for clearance. No carrier was discovered.

*Food Poisoning*.—With reference to cases of illness, 15 specimens were submitted from 13 persons, and in 3 of these food-poisoning organisms of the *Salmonella* group were found to be present.

GLANDULAR FEVER.—During 1941 for the first time certain hospitals have resorted to the Paul-Bunnell test in connection with the diagnosis of this disease; 36 specimens from 31 patients were tested in the laboratory.

ANTHRAX.—Twenty-five samples of materials, including horse and hog hair, ox hides, calf skins, and goat skins were examined biologically for the presence of the Anthrax bacillus. All proved negative.

TUBERCULOSIS.—*Human*.—Specimens of sputum in suspected cases of pulmonary tuberculosis were examined as to the presence of the tubercle bacillus for medical practitioners and for the medical officers in charge of the tuberculosis dispensaries in the City. Medical practitioners submitted 1,997 specimens, while 2,163 were reported upon to the Health Department. Other suspected materials such as urine, cerebro-spinal, and pleural fluids, pus from gland abscesses, were reported upon, largely by means of biological tests.

VENEREAL DISEASES.—The number of tests performed in 1941 in connection with venereal diseases was 21,496. This total includes 8,763 specimens of blood and 127 cerebro-spinal fluids subjected to the Wassermann Test, 9,801 specimens of blood to the Kahn Precipitation Test, and 1,862 specimens of blood subjected to both Wassermann and Kahn Tests. The total also includes 818 specimens of exudate for the presence of *Gonococcus*, 86 specimens of blood for the *Gonococcus* Complement Fixation Test, and 9 smears for *Treponema pallidum*. The Colloidal Gold Test was done on 30 specimens of cerebro-spinal fluid. The sources of the specimens for the Wassermann Test were as follows:—

Public Health Department	...	...	6,566
Medical Practitioners of the City	...	...	922
Outside Local Authorities	...	...	1
Local Hospitals and Institutions	...	...	1,401
			<hr/>
			8,890

OPHTHALMIA NEONATORUM.—Specimens of exudate from the eyes of 738 suspected cases of ophthalmia neonatorum were examined for the Child Welfare Centres, etc. Since repeated examinations are occasionally made to test the result of treatments, the number stated does not correspond to the actual number of cases. In 43 specimens only was the *Gonococcus* found.

STREPTOCOCCAL INFECTIONS.—Search for these organisms was confined for the most part to isolated sources, such as scarlet fever contacts, nurses commencing training in maternity work, cases of mastoiditis, otitis media, suspected puerperal fever, etc.; 67 examinations were made, with one positive result—a puerperal case. The sources of specimens were as follows:—

	Health Department.	Medical Practitioners.	Ear, Nose and Throat Hospital.	Outside Authorities.
Scarlet Fever, etc.	13	4	9	—
Puerperal Fever ...	3	38	—	—
	—	—	—	—
	16	42	9	—
	—	—	—	—

PLAGUE.—During the year 379 rats—159 males, 220 females—were examined for evidence of plague, with negative results. The species of rats examined were:—*Mus decumanus*, 106; *Mus rattus*, 129; *Mus alexandrinus*, 144.

MILK SUPPLY.—The number of samples tested biologically for tubercle bacilli was 645. The city milk supply yielded 6·2 per cent. tuberculous out of 401 undesignated samples, and 4·0 per cent. tuberculous out of 18 designated samples. All the samples—151—of the milk supplies of the hospitals were found to be free from tubercle bacilli, as also were all samples of pasteurised milk supplied to schools—36. From other Local Authorities 38 samples included 2 which were tuberculous (5·2 per cent.).

The milk supplies of the city, as well as those supplied to schools—561 samples in all—were similar in bacterial content to those of the previous year. The results found with the hospital supplies (188 samples) and with graded milks (378) examined for the Health Department were not quite so favourable as those reported for the year 1940, 8 per cent. more in 1941 failing to conform to the required standard.

**CITY WATER SUPPLY.**—333 samples from the reservoirs and other sources were examined during the year, and reported upon to the Health and Water Departments.

**PUBLIC BATHS WATER.**—97 samples from 8 swimming ponds were examined and reported to the Baths Department, thus providing information upon the effects of filtration and chemical treatment.

**BIOLOGICAL LABORATORY.**—695 biological tests were carried out during the year. These concerned determination of virulence of organisms, fixing diagnosis in certain possible tuberculous infections, including milk supplies, etc.

## SECTION VII.

## FOOD.

*Food Poisoning.*—Despite the hazards of war and their effect on the transport and storage of food, there has been no noticeable increase in the number of cases of food poisoning reported to the department during the past year.

In all the cases reported the symptoms suggested food poisoning but in two alone was a salmonella organism discovered and only one of these was of the food poisoning type. In this instance a man who had eaten some American ham at a canteen became acutely ill with symptoms suggestive of food poisoning. Further samples of the ham were not available. No other cases of illness were reported from this source.

The suspected articles of diet were various, *e.g.*, pork pie, tinned pie, American ham, potted meat, cooked brisket, and tinned salmon. In no instance, however, was verification obtained, as bacteriological and chemical examinations were all negative.

Much of the illness attributed to food may be in no small degree, however, the result of faulty domestic arrangements for storing food. This is suggested by one instance in which illness followed a meal which included soup and custard. The latter article of diet was suspected as the cause but on examination proved to be quite sound. On further enquiry it was learned, however, that the soup had been prepared from meat which had been kept in the house for a few days prior to making the soup. It had been stored under a leaking sink.

One case of illness admitted to hospital as enteric fever was later found to be one of food poisoning when a salmonella organism of the food poisoning group was discovered in the patient's faeces. Cause of the infection was not determined as it was not possible to obtain any accurate information about the onset of the illness.

A rather unusual case was that of a ship's crew which was attacked by illness suggestive of poisoning. Not only the crew in succession but two guests who had a meal aboard and a new captain, who arrived prior to the ship leaving dock, were involved. There was some suspicion of

deliberate poisoning but thorough investigation of all food and water etc., aboard ship failed to produce any evidence of this. Examination of fæces also proved negative for any food poisoning or other harmful organism.

*Aerated Waters.*—There were no complaints of illness associated with this.

### SUMMARY OF OPERATIONS UNDER THE FOOD AND DRUGS (ADULTERATION) ACT, THE MILK AND DAIRIES ACTS, AND ALLIED ACTS AND ORDERS.

THE FOOD AND DRUGS (ADULTERATION) ACT, 1928.—During the year there were 194 different articles of food and drugs examined. Altogether 1,295 formal and 2,860 informal—totalling 4,155—samples were submitted for analysis; 58 (4·48 per cent.) of the formal and 99 (3·46 per cent.) of the informal samples were reported as being adulterated. Prosecutions were instituted in 44 instances, and 33 convictions were obtained. Five charges were found not proven, three warranty defences were sustained, one case was dismissed, and two were deserted simpliciter. Among the number of cases dealt with, five were second offences and one a fifth offence. The fines imposed totalled £94 15s. There were no infringements in connection with the sale of margarine.

#### ABSTRACT OF TOTAL SAMPLES EXAMINED DURING 1941.

Article.	Informal.		Statutory.		Percentage adulterated.		Percentage of Samples taken in each Group to Total.	
	Taken.	Non-Gen.	Taken.	Non-Gen.	Infor. %	Stat. %	Infor. %	Stat. %
Milk and Cream ... ..	1,834	81	799	40	4·42	5·01	64·13	61·70
Milk Products (Butter, Cheese, etc.) ... ..	29	4	31	1	13·79	3·23	1·01	2·39
Meats and Meat Food Products ... ..	114	1	84	10	0·88	11·90	3·99	6·49
Cereals, etc. ... ..	222	—	101	—	—	—	7·76	7·80
Spirituos Liquors ... ..	9	—	—	—	—	—	0·31	—
Drugs ... ..	223	12	65	4	5·38	6·15	7·80	5·02
Flavourings and Condiments ... ..	133	—	50	—	—	—	4·65	3·86
Miscellaneous Foods, etc.	296	1	165	3	0·34	1·82	10·35	12·74
	2,860	99	1,295	58	3·46	4·48	100·00	100·00

ABSTRACT OF INFORMAL AND STATUTORY SAMPLES OF SWEET MILK  
EXAMINED DURING 1941.

Informal.				1941. Month.	Statutory.			
No. exam- ined.	No. pre- sumed Non- Gen.	Average per- centage Composition.			No. exam- ined.	No. pre- sumed Non- Gen.	Average per- centage Composition.	
		Fat.	Non- Fat.				Fat.	Non- Fat.
		%	%				%	%
166	4	3.66	8.79	January	74	4	3.57	8.71
149	10	3.63	8.66	February	76	3	3.66	8.70
151	7	3.68	8.67	March	72	3	3.66	8.65
157	7	3.69	8.62	April	74	1	3.67	8.65
146	13	3.68	8.61	May	64	6	3.55	8.46
167	8	3.54	8.79	June	63	4	3.50	8.79
140	3	3.65	8.73	July	56	1	3.61	8.75
147	2	3.82	8.74	August	49	—	3.71	8.75
145	13	3.87	8.65	September	69	5	3.80	8.68
152	—	4.07	8.74	October	68	—	3.94	8.76
139	6	4.01	8.64	November	69	8	3.89	8.67
165	8	3.91	8.65	December	65	5	3.81	8.64
1,824	—	3.77	8.69	Totals	799	—	3.70	8.68
		<u>4.44%</u>				<u>5.04%</u>		

THE PUBLIC HEALTH (PRESERVATIVES, ETC., IN FOOD) REGULATIONS.—No prohibited preservative or colouring matter was found in samples examined during the year. The use of borax to an amount not exceeding 0.25 per cent. is at present, owing to the national emergency, being permitted in margarine. It is a condition of the licence issued to manufacturers that this amount should not be exceeded; also, meantime, cooked pickled meat, bacon, and ham may contain added sodium or potassium nitrite not exceeding 200 parts per million in the case of pickled meat. For contraventions of the regulations seven cases were dealt with, compared with 23 last year.

MILK (SPECIAL DESIGNATIONS) ORDERS (SCOTLAND), 1936-1941.—Of 22 samples of Certified and Tuberculin Tested milk examined biologically none was found to contain tubercle bacilli. The different grades of designated milk dealt in by dairymen within the city are shown in the following table, along with the average daily quantities. The number of producers, dealers, and bottling establishments licensed in terms of the Milk (Special Designations) Orders is also included.



<b>Certified—</b>		1941.	1940.	1939.
Producers	... ..	—	—	—
Dealers	... ..	226	236	247
Total Average Daily Sales (Gallons)		331	248	298
<b>Tuberculin Tested—</b>				
Producers	... ..	4	3	3
Bottling Establishments	... ..	6	6	7
Dealers	... ..	398	417	427
Total Average Daily Sales (Gallons)		*1,456	†1,437	‡2,445
<b>Standard—</b>				
Producers	... ..	23	23	21
Bottling Establishments	... ..	—	—	—
Dealers	... ..	—	—	—
Total Average Daily Sales (City Producers only) (Gallons)		1,340	1,447	1,402
<b>Pasteurised—</b>				
Pasteurising Establishments	... ..	7	7	7
Dealers	... ..	315	326	328
Total Average Daily Sales (Gallons)		33,580	26,399	19,145
Includes *		599 gallons Tuberculin Tested (Pasteurised).		
	†	532		
	‡	1,348		

*Note.*—The quantities shown in the table do not include supplies to institutions of milk of Pasteurised standard.

Samples of the foregoing taken during the year numbered 378. All were submitted to the City Bacteriologist and the City Analyst for examination regarding their conformity with the requirements of the Orders. In the following table the results are set out in detail:—

RESULTS OF EXAMINATIONS OF DESIGNATED MILKS.

	CERTIFIED.		TUBERCULIN TESTED (PASTEURISED)		STANDARD.		PASTEURISED.	
	(a) Not more than 30,000 bacteria per ml. 1/10 ml.	(b) No coliforms in 1/100 ml.	(a) Not more than 200,000 bacteria per ml. 1/10 ml.	(b) No coliforms in 1/100 ml.	(a) Not more than 200,000 bacteria per ml. 1/100 ml.	(b) No coliforms in 1/100 ml.	(a) Not more than 30,000 bacteria per ml.	(b) No coliform requirement.
Bacteriological Examination	Number examined ...	61	99	14	118	86		
	Number conforming to count and coliform requirements.	39	77	11	86	62		
	Number exceeding count only.	5	1	—	9	24		
	Number exceeding count and having coliforms present	12	13	2	9	*19		
	Number conforming to count but having coliforms present	5	8	1	14	*23		
	Agar Count { Lowest ...	300	1,000	100	1,000	100		
	{ Highest ...	1,000,000+	1,000,000+	1,000,000+	1,000,000+	1,000,000+		
	Presence of { Coliforms +	44	78	11	98	*44		
	{ Fat Minimum 3% or over.	17	21	3	20	*42		
	{ Fat Minimum 3% or over.	61	98	14	118	86		
Chemical Examination	Minimum 3% Number below 3%.	—	—	—	—	—		
	Average Butter Fat Content	4.00	3.82	3.83	3.86	3.79		

\* As no coliform requirement, only included for reference.

The table shows that 72·75 per cent. of the samples examined were in compliance with the standards required, as compared with 79 per cent. last year. With regard to milk fat, 100 per cent. of the samples were found to be genuine.

EXAMINATION OF ORDINARY MARKET MILK FOR THE PRESENCE OF TUBERCLE.—Samples obtained at city dairies on the arrival of the milk are submitted for biological examination. 301 samples were examined in the city laboratory during the year and 18 were found to be tuberculous. This shows a percentage of 5·98 as against a percentage of 6·30 in the previous year. The following table shows the figures for the year, along with the figures for the two years previous, and shows also the county in which the milk was produced:—

SAMPLES OF PRODUCERS' SUPPLIES EXAMINED FOR THE PRESENCE OF TUBERCLE.

County.	1941		1940		1939	
	No. Examined	No. Tuberculous.	No. Examined.	No. Tuberculous.	No. Examined.	No. Tuberculous.
Argyll ...	—	—	1	—	—	—
Ayr ...	171	11	59	2	156	11
Bute ...	—	—	3	—	—	—
Dunbarton ...	7	—	12	—	13	—
Glasgow ...	5	1	7	2	4	—
Lanark ...	40	1	90	7	74	7
Perth ...	—	—	—	—	2	1
Renfrew ...	67	4	40	4	40	7
Stirling ...	11	1	38	1	21	3
Ireland ...	—	—	4	—	—	—
	<u>301</u>	<u>18</u>	<u>254</u>	<u>16</u>	<u>310</u>	<u>29</u>

BACTERIAL COUNTS OF ORDINARY MARKET MILK SUPPLIED TO THE CITY.—Three hundred and fourteen samples were examined for the number of bacteria present and for coliform bacillus. The results are shown in the following table:—

BACTERIAL COUNTS OF ORDINARY MARKET MILK SUPPLIED TO THE CITY.

Number examined.	Average number of Bacteria per ml.					Coliforms in 1/100 ml. (2 days).	
	Under 100,000	100,000 to 200,000	200,000 to 500,000	500,000 to 1,000,000	Over 1,000,000	—	+
314	215	32	33	3	31	242	72

Viewed from the number of bacteria found, 131 (60.93 per cent.) of the 215 samples with less than 100,000 bacteria per millimetre were of Certified quality, compared with 103 (54.79 per cent.) of the 188 with less than 100,000 in 1940. Two hundred and forty-seven (78.66 per cent.) of the total number of samples taken were equal to Tuberculin Tested quality, compared with 218 (71.24 per cent.) in 1940. Coliforms were absent in 242 (77.1 per cent.), compared with 209 (68.3 per cent.) in 1940. The 314 samples were also submitted for chemical analysis; 38 were found low in non-fatty solids. The average fat and non-fat content of the samples was 3.81 and 8.70 per cent. respectively.

*Raw Milk as Retailed in the City.*—Ninety-three samples of raw milk as retailed were taken from shops and carts in the city. Five of this number (5.38 per cent.) were found positive to tubercle bacilli, compared with five of 108 (4.63 per cent.) last year. Adverse results when received are communicated to the Medical Officers of Health of the districts where the milk was produced, and steps are taken meanwhile to prevent the sale of any infected milk. This raw milk supply keeps decreasing in quantity each year.

The samples were also examined for the number of bacteria and the presence of coliforms. Results are detailed in the following table:—

BACTERIAL COUNTS OF RAW (UNTREATED) MILK  
AS RETAILED IN THE CITY.

Number Examined.	Average Number of Bacteria per ml.						Coliforms in 1/100 ml. (2 days).	
	Under 30,000	30,000 to 100,000	100,000 to 200,000	200,000 to 500,000	500,000 to 1,000,000	Over 1,000,000	—	+
93	37	24	13	11	—	8	68	25

*Milk to School Children.*—One hundred and fifty-four samples were taken of this milk during the year. A table giving a summary of the results follows. Another table shows the average daily quantity supplied computed on a monthly basis, and also shows the number of school days which occurred in each month.

## SCHOOL MILK, 1941.

No. examined.	No. exceeding Count.	Bacteria per millilitre.			No. Tuberculous.	Fat and Non-Fat Solids.		
		Highest.	Lowest	Average.		Highest Sample.	Lowest Sample.	Average of all Samples
154	46	1,000,000+	100	42,061	* None	Fat Solids 4.40	3.20	3.75
						Non-Fat Solids 8.73	8.74	8.65

\* Fifty of the samples were examined biologically.

## AVERAGE DAILY QUANTITIES SUPPLIED.

Month.	Gallons.	School Days.	Month.	Gallons.	School Days.
January	3,244	20	July	1,047	25
February	3,910	20	August	1,026	20
March	3,508	20	September	3,961	20
April	2,709	13	October	4,180	24
May	2,647	24	November	4,330	20
June	3,107	20	December	3,576	23

*Inspection of Food and Food Premises.*—To ensure compliance with the various Acts and Regulations, 11,726 inspections were made by the Food Inspectors of markets, stores, shops, and places where food is dealt with. Three hundred and ninety-one lots of food were reconditioned or passed as suitable for animal food only or destroyed. The total amount equalled 88 tons 15 lbs., and consisted chiefly of vegetables, tinned food, tinned milk, figs, apple pulp, and other miscellaneous articles. Shops, stores, etc., though not so satisfactorily kept as in pre-war years, were, when regard is paid to shortage of staff, found in a commendable condition.

Under the Public Health (Meat) Regulations (Scotland), 1932, ten premises were registered and certificates of approval issued in respect of them. Thirty-nine copies of certificates were issued in connection with vehicles operating from these premises.

*Sale of Horseflesh, etc., Regulations Act, 1889.*—Two cases were dealt with under this Act. Convictions were obtained in each instance. One offender was fined £3; the other was also fined £3, but a further fine of £10 was imposed for fraud. Horseflesh was found on the premises of both offenders, each of whom carried on the business of a retail butcher.

One was supplying horseflesh in considerable quantity to a city restaurant, where two pots of horseflesh prepared for cooking were found. This was seized and destroyed.

*Dairies.*—Dairies on the register at the end of the year numbered 1,616, compared with 1,682 last year. This shows a decrease of 66. This number consists of the following:—59 producers, 18 wholesalers, 55 wholesale and retail dealers, 719 retailers of loose milk, 732 retailers of bottled milk only, and 30 carts from without the district. A qualified certificate of registration is granted where milk is supplied only in properly capped and sealed bottles as received from the wholesaler. This certificate is granted where the shop does not satisfy the terms of the dairy bye-laws. The percentage of these dairies is 45.3 of the total number registered, compared with 44.8 in 1940. During the year 19,789 inspections were made of dairies, and 16 contraventions were dealt with. In 33 instances repairs and alterations were carried out as requested.

*Byres.*—There are 59 producers in the city, having 71 byres; 519 inspections were made of these byres, which were found to be generally well kept. Repairs were carried out in eight instances, and two cases of contravention of the bye-laws corrected. There is provision for 1,816 cows in the byres, and the average number kept is 1,590. Only in one instance are no grazing facilities provided for the herd.

*Exempted Persons.*—There are four byres in the city where persons keep cows for their own use. The number kept averages 7. In addition the Public Health Department have two herds of attested cows within the city, the number approximating 182 animals. This milk is produced for use in Corporation institutions only. All these byres are regularly supervised, and found to be well kept.

*Food and Drugs (Adulteration) Act, 1928, Section 8.—Registration of Butter Factories and Wholesale Dealers in Margarine, etc.*—One margarine factory and 145 wholesale dealers in margarine are on the register. This is a decrease of five wholesale dealers in margarine from last year. Visits were paid to these premises in the course of the year, and no contravention was found. Butter and margarine samples taken were reported upon satisfactorily by the City Analyst. Details of the number on the register at the end of the year are as follows:—

Factories of margarine	...	...	...	...	...	...	1
Wholesale dealers in margarine	...	...	...	...	...	...	145
Factories of or wholesale dealers in milk blended butter	...	...	...	...	...	...	—
Butter factories	...	...	...	...	...	...	20

*Ice Cream Shops.*—The number of persons still remaining on the register of ice cream dealers in the city at the end of the year was 456, which is 22 less than the number for the previous year. It is an offence to use milk in the manufacture of ice cream at present, and the article offered as a substitute is not in popular demand to the same extent as the pre-war preparation. Inspections were carried out at shops which still retained their registration; these inspections numbered 5,566. Four contraventions were remedied, and repairs and alterations were carried out in two instances.

*Cleanliness of Milk Bottles.*—Twenty-seven bottles were procured from dairies for examination as to their cleanliness and sterility. These bottles were washed and ready for filling with milk. Twenty-five were reported upon by the City Bacteriologist to be satisfactorily washed, and nine of the number were sterile. Two bottles had bacterial counts of 72 and 104 organisms per bottle respectively. The U.S. Ordinance and Code fixes a maximum of 600 organisms per pint bottle as a standard of cleanliness. Where cleanliness was found unsatisfactory, dairymen were cautioned. The machines and methods used in washing were the soaker-sprayer and the jet type machines and rotary and hand brushes. The soaker-sprayer and the jet type of bottle washing machine showed the best results, while rotary and hand brushing were poorer.

#### THE FOOD AND DRUGS (ADULTERATION) ACT, 1928.

##### *Details of Samples, etc., in which Proceedings were Instituted during 1941.*

No. of Complaints.	Nature of Sample and Alleged Offence.	No. of Convictions.	Amount of Fines Imposed.
1	<i>Butter</i> —Contained a foreign fat ... ..	1	£2 0 0
1	<i>Brisket Beef</i> —Consisting of other than beef from the brisket of the ox ... ..	1	5 0 0
1	<i>Gelatine</i> —Contained an excess of preservative ... ..	— (a)	—
1	<i>Lard</i> —Contained hydrogenated (artificially hardened) fat ... ..	1	1 5 0
7	<i>Milk</i> —Deficient in milk fat ... ..	7	23 0 0
19	<i>Milk</i> —Deficient in solids other than fat ... ..	12 (b)	37 0 0
1	<i>Milk</i> —Deficient in milk fat and in solids other than fat ... ..	1	3 0 0
1	<i>Milk</i> —Contained extraneous matter ... ..	— (c)	—
1	<i>Roast Pork (Canned)</i> —Contained only a small quantity of meat ... ..	— (a)	—
7	<i>Sausages</i> —Contained an excess of preservative ... ..	7	15 0 0
1	<i>Sugar</i> —Contained extraneous matter ... ..	1	2 0 0
1	<i>Sugar Substitute</i> —Not a genuine sugar substitute ... ..	1	5 0 0
1	<i>Tincture of Iodine</i> —Contained an excess of iodine and potassium iodide ... ..	— (a)	—
1	<i>Zinc Ointment</i> —Deficient in zinc oxide ... ..	1	1 10 0
		33	£94 15 0

(a) Warrant defence sustained.

(b) Dismissed or found "not proven" 5; deserted simpliciter, 2.

(c) Found "not proven."

## SECTION VIII.

### AIR PURIFICATION AND SMOKE ABATEMENT.

It was indicated in the report for 1940 that owing to a general change in the policy throughout the country the procedure adopted in normal smoke abatement work had changed and that as a result of these altered conditions a programme of detailed visitation of a very large number of "industrial" and "non-industrial" premises had been made during the latter half of the year. The purpose of the visits was to direct the attention of management and executives to the altered requirements and to afford technical advice as to how these requirements could be met, having regard to local conditions.

During the early months of 1941 many re-visitations had to be made from time to time on request by individual firms in consequence of the receipt by them of circulars sent by this department on behalf of the Ministry of Home Security. When industry generally became fully aware of what was required, and how to achieve it with the minimum of local nuisance, the necessity for these visits practically ceased. Since that time no regular routine work has been necessary as regards observations of chimneys and inspection of plants. As a result of this no intimations or initial warning notices have been issued.

*Investigation of Complaints.*—The investigation of complaints received and confirmed and abatement of alleged nuisance was under normal conditions an important aspect of practical smoke abatement work and occupied the attention of the inspectors for a considerable part of their time. The public now seem to realise that conditions exist which, although they might have justified a general complaint being made under pre-war conditions, do not do so under the altered circumstances of industry, and in fact few complaints of a general nature have been received. On the other hand, as a result of the action taken by industry on the request of the Government Department concerned it was inevitable that local nuisances in many instances were bound to occur and, as was anticipated, it actually has been so. During 1941 an appreciable number of such complaints were dealt with. As each case had to be judged on its own merits it was found that under ordinary conditions the total abatement, and in some cases even the diminution of such causes of nuisance, were difficult of attainment. This was due



to a variety of causes such as a long-established practice in a particular plant and the difficulty of ensuring co-operation by the management in any changes of method indicated and the impracticability of making structural alterations, particularly in chimneys. Under war-time conditions, as will be readily understood, the position in these respects has been very much aggravated. The overload conditions on both steam boiler and process furnace plants, disorganisation of normal fuel supplies, and the difficulty in obtaining the necessary materials to effect alterations has made the abatement of many of these complaints more difficult. In many instances diminution of the nuisance is all that can be achieved. In each case it is impressed on management and executive that the avoidance of local nuisance must be a primary consideration.

*Improvements to Plant.*—Each year in the pre-war period a list was given of improvements coming under the department's notice during the previous twelve months, including details in major cases. Since the onset of war conditions this has not been done because conditions in industry are continually changing and a plant alteration which would have meant a definite improvement previously is not necessarily so now for various technical reasons. Again, owing to the discontinuance of routine observation and inspection work, many such alterations have not been noted. At some subsequent date, when it is anticipated that such alterations as have been made should definitely result in improvement, the listing and citation of such cases will be resumed.

*Soot and Atmospheric Precipitation Gauges.*—The monthly soot and basic dust fall recordings from the five gauges situated throughout the city continue without interruption, and the following table summarises the results which are usually published in detail:—

DEPOSIT OF EACH ELEMENT OF ATMOSPHERIC POLLUTION  
FOR 1940 AND 1941.

	Ton per Square Mile.	
	1940	1941
Insoluble Matter—		
Tar ... ..	4.29	4.10
Carbonaceous other than Tar ... ..	46.69	49.02
Ash ... ..	108.46	97.32
Total Insoluble Matter ... ..	159.44	150.44
Total Soluble Matter ... ..	92.29	88.09
Total Solids ... ..	251.73	238.53
Rainfall in Millimetres ... ..	839.86	691.08

*Note.*—The average weight in tons per square mile of solid matter deposited per millimetre of rainfall during the period 1935-1939 inclusive was 0.27. The amount noted from the records completed during 1941 is 0.34 tons, or an increase in concentration of solid matter deposited per millimetre rainfall of 25.9 per cent. In a future report this aspect of the recordings will be discussed in some detail.

*Classes in Boiler-House Practice and Fuel Economy.*—Technical education has always been considered by Glasgow as a necessary complement to practical smoke abatement work, and the results of many years' experience has justified its continuance. A winter session of technical instruction was again arranged under the joint auspices of the Scottish Branch of the National Smoke Abatement Society and the Corporation of Glasgow. As was the case during 1939-40 the class was run on a restricted basis and was organised primarily as a result of enquiries from intending students. The Chief Smoke Inspector was the lecturer. The standard of instruction was up to that of the normal advanced class. It is to be noted that in pre-war years two separate classes were run—one known as the ordinary class and the other the advanced class. This year the single class commenced on the 4th of November, 1941, and terminated on the 2nd of February, 1942, the lectures being one evening weekly. The total number of lectures given was 18, each of one-and-a-half hours' duration. The total enrolment was 38, the percentage attendances over the session being 66.8. Twenty-three members—or 72 per cent. of the class—sat the routine examination held on a Saturday immediately after the termination of the session. Of this number sixteen passed on the ordinary standard and gained a Merit Certificate of Competency, while three passed on the advanced standard. The usual three book prizes were allocated competitively to the ordinary classes, and two prizes to the advanced. One member sat the City and Guilds of London Institute examination on "Boiler-House Practice," at which he gained a first class certificate. Additional advanced instruction was given to this candidate before taking this examination. The annual sessional meeting of the branch was held during June, when the certificates and prizes were distributed. In addition to the class prizes, Councillor Munro again gave a technical

book prize to the highest eligible candidate in both classes who is employed in a Corporation department and who was not already a prize-winner.

*Staff Conditions.*—At the commencement of the war the smoke inspectorate consisted of the Senior Inspector and six assistants. Since that date one inspector left the service to take an appointment as engineer-surveyor, one retired from the service on pension, one was seconded to the Civil Defence Casualty Services (mechanical transport), and two others are on service as engineer officers with the Royal Naval Reserve. The Senior Inspector and one assistant carry on the work, which now includes the technical supervision of all departmental fuel supplies, plant inspections, etc., and also assist in Civil Defence service duties (Transport, etc.).

## SECTION IX.

## GENERAL SANITARY ADMINISTRATION.

Once again the annual report on the sanitary operations of the five divisions of the city is presented in a single statement and without the customary tabulated details. This war-time arrangement permits mention of matters of special interest only. The account is, however, sufficient to show that, despite added responsibilities as well as encroachments on personnel, ordinary routine work has not suffered appreciably.

Visits of inspection for the detection and removal of nuisances totalled 511,120, and 56,315 nuisances, of which choked or defective drains, conductors, or soil pipes numbered 26,634, were removed or remedied. As in the previous year, the severe wintry conditions of the opening months resulted in much damage to house pipes and fittings, which called for the special attention of the department.

Complaints of rat infestation have been on the increase, and investigation of these has made extra demands on the time of the staff. In this connection 3,322 visits were made, as compared with 2,018 in the previous year. It is apparent that the utmost vigilance is required of occupiers and owners of premises alike if this persistent menace is to be overcome.

*Offensive Trades.*—The number of offensive trades on the register is 69—the same as last year. The number of visits paid was 809, and 19 contraventions of the bye-laws were dealt with without recourse to legal proceedings.

The condition of the raw material received, particularly by tallow melters and bone boilers, before the war was, generally speaking, mostly fresh, but under war conditions a larger proportion of unsound meat is being dealt with. This may be to some extent accounted for by meat being damaged in the course of shipment and by other transport delays. The trades have responded very well to our request that unsound and offensive material should be treated immediately it is received, and so avoid as much as possible potential nuisances and fly breeding in the autumn.

The rendering of edible fats was in many cases carried on in association with tallow melting, but the Government have now reduced the number of edible fat manufacturers by their scheme of concentrating that business to one or more establishments.

There is a possibility that a similar concentration of bone boilers and tallow melters will take place.

The presence of rats has always been a big problem with those engaged in these trades, and while continual action has been taken to reduce their numbers, and not without some success, it was deemed advisable to urge the persons in charge to make further endeavour to keep down the rat population, and a good response has been given. In many of the businesses there is no sign of rats or burrowing, but unfortunately adjoining factories, which have no attraction other than ample cover for rats to breed, are sources of infestation.

*Dirty Houses.*—In the course of house-to-house visitations 492 houses and/or bedding were found dirty and suitable action was taken in each case to have both houses and bedding cleaned. The number of houses in rehousing schemes found dirty and with dirty bedding was 121 and 111 respectively.

Every assistance is given to old and infirm people who owing to their circumstances cannot afford to purchase whiting, colour, and a whitewash brush to clean the walls and ceilings of their dwellings. In deserving cases these materials are supplied free of charge, and a subsequent visit is paid to see that the materials are properly used and that the whitewash brush is returned.

There are many old people throughout the city who by reason of extreme age or infirmity are quite incapable of keeping their houses clean, and quite a few object to any interference within their homes. In such cases a kindly neighbour or a relative is sometimes persuaded to come to their assistance, and while many are fit subjects for institutional care and treatment they prefer to remain at home.

Court proceedings were taken against a woman who would not respond to the warnings given to have her house cleaned and she was found guilty and fined 2s. 6d. After her conviction we had to arrange with the Cleansing Department to remove from her house many sacks of waste paper and other rubbish, and as she made no attempt to clean

her house the Public Health Department had the walls and ceilings whitewashed. In another police court action a man was fined 30s. for failing to keep his house, bedding, and body clothing in a clean and wholesome condition.

*Verminous Children.*—As the Education Department considered their legal power to deal with verminous children better than that provided by Section 15 of the Glasgow (Police) Order Confirmation Act, 1904, which is the Act under which we operate, they undertook the supervision and inspection of the children in 52 selected schools ; our nurses continue to inspect the children alleged to be verminous and submitted to them by head teachers in 23 schools.

They paid 1,413 visits to schools ; inspected 75,030 children, and found 22,093 infested or infected with vermin, 431 with fleas, and 952 dirty. Written notices to parents for the cleansing of their children numbered 687. The number of children cleaned by parents was 11,266 and by the Local Authority 31. Children re-inspected for the purpose of ascertaining if an improvement had been effected numbered 37,841.

When our nurses find a badly infested child they have the right to visit the home, which is an advantage not evidently shared by the school nurses.

Most of the infestations discovered were in the heads of the children, and the number of homes visited and found dirty from which these children came was fractional in comparison with the number of verminous children, indicating that many of the children came from clean homes although it would appear that the parents were neglectful in attending to the heads of their children.

In view of the increase in numbers of verminous children within recent years, and also of the prevalence of scabies, the Secretary of State for Scotland made an Order—called the Scabies Order (Scotland), 1941—under Regulation 33A of the Defence (General) Regulations, 1939. The Order came into force on the 1st December, 1941, and it gives the Medical Officer of Health power to inspect premises, to examine any person who is or has recently been accommodated in the premises inspected, and to insist on verminous persons submitting themselves for cleansing or treatment. Failure on the part of any person to permit an inspection of his premises or to submit himself for examination and treatment is an offence, in respect of which he is liable on summary

conviction to imprisonment for a term not exceeding three months or to a fine not exceeding £100, or to both such imprisonment and fine.

The new Order extends the power of the Medical Officer of Health to deal compulsorily with all verminous persons irrespective of age. Formerly we could only insist upon school children being cleansed and the cleansing of adults was of a voluntary character.

*Factories Act, 1937.*—During the year a considerable number of new factories were established. The inspections numbered 14,350, and 1,715 contraventions of the Act were successfully dealt with without recourse to legal proceedings. The contraventions consisted of dirty premises, deficiencies of light and ventilation, insufficient or unsuitable sanitary accommodation, sanitary fittings choked or defective, and other nuisances. Where dry closets exist and were in use prior to this Act coming into force, steps are being taken to have them replaced with modern water-closets, and as a result quite a substantial number of dry closets have been removed. With the introduction of female labour into some of the heavy industrial and other factories separate water-closet accommodation has been provided, as well as canteens where the employees can have their meals.

There were 246 mechanical and 120 non-mechanical bakehouses on the register at the end of the year, being a reduction of 8 and 38 respectively. The large decrease in the non-mechanical type of bakehouse, which consisted chiefly of small businesses known as home bakeries, was principally due to staffs, mainly young girls, joining the various war services. A total of 1,631 inspections were paid to bakehouses, and 339 irregularities (of which 178 referred to dirty premises) were promptly attended to.

The homes of 112 registered outworkers were inspected and found clean. Each year in the months of February and August employers are required to send to the Local Authority lists showing all outworkers so employed by them during the preceding six months, and their homes are visited to see that they are clean and that no infectious disease exists. The number of outworkers has been decreasing for some years.

*Sanitary Conveniences.*—A slight decrease falls to be recorded in the number of water-closets used in common, there being now 31,025 compared with 31,237 in the previous year; the numbers serving two, three, four, and five or more families each are 6,105, 17,394, 6,241, and

1,285 respectively. Pan privies total 125, of which 103, 16, 5, and 1 serve one, two, three, and five households respectively. There are 74 houses with common or separate privy middens attached to them, and 274 houses varying in size from one to four apartments still without a sink and water supply inside, but all of these houses are located on the fringe of the city remote from sewerage facilities. Ashpits used in common by two or more tenants number 853. There are 120,361 houses in the city fitted with baths—roughly 42 per cent. of the total.

*Drainage.*—Restriction of building operations has tended to lessen the activities of the department in this connection, but notwithstanding these curtailments the drainage and plumbing fittings of over 800 new houses were tested. A large part of the work of this nature has been occasioned by additions to or alterations of factory premises (priority work), hostels, and service clubs, and in many instances adaptation of premises for temporary war purposes has necessitated departures from the customary procedure in the installation of sanitary fitments. Altogether 853 applications of the smoke test apparatus were made, while in six instances the hydraulic test was applied.

One large contract which was completed during the term was the North-Western Fire Station, which in addition to the usual offices comprises 32 dwelling-houses of three, four, and five apartments for personnel.

In the course of cutting the trench for a drain in connection with one of the tenements in a rural housing scheme a sub-soil drain discharging sewage was discovered, and the contractors, to prevent the newly-excavated track from being flooded, temporarily connected this drain to a branch pipe provided in the new drain. Just prior to the houses being occupied a complaint was made to this department of the condition of the ground in the vicinity of the temporary drain connection, and an examination revealed that the ground, which was of a clayey nature, was definitely impregnated with sewage. The sub-soil drain referred to was then traced and found to be connected to a choked septic tank installation in a farmyard situated outwith the city boundary. The attention of the neighbouring Authority was at once directed to the condition of the drainage at the farm, and after negotiations with the owners of the ground succeeded in having a new drain laid from a sewer in the county area to the affected premises, with the result that the nuisance in and around the new houses being built by the Corporation was quickly abated.



Arising from complaints of nuisance conditions—offensive smells, sewage flooding, etc.—several smoke and colour tests were applied. A noteworthy instance concerned the discharge of sewage on to a site cultivated as plots and thence over the footpath of a public highway. The complaint was of long standing, and the cause difficult to locate. Eventually by means of a series of colour tests the tenement properties immediately adjacent were eliminated and the drains of a terrace of five houses more than fifty yards distant determined as the source. The main drains common to these houses were exposed and found to be intact, and it was only when the individual house drains were uncovered that it was ascertained that these were in two or more instances completely severed, allowing sewage to escape freely into the sub-soil and into a field drain which carried it to the locus of nuisance. The entire system was renewed after considerable negotiations with the owner-occupiers, who were reluctant to accept liability.

*Military Camps and Billets.*—The co-operation of Civil with Navy, Army, and Air Force authorities, established in the early months of the war and referred to in the two preceding Reports, was fully maintained throughout the year. The help of the department was sought in several instances, particularly with regard to the addition of sanitary fittings in requisitioned buildings and the elimination of rats from a large building chiefly used for storing of foodstuffs. Altogether 212 visits were paid to various service establishments and only one complaint was noted, where a billet was found to be inadequately ventilated, but this was speedily remedied. As a further proof of the collaboration referred to above it may be added that the two disinfecting stations dealt with 60,476 articles for the different branches of the Services.

*Cleansing.*—The number of visits paid in connection with the sweeping and washing of closes and common stairs amounted to 55,719, and 12,914 notices were issued giving tenants the dates of washing, etc.

During the course of the year proceedings were instituted in 71 instances following breaches of the bye-laws regulating the cleansing of common stairs, lobbies, passages, etc. Of these, 70 cases were successful, resulting in fines amounting to £25 19s. The unsuccessful case was found not proved, the defence being that no card giving the dates was received and that if such a card had been delivered, as alleged, by putting it through the letter slot in the door it had been destroyed by a dog in the house. A large number of complaints were received regarding the failure of householders whose families had been evacuated

to take regular turns of either washing or sweeping the common stair or passage leading to their homes, but in all cases these difficulties were eventually straightened out to the satisfaction of everyone.

The walls and ceilings of the common passages and staircases in connection with 4,728 properties were cleansed during the period under review either by limewashing or painting. Labour difficulties had a serious retarding effect in the carrying out of this work, with the result that its completion was considerably delayed. An owner was proceeded against for failure to comply with a notice requiring him to cleanse the walls and ceilings of the common passage and staircase of his property, but as the necessary work was completed before the Court met the charge was departed from.

*Rag Flock Acts.*—A sample of rag flock procured for analysis from a firm of rag flock manufacturers was found to contain soluble chlorine in the form of chlorides equivalent to 230 parts of chlorine per 100,000 parts of flock, which amount was 200 parts in excess of the limit prescribed by the Rag Flock Regulations (Scotland), 1912. Legal proceedings were instituted, and when the case was called in the Sheriff Court a plea of "Guilty" was tendered and a fine of £5 was imposed.

*Tents, Vans, etc.*—The continuing restrictions imposed by the war on the migratory habits of travelling showmen have resulted, as last year, in a number of applications being made for an extension of the period in which their vehicles are permitted to remain on their particular location. These applications were in all cases granted by the Corporation. During the year 450 visits of inspection were made to tents, vans, etc., and conditions were found to be generally satisfactory. In only nine cases were irregularities of a minor nature discovered, and these were dealt with.

*Shops Act, 1934.*—The continued and increasing restriction of supplies and the demands of the Services and the munition factories for personnel have continued to have the effect of closing down many of the smaller shops in the city, as was noted in last year's report. During the year 5,326 visits of inspection were made under the Act. As a result 37 shops were found defective in light and ventilation, 6 requiring sanitary conveniences, while 2 were without washing facilities; 79 shops were found to be dirty, and 140 other nuisances of various types were discovered and dealt with.

*Air Raid Shelters.*—The building of shelters is nearing completion and protection has been provided for almost the entire population of the city. In several of the larger type the substitution of water-closets and main water taps for chemical closets and water pails is in progress and, when completed, will improve the sanitary conditions. Sleeping accommodation has been provided in fourteen of the basement shelters, where 1,740 beds have been installed. These shelters are open for twenty-four hours daily, and the majority of them are situated in the centre of the city.

In view of the number of Service men arriving at the railway stations at a late hour and unable to secure sleeping accommodation, the military authority made arrangements for such men to be provided with beds in one of the largest basement shelters open day and night and staffed by paid shelter marshals. They also provided 200 blankets for their use. In order to prevent unauthorised persons gaining access, the Women's Voluntary Service conduct the parties from the railway termini to the shelter. The number accommodated varies from 20 to 80 per night.

Small static water tanks with spigots are being introduced into many of the public surface shelters, but so far no water has been provided. Damage is still being done to many of these shelters, and in several of them the amenities have been withdrawn. All public shelters are inspected regularly, and defects in structure or nuisances discovered are transmitted to the Master of Works and/or the Director of Cleansing.

*Common Lodging-Houses.*—There are 34 houses in the city with accommodation for 7,965 persons. Four of these houses are for females and contain 667 beds, while five are boarding-houses for seamen, with 657 beds. Owing to the urgent demand for accommodation for merchant seamen three additional boarding-houses were opened during the year, one being specially adapted for the accommodation of Indian seamen. Several properties are at present in course of alteration to provide further accommodation. Arrangements have been made with the keepers of these houses for the washing of verminous bedding at the disinfection stations.

Several minor contraventions of the bye-laws were discovered during the year and were remedied without recourse to Court proceedings. Keepers report difficulty in adequately ventilating their premises without infringing the black-out regulations, and also in securing cotton bed-

sheets, which are helpful for the early discovery of verminous conditions of the bedding. A list of the number of spare beds available in the various lodging-houses is sent monthly to the billeting officer of the Welfare Department so that he may, in the event of enemy action necessitating the evacuation of a lodging-house, be in a position to rehouse the displaced lodgers at short notice.

*Houses Let in Lodgings.*—These are defined by the Public Health (Scotland) Act, 1897, as “houses or parts of houses which are let in lodgings or occupied by members of more than one family.” The number at present on the register is 413, but this is no criterion of the number of such houses in the city. There is no obligation upon the tenant to apply for registration, and they are discovered during the routine inspection of the district. Only those houses which, in the opinion of the inspector, require supervision are placed on the register. Special attention is given to houses where the tenant is non-resident, as it is in these places that conditions are found to be least desirable. All the houses are visited monthly and at such other times as are necessary. While most of the contraventions are speedily remedied, in one case the non-resident tenant of two houses which were kept in a dirty condition was prosecuted and fined 10s. for each offence.

*Farmed-Out Houses.*—All the farmed-out houses are situated in the Eastern and Central Divisions of the city. There are 368 such houses, comprising 277 of one apartment, 89 of two apartments, and 2 of three apartments. These houses are visited regularly, and in addition every month an inventory of the plenishing of each house is taken to ensure that they are kept furnished in accordance with the bye-laws. That this periodic checking takes up a lot of the inspectors' time will be appreciated when it is learned that there are 47 different articles specified for each house. On the whole they are well kept, and the majority of the houses will compare favourably with tenanted houses of similar size in the areas.

*Cemeteries.*—Sixty-eight inspections were made of burial grounds, and conditions generally were satisfactory. In one instance it was found necessary to direct attention to breaches of the bye-laws in respect of burials in the “common ground” of a cemetery; that the warning had the desired effect was confirmed by subsequent visits.

## APPENDIX.

TABLE I.—GLASGOW, 1941.—NUMBER OF OCCUPIED AND EMPTY HOUSES IN EACH MUNICIPAL WARD AND NUMBER PER ACRE.

Municipal Wards.	Occupied Houses.		Empty Houses.		Houses per acre 1941
	1941	1940	1941	1940	
1. Shettleston and Tollcross ...	11,701	11,711	6	18	8
2. Parkhead ...	9,854	9,622	7	7	11
3. Dalmarnock ...	8,078	8,074	1	4	28
4. Calton ...	6,102	6,068	25	12	18
5. Mile-End ...	4,721	4,739	12	1	25
6. Whitevale ...	5,088	5,165	8	3	29
7. Dennistoun ...	7,104	7,147	15	19	3
8. Provan ...	11,669	11,636	2	19	4
9. Cowlairs... ..	6,235	6,232	1	5	1
10. Springburn ...	6,206	6,117	5	7	1
11. Townhead ...	6,065	6,029	20	7	35
12. Exchange ...	3,234	3,206	21	16	11
13. Blythswood ...	2,274	2,290	38	30	9
14. Anderston ...	5,635	5,669	48	26	13
15. Sandyford ...	4,034	4,030	32	41	27
16. Park ...	5,334	5,430	161	113	20
17. Cowcaddens ...	7,803	7,850	9	9	14
18. Woodside ...	8,329	8,325	41	46	49
19. Ruchill ...	12,225	12,172	1	10	6
20. North Kelvin ...	5,854	5,930	110	63	41
21. Maryhill .....	6,798	6,989	27	7	4
22. Kelvinside ...	7,948	8,133	453	370	7
23. Partick (East) ...	6,477	6,606	111	54	24
24. Partick (West) ...	6,470	6,499	38	15	18
25. Whiteinch ...	8,912	9,010	80	24	7
26. Hutchesontown	9,622	9,630	6	8	25
27. Gorbals ...	9,650	9,777	49	26	34
28. Kingston ...	5,954	6,334	75	61	21
29. Kinning Park ...	8,238	8,427	28	15	22
30. Govan ...	9,018	9,023	11	7	17
31. Fairfield... ..	8,278	8,186	7	3	5
32. Pollokshields ...	12,388	12,060	78	108	3
33. Camphill ...	5,854	5,843	25	35	16
34. Pollokshaws ...	7,551	7,428	10	20	2
35. Govanhill ...	8,458	8,460	1	—	23
36. Langside ...	5,174	5,147	25	33	9
37. Cathcart... ..	9,512	9,482	10	23	3
38. Yoker and Knightswood ...	8,958	9,569	139	14	3
Total ...	282,805	284,045	1,736	1,279	7

TABLE II.—GLASGOW.—LININGS GRANTED BY DEAN OF GUILD COURT  
IN YEARS FROM 1919 TO 1941 IN RESPECT OF HOUSES.

Year ending 31st August.	NUMBER OF APARTMENTS.						TOTAL.
	1.	2.	3.	4.	5.	6.	
1919-20 (Annual Average)	—	6	692	246	107	29	1,080
1921-25 (do)	—	308	638	400	234	51	1,631
1926 ...	—	318	4,649	967	769	93	6,796
1927 ...	—	228	2,889	1,209	802	55	5,183
1928 ...	—	132	4,184	2,238	314	17	6,885
1929 ...	—	570	1,656	1,024	124	82	3,456
1930 ...	—	506	1,958	1,295	230	202	4,191
1931 ...	—	122	2,220	1,900	38	26	4,306
1932 ...	33	529	3,464	1,251	70	4	5,351
1933 ...	—	270	1,845	3,162	337	23	5,637
1934 ...	34	603	1,825	787	80	52	3,381
1935 ...	—	220	2,082	792	128	9	3,231
1936 ...	—	—	1,462	1,320	290	12	3,084
1937 ...	—	2	687	847	301	34	1,871
1938 ...	—	—	2,017	3,068	824	50	5,859
1939 ...	—	—	2,159	3,324	717	2	6,202
1940 ...	—	—	—	—	—	—	—
1941 ...	—	—	—	—	—	—	—

TABLE III.—ABSTRACT OF METEOROLOGICAL OBSERVATIONS TAKEN AT  
SPRINGBURN PUBLIC PARK.

MONTHS.	TEMPERATURE.			RAINFALL.		SUNSHINE. Hours.
	Highest Temp. in Shade.	Lowest Temp. in Shade.	Mean Temp.	No. of Days.	Amount Collected in inches.	
1941.						
January ...	43	12	29.9	12	0.76	13.9
February ...	48	21	35.7	20	3.17	40.4
March ...	55	29	38.2	13	3.46	97.1
April ...	56	30	42.2	19	1.98	95.6
May ...	77	29	48.8	15	3.28	150.0
June ...	80	39	56.7	10	1.23	185.3
July ...	79	46	59.7	18	3.60	130.6
August ...	80	44	56.6	23	5.09	122.2
September ...	75	42	57.5	13	1.72	73.2
October ...	63	28	48.3	16	4.13	91.9
November ...	54	27	40.9	23	3.01	25.7
December ...	52	28	40.9	22	1.91	9.1
1931 ...	73	19	46.5	251	43.06	1,078
1932 ...	83	25	47.3	223	42.98	1,126
1933 ...	87	20	48.4	203	29.17	1,255
1934 ...	86	24	48.5	248	39.98	1,186
1935 ...	80	15	47.2	230	43.44	1,211
1936 ...	80	17	47.2	230	40.85	1,076
1937 ...	80	15	47.0	212	31.66	1,183
1938 ...	76	20	48.1	242	49.76	1,174
1939 ...	88	18	47.6	212	38.41	1,177
1940 ...	85	6	46.5	210	39.52	1,111
1941 ...	80	12	46.3	204	33.34	1,035

TABLE IV.—GLASGOW.—BIRTH RATES AND DEATH RATES PER MILLION AND ILLEGITIMATE BIRTHS FOR THE YEARS 1940 and 1941.

Municipal Wards	Birth Rates		Death Rates		Illegitimate Births % of Total Births	
	1941	1940	1941	1940	1941	1940
1. Shettleston and Tollcross	17,339	19,047	13,851	15,435	4.6	3.4
2. Parkhead ... ..	19,447	21,086	14,538	17,825	4.8	4.4
3. Dalrnarnock ... ..	23,326	26,194	15,904	18,107	5.6	3.3
4. Calton ... ..	21,590	25,906	20,595	20,813	10.5	8.1
5. Mile-End ... ..	21,632	25,292	17,458	18,684	3.9	5.5
6. Whitevale ... ..	21,049	23,084	17,233	17,994	6.0	6.0
7. Dennistoun ... ..	14,762	14,770	15,024	15,589	7.7	4.7
8. Provan ... ..	21,560	20,917	16,103	14,919	5.3	3.8
9. Cowlairst ... ..	19,678	20,781	14,273	13,881	4.6	5.0
10. Springburn ... ..	15,769	18,601	13,429	13,559	5.3	5.8
11. Townhead ... ..	21,572	25,353	17,732	18,897	10.6	8.0
12. Exchange ... ..	19,722	26,355	18,292	23,368	11.8	13.2
13. Blythswood ... ..	16,163	20,797	23,361	22,797	11.9	17.9
14. Anderston ... ..	20,220	23,987	18,197	17,564	7.6	7.7
15. Sandyford ... ..	19,027	18,986	17,638	17,131	8.0	8.8
16. Park ... ..	13,445	13,719	17,226	19,169	14.9	13.1
17. Cowcaddens ... ..	25,064	26,931	17,200	20,295	7.8	7.1
18. Woodside ... ..	21,670	23,198	17,176	18,696	8.4	7.4
19. Ruchill ... ..	18,364	17,772	13,736	14,551	7.1	6.1
20. North Kelvin ... ..	19,187	18,605	13,856	16,929	9.2	3.4
21. Maryhill ... ..	17,706	18,876	13,886	15,138	6.0	3.9
22. Kelvinside ... ..	8,853	8,269	14,633	13,928	9.0	7.1
23. Partick (East) ... ..	15,780	19,417	17,490	17,237	7.3	6.8
24. Partick (West) ... ..	17,436	23,525	12,615	15,769	4.1	2.9
25. Whiteinch ... ..	15,483	15,734	14,561	16,273	3.3	3.1
26. Hutchesontown ... ..	23,230	25,198	14,173	15,157	3.9	3.9
27. Gorbals ... ..	26,486	27,934	20,380	20,144	10.2	9.8
28. Kingston ... ..	20,898	26,389	14,992	17,838	7.3	8.0
29. Kinning Park ... ..	22,423	24,968	15,141	17,369	8.7	5.7
30. Govan ... ..	23,732	24,915	16,185	17,045	5.8	4.7
31. Fairfield ... ..	16,869	16,158	12,965	14,569	4.3	1.1
32. Pollokshields ... ..	13,260	11,937	13,176	14,665	4.0	4.0
33. Camphill ... ..	12,251	12,056	16,377	16,085	6.8	3.2
34. Pollokshaws ... ..	17,485	14,359	13,543	14,655	5.2	4.0
35. Govanhill ... ..	15,592	15,691	13,864	16,378	2.3	3.0
36. Langside ... ..	11,527	11,177	14,631	17,924	3.3	5.2
37. Cathcart ... ..	10,988	10,518	13,355	15,058	2.9	4.6
38. Yoker and Knightswood	13,200	14,137	10,925	10,984	3.3	3.7
Institutions, etc. ... ..	—	—	—	—	26.6	22.0
Harbour ... ..	—	—	—	—	—	—
CITY ... ..	18,536	19,081	15,594	16,840	6.6	5.7

TABLE V.—GLASGOW.—DEATH-RATES *per Million* FROM DIFFERENT CAUSES, FOR THE YEAR 1941, AND CORRESPONDING RATES FOR 1940 AND 1939.

CAUSE OF DEATH.	Annual Death-rate per Million.		
	1941.	1940.	1939.
1. Typhoid and Paratyphoid Fevers ....	2	6	4
2. Cerebro-Spinal Fever .....	80	89	17
3. Scarlet Fever .....	7	10	10
4. Whooping Cough .....	274	19	133
5. Diphtheria .....	148	216	144
6. Erysipelas .....	6	11	12
7. Tuberculosis of Respiratory System	1,105	1,131	861
8. Tubercular Meningitis .....	194	185	136
9. Abdominal Tuberculosis .....	32	19	27
10. Other Tuberculous Diseases .....	98	112	62
11. Syphilitic Disease .....	69	89	*
12. Influenza .....	119	431	182
13. Measles .....	11	93	2
14. Acute Poliomyelitis and Polio- encephalitis .....	1	2	—
15. Acute Infectious Encephalitis .....	28	21	*
16. Cancer—All forms .....	1,736	1,693	1,427
17. Diabetes .....	162	195	140
18. Intra-cranial Vascular Lesions .....	1,191	1,274	*
19. Other Nervous Diseases .....	322	337	*
20. Heart Disease .....	3,654	4,131	3,011
21. Other Diseases of Circulatory System	210	322	*
22. Bronchitis .....	458	680	341
23. Pneumonia .....	961	1,197	768
24. Other Respiratory Diseases .....	134	204	136
25. Ulceration of the Stomach and the Duodenum .....	135	134	*
26. Diarrhoea (under 2 years) .....	341	294	287
27. Appendicitis .....	41	55	57
28. Other Digestive Diseases .....	343	352	*
29. Nephritis .....	279	334	293
30. Puerperal and Post-abortive Sepsis	49	37	*
31. Other Maternal Causes .....	62	63	*
32. Premature Birth .....	496	421	}
33. Congenital Malformations, Birth Injury, Infantile Diseases .....	446	396	
34. Suicide, Road Traffic Accidents and other Violent Causes .....	876	842	*
35. All other Causes .....	1,524	1,445	*
ALL CAUSES .....	15,594	16,840	13,301

\* Comparison not possible owing to alteration made in Rules of International Classification of Causes of Death.



TABLE VI.—GLASGOW, 1941.—DEATHS FROM

CAUSE OF DEATH.	MALES.													Not Stated.
	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	-75	75+	
1. Typhoid & Paratyphoid Fevers	—	—	—	—	—	1	—	—	—	—	1	—	—	—
2. Cerebro-spinal Fever ...	16	3	7	4	—	1	1	1	3	4	4	—	—	—
3. Scarlet Fever ...	—	—	1	2	—	—	—	—	—	—	—	—	—	—
4. Whooping Cough ...	64	33	20	2	—	—	—	—	—	—	—	—	—	—
5. Diphtheria ...	4	10	43	17	2	2	1	—	—	—	—	—	—	—
6. Erysipelas ...	—	—	—	—	—	—	—	—	—	—	—	2	1	—
7. Tuberculosis of Respiratory System ...	3	8	9	6	8	50	53	128	121	117	80	30	2	—
8. Tubercular Meningitis ...	7	10	18	14	13	18	3	7	1	3	—	—	—	—
9. Abdominal Tuberculosis	—	1	1	2	3	3	1	2	3	—	2	—	—	—
10. Other Tuberculous Disease ...	3	2	2	3	10	6	3	7	3	2	8	1	1	—
11. Syphilitic Disease ...	3	—	—	—	—	—	—	—	7	9	24	13	—	—
12. Influenza ...	7	—	2	—	—	1	1	1	8	8	17	11	10	—
13. Measles ...	2	—	3	1	—	—	—	—	—	—	—	—	—	—
14. Acute Poliomyelitis and Polio-encephalitis ...	—	—	—	—	—	—	—	—	1	—	—	—	—	—
15. Acute Infectious Encephalitis...	—	—	—	—	—	1	2	3	6	3	2	2	—	—
16. Cancer—all forms ...	—	—	3	1	1	—	6	18	63	140	247	319	123	—
17. Diabetes ...	—	—	—	—	—	1	—	5	1	5	12	13	10	—
18. Intra-cranial Vascular Lesions	—	1	2	—	—	2	—	6	16	44	117	264	137	—
19. Other Nervous Diseases ...	79	4	8	4	2	3	4	10	13	16	16	13	12	—
20. Heart Disease ...	4	1	1	6	5	4	6	19	85	219	467	699	497	—
21. Other Diseases of Circulatory System ...	—	—	2	—	—	1	—	—	3	4	16	45	49	—
22. Bronchitis ...	48	2	3	1	—	—	1	3	21	38	57	69	43	—
23. Pneumonia ...	213	25	15	8	2	3	4	9	33	63	85	80	41	—
24. Other Respiratory Diseases ...	8	—	2	1	—	1	2	3	6	8	12	25	10	—
25. Ulceration of the Stomach and the Duodenum ...	—	—	—	—	—	1	—	8	28	27	33	21	6	—
26. Diarrhoea (under 2 years) ...	214	8	—	—	—	—	—	—	—	—	—	—	—	—
27. Appendicitis ...	—	—	1	3	1	1	—	3	5	—	3	1	2	—
28. Other Digestive Diseases ...	15	4	7	—	3	3	—	6	10	28	27	43	19	—
29. Nephritis ...	—	—	—	1	1	2	—	10	19	22	25	45	24	—
30. Puerperal and Post-abortive Sepsis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31. Other Maternal Causes ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
32. Premature Birth ...	295	—	—	—	—	—	—	—	—	—	—	—	—	—
33. Congenital Malformations, Birth Injury, Infantile Disease ...	263	3	1	1	1	—	—	—	—	—	—	—	—	—
34. Suicide, Road Traffic Accidents and other Violent Causes ...	16	7	22	34	23	28	15	48	79	94	125	94	47	1
35. All other Causes ...	46	4	10	7	6	16	4	18	39	97	191	229	212	—
<b>ALL CAUSES</b> ...	<b>1310</b>	<b>126</b>	<b>183</b>	<b>118</b>	<b>81</b>	<b>149</b>	<b>107</b>	<b>315</b>	<b>574</b>	<b>951</b>	<b>1571</b>	<b>2019</b>	<b>1246</b>	<b>1</b>

## DIFFERENT CAUSES IN SEXES AND AT SEVERAL AGE-PERIODS.

CAUSE OF DEATH.	FEMALES.													Total Females.	Total Both Sexes.	
	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	-75	75+			
Typhoid & Paratyphoid Fevers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Cerebro-spinal Fever ...	12	5	7	3	2	2	2	1	2	2	2	—	—	40	84	
Scarlet Fever ...	1	1	—	—	1	—	1	—	—	—	—	—	—	4	7	
Whooping Cough ...	69	62	29	7	—	—	—	—	—	—	—	—	—	167	286	
Diphtheria ...	4	2	25	33	5	3	—	2	2	—	—	—	—	76	155	
Erysipelas ...	—	—	—	—	—	—	—	—	—	—	2	—	1	3	6	
Tuberculosis of Respiratory System ...	4	6	7	3	10	117	111	149	69	38	18	5	3	540	1155	
Tubercular Meningitis ...	9	8	24	17	16	21	6	3	4	—	1	—	—	109	203	
Abdominal Tuberculosis ...	—	—	—	—	1	9	1	1	—	1	2	—	—	15	33	
Other Tuberculous Disease ...	2	3	4	2	5	9	7	7	6	2	3	1	—	51	102	
Syphilitic Disease ...	—	—	—	—	—	—	—	—	4	2	6	2	2	16	72	
Influenza ...	6	—	—	1	—	2	—	1	3	6	3	13	23	58	124	
Measles ...	4	1	—	—	—	—	—	—	—	—	—	—	—	5	11	
Acute Poliomyelitis and Poli-encephalitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	
Acute Infectious Encephalitis ...	—	—	—	—	—	—	—	2	2	2	3	1	—	10	29	
Cancer—all forms ...	—	1	2	—	1	1	3	17	60	165	213	269	162	894	1815	
Diabetes ...	—	—	—	—	—	—	1	6	3	11	37	45	19	122	169	
Intra-cranial Vascular Lesions	1	—	—	—	1	—	—	2	15	53	125	223	236	656	1245	
Other Nervous Diseases ...	56	7	6	4	1	1	4	9	13	15	14	15	8	153	337	
Heart Disease ...	2	—	—	1	4	7	13	45	70	151	304	542	667	1806	3819	
Other Diseases of Circulatory System ...	—	—	1	—	—	1	1	—	2	6	20	22	47	100	220	
Bronchitis ...	27	6	2	—	—	1	1	2	3	10	19	42	80	193	479	
Pneumonia ...	174	35	21	2	1	2	6	5	10	17	27	61	63	424	1005	
Other Respiratory Diseases ...	9	—	4	—	—	2	—	3	6	6	2	10	20	62	140	
Ulceration of the Stomach and the Duodenum ...	—	—	—	—	—	—	—	2	5	1	5	2	2	17	141	
Diarrhoea (under 2 years) ...	127	8	—	—	—	—	—	—	—	—	—	—	—	135	357	
Appendicitis ...	1	—	—	2	2	1	1	1	4	4	4	3	—	23	43	
Other Digestive Diseases ...	5	2	12	2	1	—	3	9	16	24	31	53	36	194	359	
Nephritis ...	—	1	—	—	2	4	—	8	15	18	30	41	24	143	292	
Puerperal and Post-abortive Sepsis ...	—	—	—	—	—	—	3	28	20	—	—	—	—	51	51	
Other Maternal Causes ...	—	—	—	—	—	—	8	36	21	—	—	—	—	65	65	
Premature Birth ...	224	—	—	—	—	—	—	—	—	—	—	—	—	224	519	
Congenital Malformations, Birth Injury, Infantile Disease ...	189	4	—	—	—	1	—	1	2	—	—	—	—	197	466	
Suicide, Road Traffic Accidents and other Violent Causes ...	6	9	18	20	8	9	7	16	12	24	31	59	64	283	916	
All other Causes ...	25	1	2	8	9	10	13	30	59	69	103	156	229	714	1593	
<b>ALL CAUSES</b> ...	<b>957</b>	<b>162</b>	<b>164</b>	<b>105</b>	<b>70</b>	<b>203</b>	<b>192</b>	<b>386</b>	<b>428</b>	<b>627</b>	<b>1005</b>	<b>1565</b>	<b>1686</b>	<b>7550</b>	<b>16301</b>	

TABLE VII.—GLASGOW.—DEATHS UNDER 1 YEAR AND DEATH-RATES PER 1,000 BIRTHS IN EACH MUNICIPAL WARD, FOR THE YEAR 1941.

MUNICIPAL WARDS.	Deaths —1 Year.	Death Rate per 1,000 Births.		
	1941.	1941.	1940.	1939.
1. Shettleston and Tollcross ... ..	92	112	82	91
2. Parkhead ... ..	72	95	108	85
3. Dalmarnock ... ..	84	118	124	88
4. Calton ... ..	91	163	118	109
5. Mile-End ... ..	52	133	107	87
6. Whitevale ... ..	46	110	94	137
7. Dennistoun ... ..	37	95	91	41
8. Provan ... ..	129	129	90	59
9. Cowlares ... ..	33	73	74	62
10. Springburn ... ..	44	102	71	78
11. Townhead ... ..	63	119	109	80
12. Exchange ... ..	38	137	151	140
13. Blythswood ... ..	28	151	88	141
14. Anderston ... ..	57	120	117	97
15. Sandyford ... ..	34	105	89	59
16. Park ... ..	32	116	58	49
17. Cowcaddens ... ..	100	130	121	110
18. Woodside ... ..	82	123	98	92
19. Ruchill ... ..	87	89	81	73
20. North Kelvin ... ..	48	123	82	48
21. Maryhill ... ..	50	96	87	68
22. Kelvinside ... ..	15	64	62	38
23. Partick (East) ... ..	61	150	99	54
24. Partick (West) ... ..	37	96	81	53
25. Whiteinch ... ..	47	91	76	64
26. Hutchesontown ... ..	92	112	97	86
27. Gorbals ... ..	177	163	132	102
28. Kingston ... ..	68	122	94	99
29. Kinning Park ... ..	84	115	96	83
30. Govan ... ..	121	137	106	90
31. Fairfield ... ..	37	66	57	44
32. Pollokshields ... ..	38	63	64	66
33. Camphill ... ..	14	63	41	32
34. Pollokshaws ... ..	44	91	66	69
35. Govanhill ... ..	43	91	93	53
36. Langside ... ..	20	97	62	53
37. Cathcart ... ..	17	50	55	44
38. Yoker and Knightswood ... ..	41	87	62	50
Institutions ... ..	11	—	—	—
Harbour ... ..	1	—	—	—
CITY ... ..	2,267	111	95	80

TABLE VIII.—GLASGOW 1941—INFANT DEATHS AT GIVEN AGES AND FROM SEVERAL CAUSES.

CAUSE OF DEATH.	MALES.				FEMALES.				Total — 1 year. Both Sexes.		
	Age in Months.				Age in Months.						
	— 1	— 3	— 6	— 9	— 12	— 3	— 6	— 9		— 12	Total.
I. CONGENITAL MALFORMATIONS ... ..	49	16	7	5	—	39	15	7	1	62	139
II. DISEASES OF EARLY INFANCY—											
(a) Congenital Debility, Sclerema, and Icterus ... ..	52	18	6	2	—	33	13	2	—	48	126
(b) Premature Birth ... ..	275	16	4	—	—	206	17	1	—	224	519
(c) Injury at Birth ... ..	66	5	1	—	—	56	2	—	1	59	131
(d) Atelectasis ... ..	26	—	2	—	—	11	3	2	—	16	44
(e) Others ... ..	6	2	—	—	—	2	2	—	—	4	12
III. DISEASES OF RESPIRATORY SYSTEM	37	74	96	34	28	28	49	55	31	210	479
IV. DISEASES OF DIGESTIVE SYSTEM—											
(a) Diarrhoeal ... ..	18	64	85	33	14	16	34	43	6	127	341
(b) Others ... ..	7	3	3	1	1	1	1	2	2	6	21
V. DISEASES OF NERVOUS SYSTEM	10	32	25	8	4	9	26	13	3	57	136
VI. TUBERCULOUS DISEASES—											
(a) Pulmonary Tuberculosis ... ..	—	—	2	1	—	—	—	1	2	4	7
(b) Tuberculous Meningitis ... ..	—	—	2	1	4	—	—	—	5	9	16
(c) Abdominal Tuberculosis ... ..	—	—	—	—	—	—	—	—	—	—	—
(d) Other Forms ... ..	—	—	2	1	—	—	—	—	2	—	5
VII. INFECTIOUS DISEASES—											
(a) Measles ... ..	—	—	—	1	1	1	—	1	1	4	6
(b) Scarlet Fever ... ..	—	—	—	—	—	—	—	—	—	—	—
(c) Whooping Cough ... ..	1	13	14	15	21	—	11	12	18	69	133
(d) Diphtheria ... ..	—	—	2	—	2	—	2	—	2	4	8
(e) Erysipelas ... ..	—	—	—	—	—	—	—	—	—	—	—
(f) Cerebro-spinal Fever ... ..	—	1	7	4	4	—	1	6	3	12	28
(g) Varicella ... ..	—	—	1	1	—	—	—	1	—	1	3
(h) Typhoid and Paratyphoid Fevers	—	—	—	—	—	—	—	—	—	—	—
VIII. SYPHILIS ... ..	—	—	—	—	—	—	—	—	—	—	—
IX. OVERLAYING ... ..	—	2	1	—	—	—	—	—	—	—	—
X. OTHER VIOLENCE ... ..	2	3	5	1	2	1	2	—	2	5	18
XI. ALL OTHER CAUSES ... ..	17	9	16	7	6	10	10	5	4	32	87
TOTALS ... ..	566	260	282	115	87	414	188	151	80	957	2267

TABLE IX.—CASES OF INFECTIOUS DISEASE REGISTERED IN EACH MONTH IN 1941.

	MONTH.												YEAR.	
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Hosp.	Home
	Typhus Fever ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric, including Paratyphoid Fever ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Continued and Undefined Fever ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever ... ..	32	33	40	24	38	35	33	28	31	16	23	30	352	11
Puerperal Pyrexia ... ..	31	25	23	22	21	17	20	24	28	26	16	22	233	42
Smallpox ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever ... ..	188	158	150	96	113	89	86	123	168	253	240	250	1,537	377
Diphtheria and Membranous Croup ... ..	417	342	308	228	262	264	228	305	416	444	378	447	4,023	16
Erysipelas ... ..	59	48	51	50	61	46	42	51	64	62	72	66	355	317
Cerebro-spinal Fever ... ..	46	70	48	54	44	27	22	17	18	25	15	22	391	17
Ophthalmia Neonatorum ... ..	41	39	49	41	50	38	44	48	50	42	43	58	68	475
Trachoma ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute and Chronic Encephalitis Lethargica ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Polio-Encephalitis ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis ... ..	6	2	2	5	—	—	—	—	—	—	—	—	—	—
Acute Primary Pneumonia ... ..	763	850	1,102	557	433	316	223	243	292	336	437	634	3,953	2,233
Acute Influenzal Pneumonia ... ..	43	29	15	12	8	2	4	4	1	5	14	20	90	67
Malaria ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery ... ..	61	9	5	18	15	17	24	31	40	40	29	30	240	79
Pulmonary Tuberculosis ... ..	133	141	227	208	184	206	184	127	166	156	155	179	1,158	908
Tuberculosis ... ..	44	49	67	47	62	51	69	52	55	55	48	62	270	391
Measles ... ..	196	156	231	282	361	231	49	25	16	32	12	22	219	1,394
German Measles ... ..	10	21	20	27	42	53	5	3	15	17	11	10	50	184
Whooping Cough ... ..	1,147	1,631	2,704	1,771	1,913	801	129	128	379	133	150	101	950	10,037
Chickenpox ... ..	524	440	355	265	416	386	40	37	181	305	533	612	205	3,889
Total ... ..	3,741	4,049	5,400	3,714	4,026	2,590	1,241	1,264	1,950	1,966	2,189	2,573	34,703	—
Hospital ... ..	1,437	1,369	1,381	1,139	1,195	1,023	889	931	1,118	1,218	1,206	1,332	14,238	—
Home ... ..	2,304	2,680	4,019	2,575	2,831	1,567	352	333	832	748	983	1,241	—	20,465

\* 32 Pemphigus Neonatorum ; 1 Anthrax ; 1 Leprosy ; 98 Mumps. Add \* Others ... Altered Diagnosis

TABLE X.—GLASGOW, 1941 AND 1940.—CASES OF INFECTIOUS DISEASES REGISTERED, NUMBER TREATED IN HOSPITAL.

	1941.						1940.
	Fever Hospitals and Sanatoria.	Corporation General Hospitals.	Gartloch and Lennox Castle.	Other Institutions.	Home.	Total.	Total.
A.—NOTIFIABLE—							
Typhus Fever ...	—	—	—	—	—	—	—
Enteric Fever ...	16	2	—	—	1	19	11
Paratyphoid B ...	56	—	—	—	5	61	339
Continued and Undefined Fever ...	1	—	—	—	1	2	—
Puerperal Fever ...	325	14	—	13	11	363	419
Puerperal Pyrexia ...	105	38	—	90	42	275	255
Smallpox ...	—	—	—	—	—	—	—
Scarlet Fever ...	1,537	—	—	—	377	1,914	1,874
Diphtheria and Membranous Croup ...	4,017	1	—	5	16	4,039	5,190
Erysipelas ...	341	8	—	6	317	672	656
Cholera ...	—	—	—	—	—	—	—
Cerebro-spinal Fever ...	384	1	—	6	17	408	457
Ophthalmia Neonatorum	63	1	—	4	475	543	617
Trachoma ...	—	3	—	—	7	10	7
Acute and Chronic Enceph. Lethargica	1	3	—	1	2	7	3
Acute Poliоencephalitis	1	—	—	—	—	1	1
Acute Poliomyelitis ...	36	2	—	1	8	47	33
Acute Primary Pneumonia ...	2,697	896	150	210	2,233	6,186	5,516
Acute Influenzal Pneumonia ...	75	10	4	1	67	157	308
Malaria ...	17	3	—	1	4	25	50
Dysentery ...	159	70	—	11	79	319	364
Infective Jaundice ...	—	—	—	—	—	—	1
Anthrax ...	1	—	—	—	—	1	—
Pulmonary Tuberculosis	1,158	—	—	—	908	2,066	1,908
Other Forms of Tuberculosis ...	270	—	—	—	391	661	669
B.—NOT NOTIFIABLE							
Measles ...	216	1	—	2	1,394	1,613	11,028
German Measles ...	48	1	—	1	184	234	653
Whooping Cough ...	933	16	—	1	10,037	10,987	875
Chickenpox ...	197	7	—	1	3,889	4,094	2,047
Chumps ...	92	1	—	—	5	98	288
Empyema Neonatorum	20	—	—	—	12	32	41
Erysipelas ...	1	—	—	—	—	1	—
TOTALS ...	12,767	1,078	154	354	20,482	34,835	33,610
Notified, but diagnosis altered to Non-Infectious Diseases ...	1,488	1	—	1	2	1,492	1,676
TOTAL REGISTERED	14,255	1,079	154	355	20,484	36,327	35,286

\* Where patients suffer from two or more diseases, each disease is reckoned as a case.

Apart from cases of pneumonia admitted to Corporation General Hospitals and Voluntary Institutions in times of pressure; cases of puerperal fever, puerperal pyrexia, and ophthalmia neonatorum occurring in other than Fever Hospitals and allowed to remain; and cases of trachoma treated in Stobhill Hospital; the cases shown under the headings "Corporation General Hospitals" and "Other Institutions" are, for the most part, accidental.

## PART II.

## FEVER HOSPITALS.

No less than 12,459 patients were treated in the infectious diseases hospitals during 1941; of these 862 died, equivalent to a fatality rate of 7.1 per cent.; in addition 866 patients suffering from phthisis were received.

Although diphtheria was again prevalent throughout the year, other diseases did not exhibit unusual incidence. There was one case of leprosy and one of relapsing fever, both being conditions now sufficiently rare to merit mention.

For the first time there falls to be recorded the treatment of 79 air raid casualties and 17 civilian sick. These were dealt with in Knightswood Hospital.

The work of the hospitals can no longer be measured by the number of patients treated. War-time conditions and legislation have thrown an almost overwhelming burden on the administrative and clerical departments of the institutions. Rationing, clerical work pertaining thereto, staffing difficulties, A.R.P. considerations, have all absorbed a great deal of time. Last year mention was made of the difficulty of maintaining full nursing and domestic staffs. During 1941 the nursing position was a little easier, but in some cases there was acute difficulty in obtaining domestic staff. Suitable male employees were practically unobtainable, and generally speaking the year was not an easy one. In spite of these difficulties the hospital services were well maintained.

*Scarlet Fever.*—Scarlet fever showed a slight increase over the 1940 figures; 1,553 cases were treated, but this is still a very low figure when compared with pre-war years. Only 7 patients died, the fatality rate being 0.4 per cent. The disease was of a mild type. Serum treatment was used in patients who were received in a sufficiently early stage and whose symptoms warranted it. Chemo-therapy was of value in septic complications.

*Diphtheria.*—The year 1940 was the peak year for diphtheria in the Glasgow hospitals. In that year 4,803 cases were dealt with. In

1941, although as yet it was too soon to expect a massive fall in incidence as the result of the immunisation campaign, there was a welcome drop to 4,341 cases, with a marked fall in the mortality rate to 3·1 per cent. Mass typing has shown that the incidence of the Gravis type is in the neighbourhood of 60 per cent., but frequently this type has been found in relatively mild cases clinically. Laryngeal cases were again few in number. The Clinical type was less severe than in 1940, but in the first and last quarters many very severe cases were received. It seems probable that a considerable time may elapse before the full effect of immunisation is felt. So long as the number of children immunised falls short of 80 per cent. a dramatic drop in incidence may not occur. A most encouraging feature is that among the relatively small number of immunised children who contracted diphtheria, the disease was very mild. Rarely was it characterised by obvious lesions; most of the cases were merely bacteriological diphtheria. It seems reasonable to anticipate that with, as at present, only 43 per cent. of children under the age of fifteen immunised, the incidence may remain considerable, but the severity of the disease and the mortality rate will decline. All the evidence suggests that further mass immunisation is indicated. In 428 cases certified diphtheria the diagnosis was revised. Among patients who recovered the average residence was 47 days; in fatal cases 11 days.

*Pneumonia.*—During the year 2,107 cases of pneumonia were treated to a conclusion. This total is somewhat lower than that of 1940, and represents about one-third of the registered cases. There were 211 deaths, a general fatality rate of 10 per cent.; for the previous year the rate was 15·6 per cent.

Chemo-therapy has been the routine method of treatment. Sulphapyridine or Sulphathiazole were the drugs most frequently used, but towards the end of the year Sulphadiazine was given a trial. So far as clinical effect is concerned, there is little to choose between the drugs, but with Sulphathiazole and Sulphadiazine toxic effects were encountered less frequently.

Pneumococcus typing was carried out on a much reduced scale owing to shortage of staff. The available figures show that Type II pneumococcus remains the predominant type in this district and is responsible for a higher fatality rate than that of Type I. The following table shows the types and fatality rates among 310 cases:—



	Cases.	Deaths.	Fatality Rate.
Type I ... ..	66	4	6.1 per cent.
Type II ... ..	113	15	13.3 "
Type III ... ..	17	1	5.9 "
Group IV ... ..	114	6	5.3 "

Increasing experience with chemo-therapy suggests that age again becomes the factor of greatest importance in prognosis. Almost 65 per cent. of the deaths occurred under the age of one year or over the age of forty-five. The fatality rates at different ages were as follows:—

0—1	1—2	2—10	10—45	45—
16.6	9.2	4.8	4	21.8

Annual fluctuations in general fatality rates might thus well be the result of changes in the age-constitution of the cases treated.

*Puerperal and Fever Puerperal Pyrexia.*—The number of patients treated in the puerperal fever pavilion was 243; of these 165 suffered from puerperal fever, and among them 12 deaths occurred, giving a fatality rate of 7.2 per cent. Five of the fatal cases were received in a moribund condition. Cases classified as puerperal pyrexia numbered 64; of these 3 died, 2 from pneumonia and 1 from appendicitis and peritonitis. A history of full-time pregnancy was obtained in 121 patients; the remaining 108 were cases of abortion. Of these 71 were septic and 37 simple.

Among the puerperal pyrexia cases the following causal lesions were noted:—

Non-suppurative Mastitis ... ..	20
Suppurative Mastitis ... ..	13
Constipation ... ..	7
Pneumonia ... ..	5
Bronchitis ... ..	3
Acute Rheumatism ... ..	1
Pyuria and Bacilluria ... ..	2
Anaemia ... ..	2
Pernicious Anaemia ... ..	1
Bacillary Dysentery ... ..	1

In the puerperal fever group the chief complications were:—

Parametritis ... ..	10
Pelvic Peritonitis ... ..	8
Septicaemia ... ..	7
General Peritonitis ... ..	1
Phlegmasia Alba Dolens ... ..	13
Insanity ... ..	1
Post-partum Haemorrhage ... ..	1
Mesenteric Thrombosis ... ..	1
Suppurative Arthritis ... ..	1

Anaemia in varying degree was present in the majority of the cases.

*Treatment.*—As little local interference as possible consistent with securing adequate drainage was the guiding principle, but a certain amount of operative treatment was necessary. Laparotomy was performed in three cases, incision and drainage of breasts in 13 cases, and dilatation and curettage in 48 cases. In addition 9 patients had blood transfusions. General anaesthetics were given in 51 cases, and local anaesthetics in 11. Chemo-therapy was extensively employed in the form of Sulphanilamide, Sulphapyridine, and Sulphathiazole, and to a lesser extent Sulphadiazine. Apart from the fact that Sulphathiazole was undoubtedly best in mastitis; there appeared little difference in the clinical effect of the drugs.

*Erysipelas.*—335 patients suffering from erysipelas were treated; five of them died, giving a fatality rate of 1·4 per cent. The majority of the cases were dealt with in Ruchill Hospital; a few in Knightswood Hospital. Chemo-therapy has been notably successful in the treatment of this disease, in which the fatality rate has shown a steady fall for the last few years. Treatment was on the same lines as that pursued last year. Sulphanilamide or one or other of the newer preparations of similar nature was used as a routine. Generally the drugs seemed equally effective, but the newer preparations were on the whole better tolerated. The average stay in hospital was 17 days.

*Enteric Group and Dysentery.*—The enteric fevers were represented by 80 cases, of which 18 were enteric fever and 62 paratyphoid fever. There were no deaths. The comparative absence of these diseases was remarkable, as war-time conditions might well have given rise to increased incidence. Bacillary dysentery to the number of 144 cases received treatment, of which only one died. Many of the cases were children received from other institutions.

*Cerebro-spinal Fever.*—The incidence of cerebro-spinal fever was practically the same as in 1940. In all there were 401 cases; of these 82 died. The fatality rate was thus 20·4 per cent. As in 1940, the cases dealt with represented about three or four times the pre-war average of non-epidemic years. Cases continued to occur throughout the year, but the first and second quarters, as usual, showed the greater incidence. A considerable number of the patients were from units of H.M. Forces. Cerebro-spinal fever is one of the diseases which is prone to increase in war-time. Camp life, the black-out (often associated with lack of ventilation), and overcrowding are pre-eminently the conditions which favour the spread of the disease.

Apart from the very acute cases, where the time factor prevented the desired concentration of the drug, and those cases too long established before coming under treatment, chemo-therapy yielded good results. In addition to the great reduction in mortality, it much reduced the patients' stay in hospital; the average residence of recovered cases was 25 days. Sulphadiazine and Sulphapyridine were the drugs of choice. Polyvalent serum was used along with chemo-therapy in certain cases.

*Poliomyelitis.*—45 cases of acute poliomyelitis were dealt with, together with one case of polioencephalitis, and one of encephalitis lethargica. All recovered; most of those showing residual disabilities were transferred to other institutions for more prolonged treatment.

*Whooping-cough.*—Whooping-cough was more prevalent than in 1940, and the fatality rate was higher; 892 cases were treated; of these 158 died, giving a fatality rate of 17·7 per cent. The average residence was 46 days. It should be noted that the disease was already well established and chest complications were already present in almost all the cases received.

*Measles.*—Only 222 cases of measles were dealt with. The type was very mild. There were four deaths, equivalent to a fatality rate of 1·8 per cent. The average residence was 19 days.

*Rubella.*—Rubella was less prevalent than in 1940; 49 patients were treated, and all recovered. The average residence was 11 days.

*Parotitis*.—Ninety cases were treated, and all recovered without serious complications. The majority were adult patients from units of H.M. Forces.

*Chickenpox*.—139 patients suffering from chickenpox were treated. Many of them were received from other institutions, where they had been receiving treatment for other conditions. Among these there were four deaths.

*Venereal Disease*.—There was a substantial rise in the number of cases treated. Male patients treated in Belvidere Hospital numbered 228; Ruchill dealt with 28 females and 2 males; 99 of the male cases were Merchant Navy personnel, 79 of them being foreigners. As in 1940 the increase was chiefly in shipping cases; admissions from the city area were not above normal.

Among male patients Gonococcal infections numbered 67, most of them suffering from complications such as Epididymitis, Prostatitis, Arthritis, Periurethral Abscess, Stricture, Retention, etc.

Cases of syphilis numbered 102, of which 29 were complicated, 18 with arsenical dermatitis, 7 with jaundice, and 2 with nephritis. Approximately 70 per cent. of the total cases of syphilis were primary.

Soft sores frequently associated with Buboec numbered 30, and Balanitis, Paraphimosis, Venereal Warts, etc., were responsible for the remainder of the cases. Treatment was on the same lines as that pursued in 1940.

FEVER HOSPITALS—STATEMENT OF CASES TREATED ACCORDING TO SEX DATA BASED ON DISMISSALS AND DEATHS FOR YEAR 1941.

	Admitted.		Dismissed.		Died.		M'tality per cent.	Av. Residence Dismiss, Deaths	Ages.			Ruchill. Dis-missals, Deaths.	Belvidere. Dis-missals, Deaths.	Knightswood. Dis-missals, Deaths.	Shieldhall. Dis-missals, Deaths.						
	M.	F.	M.	F.	M.	F.			15+	15+	15+					5	15	15			
																			Dismiss.	Deaths	Dis-missals
Typhus	9	10	8	10	—	—	—	45	—	2	—	—	—	—	—	—					
Enteric Fever	21	42	20	42	—	—	—	43	—	7	—	—	—	—	—	—					
Paratyphoid Fever	1	—	1	—	—	—	—	72	—	7	—	—	—	—	—	—					
Continued and Undefined Fever	—	168	—	153	—	—	7.2	24	8	—	—	—	—	—	—	—					
Puerperal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
Smallpox	689	849	686	860	2	5	0.4	34	52	551	787	93	528	2	150	2					
Scarlet Fever	1757	2327	1887	2355	70	69	3.1	47	11	1207	2109	428	1895	54	252	8					
Diphtheria and Mem. Group	150	187	143	187	4	1	1.4	17	10	22	12	301	308	5	22	—					
Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
Cholera	210	186	174	145	40	42	20.4	25	7	173	54	434	177	43	17	4					
Cerebro-spinal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
Trachoma	1	—	1	—	—	—	—	67	—	—	—	—	—	—	—	—					
Encephalitis Lethargica	1	—	1	—	—	—	—	34	—	—	—	—	—	—	—	—					
Acute Poliomyelitis	21	20	23	22	—	—	—	71	—	33	11	7	23	—	6	—					
Acute Primary Pneumonia	1511	628	1313	537	152	52	9.9	26	9	799	285	355	833	87	502	26					
Acute Influenzal Pneumonia	40	15	32	14	5	2	13.2	24	14	1	2	50	8	3	15	4					
Malaria	19	20	20	—	—	—	—	22	9	52	31	2	8	—	10	2					
Dysentery	77	72	74	69	1	1	1.3	23	9	—	—	24	58	—	16	—					
Relapsing Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
Pulmonary Tuberculosis	44	39	31	30	12	7	23.8	34	18	7	9	—	—	7	12	9					
Other forms of Tuberculosis	71	78	4	4	67	76	94.7	42	8	51	45	—	—	5	3	48					
Measles	112	90	116	102	2	2	1.8	19	14	142	27	41	60	1	140	3					
German Measles	21	24	25	24	—	—	—	11	10	7	10	32	8	11	31	7					
Whooping-cough	436	463	366	368	68	90	17.7	46	9	791	100	65	383	86	322	66					
Chicken-pox	91	66	81	54	2	2	2.9	22	14	75	44	20	11	2	127	4					
Mumps	63	37	60	30	—	—	—	21	13	13	28	49	9	58	16	16					
Veneral Diseases	233	45	228	28	2	—	0.8	30	9	2	—	256	30	—	226	2					
Babies with Mothers	—	—	—	—	—	—	—	21	1	2	—	—	—	1	—	—					
No apparent Disease	17	22	18	22	—	—	—	11	18	18	13	—	—	17	11	—					
Others	580	477	534	448	54	28	7.7	21	12	350	244	470	437	48	485	29					
Influenza	36	11	36	12	—	—	—	16	26	4	15	29	7	—	38	9					
Puerperal Pyrexia	62	—	61	—	—	—	4.6	22	26	—	—	64	1	—	61	3					
Impetigo	4	1	4	1	—	—	—	23	—	4	—	—	—	—	3	—					
Leprosy	1	—	1	—	—	—	—	10	—	—	—	—	—	—	—	—					
Pemphigus Neonatorum	—	3	—	3	—	—	—	3	—	—	—	—	—	—	—	—					
Unclassified (Staff)	5	49	5	49	—	—	1.8	21	98	—	—	—	—	—	23	1					
Ophthalmia Neonatorum	2	—	2	—	—	—	—	3	—	2	—	—	—	—	—	—					
Anthrax	1	—	—	—	—	—	—	56	—	—	—	—	—	—	—	—					
Relapsing Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—					
Civilian Sick	1	24	1	14	—	—	11.7	25	10	—	—	—	—	—	15	2					
Air Raid Casualties	51	28	49	27	2	1	3.8	3	2	1	2	76	—	—	76	3					
Total	6275	6026	5924	5673	483	397	7.1	35	10	4319	3844	4314	1657	4942	443	4828	334	1049	51	778	52
Phthisis	488	422	306	298	137	125	30.3	145	89	15	32	819	—	536	198	—	—	68	—	—	64

## ROBROYSTON HOSPITAL.

Following the practice of war years, the annual report for 1941 covers only the essentials of the work done.

*Accommodation and Bed Distribution.*—Following the steady rise in the numbers of notifiable cases of tuberculosis there has been a steady increase in the number of occupied beds. By the end of the year three wards of the Government's hutted annexe had been opened to augment the accommodation for tuberculosis in the parent hospital, and a further ward was given over to pneumonia until the incidence of the disease dropped in mid-summer. Two wards were occupied by casualties resulting from the air raids of the spring, and 82 patients were treated. A small number of convalescent patients from Glasgow Royal Infirmary were treated under the Emergency Hospital Scheme.

*Pulmonary Tuberculosis.*—During 1941 a total of 276 patients were discharged, and of these 110 died. The number of deaths is not surprising when it is pointed out that two-thirds of all those discharged for any reason whatever were very advanced in their disease when first admitted. Artificial pneumothorax was attempted in 118 instances, but was unsuccessful in 12; in a further 12 the degree of collapse attained was ineffective and alternate measures were offered. Thoracoscopy was undertaken to improve the degree of collapse in 14 patients and was fully successful in 11, both technically and clinically. Phrenic nerve interruption was performed 20 times. Extrapleural pneumothorax was effective in three of the four patients in whom it was done, and 27 thoracoplastic operations were undertaken.

*Non-pulmonary Tuberculosis.*—The table below shows the grouping of the various patients discharged during 1941 and gives some idea of the operative work undertaken in each group:—

Site of Lesion.	Total.	Deaths.	Operations.
Tuberculosis of Spine ... ..	58	21	3
Tuberculosis of Hip ... ..	7	2	6
Tuberculosis of Bones other than Spinal	13	—	2
Tuberculosis of Joints other than Hip ...	27	5	21
Genitourinary Tuberculosis ... ..	27	4	86*
Abdominal Tuberculosis ... ..	28	7	3
Tuberculosis of Lymphatic Glands ...	4	1	4
Multiple and Miscellaneous Lesions ...	4	3	—
Non-Tuberculous Lesions or Admitted for Observation ... ..	40	8	39†
	<hr/> 208	<hr/> 51	<hr/> 164

\* Includes cystoscopic examinations.

† Includes dental, eye, ear, nose, and throat and staff patients.

*Puerperal Sepsis and Pyrexia.*—The table below summarises the work in this department for the past year:—

	Total.	Died.
(1) Puerperal sepsis following birth of a viable child ...	136	17
(2) Puerperal sepsis following birth of a non-viable child ...	97	9
(3) Patients not suffering from puerperal sepsis (excluding abortions) ... ..	54	5
(4) Abortions (non-septic) ... ..	34	—
	<hr/>	<hr/>
	321	31
	<hr/>	<hr/>

The death-rate in Group (1) was 13 per cent., and 9 per cent. in Group (2), the combined rate being 9.6 per cent. There is nothing significant to add to what has been said in the reports of the last few years. The rise in the number of abortions treated may be significant of the times. Gratifying use continued to be made of the full range of the preparations of the sulphonamide groups.

*Pneumonia.*—Of the 649 patients discharged during 1941 who had been admitted following their notification as suffering from pneumonia, the original diagnosis was not sustained in 224; the illnesses covered numbered 28, and many of them bore no clinical resemblance to pneumonia. Primary pneumonia was found in 119 patients, and there were 18 deaths; the remaining 234 suffered from broncho-pneumonia, and 16 of them died. There were few serious complications.

#### MEARNSKIRK HOSPITAL.

In this hospital 11,634 patients were treated during the year in its capacity as (a) a hospital for tuberculosis and (b) as an emergency hospital under the Government's emergency hospital scheme. The available beds were, to a large extent, given over to the accommodation of Naval patients, civilian casualties, and civilian sick admitted under the scheme operated by the Department of Health. The admission of tuberculous patients was nevertheless continued, though necessarily limited to a little over half of the pre-war rate.

On 1st January there were 275 tuberculous patients resident in hospital. During the year a further 308 patients were admitted, while 289 were dismissed or died in hospital, leaving 294 patients still in residence at 31st December, 1941. The relationship which these figures bear to the total turnover is shown in the following table:—

TABLE SHOWING PATIENTS ADMITTED AND DISMISSED OR DIED IN HOSPITAL DURING 1941.

	Tuberculous Patients.	Other Patients.	Total.
In residence at 1st January ... ..	275	179	454
Admitted during the year ... ..	308	5,600	5,908
Dismissed or Died ... ..	289	5,437	5,726
In residence at 31st December ... ..	294	342	636

About two-thirds of the tuberculous patients were suffering from pulmonary tuberculous, frequently in an advanced stage. Of the 289 patients who left the hospital during the year, 204 completed the course of treatment prescribed and were dismissed with the disease healed, quiescent, or much improved. Six patients were transferred to other institutions with the disease still active, while 36 left against medical advice, at their own request, or at the request of relatives. The remaining 43 patients died, almost all of them from advanced or very active pulmonary disease.

No attempt will be made here to assess in detail the total work of the hospital during the year, but the turnover in some of its essential departments will be indicated briefly in the following paragraphs.

*Plaster of Paris Work.*—In the course of the year 375 plaster appliances were made. Of these 103 (including 10 jackets, 33 hip spicas, 52 leg splints, and 8 arm splints) were for tuberculous patients. In addition to these, 20 plaster casts were constructed for the making of certalmid or celluloid splints.

*Splint Department.*—The work of this department included the making of 141 new splints, of which 74 were for tuberculous patients. Boots were altered to specification in 111 cases. Böhler's walking irons or wooden heels for incorporation in leg plasters were made to the number of 67, and pairs of crutches were supplied to 38 patients. The splint-makers also carried out 352 repairs to splints, boots, or appliances, and undertook 231 miscellaneous jobs.

*Surgical Operations.*—In all 1,102 major operations were performed, of which 33 were for the relief of tuberculous conditions and 153 were for diseases of the ear, nose, or throat. The others were mainly for abdominal or genito-urinary conditions and lesions, traumatic or otherwise, of the arms or legs. In addition the theatre staffs undertook 1,279 minor operative procedures and surgical dressings.



*Dental Department.*—In the parent hospital the visiting dentist examined 722 patients, of whom 420 received treatment. In all 540 extractions were carried out, of which 115 were completed under general anaesthesia. The remainder had local anaesthesia only. Conservative work consisted of 66 fillings, 43 dressings, and 16 scalings. One full set and one full upper denture were supplied.

In addition to this, 138 other patients were examined, and 86 received treatment. Under general anaesthesia 475 teeth were extracted, while 61 were removed under local anaesthesia. One filling, 24 scalings, and two dressings were carried out.

*Physio-therapeutic Department.*—On 1st January 41 patients were receiving physical treatment. During the year 583 new patients came under treatment, and 574 were discharged, leaving 50 still under treatment at 31st December. In all 15,525 treatments were given, as follows—Massage 9,345; medical gymnastics 2,407; medical electricity 2,399; heat therapy 1,374; 61 of the 583 new patients were children suffering from acute anterior poliomyelitis or tuberculosis.

*X-ray Department.*—During the year 3,727 in-patients and 777 out-patients were examined radiologically. Skiagrams to the number of 9,642 were taken, and 452 screen examinations were made. Of the patients, 1,032 were tuberculous subjects, and of these 162 attended as out-patients.

*Laboratory.*—A total of 4,308 specimens were submitted for investigation. The materials examined were of a varied character, but the majority of the specimens were submitted for the detection of the presence or absence of the tubercle bacillus.

*Education.*—In the course of the year 85 children were admitted to the school, and 82 were discharged. The average number of scholars on the roll was 85, with an average attendance of 80. These received half-time instruction in the subjects of the ordinary school curriculum from two full-time teachers.

## PART III.

## OUTDOOR MEDICAL SERVICES AND GENERAL HOSPITALS.

*Outdoor Medical Services.*—The following is a table showing the work done by the medical staff compared with the previous year :—

	Visits.	Consultations.
1940 ... ..	62,359	187,797
1941 ... ..	43,637	131,610

The total number of units of service rendered was 243,532, as compared with 346,476 in the previous year, a reduction of 29·7 per cent. Service rendered by the whole-time medical staff amounted to 226,061 units, or 92·8 per cent. of the total work, the remainder representing the work done by the part-time staff. (One consultation at a clinic equals 1 unit, one domiciliary visit equals 2½ units, and one session at Welfare Departments equals 2½ units).

The decline in the work of this department may be further emphasised by quoting the figures for the year 1938, in which year the amount of work was the highest since the institution of the full-time service. In 1938 there were 74,944 visits paid, and there were 300,048 consultations at clinics. The total number of units of service was 488,402. The visits paid during the year under review are thus just over half what they were in 1938, and the consultations less than half. It must be remembered, however, that in 1938 the pressure of work on the service was very heavy; indeed it might be said to have exceeded considerably the optimum capacity of the service. The decline in the utilisation of these clinics corresponds with the decline in the number of persons in receipt of sick poor relief and unemployment assistance. The absence of widespread epidemic disease has also served to reduce the amount of work.

The full-time staff at the commencement of the war was 31 medical officers; at the end of 1941 it was 29; and through long-term sickness in the case of two medical officers, the calling-up to the Services of other two, and the seconding to A.R.P. of one, the number available for duty was 24. (Up till the time of writing other two members have joined the Services, and a further three are reporting for medical examination.)

*General Hospitals.*—The following table shows the average daily number of patients in residence in the four general hospitals and the highest and lowest numbers:—

	Stobhill.	Eastern. District.	Western District.	Southern General.
Average daily number in residence in 1941 ... ..	1,343	288	226	691
Highest number in residence in 1941	1,527	331	265	827
Lowest number in residence in 1941	1,109	247	179	585
Resident on 31st December, 1941 ...	1,368	289	199	647

The total number of admissions in 1941 was 28,580, which was 974 in excess of the previous year, and this can be compared with the pre-war figure of 28,192 in 1938.

There was considerable pressure on the hospital accommodation throughout the year, and in order to relieve this beds were made available by the Department of Health for Scotland up to the number of 300 in Gartloch and 200 in Lennox Castle Institution, both of which are Emergency Hospitals. In addition, arrangements were made so that one villa consisting of three wards at Lennox Castle would be taken over for the treatment of maternity cases, and another villa for gynaecology. At the end of the year there were 179 ordinary civilian sick in Gartloch and 188 in Lennox Castle.

There is a growing demand for admission of elderly and chronic cases and of cases requiring maintenance rather than treatment. The services of the Outdoor Medical Officers have been utilised fully for the purpose of reviewing recommendations to hospital in order to ensure that the best possible use is made of the accommodation.

#### STOBHILL, EASTERN, AND WESTERN DISTRICT HOSPITALS.

Stobhill continued to receive Service patients, although in declining numbers, there being 100 in residence at the end of the year.

*Staff—Medical.*—Despite the call-up for service, the resident staff was well maintained at strength throughout the year. Difficulty is now, however, being experienced in retaining men suitable for the more senior resident positions.

*Out-Patient Departments.*—Out-patients were seen and treated at the three hospitals as undernoted:—

	Stobhill.	Eastern District.	Western District.
Number of Cases attending as Out-Patients...	3,767	3,941	6,587
Number of Attendances ... ..	8,450	10,101	27,835

These patients attended for treatment or special examination in one or other of the special departments, including the X-ray department. The Western District Hospital continues to treat a number of minor casualties. The out-patient clinics are also used for the follow-up and after-care of patients discharged from hospital.

*Dental Treatment.*—Dental treatment was provided for both out-patients and in-patients at the three hospitals. The amount of work done shows a further reduction compared with the previous year.

*Pathological Laboratory.*—The following table shows the work of the laboratory:—

Autopsies ... ..	252
Histological Reports ... ..	587
Biological Tests ... ..	15
Bacteriological and Serological Reports ... ..	9,401
Wassermann Reactions ... ..	8,222
Kahn Tests ... ..	4,445
Colloidal Gold Tests ... ..	290

*Refereeing of Cases.*—With the decline in the number of cases in receipt of Welfare allowance the work of the Board of Referees at Stobhill also declined. The total number of cases examined throughout the year was 777, an average of 15 per week.

*Electro-Medical Departments.*—The following table shows the work of the Electro-Medical Departments:—

	Stobhill.	Eastern District.	Western District.
Number of Radiographic Films taken ...	11,328	372	1,996
Number of Barium Meals ... ..	887	—	—
Number of Deep Therapy Treatments ...	1,601	—	—
Number of Cases treated by Radium ...	43	—	—
Number of Sunlight Treatments given ...	971	171	1,028
Number of Cases treated by Massage ...	1,579	159	97
Number of Massage Treatments given ...	17,535	3,103	3,871
Number of Cases treated by Electricity	442	90	70
Number of Electrical Treatments given	6,565	1,684	1,752

#### SOUTHERN GENERAL HOSPITAL.

The daily number of patients in residence and the highest and lowest figures for 1941 are shown on page 98.

The Southern General Hospital receives a number of Naval sick from the Port and from Greenock by arrangement with the Naval Authorities.

During the year some of the wards which had been under reconstruction were brought into commission.

*Out-Patients.*—Out-patient attendances numbered 19,114, compared with 12,110 in the previous year. The following table shows the work in more detail:—

REPORT OF PATIENTS AND ATTENDANCES AT OUT-PATIENT DEPARTMENT  
FOR YEAR ENDED 31ST DECEMBER, 1941.

	Persons Attended.	Total Attendances.
Medical and Surgical ... ..	1,542	6,472
Nervous Diseases ... ..	133	607
Skin Diseases ... ..	512	2,124
Diabetes ... ..	56	839
Ear, Nose, and Throat ... ..	197	632
Ante-Natal ... ..	455	2,168
Post-Natal ... ..	306	652
Diseases of Women ... ..	129	403
Dental ... ..	154	867
X-Ray Treatment ... ..	958	958
Massage Treatment ... ..	204	2,435
Light Treatment ... ..	107	897
Eye Treatment ... ..	20	60
	<u>4,773</u>	<u>19,114</u>

*Surgical Department.*—Operations under general or spinal anaesthesia totalled 2,219, as compared with 2,093 in the previous year.

*Pathology and Bacteriology.*—Laboratory work is now carried on to a limited extent in the Southern General Hospital, a technician having been appointed. Supervision is undertaken by the Pathologist, Stobhill Hospital.

*X-Ray Department.*—The following table shows the amount of work done in the X-Ray Department:—

Barium Meals—In-Patients ... ..	331
Out-Patients ... ..	96
Screen Examinations—In-Patients ... ..	461
Out-Patients ... ..	112
Number of X-Ray Films—In-Patients ... ..	7,629
Out-Patients ... ..	2,061

## OBSTETRICAL WORK IN THE GENERAL HOSPITALS.

The following table summarises the work in the Obstetrical Departments of the four general hospitals:—

GENERAL HOSPITALS—OBSTETRICAL SECTIONS.  
DISMISSALS DURING 1941.

	Stobhill Hospital.	Eastern District Hospital.	Western District Hospital.	Southern General Hospital.	Total.
<i>Cases delivered in Hospitals—</i>					
Dismissed well ... ..	1,292	487	1,064	1,357	4,200
Died ... ..	14	3	3	6	26
Transferred ... ..	82	4	23	13	122
Total dismissals of Cases which were delivered in Hospital... ..	1,388	494	1,090	1,376	4,348
<i>Method of admission of above Cases—</i>					
Admitted during ante-natal period for treatment and delivered in Hospital ...	33	5	4	49	91
Admitted to Labour Ward	1,290	489	1,086	1,327	4,192
Admitted to Labour Ward (via Glasgow Royal Ma- ternity Hospital) ...	65	—	—	—	65
Total ... ..	1,388	494	1,090	1,376	4,348
Cases admitted during ante- natal period — Dismissed undelivered ... ..	317	89	76	250	732
Cases admitted after delivery	98	3	1	47	149
Abortions and Miscarriages ...	688	90	38	332	1,148
Infants dismissed alive ...	1,240	454	1,026	1,248	3,968
Infants stillborn ... ..	64	26	39	82	211
Infants neo-natal deaths ...	109	21	43	65	238
Total ... ..	1,413	501	1,108	1,395	4,417

The number of cases delivered in hospital shows an increase from 3,926 in 1940 to 4,348 in 1941. Abortions and miscarriages show a slight increase from 1,032 to 1,148.

The incidence of puerperal morbidity and mortality is shown in the following table:—

## PUERPERAL FEVER AND PYREXIA.

Hospital.	No. of Cases.		Cases per 1,000 Births.		No. of Deaths.		Deaths per 1,000 Births.		Case Mortality
	Fever.	Pyrexia.	Fever.	Pyrexia.	Fever	Non-Septic.	Fever.	Non-Septic.	
Stobhill ... ..	10	6	7.5	4.5	1	27	0.7	20.0	10.0
Eastern District...	9	5	17.9	9.9	—	3	—	6.0	—
Western District	5	6	4.5	5.4	1	4	0.9	3.6	20.0
Southern General	12	32	8.5	22.6	2	7	1.4	4.9	16.7
Total ... ..	36	49	8.2	11.2	4	41	0.9	9.3	11.1

The number of deaths associated with the Obstetrical Departments was 47, compared with 56 in the previous year. The death-rate per 1,000 births was 10.2, as compared with 13.38. The death-rate from puerperal sepsis was increased from 0.48 to 0.9 per 1,000 births. The case mortality from sepsis was 11.1 per cent., as against 6.7 per cent. in 1940.

## DIABETES—SUPPLY OF INSULIN.

The following statement summarises the changes during 1940 and 1941 in the roll of persons in receipt of insulin from this department:—

	1940	1941
Cases on Roll at end of preceding year ...	247	249
New applications during the year ...	62	73
Old cases re-applying during the year ...	20	11
	82	84
	<u>329</u>	<u>333</u>
Cases dying during the year ... ..	33	33
Cases discontinuing treatment during the year ... ..	47	42
	80	75
On Roll at end of the year ... ..	<u>249</u>	<u>258</u>

During 1941 the amount of insulin issued was 19,550 phials, of which 7,425 were Protamine (Zinc) Insulin. The respective figures for 1940 were 20,019 and 7,896, and for 1939 20,931 and 5,439. The increased cost is largely due to a sharp rise in price of insulin as from June, 1941, and also to the increasing use of the more potent and more expensive type of insulin. The cost for the three years 1939, 1940, and 1941 was respectively £867, £1,010, and £1,379.

## PART IV.

## MENTAL SERVICES.

No changes of outstanding importance in connection with the mental hospitals occurred during the year. These hospitals continued to be overcrowded, and the accommodation was taxed to the utmost. Authority was obtained for the completion and furnishing of the new reception and sanatorium blocks at Woodilee, but by the end of the year the wards were not ready for the reception of patients.

Owing to conditions consequent upon the war, considerable difficulty was experienced in all the mental institutions in obtaining sufficient female nurses and domestics, and it is anticipated that when the new wards at Woodilee are ready for occupation some delay is likely to occur in the reception of patients through lack of the necessary staff. Every effort is being made to obtain additional nurses for this purpose, but without great success. The call-up of women under the National Service Acts to the Forces, and the higher wages paid to workers in munition factories, in addition to the greater demands for nurses in emergency and other general hospitals, are all factors militating against the supply of nurses for the mental hospitals. There is also a greater drain on the existing staffs in the mental hospitals through these counter-attractions, and in consequence great difficulty has been experienced in retaining sufficient nurses to ensure the safety and well-being of the patients. It has been found necessary to increase the working hours of the nurses in all the larger institutions.

During the year there was an increased demand for accommodation for females suffering from mental and nervous breakdown. A small proportion of these may have been caused by the air raids which occurred in this area during the early months of the year, but, as the demand was fairly evenly distributed over the whole year, it is more probable that the cause is to be found in the continuing strain of war-time conditions. To meet the increased demand for accommodation it was found necessary to utilise a part of the Emergency Hospital at Gartloch to supplement the accommodation in the mental observation wards at Stobhill, Eastern District, and Southern General Hospitals.

In December, 1941, it was also found necessary to make provision for 40 male and 80 female certified lunatics from Smithston Asylum, Greenock. These patients were transferred to the sanatorium and



farm colony blocks at Gartloch, which were taken over from the Emergency Hospital for this purpose.

Heavy air raiding and frequent "alerts" were experienced in the city and surroundings in the early months of the year. It is worthy of note that the behaviour of the patients in the mental institutions during the "alerts", and more particularly during periods of bombing and gunfire, was surprisingly good. In no instance was there any suggestion of panic, and the arrangements made for the safety of the patients worked smoothly and efficiently. Credit is due to the nursing staffs, who fulfilled their duties well.

The treatment in the mental hospitals continues to progress on up-to-date lines. At Hawkhead satisfactory results were obtained in the treatment of general paralysis of the insane by means of fever induced by electrical means. Inoculation with malaria has meanwhile been discontinued at this institution.

Owing to the frequent changes occurring amongst the personnel of the medical and nursing staffs through members being called up for service in the Forces and from other causes, coupled with the overcrowding and the relatively high proportion of patients of a dangerous type, the treatment of the insane in the mental hospitals in war time is attended with considerable hazard, and great credit is due to the staff for the good results obtained and the comparative freedom from "accidents" of a serious nature.

*Admissions, Discharges, and Deaths.*—The number of certified cases admitted to the mental hospitals during the year was 293, an increase of five over the previous year. Many more cases would have been admitted had accommodation been available, but, owing to the lack of accommodation in the mental hospitals, certifiable cases of mental disorder had in many instances to be retained in the observation wards of the general hospitals, thus interfering with the proper functioning of these wards. This state of affairs has existed for several years, and improvement is not likely to occur before the end of the war, when it is hoped more accommodation for the insane will become available.

There were 3,128 patients under care during the year, as compared with 3,163 during the previous year, and the number remaining in the Corporation mental hospitals on 31st December, 1941, was 2,852, as compared with 2,854 on the corresponding date in 1940. This figure does not include the 120 cases transferred to Gartloch from Smithston Asylum, Greenock, as these cases are chargeable to Renfrewshire and are merely "boarders" in Gartloch.

The number of patients discharged recovered was 76. This figure shows a considerable drop from the previous year's total of 104, and is probably due to the higher proportion of chronic patients admitted to the asylums in recent years. During the year 61 cases of Schizophrenia, 29 cases of Paraphrenia, and 17 cases of Senile Dementia were admitted, as compared with 31 Schizophrenics, 8 Paraphrenics, and 8 Senile Dementias in the previous year. These types of mental disorder are generally recognised as having comparatively small chances of recovery compared with patients suffering from the manic-depressive type of insanity. The number of patients of this latter type admitted during the year was 33, as against 68 during the previous year. This factor alone would appear to be sufficient to account for the decrease in the number of recoveries during the year.

As in recent years, the death-rate remains remarkably low; 166 patients died during the year, and of these more than fifty per cent. were over the age of sixty years at the time of their death. No epidemics of a serious nature occurred in the institutions. The commonest causes of death were cardio-vascular degeneration, respiratory diseases, and senile degeneration.

Of the patients discharged recovered, the great majority were discharged within two years of admission. Thus 60 per cent. were discharged within one year, 24 per cent. after one year and within two years, 9 per cent. after two and within five years, and 7 per cent. after residence of more than five years. Four male patients and one female were discharged recovered after continuous residence of more than five years. The opposite tendency is seen in the patients who died, 49 per cent. of whom had been resident for more than five years.

The causative factors in the production of mental disorders are extremely difficult to determine with any degree of accuracy. Constitutional and environmental factors both play an important part. Such factors as alcohol, mental stress, and senility are amongst the more commonly assigned causes, while previous attacks were noted in a considerable proportion of the admissions. There is no definite evidence to indicate that the incidence of insanity has increased as a consequence of war conditions.

*Air Raid Precautions in Mental Hospitals.*—Satisfactory provision of air raid shelters for the patients has been made in all the mental hospitals, and arrangements have also been made for fire prevention patrols from amongst the staff.

*Patients in other Institutions.*—At 31st December, 1941, there were 561 patients boarded out in institutions owned by other authorities. This number shows an increase of 13 on the number at the corresponding date in 1940. No large movement of patients from outside asylums to the Glasgow institutions has occurred during the year.

*Admission of Lunatics from Prison.*—Attention is again drawn to the large number of patients admitted to the Glasgow asylums at the instance of the Procurator Fiscal under Section 15 of the Act of 1862—59 of these cases were admitted during the year. This number is slightly less than that for the previous year, when 74 were admitted, but it is still sufficiently large to increase considerably the already large number of "Fiscal" cases under treatment. The restrictions necessarily imposed in connection with this class of patient react detrimentally on the ordinary patients treated alongside them. The ordinary patients resent the presence of the "Fiscal" cases in the same ward, and a greater strain is thrown on the staff owing to the fact that many of these patients are extremely dangerous. The need for the provision of a State institution for criminal lunatics is again emphasised. Until this provision is made no improvement can be looked for in the district asylums in this connection.

*Licensed Wards in Southern General Hospital.*—The 389 beds provided in these wards continued to be used to their full capacity during the year. The accommodation set aside for the treatment of intercurrent illness and infirmity amongst the patients, most of whom are of the ambulatory type, has proved satisfactory and is extremely useful, as it obviates the transfer of such cases to the hospital wards of the asylums, which are already taxed to their full capacity.

*Research.*—Research in connection with the causation and treatment of mental disease continues to be carried out in all the mental institutions in collaboration with the Director of the West of Scotland Neuro-Psychiatric Research Institute.

*Dental Services.*—Mr. Kyd, the dental surgeon to the mental institutions, carried out the following treatment during the year:—1,809 patients were examined, including 7 who refused treatment; 2,238 extractions; 64 fillings; 3 root treatments; 13 dressings; 35 sealings; 160 dentures supplied; 5 dentures remodelled; and 140 dentures repaired. The general health of the patients has improved as the result of the care and attention given to their mouths and teeth. Some diffi-

culty is being experienced by dentists in obtaining material for dentures, but, so far as the mental institutions are concerned, sufficient material is in hand to meet their requirements for some considerable time to come.

#### CERTIFIED INSTITUTIONS FOR MENTAL DEFECTIVES.

*Lennox Castle.*—The number of certified defectives in this institution at the end of the year was 1,136, an increase of 11 as compared with the previous year; 70 patients were admitted, 36 were discharged, and 23 died during the year. Of the admissions 35 came from their own homes, 13 from other certified institutions, 19 from other hospitals and institutions, and 3 from Barlinnie Prison; 25 patients were discharged to the care of friends, 10 on expiry of certificate, and one was transferred to another certified institution.

The state of overcrowding, particularly in the huts which were substituted for the villas taken over by the Government for use as an emergency hospital, is still well marked and increases considerably the difficulties of administration. The lack of day room accommodation tends to produce in the patients a state of restlessness and unsettlement which is difficult to overcome.

In his report for the year 1940 Dr. Curran, the Medical Superintendent, drew attention to the difficulties in dealing with the cases admitted under Section 9 of the Mental Deficiency and Lunacy (Scotland) Act of 1913. He again draws attention to the anxiety caused to the nursing and administrative staffs by the continued admission of cases of this type who can be treated properly only in a State institution and whose continued detention amongst ordinary defectives is attended with considerable danger and risk.

As in other mental institutions, difficulty has been experienced in maintaining an adequate staff, particularly in the female division.

*Caldwell House Certified Institution.*—On the 31st December, 1941, the number of patients was 124 (79 males and 45 females), an increase of three over the corresponding figure for last year. Nineteen patients were admitted, of whom one girl was from another hospital and one boy from a remand home. All the others came from their own homes. Eight patients were transferred to Lennox Castle on attaining the age of sixteen years, two were transferred to St. Charles' Certified Institution, and three were discharged to the care of their parents. Three children died.

During Christmas week the children entertained their parents and friends by performing the operetta "Little Cinderella." Great credit is due to the matron and her staff for their untiring patience and sympathy in brightening the lives of these low grade uneducable children.

#### MENTAL OBSERVATION WARDS.

During the year the number of admissions to the mental observation wards in the general hospitals was 1,508, and the total number of cases treated 1,888. Reference has already been made to the accommodation utilised in the Gartloch Emergency Hospital to relieve the pressure in the observation wards, and consequently there falls to be added to the above figures the number of cases admitted to Gartloch Psychiatric Unit, which was composed of 19 males and 136 females. The corrected total of admissions should therefore be 1,663, and of cases treated 2,043. These figures compare with 1,656 and 2,017 respectively for the previous year.

Of the 2,043 treated, 978 (48 per cent.) were sufficiently recovered to be sent home or, where they had no home, to an institution under the Welfare Department; 352 patients (17 per cent.) died, the majority of whom were old people admitted suffering from senile dementia; 247 patients (12 per cent.) were certified and transferred to asylums or certified institutions for further treatment.

Good results continue to be obtained from modern methods of treatment such as the use of Cardiazol and other allied convulsants in the treatment of Schizophrenia and certain states of depression. Dr. Arthur Briggs, Medical Superintendent of Southern General Hospital, in his report states in this connection: "The beneficial effects of this therapy in the treatment of the emotional mental disorders is now firmly established. Several conditions which were formerly considered to be a bar to shock treatment have since been found to involve very little risk. A consideration of the patient's age, for example, is not now regarded as so important, and elderly patients and children have been successfully treated with induced convulsions. In this field, however, there is accumulating evidence from various sources that convulsion induced by electricity is equally satisfactory and more readily controlled." It may be noted here that since the date of Dr. Briggs' report an electrical convulsant therapy apparatus has been installed at the Southern General Hospital and is being used with good results in the treatment of many cases.

In last year's report reference was made to a patient who had recovered from general paralysis after treatment by malaria and who at the time of the report was the chief officer on a merchant ship. It is of interest to record that he has paid several visits to this department while on leave during the past year. He retains excellent health and is quite fit to perform the onerous duties devolving on the chief officer of a large merchant ship even in these strenuous and anxious times.

Good work continues to be done at the Psychiatric Clinics at Cochrane Street and at the out-patient department of the Southern General Hospital. At the latter Dr. Briggs reports that the activities of the Social Sister have been fully maintained and are most helpful in the successful functioning of this unit of the hospital. The establishment of a similar service in connection with the Psychiatric Unit at Stobhill Hospital would greatly assist in the efficient treatment of the patients there.

For the duration of the war it has been decided to discontinue the publication of several of the statistical tables relating to the mental hospitals and of individual hospitals' reports, but in the following tables will be found the more important details of the admissions, discharges, and deaths for the year 1941.

SHOWING NUMBERS ADMITTED TO GLASGOW MENTAL HOSPITALS AND  
THE CHANNELS THROUGH WHICH THEY WERE ADMITTED  
DURING THE YEAR 1941.

	Hawkhead.		Woodilee.		Stoneyetts.	
	M.	F.	M.	F.	M.	F.
Observation Wards ... ..	36	38	31	60	8	17
Home, Police Stations, Infirmary, etc. ... ..	11	7	10	4	—	1
Transferred from other Asylums or Certified Institutions ...	4	3	2	1	—	1
H.M. Prisons ... ..	24	4	22	9	—	—
Totals ... ..	75	52	65	74	8	19
	—	—	—	—	—	—

## MENTAL OBSERVATION WARDS.

	Stobhill.			Eastern District.			Southern General Hospital.			Total.		
	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
Remaining at 31st December, 1940	89	126	215	28	31	59	77	29	106	194	186	380
Admitted during 1941	471	399	870	78	67	145	338	155	493	887	621	1508
Number Treated	560	525	1085	106	98	204	415	184	599	1081	807	1888
Number discharged Home or transferred to Poorhouse	280	250	530	40	34	74	222	86	308	542	370	912
Number Died	117	94	211	27	14	41	68	11	79	212	119	331
Number Removed to Asylum	49	60	109	14	20	34	42	59	101	105	139	244
Number remaining as at 31st December, 1941	114	121	235	25	30	55	83	28	111	222	179	401

ADMISSIONS, DISCHARGES, AND DEATHS IN THE MENTAL HOSPITALS DURING 1941.

	Woodilee.			Hawkhead.			Stoneyetts.			Totals.		
	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
On Register at 31st December, 1940	689	631	1320	696	564	1260	133	122	255	1518	1317	2835
Number of Cases admitted during the year ... ..	65	74	139	75	52	127	8	19	27	148	145	293
Total Cases under care during the year ... ..	754	705	1459	771	616	1387	141	141	282	1666	1462	3128
Cases discharged and died during the year—Recovered ... ..	14	6	20	31	19	50	2	4	6	47	29	76
Not Recovered ... ..	14	13	27	2	—	2	—	2	2	16	15	31
Died ... ..	40	55	95	34	23	57	3	11	14	77	89	166
Transferred to other Institutions in Scotland and boarded out in private dwellings ... ..	6	2	8	8	6	14	—	—	—	14	8	22
Total Cases discharged and died during the year ... ..	74	76	150	75	48	123	5	17	22	154	141	295
Total Cases on Register at 31st Dec., 1941 ... ..	680	629	1309	696	568	1264	136	124	260	1512	1321	2833



