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Annual Report

OF THE

Public Health Department

OF THE

City of Dundee

FOR THE YEAR 1946

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MEDICAL OFFICER OF HEALTH

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CITY OF DUNDEE

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR ENDING DECEMBER, 1946

DUNDEE :
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Annual Report — 1946

The Lord Provost, Magistrates and
Town Councillors of the City of Dundee.

LADIES AND GENTLEMEN,

I submit herewith report on the work of the Public Health Department during the year 1946. So far as can be judged by statistics the year was quite a healthy one and some records were created. The most satisfactory of these are the infantile mortality rate, which fell to 47 per 1,000, and the maternal mortality rate, which was 2.0 per 1,000. The previous lowest figures were 57 and 3.47 respectively.

This introduction draws attention to some of the more outstanding matters. Fuller information is contained in the reports of the various medical officers which are included in this volume.

Births and their Management.

The marked rise in the birth-rate made heavy demands on the maternity services—voluntary, private and municipal—in the City, and also on the infant welfare services. Almost 80% of the 4,633 live and still-births (live, 4,471; still-births, 162) which occurred in Dundee were conducted in hospitals and nursing homes. By pooling their resources, the Royal Infirmary and Maryfield Hospital ensured that full use was made of the available beds in these Institutions. In the maternity wards of the Royal Infirmary there were 1,648 births, while 992 took place in the maternity wards at Maryfield Hospital. Clement Park Maternity Home had 493 confinements, and private nursing homes 470. For reasons of infection, one confinement took place at King's Cross Hospital. Of the 929 domiciliary births (live and still-births), 411 were conducted by the district staff of the Royal Infirmary. Private doctors or midwives or both took charge of 515, three being unattended.

These figures represent the births which actually occurred in Dundee. Many of the confinements were of women who do not normally reside in the City, because, except for Maryfield Hospital, the residential maternity accommodation is available to patients normally residing elsewhere. Thus, of the total of 4,463 confinements, 4,077 were Dundee cases (3,941 of the 4,471 live births and 136 of the 162 still-births).

The question arises as to whether the resources are sufficient to meet the needs. Assuming that the demand continues on the 1946 level, the answer is definitely in the negative. During the present year (1947), the high birth-rate has continued, and there is great difficulty in finding indoor accommodation for all those who desire it. The position is aggravated by staff difficulties. Instead of increasing the average period of stay in hospital, it has had to be reduced, and wards have had to be overworked for long periods. Provided the birth-rate falls to something like pre-war level, and provided there is sufficient number of midwives, the indoor accommodation position should be very much eased especially if improved housing conditions and an adequate supply of domiciliary midwives and home helps lead to a greater number of women deciding to be confined at home. Even so, the number of maternity beds in the City would not be up to that recommended by the Sub-Committee of the Scientific Advisory Committee in their report on Infant Mortality in Scotland. With the opening of the second maternity unit in Maryfield Hospital, it was hoped that a proportion of beds would be available for antenatal cases, and it was also hoped that it would be possible to provide special accommodation for premature infants born in the hospital or elsewhere. These proposals have had to be adjusted to meet urgent demands. Under the new Health Service, Dundee institutions will no doubt serve a wider area, and it will fall to the new Regional Hospital Board to review the whole position.

The absence of an organised domiciliary midwifery service may be responsible to a small extent for the demand on hospital beds. This matter has been the subject of report on several occasions, and it is unlikely that an adequate domiciliary service will be established before the appointed day in terms of the National Health Service (Scotland) Act, 1947. Even then, the short supply of midwives will present difficulties. Meantime, consideration is

being given to the possibility of a district maternity service being conducted from Maryfield Hospital on lines similar to the service which has operated so successfully for many years from the Royal Infirmary. Such a service would have many advantages, not the least of which would be the increase in the facilities for training midwives.

With the help of health visitors, a Joint Committee of the Royal College of Obstetricians and Gynæcologists and of the Population Investigation Committee carried out a questionnaire enquiry into the social and economic aspects of child-bearing in England, Wales and Scotland. Dundee participated in the enquiry, so that the following selection from the provisional conclusions, based on the whole survey, and recorded in a preliminary report, is of local as well as of general interest:—

> " The costs of child-bearing are high. For legitimate first births they average £40, and for legitimate subsequent births, £27. Working-class mothers spend considerably less than the better-off, but, in spite of this, it is likely that, when expressed as a proportion of the family incomes, the heavier burden of expenditure is borne by the poorer mothers.
>
> " In all occupational groups, considerably more is spent on baby clothes and equipment than on medical and institutional fees, and it is clear that provision of free medical care will not greatly relieve the cost of child-bearing.
>
> " The general conclusions are that, in spite of the great improvements in the Maternity services that have taken place since the 1918 Maternity and Child Welfare Act, there is still great inequality in the care received by different social groups. In certain aspects, particularly post-natal care of the mother and the provision of analgesia, there is room for considerable improvements for all classes. The costs of child-bearing are so high that they are likely to deter many mothers, of all classes, from having children. It is not unlikely that, in many working-class families, this expenditure has to be met by borrowing or drawing upon savings. A substantial reduction in the costs of having a child is only likely to be achieved by lowering the price of baby clothes and equipment."

Deaths Associated with Childbearing and Childbirth including Infant Deaths.

Although working under pressure throughout the year, there is no evidence that the standard of midwifery in Dundee was adversely affected. Indeed, the death-rates which are believed to be dependent to a large extent on skilful management before, during and after childbirth were very satisfactory. The maternal mortality rate declined considerably, as also did that of infants under one year. The still-births rose slightly, but the combined still-birth rate and infant mortality rate showed an appreciable fall.

The Registrar-General records 8 deaths as being due directly to child-bearing or child-birth. This gives a rate of just under 2.0 per 1,000 live and still-births—a record low figure for the City. In 1945 the rate was 3.5 (then a record), and in 1939 it was 4.60. These figures support the opinion that an improved service providing the best of skill in suitable conditions will make pregnancy and child-birth reasonably safe for the mother. Four of the 8 deaths were due to sepsis, three of the 4 following abortion.

The still-birth rate rose from 30.8 per 1,000 live and still-births in 1945 to 33.65 in 1946, there being 136 still-births in the latter year. The high still-birth rate gives reason for concern, but too much importance need not be attached to last year's rise. It may be a matter of chance whether an infant dies immediately before or soon after birth, and last year there was a marked fall in the after-birth deaths of infants. This fall more than counterbalances the increase in the still-births. The certified causes of pre-natal deaths are usually indefinite, but difficult confinements and diseases associated with pregnancy were responsible for a large number. The maintenance of a high standard of health before and during the whole period of pregnancy and an adequate maternity service at all stages will certainly reduce the incidence of still-births.

The fall in the infantile death-rate to 47 per 1,000 live births from 57 in 1945—then a record—is a matter for satisfaction. The low incidence of infection among infants was mainly responsible for the low figure, and the reduced number of deaths was most obvious among infants at the later months of the first year. The death-rate during the first month (27 per 1,000 live births) was also a record, but the decline is not so marked at this age period. At ages under one week the rate was 20 per 1,000, which is slightly

higher than the 1944 figure (18). The deaths taking place so soon after birth must be considered as part of the problem created by child-bearing and child-birth. As usual, the infantile mortality rate was very high among illegitimate infants, and special attention was given to them by health visitors and by the medical officers of the Department. The social worker, shared by the Social Welfare and Public Health Departments, assisted many of the mothers of illegitimate children to solve the numerous problems with which they were confronted.

Unfortunately, the satisfactory infantile mortality rate during 1946 is not likely to be maintained in 1947. An outbreak of gastro-enteritis during the summer months of this year is taking its toll of the infant population.

Day Nurseries.

The day nurseries, of which there are now eleven, continue to look after children of mothers engaged in industry. Early this year, one of these nurseries at Flight's Lane, Lochee, was taken over by the Corporation from a voluntary body. As explained in the combined report for the years 1941-45, three of the war-time nurseries were transferred to the Education Department as nursery schools and one ceased to be used, the building having been returned to its pre-war occupants. The number of nursery places available in the City is far short of that required to meet the demands.

School Medical Services.

The findings of the medical officers engaged in the periodic inspection of school children are recorded in Dr Cuthbert's section of this report, which also contains a full description of the work of the school medical services during the school year ended July, 1946. There was still evidence to be found among the school children of the effects of war and post-war conditions. The state of nutrition and wellbeing as assessed by the school medical officers was not up to pre-war standard, the figures for "slightly defective" and "bad" being substantially the same as the average of the war years, and higher than that for the school year immediately preceding the war. The state of clothing and footwear among the children deteriorated during the year ended July, 1946, compared with the previous year. No doubt many factors contributed to this. The quality of material may not be so good as before the war, too many mothers are still engaged in industry, coupons may

be in short supply or at anyrate there may not have been simultaneous adequacy in the number of coupons and the amount of money necessary to purchase the garments of the right quality. The medical officers also record a decline in the standard of cleanliness. The percentage, especially of girls, showing evidence of dirt, nits or vermin in the head, is disappointingly high. Obviously that is the result of a decline in the standard of hygiene in the home, no doubt very often due to the fact that the mother is engaged in industry and has neither the time nor the energy to do two full-time jobs efficiently. Before the war it was difficult for a woman to work in industry and at the same time look after a family without reducing the standard of hygiene; now the difficulties of housekeeping make it impossible. Something must suffer, and too often the standard of hygiene is allowed to slip.

An investigation concerning the health of school children in Scotland during the school years 1944-45 and 1945-46 was carried out by the Sub-Committee on Nutrition of the Scientific Advisory Committee. Dundee shared in the investigation, Dr Cuthbert and his staff carrying out the special examination of a number of school children. The sub-committee's conclusions based on the examination of children residing in various areas in Scotland are of interest and it may be that they can be applied to Dundee. The following are two of the conclusions:—

> " While there is room for improvement, from the evidence given in this survey, it may be stated that generally the state of health of school children in 1944-45 was satisfactory and that it was maintained in 1945-46."

> " The state of wellbeing of school children is distinctly associated with maternal efficiency."

The second of these conclusions is of very great importance, and is relevant to the comments which have been made regarding the experience of the school medical officers on the cleanliness of school children and their clothing. In emphasising that the efficiency of the mother is clearly related to the wellbeing of the school entrants or leavers, boy or girl, the Sub-Committee point out that of good entrants, only 3.5% have mothers regarded as not

satisfactory, whereas among poor entrants, as many as 25 to 30% have inefficient mothers. The Sub-Committee point out that the contrast in this respect between good and poor leavers is equally striking—between 2.7% and 4.5% of the good children have unsatisfactory mothers, whereas the poor leavers have up to 30% unsatisfactory mothers.

Welfare Centres.

The position in regard to centres used by the maternity and infant welfare service and the school medical service is exactly as described in the report issued a year ago. The two additional centres have not been provided, and the situation of the existing centres remains unaltered. All the clinic premises, including the proposed new ones, are unsatisfactory, but nothing better can be got. Buildings should be specially designed for the purpose. While good amenities in clinics are important, the value of the work done cannot be measured by the nature of the premises. A record of the services concerned shows that a considerable volume of effective work is being done in small and inconvenient clinics. A matter which is rather urgent, and which will become more so when the new Health Service comes into operation, is the provision of a new principal centre, and especially the provision of quarters for the health visiting staff, whose duties will become much more comprehensive. It is presumed that the Public Health Institute, the best clinic premises in our possession, and the only clinic built for the purpose for which it is used, namely, the treatment of tuberculosis and of venereal disease, will go to the Regional Hospital Board with the Hosptals. That is unforunate, as it would have served as an excellent principal centre for maternity and infant welfare, school medical service, and health visitors' headquarters, etc. The Committee might consider the advisability of trying to retain the Public Health Institute in their possession and thus obviate the need for finding a new centre. It must be kept in mind that this building is used not only for the treatment of tuberculosis and venereal disease, but it houses certain activities which will continue to be carried out by the Local Authority's Health Department. These include an orthoptic clinic, the headquarters of the day nurseries organisation, the medical examination of employees of all departments in the Corporation, and the dispensing of medicines for various clinics.

Reports contained in this volume give detailed information of the work of the Maternity and Infant Welfare (Dr Fulton) and the

School Medical (Dr Cuthbert) Services throughout the year under review.

Epidemic Infectious Diseases.

Although there was an increase in the incidence of epidemic infectious diseases during 1946 compared with the preceding year, the figures were on the whole satisfactory, and there was no difficulty in providing hospital accommodation for all cases in need of it. Apart from tuberculosis there were 2,866 notifications and intimations (1,696 in 1945). The increase was mainly due to an epidemic of measles, but scarlet fever, whooping cough, chickenpox, dysentery and pneumonia (primary and influenzal) all showed higher figures.

The death-rate from the principal infectious diseases was .21 per 1,000. While higher than the 1945 figure (.05 per 1,000) which was a record, the rate is much lower than the average for the years 1941-45, viz., .35 per 1,000, and compares still more favourably with the average for the five years 1936-40 (.72 per 1,000). Of the 36 deaths, 20 were due to influenza, 10 to measles and 3 each to whooping cough and cerebro-spinal fever. Pneumonia deaths are not included in this rate.

Diphtheria had 269 notifications, but not all of these were confirmed. Practically every case was treated in King's Cross Hospital, and in only 70 was the diagnosis accepted. There were no deaths. The last Dundee death occurred in March, 1944. The immunisation campaign is being pursued vigorously, especially by the health visitors, and the available evidence suggests that over 90% of the under-five population are being inoculated either before or immediately after entering school. Of the children who began school for the first time during the year ended July, 1947, 84.3% had a history of previous immunisation and 9.2 % were immunised on entering, making a total of 93.5%. Probably most of these had been protected before or soon after their first birthday. At any rate during 1946, at least 76% of infants at ages under one year were immunised before the end of their first year or very early in their second year of life. Only 16% of the 1946-47 school entrants refused to have the maintenance dose. All the others either agreed, or, having been very recently immunised, did not require it.

Influenza and primary pneumonia increased in prevalence during the first quarter of the year, the former mainly affecting

adults while the latter was particularly hard on infants. Influenza was the certified cause of 20 deaths compared with 3 in 1945, and 119 deaths were certified as due to pneumonia, 49 of these being of infants less than one year old.

Measles reached epidemic proportions, information about 1,671 cases having been received by the Department. There were 10 deaths. The epidemic began in September, and 1,547 intimations were made during the last quarter of the year. The epidemic continued during the early months of the present year and ended in March. While the disease was fairly widespread, the damage done as measured by deaths was not by any means severe compared to the majority of epidemics in the past. Probably because the children of to-day are very much better nourished, the percentage of serious complications was comparatively smaller. The case mortality was .67% for all known cases during 1946, and 2.4% for cases treated in hospital. It was possible to meet all demands for hospital accommodation.

Details of the incidence of the various infections are contained in the numerous Tables on Pages **31 to 55** and Dr Jamieson, in his report on King's Cross Hospital, gives some interesting information regarding the clinical findings at that Institution during the year 1946.

Tuberculosis.

It was hoped that the war being over the incidence of and the death-rate from tuberculosis would steadily decline until it had reached the level of the rates for 1939. Unfortunately the decline has not taken place as quickly as one would have wished. The death-rate from all forms of the disease was .87 per 1000 population in 1946. The corresponding rate for 1945 was .86, and for 1939 .74.

In many respects the conditions which in the war years were believed to be responsible for swelling the tuberculosis figures still exist. Indeed, certain of these conditions may be present in more severe form. The standard of housing, for example, has not improved, and housing is one of the most important factors in the control of tuberculosis. Overcrowding is as bad as ever. The available food supply and the amount permitted per person have certainly not improved since the war ended, so that we must assume

that whatever effect malnutrition had in producing the high war-time rates is still operating. Industry is still absorbing a large section of the population including married women. The number of beds available in institutions for cases of tuberculosis has not increased, but tends to shrink because of the difficulty of getting nurses.

The only satisfactory trend in the various tuberculosis rates is the decline in the number of notifications of non-pulmonary tuberculosis and in the notification rate to a record low level. This may be, and probably is, an indication of an improvement in the safety of the milk supply. The disease in bone, joints and glands shows the most marked reduction. The non-pulmonary tuberculosis death-rate has not yet quite returned to the pre-war level, but it is tending that way.

Details of the work carried out in the tuberculosis section of the Public Health Institute and at Ashludie Sanatorium are contained in the sections of this report by Dr Hunter and Dr Smith. Apart from the correction of the numerous environmental conditions the important preventive measures are:—(a) Early diagnosis; and (b) early treatment. It is very obvious that these preventive measures are not yet effective. Dr Smith records in his pulmonary tuberculosis admission figures that of the 145 patients admitted to Ashludie Sanatorium in 1946, 86 were in an advanced stage of the disease, and 19 were moderately advanced; only 17 could be described as early and 16 as moderately early. So long as these proportions continue, we cannot expect to make much progress. Late diagnosis means not only late and therefore less effective treatment, but means also that centres of infection are permitted to develop and multiply in the community exposing contacts at home, at work and in public places to infection. Too many of these contacts become in their turn sources of infection.

The proposals for setting up a mass radiography unit in Dundee were mentioned in my last annual report. These had been the subject of special reports approved of by the Council. The bulk of the equipment has been delivered and is stored in the Public Health Institute waiting until the necessary structural alterations have been carried out. There may be difficulty in securing the necessary staff, and this may be responsible for further delay. Even assuming that the equipment is functioning and the personnel available,

the public, especially those sections of the population in which the disease is most likely to be found, namely, contacts of known cases and young adults, must be trained to make use of the unit. It will take some time for people to become accustomed to the idea and therefore for anything like full results to be obtained.

Early treatment is only possible if early diagnosis is made and the patients are prepared to undergo treatment. Wide use of mass radiography is expected to introduce difficulties by increasing the number of patients requiring treatment, but I have no doubt that institutional accommodation will be found for all cases requiring it provided enough nurses are found. Treatment resources at Ashludie Sanatorium have increased recently by the setting up of an orthopædic scheme for the Eastern Region. I. S. Smillie, Esq., F.R.C.S., took up duty in September, 1946, and has charge of bone and joint cases of tuberculosis in Ashludie and in any of the Public Health Department Hospitals where such cases are under treatment. More recently, an arrangement has been approved by the Council under which Bruce Dick, Esq., F.R.C.S., undertakes all the chest surgery required by patients in Ashludie. It is likely that Angus County will join with Dundee in this arrangement so that patients from the County Sanatorium at Noranside requiring chest surgery will be transferred to Ashludie. This is a development of the regional idea and is a step towards the sort of layout which is likely to be favoured by the Regional Hospitals Board.

Venereal Diseases.

The figures contained in Dr Keay's section of this report show a definite increase in the attendance of new patients during the year 1946. The total of males and females appearing at the treatment centres in the Public Health Institute for the first time was 2,400—a figure which exceeds that for any year since the scheme came into operation. Of the total, 1,149 proved not to be suffering from any form of venereal disease, but presumably they had been exposed to infection. Some 336 were diagnosed as cases of non-specific infection, 300 as cases of syphilis and 615 as cases of gonorrhœa. The rise in the all-in figure is due mainly to an increase in the number of cases of gonorrhœa and of non-specific venereal infection in men. It is not possible to say whether these figures can be interpreted as meaning that there is an increased incidence of venereal disease. It may be that better use is being made of the treatment facilities. Certainly the fact that 1,149 patients out of a total of 2,400 attending for the first time proved not to be suffering from venereal disease shows a realisation of the danger of contact with infection.

As in all diseases, diagnosis at as early a stage as possible is essential if rapid and complete success is to follow treatment. From the Dundee figures it would seem that men submit themselves to treatment much earlier than women. Thus, at the first visit 93% of male gonorrhœa patients were at the " early stage and without complications," whereas only 65% of the women are so described. Similarly, 61% of the new syphilis cases in men were in the primary stage, but only 14% of the new female syphilis cases came for treatment before the disease had entered the secondary stage. It would seem necessary to take some special action to ensure that women victims of these infections begin treatment at a much earlier stage.

Under Defence Regulation 33B, only one double notice of a possible source of infection was received during the year. Informal action resulted in securing the attendance of the individual in whom the diagnosis was confirmed and treatment begun. Single notices were received in respect of 70 persons, 34 females and 36 males, and of these 62 responded to an informal approach. The others were not traced.

Dr Keay includes in his report a useful assessment based on his experience of the value of penicillin in the control of the venereal infections.

Dental Services.

The dental service of the Department is centred on the school medical service, but, as explained in the last annual report, it provides for the dental needs not only of the day schools, but also of the municipal hospitals, ante-natal clinics, day nurseries, nursery schools, infants and children, the Trades School and the Pre-Nursing School. The field is somewhat extensive for the staff available, namely, five dental surgeons and five dental attendants. An increase in staff and additional surgery accommodation is required if the work is to be efficiently done. As is well known, dental surgeons are in short supply, and the new Health Service intends to make the best use of those available by giving priority to expectant mothers and to young people through the local authorities' maternity and child welfare service and school medical service. The special importance of dental treatment in those sections of the population is thus officially recognised, and every effort must be made to ensure that the service is as complete as possible. The raising of the school age to 15 early this year means that some 2,000 additional Dundee children will have to receive

the attention of the dental staff each year. The Senior Dental Officer emphasises that 14 to 15 years is one of the most important ages from his point of view, and that more assistance is necessary if serious slowing up of the work is to be avoided.

The effects of steady improvement in the dental service are described by Mr Finlayson, the Senior Dental Officer, in his section of this report. He points out that among school children, 57% of those examined during the school year ended July, 1946, did not require dental treatment. The corresponding figure for 1941-42 was 29.8%. Emergency treatment showed a steady decline from 2,112 in 1941-42 to 771 in 1945-46. This decline is probably due partly to better nutrition and partly to the more frequent dental inspections followed by treatment. Unfortunately, treatment is too often declined by the parents. If it was accepted for every child emergency cases would disappear, and the percentage found to require treatment at subsequent examinations would steadily fall.

The dental surgeons emphasise the low standard of oral hygiene. The findings are better than in the early war years, but there is still a long way to go.

Health Visitors.

Under the new National Health Service, the duties of the health visitor will be more comprehensive. According to the Act, the Local Authority must appoint health visitors " . . . . for the purpose of giving advice as to the care of young children, persons suffering from illness and expectant or nursing mothers, and as to the measures necessary to promote health and to prevent the spread of infection."

This development is of very great importance, and it is to be hoped that a sufficient number of health visitors will become available in order to increase the staff to the extent necessary to carry out the duties in an efficient manner. The Corporation of Dundee has for many years supported the idea that the health visitor should be responsible for the whole family. The following extract of a report submitted to and approved of by the Public Health Committee in 1934 describes the views held in Dundee at that time:—

> " The staffs of health visitors should be increased so that each member will have charge of a district small enough to enable her to establish adequate contact with each household.

She must be responsible for the whole household, and not for one member who may happen to be suffering from a particular disease or is of a particular age or who is known to have been in contact with an infectious disease, etc. The family health problem cannot be dealt with in a fragmentary fashion. The same argument may be used in support of the "family" doctor. An attempt has been made in Dundee since the passing of the Local Government (Scotland) Act, 1929, to improve the health visitors' work by combining the former child welfare nurses, school nurses, tuberculosis nurses and venereal diseases nurses into one central staff of health visitors. A few of these are engaged entirely in clinic work, but the majority are employed mainly in the district with a certain amount of school and clinic work. The health visitor working in the district is responsible for everything in her district, and she is encouraged to regard the family and not the individual as the unit. While her duties are mainly connected with the services for which the Council are responsible, namely, maternity, child welfare, school children, tuberculosis, venereal disease, and the ordinary infectious diseases, the health visitor is advised to concern herself with all questions of health and disease which may arise in a family under her charge, although these may not be directly connected with the services mentioned. The district allotted to each health visitor is, however, too large to carry out with complete efficiency the purpose in view. Close contact has not yet been established between the health visitor and the general medical practitioner, who, indeed, does not fully understand the functions of this comparatively new official. This contact is essential to progress and is just as important as that between the doctor and nurse or between doctor and midwife, when circumstances demand the services of one or other of these partnerships."

If the service in its new form is to be effective then any one health visitor should not have too many families to look after. The district should not be too big and must be much smaller than the average district in Dundee at present. The health visitor who has to rush from house to house in order to pay the necessary visits for report or record purposes cannot do good work. Quality of work in the district or in clinics can never be measured by the number of visits or number of attendances.

The health visitor must make many contacts. The important one is, of course, with the family, and if the health visitor is of

the right type there will be no difficulty about that. She will always be welcome. A working arrangement must be made with the family doctor. It is hoped that there will only be one doctor for each family, but of course there may be more than one. The family doctor must appreciate the functions of the health visitor and co-operate with her in looking after the family in health as well as in disease. Another contact of great importance is that with those who might be described as specialist health visitors or social workers. These include hospital social workers (or almoners), industrial welfare workers, child guidance social workers, orthopædic sisters, etc. The number of these specialists is increasing every year, and there is danger of families being worried by a multitude of visitors. This can be prevented by drafting a satisfactory working arrangement so that there will be no multiple visiting, no duplication and no overlapping. There is a place for all these workers—the important matter is to be sure that each one knows that place.

The new health visitor service can do great things, but it must have a good start. Consultations will be necessary before the change takes place, and from time to time thereafter with the Dundee Executive Council, the Regional Hospital Board and other authorities, including industries employing social workers of any sort.

Home Help Service.

Although the need for the assistance of home helps would appear to be very great in Dundee, there is very little demand for the service. In the year 1945, when the scheme began, there were 13 applications — 2 under the maternity service and 11 under the general scheme. In 1946 there were 7 applications (2 maternity, 5 general), and up to date this year there have been 5 applications (1 maternity, 4 general). In all these cases the circumstances were inquired into, and if the applicant was eligible a home help was provided.

Consideration was given during the year to the necessity of employing a paid organiser. The Public Health Committee were quite willing, but the Department of Health for Scotland decided that so long as the demand for the home help service in Dundee remained negligible, the proposal to appoint a whole-time organiser should not be proceeded with. The Council will very soon have to consider whether or not they intend to establish such a service under the National Health Service (Scotland) Act, 1947.

Should they decide to do so it will be necessary to employ a whole-time paid organiser if the scheme is to be of real use to the community. For a time one home help was kept on the staff on a whole-time basis, but she had to be employed on odd jobs because her services were not in sufficient demand. We have now the names of four women on the list whose services are available on call. The feeling is that we could secure a sufficient number of home helps if they are required.

Orthopaedic Service.

An outline of the progress made in setting up an orthopædic service in this Region was given in the last annual report. Since Mr Smillie took up duty in September, 1946, the Dundee out-patient clinics have been held twice monthly as formerly. The main development is that Mr Smillie's services are now available to cases of bone and joint tuberculosis under treatment in Ashludie Sanatorium, King's Cross Hospital and Maryfield Hospital.

There has been some delay in working out a complete scheme for the whole area. The work is hampered by difficulty in securing physiotherapists and orthopædic sisters, but it is important that the details of this scheme should be known to all concerned and especially to the local authorities who have special responsibilities for the health of the sections of the population likely to benefit most from a complete orthopædic service.

The number of hospital beds available to patients in this region should steadily increase as the orthopædic section of Bridge of Earn Hospital develops. We have always a waiting list of about 30 Dundee cases, but urgent cases are admitted without delay.

The facilities at Kemback Street are used to the full, nearly 9,000 treatments having been given during the school year to patients for whom this Department is responsible.

The scheme has had a good start. No doubt it will develop more speedily when personnel, premises and equipment are more easily obtainable.

Hospitals.

Reference should be made to the appropriate sections of this report on the work done in the four principal hospitals under the control of the Council.

It was impossible to secure sufficient nursing staff, especially at the Mental Hospital and at Ashludie Sanatorium. Recently the position has been eased at the Mental Hospital by providing a

shooting brake, which is used to transport part-time nurses between their homes and the Hospital. This can only be a temporary expedient enabling Dr Bell to keep things going until an answer is found to the general nursing question.

At Ashludie Sanatorium the appointment of male orderlies ensured the full use of the bed complement, but male patients are occupying more than their share, with the result that while there is virtually no waiting list for male patients, there is a long waiting list for female patients. The General Nursing Council has approved of affiliation with Maryfield Hospital—an arrangement which may help to a very small extent. That, however, is not a final solution; something more drastic is required.

Maryfield Hospital and King's Cross Hospital have managed fairly well, the former by employing male orderlies and, to some extent, part-time nurses. King's Cross Hospital had very little difficulty as, owing to the low incidence of epidemic disease, the Institution was very quiet throughout the whole year.

These four Hospitals, along with the treatment of cases of tuberculosis and venereal disease in dispensaries and treatment centres (but not the control of these and other infectious diseases) will be transferred to the Eastern Regional Hospital Board on the appointed day, so that the present is likely to be the last complete year during which the Council will be responsible for their maintenance. They require many improvements and extensions, and many of these would have been carried out had it been possible. The Council have from time to time considered and approved of many proposals for new buildings and alterations at all the Hospitals, but war and post-war difficulties have interfered with progress. Even so, it was possible to complete certain works at Maryfield Hospital which had been begun before the war.

By the interchange of patients between the Hospitals (including the Royal Infirmary) and to some extent of staff, it was possible to make better use of the available resources. For example, Dr Bell sends from the Mental Hospital to Maryfield Hospital all patients requiring operation. In his report, he gives a very informative account of the results of the operation of leucotomy which has been carried out on his behalf by Mr F. R. Brown, F.R.C.S., at Maryfield Hospital. The patients are taken to Maryfield Hospital and returned immediately after the operation to the Mental Hospital so that they can receive the sort of after-care which only he and his

skilled staff can give. King's Cross Hospital has relieved Ashludie Sanatorium to some extent by admitting a considerable number of patients suffering from tuberculosis. This was possible because, as stated above, the incidence of epidemic disease was very low throughout the year. Sidlaw Sanatorium had to close through the lack of staff in September, 1946, and the Dundee patients who were under treatment there were transferred to King's Cross Hospital because Ashludie had not sufficient accommodation. There is a continual interchange of patients between the Royal Infirmary and Maryfield Hospital, and the latter Hospital was frequently able to assist the Royal Infirmary, especially in connection with maternity cases. Similarly, there is an interchange of patients between Ashludie Sanatorium and Noranside Sanatorium, patients from the latter institution requiring operative treatment for chest conditions being transferred to the former where the necessary facilities and skill are available. Ashludie Sanatorium is steadily developing into a chest hospital as is recommended in the Hospital Survey for the Eastern Region. Patients suffering from pleurisy are frequently sent from Dundee to Bridge of Earn Hospital, and orthopædic cases, including bone and joint tuberculosis, go to Bridge of Earn and Stracathro Hospitals where there are orthopædic units specially staffed and equipped. King's Cross Hospital provides accommodation for cases of puerperal fever and puerperal pyrexia for practically the whole of the Eastern Region. From time to time patients are sent from Dundee to hospitals in the West of Scotland, Edinburgh and Aberdeen, and recently one patient was sent by aeroplane to hospital in Oxford for special treatment which could not be obtained nearer home. The venereal diseases treatment centres in the Public Health Institute cater not only for Dundee but also for neighbouring areas, and the resources of the Tuberculosis Dispensary in Dundee are also available to certain patients who reside beyond the City boundary. The Royal Infirmary has, of course, always welcomed patients no matter where they reside and has always been, in effect, a regional Institution. In the matter of nursing the student nurses at King's Cross Hospital are transferred to Ashludie Sanatorium for short periods in order to widen their training. This arrangement has the effect also of easing the nursing position at the latter institution. As a result of the affiliation arrangement approved of by the General Nursing Council, nurses at Ashludie Sanatorium may in future be transferred to Maryfield Hospital in order to complete their general training. These examples illustrate the sort of co-operation existing at the moment

between the various Hospitals in this part of the country. The arrangements will, no doubt, be varied and enlarged by the Regional Hospitals Board to provide a complete and unified hospital service.

Blind Persons.

During the year ten sessions of the Regional Clinic were held. Fifty-three persons were examined, and of these 36 were certified "blind" and 17 "not blind." Nine of the persons examined belonged to the County of Angus, 4 to Perth County, and the remaining 40 to Dundee.

In addition, 24 domiciliary visits were made to persons who were physically unfit to attend the Regional Clinic—7 of these visits were to County Angus, 4 to Perth, and 13 were local.

The total number of blind persons on the roll is 491, and of these 320 are in receipt of domiciliary assistance. The present scales of assistance are shown under Table No. 33. The general welfare work in connection with the Blind has been carried out in close co-operation with the Dundee Mission to the Outdoor Blind, to whom the Local Authority pay a capitation sum of £2 per annum for every certified blind person on the Roll.

During the year there were 54 trained blind persons (41 males and 13 females) and 9 trainees (5 males and 4 females) in employment at the Royal Dundee Institution for the Blind. The Local Authority pay a capitation sum of £100 in respect of the trained blind, and reimburse the Institution for wages paid to trainees. The capitation fee is at present the subject of negotiation with a view to reduction.

The rate of wages payable now to trained male blind persons is 94s 6d per week, and to trained female blind persons 67s 3d per week.

Trainees, both male and female, are paid a wage during their first year of training of 50% of the amount paid to trained male blind persons, and for each subsequent year of training, males are paid an additional sum of 5s per week and females 1s 6d per week.

Health Education

The Public Health Committee are at present considering a special report dealing with the advisability of establishing a health education unit as a section of the Public Health Department. Preferably such a unit should serve an area larger than Dundee, and it is likely that neighbouring authorities will be consulted on the subject. Health education must take a more prominent part in the

health programme of the future, and the work of the Scottish Council for Health Education would be much more easily carried out if there were local organisations covering the whole country.

There is evidence that the standard of hygiene did not rise but that it probably declined during the war and post-war years. It seems obvious at any rate that a greater sense of responsibility must be developed not only in the general population but in a special way among those people who are engaged in any occupation which involves contact, directly or indirectly, with food at any stage in its production, preparation or distribution. The public must be informed of the dangers and how they can be avoided. Food handlers require special courses of instruction, mainly by demonstration so that they may realise how even the slightest lack of care may have serious results. Communal feeding on a large scale is likely to continue in this country, and food rationing and home difficulties have led to an increasing number of people taking their meals out. Canteens and the school meals service cater for large numbers. Such mass feeding calls for the highest hygienic standards in the communal kitchen if food infections are to be prevented. During the war there has been a steady increase in the number of food poisoning outbreaks in the country, and it is likely that this increase is in some measure associated with the increase in communal feeding. Dysentery and non-specific enteritis cases are much more frequent. The vehicles of infection are mainly the hands of those engaged in cooking the food or handling the food containers. Many kinds of food thus infected especially if kept for some time under unsatisfactory conditions provide excellent media for the growth of bacteria. Experiments have shown that organisms capable of producing disease can be recovered from a large proportion of cutlery and food utensils immediately after they have been washed. Such organisms have also been recovered from many samples of waters used for washing dishes. Obviously the methods employed are too often inadequate. The cutlery and dishes may be washed, but they are not by any means rendered sterile. There is, therefore, definite need for a special educational campaign among all those handling food. The Scottish Council for Health Education would, I am quite sure, undertake such a campaign, which, to be effective, would consist mainly of demonstrations. Well qualified lecturers and demonstrators would have to be employed, and the arrangements would have to be carried out in consultation with representatives of the food handlers themselves.

Reference has been made elsewhere in this report to the fact that the standard of cleanliness in certain school children had tended to decline during 1946. That seems to call for some action of an educational sort among parents, particularly mothers, although one must keep in mind other factors contributing to the unsatisfactory state of affairs, for example, inadequate amenities in the houses, insufficient houses and the industrial employment of mothers.

In addition to the education of the public in regard to a more hygienic way of life, it is important that the people should know of the facilities that are provided by the various health authorities. One might mention in this connection mass radiography. If there is a mass radiography unit in an area (Dundee's unit is now being set up), the public should be told about it. It is easy to imagine that the organised instruction of the public regarding the menace of tuberculosis and the importance of its early recognition would make the work of the mass radiography unit organiser very much easier. In the same way, the public must be informed of the dangers of venereal diseases, the importance of avoiding infection, and the necessity for skilled attention immediately after exposure, and, should a venereal infection be contracted, of skilled treatment continuing until a certificate of cure and freedom from infection is issued. That the public want to know about such matters was evident from the large attendance and the numerous questions asked at the public meeting held in the King's Theatre last April. That meeting was an illustration of the excellent organising skill of the Scottish Council for Health Education.

These and many other matters could usefully find a place in any health education programme, but the most prominent place must be given to cleanliness — personal, clothing, house, food, work-place, street, etc.

Housing and Sanitation.

The figures in the various tables and the comments contained in the report of the Chief Sanitary Inspector give a fairly clear picture of the work done during the year in connection with housing and sanitation. While considerable progress has been made in providing new houses, there is much to be done, and the prospects for the future are not too bright. One is very apprehensive as to the effect of existing housing conditions on the health of the people. As is well known, many families have not got houses of their own and are living with relatives or in lodgings or in sub-let rooms. Too many others are occupying houses which are definitely unfit for

human habitation, according to any reasonable standard. The solution is, of course, the supply of an adequate number of new houses, but as this cannot be done at the rate required, one feels that some attention will require to be given now to the multitude of existing occupied houses that are below even a low standard of fitness. One must leave aside meantime houses that are adequate from the fitness point of view, but which may not have all the amenities of a modern house. It looks as if many families who are sharing a sanitary convenience with other families may have to do so for many years to come. There is an unfortunate tendency not to do anything about such insanitary conditions because the houses concerned are in clearance areas. That may have been a sound enough argument before the war, when there was a prospect of fairly early action, but clearance areas nowadays mean nothing. In all probability a generation will pass before any area, scheduled as such, can be cleared. Each family should have a separate sanitary convenience inside the house, and if there is a likelihood of any house being occupied for some time, it should be so provided. Similarly, every house should have an inside supply of water with facilities for the removal of waste water. The work of rectifying these insanitary conditions may be slow, but it should be carried out as fast as circumstances permit. It seems desirable that a survey of the City should be carried out, and records made showing the houses which can be "improved" in the sense of the Report on "Modernising Our Homes" issued by the Scottish Housing Advisory Committee. If that were done, a working scheme could be prepared and work could be begun promptly when circumstances permitted. We cannot hope for any progress these days with the "modernisation" of houses as defined in the aforesaid Report. Nevertheless, once the City has been surveyed for houses which can be improved, it could then be examined with a view to collecting material for the use of the Council in considering a policy of modernisation.

Numerous insanitary conditions or nuisances have been dealt with during the year by the sanitary staff. It is rather depressing to note that there are still 544 houses within the City which do not have an internal supply of water, and that during the whole year 1946 only one house was provided with such a supply. That there are in the City 167 sanitary conveniences other than those of the water carriage type may or may not be a serious matter. All of them are on the fringe of the City where the population is very thin, and, with ordinary care, health should not be affected. At

the same time, the water carriage appliance must be introduced in every case where drainage is within reasonable reach. What is much more dangerous is the sanitary convenience of the waterborne type even of the most up-to-date design which is shared by members of more than one family—communal convenience. There are too many diseases of the intestinal sort prevailing these days, and every step must be taken to facilitate the rapid removal and disposal of all sorts of refuse, liquid and solid. If at the same time the people adopt a high standard of cleanliness and hygiene generally, there is no reason why these intestinal infections should not vanish.

I am, Ladies and Gentlemen,

Your obedient servant,

W. L. BURGESS,

Medical Officer of Health.

STATISTICAL SECTION

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TABLE I.

Return showing Causes of Death (corrected for transfers) at the Different Age Periods during 1946.

Cause of Death.	ALL AGES															85 &
	Total	Males	Females	—1	1—	5—	10—	15—	25—	35—	45—	55—	65—	75—	over
Typhoid Fever,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles,	10	6	4	4	6	—	—	—	—	—	—	—	—	—	—
Scarlet Fever,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough,	3	—	3	—	2	1	—	—	—	—	—	—	—	—	—
Diphtheria,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Influenza,	20	9	11	—	1	1	—	—	—	3	4	—	6	4	1
Cerebro-spinal Fever,	3	1	2	1	1	—	—	—	—	—	—	1	—	—	—
Other Epidemic Diseases,	7	4	3	—	—	1	—	—	2	1	1	1	—	—	1
Tuberculosis of Respiratory System,	118	54	64	—	4	1	2	25	27	24	15	14	4	2	—
Other Tuberculous Diseases,	29	11	18	1	7	8	5	4	1	—	2	—	—	1	—
Cancer, Malignant Disease,	333	145	188	—	—	1	—	1	4	18	51	82	103	66	7
Diabetes Mellitus,	11	3	8	—	—	—	—	—	1	—	2	2	4	1	1
Diseases of Nervous System,	277	115	162	3	4	—	2	7	3	9	21	49	83	77	19
Diseases of Circulatory System,	855	378	477	—	1	—	1	4	13	16	55	111	271	283	100
Bronchitis,	58	28	30	1	—	—	—	1	1	1	3	11	22	17	1
Pneumonia (all forms),	119	60	59	49	3	—	—	—	—	5	11	15	17	16	3
Other Respiratory Diseases,	33	20	13	1	—	—	—	1	—	3	6	7	7	6	2
Diarrhœa, etc. (all ages),	18	6	12	10	1	—	—	1	—	1	1	—	1	3	—
Appendicitis,	12	3	9	—	1	1	2	—	2	1	2	1	1	1	—
Other Digestive Diseases,	71	31	40	—	—	1	1	1	4	5	10	10	23	14	2
Acute and Chronic Nephritis,	41	23	18	—	—	—	—	3	1	3	7	14	9	3	1
Other Diseases of Genito-urinary System,	34	25	9	2	—	—	—	—	—	2	1	7	12	8	2
Puerperal Sepsis,	4	—	4	—	—	—	—	—	3	1	—	—	—	—	—
Other Puerperal Causes,	4	—	4	—	—	—	—	—	4	—	—	—	—	—	—
Congenital Debility, Premature Birth, Malformations, etc.,	105	61	44	99	2	2	—	1	1	—	—	—	—	—	—
Old Age,	46	14	32	—	—	—	—	—	—	—	—	—	8	20	18
Violent Deaths,	113	66	47	9	9	5	3	2	8	12	16	12	15	15	7
All Other Causes,	57	27	30	6	2	2	2	1	2	2	9	11	13	6	1
ALL CAUSES,	2,381	1,090	1,291	186	44	24	18	52	77	107	217	348	599	543	166

TABLE II.

Death-rates at Various Age-periods (from all causes) each year, 1942-1946.

Age Periods	1942. No. of Deaths.	1942. Death-Rate.	1943. No. of Deaths.	1943. Death-Rate.	1944. No. of Deaths.	1944. Death-Rate.	1945. No. of Deaths.	1945. Death-Rate.	1946. No. of Deaths.	1946. Death-Rate.
All Ages,	2,329	14.7	2,324	15.0	2,257	14.6	2,143	13.6	2,381	14.1
0—5,	257	21.3	248	17.8	226	16.3	186	13.1	230	16.6
5—10,	43	1.9	43	1.5	32	1.1	32	1.1	42	1.5
10—15,										
15—25,	62	2.8	44	2.4	58	3.1	60	3.2	52	2.3
25—35,	62	2.7	67	3.5	56	2.9	65	3.4	77	2.9
35—45,	107	4.6	110	5.0	95	4.3	79	3.5	107	4.3
45—55,	191	9.3	207	10.4	210	10.5	213	14.9	217	10.9
55—65,	354	20.1	349	20.0	351	20.7	328	18.5	348	19.5
65—75,	1,253	76.0	1,256	78.7	1,229	77.0	1,180	72.7	1,308	82.3
75—85,										
85 +,										

TABLE III.

Death-rate (from all causes) each month during the years 1942-1946.

Month	1942.	1943.	1944.	1945.	1946.
January, ...	19.2	15.7	18.3	19.5	20.3
February, ...	16.5	18.1	13.9	15.6	16.3
March, ...	17.8	14.3	14.5	14.1	18.1
April, ...	15.2	12.9	12.7	12.6	15.6
May, ...	14.0	12.4	15.0	12.4	12.8
June, ...	12.6	14.1	12.9	11.7	13.0
July, ...	17.7	12.3	12.7	11.5	11.8
August, ...	13.0	11.3	12.3	9.5	11.7
September, ...	10.1	10.8	13.7	10.0	10.8
October, ...	12.7	12.9	13.4	10.5	10.6
November, ...	11.4	14.8	11.4	12.7	14.9
December, ...	15.7	20.7	14.8	17.3	17.8

TABLE IV.

Death-rate (from all causes) in various Wards each year, 1939-1946.

Year	Whole City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.	12.
1939,	13.5	11.8	15.9	14.3	13.9	14.6	10.6	14.1	13.5	12.9	13.2	13.9
1940,	15.9	12.2	13.2	15.8	14.8	18.0	11.2	18.7	16.1	14.7	14.9	15.4
1941,	15.3	12.9	14.2	15.5	16.8	23.4	11.1	16.7	14.5	14.8	18.6	12.4
1942,	14.7	12.0	12.0	15.7	17.1	20.4	9.8	18.6	12.1	15.9	17.9	12.6
1943,	15.0	13.1	13.3	16.0	18.8	21.6	11.9	17.3	11.7	15.0	15.2	13.0
1944,	14.6	11.5	12.2	14.8	18.1	21.9	11.3	19.8	12.9	13.3	15.7	11.6
1945,	13.6	10.0	12.0	14.0	17.1	20.5	8.4	19.0	11.4	12.6	17.2	11.6
1946,	14.1	11.6	13.1	14.2	15.6	21.8	10.8	18.5	11.8	12.4	16.1	12.1

TABLE V.

Birth-rate in Various Wards Each Year, 1939-1946

Year	Whole City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.	12.
1939,	15.8	15.2	13.3	16.7	21.1	16.9	13.2	19.0	14.0	14.6	13.3	15.5
1940,	16.6	15.4	12.8	21.9	20.4	20.6	11.8	14.5	13.9	14.8	12.1	17.9
1941,	17.5	16.1	13.4	19.7	24.2	24.8	14.3	18.7	13.7	14.2	14.5	18.5
1942,	17.5	16.7	16.2	21.6	22.3	22.6	13.6	19.7	14.1	14.6	16.1	16.2
1943,	16.3	15.0	12.1	21.2	23.1	21.6	10.9	19.2	11.8	15.0	14.3	15.5
1944,	18.0	19.4	18.7	23.8	27.1	29.3	14.8	24.7	15.4	18.9	18.6	17.2
1945,	16.1	16.2	12.9	20.2	21.8	24.9	10.1	19.3	11.3	14.1	14.6	13.5
1946,	22.3	22.8	16.4	27.1	31.2	32.8	16.6	26.4	18.7	21.4	30.0	20.9

TABLE VI.

Infantile Death-rate (per 1,000 births) in Various Wards Each Year, 1939-1946.

Year	Whole City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.	12.
1939,	74	62	101	79	86	49	74	65	104	42	42	53
1940,	67	72	85	71	89	60	83	66	49	56	15	66
1941,	89	48	96	106	69	85	92	85	91	111	193	82
1942,	68	59	52	87	83	68	38	71	62	56	58	82
1943,	69	60	92	63	78	74	108	39	68	81	33	68
1944,	60	52	46	64	76	73	58	31	78	58	23	70
1945,	57	33	59	51	84	45	75	69	47	93	38	27
1946,	47	51	38	67	42	46	54	26	50	41	55	47

TABLE VII.

Death-Rate in Various Wards from Principal Epidemic Diseases Each Year, 1939-1946.

Year	Whole City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.	12.
1939,	.32	.29	.25	.36	.57	.07	.29	.51	.52	.15	.37	.15
1940,	.98	.76	.36	.84	1.47	1.70	.93	.71	.84	1.17	.89	.89
1941,	.69	.83	.55	.78	1.05	.90	.38	.56	.62	.84	.60	.51
1942,	.33	.07	.56	.40	.45	.46	.52	.41	.29	.23	.41	.06
1943,	.61	.47	.29	.62	.46	1.26	.59	.42	.30	.95	.85	.53
1944,	.16	—	.1	.34	.20	.08	—	.25	.24	.18	.42	.06
1945	.05	—	—	.07	—	—	—	—	—	.16	.31	.06
1946,	.21	.18	.18	.19	.24	.29	.25	.28	.16	.22	.19	.11

TABLE VIII.

Pulmonary Tuberculosis Death-rate in Various Wards Each Year, 1939-1946.

Year	Whole City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.	12.
1939,	.61	.53	.84	.36	.51	.82	.69	.36	.78	.72	.64	.51
1940,	.62	.50	.54	.45	1.22	.74	.43	.79	.67	.55	.30	.50
1941,	.65	.65	.27	.72	.99	.75	.50	.88	.62	.68	.30	.68
1942,	.77	.77	.47	.74	1.08	1.54	.58	.90	.47	.69	.93	.75
1943,	.61	.94	.39	.48	.78	.95	.53	.50	.66	.65	.42	.86
1944,	.73	.61	.58	.82	.72	1.42	.53	1.09	.78	.54	.92	.65
1945,	.68	.33	.95	.47	.97	1.40	.13	.74	.65	.58	.63	.76
1946,	.70	.55	.26	1.01	1.19	.79	.24	.61	.49	.92	.68	.70

TABLE IX.

Tuberculosis (all forms) Death-rate in Various Wards Each Year, 1939-1946.

Year	Whole City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.	12.
1939,	.74	.58	.84	.54	.68	.89	.80	.73	.94	.77	.64	.67
1940,	.84	.63	.63	.58	1.53	1.11	.87	1.18	.79	.78	.40	.61
1941,	.90	.83	.83	.98	1.43	1.05	.75	1.20	.91	1 01	.30	.73
1942,	1.02	.85	.47	1.07	1.40	2.08	.77	1.07	.64	.87	1.03	1.04
1943,	.79	1.48	.39	.55	1.11	1.18	.53	.59	.78	.89	.42	.53
1944,	.88	.87	.77	.96	.85	1.60	.72	1.09	1.02	.65	.42	.65
1945,	.86	.46	1.43	.68	1.48	1.63	.19	.83	.83	.70	.63	.76
1946,	.87	.74	.35	1.07	1.37	1.01	.60	.77	.88	.98	.87	.70

TABLE X.

Deaths and Death-rates from various groups of causes each year since 1942 (all ages).

Disease Group	1942. Population 158,500. No. of Deaths.	1942. Rate per 1,000 Pop.	1943. Population 154,703. No. of Deaths.	1943. Rate per 1,000 Pop.	1944. Population 154,845. No. of Deaths.	1944. Rate per 1,000 Pop.	1945. Population 156,999. No. of Deaths.	1945. Rate per 1,000 Pop.	1946. Population 169,197 No. of Deaths.	1946. Rate per 1,000 Pop.
Congenital, ...	107	.68	96	.62	101	.72	100	.64	105	.62
Digestive, ...	116	.73	92	.59	90	.58	104	.66	101	.60
Respiratory, ...	199	1.26	216	1.39	222	1.43	158	1.01	210	1.24
Infective, ...	241	1.52	233	1.50	195	1.26	158	1.01	198	1.17
Circulatory, ...	668	4.22	675	4.36	703	4.54	653	4.16	855	5.05
Genito-urinary,	102	.46	108	.70	92	.59	105	.67	75	.44
Malignant, ...	322	2.03	367	2.37	337	2.18	341	2.17	333	1.97
Nervous, ...	301	1.90	286	1.85	282	1.82	280	1.78	277	1.64
Other Causes,	273	1.72	251	1.62	235	1.52	244	1.55	227	1.34
	2,329	14.70	2,324	15.00	2,257	14.64	2,143	13.65	2,381	14.1

TABLE XI.

Certified causes of death at various ages under 1 year during 1946.

Cause of Death.	WEEKS Under 1	1/2	2/3	3/4	Total	MONTHS Under 2	2/3	3/6	6/9	9/12	Total
Enteric Fever,	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever,	...	...	...	...	...	...	...	...	...	...	...
Smallpox,	...	...	...	...	...	...	...	...	...	...	...
Measles,	...	...	...	...	...	...	...	1	1	2	4
Scarlet Fever,	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough,	...	...	...	...	...	...	...	...	...	...	...
Diphtheria,	...	...	...	...	...	...	...	...	...	...	...
Infantile paralysis,	...	...	...	...	...	...	...	...	...	...	...
Cerebro-spinal meningitis,	...	...	...	...	...	...	1	...	...	...	1
Tuberculosis—											
Lung,	...	...	...	...	...	...	...	...	...	...	...
General,	...	...	...	...	...	...	...	...	...	...	...
Abdominal,	...	...	...	...	...	...	...	...	...	...	...
Brain,	...	...	...	...	...	...	...	...	1	...	1
Other Forms,	...	...	...	...	...	...	...	...	...	...	...
Influenza,	...	...	...	...	...	...	...	...	...	...	...
Other Infectious Diseases,	...	...	...	...	...	...	...	...	...	...	...
Pneumonia (all forms),	6	4	2	2	14	7	4	17	5	2	49
Bronchitis,	...	...	...	...	...	...	...	...	1	...	1
Laryngitis,	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Respiratory System,	...	...	...	...	...	1	...	...	...	...	1
Diarrhœa and Enteritis,	...	2	1	1	4	1	...	4	...	1	10
Other Diseases of Digestive System,	...	...	...	...	...	...	...	...	...	...	...
Meningitis (not T.B.),	...	...	...	...	...	...	1	...	...	...	1
Convulsions,	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Nervous System,	...	...	...	...	...	1	...	1	...	...	2
Congenital Malformations,	4	3	...	1	8	1	2	1	...	...	12
Congenital Debility, Icterus, Sclerema, Marasmus,	5	...	...	1	6	2	...	3	...	...	11
Premature Birth,	45	5	2	...	52	3	1	...	...	...	56
Injury at Birth,	6	...	...	...	6	...	...	...	...	...	6
Other Diseases peculiar to Early Infancy,	9	...	...	...	9	...	...	...	...	...	9
Suffocation, Over-laying,	...	...	...	...	...	1	...	1	3	...	5
Rickets,	...	...	...	...	...	...	...	...	...	...	...
Syphilis,	1	...	...	...	1	...	...	...	...	...	1
Violence,	3	1	...	...	4	2	1	1	1	...	9
All other causes,	...	...	...	2	2	...	1	...	3	1	7
Total,	79	15	5	7	106	19	11	29	15	6	186

TABLE XII.

Infant Mortality Rates from various groups of causes each year, 1939-1946.

Year.	Congenital.	Digestive.	Respiratory.	Infectious Disease.	All Other Causes.	Rate per 1,000.
1939,	43	10	11	2	8	74
1940,	32	4	17	5	9	67
1941,	45	8	21	8	7	89
1942,	36	8	12	5	7	68
1943,	31	7	16	5	10	69
1944,	33	5	14	1	7	60
1945,	26	7	10	1	13	57
1946,	22	3	11	1	10	47

TABLE XIII.

Infant Mortality Rates from all causes at various age periods 1939-1946.

		DEATH-RATES			
Year.	Births.	Under 1 Week.	Under 1 Month.	Under 3 Months.	Under 1 Year.
1939,	2,807	30	44	54	74
1940,	2,872	25	32	44	67
1941,	2,850	38	46	60	89
1942,	2,770	23	32	38	68
1943,	2,849	21	30	41	69
1944,	3,174	18	29	35	60
1945,	2,832	25	34	37	57
1946,	3,941	20	27	35	47

TABLE XIV.

Number of Illegitimate Births, Number of Deaths (under 1 year) of Illegitimate Infants, and Death-rate per 1,000 Illegitimate Births since 1939.

Year.	Illegitimate Births.	Deaths of Illeg. Infants.	Rate per 1,000 Illeg. Births.
1939, ...	170	23	135
1940, ...	160	25	156
1941, ...	209	28	134
1942, ...	224	21	94
1943, ...	241	30	124
1944, ...	294	24	82
1945, ...	282	28	99
1946	281	23	82

TABLE XV.

Table showing Number of Still-Births and rate per 1,000 Births, 1939-1946.

Year.	No. of. Still-Births.	Total of Live Births and Still-Births.	Rate per 1,000 total Births (Live & Still).
1939,	125	2,931	42.65
1940,	158	3,030	52.15
1941,	128	2,978	42.98
1942,	132	2,902	45,49
1943,	110	3,022	36.40
1944,	146	3,390	43.07
1945,	90	2,922	30,80
1946,	136	4,077	33.65

TABLE XVI.

MATERNAL MORTALITY

Certified causes of deaths of women from diseases and accidents connected with pregnancy and child-birth since 1942.

	1942.	1943.	1944.	1945.	1946.
Accidents of Pregnancy,	3	7	3	0	2
Puerperal Hæmorrhage,	0	0	3	4	0
Puerperal Septicæmia, including Post-abortive Sepsis,	3	3	3	3	4
Toxæmia of Pregnancy, albuminuria, convulsions,	3	2	2	2	1
Other Puerperal diseases,	1	0	0	1	1
	10	12	11	10	8

TABLE XVII.

Maternal Mortality Rates — Number of Deaths per 1,000 Registered Births, 1939-1946.

1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.
4.60	3.48	4.56	3.61	3.51	3.47	3.5	2.0

TABLE XVIII.

Annual death-rates per 100,000 population from certain of the Infectious Diseases, 1939-1946.

Year.	Scarlet Fever.		Enteric Fever.		Diphtheria.		Measles.		Whooping Cough.	
	No. of Deaths.	Death-rate per 100,000.	No. of Deaths.	Death-rate per 100,000.	No. of Deaths.	Death-rate per 100,000.	No. of Deaths.	Death-rate per 100,000.	No. of Deaths.	Death-rate per 100,000.
1939, ...	1	.6	0	—	11	6.2	0	—	8	4.5
1940, ...	2	1.2	0	—	69	41.8	10	6.1	9	5.4
1941, ...	1	.6	5	3.1	53	32.5	10	6.1	17	10.4
1942, ...	1	.6	1	.6	28	17.7	6	3.8	5	3.2
1943, ...	0	—	0	—	17	11.0	4	2.6	14	9.0
1944, ...	0	—	0	—	6	3.9	10	6.5	0	—
1945, ...	0	—	0	—	0	—	4	2.5	1	.64
1946, ...	0	—	0	—	0	—	10	5.9	3	1.8

TABLE XIX.

Case Mortality (per cent.) from certain Infectious Diseases each year since 1939.

Year.	Scarlet Fever.			Enteric Fever.			Diphtheria.			Measles.			Whooping Cough.		
	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.
1939, ...	221	1	.4	1	0	—	507	11	2.1	2,400	0	—	471	8	1.7
1940, ...	172	2	1.1	13	0	—	1,353	69	5.1	1,255	10	.8	607	9	1.5
1941, ...	428	1	.2	367	5	1.4	1,228	53	4.3	789	10	1.3	728	17	2.3
1942, ...	720	1	.1	3	1	33.3	903	28	3.1	1,241	6	.5	236	5	2.1
1943, ...	429	0	—	8	0	—	512	17	3.3	669	4	.6	518	14	2.7
1944, ...	223	0	—	0	0	—	415	6	1.4	1,188	10	.84	352	0	—
1945, ...	224	0	—	0	0	—	342	0	—	306	4	1.31	164	1	.61
1946, ...	425	0	—	3	0	—	269	0	—	1,671	10	.6	522	3	.57

TABLE XX.

Death-rates per 100,000 each year since 1939, from the Respiratory Diseases (including Bronchitis, Pneumonia (all forms), Pleurisy, Asthma, Laryngitis, etc.).

Year.	Total Deaths.	Death-rate per 100,000.
1939, ...	221	124.1
1940, ...	337	204.1
1941, ...	269	165.0
1942, ...	199	125.6
1943, ...	216	139.6
1944, ...	222	143.4
1945, ...	158	100.6
1946, ...	210	124.1

TABLE XXI.

Deaths in which Influenza was given as a cause of death each month, January, 1942 to December, 1946.

Months	1942.	1943.	1944.	1945.	1946.
January, ...	3	2	2	0	10
February, ...	1	5	0	2	8
March, ...	1	2	1	0	1
April, ...	0	3	0	0	0
May, ...	0	2	1	1	0
June, ...	0	2	0	0	0
July, ...	0	1	0	0	0
August, ...	0	0	0	0	0
September, ...	0	1	0	0	0
October, ...	0	0	0	0	0
November, ...	0	9	0	0	1
December, ...	1	26	2	0	0
	6	53	6	3	20

TABLE XXII.

Deaths in which Influenza appeared as a cause in death certificate, 1942-1946, classified in age periods.

Age Periods.	1942.	1943.	1944.	1945.	1946.
Under 1 year, ...	1	1	0	0	0
1— 5 years, ...	1	0	0	0	1
5—15 years, ...	0	1	0	0	1
15—25 years, ...	0	1	0	0	0
25—45 years, ...	0	6	0	0	3
45—65 years, ...	2	15	2	0	4
65 and upwards, ..	2	29	4	3	11
	6	53	6	3	20

TABLE XXIII.

INFECTIOUS DISEASE.—Number of Cases of each disease notified and reported in Dundee during the year 1946. Also number removed and number not removed to Hospital.

DISEASE	At Ages — Years.								Cases removed to Hospital.	Cases not removed to Hospital.
	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.		
Cerebro-spinal Fever,	33	7	11	6	5	1	1	2	33	—
Chickenpox*,	558	16	108	431	3	—	—	—	44	514
Diphtheria,	269	19	55	86	64	36	9	—	239	30
Dysentery,	269	26	141	38	10	30	14	10	225	44
Erysipelas,	148	1	2	8	6	35	77	19	104	44
Malaria,	5	—	—	—	—	5	—	—	4	1
Measles (Morbilli),*	1,671	43	559	1,029	39	1	—	—	327	1,344
Measles (Rubella)*,	115	4	10	99	2	—	—	—	3	112
Ophthalmia Neonatorum,	186	186	—	—	—	—	—	—	22	164
Pneumonia, Acute Influenzal,	46	—	3	13	4	12	10	4	15	31
Pneumonia, Acute Primary,	348	142	71	25	28	57	25	—	200	148
Poliomyelitis, acute,	1	1	—	—	—	—	—	—	1	—
Puerperal Fever,	12	—	—	—	1	11	—	—	8	4
Puerperal Pyrexia,	51	—	—	—	21	30	—	—	48	3
Scarlet Fever,	425	6	149	251	11	8	—	—	273	152
Tuberculosis, Pulmonary,	270	1	5	15	92	112	36	9	200	70
Tuberculosis, Non-pulmonary,	51	1	16	16	9	4	3	2	20	31
Typhoid Fever,	—	—	—	—	—	—	—	—	—	—
Paratyphoid A,	—	—	—	—	—	—	—	—	—	—
Paratyphoid B,	3	—	—	—	1	—	2	—	2	1
Whooping Cough,*	522	57	178	286	1	—	—	—	98	424
Mumps,*	44	—	8	36	—	—	—	—	—	44
Enteritis,*	12	6	6	—	—	—	—	—	—	12
Gastro-enteritis,*	14	11	3	—	—	—	—	—	—	14
	5,053	527	1,325	2,339	297	342	177	46	1,866	3,187

*Not notifiable in Dundee during 1946.

Tuberculosis — Cases Notified in a previous year and removed to Hospital for first time during 1946.

Pulmonary, 60; Non-pulmonary, 5 — Total, 65.

TABLE XXIV.

Monthly Notifications and Intimations of Infectious Diseases, Dundee, 1946.

DISEASE	Jan.	Feb.	Mar.	Apr.	May	June.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals.
Cerebro-spinal Fever, ...	5	3	6	3	4	1	3	1	3	2	1	1	33
Chickenpox,*	108	44	59	61	36	69	7	25	28	58	36	27	558
Continued Fever (Undulant), ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria, ...	32	—	14	17	21	18	18	25	29	26	29	40	269
Dysentery, ...	19	31	49	17	23	21	14	27	12	20	21	15	269
Erysipelas, ...	18	6	16	7	10	9	10	13	12	12	18	17	148
Malaria, ...	1	—	—	1	—	—	1	1	—	1	—	—	5
Measles (Morbilli)*	4	7	12	6	5	16	3	18	93	417	723	367	1,671
Measles (Rubella),*	3	8	10	9	20	35	2	2	3	8	7	8	115
Ophthalmia Neonatorum, ...	13	14	12	23	25	17	22	14	11	15	13	7	186
Pneumonia, acute Influenzal, ...	27	10	1	1	1	—	—	—	—	—	3	3	46
Pneumonia, acute Primary, ...	54	39	36	29	28	16	11	12	15	21	69	28	348
Poliomyelitis, acute, ...	—	—	—	—	—	—	1	—	—	—	—	—	1
Puerperal Fever, ...	—	—	—	1	1	2	—	2	1	2	—	3	12
Puerperal Pyrexia, ...	2	5	11	3	4	2	6	4	3	3	4	4	51
Scarlet Fever, ...	19	19	19	20	16	35	11	26	45	90	61	64	425
Tuberculosis, Pulmonary, ...	26	19	26	21	23	18	36	15	16	25	32	13	270
Tuberculosis, Non-pulmonary, ...	5	3	5	5	7	5	3	3	2	3	5	5	51
Paratyphoid B., ...	—	—	—	—	—	1	—	—	—	1	—	1	3
Whooping Cough,*	74	71	121	84	75	19	6	11	4	17	25	15	522
Typhoid Fever, ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Gastro-enteritis,*	—	—	1	1	1	3	3	1	—	—	3	1	14
Enteritis, ...	1	—	2	—	—	—	—	4	—	—	1	4	12
Mumps,*	7	4	5	2	—	6	—	—	—	3	3	14	44
	418	283	405	311	290	293	157	204	277	724	1,054	637	5,053

* Not Notifiable during 1946.

TABLE XXV.

TUBERCULOSIS—Notifications and Deaths, with corresponding rates per 1,000 population at various age periods each year since 1939.

		PULMONARY TUBERCULOSIS												NON-PULMONARY TUBERCULOSIS.									
		0—5		5—15		15—25		25—45		45—65		65 & over.		0—5		5—15		15—25		25—45		45—65		65 & over.	
Year.		No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000	No.	Per 1,000
1939	Notifications,	2	.13	36	1.17	49	1.56	69	1.38	30	.81	3	.22	14	.91	22	.71	22	.70	11	.22	6	.15	1	.07
	Deaths, ..	1	.07	2	.07	23	.73	50	1.0	31	.83	2	.15	3	.20	4	.13	7	.22	3	.06	3	.05	2	.15
1940	Notifications,	2	1.30	19	6.20	65	3.00	84	1.80	25	.67	6	.45	15	.98	27	.88	22	1.01	16	.34	1	.03	2	.15
	Deaths, ..	0	.0	2	.06	21	.96	41	.98	21	.57	12	.90	10	.65	5	.16	11	.50	6	.12	2	.05	2	.15
1941	Notifications,	5	.40	20	.86	67	2.81	95	2.01	44	1.12	7	.41	28	2.25	31	1.34	22	.92	9	.19	8	.20	2	.12
	Deaths, ..	1	.08	2	.09	25	1.05	47	.99	28	.71	3	.18	11	.88	5	.22	11	.46	9	.19	3	.08	1	.06
1942	Notifications,	11	.91	22	.98	69	3.06	82	1.76	44	1.15	8	.49	42	3.48	69	3.06	26	1.15	23	.49	10	.26	1	.06
	Deaths, ..	1	.08	1	.04	33	1.46	41	.88	36	.94	10	.61	17	1.41	9	.40	4	.18	6	.13	4	.10	0	.0
1943	Notifications,	3	.21	22	.79	69	3.74	86	2.10	43	1.15	4	.25	21	1.50	40	1.43	15	.81	8	.20	3	.08	2	.12
	Deaths, ..	2	.14	0	.0	21	1.14	33	.81	38	1.02	1	.06	11	.79	8	.29	3	.16	2	.05	2	.05	1	.06
1944	Notifications,	6	.43	25	.89	93	5.03	78	1.91	37	.99	9	.56	14	1.00	24	.85	12	.65	5	.12	1	.03	1	.06
	Deaths, ..	1	1.07	1	.04	24	1.30	43	1.05	38	1.02	6	.37	3	.21	6	.21	6	.33	3	.07	4	.12	1	.06
1945	Notifications,	6		29		103		101		30		5		12		29		18		12		3		0	
	Deaths, ..	2		3		27		45		23		6		11		7		7		2		2		0	
1946	Notifications,	6	.43	15	.54	92	4.03	112	2.19	36	.95	9	.57	17	1.22	16	.58	9	.39	4	.08	3	.08	2	.13
	Deaths, ..	4	.29	3	.11	25	1.10	51	1.00	29	.77	6	.38	8	.58	13	.47	4	.18	1	.02	2	.06	1	.06

TABLE XXVI.

TUBERCULOSIS.—Notifications and Deaths, with corresponding rates per 1,000 population for each year since 1939.

Year.	Estimated Population.	NOTIFICATION AND CASE RATE						DEATHS AND DEATH-RATES					
		Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Tuberculosis (all forms).		Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Tuberculosis (all forms).	
		No.	per 1,000.	No.	per 1,000.	No.	per 1,000.	No.	per 1,000.	No.	per 1,000.	No.	per 1,000.
1939, ...	178,013	189	1.07	76	.43	265	1 50	109	.61	22	.13	131	.74
1940, ...	165,074	201	1.21	83	.50	284	1.71	103	.62	38	.23	141	.85
1941, ...	163,000	238	1.46	100	.61	338	2.07	106	.65	40	.25	146	.90
1942, ...	158,500	236	1.49	171	1.08	307	2.57	122	.77	40	.25	162	1.02
1943, ...	154,703	227	1.47	89	.57	316	2.04	95	.61	27	.18	122	.79
1944, ...	154,845	248	1.61	57	.37	305	1.97	113	.73	23	.15	136	.88
1945, ...	156,999	274	1.75	77	.50	351	2.24	106	.68	29	.18	135	.86
1946, ...	169,197	270	1.60	51	.30	321	1.90	118	.70	29	.17	147	.87

TABLE XXVII.

PULMONARY TUBERCULOSIS.—Notifications and Deaths with corresponding rates per 1,000 population for each sex each year since 1939.

	NOTIFICATIONS.				DEATHS.			
	Males.		Females.		Males.		Females.	
Year.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.
1939,	95	1.19	94	.96	55	.69	54	.55
1940,	92	1.35	109	1.02	51	.75	51	.53
1941,	126	1.72	112	1.25	53	.72	53	.59
1942,	119	1.43	117	1.14	62	.74	60	.59
1943,	124	1.79	103	1.21	49	.71	46	.54
1944,	112	1.61	136	1.57	54	.82	59	.69
1945,	153	2.17	121	1.40	57	.81	49	.57
1946,	146	—	124	—	54	—	64	—

TABLE XXVIII.

Pulmonary Tuberculosis—Deaths in Institutions each year since 1942.

	1942.	1943.	1944.	1945.	1946.
Total Deaths from Pulmonary Tuberculosis, ...	122	95	113	106	118
No. of Deaths from Pulmonary Tuberculosis in Institutions,	87	54	79	52	44
Percentage of Total Deaths from Pulmonary Tuberculosis dying in Institutions, ...	71.3	56.8	69.9	49.1	37.3

TABLE XXIX.

MALIGNANT DISEASES

Number of Deaths and Death-rates per 10,000 population each year since 1939.

Year	Males.	Females.	Total.	Rates.
1939, ...	139	181	320	17.98
1940, ...	135	162	297	17.99
1941, ...	122	178	300	18.40
1942, ...	141	181	322	20.32
1943, ...	162	205	367	23.72
1944, ...	159	178	337	21.76
1945, ...	159	182	341	21.72
1946, ...	145	188	333	19.68

Age and Sex Distribution of Deaths from Malignant

MALES

LOCATION	All Ages	0—5	5—15	15—25	25—35	35—40	40—45	45—50	50—55	55—60	60—65	65—70	70—75	75—80	80—85	85 & over
All Sites	145	...	...	1	2	3	2	9	13	22	17	21	24	14	13	4
Lip	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mouth, Palate	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Tongue	3	...	...	...	...	...	...	...	...	...	...	...	2	1	...	...
Jaw, Maxilla, Antrum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Salivary Glands, Parotid	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonsils	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Pharynx, Fauces	2	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...
Nasopharynx, Nose-internal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cheek	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Buccal Cavity, etc. Total	7	...	...	...	1	...	...	...	...	...	...	1	2	3	...	...
Oesophagus, Gullet	6	...	...	...	...	...	...	...	2	1	...	...	2	...	1	...
Stomach, Pylorus	23	...	...	...	1	1	...	2	...	4	4	2	1	3	5	...
Intestine	20	...	...	...	...	...	...	2	...	4	1	3	4	2	3	1
Abdomen	2	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...
Rectum	14	...	...	1	...	...	...	...	3	...	2	4	2	1	...	1
Liver, Gall Bladder	8	...	...	...	...	...	...	1	1	...	1	...	2	2	1	...
Pancreas	8	...	...	...	...	1	...	...	...	1	1	4	1	...	...	...
Peritoneum, Omentum, Mesentery	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Digestive Organs, etc. Total	82	...	...	1	1	2	...	6	6	10	10	13	12	9	10	2
Larynx	8	...	...	...	...	...	...	...	1	1	1	1	2	1	1	...
Lung, Bronchus, Pleura	21	...	...	...	...	...	1	3	3	5	4	1	4	...	...	...
Mediastinum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Respiratory Organs. Total	29	...	...	...	...	...	1	3	4	6	5	2	6	1	1	...
Breast	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Prostate	11	...	...	...	...	...	...	...	...	3	1	2	2	1	1	1
Testis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Penis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scrotum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Male Genital Organs Total	11	...	...	...	...	...	...	...	...	3	1	2	2	1	1	1
Kidney	2	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...
Bladder, Urethra	4	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...
Urinary Organs Total	6	...	...	...	...	...	...	...	...	2	1	2	1	...	...	...
Anus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ear	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nose (external)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scalp, Face (rodent ulcer)	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Skin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Skin Total	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Brain	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Spinal Cord	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brain and Nervous System Total	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Adrenals	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arm, Leg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bones	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eye	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lymphatic Glands	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pelvis	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Rib, Sternum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spleen	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thorax	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Throat	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Thyroid	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Others	3	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...
Not Stated	2	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...
Other or Unspecified Organs Total	7	...	...	...	...	1	1	...	2	1	...	1	1	...	...	...

XXX.

Diseases during 1946, showing parts of the body affected.

FEMALES

LOCATION	All Ages	0—5	5—15	15—25	25—35	35—40	40—45	45—50	50—55	55—60	60—65	65—70	70—75	75—80	80—85	85 & over
All Sites	188	...	1	...	2	4	9	14	15	17	26	30	28	26	13	3
Lip	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mouth, Palate	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Tongue	2	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...
Jaw, Maxilla, Antrum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Salivary Glands, Parotid	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonsils	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pharynx, Fauces	2	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...
Nasopharynx, Nose—Internal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cheek	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Buccal Cavity, Etc. Total	5	...	...	...	...	...	...	1	...	...	1	1	1	1	...	...
Oesophagus, Gullet	7	...	...	...	...	...	...	...	...	...	1	3	1	2	...	...
Stomach, Pylorus	37	...	...	...	...	1	1	2	...	4	4	7	8	7	3	...
Intestine	36	...	...	...	...	1	1	2	1	1	3	9	8	4	5	...
Abdomen	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rectum	7	...	...	...	...	1	...	...	1	...	1	...	...	2	1	...
Liver, Gall Bladder	16	...	...	...	...	...	...	...	1	1	...	4	5	4	1	...
Pancreas	2	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...
Peritoneum, Omentum, Mesentery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Digestive Organs, etc. Total	105	...	...	...	...	3	2	4	3	7	9	23	22	20	10	...
Larynx	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Lung, Bronchus, Pleura	6	...	...	...	...	...	...	2	1	...	2	1	...	...	...	...
Mediastinum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Respiratory Organs. Total	7	...	...	...	...	...	...	2	1	...	2	1	...	1	...	...
Cervix	9	...	...	...	...	...	1	1	2	...	3	...	1	1	...	...
Uterus, Other or Unspecified	12	...	...	...	...	...	...	2	2	4	2	1	...	...	1	...
Uterus. Total	21	...	...	...	...	...	1	3	4	4	5	1	1	1	1	...
Ovary, Fallopian Tube	4	...	...	...	1	...	...	...	1	...	1	1	...	...	...	...
Vagina, Vulva	2	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
Other Female Genital Organs. Total	6	...	...	...	1	...	...	...	2	...	2	1	...	...	...	...
Breast	28	...	...	...	1	1	4	3	3	5	5	1	2	2	1	...
Kidney,	5	...	1	...	...	...	...	1	...	1	...	1	1	...	...	...
Bladder, Urethra	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Urinary Organs. Total	6	...	1	...	...	...	...	1	...	1	1	1	1	...	...	...
Anus	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Ear	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nose (external)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scalp, face (rodent ulcer)	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Skin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Skin Total	2	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...
Brain	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spinal Cord	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brain and Nervous System Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Adrenals	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arm, Leg	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bones	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eye	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Heart	2	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...
Lymphatic Glands	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pelvis	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Rib, Sternum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spleen	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thorax	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Throat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thyroid	4	...	...	...	...	...	1	...	...	1	1	...	...	...	1	...
Others	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Not Stated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other or Unspecified Organs. Total	8	...	...	...	...	...	3	...	1	1	1	...	...	1	1	...

TABLE XXXI.

Number of Births per 1,000 population, Illegitimate Births per 100 Registered Births, and Marriages per 1,000 population, each year since 1939.

Year.	Birth-rate.	Illegitimate-rate.	Marriage-rate.
1939, ...	15.8	6.1	10.3
1940, ...	16.6	5.7	12.7
1941, ...	16.3	7.3	9.5
1942, ...	15.9	8.1	9.2
1943, ...	16.3	8.5	8.2
1944, ...	18.0	9.3	8.1
1945, ...	16.1	10.0	10.7
1946, ...	22.3	7.1	10.5

TABLE XXXII.

PORT SANITARY ADMINISTRATION — 1946

The volume of foreign-going vessels arriving at this Port throughout the year showed a considerable increase in numbers and tonnage, and in the case of coasting ships, a slight decrease:—

Volume of Shipping Entering the Port in 1946.

	Number.	Tonnage.
(1) Foreign, ...	123	211,894
(2) Coastwise, ...	428	144,150
	551	356,044

Vermin Infestation.

In no case did inspection disclose traces of fleas or lice, and only on one vessel was action taken regarding the presence of bugs. One ship was cleared of cockroaches by fumigation while the ship was undergoing deratization by H.C.N.

Deratization.

Details of Deratization are given in tabulated form at the end of this report.

The Parrots (Prohibition of Import) Regulations (Scotland), 1930.

There was no occasion demanding action under the above Regulations.

During the year the work at the Harbour was carried out on normal lines. Nothing of an unusual nature falls to be reported.

Total number of verbal intimations, ...		123
Total number of rat notices issued, ...		Nil
Number of visits to ships, ...		195
Number of ships from infected Ports (direct), ...	11	
Number of ships from infected Ports (indirect), ...	36	
Number of ships from free Ports (direct), ...	63	
Number of ships from free Ports (indirect), ...	13	
Total number of ships from Foreign Ports, ...		123
Nuisances and defects attended to, ...		88
Forecastles cleaned, ...		18
Messrooms cleaned, ...		12
Galleys and storerooms cleaned, ...		15
Choked or defective water closets, ...		19
Dirty Water Closets, ...		10
Discharge of foul water on quay, ...		8
Leaking forecastles, ...		6

In addition the following work was carried out while the vessels were in Port:—

Freshwater tanks cleaned out, ...	18
Forecastles washed or painted, ...	14
Bathrooms or wash places painted, ...	8
Crews messrooms washed or painted, ...	16
Water closets painted, ...	8

"A"

Number of vessels subjected to measures of rat destruction,	6
On Ships —Number of dead rats recovered	129
Number of rats examined bacteriologically, ...	Nil
On Shore —Number of rats destroyed (other than on ships),	369
Number of rats examined bacteriologically, ...	Nil

Species of rats recovered—On ships, 119 Black; 10 Brown.
On shore, 149 Black; 220 Brown.

"B"

Number of vessels fumigated by S.O.2, ...	Nil
Number of vessels fumigated by H.C.N., ...	4
Number of dead rats recovered, ...	109
Number of vessels in which poisoning, etc., was employed,	2
Number of dead rats recovered, ...	20
Deratization Certificates issued, ...	4
Deratization Exemption Certificates issued, ...	17

Two of H.M. Submarines were fumigated at this Port during the year.

TABLE XXXIII.

VACCINATION, 1938-45

Year.	Total Births (excluding Transcripts received)	Successfully Vaccinated.		Insusceptible to Vaccination.		Died before Vaccination.		Conscientious Objectors.		Postponements or Unaccounted for	
		No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
1938, ...	3,394	815	24.0	20	.6	181	5.3	2,337	68.9	41	1.2
1939, ...	3,042	788	25.9	21	.7	189	6.2	1,954	64.2	90	3.0
1940, ...	3,046	853	28.0	34	1.1	161	5.3	1,944	63.8	54	1.8
1941, ...	3,105	1,072	34.5	19	.6	227	7.3	1,705	54.9	82	2.6
1942, ...	3,104	1,393	44.9	24	.8	161	5.2	1,437	46.3	89	2.9
1943, ...	3,248	1,425	44.0	33	1.0	165	5.1	1,525	46.9	100	3.0
1944, ...	3,549	1,574	44.4	44	1.2	160	4.5	1,661	46.8	110	3.1
1945, ...	3,240	1,459	45,0	65	2.0	159	4.9	1,428	44.1	129	4.0

TABLE XXXIV.

Blind Persons Acts, 1920/1938.

SCALES OF DOMICILIARY ASSISTANCE

	Scale
Married Couples:—	
Both blind, ...	65/- per week
Husband blind, ...	60/- ,, ,,
Wife blind, ...	30/- ,, ,,
Widows and Widowers, ...	45/- ,, ,,
Single Persons:—	
Over 21 years, ...	45/- ,, ,,
Between 18/21 years, ...	35/- ,, ,,
Between 16/18 years	25/- ,, ,,
Dependent Children, ...	11/- each per week

Maximum.—Not to exceed the wages of a trained blind worker in the Dundee Royal Institution for the Blind.

The above scales came into operation on the first full pay period after 1st January, 1947, and are inclusive of rent, rates and other necessities (except medical attention). An additional rent allowance will only be paid where the Local Authority are satisfied that an exceptionally high rent is being paid by the applicant.

Medical Attention, etc.—There is also provided to blind persons qualifying for an allowance such medical relief (including dental, ophthalmic and surgical treatment) as the Medical Officer of Health may certify to be necessary.

Allowances shall be paid subject to deductions in respect of resources as follows:—

Resources.	Amount to be Deducted.
1. Earnings:—	
(a) Recipient,	Full amount.
(b) Wife of recipient,	Half, provided 30s is left to worker.
(c) Son, daughter, father, mother, brother, sister or other relative of applicant,	Not taken into account.
2. Sub-let,	Two-thirds of amount received.
3. Boarders,	One-sixth of amount paid.
4. Compulsory Army Dependents' allowances,	Full amount.
5. Family allowances,	Full amount.
6. Dependents' pension,	Half.

Resources.	Amount to be Deducted
7. Other income,	In full, subject to " Statutory Disregards," viz.:— (a) The first 10s 6d of a superannuation allowance. (b) The first 10s 6d of N.H.I. benefit. (c) The first £1 of a wound or disability pension. (d) The first 5s of a Friendly Society's sick pay. (e) One-half of any weekly payment by way of compensation under the Workmen's Compensation Acts. (f) The whole of maternity benefit exclusive (a) of any increase by way of additional benefits; or (b) any second maternity benefit. (g) All money and investments treated as capital assets, so far as their value does not exceed £25. (Where the value exceeds £25, but does not exceed £400, such assets are, subject to the provisions of the Determination of Needs Act, 1943, to be treated as equivalent to a weekly income of 6d for every complete £25).
8. Grants from charitable organisations,	Nil, except in the case of a grant from an organisation administering funds to be applied exclusively in the assistance of blind persons, in which case the full amount of the grant shall be deducted.

TABLE XXXV.

Work of Health Visitors During 1946.

Visits to Individuals in Their Own Homes—

Under 1 year.	
First Visits,	5,894
Revisits,	15,916
Age 1-5 years.	
First Visits,	6,622
Revisits,	9,601
Age 5-15 years.	
First Visits,	3,664
Revisits,	804
Over 15 years.	
First Visits,	5,457
Revisits,	5,080
Total Visits,	53,038

Actual Number of Houses Visited—

First Visits,	24,000
Revisits,	25,106
Total Visits,	49,106

Number of Visits to Schools—

Sessions (i.e., half-days for routine inspection)	418
Other visits (each lasting from a few minutes to two hours),	1,331

Clinic and Nursery Duty — (Infant Welfare, School Treatment, T.B., V.D., U.V.R., Ante-natal, Day Nursery Children, Diphtheria Immunisation, Vaccination, Specialist Clinics)— Year 1946.

Sessions (each lasting from 1-3 hrs),	4,676
Sessions by health visitors (4) engaged wholly on clinic duty,	2,000
	6,676

KING'S CROSS HOSPITAL

Report by Dr WILLIAM M. JAMIESON

During 1946 the number of patients admitted to the hospital was 1,853. Table I. shows the admissions, discharges and deaths during the year, in respect of the various diseases, according to the pre-admission diagnosis.

TABLE I.

Details of Admissions, Discharges and Deaths during 1946 According to Pre-admission Diagnosis.

Disease	In Hospital 31st Dec., 1945.	Admitted during 1946.	Discharged during 1946.	Died during 1946.	In Hospital 31st Dec., 1946.
Diphtheria (including Croup)	19	286	293	—	12
Tonsillitis, ...	—	2	2	—	—
Erysipelas, ...	4	104	104	1	3
Scarlet Fever, ...	20	313	305	2	26
Scarlet Fever and Wh. Cough,	—	2	2	—	—
Scarlet Fever and Measles, ...	—	3	3	—	—
Puerperal Pyrexia, ...	2	50	50	—	2
Post-abortum Pyrexia, ...	1	23	20	3	1
Bacillary Dysentery, ...	2	242	233	1	10
Enteritis, ...	—	10	7	3	—
Enteric Fever, ...	2	4	5	—	1
Paratyphoid B. Carrier, ...	—	1	1	—	—
Rubella, ...	1	6	6	—	1
Measles, ...	1	366	315	8	44
Measles and Wh. Cough, ...	—	5	3	—	2
Whooping Cough, ...	8	113	110	4	7
Wh. Cough and Dysentery, ...	1	1	2	—	—
Wh. Cough and Chickenpox,	—	2	2	—	—
Primary Pneumonia, ...	2	124	110	2	14
Influenzal Pneumonia, ...	—	14	12	2	—
Influenza, ...	—	2	2	—	—
Bronchitis, ...	—	20	17	3	—
Tuberculosis (Pulm.), ...	—	14	2	—	12
Tuberculosis (Non-Pul.), ...	—	16	4	—	12
Meningitis, ...	—	32	30	2	—

Ant. Poliomyelitis, ...	1	1	2	—	—
Herpes Zoster, ...	—	2	2	—	—
Chickenpox, ...	17	47	63	—	1
Mumps, ...	1	1	2	—	—
Ophthalmia Neonatorum, ...	—	26	26	—	—
Conjunctivitis, ...	—	3	2	—	1
Vulvo-vaginitis, ...	—	2	2	—	—
Glandular Fever, ...	—	2	2	—	—
Pyrexia of Unknown Origin,	—	6	5	1	—
Rash of Unknown Origin, ...	—	3	3	—	—
Scabies, ...	—	1	1	—	—
Bacillary Food Infection, ...	—	2	2	—	—
Miscellaneous, ...	—	2	2	—	—
Total, ...	82	1,853	1,754	32	149

Average daily number of patients, ...	98.6
Highest daily number of patients, ...	194
Lowest daily number of patients, ...	42
Total number of patient days, ...	35,988

There were 32 deaths, giving a hospital mortality of 1.8%.

Diphtheria.

Of 293 cases admitted with the diagnosis of diphtheria (or croup) and discharged during the year, the diagnosis was accepted in 70 (clinical evidence with or without bacteriological confirmation).

The ultimate diagnoses in the non-accepted cases included the following:—

Carrier B. Diph. (various), ...	11
Tonsillitis, ...	151
Quinsy, ...	4
Simple Croup, ...	10
Vincent's Angina, ...	5
Ulcerative stomatitis, ...	7
Miscellaneous, ...	35
	223

The clinical classification, together with the causal organism, where identified, is set out in Table II.

TABLE II.

Showing Number of Cases Sub-divided in Terms of Classification of Lesion and Type of Infecting Organism.

Classification of Lesion	Type of infecting organism—number of cases. (a) Mitis	(b) Intermed.	(c) Gravis (Type I.)	(d) Untyped	(e) Bacterio-logical negative	(a)-(e) All Groups
Anterior nasal, ...	—	4	—	4	—	8
Faucial—mild, ...	—	8	—	—	4	12
Faucial—moderate,	1	18	5	—	21	45
Nasopharyngeal—severe, ...	—	1	1	—	3	5
Laryngeal, ...	—	—	—	—	—	—
All Types, ...	1	31	6	4	28	70

All patients made a complete recovery, case mortality being nil.

Only 4 of the 70 cases were complicated; 2 developed myocarditis, 1 paralysis of accommodation, and 1 palato-pharyngeal paralysis with added accommodation paralysis.

The age incidence is detailed below:—

Age in Years.	No. of Cases.
Under 1, ...	8
1, ...	1
2— 4, ...	11
5— 9, ...	14
10—14, ...	15
15—20, ...	10
21+, ...	11
	70

Immunisation History of Cases.

Not Immunised, ...	37
Immunised, ...	33
	70

Although this report is concerned only with 1946, it is perhaps worthy of note that during the first six months of 1947 not only has the case mortality from diphtheria remained nil, but there have been no more than 4 accepted cases of the disease, and of these only one has been confirmed bacteriologically.

Comment.

While other factors may be concerned, immunisation has undoubtedly played a major role in producing the satisfactory position now obtaining as regards diphtheria. Figures show that over 90% of Dundee's children are immunised against the disease, and it is of the utmost importance that continued efforts should be made to ensure that the number of immunised infants should approximate to the number of births in the previous year and that every child should receive a "boosting" dose on entering school. This is especially important since, during the next few years one may expect a decline in any degree of herd immunity which may have been established as a result of the 1940-41 epidemic.

Scarlet Fever.

Scarlet fever continues to be a relatively mild condition. There was no mortality during the year, the two cases shown in Table I. as having died were not finally accepted as suffering from the disease, one death being due to Staphylococcal Septicaemia, the other to Primary Pneumonia. Complications were not infrequent and comprised, mainly, cervical adenitis, rhinitis, and, to a lesser extent, otitis media. The complication rate in scarlet fever appears to be unaffected by the type of initial treatment, and it is suggested that the bulk of cases nowadays need only local treatment of the initial lesion, reserving sulphonamide, penicillin and so on for complications as they arise. Occasionally one sees cases which might benefit, by reason of a severe throat lesion initially, from sulphonamide therapy or, by reason of a degree of toxaemia, from a dose of scarlet fever antitoxin.

Erysipelas.

Of 105 cases notified as erysipelas and discharged during the year the diagnosis was confirmed in 85, the face being affected in 70 cases, the lower limbs in 15. There was no mortality. The non-accepted cases were mostly various kinds of skin conditions.

Puerperal Sepsis.

Fifty cases notified as puerperal sepsis were discharged during the year. The final diagnosis in these were as follows:—

	No. of Cases
Endometritis,	17
Pelvic cellulitis,	1
Vaginal and perineal lacerations,	1
Engorged breasts,	3
Mastitis,	5
Mammary abscess,	5
Pyelitis,	3
Thrombophlebitis,	1
Pernicious anæmia of pregnancy,	1
Miscellaneous (unrelated to pregnancy),	13
	50

All the cases recovered.

Septic Abortion.

The diagnosis was confirmed in 16 of the 23 patients notified as post-abortum pyrexia and discharged during the year.

Three of the accepted 16 cases died, the cause of death in each being as follows:—

(1) Staphylococcal septicæmia, pyæmia, pericarditis and cerebral abscess.

(2) Pelvic cellulitis, bilateral thrombophlebitis, pyæmia and pulmonary and cerebral embolism.

(3) Hæmolytic anæmia, toxic nephritis and uræmia.

Most of the patients were admitted from Dundee Royal Infirmary, and dilation and curettage had been carried out in that institution in 11 of the 16 cases, including two of the deaths.

Bacillary Dysentry.

Of 236 cases admitted with dysentery or dysentery with intercurrent infection and discharged during the year, the diagnosis was accepted in 112. To this number must be added 4 cases admitted as other conditions, making the total number of confirmed cases 116.

The causal organism was as detailed below:—

	No. of Cases
Sonne III.,	65
Flexner group,	22
Sonne III. and Flexner,	1
Newcastle,	1
Schmitz,	4
Clinical cases,	23
	116

There was no mortality.

The diagnosis in the non-accepted cases was as follows:—

	No. of Cases	
Non-specific enteritis, ...	96	1 died
Teething, ...	13	
Bacillary food infection, ...	2	
Miscellaneous, ...	3	
Nil abnormal, ...	10	
	124	

Non-Specific Enteritis.

The term " non-specific enteritis " has been used in the past to cover a wide variety of lienteric conditions, having a common factor in the failure to demonstrate causal organisms. Increasing attention has recently been paid to the group, particularly as a result of several outbreaks which have been associated with an extremely high mortality. Examination of fæces for the usual pathogens has been entirely negative. Culture for virus has likewise given negative results. The only positive finding has been the fairly constant recovery of B. Coli Neopolitanum from the fæces. In Dundee we have been fortunate in escaping this fatal type, although recently (1947) 12 cases of Enteritis in infants of between 3 and 10 months were admitted in the course of a fortnight and 4 died. It would appear that the condition is infective, but that the lethal factor is a gross disturbance of fluid balance, the children dying before this balance can be properly restored. Post-mortem examination of two of the above cases was remarkable in that in neither was there any evidence of inflammation of the gastro-intestinal tract, the only pathological change noted being a toxic necrosis of the liver. It is hoped, in the near future, that there will be a full investigation of the condition from every possible angle, including clinical, bacteriological, hæmatological, biochemical and, if occasion arises, post-mortem examination.

Whooping Cough.

Of 123 cases notified as whooping cough or whooping cough with intercurrent infection, the diagnosis was confirmed in 98. To this number must be added 9 admitted as other conditions, thus the total number of confirmed cases becomes 107.

There was one death (an infant of 13 weeks), giving a case mortality of 0.9 per cent. Complications were present in 51 cases (several had more than one complication) as follows:—

	No. of Cases.
Broncho-pneumonia,	37
Bronchitis,	7
Primary Tuberculous Complex,	2
Convulsions,	3
Enteritis,	11
Otitis Media,	1
	61

Of the 25 non-accepted cases 3 died from " marasmus and pneumonia," " encephalitis " and " purulent meningitis."

Measles.

329 cases admitted as measles or measles with intercurrent infection were discharged during the year. The diagnosis was confirmed in 309 of these. In addition, 62 cases notified as other conditions were found to be suffering from measles, thus making the total number of accepted cases 371.

There were 9 deaths, giving a case mortality of 2.4 per cent.

One or more complications were present in 109 cases as follows:—

	No. of Cases.
Pneumonia,	54
Bronchitis,	11
Primary Tuberculous Complex,	3
Empyema,	1
Otitis media,	38
Mastoiditis,	1
Convulsions,	1
Severe Stomatitis,	1
Ulcerative glossitis,	1
Croup,	3
Enteritis,	2
	116

Meningococcal Meningitis.

During the year 32 cases notified as " Meningitis " were discharged. Since two of these were readmissions the actual number of cases dealt with was 30.

The ultimate diagnosis was as follows:—

Meningococcal Meningitis,	12	1 died
Pneumococcal Meningitis,	2	
Tuberculous Meningitis,	1	1 died
Conditions other than Meningitis,	15	
	30	

Typing of the organism was successful in 3 of the 12 cases of meningococcal meningitis, and in each instance the organism proved to be Type I. The single fatal case was a young man of 18 years who died as a result of a fulminating meningococcal (Type I.) septicæmia. At post-mortem examination inflammatory changes were present in the meninges and in the brain itself.

Both cases of pneumococcal meningitis recovered. One of these, after being in hospital initially for about two months, had a recurrence two months after discharge, was readmitted, re-treated and again made a good recovery.

One of the meningococcal infections is a most interesting case and merits a brief description here. This was a girl who in May, 1937, at the age of 16 years, developed meningococcal meningitis. She was treated with anti-meningococcal serum and apparently made a good recovery, but in October, 1937, she had a further attack which was followed by still another in 1938. She was then seen by a neurological surgeon, who performed a decompression operation and freed the adhesions of a chronic adhesive meningitis. Meningococci were recovered at this time. In 1943 she had another attack and this has been followed by two attacks in 1945 and a further two in 1946. After each illness recovery appears to be complete and she is perfectly well in the intervals between attacks. It is hoped to publish a full report of the case at a later date.

Tuberculosis.

With the closure of Sidlaw Sanatorium, Ward 7 was opened on 17th September, 1946, for the reception of cases of tuberculosis in children. Thirty beds are now available, and for some time now have been fully occupied. Both pulmonary and non-pulmonary cases are admitted, arrangements for admission being made by the Tuberculosis Officer. Treatment is directed by the Tuberculosis Officer in respect of the pulmonary cases and by the Regional Orthopædic Surgeon in respect of the non-pulmonary. Educational facilities are available for the children.

Other conditions permitting, it is hoped in the near future to arrange for the admission of a limited number of selected cases of adult tuberculosis.

Scabies.

The clinic within the hospital for the out-patient treatment of adults suffering from scabies continues to be available. Doctors may refer cases to the clinic by arrangement with Public Health Office.

Treatment is, broadly speaking, two applications of Benzyl Benzoate (25%) Emulsion on successive days, followed by bath and change of clothing on third day. Patients return one week after commencing treatment for observation and re-treatment where necessary.

No. of females treated during the year,	163
,, ,, males ,, ,, ,, ,,	68
Total, ,, ,, ,, ,,	231

	Female.	Males.	Total.
No. of cases requiring 1 treatment only,	22	8	30
No. of cases requiring more than 1 treatment,	62	23	85
No. attending own doctor after 1 treatment,	1	2	3
No. of cases who failed to return to complete treatment,	78	35	113
	163	68	231

The actual number of treatments required to effect complete clearance is shown below:—

	Females.	Males.	Total.
1 treatment,	22	8	30
2 treatments,	21	8	29
3 ,,	24	6	30
4 ,,	10	3	13
5 ,,	4	3	7
6 ,,	2	3	5
7 ,,	1	0	1
	84	31	115

Infestation with Pediculosis Capitis.

Since 1941, records have been kept of the state of head infestation with lice of all admissions to the hospital. The recorded results may prove useful in giving a certain amount of information on social trends.

In 1941 a report was made on the degree of head infestation of 600 more or less consecutive admissions and this was followed by a similar report in 1946. The findings are summarised briefly below:—

	1941. Percentage infested.		1946. Percentage infested.	
Age in Years	M.	F.	M.	F.
Under 2, ...	47	44	28	30
2—4, ...	68	77	57	65
5—9, ...	73	75	46	52
10—14, ...	60	90	39	65
15—19, ...	20	72	25	46
Over 20, ...	11	40	0	29

The actual totals were as follows: —

Total number examined on each occasion,	600	
Total number found infected in 1941, ...	404	(67.3%)
Total number found infected in 1946, ...	241	(40.2%)

While it is obvious that several factors would have to be equalised before those two groups could be properly compared, the above results do confirm the impression of the nursing staff that there has been a distinct improvement in cleanliness over the past few years.

GENERAL REMARKS.

In few branches of Medicine have greater changes been evidenced in recent years than in the field of infectious diseases. Historic advance in therapeutics have been matched only by successes in prophylaxis. Some diseases, such as scarlet fever, have declined to relatively mild conditions, while others, like infantile enteritis, have assumed increasing importance. The wide variety of conditions of varying infectivity, now treated in a fever hospital bears testimony to the fact that the need for specialised treatment more often than not surpasses in importance the necessity for isolation. This being so, it must surely follow that the larger modern fever hospital should have at its disposal all the facilities, including the necessary aids to diagnosis, that up-to-date methods demand. The number of cases of respiratory infection, both primary and secondary, now treated certainly warrants the installation of X-ray equipment, while the very fact that one is dealing all the time with infectious diseases warrants only the most efficient arrangements for laboratory procedure. Again, while isolation in the broad sense of the term is often not a prime consideration, isolation of the individual within the hospital is frequently of the utmost importance. A patient admitted with one disease must as far as humanly possible be prevented from acquiring a second condition by reason of his stay in hospital. The only way this can be done is by a considerable increase in the available cubicle isolation.

Cubicle Isolation.

The present position is that roughly 10% of the accommodation is of the cubicle type. This is, of course, completely inadequate —a figure nearer 50% should be regarded as the ultimate aim. The present cubicle block, built during the war, has undoubtedly served a useful purpose inasmuch as it has certainly been better than nothing at all, but it is quite unsatisfactory both in construction and design for the efficient treatment and nursing of patients. The need for initial cubicle isolation in certain diseases is well recognised. In addition, circumstances from time to time complicate the position further. For example, quite recently a number of patients were admitted over a period of several weeks from the children's ward of a general hospital, this ward unfortunately being cross-infected with no fewer than three different infectious diseases. Practically every child therefore transferred to the fever hospital from that ward had to undergo quarantine in the cubicle block before being transferred to an open ward.

Mindful of the fact that these are difficult days for building enterprises, the construction of efficient and sufficient cubicle isolation is, nevertheless, an item of the utmost importance which should be given high priority.

X-ray Apparatus.

Table I. shows that 160 patients suffering from conditions affecing the respiratory system were admitted during 1946. To this number can be added about a further 120 who had respiratory complications in other diseases, and finally there is now in the hospital fully occupied accommodation for 30 children suffering from tuberculosis, pulmonary and non-pulmonary. We have no X-ray apparatus. Patients must be sent to Maryfield Hospital, which fact places severe limitations on the medical staff since obviously only a patient fit to stand the journey can be examined radiologically, and in any case such an arrangement is always unsatisfactory at best. An X-ray plant is an essential in a modern fever hospital, and steps should be taken at the earliest opportunity to remove the severe handicap to progressive work which the absence of such a plant entails.

Laboratory Facilities.

The present scope of laboratory work within the hospital is limited to what one might term " side-room work," this being

carried out in a converted side-ward of Ward 6, fairly well equipped for the purpose. Bacteriological investigations are carried out by Professor Tulloch at the University Bacteriology Department. Other special examinations (biochemical, pathological, etc.) are dealt with by the appropriate department of the University. While the system has worked well—and we could not have had better co-operation than that which we have enjoyed from Professor Tulloch and his staff—there are, nevertheless, limitations to such an arrangement, and the time has now come to consider whether it would not be to the advantage of all concerned to have a fully-equipped laboratory within the hospital with a staff responsible to the medical superintendent but probably working under the ægis of Professor Tulloch. Such a laboratory would embrace all aspects of clinical pathology and routine bacteriology. The clinicians would benefit by being able to carry out any investigations they chose without feeling they were putting an added strain on a busy laboratory such as the University Bacteriology Department is at the moment. The parent laboratory, freed from much of the routine investigation, would be able to devote its attention to any more specialised work outwith the scope of the hospital laboratory. Lastly, the setting up of a laboratory within the hospital would tend to draw still closer together the clinical side and the bacteriological, which relationship is the essence of the proper management of infectious diseases.

TUBERCULOSIS SECTION

Report by Dr J. H. HUNTER,
Chief Tuberculosis Medical Officer.

The total figure for notifications shows a drop of 30 from the preceding year, but that drop is almost entirely in the non-pulmonary group and on this little stress can be laid as the non-pulmonary figures are very variable. The pulmonary figures are practically the same but a significant feature in them is the tendency for the female age grouping to conform to the male type.

An event of serious import occurred during the year. Owing to lack of nursing and domestic staff, Sidlaw Sanatorium, Auchterhouse, was forced to shut down and the cases that required further institutional treatment were transferred to Ward 7, King's Cross Hospital, in September.

The state of affairs at Ashludie is very serious. The institution is carrying on with the minimum of staff. One third of the female accommodation only is available, and thus a very large number of cases are being treated at home and in many instances in quite unsuitable conditions. With the employment of male nurses the accommodation for male patients has been increased and all our male cases are being admitted with the minimum of delay.

In this my last report I take leave of all my colleagues in the Public Health Department and thank them for their cordial co-operation and wish them well in the work they are carrying on.

Year	Total	Pulm.	Non-Pulm.	Pulm. M.	Pulm. F.	Non-Pulm. M.	Non-Pulm. F.	Outside Notification
1942	408	236	172	119	117	79	93	34
1943	316	227	89	124	103	35	54	40
1944	305	248	57	112	136	25	32	19
1945	351	274	77	153	121	35	42	16
1946	321	270	51	146	124	25	26	49

During the year, 1946, 321 cases of Tuberculosis were notified, 270 cases of Pulmonary Tuberculosis and 51 cases of Non-Pulmonary Tuberculosis.

Of these,

158 cases were notified at the Tuberculosis Clinic.
24 cases were notified from private practitioners.
5 cases were notified from Maryfield Hospital.
62 notifications came from Royal Infirmary.
49 notifications came from Medical Officers outside the City.
23 notifications came under the notice of the Department through the Registrar after death had taken place.

PULMONARY TUBERCULOSIS

During the year 270 cases of pulmonary tuberculosis were notified. The age and sex of these are as follows:—

Age	Males	Females	Total
Under 1 year, ...	—	1	1
1-5 years, ...	5	—	5
5-15 years, ...	7	8	15
15-25 years, ...	43	49	92
25-45 years, ...	58	54	112
45-65 years, ...	26	10	36
65 and over, ...	7	2	9
	146	124	270

Pulmonary Tuberculosis.

The following are particulars regarding housing:—

No. of Rooms	No. of Cases	Total No. of Inmates	No. of Inmates per Room
1	21	59	2.81
2	95	388	2.04
3	84	395	1.57
4 and upwards	40	242	1.50

In 30 cases no home conditions were obtained.

Non-Pulmonary Tuberculosis.

During the year 51 cases of non-pulmonary tuberculosis were notified. The age and sex of these were as follows:—

Age	Males	Females	Total
Under 1 year, ...	—	1	1
1-5 years, ...	8	8	16
5-15 years, ...	9	7	16
15-25 years, ...	6	3	9
25-45 years, ...	1	3	4
45-65 years, ...	1	2	3
65 and over, ...	—	2	2
	25	26	51

The sites of the diseases are as follows:—

Site of Disease.	Total.	Under 1 Yr. M.	Under 1 Yr. F.	1-5 Yrs. M.	1-5 Yrs. F.	5-15 Yrs. M.	5-15 Yrs. F.	15-25 Yrs. M.	15-25 Yrs. F.	25-45 Yrs. M.	25-45 Yrs. F.	45-65 Yrs. M.	45-65 Yrs. F.	65 & Over. M.	65 & Over. F.
Abdomen, ...	8	—	—	2	—	3	2	—	—	—	1	—	—	—	—
Meninges, ...	14	—	1	3	3	2	4	—	1	—	—	—	—	—	—
Glands, ...	6	—	—	3	1	—	—	1	—	—	1	—	—	—	—
Bones & Joints,	5	—	—	—	1	1	1	1	—	—	—	—	1	—	—
Spine, ...	5	—	—	—	—	1	—	1	—	—	1	—	1	—	1
Other Forms, ...	13	—	—	—	3	2	—	3	2	1	—	1	—	—	1
Totals, ...	51	—	1	8	8	9	7	6	3	1	3	1	2	—	2

The following are particulars regarding housing of the Non-Pulmonary cases:—

No. of Rooms.	No. of Cases.	Total No. of Inmates.	No. of Inmates per Room.
1	4	15	3.75
2	11	61	2.82
3	10	48	1.6
4 & upwards	9	57	1.5

In 17 cases no home conditions were obtained.

TUBERCULOSIS CLINIC

During the year 642 cases were enrolled as compared with 648 in the year 1945. Of these 133 were found to be suffering from distinct phthisis (71 males and 62 females). 342 were found not to have the disease; in 153 cases no definite evidence of Tuberculosis was found, and 14 were found to be suffering from other forms of Tuberculosis.

There were 506 contacts examined, 25 were found to be suffering from pulmonary tuberculosis, 85 were suspicious and are being kept under observation, and the remaining 390 were found to be negative.

Of the 133 cases of definite phthisis 34 were previously notified and 99 were notified from the Clinic for the first time.

The age and sex of these were as follows:—

Age.	Male	Female.	Total.
Under 1 year, ...	—	1	1
1-5 years, ...	2	—	2
5-15 years, ...	2	5	7
15-25 years, ...	19	25	44
25-45 years, ...	30	27	57
45-65 years, ...	13	4	17
65 and over, ...	5	—	5
	71	62	133

The attendances at the Tuberculosis Section are as follow:—

Month.	Ins.	Non-Ins.	Total.
January, ...	594	151	745
February, ...	593	180	773
March, ...	617	172	789
April, ...	630	155	785
May, ...	625	162	787
June, ...	535	115	650
July, ...	489	94	583
August, ...	655	137	792
September, ...	551	159	710
October, ...	688	132	820
November, ...	598	184	782
December, ...	667	180	847
	7,242	1,821	9,063

LABORATORY WORK.

During the year 1946, 702 specimens of sputum were examined in the laboratory with the following results:—

	Positive.	Negative.
For General Practitioners, ...	—	7
For Clinic Patients, ...	146	549

143 Specimens of Urine were examined.

X-Ray Department.

During the year 1946, 2,582 radiograms and 1,178 screen examinations were carried out. Of the 2,582 radiograms,

2,283 were for the Tuberculosis Section
5 were for the V.D. Clinic
294 were medical examinations.

Chest.	Other Parts.	Total.
2,582	—	2,582

Artificial Pneumothorax.

During the year 1946, there were 1,178 attendances at the Artificial Pneumothorax Clinic. Of these 438 were males and 740 were females.

Sidlaw Sanatorium.

During the year there were altogether 11 cases from the City recommended for treatment in this institution. Of these 6 were males and 5 females.

There were 30 cases discharged (18 males and 12 females).

Fifteen of those discharged were transferred to King's Cross Hospital. All were reported to have improved.

Artificial Sunlight.

During the year 1946, 3,613 patients attended the Artificial Sunlight Clinic. Of these 1,426 were males and 2,187 were females.

	Males.	Females.	Total.
Number of attendances,	1,426	2,187	3,613

J. H. HUNTER, M.B., Ch.B., D.P.H.

Chief Tuberculosis Officer.

ASHLUDIE SANATORIUM

Report by Dr D. H. SMITH,
Medical Superintendent.

During the year 1946, 169 patients were admitted and 170 discharged, this latter figure including 42 who died.

Admissions—	Male.	Female	Children Under 12.	Total.
Tuberculosis of Lungs and Pleura,	103	42	—	145
Disseminated tuberculosis,	13	7	—	20
Non-tuberculous,	3	1	—	4
Discharges,	65	62	1	128
Deaths,	22	19	1	42

Number of beds occupied on 31st December, 1946,	144
Highest daily number of patients,	164
Lowest daily number of patients,	130
Average daily number of patients,	149
Average residence of those discharged,	312 days
Average residence of those who died,	261 days

Age and Sex Distribution of Admissions.

	Pulmonary.		Disseminated.		Non-tuberculous.		
Age.	M.	F.	M.	F.	M.	F.	Total.
0-5,	—	—	—	—	—	—	—
5-15,	3	2	4	1	—	—	10
15-25,	41	18	7	2	—	1	69
25-35,	26	15	—	1	—	—	42
35-45,	23	5	—	1	1	—	30
45-60,	9	2	2	1	2	—	16
Over 60,	1	—	—	1	—	—	2

Condition on Discharge.

	Male.	Female.	Children.	Total.
Much Improved (quiescent),	16	16	—	32
Improved,	37	33	1	71
No Change,	5	6	—	11
Worse,	4	6	—	10
Died,	22	19	1	42
Non-tuberculous,	3	1	—	4

Classification of Pulmonary Admissions.

Pleural Effusions.	Early.	Moderately Early.	Moderately Advanced.	Advanced.	Total.
7	17	16	19	86	145

Disseminated Admissions — Site of Disease.

Spine,	12
Foot,	2
Miliary,	2
Kidney,	2
Kidney and chest,	1
Elbow and ankle,	1

Diagnosis of Non-tuberculous Cases.

Bronchiectasis,	3
Renal calculus,	1

Cause of Deaths.

Pulmonary tuberculosis,	37 cases
Generalised tuberculosis,	1 case
Gastric carcinoma and tuberculosis of spine,	1 case
Tuberculosis of hip and tuberculous pyæmia,	1 case
Tuberculous bronch-pneumonia,	1 case
Tuberculosis of spine, abdomen and bladder,	1 case

Special Treatment of Pulmonary Admissions.

Artificial pneumothorax,	59 cases attempted
Bilateral artificial pneumothorax,	3 cases
Phrenic nerve operations,	33 cases
Adhesion section operations (internal pneumolysis),	34 cases
Bilateral adhesion section operations,	3 cases
Pneumoperitoneum,	8 cases
Gold therapy,	10 cases
Thoracoplasty operations (in Hairmyres Hospital),	1 case

Treatment Block, Including Theatre.

Artificial pneumothorax refills and other minor operations,	1,966
Adhesion section operations,	61
Phrenic nerve operations,	44
Operations under general anæsthesia,	39
Pleural aspirations and lavage,	70
Gold injections,	539
Plasters,	70
X-rays,	1,248

COMMENTS

Treatment of lung tuberculosis has followed along the usual lines of a " sanatorium regime " plus the various forms of collapse therapy. It will be noted from the statistics that 105 of a total of 145 pulmonary admissions fall into the classification of moderately advanced or advanced; nevertheless active treatment by artificial pneumothorax was attempted in 59 cases and adhesions were divided at operation in 37 cases. A number of the unsuccessful cases of artificial pneumothorax might have been treated by the major operation of thoracoplasty had the services of a thoracic surgeon been available. At the time of writing this report, the Corporation have wisely agreed to the appointment of Mr Bruce Dick, F.R.C.S., and his assistants to undertake chest surgery in the Sanatorium. The predominance of advanced pulmonary admissions is a strong argument in favour of improved methods of case finding so that diagnosis is made during the initial stages of the disease. The wide use of " Mass Radiography " should alter in a few years the type of case admitted for treatment.

Cases of bone and joint tuberculosis have been treated along the usual conservative lines. Most of these patients are in hospital for long periods, usually from 2 to 3 years; the diagnosis and assessment of progress are often very difficult. The appointment of Mr I. S. Smillie, F.R.C.S., as orthopædic surgeon to the area has been invaluable in the treatment of this type of case.

During late 1946 an approach was made to the Scottish General Nursing Council to have Ashludie affiliated to Maryfield Hospital for the purpose of nursing training in the hope that the improved status of the Sanatorium as a training school would aid in the recruitment of nurses. At the time of writing this report, this proposal has been agreed to by the General Nursing Council. In early 1946 the nursing position became so serious that it was decided to employ male orderlies, who had previous nursing experience in one of the armed services, in order to prevent marked reduction in the bed state of the Sanatorium. This experiment has proved successful, and it is pleasant to report that during 1946 no reduction in the bed state of the hospital had to be effected, as had been anticipated early in the year. Unfortunately, two female wards had to be closed and opened as male wards owing to the shortage of women nurses, which has meant that although there is no male waiting list, the female waiting list is in the region of 40.

It is hoped that the affiliated training referred to above will attract more women probationer nurses; with this in view, a Sister Tutor was appointed during the year and a small teaching unit established and equipped in one of the E.M.S. huts to comply with the regulations laid down by the General Nursing Council.

Early in the year it was agreed to close the open fronts of the East and West Pavilions (built in 1916) with folding glass doors and add certain equipment and heating to these wards to make them more suitable for the modern conception of treatment of pulmonary tuberculosis. This work has not yet been completed, but when it is done it will considerably improve the effectiveness of the total bed state of the Sanatorium.

A comprehensive dental service to the Sanatorium has been agreed to by the Public Health Committee, and at the time of writing this report a modern dental surgery has been fully equipped; the whole service is working well. Mr D. M. Anderson, L.D.S., visits the Sanatorium for a whole day each week. The dental report for the latter part of the year is appended.

As stated in the last annual report, the standard of work in the X-ray department is hampered by an inadequate electricity supply. An improvement in this department is an urgent necessity now that a chest surgery unit has been commenced. The Department of Health has loaned to the Sanatorium a new X-ray tube, free of charge, presumably until the hospitals are taken over by the Regional Hospital Board.

The full-time medical staff of the Institution consists of a medical superintendent and two junior resident medical officers, the latter changing every six months. The size of the Sanatorium (180 beds) and the increased scope and amount of work carried out in it is such that one of the resident medical officers should have more post-graduate experience in medicine and tuberculosis in particular, than can be expected from a junior resident medical officer. The new appointment should have the status and salary of a senior resident medical officer or, preferably, a resident deputy medical superintendent, thereby ensuring more continuity in the medical staff and so maintaining and improving the standard of treatment.

The laboratory technician would be of considerable advantage to the hospital.

In a previous report an improved occupational therapy unit was envisaged as part of an enlarged rehabilitation scheme. This, however, is probably premature, since reorganisation of this part of treatment will probably be worked out on a regional basis, but there is undoubtedly a sound argument for the appointment of a " diversional therapist " to organise handicraft work in order to combat the boredom and psychological deterioration of patients, who, of necessity, must have many months of rest in bed. It is increasingly recognised that this is an important aspect of treatment, not only in tuberculosis, but in any disease during which prolonged bed rest is necessary.

Dr J. H. Hunter, Tuberculosis Officer and Medical Superintendent of Ashludie Sanatorium for over 25 years, retired in February, 1947. He was closely associated with Ashludie from its beginning to the present day, and has been largely responsible for its many improvements. I should like to record my personal appreciation of his sound advice and help during seven years of close professional association under him. The staff of the Sanatorium join with me in wishing him well in his retiral.

D. H. SMITH.
Medical Superintendent.

Dental Report: September-December, 1946.

	Patients.	Staff.	Total.
No. Inspected, ...	185	10	195
No. Requiring Treatment, ...	131	8	139
No. Treated, ...	51	8	59
No. of Attendances, ...	128	14	142
Extractions, ...	114	2	116
Fillings, ...	46	10	56
Other operations, ...	31	2	33
Scaling, ...	9	3	12
General Anæsthetic, ...	1	—	1

DAVID A. FINLAYSON,
Senior Dental Officer.

DUNDEE MENTAL HOSPITAL

Report by Dr A. ALLAN BELL

I have the honour to submit the Annual Report of Dundee District Mental Hospital, Westgreen, for the year ending 15th May, 1946.

The number of patients on the hospital registers was on 15th May, 1945:—Certified, 558 (292 men and 266 women); Voluntary, 3 (2 men and 1 woman); and on 15th May, 1946:— Certified, 573 (299 men and 274 women), Voluntary, 1 man.

During the year there were 70 Admissions, 31 Discharges, and 26 Deaths. The total number under care and treatment was 631 (326 males and 305 females) and the average daily number 570.4 (298.7 males and 271.7 females).

Patients evacuated from Stirling District Mental Hospital, Larbert, numbered on 15th May, 1945, 114 (49 men and 65 women) and on 15th May, 1946, 104 (45 men and 59 women).

During the year there were no Larbert admissions, 3 discharges (1 male and 2 females) and 7 deaths (3 males and 4 females).

The Service Patients, etc., maintained by the Ministry of Pensions as Private Patients numbered 15 at the beginning, and at the end of the year 15. There are also 3 Service Patients from Stirling District Mental Hospital, Larbert.

Three Voluntary Patients (2 males and 1 female) were resident on 15th May, 1945. During the year 1 Voluntary male was admitted, and 3 Voluntary Patients (2 males and 1 female) were discharged, making on 15th May, 1946, a total of 1 Voluntary male patient. Stirling District Mental Hospital Voluntary Patients on 15th May, 1946, numbered 4 (3 males and one female).

The rate-aided patients on 15th May, 1946, are chargeable as follows:—

	M.	F.	Total.
Dundee, ...	278	263	541
Angus, ...	—	2	2
Other Districts, ...	5	9	14
	283	274	557

ADMISSIONS.—The types of mental disorders among the certified admissions comprised chiefly:—

Psychogenic Psychoses:—Schizophrenia, 15 cases; Manic depressive psychoses, 10 cases (acute mania 7, and acute melancholia, 3); Involutional melancholia, 7 cases; Paraphrenia, 9 cases; Paranoia, 1 case; and Epileptic psychoses, 5 cases.

Physiogenic Psychoses:—Acute Confusional Psychoses, 5 cases (Puerperal 1); Toxic Psychoses-Alcoholic 3 cases, Drugs 1 case; Dementia paralytica, 2 cases; Senile Psychoses, 4 cases; Post-encephalitic Psychosis, 2 cases; Mental Deficiency, 5 cases.

The bodily health of the new admissions was recorded as good in 51 cases, fair in 12 cases, and poor in 6 cases.

DISCHARGES.—The cases discharged numbered 31 (15 males and 16 females) of whom 27 were discharged " recovered " and 4 " relieved." The number of those recovered was 38.5% of the number admitted, while those relieved amounted to 5.7%, making the total discharge rate 44.2% of the admission rate. Of the Stirling District Mental Hospital patients 3 were discharged " recovered."

DEATHS.—Twenty-six patients died during the year (11 men and 15 women). The death-rate for the year calculated on the average number resident was 4.5%. The deaths were all due to natural causes, which were verified by post-mortem in 12 cases, being those in which the relatives granted permission.

The causes of death were as follows:—Diseases of Cardio-vascular system, 5 cases; Acute Diseases of Respiratory System, 7 cases; Pulmonary Tuberculosis, 1 case; Senility, 2 cases; Organic Brain Disease, 2 cases; Dementia Paralytica, 2 cases; Disease of the Genito-urinary System, 2 cases; Diabetes Mellitus, 1 case; Status Epilepticus, 1 case; Suppurative Phlebitis, 1 case; Carcinoma, 2 cases. Senility was a definite contributing factor in an additional three of the above cases.

Of the patients who died, 1 was from 20-30 years of age, 5 from 30-40, 3 from 40-50, 6 from 50-60, 6 from 60-70; 2 from 70-80; and 3 from 80-90.

Amongst Stirling District Mental Hospital patients, 7 died, the causes of death being as follows:—Diseases of the Cardio-vascular

System, 1 case; Acute Diseases of the Respiratory System, 3 cases; Pulmonary Tuberculosis, 1 case; Senility, 1 case; and Acute Infectious Fever, 1 case.

Of the patients who died 1 was from 20-30 years of age, (none from 30-40), 1 from 40-50; 2 from 50-60; 1 from 60-70; and 2 from 70-80.

GENERAL ADMINISTRATION.

Although this has been a momentous year in world affairs owing to the much-longed-for cessation of hostilities it has not contributed greatly to the alleviation of the many problems which arose in the administration of the Hospital during the war years.

Shortage of Staff.—The major problem of the shortage of nurses continued to cause anxiety and apprehension and, as anticipated in our last report, became gradually more acute as time passed. As formerly indicated, at the beginning of hostilities the nursing staff comprised 60 Westgreen nurses and 17 Larbert nurses. At the end of 1945 the numbers were reduced to Larbert nurses nil, Westgreen nurses 22 permanent, 8 temporary, and 10 part-time, while at the close of the present year a further reduction had taken place to Westgreen nurses 21 permanent, 5 temporary and 12 part-time. This meant that not only had Acute Wards and Dayrooms of over 60 patients to be left under the care of one nurse, but certain Dayrooms had to be completely unattended during the nurses' meal hours, despite the fact that the Hospital matron and her assistants were relieving as far as possible at these times. The gravity, the seriousness and the danger of the position is at once apparent owing to the possibility of a catastrophe arising at any moment. The strain, anxiety and tension owing to the unrelaxed vigilance and anticipation told heavily on the few remaining nurses whose devotion to duty and high sense of responsibility cannot be sufficiently recognised by the community.

It may be possible as a short term policy to relieve this intolerable position somewhat by obtaining the services of more part-time nurses and nursing helpers by means of the Shooting Brake which was authorised during the year. Nevertheless this will not solve the ultimate problem of the shortage of mental nurses, as there are practically no student nurses entering the service to replace the older trained nurses as they break down or retire, so that a frankly impossible position will arise in the future.

A great amount of thought and consideration has been given to this problem of attracting nurses to, and retaining them in, the mental nursing service, as increased salaries, per se, do not appear to be able to accomplish this, although it is recognised that the remuneration for student nurses will require to be increased still further in order to compete with other careers. After a quarter of a century's life in a mental hospital it seems to me that one of the greatest deterrents is the feeling of isolation and social frustration which is engendered. It is not so much a case of physical, geographical isolation as of mental, emotional, spiritual isolation, a feeling of apartness from, and lack of oneness with, the rest of the community based upon the thwarting of the socialising ' herd ' instinct. This, together with the medieval prejudices and taboos which are still associated with mental hospitals, mental patients and mental treatment, gives rise to a kind of " Isolation neurosis " whereby a feeling of being out of sympathy with the views and aspirations of the world at large is fostered, coupled with the realisation that the best of efforts are not being appreciated, and with the consciousness of being a pariah amongst ordinary people, all of which gives rise to acute dissatisfaction and restlessness. A great deal of this was broken down in former days by the members of the old District Boards of Control having the leisure to take a personal interest not only in the patients but in the hopes, wishes, successes and failures and in the general affairs of the individual members of the nursing staff. It seems that this deterring factor could be surmounted in great measure, at the present time, if the Mental Hospital became the focus of a complete Mental Health Service which would include Psychiatric Wards and Outdoor Clinics at the General Hospital, Child Guidance and Child Psychiatry Centres, After-care and Rehabilitation Centres, Geriatric Homes (old people), Mental Defective Colonies, Court Psychiatry Facilities and Mental Health Visiting and Social Services. Within the compass of such a complete service the nurses would be interchangeable and during their training, which would be eminently practical, the student nurses would require to visit and study in all or several of the various departments. At the same time the holding of the higher posts in the service would necessitate the completion of a full course of study in the mental hospital and the obtaining of the requisite Mental Nursing Certificate which would ensure that the holder was suited from the point of view of knowledge, character and temperament to undertake the treatment of all varieties of mental problems. The necessity of this is at once apparent on thinking of old people, many of whose problems are being increasingly recognised as of a psychological nature.

MENTAL AND PHYSICAL TREATMENT.

Despite all the difficulties and restrictions which arose during the war the general health of the patients was maintained at a satisfactory level without the occurrence of any epidemic or of any accidents of a serious nature, thanks to the skill and devotion of the nursing staff both on the male and female sides of the Hospital.

The Admission rate is a little higher than during the war years but the proportion of the various psychoses remains fairly constant. It should be pointed out, however, that two of the mental defective patients who were admitted were under 10 years of age so that the comments which were made in the last report are equally applicable to them. The Discharge rate was of a fairly high level while the Death rate was reasonably low for the year, in spite of the difficulty of giving those who are physically ill adequate nursing attention owing to the staffing difficulties.

The introduction of Penicillin has assisted greatly in the treatment of Pneumonia which has always taken a high toll of the elderly patients and those exhausted from acute mental illness. It has also been used in the treatment of cases suffering from Acute Confusional Psychoses of toxic origin and has contributed to the recovery of some patients.

Electric Convulsion Therapy has continued to be used extensively with remarkably beneficial results in the affective disorders, especially the depressions which are encountered in middle age. By giving maintenance doses at fortnightly and longer intervals it was found to be possible to keep some patients well for long periods of time. It was felt that several cases of acute mania, who always relapsed whenever this treatment was stopped, were kept well by means of maintenance doses until their manic attack had run its usual course. Although this did not materially shorten their stay in hospital it was naturally of great comfort and benefit to themselves and to those who were in charge of their welfare. Many schizophrenic patients especially those of the simple and catatonic varieties who would have remained quite inaccessible, showed great improvement after this treatment, becoming much more co-operative and amenable to the ordinary psychotherapeutic approaches.

A completely new era, however, was begun in the treatment of our patients in November, 1945, by the introduction of the operation of Prefrontal Leucotomy. This operation was inaugurated by the Portuguese physician Moniz in Lisbon in

1936, after several courageous experiments, and thereafter was developed in America and was introduced from there to this country during the war. It consists essentially of severing some of the white connecting fibres in the brain and thereby (like releasing a spring) relieving the patient of pent-up emotional energy and tension which may have shown itself in the form of anxieties, obsessions, depressions, phantasies, hallucinations and in all manner of impulsive, explosive, aggressive, destructive, dangerous and homicidal attacks. The transformation which is at once apparent in the patient's mental condition to one of calm, placid, pleasant co-operation and helpfulness, is almost incredible and little short of magical. In suitable cases practically everyone shows considerable improvement, although to varying degrees, to the extent of being able to resume their former occupation, irrespective of the duration of their illness. Although some patients have still to remain in hospital they are much more happy and contented in themselves, and, having lost the worst of their symptoms, are not nearly such a problem to those who require to nurse them and in many instances are metamorphosed into very useful and industrious members of the hospital community, taking part in the occupational and social activities. The operation is actually performed under the skilled hands of Mr F. R. Brown at Maryfield Hospital and the patients are immediately brought back to the Mental Hospital before they recover from the anaesthetic, so that few of them remember anything at all about its occurrence. The post-operative nursing, training and re-education is thus carried out in the Mental Hospital by the nurses whose mental experience and training has never had such an opportunity of proving its high value. Before the operation each patient is carefully studied and selected, and it is decided whether the surgeon should be asked to perform a complete or conservative section. The precision and delicacy of movement required in performing this operation are apparent to all, but it should be remembered that the surgeon, although using several general measurements, has to be guided in the last resort by his own intuition and judgment, as to where he should operate, owing to the wide variations in the configuration of the skull to be encountered in different people. So far all our patients have made an uninterrupted recovery from the operation, which does not appear to be attended with any high degree of shock, while no complications or accidents in the nature of brain haemorrhage have occurred. It should be noted that the patient's intelligence, understanding, knowledge and memory are unimpaired although we were always led to believe that interference with that part of the brain, which is the latest to evolve,

would be followed by disastrous results. Indeed one of the greatest benefits to the patient is that he loses all self-consciousness and can enjoy social contacts and activities without any feelings of restraint or embarrassment, while he lives a great deal in the present, being unable to worry or harass himself with the anticipation of imaginary events in future, living up to the Biblical injunction of taking no thought for the morrow. At the end of the year the operation had been performed on 25 patients, 10 male and 15 female, with gratifying results in practically all cases. All the patients were of a chronic nature and almost all of them were of long standing, even to 10 or 15 years in the Hospital. The majority of them were of the Schizophrenic group which forms such a large proportion of our permanent inmates. Some of the patients were extremely violent and dangerous and required to be confined to bed or to a single room owing to their impulsive homicidal attacks. By all the standards of judgment which our experience could bring to bear there was no hope of improvement in any of their mental states while several of them were rapidly deteriorating. Almost all of them had had prolonged courses of Electric Convulsion Treatment without showing any improvement of a permanent nature. Their ages varied from 26 years to 69 years and all were in good physical condition with the exception of one or two. Of the first 20 cases, 8 male and 12 female, which were operated upon, 2 male and 2 female patients are actually at home, while arrangements have been made to discharge other 2 male patients. Another female patient could be at home if the circumstances of her relatives permitted. This means that a social recovery has taken place in 35% of the cases, while several who are still in the Hospital are usefully employed in the Occupational Therapy Department. Attention should be drawn to one woman who suffered from Agitated Melancholia, the most distressing of all mental disorders both for the patient and those around, who had been in hospital for 10½ years confined to bed moaning and groaning without ceasing both day and night, who is now sufficiently improved to perform useful ward work and converse with her neighbours and whose return home cannot be too long delayed. It is considered that results so far obtained justify our continuing this form of treatment in suitably selected cases, after other forms of therapy have been used, especially hopeful being those who make a temporary improvement under Electric Convulsion Therapy and who can be kept well with periodical applications. It is to be regretted, however, that there is no Out-door Clinic in the City associated with the Mental Hospital, where those discharged patients

could be seen by the hospital doctors. At the same time a service of Mental Health Visitors or Psychiatric Social Workers would help and guide in any of their domestic difficulties which might be encountered. Moreover, a Mental Rehabilitation and After-care Centre would ensure that suitable employment with congenial associates was found for them. These observations, of course, are equally applicable to all the patients who are discharged from mental hospitals, if the whole problem of mental diseases is going to be dealt with at all.

The customary Recreational and Occupational Therapy were maintained throughout the year with the same marked benefit to the patients, especially those recovering from acute illnesses.

NEW CONSTRUCTION AND REPAIRS

In spite of the increasing shortage of material, especially wood and glass, the artisan staff have again managed to maintain the Hospital fabric in a good state of repair. New floors were laid in some of the corridors and in one of the smaller Dining Rooms, to the greater safety of the patients. The resurfacing of the main avenue has made a vast improvement in the approaches to the Hospital but shows up, in contrast, what is urgently needed in some of the other avenues throughout the policies. The repairs to the heating and engineering departments have been carried out by Mr Barry Cuthill with his customary promptness and efficiency while he has installed an additional pump in the boiler house to forestall any possible breakdown.

GARDENS AND GROUNDS.

Every effort was made during the year to produce as many vegetables as possible and as many patients as were able were encouraged to work in the garden, probably to the detriment of the Occupational Therapy Department.

The Hospital grounds in general are still suffering from the war-time lack of male staff and will require several years before they attain their pre-war condition.

FARM MANAGER'S REPORT.

Dairy Herd. During this year the Dairy Herd was maintained at a total of all classes of between 310 and 320 head with over 100 cows in milk all the year round. The average monthly milk supplied to the various institutions was 7,525 gallons.

During the year a number of stock surplus to requirements, was sold at satisfactory prices. The rearing of the young stock and the housing of these animals was difficult owing to the unsatisfactory state of the buildings. Winter feeding of the stock was difficult owing to the restricted supplies of purchased feeding stuffs.

Cropping. The cropping side of the farm was slightly modified owing to the loss of housing land in the City. The potato acreage was reduced but the acreage of forage crops for stock feeding was maintained, chief of the crops were, Hay, Turnips, Cabbages and Sugar Beet.

Staffing of the farm was fairly satisfactory but would be easier if more housing were available.

(Signed) JAMES B. BOYD,
Farms Manager.

PERSONAL.

I wish to take this opportunity of thanking all the members of the Hospital Staff for their loyal co-operation and unfailing assistance throughout this difficult year. I must also thank the Medical Officer of Health for his guidance and advice in the many administrative problems which arose. My gratitude must also go to the Convener of the Public Health Committee and to the Members of the Mental Health Sub-Committee for the sympathetic interest which they have always taken in the Hospital and for their confidence and support which they have shown in its administration.

A. ALLAN BELL,
M.B., Ch.B., F.R.F.P.&S.G., D.P.M.,
Medical Superintendent.

MARYFIELD HOSPITAL

Report by Dr. W. A. DAVIDSON, Medical Superintendent.

The first complete year following the end of World War II has been notable for the difficulties facing hospital authorities in making good the arrears of maintenance work and shortages of equipment. Other demands on manpower and materials have resulted in the further deferment of structural alterations already long overdue.

Hospitals throughout the country have been crying out for more nurses and this year has seen the introduction of a new type of helper, the ward orderly. At Maryfield some twenty men were engaged in this capacity although the number has since fallen to about twelve. All of these men have had previous experience in handling casualties in the Forces and their help has enabled Maryfield Hospital to carry on through a difficult period in 1946. Fuller reference to nursing staff generally is made in a later section of this Report.

Rising costs have also been a feature of the year and have been contributed to by increases in salary awards by the Scottish Nurses' Salaries Committee, by the rising cost of drugs, dressings and equipment and by a higher standard of feeding provided to patients and staff.

Main Buildings.

After much delay, alterations were begun in January to Ward 7 which is now being divided into two separate wards each of 12-15 beds capacity. One of these is to be used for the treatment of gynaecological conditions and the other for venereal diseases in women. Each ward will have its own access and there will be no intercommunication. The sanitary annexes and fitments being provided are very modern and demonstrate how up-to-date the other wards in the Main Buildings could become were they similarly treated. At the time of writing works of alteration are still being made as delays in receiving items of equipment are holding up the completion of the job.

About 200 new bedsteads ordered since 1945 were delivered to the Hospital and issued in June, 1946. This has permitted of the removal of the old, black, fixed bed standing low on the floor and their replacement by mobile fitments, complete with adjustable backrests. A proportion are of the cardiac type facilitating conversion to the Fowler position. Most of the beds are cream enamelled, and these have been issued to Wards 1, 6 and 8, while a reserve is being kept for Ward 7 when it is re-opened. The others are of a pale green finish and have been supplied to the Surgical Wards 3 and 5, as well as to Ward 13. A reserve of these for Ward 14 is also in stock.

All wards were equipped for the first time with mobile linen trolleys in November, and metal bedside lockers are now available to equip Wards 7 and 14 when the alterations are completed.

The maintenance painters are constantly employed in redecorating offices, residential quarters, ward kitchens, siderooms and sanitary annexes, and most of their work is located in these buildings, the oldest part of the Hospital.

North Block.—The continued absence of adequate isolation accommodation renders the control of infection and the observation of suspicious cases very difficult. This need could be partly met and probably without much cost or material by enclosing the eastermost portion of the verandah of the children's ward. It is already provided with three walls, and if treated in the way indicated could afford an observation cell for two cots.

Internal painterwork of this Block was commenced in January.

North East Block.—It was resolved to devote two of the siderooms of this block to the use of premature infants subject to there being an adequacy of nursing staff and no increased demand for midwifery accommodation. Neither of these provisos was to be fulfilled although the rooms were adapted by introducing piped steam and preparing the walls and ceilings with enamel paint. Four special type cots were purchased for nursing premature babies, and other necessary items of equipment were obtained.

There is no such unit in the City, and it was hoped that Maryfield would give a lead by taking the steps described above. It is unfortunate that one of the circumstances standing in the way of its fulfilment—the increased birth-rate—has been the means of contributing more premature infants than ever requiring special nursing care and attention. However, the preparations that have been

made will yet be utilised and will assume a greater importance in the teaching of pupil midwives when Maryfield becomes a training school for midwifery.

Nurses' Home.—This Home, containing 144 bedrooms, is always an attraction to visitors to the Hospital, and it is much appreciated by the nurses who occupy it. The south wing was erected just before the outbreak of war, and the remainder completed in 1943. In these difficult times it was not possible to obtain labour and material to undertake its proper decoration, and only one coat of distemper was applied to the fresh plaster walls. The result is that the whole building both inside and out is now in urgent need of being painted, and its handsome appearance is rapidly deteriorating. These circumstances were reported to the Sub-Committee in April, 1947, when it was decided to visit the Home before settling on the action to be taken.

Maternity Department.—Reference to the Appendix illustrates the marked increase in midwifery work undertaken by the Hospital during the year. In March it was recognised that the rising birth-rate would have the effect of ending arrangements whereby mothers could remain in Hospital for 14 days after delivery. To allow of this the maximum number of bookings would have had to remain at not more than 58 per month. The new circumstances at once forced bookings up to 70, but within a month or two they were at 80 and 90. Even these figures will appear small when the Annual Report for 1947 comes to be written.

Difficulties of accommodation were also being experienced at the Royal Infirmary, and on many occasions during the year Maryfield relieved the situation by accepting cases originally booked for confinement by the Infirmary.

In November a useful arrangement was made with Dr Fulton, Maternity and Child Welfare Department, whereby a health visitor attends the ante-natal clinics and takes notes of those mothers who fail to report for examination. Calls are made at the homes by the health visitor to make sure that the patients are well and to arrange another appointment at the clinic.

The inauguration of a post-natal service took place on 12th November, and a session is held each week. Details of the findings are recorded in the Appendix.

X-ray Department.—On the instructions of the Sub-Committee I submitted a Report in January containing recommendations to

instal more powerful diagnostic equipment and superficial therapy apparatus and to effect internal structural alterations to enlarge and improve the department. These were approved, and the treatment unit has been delivered. There are indications that the rest of the apparatus will arrive shortly, but none of it can be put to use as there has been delay in proceeding with the alterations. Only now are working drawings being prepared, and I am afraid that it will be many months before the premises are adapted in the manner contemplated in the Report.

Dental Services.—The Medical Officer of Health reported to the Committee in May his proposals for an extended dental service within the Public Health Department generally. These contemplated among other things the establishment of a modern dental surgery at Maryfield Hospital with the availability of a dentist on five half-days each week. I am glad to report that Mr Finlayson continues to give Maryfield Hospital his personal attention, and he visits all day on Mondays and in the mornings of Tuesday, Thursday and Friday. In this way he is able to undertake the dental inspection of all women attending the ante-natal department and to devote ample time to the treatment of Hospital patients and of inmates from East House. The extended dental service has also permitted of a most valuable development in so much as every member of the nursing staff attends for inspection (and treatment if desired) at intervals of six months. Each new nurse on joining the staff submits to a full dental as well as medical examination. Nurses from King's Cross Hospital attend Maryfield for treatment purposes.

At the time of writing the new dental equipment, comprising chair and electric unit, has been delivered, but delay in proceeding with installation is holding up its long awaited use.

East House Medical Services.—Daily visits are paid to the East House in the mornings and, if necessary, in the evenings, to attend the sick and to examine new admissions. During the year 1,085 such examinations were made; 41 men and 39 women were admitted to Maryfield Hospital for treatment. In addition, medical attention is provided to the inmates of the male and female asylum wards of East House.

Emergency Medical Service.—Last year I reported a reduction in the quota of reserved beds from 85 to 10 (November). On 31st March, 1946, the Department of Health for Scotland, finding that

the demands upon the Emergency Medical Service were rapidly diminishing, finally released Maryfield from obligations to the Service.

Dietary.—Since her appointment as dietitian on 16th April, Miss E. D. Taylor has been personally responsible for the purchase of foodstuffs, the preparation of meals and the planning of menus. Her influence has been appreciatively felt by both patients and staff, who enjoy as liberal and varied dietaries as appear to be possible in time of rationing. Substantial meals are served at breakfast, lunch and supper times, and patients enjoy light snacks in the early morning and late evening. A pleasing feature is the break from monotony in that meals vary from week to week as well as from day to day. Miss Taylor's special knowledge is utilised by the visiting physicians who wish certain patients to be placed on special diets in accordance with their disabilities.

Unfortunately offers have not yet been placed before the Committee for the supply of miscellaneous items of food service equipment urgently needed. Perhaps the most important single item required is a refrigerator of at least 75 cubic feet capacity for the storage of perishable foodstuffs. It is astonishing that such a large Hospital cannot claim to possess cold storage facilities of any kind, and little wonder that losses are incurred in the summer months through food going bad.

Laundry.—Maryfield Hospital contributes £90 each month to the East House and has done so for many years in return for limited laundry services. The bulk of laundering has to be done by a private company, and the erratic return of linen creates considerable difficulties for the nursing staff in maintaining their stocks. There is no doubt that a laundry service should be established to meet all the needs of the Hospital and that this would effect an economy both in money and material.

Penicillin.—The provision by the Government of penicillin free of charge for use in selected cases ended on 1st June, and from that date all supplies had to be purchased. Widespread demand on production centres made it difficult at times to procure sufficient quantities especially of the oil and wax suspensions. However, it was much more fully used this year than in 1945, when only 22 patients received penicillin therapy. Many conditions, including venereal diseases, were treated, and 116 patients received a total of 194,974,000 units.

Infectious Diseases.—A puzzling series of cases of ophthalmia neonatorum occurred in one of the maternity wards during the months of April, May, June and July, when there were 8, 6, 2 and 6 cases respectively. They were all of a benign nature, and although every effort was made to establish their causation it was not possible to do so. Prophylactic measures involving the instillation of 25 per cent. argyrol into each infant's eyes twice daily had to be adopted for a considerable time and this led to a disappearance of the infection.

Chickenpox was prevalent in the City in the early part of the year and measles towards the later months. Cases of both diseases cropped up in the children's ward and presented problems of isolation and accommodation.

Staff Changes.—On 8th February Miss Brannen was promoted from the rank of Home Sister to that of junior assistant matron, this being the first appointment to that position.

Sister I. Beaton, sister tutor, left in March, 1946, to take up another post in England. Her place was taken by Sister Barbara Knight, who had been appointed on 3rd January, and she was assisted by Sister Kathleen Gordon from 1st April.

The post of Home Sister had been vacant for some time before it was filled by the appointment of Sister Margaret Chisholm on 16th April.

It is with regret that the death of Miss Elizabeth C. Kelly, Assistant Matron, on 24th November has to be recorded. She had been associated with the Hospital since 1925.

The duties of physician to the East House and to Ward 12, containing 30 female and 20 male beds, which had previously been undertaken by me, had to be relinquished by reason of pressure of other duties. It was on 16th May, therefore, that Dr James Roberts was temporarily appointed to the post which he still occupies.

The Professor of Anatomy, University College, very kindly consented to his assistant undertaking the duties of lecturer in surgery to the class of senior student nurses. Dr J. M. Aitken obliged in this way during the winter term and Dr Robertson in the autumn, and their services were much appreciated.

Miss Myra R. Falconer, M.S.R., who had been on the staff as radiographer since 1st September, 1944, resigned on 12th January, and her place was taken by Miss C. Helen Mitchell, M.S.R., on 7th January.

Dr John Emerson returned from active service and resumed his duties as senior anæsthetist on 16th March.

Nursing Staff.—A reference is made elsewhere to the difficult times Maryfield has had in carrying on its work in the presence of a shortage of nurses. In spite of this, it is gratifying to record that while 28 students enrolled in 1945, the number rose to 47 in 1946. Details of enrolments and resignations of these and other grades of nursing staff are given in the following table:—

	Enrolments.			Resignations.		
Grade of Nurse.	Eire.	Scotland.	Total.	Eire.	Scotland.	Total.
1st Year Student,	10	37	47	1	15	16
2nd ,, ,,	...	...	...	...	3	3
3rd ,, ,,	...	...	...	...	8	8
Staff Nurse, ...	...	8	8	2	15	17
Staff Midwife, ...	...	12	12	...	12	12
Sister, ...	...	9	9	...	8	8
Total, ...	10	66	76	3	61	64

The number of nurses in training on 1.1.46 was 67.

The number of nurses in training on 31.12.46 was 76.

On the instructions of the Hospitals and Special Schemes Sub-Committee I submitted a Report on Staffing and Training in September embodying numerical standards of staff in relation to beds, the ratio of trained to untrained nurses, and recommending the development of the block system of training and the creation of a nursing pool. It will be difficult to secure the numbers involved, but it has been encouraging to have the Committee's approval of the recommendations. The desirability of creating a teaching department separate from the Nurses' Home was also stressed, and it was agreed that the University of St Andrews be invited to co-operate with the Corporation in considering the establishment of premises capable of accommodating student nurses, pupil midwives and medical students. This matter is now receiving attention by the University authorities.

Another proposal contained in the foregoing Report was that application should be made to the Central Midwives Board for the approval of Maryfield Hospital as a Part I. training school for pupil midwives. Application was duly made in November, but unfortunately there is no progress to report at the time of writing. The necessary conditions appear to be more than fully available at the Hospital, and it is confidently expected that the advent of pupil midwives will go some way towards relieving the difficulties experienced in staffing the ever busy maternity department.

Earlier in the year (May) a joint Report was submitted to the Sub-Committee by the Medical Superintendent of Ashludie Sanatorium and me on the subject of a combined training programme between that Institution and Maryfield Hospital. Our recommendation was adopted to apply to the General Nursing Council for approval of the affiliation of Ashludie Sanatorium to Maryfield so that student nurses at the former would undertake their preliminary training there over a period of two years. Thereafter they will proceed to Maryfield Hospital for a further two years and complete their courses as general nurses. This proposal has since been approved by the General Nursing Council.

Meanwhile, the recommended span of annual leave of 28 days for all grades of nurse cannot be implemented in full, and only 21 days can be spared to the student nurse.

Rather better results were obtained this year than last in both the preliminary and the final examinations of the General Nursing Council.

Preliminary State Examination.

Subject	Pass	Fail
Hygiene and dietetics, ...	14	11
Anatomy and physiology,	11	16
Junior nursing, ...	8	7
Total, ...	33	34

Final State Examination.

Subject	Pass	Fail
Medicine, ...	17	6
Surgery, ...	15	7
Senior nursing, ...	19	6
Total, ...	51	19

For the first time in its history a Nurses' Day at Maryfield was declared on 31st January, when a prize-giving ceremony was held in the Hall of the Nurses' Home. Convener Dr J. D. Saggar was chairman, and the platform party included Lord and Lady Provost Archibald Powrie. The Lady Provost presented the prizes, which included a special silver medal donated by Dr Saggar to the best nurse of the year. This was awarded to Miss Nellie Neave, S.R.G.N. After the ceremony the guests were free to inspect the Home and to visit the wards.

The annual staff dance was held on 22nd and 23rd January, and as usual proved a great success. Two evenings were devoted to the occasion this year in order that all members of staff might have an equal opportunity of attending.

Details of sickness among members of the nursing staff have been prepared, and it is found that 64 were off duty for a total of 1,570 days, averaging 24.5 days each. One nurse was discovered, on taking up duty, to be suffering from pulmonary tuberculosis and had been off duty for 317 days by the end of the year. Another

lost 136 days from rheumatism, and a third 85 days from a cardiac affection. If the first-quoted case is excluded the numbers become 63 losing 1,253 days, averaging 19.8 days each. Broad detail is given below.

Grade of Nurse.	Total on staff.	No. off sick.	Total days lost.	Ave. days lost each.
1st Year Student, ...	39	21*	298	14
2nd ,, ,, ...	23	12	253	21
3rd ,, ,, ...	19	15	318	21
Staff nurse, ...	12	8	248	31
Sister, ...	12	5	89	18
Assistant nurse, ...	6	2	47	23
Total, ...	111	63	1,253	19.8

*Excludes one nurse off for 317 days with pulmonary tuberculosis.

Maintenance Staff.—Two journeymen painters were engaged, one on 8th April and the other on 7th September. Their duties are to undertake as much maintenance painterwork in the Hospital as possible. A gardener was appointed on 28th March, and authority was received to take on a groundsman to assist him during the season. The staff was also increased by two window cleaners on 14th March and 3rd May.

Resident Medical Officers.—There were times during the year when the Hospital was without the full complement of five resident medical officers, but the duties were satisfactorily carried out at all times. An interim appointment was made on 15th August to the post of senior obstetrical and gynæcological resident medical officer, when it was occupied for the first time by Dr Elizabeth R. Younger for a period of five months. Of the four junior resident posts, one is also associated with the department of obstetrics and gynæcology.

Supernumerary Medical Officers.—Under the Government's scheme for the rehabilitation of medical officers released from the Forces appointments are made by the Dean of the Faculty of Medicine, St Andrews University to certain approved hospitals. Maryfield is officially recognised as suitable for this purpose, and five ex-officers representative of all three Services each worked for terms of six months, during which time they were supernumerary to the resident staff. They all had good opportunities of refreshing their clinical knowledge and on leaving felt that their time had been most profitably spent. One continued for a second spell of six months in order to prepare for a higher medical qualification and ranked as a junior specialist during that period.

Medical Students.—Senior medical students in their final year of study continue to seek engagements at Maryfield as resident clinical clerks. Their duties bring them into close contact with the visiting specialists and with the patients and the experience they gain is of undoubted value in preparing them for their qualifying examination. During the year 17 students were accepted as unqualified clerks.

In June and again in December part of the final examination in medicine was conducted at Maryfield Hospital by Professor Patrick in association with Professor Noah Morris, Glasgow, as external examiner. Patients in the wards co-operated by submitting to clinical investigation, and the Hall of the Nurses' Home was utilised for oral and practical examination.

Arrangements with the University also provide for medical students undertaking practical obstetrics at Maryfield, and of 953 confinements occurring in the Hospital 65 students assisted at 456. Two or three students are engaged on this work for four weeks at a time, the first two weeks being spent at the Royal Infirmary and during the next fortnight they receive calls to Maryfield Hospital and to outdoor (district) cases booked by the Infirmary.

Cost of Maintenance of Patients.—The weekly cost of maintenance of patients for the financial year ending 15th May, 1946, was £4 11s 8d. In 1945 the corresponding amount was £3 11s 3d per week. The average daily population during the twelve months was 324.249.

Acknowledgments.—I welcome this opportunity of recording my sincere thanks to all members of the Hospital staff in every department for their loyalty and support in 1946. I would also thank the Medical Officer of Health, whose advice and guidance has been a constant source of help and encouragement in the administration of the Hospital.

Appendix.—Statistical details of the work of the Hospital are provided in the Appendix which follows.

W. A. DAVIDSON,
Medical Superintendent.

APPENDIX.

Annual Report for 1946.

Admissions, Discharges and Deaths.

	Men	Women	Boys (under 10)	Girls (under 10)	Total
In Hospital, 1.1.46, ...	102	168	25	32	327
Admitted during 1946, ...	1,091	2,623	780	743	5,237
Total patients treated during 1946, ...	1,193	2,791	805	775	5,564
Discharged, ...	882	2,350	773	719	4,724
Died, ...	223	295	21	16	555
In Hospital, 31.12.46, ...	88	146	11	40	285

Smallest number of patients, ... 278 — 16.8.46

Greatest number of patients, ... 371 — 12.2.46

Bed accommodation, 360 (and 50 beds in temporary annexe)

Classification of Conditions Treated.

The broad medical classification of conditions from which discharged patients suffered included the following:—

Bone and joint diseases,	38	Nervous diseases, ...	431
Circulatory diseases, ...	472	Old age diseases, ...	125
Digestive diseases, ...	321	Pregnancy and parturition—	
Ductless gland, ...	35	Pregnancy, ...	1,142
Infancy and malformation—		Abortion, ...	60
Healthy children, ...	871	Other conditions, ...	43
Premature, ...	62	Respiratory diseases, ...	486
Other conditions, ...	87	Violence and Injury, ...	88
General diseases, ...	151	Tuberculosis, ...	104
Genito-urinary diseases, .	340	Observation mental, ...	136
Infectious diseases, ...	110	Skin diseases, ...	346
Malignant-diseases, ...	142		

Operations Performed.

General surgical:—	
(a) Under general anæsthesia, ...	152
(b) Under local anæsthesia, ...	38
Gynæcological and obstetrical:—	
(a) Major, ...	115
(b) Minor, ...	220
Ophthalmic, ...	114
Ear, nose and throat, ...	34
Leucotomy, ...	28

X-ray Department.

The number of persons X-rayed and the number of films taken.

Source of Subjects x-rayed.	Patients.	Staff.	Films taken.
Maryfield Hospital, ...	1,256	147	2,021
King's Cross Hospital, ...	105	7	167
Dundee Mental Hospital, ...	2	0	7
Public Health Institute, ...	11	0	21
War-time Nurseries, ...	0	5	5
East House, ...	14	2	19
Armitstead Home, ...	0	1	3
Orthopædic Scheme, ...	122	0	258
Total, ...	1,510	162	2,501

In 1945 the number of films taken was 2,381. The increase is accounted mainly by a 100 per cent. increase in the number of x-rays taken of members of Maryfield nursing staff and by an increase in orthopaedic examinations.

The range of X-ray work undertaken is illustrated in the following tables:—

Region Examined.	No.	Region Examined.	No.
Head, ...	71	Abdomen (enema), ...	27
Spine, ...	131	Gall-bladder (plain), ...	11
Extremities, ...	199	Gall-bladder (dye), ...	10
Chest (plain), ...	871	Renal tract (plain), ...	31
Chest (lipiodol), ...	3	I-V pyleogram, ...	25
Throat (barium), ...	3	Pregnancy, ...	133
Abdomen (plain), ...	72	Screening only, ...	6
Abdomen (barium), ...	92		

Infra-red and Ultra-violet Ray Therapy.

No. of Patients.	I.R.	U.V.R.
33	28	5

A variety of conditions was treated by this means, including forms of arthritis, rheumatism, fibrositis and sciatica.

Dental Services.

	Inspections.	Req. Treat.	Treatment.	Attendances for Treatment.	Extractions T.	Extractions P.	Fillings T.	Fillings P.	Other Ops.	Scalings.	Dentures.	Gen. Anæsthetics.
Staff, ...	127	95	69	112	0	46	0	179	11	30	0	2
In-patients,	44	38	37	43	11	138	0	5	7	7	0	18
A.-natal,	634	303	138	172	0	422	0	75	9	60	0	5
Post-natal,	2	2	2	2	0	4	0	0	0	0	0	2
E. House,	35	34	34	38	0	67	0	0	4	2	0	0
Total,	842	472	280	367	11	677	0	259	31	99	0	27

Malignant Disease.

Number of cases discharged according to age in years and sex distribution.

Region Involved.	20-40 M.	20-40 F.	40-60 M.	40-60 F.	Over 60 M.	Over 60 F.	Total M.	Total F.	Sum
Face and mouth,	—	—	—	—	1	—	1	0	1
Stomach, ...	1	—	—	—	1	3*	2	3	5
Pancreas, ...	—	—	—	1	—	—	0	1	1
Colon, ...	—	—	—	2	1	1	1	3	4
Rectum, ...	—	—	—	—	1	1	1	1	2
Throat, lungs, ...	—	1	—	1	2*	2	2	4	6
Cervix, uterus, ...	—	—	—	4	—	3*	0	7	7
Breast, ...	—	—	—	2	—	1*	0	3	3
Prostate, ...	—	—	—	—	1	—	1	0	1
Skin, ...	—	1	1	—	—	1	1	2	3
Total, ...	1	2	1	10	7	12	9	24	33

*One from each group died later in 1946.

In addition to the above, a girl aged 3 years was found to have a retinal blastoma.

Number of fatal cases according to age in years and sex distribution.

Region Involved	1-20 M.	1-20 F.	20-40 M.	20-40 F.	40-60 M.	40-60 F.	Over 60 M.	Over 60 F.	Total M.	Total F.	Sum
Face and mouth, ...	—	—	—	—	—	—	5	1	5	1	6
Stomach, ...	—	—	1	—	1	1	3	8	5	9	14
Pancreas, ...	—	—	1	—	—	—	3	—	4	0	4
Liver, ...	—	—	—	—	—	—	—	3	0	3	3
Colon, ...	—	—	—	1	—	1	1	14*	1	16	17
Rectum, ...	—	—	—	—	1	1	5	2	6	3	9
Kidney, ...	—	1	—	—	—	—	1	—	1	1	2
Urinary bladder, ...	—	—	—	—	1	—	—	—	1	0	1
Prostate, ...	—	—	—	—	—	—	2	—	2	0	2
Throat, lung, ...	—	—	—	—	3	1	6	3	9	4	13
Ovary, ...	—	—	—	1	—	—	—	—	0	1	1
Cervix and uterus, .	—	—	—	—	—	2	—	2	0	4	4
Breast, ...	—	—	—	—	—	3	—	2	0	5	5
Skin, ...	—	—	—	—	1	1	1	2	2	3	5
Bone, ...	—	—	—	—	—	—	—	1	0	1	1
Lymphogranuloma,	—	—	—	—	—	—	1	—	1	0	1
Melanoma, ...	—	—	1	—	—	—	—	—	1	0	1
Total, ...	0	1	3	2	7	10	28	38	38	51	89

*One also had extensive rodent ulceration of nose.

Gynæcology.

Considerable numbers of women are referred as out-patients to Maryfield Hospital by general practitioners for the diagnosis and treatment of gynæcological conditions. A total of 280 persons were so recommended by 47 city doctors, and many of these cases were subsequently admitted for surgical attention. The number of out-patients shows a 30 per cent. increase over 1946.

Conditions discovered among these women include:—Pregnancy, 40; pregnancy, ovarian cyst, 1; threatened abortion, 3; amenorrhœa, 4; sterility, 8; menopause, 1; dysmenorrhœa, 25; dysmenorrhœa, inguinal hernia, 1; menorrhagia, metrorrhagia, 43; chronic endometritis, 1; placental polyp, 1; hæmatometra, 1; pelvic congestion, 1; leucorrhœa, 30; cervical erosion, 27; vaginitis, 1; prolapse, 26; prolapse retroversion, 1; retroversion, 5; vaginal cyst, 1; uterine fibroids, 3; ovarian tumour, 7; tubo-ovarian abscess, 1; labial abscess, 1; carcinoma cervix, 1; condylomata, 3; cystitis, 2; papilloma bladder, 1; hernia, 1; and appendicitis, 2. No gynæcological defect was noted in 25 women who attended.

Ante-natal Department.

Attendances.—The number of ante-natal out-patients and their stages of pregnancy at the time of their first visit to the clinic were 2nd month, 101; 3rd month, 252; 4th month, 275; 5th month, 244; 6th month, 137; 7th month, 100; 8th month, 54; and 9th month, 6.

A total of 1,169 patients paid 5,622 visits to the clinic, averaging almost five attendances per patient.

Pregnancy was terminated in eleven women.

Para.	Stage of Pregnancy.	Reason for Termination.	No. of Cases.
1	2 months	Pulmonary tuberculosis	1
3	2 months	Pulmonary tuberculosis	4
4	2 months	Pulmonary tuberculosis	1
5	6 weeks	Hyperemesis	1
6	6 weeks	Hyperemesis	1
5	4 months	Cardiac affection	1
?	5 months	Mital stenosis	1
?	?	Pulmonary tuberculosis	1

Complications found at ante-natal examination included albuminuria, 27; pyelitis, 37; cardiac affection, 21; hyperpiesis, 141; phlebitis, 1; pulmonary affection, 9; hyperemesis, 5; disparity, 2; dental caries, 306; gonorrhœa, 3; and Wassermann positive, 30. These figures total, 582.

Version was successfully performed in 86 cases out of 108.

Ante-natal Patients Discharged.

A total of 96 ante-natal in-patients were discharged, and they comprised 40 para 1, 16 para 2; 16 para 3, 6 para 4; 7 para 5; 4 para 6, 1 para 7, 2 para 8, 1 para 9, 1 para 14, and 2 para 15.

The conditions for which they were treated were:—False labour, 25; miscarriage 6, threatened hyperemesis, 13; pre-eclampsia, 2; ante-partum hæmorrhage, 4; incarceration gravid uterus, 1; leucorrhœa, 4; urinary affection, 10; hyperpiesis, 7; phlebitis, 1; anæmia, 5; respiratory affection, 7; gonorrhœa, 1; jaundice, 1; rheumatism, 1; and neurosis, 1. Seven patients were not suffering from any disease, but were admitted for rest, and they included a para 15 and a para 5 with twin pregnancy.

No death occurred among these patients.

MATERNITY DEPARTMENT.

Confinements.

Para.	Confinements in Hospital Single.	Twin.	Triple Pregnancy.	Confinements before Admission.
1	415	8	...	2
2	239	3	1	5
3	137	3	1	2
4	57	...	...	3
5	29	1	...	...
6	21	1	...	1
7	13	...	...	...
8	9	1	...	...
9	7	1	...	...
10	5	...	...	...
14	1	...	...	...
Total, ...	933	18	2	13

A total of 953 mothers were therefore delivered in Hospital of 975 babies and a further 13 mothers were admitted with their infants (13) who were born before reaching Hospital.

The following table shows the number of live and still births and distinguishes between mature and premature babies. For the latter purpose an infant of 5½ pounds or less birth weight is regarded as premature, irrespective of the period of gestation and whether born as a twin or triplet. It will be observed that the total number of babies is 989 as it includes one born before admission whose mother remained at home during the puerperium.

Births.	Birth Weight. 5½lb. & Less.	Over 5½lb.	Birth Weight (B.B.A.) 5½lb. & Less.	Over 5½lb.
Live, ...	62	871	5	10
Still, ...	22	19	0	0
Total, ...	84	890	5	10

Two mothers were delivered of triplets, the first on 22nd May and the second on 26th October. Details are given below.

		Birth weight.		On discharge.		
Para.	Sex.	Live born.	Still Born.	Weight.	Age.	Feeding.
5	F.		2lb. 8oz.			
	F.	3lb. 8oz.		5lb. 6oz.	28 days	Breast
	M.	4lb. 7oz.		6lb. 4oz.	28 days	do.
3	F.	6lb. 8oz.		6lb. 8oz.	21 days	Breast
	F.	5lb..10oz.		6lb. 15oz.	28 days	Bottle
	M.	4lb. 14oz.		7lb. 6oz.	35 days	do.

In 1945 the total number of mothers and their babies dealt with was 688 and 694, as compared this year with 966 and 989 respectively. The increased demand upon accommodation made it impossible to continue the policy of encouraging patients to remain in Hospital for 14 days rather than the shorter period of 10 days. As in the past an analysis has been made of the actual period spent in Hospital by each woman, although it is not strictly comparable with previous figures by reason of the changed circumstances. The day counts as one day only if delivery occurred before mid-day.

Days spent In Hospital,	1-4	5-7	8	9	10	11	12	13	14	15-21	22-28	29-35	49
No. of patients,	4	3	2	26	694	34	36	34	64	48	12	4	1

Thus a total of 962 patients were discharged during the year and those who left before the 10th day (35) include four women who died and one who developed pyrexia and had to be transferred to King's Cross Hospital. Those who left on the 10th day represented 72 per cent. of all discharges, compared with 71 per cent., in 1945. The majority of those who remained for two weeks may be regarded as converts to the principle of the longer lying-in period, and the 168 mothers who stayed for 11, 12, 13 and 14 days constituted almost 19 per cent. of all those discharged by the end of two weeks. This is the same proportion as in 1945, and in view of the difficulties standing in the way suggests that the idea is finding favour among patients.

Most of the patients kept in Hospital beyond two weeks suffered from some complication of pregnancy or the puerperium. Cæsarian section cases are not discharged till the 21st day, by which time they are able to be up and look after their babies. Mothers of premature babies, though well themselves, are usually given the opportunity of remaining in Hospital beyond the 14th day in order to breast feed their infants, and the day of their discharge is related to the progress of the child.

Complications of Pregnancy and the Puerperium.

These comprised hypertension, 12; albuminuria, 24; pyelitis, 28; placenta prævia, 1; accidental hæmorrhage, 2; hydramnios, 1; prolapsed cord, 4; breech presentation, 19; occipito-posterior presentation, 17; face presentation, 3; adherent placenta, 10; post-partum hæmorrhage, 9; phlebitis, 12; eclampsia, 5; cardiac disease, 2; anæmia, 2; syphilis, 24; gonorrhœa, 7; tuberculosis, 3; pneumonia, 2; and influenza, 4.

Surgical Intervention.

Method.	No. of Cases.
Forceps delivery, ...	45
Cæsarian section, ...	23

Maternal Deaths.

There were four such deaths and brief details are as follow:—

Age.	Para.	Day of Puerperium.	Infant.	Certified Cause of Death.
25	2	1st	Alive	Bilateral cortical necrosis of kidney, necrosis of anterior pituitary.
25	1	27th	Alive	Mitral stenosis, empyema, cardiac failure.
26	1	4th	Stillborn	Gangrenous appendix, peritonitis.
30	3	1st	Alive (twins)	Eclampsia.

Deaths of Live-Born Infants.

There were 20 such deaths and from the table below it will be seen that 13 occurred during the winter months of February, March, and October to December. Eleven were of 5½ pounds or less birth weight, and the incidence between the sexes as a whole was equal.

Month of Year.	Sex	Age at Death.	Birth weight.	Cause of Death.
Feb.	F.	6 days	6lb. 14oz.	Subarachnoid hæmorrhage, broncho-pneumonia.
Feb.	F.	6 days	7lb. 2oz.	Subarachnoid hæmorrhage.
Mar.	M.	6 days	4lb. 10oz.	Prematurity.
Mar.	F.	12 days	2lb. 11oz.	Prematurity.
Mar.	F.	1 hour	2lb.	Prematurity..
Apr.	M.	1 day	4lb. 14oz.	Prematurity.
May	M.	1 day	7lb.	Asphyxia neonatorum, prematurity.
May	F.	4 days	6lb. 8oz.	Broncho-pneumonia.
May	F.	8 days	9lb. 8oz.	Hydocephalus, spina bifida, meningocele.
June	F.	1 day	8lb.	Asphyxia neonatorum.
Aug.	F.	1 day	1lb. 13oz.	Prematurity.

Month of Year.	Sex.	Age at Death.	Birth Weight.	Cause of Death.
Sept.	M.	5 hours	2lb. 2oz.	Prematurity.
Oct.	M.	2 hours	3lb. 2oz.	Prematurity } Twins.
Oct.	F.	5 hours	3lb.	Prematurity }
Nov.	M.	1 day	6lb. 1oz.	Atelectasis, syphilis.
Nov.	M.	5 days	7lb. 6oz.	Congenital syphilis.
Dec.	M.	2 days	5lb 10oz.	Prematurity, asphyxia livida.
Dec.	M.	1 day	2lb. 8oz.	Prematurity.
Dec.	M.	1 day	2lb.	Prematurity.
Dec.	F.	1½ hours	2lb. 12oz.	Prematurity.

Stillbirths.

There were 41 stillbirths and the causes may be broadly classified as:—Maternal toxæmia, 3; prematurity, 6; cord complications, 6; fœtal defects, 8; and ill-defined causes, 18.

Post-natal Department.

At the time of their discharge from Hospital mothers are invited to return for post-natal examination about a month after the date of confinement. This service was begun in November, 1946, and a clinic is held each week. A total of 38 women made attendances, and the results of their examination were:—Anæmia, 4; cervical conditions, 5; vaginitis, 8; subinvolution, 5; retroversion, 2; mastitis, 3; and in 11 no disease was discovered.

The large incidence of morbid conditions found in the course of these examinations emphasises the need for the clinic.

Children's Consultation Clinic.

A total of 35 children were referred to this clinic mainly by medical officers of the School Medical Service (24) and Child Welfare Service (3). General Practicioners sent 5 cases and 3 were brought by their mothers.

VENEREAL DISEASES

Report by Dr D. M. KEAY, Special Medical Officer, Venereal Diseases Scheme.

New Cases.—The total number of new cases for the year was 2,400 an increase of 147 compared with the previous year. To this number is added 797 patients, who had not completed their treatment during 1946; 76 " return " cases; and 125 patients who were " transfers in " from approved centres. Therefore a total number of 3,398 patients attended the Dundee Centre during the year. Details concerning the 2,400 new cases compared with the previous year are as follows:—

	Syphilis		Gonorrhœa		Other V.D.		No V.D.		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1946,	177	123	436	179	251	85	706	443	1,570	830
1945,	118	106	273	305	120	50	923	358	1,434	819

The new cases were directed to the Centres as follows:—

	Male	Female
Medical Practitioners,	188	127
Dundee Royal Infirmary,	17	48
Dundee Royal Infirmary Ante-natal Clinic,	—	52
Public Health Ante-Natal Clinics,	—	49
Other Institutions,	55	97
Traced by M.O. Female Clinic, through female patients,	45	—
Traced by M.O. Male Clinic, through male patients,	—	42
Card S.D.,	3	—
H.M. Forces,	306	—
Ophthalmic Clinic,	—	2
Voluntary,	956	413
	1,570	830

New Syphilis cases were classified as follows:—

	Male	Female
Primary,	61%	14%
Secondary,	14%	35%
Latent in 1st Year,	9%	19%
Later,	12%	9%
Extra-Genital,	—	.8%
Congenital,	4%	22.2%

New Gonorrhœa cases were classified thus:—

Early stage and without complications,	93%	65%
Well established,	7%	35%

Control of Congenital Syphilis.—Throughout the year 3,586 ante-natal cases were examined and 57 or 1.59% gave positive results, compared with 1.51% for 1945.

The following is a detailed list of the number of blood tests carried out at the various ante-natal clinics, together with their results:—

	Wassermann Reaction Positive	Wassermann Reaction Negative	Total
Dundee Royal Infirmary, ...	31	2,205	2,236
Public Health Department, ...	3	186	189
Maryfield Hospital, ...	23	1,138	1,161
	57	3,529	3,586

Out-Patients.—The total number of "out-patient" attendances during 1945 was 50,565 (26,943 males and 23,622 females), compared with 39,224 (19,470 males and 19,754 females) in 1925. Details of the attendances during 1946 are:—

	Syphilis		Gonorrhœa		Other V.D.		No V.D.	
	M.	F.	M.	F.	M.	F.	M.	F.
1946,	10,450	9,808	11,204	10,629	2,563	668	2,726	2,517
1945,	7,468	8,452	6,281	8,872	2,204	593	3,517	1,837

In-Patients.—The number of cases admitted for treatment in hospital was 26 (13 males and 13 females). Of this number 10 males and 9 females suffered from syphilis; 1 male and 4 females from gonorrhœa; and 2 males were suffering from other venereal disease. The total number of patient days was 854 (479 for males and 375 for females).

Arseno-benzol Compounds.—In the course of the year 3,688 males and 2,774 females were treated with arseno-benzol compounds. The corresponding figures for 1945 are 2,725 males and 2,340 females.

Bacteriological Examinations.—Altogether 12,305 specimens were submitted for bacteriological examination, and details of these and also the comparison with last year are as follows:—

	1946	1945
Wasserman reactions, ...	4,436	3,978
Special Wasserman reaction, ...	305	306
Gonococcus Complement Fixation Tests, ...	1,894	1,692
Smears, ...	5,406	4,298
Cerebro-spinal fluids, ...	58	55
Dark Ground Examinations, ...	206	127
	12,305	10,456

End Results of Treatment.—As a result of treatment 750 patients were discharged as completely cured — 73 cases of syphilis; 419 of gonorrhœa; and 258 non-specific venereal infections.

At the end of the year 43 patients were under treatment; 220 were transferred to other centres; 180 defaulted before completion of treatment; and 119 defaulted after completion of treatment but before test of cure.

Penicillin Treatment of Syphilis.—Current views on the treatment of syphilis with Penicillin express conclusions which are as yet uncrystallised.

Throughout the year various schemes of treatment suitable for out-patient practice have been submitted to trial. These have included daily injections of 375,000—500,000 units of Penicillin in oil wax over a period of eight—fourteen days. The conclusion reached was that Penicillin in oil wax was not a satisfactory preparation for the treatment of syphilis.

Using aqueous Penicillin, schedules of treatment have ranged from daily injections of 300,000 units for thirteen days in primary syphilis and for sixteen days in secondary syphilis to twice daily injections of 500,000 units for fourteen days for any early stage of the disease.

On the face of it, it would appear that the last scheme is nearer success in its attempt to produce clear-cut results.

Even so, impressions obtained continue to suggest Penicillin alone does not cure syphilis, and it is our policy to follow the fourteen mega units of Penicillin with one " unit " course of arsenic and bismuth in sero-negative primary syphilis and two courses in syphilis in the primary sero-positive and secondary stages. For some time now propaganda has stressed to the public that V.D. is curable. The adoption of any new scheme of treatment which gives a higher percentage of relapse than the older methods may bring the clinics into disrepute, and in the present state of our knowledge it is better to over-treat than under-treat.

Penicillin Treatment of Gonorrhœa.—As in the treatment of syphilis, Penicillin in aqueous solution is preferred to the oil wax preparation.

At the moment, routine treatment of male patients consists of one injection of 500,000 units repeated the following day if examination of a urethral smear or of a centrifugalised urinary deposit shows the presence of gonococci. A second injuection is necessary only in a small percentage of cases. If two injections prove insufficient, recourse is had to one of the sulpha drugs—preferably sulphadiazine.

In female cases it has been found advisable to give 500,000 units on four consecutive days with local treatment as absolute necessity. The often-quoted risk of masking coincidental syphilis is regarded as over emphasised, and experience suggests that it can be avoided by keeping the patient under observation for six months.

With the adoption of Penicillin in the treatment of gonorrhœa and with the excellent initial results obtained clinically, there appears to be a tendency to relax the severity of the tests of cure. This seems unwarrantable, for close observation proves that the standards of surveillance and tests of cure for gonorrhœa, so far from being reduced, should if possible be made more exacting. Our own standards remain unaltered and are outlined in our last report.

Any reduction in the stringency of these tests may lead to an increase in sub-clinical infections or carrier rate and perhaps to a Penicillin-resistant strain of gonococci.

BACTERIOLOGICAL SERVICES

By Prof. W. J. TULLOCH

The work of this Department has been of the same nature as in previous years, but naturally modified to some extent by the conditions brought about by war.

This Department of Bacteriology became, on the outbreak of hostilities, the Scottish East Central Emergency Laboratory and, therefore, a section of the National Health Service under the Commissioner of this area.

Since September, 1939, the policy followed has been to focus attention solely upon the control of communicable diseases and the examination of water and milk supplies, eliminating all that was not essential.

During 1942, however, the prevalence of diphtheria in the City and the surrounding country necessitated an intensive investigation of that malady, especially as that condition presented certain peculiar features during the year under consideration. This intensive examination of diphtheria cases still continues, as it may prove valuable in investigating the epidemiology of the disease.

I.—Venereal Diseases.

The total number of tests performed was 19,554, 11,543 being made for the investigation of syphilis and 8,011 being performed for the diagnosis of gonorrhœa. The total number, therefore, was almost the same as in the previous year.

II.—Diphtheria—Swabs, Widal Tests for Enteric Fever, and Sputa for Tuberculosis.

There were 873 swabs examined from suspected cases of diphtheria during 1946, while 109 specimens of blood were submitted for the Widal reaction and 290 specimens of sputum were tested for the presence of B. tuberculosis.

III.—Blood Cultures and Examination of Fæces and Urine for Enteric Bacilli.

In suspected cases of enteric, 22 blood cultures, 64 specimens of stool and 78 of urine were examined during 1946.

IV.—Examination of suspected Tuberculous Material other than Sputum.

Of these, 561 were investigated during the year under consideration.

V.—Puerperal Sepsis.

The control of this condition involved the examination of 26 specimens of morbid material, a very marked decrease as compared with previous years.

VI.—Examination of Milk for Cleanliness.

The routine examination of milk was continued notwithstanding the conditions brought about by war, as it was deemed wise, if possible, to maintain the scrutiny of this very essential foodstuff.

The samples examined were:—

Certified, ...	42	samples.
T.T., ...	36	,,
Pasteurised, ...	78	,,
Standard, ...	68	,,
Undesignated, ...	160	,,
Sterilized, ...	15	,,

On the whole the findings were satisfactory.

In the case of Pasteurised milk the phosphatase and methylene blue tests were applied, and all but 10 specimens satisfied the requirements in respect of them.

VII.—Examination of Milk for Presence of B. Tuberculosis.

The biological test for the presence of B. tuberculosis in milk was resumed in 1943 as a routine procedure. Of 124 samples tested during 1946, 3 proved to be infected with B. tuberculosis.

VIII.—Examination of Water for Cleanliness.

During 1946 the water supply of the City has been under weekly supervision, 567 samples being examined.

In addition, 8 further specimens of water, derived from sources other than the Municipal supply, were tested, making a total of 575 samples.

IX.—Bacillary Dysentery.

During 1941 Dr Brodie of this Department elaborated new methods whereby the accuracy of laboratory investigation of bacillary dysentery has been much enhanced.

During 1946, 1,614 specimens from 669 suspected cases of Bacillary Dysentery were examined, and of these 141 proved to be actual cases of the disease.

X.—Meningitis.

In 122 instances primary meningitis was suspected, and of them only 8 proved to be cases of true cerebro-spinal fever; 3 were infected with bacillus hæmophilus, 5 with the pneumococcus and 2 with streptococcus viridans.

XI.—Bacillary Food Infection.

There were 17 cases of suspected bacillary food infection during 1946; of these four proved positive and thirteen negative. The infecting organism in the four positive cases was the Aertrycke bacillus.

XII.—Miscellaneous Investigations.

(a) Leptospirosis,	1
(b) Pyrexia of Unknown Origin,	74
(c) Vincent's Angina,	25
(d) Pleural pus,	66
(e) Pus from abcesses,	35
(f) Tetanus,	1
(g) Throat swabs for streptococcus hæmolyticus,	397
(h) Preparation of autogenous vaccine,	1
(i) Cultural and biological examination of sputum and gastric lavage,	97
(j) Other examinations,	49

W. J. TULLOCH.

MATERNITY AND INFANT WELFARE SERVICES.

Report by Dr. ANNIE A. FULTON

The birth-rate (22.3) showed a substantial increase during the year and was higher than the rate for Scotland as a whole. 4,462 live births were registered in the City during 1946, of which 562 were transferred out and 41 transferred in, giving 3,941 (2038 male and 1903 female) registered live births (corrected). After correction for transfers, 281 illegitimate births (129 male and 152 female) were registered during the year giving an illegitimate rate of 7.1% of all births compared with 10% in 1945. The number of still births registered during the year was 164, and after correction for inward and outward transfers the net total was 136 (73 males and 63 females) which is equivalent to 3.3% of the total births.

Year.	Live Birth-Rate.		Illegitimate Rate.		Still Birth-Rate.	
	Dundee.	Scotland.	Dundee.	Scotland.	Dundee.	Scotland.
1944, ...	18.0	19.2	9.3	7.9	44	32
1945, ...	16.1	16.9	10.0	8.6	31	33
1946, ...	22.3	20.3	7.1	6.6	33	32

Notification of Births.

The number of live births occurring in Dundee during 1946 was 4,469, and the number of still births 162.

No. of live births—		
Notified, ...	4,419	
Unnotified, ...	52	4,471
No. of still births—		
Notified, ...	160	
Unnotified, ...	2	162
Total No. of births, ...		4,633
No. notified as illegitimate, ...		358
No. notified as premature, ...		322

Classification of Births According to Nature of Attendance at Confinement.

Domiciliary Cases—

	Notified.	Unnotified.	Total.	Percentage of Births.
Doctor, ...	27	37	64	1.4
Midwife, ...	317	—	317	6.8
Doctor and Midwife, ...	134	—	134	2.9
Maternity Dept., Royal Infirmary (O.P.), ...	411	—	411	8.9
Unattended, ...	—	3	3	0.1
	889	40	929	20.1
Institutional Cases—				
Maternity Dept., Royal Infirmary, ...	1,647	1	1,648	35.6
Maryfield Hospital, ...	986	6	992	21.4
Clement Park M.H., ..	493	—	493	10.6
Nursing Home, ...	563	7	570	12.3
King's Cross Hospital, ...	1	—	1	0.02
	3,690	14	3,704	79.9
	4,579	54	4,633	100.0

Year.	Total Births.	Percentages Notified	Institutional Confinements.		Domiciliary Confinements (including D.R.I. Outdoor Cases).	
1944,	3,722	97.4	2,793	(75.0%)	929	(25.0%)
1945,	3,365	98.4	2,631	(78.2%)	734	(21.8%)
1946,	4,633	98.6	3,704	(79.9%)	929	(20.1%)

There is an increasing tendency for confinements to take place in institutions as shown in the above table. Factors probably responsible for this tendency are housing difficulties and lack of domestic help, but, whatever the reason, the demand for hospital beds is becoming more and more difficult to meet. Although a number of mothers would have been willing to stay in hospital for 14 days following delivery it was not possible to keep them, and it is with great reluctance that we have had temporarily to suspend our policy of encouraging every woman to stay in hospital for a minimum period of 14 days.

Year.	Infant Mortality Rate. Scotland.	Infant Mortality Rate. Dundee.	Neo-Natal Rate. Dundee.	Rate from 1-12 Months. Dundee	Still Birth Rate. Scotland.	Still Birth Rate. Dundee.	Still Birth Rate + Infant Mortality Rate. Scotland.	Still Birth Rate + Infant Mortality Rate. Dundee.
1944, ...	65	60	29	31	32	44	97	104
1945, ...	56	57	34	23	33	31	89	88
1946, ...	54	47	27	20	32	33	86	80

Infant Mortality.

During 1946 there were 186 registered infant deaths (113 males and 73 females), and the infant mortality rate per 1000 live births was 47. One hundred and seven infants (59 males and 48 females) died before reaching the age of 1 month, and 79 infants (54 males and 25 females) died between the ages of one and twelve months. The neo-natal mortality rate per 1000 live births was 27. It is encouraging to report that the infant mortality and neo-natal death rates are the lowest ever recorded for the city.

According to the Report on Infant Mortality in Scotland, adverse economic and social conditions have a direct effect on the infants' chances of survival. Unfortunately overcrowded and unsuitable homes are still prevalent, but it is likely that improved nutrition of both mothers and infants, as a result of priorities, is largely responsible for the fall in the infant mortality rate, because there is considerable evidence to show that nutritional factors have an important effect on the incidence of prematurity—the most important cause of neo-natal death. There is no doubt also that the educational work of the health visitors in the homes and of the staff in the clinics is beginning to bear fruit and improved mothercraft is the result.

It is well to note, however, that there may be a tendency for the infant mortality rate to appear more favourable than it actually is owing to the sharp rise in the birth-rate. A number of the infants who died in 1946 were born in 1945, when the number of births was much less. If the birth-rate were to fall suddenly we might be faced with a rise in the infant mortality rate for the same reason.

Causes of Infant Deaths.—The heaviest cause of infant deaths is immaturity; 6.95% of all notified births were considered to be premature, whereas 50% of the infants who died were considered to be premature. As, in conformity with the standard in international use, the criterion of prematurity or immaturity depends on birth weight, the number of premature infants must necessarily be only an approximate estimate because accurate weighing is difficult in certain circumstances.

Year.	Total Number of Births.	No. Notified as Premature.		No. of Infant Deaths.	Considered to be Premature.	
1944, ...	3,722	216	5.8%	181	39	21.5%
1945, ...	3,365	198	5.9%	162	49	30.2%
1946, ...	4,633	322	6.95%	186	94	50.5%

About 50% of the neo-natal deaths were due to prematurity, whereas the most frequent cause of death in the period of one to twelve months was pneumonia (all forms).

Anlyasis of Feeding in Infants who Died Before Reaching the Age of One Year — Males and Females.

Mths.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9+	Tl.
Breast, ...	4	3	3	2	1	2	—	—	—	—	15
Mixed,*	5	2	—	—	—	—	—	—	—	—	7
Partly Breast Fed,†	5	3	3	3	3	3	3	—	1	2	26
Artificial Feeding, ..	22	10	4	6	4	5	5	3	1	4	64
Feeding not commenced, ...	52	—	—	—	—	—	—	—	—	—	52
Unknown, ...	19	—	1	—	1	—	1	—	—	—	22
	107	18	11	11	9	10	9	3	2	6	186

*Mixed feeding means breast feeding complemented or supplemented by artificial feeds, i.e., combination of breast and artificial feeding.

†Partly breast fed means that breast feeding had been carried out for part of the time, but that artificial feeding had been substituted before death occurred.

Illegitimate Mortality.

Year.	No. of Reg. Births (corrected).	No. Illegit.		No. of Infant Deaths.	No. Illegit.		I.M.R.	Illegit. deaths per 1000 Illegit. Births.
1944, ...	3,174	294	9.3%	181	20	11.04%	60	68
1945, ...	2,832	282	10.0%	162	24	14.8%	57	85
1946, ...	3,941	281	7.1%	186	24	12.9%	47	85

Among the 281 illegitimate births 24 infants died before reaching the age of one year equivalent to an infant mortality rate of 85 (the same as the corresponding rate for the previous year) and although the infant mortality rate as a whole has fallen, the rate for illegitimate births has remained stationary. The effects of illegitimacy apparently fall more heavily on the later age groups of infancy indicating that environmental rather than ante-natal factors play the greater part in causation.

		No. Illegit.	Percentage
Number of Still Births, ...	162	13	8.02%
Number of Neo-natal deaths, ...	107	9	8.41%
Number of deaths (1-12 months),	79	15	18.98%

Still Births.

From information obtained regarding still births reported under the Notification of Births Act it was found that 3.7% of institutional

births and 2.6% of domiciliary births were still born. Among non-medically attended domiciliary cases the corresponding rate was 1.3%.

Still Births (1).

Sex		Legitimacy		Percentage
Male	Female	Legitimate	Illegitimate	Illegitimate
85	77	149	13	8.02

Still Births (2).

Place of Birth	Total Births	No. Stillborn	Percentage
Royal Infirmary In-Patient, ...	1,648	72	
Maryfield Hospital, ...	992	41	
Nursing Home, ...	1,063	25	
King's Cross Hospital, ...	1	—	
	3,704	138	3.7%
Royal Infirmary Out-Patient, ...	411	11	
Midwife, ...	317	4	
Doctor and Midwife, ...	198	9	
Unattended, ...	3	—	
	929	24	2.6%
Total, ...	4,633	162	3.5%

Still Births (3).

Cause of Death.

1. **Disease in or accident to Mother.**

   (a) **Diseases not specially associated with pregnancy or child birth.**

   Syphilis, ... 3

   (b) **Diseases associated with pregnancy or child birth.**

   Eclampsia and pre eclampsia, ... 3
   Nephritic Toxaemia, ... 2
   Toxaemia, ... 4
   Placenta praevia, ... 2
   Accidental haemorrhage, ... 13
   Other A.P. haemorrhages, ... 5

   (c) **Other Causes in Mother.**

   Fall, ... 1

2. **Anomolies of foetus, placenta or cord.**

   Spina bifida, ... 1
   Congenital heart disease, ... 1
   Hydramnios, ... 2
   Multiple malformations, ... 6
   Anencephalus, ... 8

3. **Death of foetus by injury or other cause.**

Abnormal presentation foetus,	4
Malformation of pelvis,	1
Prolapse of cord,	13
Torsion of cord,	3
Prolonged labour,	1
Injury at birth including cerebral haemorrhage,	14
Other defined causes,	1

4. **Ill defined or unknown cause.**

Prematurity,	16
Debility,	1
Asphyxia,	30
Atelectasis,	2
Macerated foetus,	22
Cause unknown,	3

Still Births (4).

Age of Mother

15-20 yrs.	20-25 yrs.	25-30 yrs.	30-35 yrs.	35-40 yrs.	40 yrs. and over	Unknown
6	31	40	35	35	11	4

Still Births (5).

Parity of Mother.

1	2	3	4	5	6	7	8	9	10	Not known
60	21	17	14	5	8	1	3	2	3	28

Still Births (6).

Employment of Mother during Pregnancy.

Working	Not Working	Not Known
42	92	28

In addition to deaths of children under one year of age, 40 deaths of children (21 males and 19 females) from 1-5 years were noted by the department.

During 1946 twenty-one women died during pregnancy, child birth or puerperium. Six of these deaths occurred in women whose homes were outwith the boundary but who had been confined in the City.

In the 15 Dundee deaths the attendants at birth were:—

Royal Infirmary,	9	(including 4 abortions and 2 ectopic gestations).
Maryfield Hospital,	5	
Nursing Home,	1	
Doctor and Midwife,	—	
Doctor,	—	
Midwife,	—	
	15	

Classification of Certified Causes of Death of the 15 Dundee deaths.

	Age Groups 15-25 yrs.	25-35 yrs.	35 + yrs.	Total
Deaths directly due to child bearing:—				
Pulmonary embolism	1	1	—	2
Puerperal eclampsia	—	1	—	1
Bilateral renal cortical necrosis ...	—	1	—	1
Ectopic gestation	—	2	—	2
Criminal abortion (toxic agent) ...	—	1*	—	1
Septic abortion	—	1	2	3
Deaths due to causes aggravated by child bearing:—				
Mitral Stenosis	—	1	1	2
Intestinal obstruction (unknown cause)	—	1	—	1
Deaths unconnected with pregnancy:—				
Aplastic anaemia (probably occupational), ...	—	—	1	1
Gangrene of appendix and peritonitis	—	1	—	1

* Notified as puerperal fever.

Notification of Special Conditions.

Year	Puerperal Sepsis.	Puerperal Pyrexia.	Ophthalmia Neonatorum.
1944, ...	17	30	27
1945, ...	8	55	46
1946	10	48	191

The increase in notifications of ophthalmia neonatorum is not necessarily an indication of an increase in the incidence of the disease but is probably due to a stricter interpretation of the definition of ophthalmia neonatorum in the Public Health (Infectious Diseases) Regulations (Scotland) 1932.

Analysis of the 1946 Figures.

Place of Delivery	Puerperal Sepsis. Full-time birth	Abortion	Puerperal Pyrexia. Full-time birth	Premature birth	Abortion
Royal Infirmary, ...	3	5	17	2	8
Maryfield Hospital	—	—	5	—	—
Nursing Home, ...	—	—	5	—	—
King's Cross Hospital, ...	1	—	—	—	1
At home D.R.I. (O.P.),...	—	—	2	1	2
Doctor, ...	1	—	1	—	—
Midwife, ...	—	—	2	—	—
No attendant, ...	—	—	—	—	2
	5	5	32	3	13

Analysis of the 1946 Figures—continued.

Place of Treatment					
King's Cross Hospital, ...	5	4	30	3	13
Royal Infirmary, ...	—	1	1	—	—
Maryfield Hospital, ...	—	—	—	—	—
Nursing Home, ...	—	—	—	—	—
At Home, ...	—	—	1	—	—
	5	5	32	3	13
Parity					
Primiparous, ...	3	3	20	1	2
Multiparous, ...	2	2	12	2	11
	5	5	32	3	13
Result					
Recovery, ...	5	3	32	3	11
Death, ...	—	2	—	—	2
	5	5	32	3	13

Cause of death in three of the cases who died was septic abortion and in the fourth case the cause of death was considered to be due to a toxic agent employed to procure abortion. Three women belonged to areas outside Dundee but had been admitted to the Royal Infirmary either for confinement or following confinement.

Ophthalmia Neonatorum.

	Source of Notification	Nature of Attendance at Birth
Doctor, ...	14	1
Midwife, ...	16	21
Doctor and Midwife, ...	—	1
Royal Infirmary (O.P.), ...	26	26
Royal Infirmary (I.P.), ...	32	53
Maryfield Hospital, ...	35	57
Nursing Home, ...	11	29
Maternity and Infant Welfare Department, ...	57	—
	191	191

Of the 191 notified cases of ophthalmia neonatorum the health visitors visited 183 and paid 1279 visits. In 61 cases smears were taken by the health visitors and two were found to be positive for the gonococcus. Twenty-two cases of ophthalmia were admitted to King's Cross Hospital for treatment and all the infants (191) made a complete recovery with no impairment of vision in any case.

Ante-Natal Clinics.

(a) Local Authority.

There are two municipal ante-natal centres, namely, Maryfield Hospital and Lochee Child Welfare Centre. Two sessions per week were held at Maryfield Hospital and one at Lochee. Both centres showed a considerable increase in the numbers of new cases and of attendances. The average number of attendances made by each patient was 5.

	Central (Nelson St.)		Lochee (Ancrum Road)		Maryfield Hospital		Total	
	New Cases.	Total Attend.	New Cases.	Total Attend.	New Cases.	Total Attend.	New Cases.	Total Attend.
1944, ...	188	462	129	578	751	3,979	1,068	5,019
1945, ...	38	142	175	380	809	4,117	1,022	4,639
1946, ...	—	—	213	944	1,169	5,622	1,382	6,566

NEW CASES

Stage of Pregnancy.	Maryfield.	Lochee.	Total.
2nd month, ...	101	4	105
3rd month, ...	252	8	260
4th month, ...	275	34	309
5th month, ...	244	46	290
6th month, ...	137	43	190
7th month, ...	100	37	137
8th month, ...	54	32	86
9th month, ...	6	9	15
	1,169	213	1,382
Total Attendances,	5,622	944	6,566

CONDITIONS FOUND.

	Maryfield. No. of Cases.	Lochee. No of Cases.	Total.
Albuminuria, ...	27	—	27
Pyelitis, ...	37	—	37
Cardiac affection, ...	21	7	28
Hyperpiesis, ...	141	38	179
Phlebitis, ...	1	—	1
Chorea, ...	—	1	1
Pulmonary infection, ...	9	6	15
Hyperemesis, ...	5	—	5
Disparity, ...	2	—	2
Breech presentation, ...	108	3	111
Dental caries, ...	306	24	330
Gonorrhœa, ...	3	—	3
Wassermann positive, ...	30	2	32

(b) Provided by Voluntary Bodies.

There is an ante-natal centre at the Dundee Royal Infirmary at which three weekly sessions are held. In 1946 2,287 women attended this clinic and they made 13,479 attendances.

Advice Centre for Expectant Mothers.

The attendances at this clinic also increased as was to be expected from the rising birth-rate and from the increased demand for admission to hospital. It is encouraging to report, however, that a greater number of women attended the centre for advice thus justifying the establishment of such a centre.

Year.	Attendance For Booking.	Advice Only.
1941,	816	—
1942,	842	—
1943,	805	—
1944,	783	—
1945,	780	138
1946,	1,082	225

Post-natal Clinics.

(a) Local Authority.

In November, 1946, a post-natal clinic was started in Maryfield Hospital. It was held once a week, and during November and December 38 mothers attended. Ten women showed no abnormality, and the conditions found in the remainder were as follows:—

Anæmia,	4
Mastitis,	3
Subinvolution,	5
Retroversion,	2
Prolapse,	1
Albuminuria,	1
Cervicitis,	4
Cervical erosion,	3
Vaginitis,	8

(b) Provided by Voluntary Bodies.

A combined post-natal and child welfare clinic is held once a week at the Dundee Royal Infirmary, where mothers are medically examined following confinement and where advice is also given about the care of the child. During the year 800 mothers attended this clinic, and they made 911 attendances, while 980 infants made 1,357 attendances.

INFANT WELFARE CLINICS

There is a growing demand for infant and child welfare facilities, and during 1946 there was an increase in the number of new babies seen, the increase probably being due to the rise in the number of births. Attendance of young babies is to be encouraged, and if the purpose of these clinics is to be fulfilled it is advisable to see babies as early in life as possible. It cannot be emphasised too

much that the main object of the infant welfare clinics is to keep well children well, and the work is, or ought to be, preventive and educational in character. For example, it is in the early stages that valuable advice can be given about breast-feeding and when early deviations from the normal can be dealt with. Sessions are held each week at seven centres, and the attendances are given in the following table:—

	NEW CASES.			ATTENDANCES.			
Year.	Under 1 Year.	Over 1 Year.	Mothers.	Under 1 Year.	Over 1 Year.	Mothers.	Total.
1944,	947	61	12	8,969	5,542	333	14,744*
1945,	1,028	86	12	10,426	4,566	394	15,386*
1946,	1,377	69	40	10,552	2,486	239	13,277

*Includes children examined for admission to nurseries.

ATTENDANCES AT INFANT WELFARE CENTRES.

	Babies.		Children 1-5.		Mothers.				
	New Cases.	Re-visits.	New Cases	Re-visits.	New Cases A.N.	New Cases P.N.	Revisits. A.N.	Revisits. P.N.	Total.
Central, ...	243	1,699	18	494	1	3	5	40	2,503
Lochee, ...	261	1,669	6	387	—	5	—	33	2,361
Caldrum St.,	162	805	11	288	—	2	—	21	1,289
Ferry Road,	123	1,065	4	398	—	3	—	17	1,610
Blinshall St.,	253	1,705	9	305	1	5	—	36	2,314
Bro'ty Ferry,	79	543	6	276	—	12	—	9	925
Maryfield,	256	1,689	15	269	—	8	—	38	2,275
	1,377	9,175	69	2,417	2	38	5	194	13,277

Analysis of Type of Feeding of New Infants Attending Infant Welfare Clinics.

	Breast.	Mixed.	Artificial.	Partly Breast.	Total.
Males, ...	245	47	408	11	711
Females, ...	276	45	335	10	666
Total, ...	521 (37.8%)	92 (6.7%)	743 53.9%)	21 (1.5%)	1,377

Condition on Admission to Clinics.

(1) Children Under 1 Year of Age.

Of the 1,377 children under 1 year of age attending the clinics for the first time, 525 (38.1%) showed no disease or congenital defect. The remaining 852 (61.9%) showed diseases or defects, classified as follows:—

Diseases of the digestive system,	145
Diseases of the respiratory system,	105
Diseases of nutrition,	35
Diseases of the skin,	321
Diseases of the eye,	103
Diseases of the ear, nose and throat,	11
Congenital defects,	366
Infectious diseases,	5
Various,	54
	1,145

(2) Children Over 1 Year of Age.

Of the 69 children between one and five years of age attending the clinics for the first time 8 (11.6%) showed no disease or congenital defect. The remaining 61 (88.4%) showed diseases or defects, classified as follows:—

Diseases of the digestive system,	6
Diseases of the respiratory system,	8
Diseases of nutrition,	29
Diseases of the skin,	17
Diseases of the eye,	2
Diseases of the ear, nose and throat,	4
Congenital defects,	11
Surgical conditions,	5
Infectious diseases,	1
	83

SPECIAL CLINICS.

Dental Clinic.

In September, 1946, the routine examination by a dentist of all patients attending the Corporation ante-natal clinics was begun, and a considerable number availed themselves of the treatment offered.

Babies.		Children 1-5.		Mothers.				
New Cases.	Revisits.	New Cases.	Revisits.	New Cases.		Revisits.		Total.
				A.N.	P.N.	A.N.	P.N.	
1	—	68	19	634	2	205	1	930

Ultra-Violet Light Clinic.

	BABIES.				CHILDREN.			
	Cases Carried forward from				Cases Carried forward from			
	New	Previous	Total	Attend-	New	Previous	Total	Attend-
Year.	Cases.	Year.	Cases.	dances.	Cases.	Year.	Cases.	dances.
1944,	60	9	69	1,046	179	48	227	3,888
1945,	33	6	39	539	143	28	171	3,479
1946,	26	3	26	444	83	26	89	2,111

Pædiatric Clinic.

A pædiatrician attends once a fortnight to see special cases referred to him from the child welfare clinics. This clinic is intended primarily for infants under 1 year, but older children are also seen. During 1946, 97 children under 5 years attended (63 under 1 year and 34 between 1 and 5 years of age). Among the conditions found were:—Marasmus, vomiting, pyloric spasm, disorders of feeding, constipation, debility, pyelitis, infantile eczema, congenital heart, erythrœdema, asthma, enuresis, behaviour problems, post-meningitis, cerebral diplegia, mental retardation, mongolism.

Babies.		Children 1-5.		
New Cases.	Revisits	New Cases.	Revisits.	Total.
63	6	34	12	115

Orthopædic Clinic.

	Babies.		Children 1-5.		
	New Cases.	Revisits.	New Cases.	Revisits.	Total.
1945, ...	4	9	58	145	216
1946, ...	32	41	81	251	405

Among the conditions found were:—Talipes equino-varus, geno varus, genu valgus, congenital dislocation of hip, inversion of feet, spinal curvature, birth palsy, drop wrist, spina bifida, meta-tarsus deformity.

Specialist Eye Clinic.

During 1946, 97 children under 5 years of age made 264 attendances. Amongst conditions found were:—Conjunctivitis, ophthalmia neonatorum, tear duct obstruction, corneal ulcer, blepharitis, strabismus, etc.

Specialist Ear, Nose and Throat Clinic.

During 1946, 113 children under 5 years of age made 127 attendances. Amongst conditions found were:—Otorrhœa, catarrhal changes in the ear, retracted drum, deafness, nasal obstruction, simple catarrh, allergic rhinitis, enlarged or unhealthy tonsils, adenoids, tonsillitis, adenitis, etc.

Nursery Clinic.

A clinic is held on four mornings a week, when children are medically examined before admission to a nursery for the first time or are re-examined after an absence from the nursery exceeding three days.

	Babies.		Children 1-5.		
	New Cases.	Revisits.	New Cases.	Revisits.	Total.
1946, ...	119	174	186	1,182	1,661

Diphtheria Immunization.

The number of children who complete a course of inoculation before reaching the age of one year is steadily rising, and the percentage of children completing a course at the age of one year or soon after is also increasing. Mothers are encouraged to bring their children as soon as possible after reaching the age of 6 months so that immunity may be well developed by the time the child reaches the age of one year. The following table shows that in 1946 more than 75% of young children had completed a course of inoculation by the time they reached the age of one year or soon afterwards, and the credit for this satisfactory result is entirely due to the keenness and enthusiasm of the health visitors.

Year.	Total No. of Children.	Number of these completing inoculation at the age of 1 year or soon after.	Percentage.
1943, ...	2,475	936	37.8
1944, ...	2,476	1,670	67.4
1945, ...	2,787	1,738	62.4
1946, ...	2,439	1,866	76.5

Whooping Cough Immunisation.

This is not carried out on any large scale as the results of whooping cough immunization are not yet sufficiently proved to warrant active propaganda measures being taken. If, however, the mother is anxious to have the child protected and, if the child is young enough to justify an attempt at protection being made, then facilities are available at the infant welfare clinics. The number of children completing a course of inoculation against whooping cough during 1946 was 67.

Vaccination.

Facilities are provided at infant welfare clinics for vaccination of babies who attend the centres. During 1946, 304 babies were vaccinated at infant welfare clinics.

Home Visitation by Health Visitors.

Altogether the health visitors made 46,973 home visits during the year, and of these the number for infants under one year of age was 21,810, and for children between 1 and 5 years 16,223, and 5,059 visits were made to expectant mothers. These totals include special visits made to cases of ophthalmia neonatorum, infantile diarrhœa, puerperal fever and puerperal pyrexia, infectious diseases, and for inquiries with regard to housing, maternal deaths and infant deaths.

Year.	Mothers A.N. 1st visit.	Revisits.	Total.	Mothers P.N. 1st visit.	Revisits.	Total.
1944, ...	869	165	1,034	2,250	196	2,446
1945, ...	1,264	2,205	3,469	2,036	249	2,285
1946, ...	1,493	3,566	5,059	3,552	329	3,881

	Babies. 1st visit.	Revisits.	Total.	Children 1-5 1st visit.	Revisits.	Total.
1944, ...	4,811	12,856	17,667	.....	.....	.....
1945, ...	4,733	14,541	19,274	.....	.....	.....
1946, ...	3,641	18,159	21,810	2,439	13,784	16,223

	1st Visits.	Return Visits.	Total.
Ophthalmia Neonatorum, ...	184	1,096	1,280
Infantile Diarrhœa, ...	14	2	16
Puerperal Pyrexia, ...	31	7	38
Puerperal Sepsis, ...	4	—	4
	233	1,105	1,338

Year.	Ophthalmia Neonatorum.	Infantile Diarrhœa.	Puerperal Pyrexia.	Puerperal Sepsis.
1944, ...	227	18	17	22
1945, ...	264	32	31	11
1946, ...	1,280	16	38	4

Day Nurseries.

At the beginning of the year there were 14 war-time nurseries, namely:—

	No. of Places.
Bellfield Babies' Nursery, ...	8
Burgess Street Nursery, ...	40
Cotton Road, Nursery, ...	65
Dudhope Street Nursery, ...	40
Ellengowan Drive Nursery, ...	40
Fairbairn Street Nursery, ...	40
Harefield Road Nursery, ...	40
Isles Lane Nursery, ...	26
Lilybank Nursery, ...	40
Linlathen Nursery, ...	40
North George Street Nursery, ...	30
Polepark Nursery, ...	40
Polepark (Annexe) Nursery, ...	40
Rankine Street Nursery, ...	55
*Flight's Lane, ...	30

*Under the management of a voluntary committee.

From 1st April, 1946, these ceased to be war-time nurseries entitled to full reimbursement of expenditure from the Exchequer. The Local Authority was asked to assess the local need for day nursery facilities and to review the war-time nurseries in operation

and consider which should be taken over and run as nursery schools, which should continue to be run as day nurseries, and which should be closed on the ground that they were surplus to requirements. It was decided to hand back Cotton Road Nursery to the Education Authority, to hand over Polepark Annexe and Ellengowan to be used as Nursery Schools, and to return the premises at Rankine Street to the Dundee Institution for Education of the Deaf and Dumb.

Rankine Street Nursery was closed in May, when the children and staff were transferred to other nurseries, and in July Ellengowan Drive Nursery was handed over to the Education Authority to be re-opened as a Nursery School, the younger children being transferred to other nurseries. In November the nurseries at Cotton Road and Polepark Annexe were also handed over to Education Authority to be re-opened as Nursery Schools. It was considered that the older children would be better in Nursery Schools, and that the day nurseries should concentrate on the younger children. Meantime this is not practicable as the available accommodation in the Nursery Schools does not meet the needs, and there are large waiting lists for both Nursery Schools and Day Nurseries.

At the beginning of 1946 there were four nurseries recognised as Training Schools for Nursery Nurses, namely, Cotton Road, Rankine Street, Lilybank and Polepark, and when Cotton Road and Rankine Street were given up, Dudhope Street was recognised as a Training School to take their place.

The attendances at the Day Nurseries were as follows:—

	Nursery Attendances.						Flight's Lane Attendances.	
	Under 2 Years.		Over 2 Years.		Total Attendances.			
Year.	Day.	Night.	Day.	Night.	Day.	Night.	Day.	Night.
1944, ...	37,714	871	67,898	1,507	105,612	2,378	8,824	101
1945, ...	42,769	139	67,928	247	110,697	386	6,384	—
1946, ...	35,106	—	57,599	—	92,705	—	5,211	—

Mother and Baby Homes.

Name of Home provided by Voluntary Assos.	Number of Beds.					Average length of stay.		
	Ante-natal.	Post-natal.	Total ante-natal and post-natal.	Maternity (excl. labour and isolation).	Cots.	Ante-natal.	Post-natal.	No. of Girls.
St Ronan's,	6	10	16	—	9	7½ wks.	11½ wks.	38 (29 new during year.)
Clement Park,	10	26	36	4	30	40 dys.	94 dys.	64

Residential Nurseries and Children's Homes.

Name and Address of Nursery or Home.	Whether Long Stay or Short Stay.	Number of Beds Provided at End of Year. Aged 0-2.	2-5.	Others.	Total.
Duncarse (Local Auth.)	Both	40 (allocated according to demand.)	40		80
Armitstead Convalescent Home (Vol. Asso.)	Short Stay	18	24	—	42

Midwives (Scotland) Acts.

In the year 1946, 25 midwives notified their intention to practise midwifery in Dundee, six as midwives in private practice.

The midwives in private practice attended a total of 447 births (including 134 cases where the midwife acted as a midwife though a doctor was in attendance)—that is 9.7% of the total births occurring in the City, including still births—as compared with 405 in 1945.

The extent of the individual practice of each midwife varied; of the 6 midwives who were in practice during 1946, one had 122 cases, one had 112, one had 63 and one 13. One who died during the year attended three cases, and one who was ill did not attend any cases.

25 visits were paid by the Inspector of Midwives and her assistant to the homes of the midwives. The midwives have sent 167 mothers to attend ante-natal clinics or to private doctors for medical advice and supervision.

150 notifications were received from midwives as follows:—

Application for medical assistance (a) Mother, ...	71
(b) Child, ...	20
Notification of death (a) Child, ...	1
Notification of stillbirth, ...	5
Notification of artificial feeding, ...	53

Nursing Homes Registration (Scotland) Act, 1938.

There are 11 nursing homes in the City, of which four are exempted from registration, namely:—St Ronan's Home, Dalkeith Road; Clement Park Nursing Home; St Mary's Home, King Street; and Dundee Women's Hospital and Nursing Home, Elliot Road.

During the year Westbay was opened as a Maternity Nursing Home, and has accommodation for 13 patients. In March, Fort House Nursing Home was granted a certificate of registration as a Limited Liability Company and, in September, registration was transferred from Burnbank Nursing Home, 14 Seafield Road, Broughty Ferry, to 1 Victoria Road, West Ferry.

There were 22 visits paid to the Nursing Homes during the year.

Nurses (Scotland) Act, 1943, and Nurses' Agencies (Scotland) Regulations, 1945.

Dundee Private Nursing Home (Marrbank), Ltd., and Fernbrae Nursing Home Ltd., were granted licences under the above Act and Regulations to carry on agencies for the supply of nurses in terms of Section VIII. of the Act.

Foster Children, Adopted Children and Illegitimate Children.

During the year the health visitors paid special attention to 78 children who had been adopted or were awaiting legal adoption and to 21 children who were under the care of foster parents. In addition to their welfare duties in respect of all infants special care was given by the health visitors to illegitimate babies and their mothers. As pointed out in a previous part of this report, the death-rate amongst illegitimate infants—especially in later infancy—was much higher than the corresponding rate for legitimate infants. This was almost certainly the result of adverse environmental conditions showing the need for extra care and supervision in the homes of these infants.

Apart from the special care and attention given by health visitors to all illegitimate babies, 70 women who attended the "advice bureau" for expectant mothers and who were each expecting an illegitimate child were interviewed by the social worker who is shared by the Public Health and Social Welfare Departments. These women were given guidance and help, and were kept under special observation during pregnancy and after confinement. 48 were single, 16 were married, four were widows and two were divorced. One mother died soon after delivery and one was admitted to a mental hospital; in both cases the babies are being reared by relatives. Five mothers have been married to the fathers of their children, and eight mothers are living with the fathers and being maintained by them. Three babies have been legally adopted and four are awaiting adoption. Two babies have died and 46 are still in the care of their mothers, many of whom are in employment but are being assisted by relatives in looking after the baby.

PRE-SCHOOL AND SCHOOL MEDICAL SERVICES

Report by Dr. JAMES A. CUTHBERT

1. List of Staff.

(a) Whole-time:—

1 Deputy Medical Officer of Health (Pre-school and School Medical Services).

4 Assistant Medical Officers of Health.

1 Senior Dental Officer.

3 Assistant Dental Officers.

School Nurses—The services of a Combined Staff of Superintendent and 33 Health Visitors.

4 Clerkesses.

4 Dental Attendants.

2 Nurses and 3 Clinic Attendants for Scabies Treatment.

1 Medical Room Attendant at the Special School for Physically and Mentally Handicapped Pupils.

2 Clinic Porters.

Changes in Staff—

Dr Claude Imrie returned from war service on 16.1.46 and Dr Nona Lesslie on 7.2.46.

Their reliefs, Dr Flora Perry and Dr Janette Turner left on 9.2.46 and 16.2.46 respectively.

(b) Part-time:—

1 Aurist; 1 Dermatologist; 1 Oculist; 1 Orthopædic Specialist.

Changes in Staff:—

Dr T. K. Buchanan was appointed temporary part-time Dermatologist in January, 1946, pending the return from war service of Dr John Kinnear, who resumed duty in June, 1946.

2. General Statistics.

Population of the area, ...	162,100
Number of Schools:—	
(a) Primary } Under Education	37
(b) Secondary } Authority	10
(c) 1. Special Schools, ...	4
2. Nursery School, ...	1
3. Special Classes (Nursery in ordinary schools, ...	3
(d) In receipt of grant from Education Authority and under medical inspection—	
1. Primary and Secondary, ...	1
2. Nursery Schools, ...	2
(e) Under Provincial Training College for Teachers and by arrangement under medical inspection—	
1. Primary School, ...	1
2. Special Class Nursery, ...	1
Number of children on registers, ...	25,208
Number of children in average attendance, ...	22,281

3. Sanitary Condition of Schools.

No systematic survey of any of the schools has been undertaken during the year under report. Strong representations, however, have been made to the Education Committee with regard to the urgency of improving lighting, ventilation and playground space in many of the schools by the removal of baffle walls, the last traces of black-out devices and playground A.R.P. shelters. Covered play sheds adapted as A.R.P. shelters require to be restored with the least possible delay. Indication was given of all the premises at which the alterations are most urgently required.

4. Organisation and Administration.

A—System and Extent of Medical Inspection and Treatment.

The groups of children presented for systematic inspection were:—(1) Entrants and children born in (2) 1936; (3) 1932; and (4) 1929.

The following is a summary of the work of the Medical Officers:—

Systematic Inspection, ...	345 Sessions
Ordinary Schools, ...	96 Special Visits
Special Schools, ...	44 Visits
Nursery Schools and Classes, ...	55 ,,
Nurseries, ...	315 ,,
Consultation Clinics, ...	514 Sessions

The work was carried out according to the normal routine.

Trades School.

Examination of all the pupils enrolled during the session under review has been carried out on our behalf by an assistant Medical Officer of Health attached to the Central Public Health Office.

Number examined, ...	198
Number defective, ...	56
Number re-examined, ...	18

Seymour Lodge Pre-Nursing School.

Thirty-six entrants to the school were examined by the Assistant Medical Officers of Health, Pre-school and School Medical Services on superannuation standards.

The Education Committee agreed that the pupils of these two schools should be given the full treatment facilities afforded by the School Health Services.

The only change to record in treatment clinic premises during the year was the closure in December, 1945, of Hawkhill First Aid Post Scabies Treatment Centre. The number of cases had been so far reduced as to render this centre unnecessary when an outbreak of fire caused it to be evacuated.

Dr Claude Imrie trained in refraction work on his return to duty, and it was possible to increase the number of refraction clinics to six per week.

Improved clinic premises are approved for the eastern (Broughty Ferry) area so that the present schoolrooms in Eastern School may be released for educational purposes.

Unfortunately it has not been possible to obtain a gramophone audiometer yet, and the routine testing of hearing by that instrument has not been done. Using borrowed machines, however, and two teachers trained in Manchester and Edinburgh, the survey, which was started in June, 1945, and mentioned in the last report was carried on through the session.

2,172 pupils in all were tested, and 1,329 re-tested, and the following results were obtained:—

Number examined—

Grade I.	502
Grade II.a	70
Grade II.b.	122
Grade III.	...
Number defective, ...	694

All the Grade II.b cases and most of the Grade II.a cases have been examined by the Aurist and treatment prescribed where possible. 36 cases were recommended for admission to the Special School for the hard of hearing.

The increased incidence of ringworm of the scalp noted in the previous session was dealt with by referral of all suspects to the Department of Diseases of the Skin, Dundee Royal Infirmary for diagnostic and treatment facilities, and not until January, 1946, was it possible to obtain delivery of a table model U.V.R. lamp with Wood's Glass. From that time a bi-weekly diagnostic and treatment service was established at our Central Clinic under the direction of the skin specialist. Full facilities for epilation by X-ray irradiation were not available until June, 1946. Until then a few cases with single patches were treated at the Infirmary, and all suitable cases had appropriate dosage of Thallium Acetate.

The arrangements for Orthopædic Specialist advice and treatment were continued throughout the session.

B.—System and extent of Dental Inspection and Treatment.

No change has been made during the year, but it will be noted from the report by the Senior Dental Officer appended hereto that

the service is to be extended in the new session to cover more adequately the expectant mother and municipal hospital and sanatorium staffs and patients and also orthodontia in school children. Appointment of an additional Assistant Dental Officer is authorised.

All pupils from 5 to 14 years had at least one dental inspection and also the pupils of all nursery schools and classes.

C.—School Nursing and Arrangements for Following up.

These have continued as described in a previous report.

The Health Visitors spent 455 sessions on medical inspection and paid 1,392 additional visits to schools.

2,236 follow-up visits were paid to 1,890 school children.

574 follow-up visits to 506 Day Nursery and Nursery School children.

2,401 Health Visitor sessions were devoted to consultation and treatment clinics in addition to two Health Visitors engaged full time on that work.

D.—Co-ordination with the Public Health Service and with Other Departments of the Authority which Render Services to Children.

With a common health visiting staff and common premises the Infant Welfare and School Medical Services have been fully co-operative and complementary. The under fives share freely in the consultation and treatment facilities.

Close communication is maintained with the Infectious Diseases and General Hospitals and the Tuberculosis Department in regard to child patients.

Arrangements are made to press for the immunisation against Diphtheria of all children not already protected on entry to school and for the administration of a maintenance injection to all those already immunised. This scheme works smoothly, and we believe it to be highly effective.

2,430 children were submitted for Systematic Medical Inspection in the Entrants group, and of these 2,085 (85.8%) had been immunised before admission to school.

Of the remaining 345, as many as 202 (58.55% of the remainder, or 8.3% of the total inspected) consented to take the full course of injections.

1,563 (75.0% of those previously immunised) agreed to have a further maintenance injection, had already received such an injection, or did not require it, because the full course had been completed within the previous year. We are satisfied that the appropriate injections are duly administered because we contrive to have nearly all of them given under the auspices and with the valuable help of the teaching staff.

The figures for the past three sessions are as follows:—

	Not Yet Immunised.			Consents for	
	Consents for Full Course.	Refusals.	Previously Immunised.	Maintenance Dose.	Number Examined.
1943-44,	290	166	2,205	1,238	
	10.7%	6.13%	81.37%	56.1% (of P.I.)	2,710
1944-45,	233	125	1,967	1,249	
	9.87%	5.3%	83.4%	63.5% (of P.I.)	2,359
1945-46,	202	143	2,085	1,563	
	8.3%	5.9%	85.8%	75.0% (of P.I.)	2,430

E—Co-operation with Voluntary Organisations and Other Outside Bodies.

This has been continued as described in the earlier report, and the facilities are becoming better and more widely known and used.

We are indebted to the Dundee Branch of the Invalid and Cripple Children's Aid Association for the only Holiday Home facilities available meantime. We select the children who are to benefit and carry out the preliminary medical examinations.

Examinations for fitness to proceed to holidays camps under the auspices of Grey Lodge Settlement and the Girls' Guildry, etc., have considerably increased in number.

F—Co-operation with Teachers and Parents with Special Reference to the Attendance of Parents at Inspections.

The fact that so many mothers are still employed on essential work makes it difficult to obtain as high a percentage of parents present at routine and special inspections as we should like and, indeed, renders the whole matter of following up cases adequately, extremely difficult. The results obtained are therefore disappointing and discouraging at times.

2,544 pupils (34.37%) had the parent present at the systematic inspection.

Parents present at systematic inspections:—		
Entrants Boys and Girls, ...	1,760	72.427%
2nd Group Boys and Girls, ...	717	29.987%
3rd Group Boys and Girls, ...	66	2.839%
Secondary Group Boys and Girls, ...	1	0.41%

The teaching staffs continue to co-operate on the whole with great cordiality. We value their co-operation very highly and especially in the matter of conducting five-year-old entrants at considerable inconvenience to the nearest immunisation centre by arrangement for the first injection of the course or the maintenance injection as mentioned above (Section D). It is important that this campaign should be carried out as far as possible under the school auspices.

A number of talks have been given on health subjects to associations of parents and teachers and also to student teachers and youth leaders.

5. The Findings of Medical Inspection.

7,401 children were submitted to systematic medical inspection at 345 sessions, an average of 21-22 per session.

In the previous year the number was 7,841 at 334 sessions, average 23-24.

" Other Examinations " include 459 children brought forward specially in schools, and 10,095 referred to consultation clinics, also 654 inspections for the Scientific Advisory Committee's Sub-Committee on Nutrition, and 29,571 re-inspections in schools and clinics.

Special examinations in clinics included the following:—	
Applicants for licences for employment, ...	395
For exemption, ...	30
For holiday and convalescent homes, camps, etc.,	2,159
For approved schools or boarding out, ...	89

The following are the particulars of the Special Examinations in schools:—

	459 Children Examined; 323 Defective.	2,641 Children Re-examined; 1,271 Still Defective.
Head—Vermin,	2	1
Nits,	17	108
Other conditions,	30	16
Body—Vermin,	—	1
Other conditions,	24	24
Diseases of tonsils,	13	150
Defective vision,	50	238
Diseases of the eye,	44	92
Defective hearing,	2	9
Diseases of the ear,	3	16
Speech defects,	4	11
Mental or nervous conditions,	20	169
Infectious disease,	16	2
Other conditions,	115	42

The result of Systematic Inspection will be found in Table II. appended.

Clothing and Footwear Unsatisfactory.—Of the number, 7.401, examined, 22 (0.3%) and 5 (0.07%) respectively were unsatisfactory, a noteworthy deterioration in the state of the clothing. For the previous year the percentage of cases unsatisfactorily clothed was only 0.08.

During the year 679 children were supplied with 1,209 pairs of boots or shoes.

Cleanliness.—The results under this heading for the state of the heads particularly are disappointing, showing an increase over the two previous years.

636 (8.59%) of the 7,401 children examined, 14.06% of the girls had definite evidence of dirt, nits or verminous head, and 52 (0.7%) dirty or verminous body.

In 1939 the figures were:—Head, 3.85%; Body, 0.4%.

Reference has been made elsewhere to the difficulty experienced in following up and obtaining adequate attention to personal hygiene in these abnormal times.

Skin — Head and Body.—The incidence of ringworm of the scalp increased sharply from 1 (0.01%) in the previous session to 8 (0.11%), and reference to this is made under Medical Treatment.

Scabies cases have decreased from 1.12% to 0.97% (72 cases).

Nutritional State.—There is no noteworthy change to record over the past four years.

Number examined, 7,401. Slightly defective, 172 (2.32%). Bad, 3 (0.04%).

School meals have greatly improved in quality and are subject to periodical examination as to their nutritional value.

During the session 1,698,115 dinners were provided, of which 156,060 were free to necessitous children.

In 1939 the number was 492,906, of which 451,891 were free.

3,194,279 bottles of milk were supplied, compared with 1,965,896 in 1939.

Mouth and Teeth Unhealthy.—The incidence of this defect, 172 cases (2.32%) compared with 5.1% in 1939, shows the benefit of a more adequate dental service. The peak incidence, 3.13%, occurs in boys of the 9-10 year age group, and there is no doubt that much propaganda is required with regard to oral hygiene at all ages. The report of the Senior Dental Officer appended gives details of the findings and the treatment.

Naso-pharynx.—There is a definite increase in the incidence of nasal obstruction and tonsils requiring observation and operation compared with the previous year, but without a corresponding increase in the incidence of adenitis. The increase affects particularly the Entrants group, and it suggests the need for more general participation in the Food Ministry's scheme for the provision of extra vitamins to the under fives.

Eyes—(a) External Diseases.

Blepharitis and Conjunctivitis show some increase in the past year.

Examined, 7,401. 204 (2.76%) and 135 (1.82%) respectively compared with 2.5% and 0.71%.

No explanation is offered except that Medical Officers were rendered more " conjunctivitis conscious " by the discovery of a number of cases of granular conjunctivitis in one particular school, and the assessment of these conditions may vary greatly.

(b) Visual Acuity.

Unsatisfactory vision, with glasses if worn, was less frequent.

989 children (13.36%) had fair vision, compared with 16.09% last year and 110 children (1.49%) had bad vision compared with 1.72% last year. 420 children (5.67 %) were referred for refraction compared with 7.28% last year.

Strabismus.—The figure for Strabismus, 4.08% (302 children), compares with 4.45% in the previous session. Many of the suitable cases are referred for examination and treatment to the Orthoptic Clinic, which continues to give valuable service.

Ears — Otorrhœa (.69%, 51 children) shows no change.

Defective Hearing.—Systematic inspection yielded only 6 cases (0.08%) of Grade I. hearing loss compared with .24% the previous year, 1 case of Grade II.a loss, and 3 of Grade II.b.

Speech Defects.—The number of cases of defective articulation, 23 (.31%), and stammering, 16 (0.2%), shows no change.

Mental and Nervous Condition.—Backward (due to irregular attendance, etc.) shows an increase to .24% (18 cases), from .17% last year.

Highly nervous or excitable (.12%, 9 children) is a decrease from .18% last year.

Difficult in behaviour (0.09%, 7 children) is the most marked increase from 0.03%.

Circulatory System.—The incidence of congenital heart conditions (.16%, 12 children) is unchanged, and acquired organic heart disease (.17%, 13 children) shows a decrease from .28%. There is a similar decrease in the recorded incidence of functional heart conditions (.82%, 61 children).

Lungs.—The figure for Chronic Bronchitis (0.76%, 56 children) is unchanged, but that for suspected Tuberculosis, a somewhat unsatisfactory category from the examiners' viewpoint, the figure (0.17%, 13 cases) has risen from 0.1%. For other diseases (1.82%, 135 children) there is a slight decrease from 1.98%.

Deformities.—216 children (2.91%) suffering from deformities of one type or another, compared with 2.39% last year suggests a growing orthopædic consciousness on the part of the Medical Officers rather than an absolute increase in incidence.

Parents were notified with regard to defects requiring treatment found in 1,943 children of the 7,401 examined, compared with 2,098 of the 7,841 last session.

With regard to the Classification of Children according to the remediability of the major defect — Table III. appended — there is an increase in the percentage of children free from defects from 52.33% in 1941-42 to 54.15% in 1945-46.

The most striking improvement in this respect is noted in the "entrants" group for which the relative figures are 50.73% to 57.45%.

There appears, from the foregoing details, to be justification for the view that there is no deterioration in the health of the children shown by routine inspection during the past session. There is noteworthy neglect of personal hygiene on which comment has already been made, and there is still a considerable increase in scabies infestation over the pre-war figures, although these are steadily declining from the war-time peak. The incidence of ringworm of the scalp has so sharply increased as to give concern, but vigorous steps have been taken to meet the situation.

6. Medical Treatment.

Consultation and Treatment Clinics for Minor Ailments have continued throughout the session, modified slightly during holiday periods when the reduced demands of a particular area could be met by facilities at the larger clinics.

Consultation Clinic Attendances.

	Children 2-5 Years.		Children 5-15 Years.	
Clinic.	Cases.	Consultations.	Cases.	Consultations.
Central, ...	408	741	3,941	11,119
West, ...	202	346	2,057	4,242
Lochee, ...	100	203	1,549	3,765
East, ...	55	116	582	1,912
Broughty Ferry,	23	31	435	941
Maryfield, ...	76	158	1,531	3,356
	864	1,595	10,095	25,335

These show a slight increase over the figures for the previous session in respect of both age groups and bear out the Medical Officers' impressions that there is a greater "clinic habit" and more quite minor ailments.

1,836 intimations regarding the occurrence and school attendance of cases and contacts of infectious diseases were sent to Head Teachers.

6,554 certificates exempting children from school attendance for periods varying from one to six weeks were sent to the Attendance Department and Head Teachers.

Treatment Clinic Attendances (Totals for 6 Clinics + 3 Scabies Treatment Centres).

(a) Minor Ailments—

	Children 2-5 Years.			Children 5-15 Years.		
	Cases.	Attend.	Av. per Case.	Cases.	Attend.	Av. per Case.
Cuts, bruises, sprains, minor injuries, etc., ...	116	705	6.08	3,797	20,405	5.37
Diseases of the ear, ...	46	566	12.30	672	7,181	10.69
Diseases of the eye (ex. def. vision), ...	52	538	10.35	947	8,952	9.46
Diseases of the skin—						
Ringworm (Scalp)--						
X-ray treatment, ...	—	—	—	34	34	1.00
Other treatment, ...	5	44	8.80	50	2,823	56.46
Ringworm (Body), ...	6	29	4.83	127	1,122	8.83
Scabies—						
Clinic treatment, ...	5	25	5.00	136	464	3.41
Baths treatment, ...	178	1,528	8.58	1,031	15,749	15.28
Impetigo, ...	83	517	6.23	1,069	7,466	6.98
Other diseases, ...	10	57	5.7	326	1,957	6.00

The sharp increase in the number of cases of ringworm of both scalp and body will be noted.

	Scalp.		Body.	
	2-5 yrs.	5-15 yrs.	2-5 yrs.	5-15 yrs.
1943-44, ...	1	10	3	48
1944-45, ...	1	16	5	75
1945-46, ...	5	84	6	127

The figures for the initial cases of scabies are also of interest.

	Clinic Treatment.		Baths.	
	2-5 yrs.	5-15 yrs.	2-5 yrs.	5-15 yrs.
1938-39, ...	1	63	12	230
1943-44, ...	10	173	370	2,433
1944-45, ...	4	89	353	1,506
1945-46, ...	5	136	178	1,031

The increase this session in the 5-15 years clinic cases indicates the earlier detection of slight infestation, and the pre-war figures show how considerably is the present incidence above the peace-time average.

B—Defective Vision and Squint.

Commencing in March, 1946, it was possible to increase the number of refraction sessions to six per week in an effort to reduce a very long waiting list.

Glasses were provided under the Authority's scheme as follows:—

Free of Charge	593
At half-cost,	73
At contract rate,	149
	815

The Orthoptic Clinic has worked at full pressure, and it is increasingly evident that the present facilities are not adequate.

Cases brought forward from previous year:—

Waiting List (includes 101 too young for treatment),	382
Under treatment,	183
Postponed (partly treated),	99
	664
New cases,	154
Returned cases,	3
	821

Number of new cases not requiring or unsuitable for treatment,	40

Discharged during year:—

Cured,	34
Improved,	28
Failed to improve,	3
Failed or unable to attend,	34
Left Dundee,	8
Left school,	6
	153

Carried forward to next session:—

Waiting List,	377
Under treatment,	192
Postponed (partly treated),	99
	821

Attendances made by children under 5 years—

Children,	45
Attendances,	136

Attendances made by children 5 years and over—

Children,	109
Attendances,	5,004

The report of the Ophthalmic Specialist is appended.

C—Nose and Throat (operative Treatment).

Particulars are shown in the Ear, Nose and Throat Specialist's report appended. All the children who received operative treatment as shown in that report were referred through our specialist clinic and all but 10 cases for removal of tonsils and adenoids (treated in the Municipal General Hospital) received treatment in the Voluntary Hospital and no specific contribution was made.

No figures are available for the cases treated through private practitioners or the voluntary hospital under arrangements made by the parents.

D—Orthopædic and Postural Defects (Specialist Treatment).

These arrangements have already been fully reported in the Annual Report for 1943-45 and also the Summary Report for the War Years.

Out-patient Clinics have been held on two whole days per month.

The figures are as follows:—

Consultations—

Babies (under 2 yrs.).		**Pre-school (2-5 yrs.).**		**School (5 yrs. +)**	
Cases.	Consultations.	Cases.	Consultations.	Cases.	Consultations
16	16	108	250	233	817
Number of Sessions		Total Consultations.		Average per Session.	
20		1,440		72	
Recommended for Hospital—					
0-2		2-5		5+	
5		7		44	
Admissions to Hospital—					
0-2		2-5		5+	
3		3		34	
Recommended for Treatment at Dundee Orthopædic and Rheumatic Clinic—					
0-2		2-5		5+	
32		.127		.280	
Number of Treatments Given—					
0.2		2-5		5+	
135		1,534		8,973	

Artificial Sunlight Treatment (for 3 Clinics).

	Cases.	Attend.	Av. per Case.
Boys, 2-5 years, ...	54	1,059	20.61
Boys, over 5 years, ...	188	4,672	25.85
Girls, 2-5 years, ...	42	436	11.38
Girls, over 5 years, ...	178	4,601	26.85
	462	10,768	

E—Speech Defects.

Miss Winifred Laidlaw, L.C.S.T., has continued her treatment of Speech Defects during the session with marked enthusiasm and encouraging results. 120 cases of stammer and 5 children suffering from cleft palate have received attention at bi-weekly treatment sessions. These are the most disabling defects of speech and call most urgently for treatment. It is quite obvious that the Therapist has so much territory to cover and so many cases requiring attention that only the most urgent can receive it. An adequate service of this kind to deal with a fuller range of defects of speech would require the appointment of at least two additional therapists.

7. Dental Inspection and Treatment.

This is dealt with fully by the Senior Dental Officer in his report already sent under separate cover.

8. Special Schools and Classes.

The special school arrangements for invalid and cripple children were as reported previously except that the Orthopædic Specialist gave adequate supervision at a monthly session to all the pupils suffering from an orthopædic defect. A considerable amount of psysiotherapy is given in school by a member of the Physical Training Staff.

Fairmuir Special School (P.D. Side).

	Boys.	Girls.
On roll at 31.7.45,	105	106
Admitted,	29	25
Transferred to ordinary schools,	7	8
Transferred to Retarded Side,	1	2
Left over age or exempted,	14	20
Left town,	6	4
On roll at 31.7.46,	106	97

The following cases were recommended for admission during the session:—

Double otorrhœa,	1
Orthopædic—Congenital,	4
Acquired,	5
Epilepsy,	3
Chorea,	1
V.D.H.—Congenital,	2
Acquired,	4
Rheumatism,	2
Debility,	12
Pre-tuberculous,	4
Chronic Bronchitis and Asthma,	6
Post-burns,	1
	45

Tuberculous children, who were patients in Sidlaw Sanatorium, Auchterhouse, had the benefit of attendance at the special school there or of bedside instruction at the discretion of the Visiting Medical Officer.

On roll at 31.7.45,	48
Admitted,	34
Transferred to other schools,	33
On roll at 31.7.46,	49

Blind and Partially Sighted Children.

The special school for these children still occupies the old premises of the Royal Dundee Institution for the Blind, and all efforts to find alternative accommodation have failed so far. Seven pupils from outwith the City, along with four Dundee cases whose circumstances warrant it, have been boarded in the hostel attached to the Institution.

On roll at 31.7.45,	36
Admitted,	1
Left over age or exempted,	2
Transferred to ordinary school,	1
On roll at 31.7.46,	34

One child has been recommended for admission during the year.

One blind child from this area has been boarded and educated at Craigmillar School, Edinburgh.

Deaf, Partially Deaf and Deaf Mute Children.

The special school for these children has been awaiting delivery of hearing aid equipment for one room, and that will be installed with as little delay as possible.

On roll at 31.7.45,	22
Admitted,	12
Left over age or exempted,	2
On roll at 31.7.46,	32

36 children have been recommended for admission.

The Dundee Institution for the Education of the Deaf has continued in the evacuation premises at Belmont Castle, and three Dundee cases are boarded there. Teachers are supplied by this Authority, and this Department exercises some medical supervision and supplies first-aid and other needs. Meals have continued to be supplied by the nearby Belmont Camp, an arrangement which has proved highly satisfactory.

On roll at 31.7.45,	21
Admitted,	9
Discharged,	7
On roll at 31.7.46,	23

One Dundee child has been boarded and educated this session in St Vincent's School, Tollcross, Glasgow.

Mentally Handicapped Children.

The arrangements for these children have not changed since they were reported previously, but the provision is inadequate and the Authority have approved an arrangement which will have the effect of doubling the accommodation and improving the facilities for the teaching of practical subjects.

	Boys.	Girls.
On roll at 31.7.45,	81	43
Admitted,	10	9
Transferred from Certified Institutions,	3	—
Left over age or exempted,	11	2
Left town,	2	3
On roll at 31.7.46,	75	47

23 children were recommended for admission during the year.

This Authority has two children in the Rudolf Steiner School, Camphill, Milltimber.

Nursery Schools.

Bellfield Nursery School has continued under the Local Authority and the two others are under voluntary bodies, but are aided by the Authority and have teachers supplied. There are considerable waiting lists for all these schools.

Bellfield Nursery School.

On roll at 31.7.45,	45
Admitted,	22
Discharged,	25
Average roll,	41
Average attendance,	36
On roll at 31.7.46,	42

Grey Lodge Settlement Nursery School.

On roll at 31.7.45,	25
Admitted,	22
Discharged,	19
Average roll,	26
Average attendance,	20
On roll at 31.7.46,	28

Wesley House Nursery School.

On roll at 31.7.45,	19
Admitted,	15
Discharged,	12
Average roll,	22
Average attendance,	18
On roll at 31.7.46,	22

Nursery Classes.

These classes have been established in or in connection with four primary schools, and the provision will be extended whenever suitable accommodation can be found as trained staff becomes available.

Holiday and Convalescent Homes.

None of these facilities are provided by the Authority, but throughout the session except for a period of 6 to 8 weeks in December-January the Medical Officers of this Department have selected and examined prior to admission groups of 20 children for a fortnight's stay at the Auchterhouse Holiday Home of the Dundee Branch, Invalid and Cripple Children's Aid Association, and 4 children for a month's stay at the St Leonard's Convalescent Home, St Andrews. The former receives a grant from the Authority, and both make a small charge to the parents.

Holiday camps were run for the necessitous school children by the Governors of the Dundee School Children's Holiday Fund in the summer of 1945 at Limekilns, Fife, in school buildings. 196 children spent an enjoyable and healthful week at those camps under the supervision of teacher volunteers.

School Camps.

Under an arrangement with the Scottish Special Housing Association plans were made to send 200 children from each of five city schools to Belmont Camp, Meigle, for a fortnight in charge, so far as possible, of their own class teachers.

The School Medical Staff examined all the children carefully two or three days before the date of departure to ensure their fitness for camp, and it was possible to have many minor defects and uncleanliness remedied in time to allow admission to the group.

The first group went off on 20th April, 1946, and successive groups at fortnightly intervals. The experiment, for such it was, proved highly successful—a fine lesson in community living which the children thoroughly enjoyed and from which they received considerable benefit.

I take this opportunity of recording our cordial appreciation of the willing co-operation of the Education Department and the School Staffs in the work of the School Health Services.

OPHTHALMIC SPECIALIST'S REPORT — 1945-46.

The following is a detailed list of 3,158 attendances at the Eye Clinic during the session 1945-46.

	New Cases.	Attendances.
Refractions,	1,367	2,626
Corneal Ulcers,	60	167
Blepharitis,	18	63
Conjunctivitis,	4	31
Anophthalmos,	1	10
Traumatic Cataract,	—	—
Follicular Conjunctivitis,	45	155
Choroidal Degeneration (Congenital),	1	3
Wart,	1	1
Chalazion,	3	13
Blow,	1	1
Trachoma,	—	—
Foreign Body,	1	2
Nystagmus,	1	1
Ophthalmia Neonatorum,	2	8
Subj. Ecchymosis,	1	2
Congenital T.D.O.,	5	17
Hordeolum,	4	10
Buphthalmos,	2	6
Nebula,	1	3
Subluxated lens,	1	3
Microphthalmus,	1	1
Congenital Cataract,	4	31
Phthisis Bulbi,	—	1
Abrasion of Cornea,	—	1
Pigment spot on caruncle,	—	2
	1,524	3,158

ORTHOPTIC CLINIC.

During the session 1945-46 there were 5,294 attendances at the Orthoptic Clinic, and 154 new cases were examined. I should like to take this opportunity of thanking Miss Kinnear, the Orthoptic Trainer, for her most efficient help and co-operation in dealing with squinting children. It is most regrettable that facilities are not available for adult treatment. A great number of adults suffer from serious headaches and eye-strain due to weakened eye muscles. The only adequate form of treatment to cure such headaches is by orthoptic exercises.

(Signed) ALLISTER M. MacGILLIVRAY.

EAR, NOSE, AND THROAT SPECIALIST CLINIC

Session 1945-46

	2-5 yrs.	5-14 yrs.
Old Cases Examined,	7	31
New Cases Examined,	98	536
Total Consultations,	128	672
Diagnoses were made as follows:—		
Negative Examinations,	14	48
Ear Conditions—		
Deafness,	5	140
Retracted Drum,	1	47
Catarrhal Changes,	4	48
A.O.M.S.—One ear,	9	13
Both ears,	4	7
C.O.M.S.—One ear,	1	41
Both ears,	—	11
Granulations,	—	5
Aural Polyp,	—	3
Dry Perforation—One ear,	2	32
Both ears,	—	16
Otalgia,	—	9
Wax,	—	23
F.B. in Ext. Meatus,	—	2
External Otitis,	6	2
Furuncle,	—	2
Mastoiditis,	—	3
Post-Radical Mastoid,	—	2

Nose Conditions—	2-5 yrs.	5-15 yrs.
Obstruction (Mouth Breathing),	19	46
Simple Catarrh,	9	19
Allergic Rhinitis,	2	9
Purulent Rhinitis,	1	13
Atrophic Rhinitis,	1	6
Hypertrophic Rhinitis,	—	1
Coryza,	3	14
Injury,	—	1
Epistaxis,	—	3
Sinusitis,	—	11
Pansinusitis,	—	1
Polyp,	—	1
Deviation Septum,	2	16
Furuncle (vestibule),	—	3
Obstruction Nasolacrymal Duct,	—	1

Throat Conditions—	2-5 yrs.	5-15 yrs.
Enlarged or unhealthy—		
Tonsils and adenoids,	36	208
Tonsils only,	11	72
Adenoids only,	5	34
Tonsillitis—Acute,	10	14
Chronic,	—	8
Cervical Adenitis,	12	61
Gland abscess,	—	1
Granular Pharyngitis,	—	7
Hoarseness,	—	10
Laryngitis—Acute,	—	3
Chronic,	—	2

Referrals—	2-5 yrs.	5-15 yrs.
Removal of Tonsils and Adenoids, ...	34	202
,, ,, Tonsils only, ...	4	37
,, ,, Adenoids only, ...	3	26
,, ,, Aural granulations, ...	—	2
,, ,, Polyp, ...	—	4
,, ,, Impacted wax, ...	—	1
X-ray sinuses, ...	—	12
Examination under anæsthesia, ...	3	1
Radical Mastoid, ...	—	3
Sub Mucous Resection, ...	—	5
Cautery, ...	—	1
Operative Work—		
Removal of Tonsils and Adenoids, ...	24	187
,, ,, Tonsils only, ...	1	31
,, ,, Adenoids only, ...	4	15
,, ,, Aural Polyp, ...	—	3
Schwartze operation, ...	—	1
Radical Mastoid, ...	—	2
Antrostomy, ...	—	2
Sub-mucous Resection, ...	—	2

TABLE I.

1945-46.

Total number of children examined at:—

	(a) Systematic Examinations.	Other Systematic Examinations.
Ordinary Schools—		
Entrants, ...	2,430	—
Second Age Group, ...	2,322	74
Third Age Group, ...	2,321	26
Secondary Schools—		
Age Group, ...	224	4
Total, ...	7,297	104

(b) Other Examinations—	
Special Cases, ...	13,881
Re-inspections by Medical Officer,	29,571
Total, ...	43,452

Number of INDIVIDUAL children inspected at systematic examinations, who were notified to parents as requiring treatment:—

Entrants, ...	680
Second Age Group, ...	627
Third Age Group, ...	571
Secondary Age Group, ...	39
Other Systematic Examinations, ...	26
Total, ...	1,943

TABLE II.

SYSTEMATIC EXAMINATIONS.

Return of number and percentage of individual children in each age group suffering from particular defects:—

	AGE GROUP.											
	Entrants.		Second.		Third.		Secondary.		All Ages.		Total.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.		
Number examined,	1,217	1,213	1,919	1,177	1,117	1,230	121	107	3,674	3,727	7,401	
Nature of Defect—												
1. Clothing unsatisfactory,	3	6	3	3	5	2	—	—	11	11	22	
	0.25	0.49	0.25	0.25	0.44	0.16	—	—	0.29	0.29	0.297	
2. Footgear unsatisfactory,	1	2	1	—	1	—	—	—	3	2	5	
	0.08	0.16	0.08	—	0.09	—	—	—	0.08	0.05	0.07	
3. Cleanliness—												
(a) Head: dirty, nits, or vermin,	43	183	38	165	31	176	—	—	112	524	636	
	3.54	13.09	3.13	14.02	2.77	14.31	—	—	3.05	14.06	8.59	
(b) Body: dirty or verminous, ...	15	17	9	2	6	3	—	—	30	22	52	
	1.23	1.40	0.74	0.17	0.54	0.24	—	—	0.82	0.59	0.70	
4. Skin—(a) Head: Ringworm, ...	4	1	3	—	—	—	—	—	7	1	8	
	0.33	0.08	0.25	—	—	—	—	—	0.19	0.03	0.11	
Impetigo, ...	6	8	17	7	1	1	—	—	24	16	40	
	0.49	0.66	1.39	0.59	0.09	0.08	—	—	0.65	0.43	0.54	
Other diseases, ...	22	15	30	14	17	21	—	2	69	52	121	
	1.80	1.24	2.46	1.19	1.52	1.71	—	1.87	1.88	1.39	1.63	
(b) Body: Ringworm, ...	1	—	1	—	1	—	—	—	3	—	3	
	0.08	—	0.08	—	0.09	—	—	—	0.08	—	0.04	
Impetigo, ...	8	2	7	3	1	1	—	—	16	6	22	
	0.66	0.16	0.57	0.25	0.09	0.08	—	—	0.44	0.16	0.29	
Scabies, ...	10	12	17	17	8	8	—	—	35	37	72	
	0.82	0.99	1.39	1.44	0.76	0.65	—	—	0.95	0.99	0.97	
Other Diseases, ...	71	66	55	43	47	42	3	7	176	158	334	
	5.83	5.44	4.51	3.65	4.21	3.41	2.48	6.54	4.79	4.24	4.51	
5. Nutritional State:												
Slightly defective, ...	27	33	36	31	24	20	1	—	88	84	172	
	2.22	2.73	2.93	2.63	2.45	1.62	0.83	—	2.39	2.25	2.32	
Bad, ...	1	—	2	—	—	—	—	—	3	—	3	
	0.08	—	0.16	—	—	—	—	—	0.08	—	0.04	
6. Mouth and teeth unhealthy, ...	23	14	38	31	33	30	—	3	94	78	172	
	1.89	1.15	3.13	2.63	2.95	2.44	—	2.80	2.56	2.09	2.32	
7. Naso-pharynx—(a) Nose:												
(1) Obstruction requiring observation, ...	50	46	28	38	7	13	1	—	86	97	183	
	4.11	3.79	2.29	2.63	0.63	1.06	0.83	—	2.34	2.60	2.47	
(2) Requiring operation, ...	16	12	9	11	9	7	—	—	34	30	64	
	1.31	0.99	0.74	0.94	0.81	0.57	—	—	0.93	0.80	0.86	
(3) Other conditions, ...	29	16	21	20	15	13	1	2	66	51	117	
	2.38	1.319	1.72	1.71	1.34	1.06	0.83	1.87	1.79	1.37	1.58	
(b) Throat:												
(1) Tonsils requiring observation,	138	127	60	102	52	64	1	1	251	294	545	
	11.34	10.47	4.92	8.67	4.65	5.20	0.83	0.93	6.83	7.89	7.36	
(2) Requiring operation, ...	47	49	14	25	10	15	1	—	72	89	161	
	3.86	4.04	1.15	2.12	0.89	1.21	0.83	—	1.96	2.39	2.18	
(c) Glands:												
(1) Requiring observation, ...	30	36	27	27	4	12	1	—	62	75	137	
	2.46	2.97	2.21	2.29	0.36	0.97	0.83	—	1.69	2.01	1.85	
(2) Requiring operation, ...	1	—	—	—	—	—	—	—	1	—	1	
	0.08	—	—	—	—	—	—	—	0.03	—	0.01	
8. Eyes—(a) External diseases:												
Blepharitis, ...	31	26	37	43	27	36	2	2	97	107	204	
	2.54	2.14	3.04	3.65	2.42	2.93	1.65	1.87	2.64	2.87	2.76	
Conjunctivitis, ...	16	18	21	17	57	11	2	—	91	47	138	
	1.31	1.07	1.72	1.44	5.10	0.89	1.65	—	2.55	1.10	1.82	
Corneal opacities, ...	—	—	2	1	2	1	—	—	4	2	6	
	—	—	0.16	0.08	0.18	0.08	—	—	0.11	0.05	0.08	
Strabismus, ...	49	74	50	36	40	49	3	1	142	160	302	
	4.03	6.10	4.12	3.06	3.58	3.98	2.48	0.93	3.86	4.29	4.08	
Other diseases, ...	17	13	8	12	11	12	—	2	36	39	75	
	1.39	1.07	0.66	1.02	0.98	0.97	—	1.87	1.03	1.05	1.04	
*(b) Visual acuity:												
(Snellen) Fair, ...	3	4	228	217	206	284	25	22	462	527	989	
	0.25	0.33	18.70	18.44	18.44	23.09	20.66	20.56	12.57	14.14	13.36	
Bad, ...	1	—	21	35	26	28	1	1	49	64	110	
	0.08	—	1.72	2.97	2.33	2.03	0.83	0.93	1.33	1.64	1.49	
Recommended for refraction, ...	27	25	82	78	96	97	12	3	217	203	420	
	2.22	2.06	6.72	6.63	8.59	7.88	9.92	2.80	5.91	5.45	5.67	
9. Ears—(a) Diseases—												
Otorrhœa, ...	11	11	10	9	5	5	—	—	26	25	51	
	0.90	0.907	0.82	0.76	0.45	0.41	—	—	0.71	0.67	0.69	
Other diseases, ...	10	5	10	10	9	5	1	—	30	20	50	
	0.82	0.41	0.82	0.85	0.81	0.41	0.83	—	0.82	0.34	0.67	
(b) Defective hearing:												
Grade I., ...	—	1	2	2	1	—	—	—	3	3	6	
	—	0.08	0.16	0.17	0.09	—	—	—	0.08	0.08	0.08	
Grade II.a, ...	—	—	—	1	—	—	—	—	—	1	1	
	—	—	—	0.08	—	—	—	—	—	0.03	0.01	
Grade II.b, ...	—	—	1	—	—	2	—	—	1	2	3	
	—	—	0.08	—	—	0.16	—	—	0.03	0.05	0.04	
Grade III., ...	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	
10. Speech—Defect. Articulation, ...	4	3	8	2	4	2	—	—	16	7	23	
	0.33	0.25	0.66	0.17	0.36	0.16	—	—	0.43	0.19	0.31	
Stammering, ...	1	—	3	—	10	—	2	—	16	—	16	
	0.08	—	0.24	—	0.89	—	1.65	—	0.43	—	0.22	
11. Mental and nervous Condition—												
(a) Backward (due to irregular attendance, etc.), ...	—	—	9	3	6	—	—	—	15	3	18	
	—	—	0.74	0.25	0.54	—	—	—	0.41	0.08	0.24	
(b) Dull (intrinsically), ...	1	2	1	2	2	—	—	—	4	4	8	
	0.08	0.16	0.08	0.17	0.16	—	—	—	0.11	0.11	0.11	
(c) Mentally defective (educable),	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	
(d) (Ineducable), ...	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	—	—	—	
(e) Highly nervous or excitable,	—	—	6	1	1	1	—	—	7	2	9	
	—	—	0.492	0.08	0.09	0.08	—	—	0.19	0.05	0.12	
(f) Difficult to behandle, ...	5	2	—	—	—	—	—	—	5	2	7	
	0.41	0.16	—	—	—	—	—	—	0.14	0.05	0.09	
12. Circulatory system—												
(a) Organic heart disease—												
(1) Congenital, ...	5	2	1	1	1	2	—	—	7	5	12	
	0.41	0.16	0.08	0.08	0.09	0.16	—	—	0.19	0.13	0.16	
(2) Acquired, ...	1	2	2	—	1	8	—	—	3	10	13	
	0.08	0.16	0.16	—	0.09	0.65	—	—	0.08	0.27	0.17	
(b) Functional Conditions, ...	10	8	9	9	6	16	3	—	28	33	61	
	0.82	0.66	0.74	0.76	0.54	1.30	2.48	—	0.76	0.88	0.82	
13. Lungs—Chronic Bronchitis, ...	15	22	8	5	3	3	—	—	26	30	56	
	1.23	1.81	0.65	0.43	0.27	0.24	—	—	0.71	0.80	0.76	
Suspected Tuberculosis, ...	1	3	1	4	2	2	—	—	4	9	13	
	0.08	0.25	0.08	0.34	0.16	0.16	—	—	0.11	0.24	0.17	
Other Diseases, ...	45	35	18	10	18	6	3	—	84	51	135	
	3.69	2.88	1.48	0.85	1.61	0.49	2.48	—	2.29	1.37	1.82	
14. Deformities—												
(a) Congenital, ...	12	9	3	6	5	5	—	1	20	21	41	
	0.99	0.74	0.25	0.51	0.48	0.41	—	0.93	0.54	0.56	0.55	
(b) Acquired (Inf. Paral.), ...	2	2	—	1	—	1	—	—	2	4	6	
	0.16	0.16	—	0.08	—	0.08	—	—	0.05	0.11	0.08	
(c) Acquired (Probable Rickets),	27	16	7	3	5	3	1	—	40	24	64	
	2.22	1.32	0.57	0.26	0.48	0.41	0.83	—	1.09	0.64	0.86	
(d) Acquired (other causes), ...	19	11	21	19	15	18	1	1	56	49	105	
	1.56	0.91	1.72	1.61	1.34	1.46	0.83	0.93	1.52	1.31	1.42	
15. Infectious Disease, ...	—	—	—	—	2	—	—	—	2	—	2	
	—	—	—	—	0.16	—	—	—	0.05	—	0.03	
16. Other Diseases or Defects, ...	120	85	94	69	70	84	3	5	287	243	530	
	9.53	7.01	7.71	5.86	6.27	6.83	2.48	4.67	7.81	6.52	7.16	

*Entrants are not included in these figures. Vision is tested with glasses if worn.

TABLE III.

SYSTEMATIC MEDICAL EXAMINATIONS — 1945-46

	Entrants.		Second Age-group.		Third Age-group.		Secondary Age-Group.		Others All Ages.		Total.	
	No.	Percentage Examined.	No.	Percentage Examined.	No.	Percentage Examined.	No.	Percentage Examined.	No.	Percentage Examined.	No.	Percentage Examined.
I. Children free from defects, ...	1,396	57.45	1,250	52.17	1,213	51.68	149	65.35	—	—	4,008	54.15
II. Children (otherwise free from defects) who suffer from—												
(a) Defective vision not worse than 6/12 in the better eye with or without glasses; or	24	0.99	311	12.98	375	15.98	43	18.86	—	—	753	10.17
(b) Conditions of the mouth and teeth requiring treatment, ...	11	0.45	25	1.04	27	1.15	1	0.44	—	—	64	0.86
(c) Both (a) and (b), ...	3	0.12	5	0.21	10	0.43	1	0.44	—	—	19	0.26
Total, ...	38	1.56	341	14.23	412	17.56	45	19.74	—	—	836	11.30
III. Children suffering from ailments (other than those mentioned in II.) from which complete recovery is anticipated within a few weeks,	718	29.55	585	24.41	520	22.16	24	10.53	—	—	1,847	24.95
IV. Children suffering from (or suspected to be suffering from) defect less remediable than defects specified in II. or III., distinguishing cases—												
(a) Where complete cure or restoration of function (in the case of eye defect, full correction) is considered possible, ...	261	10.74	201	8.39	171	7.29	9	3.95	—	—	642	8.67
(b) Where improvement only is considered possible, e.g., without complete restoration of function,	17	0.70	19	0.79	31	1.32	1	0.44	—	—	68	0.92
Total, ...	278	11.44	220	9.18	202	8.61	10	4.39	—	—	710	9.59
Total number of children examined,	2,430	100.00	2,396	99.99	2,347	100.00	228	100.01	—	—	7,401	100.00

TABLE IV.

Return of ALL Exceptional Children of School Age in the Area Session 1945-46

Disability.	At Ordinary Schools.	At Special Schools or Classes.	At no School or Institution.	Total.
1. Blind, ...	—	9	—	9
2. Partially Sighted—				
(a) Refractive errors in which the curriculum of an ordinary school would adversely affect the eye condition, ...	—	10	—	10
(b) Other conditions of the eye, e.g., cataract, ulceration, etc., which render the child unable to read ordinary school books or to see well enough to be taught in an ordinary school, ...	1	13	—	14
3. Deaf—				
Grade I., ...	510	—	—	510
Grade II.a, ...	115	—	—	115
Grade II.b, ...	30	12	—	42
Grade III., ...	—	19	—	19
4. Defective Speech—				
(a) Defects of articulation, requiring special educational measures, ...	310	—	—	310
(b) Stammering requiring special educational measures, ...	120	—	—	120
5. Mentally Defective (Children between 5 and 16 years)—				
(a) Educable (I.Q. approx. 50-70), ...	30	129	13	172
(b) Ineducable (I.Q. generally less than 50), ...	—	20	21	41
6. Epilepsy—				
(a) Mild and occasional, ...	12	10	—	22
(b) Severe (suitable for care in a residential school), ...	—	—	—	—
7. Physically Defective (Children between 5 and 16 years)—				
(a) Non-pulmonary tuberculosis (excluding cervical glands),	15	17	—	32
(b) General orthopædic conditions, ...	448	46	1	495
(c) Organic heart disease, ...	43	24	1	68
(d) Other causes of ill-health,* ...	—	96	—	96
8. Multiple Defects—				
Various combinations, ...	5	17	8	30

*Definition of Ill-health.—" Children who by reason of ill-health are unable to attend ordinary schools or are incapable of receiving proper benefit from the instruction in ordinary schools."

DENTAL SERVICES

Report for Year Ending 31st July, 1946

It is with pleasure that we record another year of progress. The accompanying figures show that the dental condition of the school children in the city is steadily improving.

The percentage of children who did not require dental treatment was 57 as compared with 29.8 in 1941-42, and the refusal rate of the **number inspected** was 26.4% as compared with 35.2% in that year. This gives a percentage of 73.6 as an index of success, as compared with 64.8% in 1941-42.

Emergency treatment shows a decrease in the number of casual patients over the past five years—from 2,112 in 1941-42 — 771 in 1945-46. This decrease is largely due to the regular routine inspection and treatment which has been carried out over these years.

It is interesting to note that the number of administrations of general anæsthetics has increased from 23 last year to 154 this year.

The difficulties which face us are chiefly these:—(a) The large number of parents who continue to decline routine treatment because the child does not suffer from toothache; and (b) the lack of any oral hygiene.

To combat these difficulties the Dental Attendants have visited 1,394 homes to persuade the parents to have dental treatment for the children, either at the clinics or privately. Of the visits paid, 485 attended the clinics, and we shall note, on our next visits to the schools, the number who have received private treatment.

The Dental Officers have been explaining to the children, in the course of dental inspection, the importance of cleaning the teeth and the method of doing so. In addition, each child visiting the clinics is urged to use a toothbrush.

It should be noted that during the year we referred 53 children to the Dental Hospital, viz.:—

Orthodontia, 30; X-ray, 23; Crowns, 19.

In this connection we hope the day is not far distant when we shall have an X-ray unit installed in order that our service will be more comprehensive and complete. A dental X-ray unit is now regarded as an essential part of dental equipment, the initial cost is not particularly high and it is economical to use.

The Future.—As from August, 1946, the staff will consist of 5 Dental Officers and 5 Dental Attendants. This has been necessitated by the developing of the Council's dental services—a development which we cordially welcome. We shall be giving dental inspection and treatment at:—(a) Maryfield Hospital to the patients, nursing staff and out-patients of the Maternity Department; and (b) to patients and nursing staff at Ashludie Sanatorium.

In addition, we shall be able to commence an Orthodontic Service for the school children. This service is long overdue, as will be seen from the number of children we have had to refer to the Dental Hospital.

We shall take full advantage of these new services now open to us to create a greater interest in oral hygiene among the patients and to offer a dental service in which quality is the first consideration.

Dental Inspection and Treatment—Year Ending 31st July, 1946.

Number of Children who were Inspected by the Dental Officers.

Age.	Systematic Inspection.	Emergency Cases.	Total.
5, ...	3,491	92	3,583
6, ...	3,625	101	3,726
7, ...	3,855	127	3,982
8, ...	3,974	107	4,081
9, ...	3,943	88	4,031
10, ...	3,862	93	3,955
11, ...	4,133	57	4,190
12, ...	4,291	46	4,337
13, ...	4,528	40	4,568
14, ...	1,978	19	1,997
15, ...	251	1	252
16, ...	11	—	11
17, ...	1	—	1
	37,943	771	38,714

Number of Children who were Treated by the Dental Officers.

Age.	Systematic Treatment.	Emergency Cases.	Total.
5, ...	405	92	497
6, ...	539	101	640
7, ...	641	127	768
8, ...	699	107	806
9, ...	676	88	764
10, ...	636	93	729
11, ...	567	57	624
12, ...	572	46	618
13, ...	514	40	554
14, ...	189	19	208
15, ...	10	1	11
16, ...	2	—	2
	5,450	771	6,221

SYSTEMATIC AND EMERGENCY TREATMENT — 1945-46

Children Age 5-14 Inclusive

TABLE OF WORK DONE AT EACH CLINIC

	Central Clinic.				Lochee Clinic.		Kilcraig.				
	Mr Finlayson.		Miss Mears.		Miss Miller.		Miss McArthur.		Total.	Total.	
	Syst.	Emer.	Syst.	Emer.	Syst.	Emer.	Syst.	Emer.	Syst.	Emer.	TOTAL.
No. Inspected,	7,706	240	10,071	218	14,462	163	5,704	150	37,943	771	38,714
No. Requiring Treatment,	3,018	240	4,685	218	4,475	163	4,121	150	16,299	771	17,070
No. Accepting Treatment,	1,104	240	1,779	218	1,759	163	1,621	150	6,263	771	7,034
No. Actually Treated,	986	240	1,536	218	1,493	163	1,435	150	5,450	771	6,221
No. of Attendances,	989	240	1,736	218	1,650	163	2,137	150	6,512	771	7,283
Fillings—											
(a) Temporary Teeth,	7	9	34	2	40	2	356	5	437	18	455
(b) Permanent Teeth,	609	12	925	16	1,027	9	755	3	3,316	40	3,356
Extractions—											
(a) Temporary Teeth,	1,267	236	1,833	167	1,597	115	1,266	156	5,963	674	6,637
(b) Permanent Teeth,	291	41	524	25	625	22	316	10	1,756	98	1,854
General Anæsthetics,	18	3	8	4	84	5	28	4	138	16	154
Cleaning,	60		156		438		111		765		765
Other Operations,	4	35	159	90	31	55	401	28	595	208	803
Half-days Devoted to Inspection,	40		44		77		32½		193½		193½
Half-days Devoted to Treatment,	151		285		285		336½		1,057½		1,057½
No. of Children Treated Privately,	216		284		404		267		1,171		1,171
No. of Children Absent at Inspection,	1,273		1,069		2,080		503		4,925		4,925
No. of Dental Notices Not Returned,	246		204		726		165		1,341		1,341

SYSTEMATIC INSPECTION AND TREATMENT IN EACH GROUP OF SCHOOLS

	Academies. Primary.	Academies. Secondary.	Elementary Schools.	Central Schools	Total.
No. Inspected, ...	2,859	2,699	25,854	6,531	37,943
No. Requiring Treatment,	1,038	1,221	11,073	2,967	16,299
No. Accepting Treatment,	225	229	4,830	979	6,263
No Actually Treated, ...	198	213	4,200	839	5,450
No. of Attendances, ...	256	326	4,789	1,141	6,512
Fillings—					
(a) Temporary T.	65		372		437
(b) Permanent T.	108	316	1,952	940	3,316
Extractions—					
(a) Temporary T.	232	36	5,551	144	5.963
(b) Permanent T.	10	77	1,108	561	1,756
Other Operations, ...	46	58	329	162	595
Cleaning, ...	22	70	433	240	765
Gen. Anæsthetic, ...	1	3	97	37	138

PRE-SCHOOL CHILDREN

Boys.	Girls.	No. of Patients.	Attend.	Fillings.	Extrac.	O.Ops.	Gen. Anæs.
28	34	62	70	7	86	17	12

Inspections—Wesley House, ... 48
Bellfield, ... 37
Grey Lodge, ... 20
105

MARYFIELD HOSPITAL — 1945-46 (Mr Finlayson)

	Staff.	East House.	Civilian.	Servicemen.	Tl.
Inspections, ...	36	42	34	1	113
Treated, ...	32	41	26	1	100
Attendances, ...	77	52	48	2	179
Extractions—					
Temporary, ...	1	—	5	—	6
Permanent, ...	24	107	124	—	225
Fillings—					
Temporary, ...	—	—	—	—	—
Permanent, ...	102	3	4	6	115
Other Operations, ...	11	5	14	—	30
Cleaning, ...	6	2	6	—	14
Dentures, ...	—	—	1	—	1
Gen. Anæsthetics, ...	—	—	5	—	5

MATERNITY CASES

Maryfield Hospital — Ante-Natal

Total Number of Patients—

Inspections,	30
Treatments,	28
Attendances,	47

Treatment—

Fillings,	26
Extractions,	140
Other Operations,	5
Cleaning,	14
Dentures,	—
General Anæsthetic,	2

NELSON STREET — Ante-Natal

Total Number of Patients—

Inspections,	1
Treatments,	1
Attendances,	3

Treatment—

Fillings,	—
Extractions,	15
Other Operations,	—
Dentures,	—
General Anæsthetic,	—

NELSON STREET — Post-Natal

Total Number of Patients—

Inspections,	1
Treatments,	1
Attendances,	3

Treatment—

Fillings,	—
Extractions,	20
Other Operations,	—
Dentures,	—
General Anæsthetics,	1

LOCHEE — Ante-Natal (Miss Millar)

Total Number of Patients—

Inspections,	9
Treatments,	9
Attendances,	14

Treatment—

Fillings,	10
Extractions,	40
Other Operations,	—
Dentures,	—
General Anæsthetics,	3

BELMONT CASTLE (Deaf and Dumb)

No. of Children Inspected,	42
No. of Children Requiring Treatment,	15
No. of Children Treated,	15
No. of Attendances for Treatment,	16
Fillings—	
Permanent T.,	5
Temporary T.,	—
Extractions—	
Permanent T.,	3
Temporary T.,	14
Other Operations,	3
Sessions—Inspection,	1
Treatment,	2

(Miss Millar)

Home Visits by Dental Attendants — 1945-46

Visited.	Actually Seen.	Agreed to Attend Clinics.	Actually Attended.
2,505	1,394	665	485

CITY POLICE INSPECTION

Number Examined,	38
Attendances,	66

SANITARY SERVICES

Report by Mr W. M. SMITH, Chief Sanitary Inspector.

SANITARY DEPARTMENT,
17 WEST BELL STREET,
DUNDEE.

To the Honourable,
The Department of Health for Scotland; and
The Lord Provost, Magistrates, and Councillors—
the Local Authority of the City of Dundee.

MESDAMES AND GENTLEMEN,

I have the honour to submit my Annual Report for the year 1946 which has been prepared in accordance with the Circular of the Department of Health for Scotland of date 12th April, 1947.

INTRODUCTORY

Since the end of the war we have been concerned with the task of overtaking work which had to be considerably curtailed, or in some cases abandoned, in preference for emergency duties which claimed precedence. Shortage of staff, not yet fully restored to pre-war strength, also restricts our activities and we are busily engaged making up lost time and setting our house in order once again.

I think it will be agreed that the transition from war-time to normal conditions is a strenuous period for the country as a whole, with legislation being amended to present-day requirements and new laws placed on the Statute Book.

Could this post-war era not be regarded as a fresh start and opportunity taken to frame future legislation with a greater degree of clarity, more easily comprehended by officials and laymen alike? If this were feasible, it would ease the task of those responsible for administering the law, ambiguity would be eliminated and the public would more readily understand what was demanded.

Also let us have legislation applicable to the entire country and not each Local Authority devising its own Bye-Laws from off a set of Model Bye-Laws. This system engenders the possibility of two sets of Bye-Laws being in existence within adjacent areas and creates a feeling among the populace of not receiving a fair deal, moreover the official who has the stricter code to adhere to is frequently regarded as having a " bee in his bonnet."

In 1946 the City area was augmented by fully 3000 acres transferred from the county to our jurisdiction.

This additional territory has all to be surveyed for housing, sanitary accommodation, embracing privies, of which there are many, and water supplies from wells and springs so that we may be thoroughly acquaint with the merits and demerits of our new terrain. The additional number of these undesirable conveniences is to be regretted as all sanitarians regard privies with disfavour and look upon them as black spots in their districts. Wells and springs as domestic water supply are also unwelcome. Frequent sampling and strict observation must be paid to those sources if our responsibility to those dependent on them for their supplies is to be discharged. The annexation of rural areas inevitably entails such drawbacks.

Another unfortunate phase of our present-day position is the shortage of raw materials, equipment and replacements against fittings, which, through hard usage during the war, are now ready for scrapping. This state of affairs in conjunction with priority calls on labour tends to create a feeling of frustration especially when property owners or business firms are on their own initiative willing to carry out improvements. Unfortunately we are more or less powerless to assist in securing the necessary materials. We are also greatly curtailed in the matter of insisting on works being done if the essentials are not forthcoming.

Let us hope that another year will see more goods available for home use and relieve the situation.

Apropos of the foregoing remarks regarding shortage of materials, this is reflected in another fashion. Before goods for renewals are made available to tradesmen it has to be ascertained if the article is in such a condition as to be useless or incapable of repair. Replacements are only sanctioned after it is determined that

renewal is essential. To this end 776 visits were paid to houses, etc., for which replacements had been asked. In 743 instances the desired permits were granted and the remaining 33 refused.

Opportunity is taken here to tender thanks to the Police and other Departments of the Corporation services for their whole-hearted co-operation and assistance throughout the year. I also acknowledge my indebtedness to the staff for their work often under difficult circumstances in our efforts to maintain the City in a healthy state.

Throughout this Report will be found details of the year's work given in the form of Tables or explanatory notes.

Death-Rate : Density of Population and Acreage.

The death-rate per 1,000, as corrected, for 1946 was 14.1, as against 13.6 in 1945 and 14.6 in 1944.

The population, as estimated to the middle of 1946 by the Registrar-General, was 169,197.

The acreage of the City, excluding foreshore, is 12,294. This works out at 13.76 persons to an acre.

Rainfall.

The total rainfall in Dundee, as noted at the Official Station, Mayfield Hostel, Dundee, was 32.95 inches as against 36.50 inches last year. The figures for each month are as follows :—

January	1.90 inches
February	1.23 inches
March	2.27 inches
April	0.36 inches
May	1.71 inches
June	2.90 inches
July	3.45 inches
August	5.94 inches
September	3.52 inches
October	0.45 inches
November	6.25 inches
December	2.97 inches
Total	32.95 inches

Showing an average fall of 2.75 inches per month as against 3.04 inches in 1945 and 2.14 inches in 1944.

Water Supply.

The Corporation are responsible for the Supply of Water to the City. The Department particularly concerned therewith is under the charge of Mr R. H. Cuthbertson, B.Sc., A.M.Inst.C.E., who reports thereon as follows:—

Sources and System of Supply.

" The Water Supply of the City of Dundee and of the area supplied from the Dundee Corporation Water Undertaking outwith the City is wholly by gravitation. The principal source of supply is Lintrathen Loch, situated approximately 18 miles north-west of the city at an elevation of 680 feet above sea level. The other supplies of the Undertaking are derived from the Works of the old Dundee Water Company at Monikie and Crombie, situated approximately 8 miles and 10 miles north-east of the city at elevations of 476 feet and 522 feet above sea level respectively.

Reservoir capacities, surface areas, and extent of catchment areas are as follows :—

	Capacity, Gallons.	Surface Area at Top Water Level.	Extent of Catchment Area.
Lintrathen Loch ...	2,141,429,000	400 acres	18,500 acres
Monikie and Crombie (4 Reservoirs)	654,763,000	181½ ,,	3,500 ,,

At present 93% of the daily supply of the city and district is drawn from Lintrathen.

Area and Population Supplied.

The statutory area of supply of the Undertaking, excluding the areas supplied from the aqueducts and conduits between the various storage reservoirs and the city, extends to 51¾ square miles, of which 23½ square miles are situated in the compulsory area, and 28¼ square miles in the permissive area of supply.

Outside of the City of Dundee the following areas are supplied :—On the north side of the Tay Estuary, the burghs of Carnoustie and Monifieth, and the villages of Barry, Wellbank, Newbigging, Kellas, Muirhead, Birkhill, Invergowrie, Longforgan and Meigle ; and, on the south side of the Estuary, the burghs of Newport (including Wormit) and Tayport.

The area varies in altitude from sea level to an elevation of 457 o.d., which is the highest point supplied, while the average population supplied is approximately 204,000.

Consumption.

The average daily consumption of water for all purposes for the year ending 15th May, 1946, was 11,607,940 gallons. This represents a consumption per head of the population supplied of 56.9 gallons, of which 37.2 is for domestic and non-metred supplies and 19.7 for trade and general industrial purposes supplied through meter. The minimum daily consumption for the same period was 8,597,400 gallons and the maximum 13,340,800 gallons.

Chemical Analyses of Waters.

The following are the average Chemical Analyses of the Lintrathen and Crombie Waters as supplied during 1946:—

	Lintrathen	Lintrathen (filtered)	Crombie
P.h. Value,	6.9	6.1	7.1
Colour (Hazen Scale),	27 m.m.	5 m.m.	16 m.m.
Hardness in Clarke's Degrees—			
Temporary,	0.25	0.75	0.75
Permanent,	1.25	2.90	4.25
Combined Alkalinity (as Ca CO3)	16 p.p.m.	22 p.p.m.	50 p.p.m.
Combined Chlorine,	9 p.p.m.	13 p.p.m.	17 p.p.m.
Nitrates,	0.37 p.p.m.	1.60 p.p.m.	3.46 p.p.m.
Nitrites,	None	None	None
Free Ammonia,	.113 p.p.m.	.015 p.p.m.	.003 p.p.m.
Albuminoid Ammonia,	.121 p.p.m.	.055 p.p.m.	.070 p.p.m.
Lead or other Poisonous Metal,	None	None	None

Bacteriological Analyses of Waters

Weekly bacteriological analyses taken throughout 1946 of the filtered and unfiltered waters put into supply give the following results:—

	B.Coli absent in 100 c.c.	B.Coli present in 10 c.c. or less.
Filtered and Chlorinated Water—		
Lintrathen†	100%	None
Crombie	92%	2% (1 sample)
Unfiltered Water, after Chloramine Treatment—		
Lintrathen (taken at Clatto),	90.4%	None

†Proportion filtered at Gagie

New Works.

With the termination of the war, the Water Department is now in course of executing preliminary survey work for new capital works. These works include a new Trunk Main from Lintrathen; new service reservoirs, and, in addition, plans are being prepared for the filtration of Lintrathen water.

The following remarks provided by Mr Cuthbertson give an outline of the Water (Scotland) Act, 1946, in so far as the functions of the local authority in respect of public health and those of a local water authority in respect of the supply of water are inter-related. Fuller details may be obtained from the Act itself and the Explanatory Memorandum published along with the Act.

" It is necessary to point out that the Act defines the several duties in relation to water supply of local authorities and local water authorities which is best illustrated by references to the local arrangements. The Corporation is responsible under the Act in respect of the City for the functions of both a " local authority" and a " local water authority", the former function being exercised through the Public Health Department and the latter through the Water Department. The Corporation will further exercise through the Water Department the function of a local water authority in respect of those parts of its Limits of Supply which lie outside the City boundary, comprising the burghs of Carnoustie and Monifieth, Newport and Tayport, and parts of Angus and Fife; the local authority functions defined by the Act, except that relating to the supply of water, remaining the responsibility of the several authorities concerned.

The Act came into operation on the 16th May, 1946. It consolidates and amends over 100 years of general legislation relating to water supply. The Act repeals the Waterworks Clauses Acts of 1847 and 1863, the Public Health (Scotland) Act, 1897, Amendment Act, 1911, and amends many other Acts relating to Public Health.

The outstanding provisions of the Act are as follows:—

1. Central Authority.

The Secretary of State is made the Central Authority for the organisation of water supplies, and the duty is laid upon him "to promote conservation of the water resources of Scotland, and the provision by local authorities of adequate water supplies throughout Scotland". In this and in other matters, the Secretary of State will be advised by an advisory committee which he has set up under the Act.

2. Duties of Local Authorities.

(a) It is provided that "it shall be the duty of every local water authority to provide a supply of wholesome water to every part of their district where a supply of water is required for domestic

purposes and can be provided at reasonable cost." Local authorities may implement this duty either by supplying water themselves or securing the provision of water supplies by another local authority, or by the Joint Water Board or otherwise.

(b) It is also laid down that it shall be the duty of every local authority to ascertain from time to time the sufficiency and wholesomeness of the water supply within their district. This is a function which cannot be delegated to another authority.

(c) There is a new definition of "water for domestic purposes" which includes water for drinking, washing, cooking, central heating, and sanitary purposes, wherever water is so used. Formerly, in many cases, the definition of "domestic purposes" only covered the use of water in private dwelling-houses.

(d) The duty is laid upon the local **water** authority to provide in their mains supplies of wholesome water sufficient for the domestic purposes of all owners and occupiers of premises within their limits of supply.

3. Powers in respect of polluted private sources of supply.

The local authority is given powers to close any well, fountain, or other work in their district from which the water obtained is so polluted as to be injurious or dangerous to health. Further, they may close any private source of supply in their area from which water is being supplied for domestic purposes or for the preparation of food or drink for human consumption, or if that supply is polluted or is likely to become polluted.

4. Conservation and Protection of Water Resources.

Local water authorities are authorised to enter into agreements with the owners and occupiers of lands for, amongst other purposes, preserving the purity of water which they are authorised to take. This may extend to the execution and maintenance of works of sewerage and sewage disposal executed and maintained by local authorities. Bye-laws may be made for preventing waste, misuse, or contamination of water. Similarly, local water authorities may make bye-laws for protecting against pollution any water whether on the surface or underground, which belongs to them or which they are for the time being authorised to take. In this way they may (a) define the area within which they deem it necessary to exercise control; and (b) prohibit or regulate the doing within that

area of any act specified in the bye-laws. Such powers are subject to the payment of appropriate compensation to any persons injuriously affected. It is interesting to note here that since 1911 the Dundee Water Undertaking has had powers to make such bye-laws.

5. Provisions to ensure that houses, etc., are supplied with water.

There are extensive provisions in Sections 53 to 57 which are wholly public health provisions enabling local authorities to ensure that houses, etc., are supplied with an adequate supply of water for domestic purposes and are substantially a consolidation of the previous law on the subject.

6. Waterworks Code.

A schedule is attached to the Act, which lays down a code of administration of water undertakings on the lines of previous practice and extends the powers of such authorities in safeguarding their supplies in their mains and pipes from pollution.

The full effect of the Act will not be felt until the Corporation seeks authority to amend its local Water Acts, or until the Central Authority causes this to be done, within five years from the inception of the Act."

Sources of Water Supply — Other than Corporation

There are 41 wells and springs the water from which is used as follows:—

For Domestic Purposes	17
Brewing and manufacture of aerated water	2
Purposes incidental to industry (cooling, flushing sanitary conveniences, horticulture, and watering animals)	9
From which public are liable to drink	1

In 12 other instances the wells or springs are sealed up or in disuse.

The extension to the City in 1946 has increased the number of water supplies from sources other than that of the Corporation. These supplies have been inspected and will be kept under observation and sampled in order to ascertain their wholesomeness and suitability for the purposes for which they are utilised.

Excluding the area recently added to the City there are 8 supplies from wells utilised for drinking, manufacturing purposes or processes incidental thereto. In these cases samples therefrom were submitted for both chemical and bacteriological analysis. During the year 1946 the 8 samples so submitted were returned by both Analyst and Bacteriologist as being satisfactory for domestic purposes.

Domestic Water Supplies—Sinks, Etc.

The following table shows that there are 544 houses within the city lacking an internal supply of water. Of these, 117 have already been dealt with under the Housing Acts by way of Closing or Demolition Orders, etc., or are included within Clearance Areas. Of the total, 32 relate to supplies within the Area brought into the City by boundaries extension.

						WATER SUPPLY.	
	No. of	ROOMS			4	On Stairs,	In Courts,
Ward.	Houses.	1	2	3	&over.	Landings, &c.	Areas, &c.
1	26	25	1	—	—	26	—
2	86	63	21	2	—	81	5
3	82	66	15	1	—	66	16
4	67	23	20	16	8	22	45
5	31	15	10	4	2	11	20
6	95	78	14	3	—	92	3
7	16	1	9	4	2	2	14
8	21	14	7	—	—	19	2
9	47	33	14	—	—	46	1
10	23	3	8	12	—	2	21
11	32	2	10	20	—	—	32
12	18	15	2	—	1	16	2
Totals,	544	338	131	62	13	383	161

During the year 1946, 1 house was provided with a sink and internal supply of water direct from the public main; 52 houses had their supply improved by means of larger service piping, and in 100 instances old iron sinks were replaced with modern enamelled earthenware fittings.

Public Sewerage.

The construction and maintenance of the sewers within the City are under the charge of Mr David B. McLay, B.Sc., M.Inst.C.E., who reports as follows:—

New Sewers Laid.

"During the two years from 16th May, 1945, to 15th May, 1947, 25.71 miles of new sewers were laid, making the total length of sewers in the city 196.90 miles, and the sum of £7,803 was expended on the work of maintenance and repair.

Dighty Valley Sewer.

The western portion of this sewer, extending for approximately 2½ miles from Magdalene's Kirkton Housing Scheme to the Pumping Station at Pitkerro Road, was completed in September, 1939. The eastern portion extending from the Pumping Station to the outfall at Monifieth, a distance of approximately 4½ miles, has now been completed except for a ¼ mile length of steel pipes below high water mark. This remaining work will be completed in the near future. The completion of the eastern portion of this sewer provides for the drainage of all the remaining drainable land to the south of the Dighty, in addition to about half of the land within the Burgh lying to the north of the Dighty.

Flooding.

During the period under review, no serious cases of flooding were reported although a large number of minor complaints were received. In most of these cases the flooding was of a very minor character and occurred in basements in the central area of the city."

Rivers Pollution.

There is little to record under this heading beyond remarking that the Dighty Water, a stream encircling the north of the City, receives the effluent from septic tanks dealing with sewage emanating from houses and other premises situated nearby, about which no complaints have been received. The unpiped portion of Lochee Burn is the recipient of an overflow of storm water from the public sewer when the latter becomes overloaded. This is not altogether a desirable arrangement and with the development of the area in this vicinity an extension of the piping beyond the old burgh boundary will be necessary.

Scavenging and Refuse Disposal.

The collection and disposal of refuse is under the care of the Cleansing Department and the Superintendent of this important

section of our services, Mr J. D. Henry, gives the following brief summary thereanent:—

" 1946 was an eventful year in the history of the Cleansing Department marked by the extension of the City Boundaries by some 3,000 Acres and also the change over to complete mechanisation. The last of the horses being dispensed with in June.

House and Trade refuse collected during the year totalled 44,662 tons being almost 1,000 tons more than the previous year, an increase accountable in some measure to clearance of war stores and factories and also to the poor quality coal supplied to the householder.

Salvage showed a slight increase, £9,791 being the total. The amount for waste paper was £4,216. The figures for 1945 were £9,081 and £3,872 respectively.

The extension of the City Boundaries and the large building programme in hand makes it imperative that our Refuse Disposal facilities be increased and in the coming year this problem will require to be settled.

Three new 6 cub. yd. Scammell Refuse Collection Vehicles were added to the fleet during the latter part of the year.

Proposals for renewing and increasing Public Lavatory accommodation have had to be held in abeyance owing to shortage of building materials and labour."

Ashbins, etc.

To replace receptacles no longer fit for service 166 new bins were laid down throughout the year.

It is regrettable but not unexpected that the extension to the Burgh, embracing as it does rural areas, should contain a goodly number of ashpits and where considered necessary, action will be taken to dispense with that means of refuse storage and the substitution therefor of the more desirable ashbin.

Earth Closets, Privies and Privy Middens.

Again we must record an increase in this type of convenience due entirely to the boundary extension but it is hoped that the total will be reduced when conditions permit and sewerage made available.

Position as at 31st December, 1946:—

Ward	Conveniences	Houses	Serving Other Premises
1	—	—	—
2	7	6	2
3	20	23	—
4	39	50	1
5	22	22	—
6	—	—	—
7	6	6	1
8	9	9	1
9	3	3	1
10	36	44	3
11	25	31	—
12	—	—	—
	167	194	9

The 167 conveniences shown in above table are classified as follows:—

Privies	136	Serving Houses.
Privy Middens	7	
Chemical Closets	16	
and		
Privies	7	Serving Premises other than houses.
Chemical Closets	1	

Water Closet Basins and Other Sanitary Fittings.

The necessity of Permits for all material under this category entailed considerable addition to the work of the Department, inspectional and clerical, during the year; each demand for material requiring inspection of the fitting to ensure absolute necessity for renewal before the granting or otherwise of the permit.

During the year the undernoted fittings and materials were used.

342 water closet basins.
38 baths.
138 washhand basins.
36 wash tubs.
3 wash boilers.
1207 feet of waste pipe.
3926 feet water pipe.
922 feet soil pipe.
357 feet flushing pipe.
116 feet C.I. drain pipe.
84 feet fireclay drain pipe.
27 C.I. drain traps.
14 fireclay drain traps.
67 lead waste traps.
479 feet vent pipe.
137 water closet cisterns.
7 hot water storage cisterns.
4 urinals.
9 showers.
2 footbaths.
2 inspection chambers.

Plans Submitted to the Works Committee.

In order that new buildings, and additions and alterations to existing buildings, comply with local bye-laws, plans showing proposed erections and alterations are carefully examined prior to approval by the Committee. Occasionally amendments are suggested or insisted upon, as the case may require, before the plans are finally agreed to.

SCHOOLS.

The following information is supplied by Mr J. D. Collins, Director of Education.

" Current shortages of material and labour, and the priority given to housing, continued to exercise restricting effects on educational provision during 1946. Thus the practical room at Fairmuir Special School, destroyed by fire in 1945, has not yet been replaced. Extensive damage was caused by fire towards the end of 1945 to Hawkhill North School, and temporary accommodation has had to be found in St Peter's Church Hall. It is doubtful if it is worth while to recondition the damaged building, which renders more acute the situation presented by the raising of the school leaving age on 1st April, 1947; and the plan to recondition this building and use it as an Annexe to Logie Junior Secondary School has been abandoned.

The Nursery School at Cotton Road, planned for the Education Committee, was completed and used as a war-time Nursery during the war; but in November, 1946, it was handed back to the Committee and is now a Nursery School. At about the same time, the war-time Nurseries at Ellengowan and Polepark Annexe, passed from the Public Health Department to the Education Committee for use as Nursery Schools.

St Michael's School, planned as a Secondary School for Roman Catholic pupils, was partially completed after the outbreak of war and used as a Primary School for children from Mid Craigie and Linlathen.

When Primary Schools at Mid Craigie and Linlathen are erected, St Michael's will revert to its proper function, made more urgent than ever by the raising of the school age. No progress has been made with the incompleted building at Mid Craigie and the Primary School at Linlathen has not yet been started. The new Stobswell School, planned for boys only, is to be completed in austerity finish as soon as possible, but work has not yet started. Prefabricated huts are contemplated at Lawside and Morgan Academies, to meet the requirements of the additional pupils that the raising of the age will bring.

Repair and maintenance to school premises during 1943 has been confined to matters of emergency, and air-raid shelters and baffle walls have for the most part, still to be removed, but as and when contractors are engaged on the demolition of street shelters in particular localities, school shelters in the area are being included in the arrangements."

Complaints.

Complaints to the number of 3,863 reached the Department during 1946 as against 3,819 in 1945. These complaints were of a varied nature but as might be expected choked drains, etc., figured prominently.

"Well Wisher", the pseudonym of those seeking anonymity provided 116 complaints which, on investigation, were found to be groundless. All were looked into, in case for a change, the intimation was genuine and not the usual malicious effort after a quarrel to score against a neighbour.

Statutory Notices or Intimations.

To secure compliance with the requirements of the Public Health (Scotland) Acts and other legislation administered by this Department 11,189 notices or intimations, written or verbal, were transmitted to property owners or agents or authors of nuisances, all of which received or are receiving attention.

General Nuisances.

Towards the detection of nuisances 28,742 visits were made in the course of which 6,828 were discovered and steps taken forthwith for their removal.

These nuisances are classified under the following headings:—

Choked and defective water closets, sinks, drains, etc.	3517
Choked and defective rhones and rainwater conductors	371
Leaking roofs	314
Defective Chimneys	170
Internal condition of houses (plasterwork, woodwork, glazing, dampness, etc.)	1111
Defective Ashbins	172
Dirty and Verminous Houses	241
Rat Infestation	156
Dirty Stairs, Passages and Water Closets	86
Miscellaneous	390
	6828

Omitting the day-to-day type of nuisances, the following more unusual illustrate the many-sided aspect of the work covered by this heading.

Complaints were received here from legal tenants regarding the conduct of squatters who had taken possession of empty houses in certain properties. Investigation revealed an intolerable state of affiairs. The squatters instead of using the ashbins were depositing ashes, etc.. in attic cellars. Pressure was brought to bear on the delinquents and they eventually removed the refuse to street for collection by the Cleansing Department. A flooding incident in the north end of the city caused by a mechanical excavator fracturing a water main giving nearby residenters the impression that a water spout had suddenly manifested itself in their midst. No time was lost in having the main closed but not before low lying houses and gardens were inundated.

Our services were requested by a shop-keeper regarding water entering his cellarage. A sample of this water was submitted for analysis and reported as coming from local strata and not town's mains or sewerage.

It is most difficult, and in some cases almost impossible, to trace the origin of unknown springs, especially in a congested area. A cure was established by laying down tiled pipes under the cellar floor and diverting the flow to a drain.

"Slater" infestation of a second-floor tenemental house claimed attention. Enquiries elicited that this particular house was the only dwelling in the whole property to be so affected. The ingress of these insects was traced to a chimney in the gable wall and the source of the trouble to loose stones and a shrubbery in an adjoining garden which acted as a breeding ground. The slaters stubbornly withstood many efforts to eliminate them by insecticides. Latterly the removal of the stones and shrubs and the cementing of open-jointed masonry on the gable freed the householder from his unwelcome guests.

Dampness underfloor and in a wall press was intimated from an office situated on the first floor of a property. A survey of the premises showed the complaint to be well justified. Exhaustive exploration revealed the cause to emanate from a condenser in the basement, steam from which travelled up the wall behind the lath

and plaster, passing the ground floor without detriment but manifesting itself in a condensed form on the underside of the floor of the next storey.

The removal of the lath and plaster and finishing the wall with cement on the solid stonework removed this nuisance by preventing the escape of steam from the basement.

The occupiers of houses adjacent to Camperdown Quarry where the burning of dumped material was carried out complained to the Department of nuisance. The matter was investigated and found to be substantiated as offensive smells and smoke from the burning refuse were entering their houses. On representation being made to the proper quarter the practice ceased.

Later in the year, however, an accumulation of waste rubber dumped at the same locus became ignited and a huge pall of black smoke enveloped the quarry and threatened to extend over a wide area. Immediate steps were then taken to notify the Fire Service who promptly had the outbreak under control.

Verminous Houses and Persons.

Throughout the year under review in response to calls for assistance this Office fumigated or otherwise treated 135 rooms in 95 houses for bug infestation; incorporated in the foregoing figures are 20 rooms in 11 corporation houses.

Advice was also given to persons who wanted to carry out disinfestation measures on their own. They were advised of the proper manner in which to approach the task, of the most suitable agents of destruction and warned that the killing of the bug is only a half completed job and that unless the eggs are also destroyed their efforts will have been in vain.

The Superintendent of a hostel intimated that certain of the beds in his institution were verminous. Fumigation was carried out by this Department, advice given as to future procedure, since when no recurrense of the nuisance has been reported. In all 167 complaints relative to vermin infestation were received.

Verminous Persons.—Two such cases were the subject of enquiry and resulted in both being treated at King's Cross Hospital. Body and bed clothing were also subjected to cleansing operations at the same institution where facilities for such are available.

Whitewashing and Painting Common Stairs and Passages.

As can be understood such work could not be asked for during hostilities except on very extreme cases and even in 1946 the position was still very difficult owing to the shortage of material and manpower. However, it was felt incumbent to make an effort to overtake these arrears and to this end some 235 letter intimations were dispatched in August to property owners and agents informing of the need for this work—fully 3,000 stairs and passages, etc., being involved.

For those who avail themselves of such facilities, whitewash brushes were given out by this Department on 220 occasions and were employed in the cleansing of approximately 500 rooms. Ochre and whiting were also provided in necessitous cases.

Back Courts, Area, Footways, etc.

The above were maintained in a reasonably acceptable manner. The most frequent cause of nuisance was the misuse of Air Raid Shelters erected on the drying greens, etc., of tenemental property. The demolition of these and reinstatement of area it is hoped will not be too long delayed.

875 square feet of paving (tarred chips) were laid down at the approaches to houses at a scheme in the west end of the city.

Smoke Nuisance.

The veto on excessive emission of smoke from factory chimneys is again imposed after the war-time relaxation for security measures.

A weather eye was kept on all factory chimneys, etc., particularly on those which were known, in the past, to be frequent offenders, and on untoward occurrence the attention of firemen and works' managers was immediately directed thereto. This action generally had the desired results.

Seven complaints relative to smoke emission were received during the year. Observations of one hour's duration each were taken and warning letters addressed to the firms implicated when considered necessary. In two cases early electrification of the plant will permanently remove the nuisance.

Two of the observations related to a chimney of a workshop which polluted nearby houses. This nuisance was annulled when, on our recommendation, the proprietor installed gas as a means of heating.

At one factory investigation showed two of the three boilers under repair and the third being seriously overworked to make good the deficiency of steam power. Completion of the repairs resulted in no further trouble being experienced. A warning was sufficient in another case, while the remaining complaint concerned a metal chimney which when heightened by ten feet ceased to offend.

Before leaving this subject it might be mentioned that the quality of coal supply does not assist firemen to attain their objective—a smoke-free chimney head.

Rats and Mice Destruction Act, 1919.
Rats and Mice (Scotland) Order, 1943.

In the summary Report for the war period issued last year it was mentioned that operatives of the Department of Agriculture for Scotland were to carry out an intensified campaign of rat destruction within the city.

A second survey preceded the actual commencement of operations and it was found that the position had altered considerably since the initial examination—previous major infestations reduced to minor and former minor freed from rodent population due to action during the interval by occupiers of premises.

The scheme actually started on 4th February at the Refuse Dump at Riverside Drive where the most serious seat of infestation was located and confirmed by a kill of 608. The dumping and collection of fish offal at this locus formed an attraction for the rodents and, in addition to the work of disinfestation, an improvement in the means of storage was carried out by the official responsible therefor. Later inspections showed the site to be in a satisfactory state. Thus commenced the campaign, and it was extended according to plan till all parts of the city demanding attention had been dealt with. April saw the extension of the scheme to include the sewerage system of the town. It was apparent from preliminary results that a heavy infestation existed underground and it was

decided this phase of the clearance should endure till the whole network had been treated. The results to the end of this year have been most gratifying and it has also been found that land infestation derived from this source has to some extent been minimised.

Advertisements were again inserted in the local press urging landowners to communicate with the Department if they should see signs, however incipient, of rats or mice. The area recently added to the city was also surveyed by Department of Agriculture Officers and was found to be relatively free from rats. Another survey of certain city areas, including Refuse Dumps, was undertaken and showed a healthy state of affairs. From the commencement of the scheme till the end of the year 13,301 rats were accounted for as under:—

Above ground	2,922	(Trapped, 1,762; Poisoned or Gassed, 1,160).
Killed in Sewers,	10,379	
	13,301	

There can be no doubt that the operation of the scheme has been of benefit to the city, undertaken at little or no cost to the ratepayers. At the same time it must be recorded that the former attitude taken by the Department in connection with the menace was not altogether unsuccessful, and the continuous efforts practised and preached over many years resulted in the very limited number of serious infestations falling to be dealt with.

The Milk and Dairies (Scotland) Acts.

Registers.—At the end of the year the Registers stood as follows:—

Dairymen or Cow-Keepers, ...	20
Retail Purveyors of Milk (including Producer-Retailers) made up as under:—	552
Purveyors from shops, milkhouses, etc., ...	503
Purveyors from vans, ...	11
Purveyors resident outwith the City but registered to purvey milk within it from vans on streets,	18
Purveyors from shops or milkhouses together with vans on streets, ...	20

The year ended with 20 Dairymen or Cowkeepers on the Register—5 additional to the previous year owing to six dairy farms being in the area taken over by this Local Authority from the County. One of our local dairymen, long connected with the trade, died during the year and his representatives decided to discontinue the business in favour of other pursuits.

One of the Dairymen possesses no cows and obtains his supply of milk from a county producer.

In the remaining 19 dairies there were housed 522 cows and to the cowsheds concerned 217 visits were paid, while shops and other places where the retail of milk is engaged in were visited on 846 occasions.

These businesses, while not in all respects complying with requisite bye-laws were, general speaking, found to be conducted in an acceptable manner.

The six dairies included in the area added to our boundary were all inspected and the registrations previously held with the County Authority transferred to our Register. Four are listed as producers of non-designated milk and two as producers of Designated Milk, i.e., one "Certified" and one "Tuberculin Tested." Both herds are in the attested category.

There is a milking parlour at the farm licensed to produce "Certified" milk, which, so far as this City is concerned, is an innovation.

At three of the Dairies, now incorporated within our boundary, improvements to the premises have been asked and attention directed to production methods, while the fourth is in the course of re-construction.

At one dairy within the town area, which was much below the desired standard, complete reconstruction was proposed, and at the end of the year the necessary work was almost completed, embracing new milk house, new dairy wash-house, improved lighting, ventilation and re-flooring of byres, electric light throughout, and a better system for the provision of a supply of hot water for cleaning dairy utensils.

During the year we had complaints of milk being sent into the town in dirty cans, which matter was immediately taken up with the producer or appropriate officials in the dispatching area.

There are five producers (including 1 Certified and 1 T.T.) who do not dispose of their milk by retail. All wholesale dealers are also engaged in the retail business.

Complaints received regarding the quality of milk were very few and bore no comparison to previous years.

The attention of certain dairymen had to be directed, particularly with reference to school supplies, to the presence of small pieces of glass in bottles of milk. Generally speaking, great care is manifested by employees filling milk bottles, but it can be appreciated that on occasions the requisite alertness is not displayed, and when this is revealed by such lapses a timely word from this Department has the desired effect.

There are 17 cowsheds where 40 milk cows are kept, exempt from Registration, under Section 2 of the 1914 Act " From which a person sells milk only in small quantities and for their own consumption to persons in his employment or to neighbours."

With the exception of lack of, or the inadequacy of sealing of churns conveyed by road or rail transport, Articles 4 to 14 of the Milk and Dairies (Scotland) Order, 1934, are generally being complied with.

The Milk (Special Designations) Orders (Scotland), 1936/44.

At the end of the year the Register showed that the undernoted licences had been issued by the Local Authority:—

1 Producer of Pasteurised Milk; and
331 Retail Sellers thereof; and
5 Producer Dealers in Standard Milk;
1 Produced Dealer in Tuberculin Tested Milk;
3 Producer Dealers in Certified Milk;
1 Supplementary Licence for dealing in Certified Milk;
1 Supplementary Licence for dealing in T. T. Milk.

In addition there are registered:—
52 Dealers in Certified and 37 in Tuberculin Tested Milks.

The T.T. Licence previously referred to was granted in place of an application for Certified. In this particular case the premises and other arrangements were satisfactory for a Certified licence with the exception of the distribution of the milk, which was not bottled on the premises but placed in large churns for wholesale disposal. This procedure did not conform to the Order and a T.T. licence was issued pending the statutory requirements regarding bottling being complied with when a further request for a Certified Licence would be entertained.

The premises of our local pasteurising company, where large quantities of milk are daily submitted to the H.T.S.T. process, are kept under regular supervision and found to be maintained in good order. A can-washing machine was installed by this Company during the year. Further extensive improvements to premises, plant and transport have been approved and the necessary licences sought.

There is also in the district one producer of Sterilised Milk whose premises were the subject of frequent visits. The business was conducted in a manner to which no exception could be taken. Samples of milk from this source invariably receive a " negative " report so far as viable bacteria is concerned.

Artificial Cream Act, 1929.

There is only one registration in force under this Act.

Stables and Piggeries.

Stables.—These number 170 — 152 occupied and 18 empty. Inspections numbering 230 were made throughout the year.

Piggeries.—215 visits were paid to the 67 pig-stys within the City, wherein approximately 1260 pigs were kept.

Complaints received mainly related to these piggeries which came into existence consequent upon the relaxation by means of the Defence (General) Regulations of restrictions on the places where pigs, etc., may be kept. One complaint concerned the smell from the cooking of pig food. The heightening of the chimney and repairs to the boiler brought about an improvement, and at the end of the year no further complaint was received. In another case, the premises were unsuitable for the type of business. A change of ownership, along with Departmental pressure, secured the sale of the pigs,

thereby removing the nuisance completely. One piggery was discontinued when its unsuitability was pointed out to the proprietor. One complaint was received regarding the keeping of hens in a large garden adjoining a dwelling-house. Verbal suasion was successful in getting the culprit to provide a suitable battery for the keeping of the poultry, placed in such a position as to cause no offence to residenters in the vicinity.

Offensive Trades.

There is no alteration falling to be recorded in connection with the premises utilised for this type of business. They are located at:—

Public Slaughter-Houses, East Dock Street—

Gut Cleaner (Private) (1).		
Hide Factors (Private) (2).		
Slaughterer of Cattle	(Corporation)	1.
Tripe Cleaner	,,	1.
Tallow Melter	,,	1.
Blood Boiler	,,	1.

No complaint arose in connection therewith.

Interments — Section 69 of The Public Health (Scotland) Act, 1897.

The assistance of the Department was sought on 14 occasions in connection with the interment of bodies of destitute persons.

In all cases funerals were carried out at a total cost of £29 13s, against which expenditure the sum of £13 4s was recovered.

An analysis of the interments shows that there were 5 adults and 9 juveniles.

Burial Grounds.—The following interments were made at the undernoted Burial Grounds with the Burgh during the year:—

Eastern Necropolis, ...	1086
Western Necropolis, ...	811
Western Cemetery (Perth Road), ...	128
Barnhill Cemetery, ...	189
Parish Church Burying-Ground (Bro. Ferry), ...	0
Constitution Road Burying-Ground, ...	0
St Luke's Episcopal Church, Downfield, ...	0
New Mains Cemetery, ...	9
Total, ...	2223

Additional to the interments recorded above, cremations numbering 689 were carried out at the Dundee Crematorium, which particulars are available through the courtesy of the Secretaries.

No action by this Department in relation to burial grounds was called for.

HOUSING.

The year under review, which had such a promising beginning so far as housing is concerned, closed disappointingly. The results anticipated by Local Authorities did not reach fruition due to circumstances over which they had absolutely no control. The hold-up in the supply of materials, scarcity of labour, etc., and even the weather clerk, all played a part in reducing the number of houses completed, and the problem remains as acute as ever.

Some progress, however, was made towards amelioration of the situation by the provision of a large number of temporary dwellings by requisitioning and licensing of vacated houses which had been dealt with under the Housing Acts. Hutted Camps, no longer required for Army purposes, and large mansion houses derequisitioned by the Military Authorities, were all pressed into service in an effort to ease the shortage, and under these headings we were able to deal with:- -

Condemned Houses—

Requisitioned—Unoccupied Dwellings, ...	70
Requisitioned after occupation by squatters, ...	348
Licensed after occupation by squatters, ...	48
Licensed—Unoccupied Dwellings, ...	39
	505

Hutted Camps—

Estimated number of Homes to be provided, ... 50

Mansion Houses—

11 Requisitioned, providing accommodation for 49 families.

Taking possession of vacated houses illegally, an operation generally known as " squatting," became rather prevalent during the year and while we were able to help in a large number of cases by way of requisitioning and licensing, as already detailed, we are still faced with the difficulty of dealing with those who took possession of 307 houses considered totally unsuitable for further use as dwellings due to extreme dilapidation and/or other serious defects. Unfortunately a number of these families are of the type

who do not improve the conditions under which they live, and their continued occupation of these premises causes annoyance to existing legal tenants in adjoining houses and throws a considerable burden upon the work of the Department.

In an effort to secure still further accommodation for the homeless the Local Authority asked a detailed survey to be made of houses of ten rooms or more in order to ascertain the surplus accommodation available. The Inspectorate of this Department carried out the survey and all data has been submitted to the Town Council for their deliberations.

Of the 744 dwelling-houses erected during the year, only 9 were provided by Private Enterprise, and of the remainder 579 were Government Erected Temporary Prefabricated Houses. While the structure and design of these is varied (three distinct types were erected during 1946, i.e., Phœnix, Arcon and Tarran) all tend to reduce the number of homeless families and in that respect are welcomed.

Structurally they are of a temporary nature, but their internal equipment is all that a housewife could desire.

A further step towards the re-housing of Tuberculosis cases was made early in the year when, following representation by the Medical Officer of Health and this Department, the Local Authority agreed to grant priority to these cases for all housing schemes controlled by them. Previously, houses were only available in two schemes for this purpose.

In August, 1946, the Local Authority set up a new Department known as the Direct Labour Department, the activities of which were to be directed towards new housing. Their present programme is the construction of 150 houses at Clement Park of the 4, 5 and 6-roomed type. A maintenance section of this new venture carry out, on an average, 2000 repairs monthly at property owned by the Local Authority.

Housing Requirements during the next 15 years are estimated at 21,849 dwellings, which figure was given in evidence at the

enquiry held in Edinburgh in connection with the extension of the Burgh Boundary, and is made up as follows:—

1.	Slum Clearance—		
	(a) To meet needs of families living in houses already condemned or in clearance areas, ...		3,485
	(b) Unfit houses and unhealthy areas yet to be dealt with, ...		5,000
2.	For families occupying condemned houses re-opened temporarily under licence, ...		200
3.	Shops occupied as dwelling-houses, ...		164
4.	Overcrowded families, ...	7,000	
	Less surplus 2-roomed houses which may be reconstructed, say	2,000	
			5,000
5.	General Requirements—		
	(a) 400 houses per annum for 15 years, ...		6,000
	(b) Marriages during war years — 400 houses per annum for 5 years, ...		2,000
			21,849

TABLE I.

Shows the number of houses which have been erected during the year 1946:—

	Rooms.				
	1	2	3	4 etc.	Total.
By the Corporation, ...	—	—	88	42	130
Government Erected Temporary Dwellings, ...	—	—	579	—	579
By Scottish Special Housing Association, ...	—	—	—	26	26
By Private Enterprise, ...	—	—	6	3	9
Totals, ...	—	—	673	71	744

TABLE II.

The locus of the Housing Schemes under the control of the Corporation, giving the number of houses completed; in course of construction; proposed; and the Act under which erected, or to be erected (from data supplied by the Director of Housing).

Act under which erected.	Scheme or Site.	Type.	No. of Houses Completed Apartments. 1	2	3	4	5	6	In Course of Construction. Apartments 1	2	3	4	5	6	Proposed to be Erected. Apartments 1	2	3	4	5	6
1919 Act	Logie	Flatted	... 88	102	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Logie	Tenement	... 8	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hospital Park	Flatted	... 52	100	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Stirling Park	Do.	... ...	116	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Taybank	Do.	... ...	180	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Craigiebank	Cottage	... ...	...	76	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dudhope	Flatted	... ...	88	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Broughty Ferry	Do.	... ...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1923 Act	Johnston Ave.	Cottage	... ...	...	52	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dudhope	Tenement	... 46	26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1924 Act	Broughty Ferry	Flatted	... 68	128	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Craigiebank	Do.	... ...	204	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Alpin Road	Do.	... 52	164	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lawton	Do.	... ...	264	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Stirling Park	Do.	... ...	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Steel Houses (Lawton Rd. and Alpin Rd.)	Do.	... ...	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Steel House (Alpin Road)	Bangalow	... ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Strathmore Ave.	Tenement	... ...	54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lawton (Boot's Pat.)	Flatted	... ...	264	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Graham Street (Boot's Patent)	Do.	... ...	236	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arklay Street	Tenement	... 216	180	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Corso Street	Do.	... 66	210	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lawton Farm	Flatted	... 12	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Harefield Road	Do.	... 12	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Law Crescent	Do	... 64	196	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hepburn Street	Tenement	... ...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ann Street	Do.	... 4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1925 Act	(Not State Aided)—																			
	Glenprosen Terrace	Flatted	... 24	68	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Graham Street	Do.	... 72	140	72	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Taybank	Do.	... ...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1923/25 Acts—	Slum Clearance and Closing Orders—																			
	Dudhope	Tenement	... 24	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Byron Street	Do.	... 36	48	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arklay Street	Do.	... 36	72	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Wester Clepington I.	Do.	... 90	138	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Do. Do. II.	Do.	... 96	150	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Tullideph Road	Do.	... 18	66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Do. Do	Flatted	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	West Port	Tenement	... 6	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1930/46 Acts—																				
	Sandeman Street	Tenement	... ...	112	90	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Queen Street, B.F.	Do.	... 6	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Clepington Road	Do.	... 36	60	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Caird Avenue	Do.	... 6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Wedderburn Street	Do.	... 20	32	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lawton Road	Flatted	... ...	92	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Monurt Crescent	Tenement	... 18	66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lorne Street	Do.	... ...	36	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arbroath Road	Do.	... 18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Carnegie Street	Do.	... ...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Constitution St.	Do.	... 3	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cotton Road	Do.	... 12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ann Street	Do.	... 2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Canning Street	Do.	... ...	60	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kinghorne Road	Do.	... 18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Harcourt Street	Do.	... ...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Paterson Street	Do.	... ...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ogilvie's Road	Do.	... ...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hilltown I.	Do.	... 3	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bonnybank Road	Do.	... ...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Forebank Road	Do.	... ...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hawkhill	Do.	... 8	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cross Row	Do.	... ...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hill Street	Do.	... ...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	King Street, B.F.	Do.	... 3	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Marshall Street	Do.	... 12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Fairbairn Street	Do.	... 56	24	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hospital Street	Do.	... 12	36	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dens Road	Do.	... ...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Maitland Street	Do.	... 6	36	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Benvie Road	Do.	... ...	18	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Balgay Street	Do.	... ...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Wolseley Street	Do.	32	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Mid Craigie, 1st De.	Do.	32 120	300	154	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Mid Craigie, 2nd De.	Do. &Cot.	... ...	256	80	60	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hilltown (II.) Nos. 59/69	Tenement	... ...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Queen Street, B.F., 2nd Dev.	Do.	... ...	36	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gardner Street	Do.	... ...	30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Morgan Street	Do.	... ...	18	54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Beechwood, 1st De.	Do.	32 ...	92	36	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Beechwood, 2nd De.	Do. &Cot.	... ...	42	90	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Beechwood, 3rd De.	Tenement	... ...	...	138	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Beechwood, 4th De.	Tenement	... ...	...	90	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Polepark	Do.	... ...	48	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Linlathen	Flatted	... ...	178	280	98	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Wellgrove	Flat & Cot.	... ...	...	12	25	10	...	...	...	...	...	...	...	...	...	...	...	...	...
	Magdalene's Kirkton 1st Dev.	Flat & Cot.	... ...	84	36	10	...	...	...	...	76	60	10	...	...	...	...	...	...	...
	2nd Dev.	Cottage	... ...	...	...	...	...	...	...	...	...	219	70	24	...	...	...	...	...	...
	3rd Dev.	Flat. & Cot.	... ...	...	...	...	...	...	...	...	...	127	60	18	...	...	...	170	...	...
	Swedish Type	...	... ...	...	...	...	...	...	...	...	...	50	...	...	...	...	...	...	...	...
	West Kirkton 1st Dev.	Cottage	... ...	...	...	...	...	...	...	...	...	37	18	2	...	...	...	248	70	80
	2nd Dev. B.I.S.F.		... ...	...	...	...	...	...	...	...	...	30	...	...	...	...	...	...	...	...
	Dryburgh 1st Dev.	Cottage	... ...	14	6	4	...	...	...	...	96	48	4	...	...	...	...	...	...	...
	Long Lane, B.F.	Tenement	... ...	18	...	...	...	...	...	...	...	46	21	...	...	...	...	63	22	12
	Clement Park	Cottage	... ...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	24	...	...
	Hilltown	Tenement	... ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			96 1,473	5,246	1,356	232	10	...	172	623	183	44	...	...	...	...	...	502	92	42
Houses Erected by Scottish Special Housing Association—																				
	Dean Avenue	Weir	... ...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Magdalene's Kirkton	Swedish	... ...	...	24	...	...	...	...	...	...	76	...	...	...	...	...	...	...	...
	do. do.	Atholl	... ...	...	...	...	...	...	...	...	...	20	...	...	...	...	...	...	...	...
			... ...	...	26	...	...	...	...	...	...	96	...	...	...	...	...	...	...	...
Temporary Housing—																				
	Arcon		... ...	522	...	...	...	...	176	...	...	...	...	...	...	93	...	...	...	...
	Tarran		... ...	114	...	...	...	...	412	...	...	...	...	...	...	6	...	...	...	...
	Aluminium		... ...	...	...	...	...	...	...	...	...	...	...	...	...	134	...	...	...	...
	Phoenix		... ...	20	...	...	...	...	...	...	...	...	...	...	...	73	...	...	...	...
			... ...	656	...	...	...	...	588	...	...	...	...	...	...	306	...	...	...	...
The Corporation of Dundee as Fleming Trustees—																				
			Rooms 1	2	3															
Fleming Trust Deed—																				
	Easter Clepington	Flatted	192	158	146	...	...	...	...	...	...	...	...	...	...	172	56	...	...	...
	Scott Street	Do.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Peter Gray Housing Trust—																				
	Kinghorne Road	Tenement	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE III.

Gives the number of houses provided since 1919, excluding houses outwith the control of the Town Council erected by Private Enterprise, etc.

	1 Room	2 Rooms	3 Rooms	4 Rooms & over	Total
Town Council—					
1919-1923, ...	—	212	550	4	766*
1924-1928, ...	—	306	1,635	124	2,065
1929-1933, ...	—	618	1,264	114	1,996
1934-1938, ...	96	409	1,204	478	2,187
1939, ...	—	—	255	591	846
1940, ...	—	—	170	150	320
1941, ...	—	—	38	45	83
1942, ...	—	—	—	18	18
1943, ...	—	—	—	—	—
1944, ...	—	—	38	2	40
1945, ...	—	—	8	30	38
1946, ...	—	—	88	42	130
Fleming Trust, ...	192	158	146	—	496
Peter Gray Housing Trust,	24	—	—	—	24
Government Erected Temporary Dwellings—					
1945, ...	—	—	77	—	77
1946, ...	—	—	579	—	579
Scottish Special Housing Association—					
1946, ...	—	—	—	26	26
Grand Totals, ...	312	1,703	6,052	1,624	9,691

*Includes 76 Timber Huts.

The above Tables show 9,691 houses have been so provided, or an average of 346 per annum for the past 28 years.

TABLE IV.

Houses provided by Private Enterprise.

	1 Room	2 Rooms	3 Rooms	4 Rooms and over	Total
1919-23, ...	—	1	37	92	130
1924-28, ...	—	2	462	565	1,029
1929-33, ...	—	1	43	467	511
1934-38, ...	14	58	483	637	1,192
1939, ...	...	2	115	77	194
1940, ...	...	...	11	12	23
1941, ...	...	...	8	3	11
1942, ...	...	...	9	5	14
1943, ...	...	...	2	10	12
1944, ...	...	...	6	...	6
1945, ...	...	...	...	2	2
1946, ...	—	—	6	3	9
Totals, ...	14	64	1,182	1,873	3,133

TABLE V.

Shops, etc., converted into dwelling-houses; houses reconstructed and re-opened, and large houses sub-divided.

	1 Room	2 Rooms	3 Rooms	4 Rooms and over	Total
1919-23, ...	35	102	28	25	190
1924-28, ...	22	60	14	25	121
1929-33, ...	47	127	37	73	284
1934-38, ...	85	154	50	88	377
1939, ...	3	32	8	13	56
1940, ...	...	26	6	3	35
1941, ...	1	11	5	2	19
1942, ...	1	10	2	...	13
1943, ...	...	2	2	4	8
1944, ...	1	11	2	11	25
1945, ...	...	6	4	13	23
1946, ...	—	6	8	53	67
Totals, ...	195	547	166	310	1,218

Summary of Houses Provided — Period 1919 to 1946.

PROVIDED BY	1 Room	2 Rooms	3 Rooms	4 Rooms & over	Total
Table III. — Town Council, Trusts, Scottish Special Housing Association and Temporary Houses, ...	312	1,703	6,052	1,624	9,691
Table IV. — Private Enterprise, ...	14	64	1,182	1,873	3,133
Table V. — Shops, etc., converted into houses, ...	195	547	166	310	1,218
	521	2,314	7,400	3,807	14,042

These tables show a grand total of 14,042 houses provided during the past 28 years, an average of 501 houses per annum over that period.

TABLE VI.

Houses Voluntarily Closed, Closed by Order, Demolished or turned into Business Premises:—

	1 Room	2 Rooms	3 Rooms	4 Rooms and over	Total
1919-23, ...	136	128	25	40	329
1924-28, ...	212	166	49	68	495
1929-33, ...	747	872	153	162	1,934
1934-38, ...	871	892	151	145	2,059
1939, ...	823	857	83	28	1,791
1940, ...	201	155	30	12	398
1941, ...	90	51	11	3	155
1942, ...	53	44	2	2	101
1943, ...	52	40	2	4	98
1944, ...	58	58	7	9	132
1945, ...	39	47	5	8	99
1946, ...	72	58	9	33	172
Totals, ...	3,354	3,368	527	514	7,763

The total of 7,763 is equal to an average annual figure of 277 houses closed. From the total provided, 14,042, as shown on this page we must deduct the above 7,763, the number of dwellings which have gone out of use as such during the past 28 years, thus giving a net increase of 6,279 houses in the City, or an average annual contribution of 224.

HOUSING (SCOTLAND) ACT, 1925

The Dundee (Blue Mountains, etc.) Improvement Scheme, 1925; Confirmation Order, 1925, made by the Department of Health for Scotland under the Housing (Scotland) Act, 1925.

This Scheme was completed in 1932, and comprised:—

1 Room.	2 Rooms.	3 Rooms.	4 Rooms and over.	Total.
59	45	4	1	109

The Dundee (Small's Wynd) Improvement Scheme, 1928, Confimation Order, 1929, made by the Department of Health for Scotland under the Housing (Scotland) Act, 1925.

This Scheme was completed in 1935 and comprised:—

1 Room.	2 Rooms.	3 Rooms.	4 Rooms and over.	Total.
139	147	26	3	315

The following table shows the dwelling-houses within the City which have been dealt with by Clearance Resolutions, and in addition the details of the properties adjoining these areas included by the Local Authority under Section 3 of the Housing (Scotland) Act, 1930, to make the schemes effective:—

HOUSING (SCOTLAND) ACTS, 1930/35. CLEARANCE AREAS.

Area Number	Date of Resolution	Included in Terms of Section 1 Houses	Section 1 Other Premises	Section 3 Houses	Section 3 Other Premises	Totals Houses	Totals Other Premises	No. of Houses Still Occupied at Dec. 31, 1946	Remarks
1 to 18	17.11.30	304	73	23	19	327	92	...	All buildings demolished except 1 Hall.
19 to 32	1.12.32	259	31	6	34	265	65	...	Scheme completed in 1933.
Queen St., B.F.	5. 3.31	15	...	1	3	16	3	...	Scheme completed in 1933.
33 to 34	17.6 32	50	...	2	...	52	...	...	One building yet to be demolished.
35 to 91	2.11.33	840	101	113	74	953	175	107	Amended 1935 and 1936.
92 to 100	14. 2.35	109	17	47	17	156	34	44	
101	1. 8.35	43	5	3	17	46	22	...	Scheme Completed 1946.
102	6. 6.35	56	9	...	...	56	9	...	
103	1. 8.35	Resolution rescinded, 2.4.36.						...	Houses dealt with under Sec. 16 of Housing (Scotland) Act, 1930.
104	3.10.35	Resolution rescinded, 6.2.36.						...	Houses dealt with under Sec. 16 of Housing (Scotland) Act, 1930.
105 to 106	2. 7.36	8	...	7	13	15	13	4	
107 to 109	.....	Representations Cancelled.						...	Houses dealt with under Sec. 16 of Housing (Scotland) Act, 1930
110	1.10.36	24	...	...	8	24	8	...	All the houses were demolished during 1938.
111	1.10.36	26	1	...	1	26	2	12	
112	1.10.36	6	...	...	...	6	...	...	Scheme Completed, 1939.
113 to 115	1.10.36	52	5	1	4	53	9	11	
116 to 117	1.10.36	21	5	...	3	21	8	12	Amended Resolution, 1939.
118	9.11.36	23	...	...	...	23	...	8	Amended Resolution, 1938.
119	3.12.36	25	...	3	...	28	...	...	Scheme Completed, 1939.
120	4. 3.37	22	...	...	...	22	...	6	
121	2. 9.37	13	3	...	...	13	3	13	
122	2. 9.37	11	5	27	...	38	5	38	
123	2. 9.37	67	6	...	1	67	7	59	
124	2. 9.37	15	6	...	2	15	8	15	
125	2. 9.37	18	3	4	1	22	4	20	
126 to 126a	2. 9.37	65	1	16	2	81	3	61	Amended Resolution, 1938.
127	2. 9.37	242	6	18	39	260	45	255	
128	7.10.37	71	11	...	...	71	11	33	
129	8.11.37	59	3	7	3	66	6	65	
130	8.11.37	110	9	8	1	118	10	118	
131 to 131b	8.11.37	73	11	51	21	124	32	106	Amended Resolution, 1938.
132	10. 2.38	75	...	...	...	75	...	57	
133	10. 2.38	99	5	...	...	99	5	72	
134	10. 2.38	16	6	...	...	16	6	16	
135	10. 2.38	55	2	17	39	72	41	72	
136	3. 3.38	35	2	...	...	35	2	35	
137	3. 3.38	48	1	...	9	48	10	37	
138	3. 3.38	16	...	...	...	16	...	16	
139	3. 3.38	313	41	...	3	313	44	196	
140	3. 3.38	257	12	37	35	294	47	186	
141	2. 3.38	125	5	...	...	125	5	33	
142	7. 4.38	37	6	...	...	37	6	17	
143	7. 4.38	33	...	...	...	33	...	30	
144	7. 7.38	4	2	...	1	4	3	1	
145	7. 7.38	45	5	...	1	45	6	38	
146	7. 7.38	16	6	...	5	16	11	5	
147	7. 7.38	19	3	12	1	31	4	31	
148	7. 7.38	11	2	...	2	11	4	11	
149	7. 7.38	24	8	11	12	35	20	34	
150	7. 7.38	18	4	...	...	18	4	8	
151	7. 7.38	10	...	15	3	25	3	21	
152	7. 7.38	25	1	16	2	41	3	32	
153	7. 7.38	77	15	...	3	77	18	71	
154	7. 7.38	166	10	13	4	179	14	167	
155	7. 7.38	62	3	...	9	62	12	25	
156	7. 7.38	51	18	4	5	55	23	51	
157	7. 7.38	112	4	20	11	132	15	102	
158	1.12.38	7	...	...	...	7	...	...	Scheme Completed, 1939.
159	1.12.38	30	1	1	3	31	4	26	
160	2. 2.39	45	5	15	20	60	25	51	
161	6. 4.39	30	2	43	10	73	12	55	
162	6. 7.39	23	7	...	7	23	14	14	
		4.511	487	541	448	5,052	935	2,505	and 9 other premises occupied as houses.

Table showing Number of Houses Closed under the Housing (Scotland) Acts, 1925-1935 and still Occupied at 31st December, 1946.

	(a) Number of Rooms. 1	2	3	4	5	6 and over.	Pop.	(b) Sizes of Houses Required to Accommodate families in (a). Number of Rooms. 1	2	3	4	5	6
Individual Houses, ...	275	386	47	7	1	1	2,236	323	176	184	38	1	—
Clearance Areas, ...	783	1,418	238	35	18	13	8,589	1,044	611	639	216	35	4
Total, ...	1,058	1,804	285	42	19	14	10,825	1,367	787	823	254	36	4
			3,222							3,271*			

*Includes accommodation required for 49 families occupying sub-let rooms or premises other than houses.

Summary in regard to Housing conditions and alterations during the year 1946.

I.—Particular of Houses (67) Improved:—

	1 Room	2 Rooms	3 Rooms	4 Rooms & over
(a) At properties that had been "Closed by Order" for a period,	1	1	—	—
(b) At instance of Sanitary Inspector and after Plans had been submitted to and approved of by the Works Committee, ...	—	6	14	16
(c) Two or more houses made into one,	10	—	—	—
(d) Houses divided and improved, ...	—	—	—	19

II.—Other premises converted into dwelling-houses:—

	1 Room	2 Rooms	3 Rooms	4 Rooms & over
1 Office, ...	—	—	—	1
1 Stable, ...	—	—	1	—

III.—New Houses completed and ready for occupation during this period:—

(a) Under the Corporation Housing Schemes:—

	1 Room	2 Rooms	3 Rooms	4 Rooms & over
Ward 3—Dryburgh, 1st Dev., ...	—	—	14	10
Ward 7—Magdalene's Kirkton, 1st Dev., ...	—	—	56	32
Ward 11—Long Lane, ...	—	—	18	—
	—	—	88	42

Total Houses — 130.

(b) Temporary Non-Traditional Type Houses:—

Ward 1—Dean Avenue, Phœnix, ...	—	—	16	—
Craigiebank Circle, Arcon,	—	—	36	—
Ward 4—Kingsway East, Arcon,	—	—	162	—
Ward 5—Linlathen, Arcon, ...	—	—	156	—
Ward 8—Glamis Road, Arcon, ...	—	—	95	—
Ward 11—Strathmore Street, Barnhill, Tarran, ...	—	—	114	—
	—	—	579	—

Total Houses — 579.

(c) Scottish Special Housing Association:—

Ward 1—Dean Avenue, Weir, ...	—	—	—	2
Ward 7—Magdalene's Kirkton, 3rd Dev., Swedish, ...	—	—	—	24
	—	—	—	26

Total Houses — 26.

(d) Private Enterprise:—

	1 Room	2 Rooms	3 Rooms	4 Rooms & over
Ward 4, ...	—	—	6	—
Ward 7, ...	—	—	—	1
Ward 9, ...	—	—	—	1
Ward 11, ...	—	—	—	1

Total Houses — 9.

Giving a grand total of 744 new houses erected throughout the period.

IV.—Particulars of dwelling-houses closed (172) for human habitation during the year 1946 in whole or in part and vacated:—

	1 Room	2 Rooms	3 Rooms	4 Rooms & over
(a) Street widening, ...	—	—	—	2
(b) Converted into business premises, offices, shops or workshops, etc.,	—	—	—	1
(c) By absorption into other houses,	8	—	2	29
(d) Closed by Order, Demolition Order or Undertaking, ...	47	39	4	—
(e) Clearance Areas, ...	17	19	3	1
Totals,	72	58	9	33

V.—Dwelling-houses Demolished (60) during the year 1946:—

	1 Room	2 Rooms	3 Rooms	4 Rooms & over
(a) Dwelling-houses that had been Closed by Order or Demolition Order, ...	8	8	—	—
(b) Dwelling-houses that had been Closed Voluntarily, ...	—	—	—	1
(c) Clearance Areas, ...	10	16	1	1
(d) Dwelling-houses that had been Closed by Undertaking, ...	5	8	—	—
(e) Street Widening, ...	—	—	—	2
Totals,	23	32	1	4

In addition to the above 8 other premises were demolished, viz:—

1 Workshop, 3 Stores, 1 Shop, 1 Office, 1 Shed, 1 Piggery.

VI.—Net Result for year 1946:—

The net result for the period is that there are 639 more houses available for human habitation than at 31st December, 1945, i.e., houses of:—

1 Room	2 Rooms	3 Rooms	4 Rooms and over
72 less	52 less	672 more	91 more

VII.—The total number of Dwelling-houses (Private and Corporation) in course of erection (1,760)—all stages—at 31st December, 1946, is as follows :—

	1 Room	2 Rooms	3 Rooms	4 Rooms & over
Permanent Houses—				
Ward 3, ...	—	—	97	121
Ward 4, ...	—	—	1	—
Ward 5, ...	—	—	12	—
Ward 6, ...	—	—	—	6
Ward 7, ...	—	—	85	824
Ward 8, ...	—	—	17	4
Ward 10, ...	—	—	1	—
Ward 11, ...	—	—	2	1
Totals,	—	—	215	956
Temporary Houses—				
Ward 3, ...	—	—	413	—
Ward 7, ...	—	—	176	—
Totals,	—	—	589	—

VIII.—Estimated Number of Inhabited Houses (excluding Institutions and other large establishments) within the Burgh of Dundee, as arrived at from the Quinquennial Survey undertaken during the year 1938 and corrected to 31st December, 1946:—

1 Room	2 Rooms	3 Rooms	4 & over Rooms	Total
4,907	21,777	14,644	10,002	51,330
or	or	or	or	
9.6%	42.4%	28.5%	19.5%	

of which approximately 4,720 are owner occupied. Included in the above figures are 6 x 1 roomed, 48 x 2 roomed, 106 x 3 roomed and 83 x 4, etc., roomed houses, a total of 243, which were added to the Burgh by extension of the boundaries during 1946.

Visits in connection with housing activities totalled 5,623, the object of which was to check up the position relating to houses closed but still occupied, survey of new houses, squatters, etc.

Overcrowding.

This problem shows no sign of descending from the " major " to the " minor " category. Each day that passes seems to add its quota of new names to the list of overcrowded families. The progress of the building programme so far as the erection of permanent houses to meet this part of the housing problem has been disappointing, but housing and overcrowding are germane to a very marked degree, and the alleviation of one has a salutary repercussion on the other. Could something more not be accomplished by way of compulsory exchange, or shall we say merely exchange, for there are many it is believed willing to do so if they could but be put in touch with each other. To cite an example. Assume an elderly couple whose family is scattered, live in a four-roomed house and find it a burden both as regards size and finance and would welcome an exchange to a two-roomed house. There might be a house of this size occupied by seven persons who would welcome a chance of a four-roomed house. If such an exchange was carried through two problems would be solved—one of overcrowding and one economic.

The Rent and Mortgage Interest Restrictions Acts, 1920 to 1939.

Hereunder are shown the applications received from tenants craving Certificates testifying to the disrepair of their houses, also requests from Factors for Reports certifying that repairs had been carried out to dwelling-houses so that the Certificate granted to the tenant might be annulled.

BY TENANTS.			BY FACTORS OR OWNERS		
No. of Applications.	Granted	Refused, etc.	No. of Applications.	Granted.	Refused.
15	8	7	5	5	...

The above table is self-explanatory and the only remarks necessary concern the "Refusal " of 7 certificates. The repairs needed in these cases did not involve major works, and were executed by the Factors or Owners upon notification of their existence.

Common Lodging Houses.

There are now only two establishments coming under the above nomenclature within the City, i.e.,

3/5 Craig Street, with accommodation for 137 Male Lodgers; and 25 No. Lindsay Street, with accommodation for 54 Male Lodgers.

During 1946 the proprietor of what used to be the third and largest common lodging-house decided to retire from this business.

Time will tell if the remaining two are sufficient to cater for the needs of the itinerant class of lodger. The town lacks accommodation of this type for females.

110 visits of inspection were made to these premises which are controlled by the one owner. They were found to be well conducted and kept.

The Seamen's Boarding House (Dundee Sailors' Home and Hostel) and the **Salvation Army Home and Metropole for Women** are well kept—clean and comfortable, the former also being available for commercial " boarders."

Houses Let in Lodgings.

To the above, of which 80 are registered, visits numbering 200 were paid throughout the year. Apart from one case of permitting the common kitchen to be utilised as sleeping quarters, which design was promptly and effectively quashed, there is no call for adverse criticism in connection with these houses.

In passing it might be added that this type of accommodation, owing to the housing shortage, is particularly well patronised.

Tents and Vans.

There are no recognised permanent camping sites within this district. When vans are in our locality they are usually part of the entourage of a circus or carnival, and during the year several of these travelling shows visited the City. Throughout their sojourn, which usually runs into several weeks, they were the subject of frequent inspection and gave rise to no complaint. The collection of refuse, etc., is, by arrangement, undertaken by the Cleansing Department.

48 visits were undertaken under this heading during the year.

Seasonal Workers, etc.

This class of worker in Dundee is mainly drawn from City dwellers who are provided with transport to and from their places of employment, consequently there is not the need for housing such personnel on a large extent.

At the farms possessing such accommodation the facilities provided were considered reasonably adequate.

In one case, however, it was discovered that potato lifters were being housed in a hut neither approved of nor altogether suitable for such a purpose.

At our request the owner provided additional facilities sufficient to enable the premises to continue in use for the season. He also gave his assurance that other more suitable premises would be obtained before another harvest.

Mechanical and Non-Mechanical Factories.

Trade or Business	Mechanical Factories	Non-Mechanical Factories
Blacksmiths, Cartwright and Carriage Builders, ...	15	12
Boot Repairers, ...	39	22
Clockmakers, ...	1	—
Cabinetmakers, Joiners and French Polishers, ...	66	40
Cash Registers, ...	1	—
Cycle and Motor Mechanics, Enamellers and Vulcanisers, ...	56	26
Dental Mechanics, ...	21	18
Dress, Mantle and Corset Makers, ...	—	36
Engineers, ...	62	11
Electro-Platers, Wire Workers, Blind Makers and Bellhangers, ...	3	1
Florists, ...	—	7
Furriers, ...	2	7
Granite and Marble Cutters and Masons,	3	18
Hairdressers and Wigmakers, ...	—	31
Hotels and Restaurants, ...	6	21
Jute Spinners, Weavers and Calenderers, etc., ...	58	—
Milliners, ...	2	5
Painters, ...	—	37
Photographers, ...	2	7
Piano and Gramophone Repairers, ...	2	16
Plastics, ...	1	—
Picture Framers, Gilders and Glaziers, ...	3	8
Plasterers, ...	—	16
Plumbers and Tinsmiths, ...	10	36
Saddlers and Leather Cutters, ...	4	6
Slaters, ...	—	24
Stamp Cutters, Engravers and Ticket Writers, ...	1	3
Sugar Boilers, ...	7	4
Tailors, ...	6	41
Umbrella Makers and Repairers, ...	1	1
Underclothing, Baby Linen, and Blouse Makers, Hosiers and Knitters, ...	9	7
Upholsterers and Carpet Sewers, ...	9	7
Waste, Rag and Metal Merchants, ...	6	10
Watch and Jewellery Repairers and Opticians, ...	2	42
Miscellaneous, i.e., Gut Manufacturer, Mica Makers, Clay Pipe Makers, Paper Bag Makers, Bottlers, Potted Meat Manufacturers, Oil Refiners, Manufacturing Chemists, Sack Repairers, Laundries, Basket Makers, Brush Makers, Scale Makers, etc., ...	278	62
	676	582

The Department is presently engaged on a survey of all such premises for the purposes of compiling up-to-date statistics, necessary as a result of discontinuance of such records during war years.

At several mechanical factories schemes for the improvement of the sanitary accommodation are in progress.

Two intimations were served under the Factories Act, 1937, calling for the provision of sanitary accommodation.

Manufacture of plastics, clocks and cash registers, all of which are being produced, are a few of the new industries commenced in this city, and enquiries for sites for other factories are being negotiated.

This introduction of fresh commercial interest is most welcome, and will, it is hoped, assist in placing Dundee still more prominently on the industrial front.

The new factories embrace all the latest equipment both for production and the care and comfort of their employees.

Light, airy buildings, canteens and washing facilities feature prominently among amenities undreamed of a few decades ago.

Throughout the year 42 Intimations were received from H.M. Inspector of Factories relating to:—

No.	Nature of Defect	Improvements Effected after action by Sanitary Department
11	Lack of Cleanliness, ...	In 11 cases.
7	Insufficient Water-Closet Accommodation,	In 4 cases.
20	Unsuitable Water-Closet Accommodation,	In 16 cases.
2	No separate Accommodation for Sexes, ...	In 2 cases.
2	No Thermometer in Workroom, ...	In 2 cases.
42		

Bakehouses.

The following bakehouses are on the Register:—

Occupied mechanical factory bakehouses, ... 57
(Included in this number are 6 underground.)
Occupied non-mechanical factory bakehouses, ... 24
(Included in this number is 1 underground.)
Bakehouses, empty, ... 6

Each bakehouse was regularly inspected during the year—1,032 visits being made. In general these places were maintained in a proper condition, except for trifling matters which on attention being directed thereto were put right.

In 1 case an intimation from H.M. Inspector of Factories was issued calling for lime-washing which was duly given effect to. There was no attempt on the part of the proprietor to evade this work, it was merely being deferred for convenience sake till the annual holiday week.

An underground mechanical factory of very long standing was closed down, another bakery, the property of the same owner, being deemed sufficient to meet his needs. At the bakehouse where the business is now consolidated additional male dressing accommodation was installed to meet the requirements of augmented staff, and a scheme of improvement is contemplated which will be overtaken as opportunity presents itself.

One underground bakehouse — non-mechanical — no longer considered suitable for the business carried on therein was deleted from the list.

A non-mechanical factory was transferred to the mechanical section on the installation of a power-driven mixer.

Fluorescent lighting was introduced into two bakehouses.

FOOD INSPECTION

Shops, Stalls, Barrows, etc.

ARTICLES OF FOOD SEIZED

Articles.	Where Seized.	Quantities or Weights. Tons.	Cwts.	Qrs.	Lbs.	Reasons for Seizure.
Vegetables (tinned) ...	Shops, or stalls, or barrows on street, or food or wholesale stores, or railway stations and Ministry of Food Stores, etc.	1	4	2	20	Decomposition, Contamination, etc.
Fruit		1	1	1	23	
Mutton (tinned)		0	7	2	0	
Milk (tinned)		1	3	0	13	
Beef (tinned)		2	19	0	21	
Fruit (tinned)		0	5	1	24	
Eggs (dried)		0	0	1	1	
Cheese		0	0	1	20	
Meat		0	8	1	9	
Fish (tinned)		0	10	2	6	
Tongue (tinned)		0	1	0	27	
Jam		0	5	2	9	
Vegetables		0	5	1	7	
Dried Fruit		0	15	3	0	
Sugar		0	0	1	17	
Luncheon Meat, etc. (tinned)		0	10	0	1	
Soup (tinned)		0	6	0	27	
Spaghetti (tinned)		0	0	1	21	
Pickles, etc.		0	1	3	8	
Cereals		0	1	1	15	
Fish		1	14	0	20	
Tea		0	0	0	25	
Dried Milk		0	0	0	16	
Sausages		0	0	0	7	
Macaroni (tinned)		0	0	1	12	
Miscellaneous		1	5	3	9	

On 468 occasions this Department was asked to inspect articles and stocks of food regarding which the holders were suspicious. The above table shows the weight and variety of the foodstuffs considered unfit for human consumption and destroyed at the instance of this office. In this connection 2,034 certificates of destruction were duly issued.

Foodstuffs amounting to 10 cwts. 2 qrs. 5 lbs. composed of tea, butter and margarine considered unfit for sale were returned to wholesalers, and miscellaneous food totalling 9 cwts. 1 qr. 12 lbs. was transferred to the Food Salvage Officer of the Ministry of Food, neither of which amounts are embraced in the above table.

1933 inspections were made to provision shops and premises where preparation and storage of foodstuffs were carried on by way of business.

These inspections, in conjunction with sampling under the Food and Drugs (Adulteration) Act, 1928, do much to ensure a clean food supply for the population, and comprise an appreciable portion of the Departmental duties.

Any evidence of slackness on the part of shopkeepers, etc., is immediately brought to their notice and remedial measures prescribed.

What was perhaps a most unusual complaint concerned a bottle of tonic wine containing the bodies of many flies. Local enquiry at the retailer and wholesaler could elicit no explanation for their presence. The subject was reported to the Public Health Authority of the area where the wine was bottled, and the premises and methods of bottling being satisfactory it could only be surmised that a secondary fermentation had taken place after the bottle left their premises blowing the cork. Flies would naturally be attracted by the smell of the wine and upon the cork being replaced " inebriated " flies were imprisoned in the bottle.

Labelling of Food Order (No. 2), 1944.

The main function of this Order appears to be a determination to counteract the erroneous impression created by the spurious claims emblazoned on labels and advertisements by unscrupulous manufacturers, etc., claiming exceptional nutrimental properties for their products — some of which to say the least were inferior and totally lacking the virtue they were credited with. It also aims at a correct specification of the vitamin content of foods, etc., this too being a much-needed piece of legislation as the vague statement claiming vitamin content is insufficient unless the unitage is precisely stated and determined by proper methods.

So far no infringement of the Order has been detected. During sampling operations a close scrutiny is given each package to ascertain if there is any violation of legal requirements.

The Public Health (Meat) Regulations (Scotland), 1932—Art. 15.

Three certificates granted in terms of the above Regulations approving storage accommodation for meat, etc., sold from off vans were in force at the close of the year.

FOODSTUFFS ARRIVING AT THE PORT OF DUNDEE, EITHER DIRECTLY FROM ABROAD OR BY COASTWISE TRAFFIC.

The following two tables show the kind and quantity of foods arriving by waterway at the Port during the year.

The total is 11,060 tons 12 cwts. 0 qrs., as against 35,446 tons 15 cwts. 1 qr. last year, and 59,423 tons 4 cwts. 3 qrs. in 1944.

TABLE No. I.

Shows the foodstuffs arriving coastwise at the Port by steamers plying between Dundee and the Ports of London, Hull, Liverpool, Aberdeen, Newcastle, Belfast, Southampton, Leith, etc.

	Tons.	Cwts.	Qrs.
Baking Soda, Cream of Tartar, etc. ...	11	13	2
Biscuits, ...	1	7	1
Butter, ...	0	12	0
Cocoa, ...	25	5	2
Coffee, ...	5	2	0
Confectionery, ...	4	12	2
Custard Powder, ...	7	6	3
Egg (Powdered), ...	1	12	0
Fish (Tinned), ...	0	5	0
Flour, ...	103	13	0
Fruit Syrup, ...	7	6	2
Fruit (Dried), ...	1	11	0
Fruit (Pulp), ...	40	17	3
Fruit (Tinned), ...	7	7	2
Glucose, ...	345	1	1
Meat Extract, ...	100	7	0
Meat (Tinned), ...	24	9	1
Milk (Dried), ...	6	10	0
Macaroni, ...	1	3	2
Nuts, ...	9	9	1
Oatmeal, ...	22	7	1
Patent Foods, ...	14	11	1
Peas, Beans, etc., ...	102	19	0
Sugar, ...	242	15	2
Pickles, etc., ...	12	12	0
Soups, etc. (Tinned), ...	1,348	6	2
Semolina, ...	24	1	0
Sausage Meat, ...	7	10	0
Syrup, ...	9	10	1
Tea, ...	168	6	1
Treacle, ...	262	0	2
	2,920	12	0

TABLE II.

Shows the amount and kinds of foods arriving direct from abroad.

Sugar, ...	8,000	0	0
Tea, ...	140	0	0
	8,140	0	0

Fish Inspection at the Fish Market, Carolina Port.

No intervention was necessary by this Department throughout the year relative to fish landed at the Fish Dock, nor did the premises themselves call for any special attention.

Public Slaughter-House, Meat and Cattle Market.

The undernoted table (kindly supplied by the Superintendent of Markets and Slaughter-Houses) gives the number of animals slaughtered and particulars of meat found to be unfit for human consumption.

Class of Animal.	Slaughtered.	Number of Animals. Wholly Condemned.	Partially Condemned.	Weight (in lbs.) of condemned Meat.
Cattle, ...	12,004	221	4,063	160,782
Sheep, ...	60,748	106	2,842	6,202
Pigs, ...	493	10	81	2,173

Note.—Calves are included as Cattle.

The premises on the whole have been maintained in a satisfactory condition of cleanliness and no nuisance arose thereanent to which attention had to be directed.

THERE IS NO PRIVATE SLAUGHTER-HOUSE WITHIN THE CITY.

The Public Health (Preservatives, etc., in Food) Regulations (Scotland), 1925 to 1927.

Mince.—11 samples, all Official, were purchased for the purpose of analysis. Of these, 2 were reported by the Analyst to contain preservative during the prohibited period. Both cases were reported for prosecution, and fines of £2 and £4 respectively were imposed on the sellers.

Sausages.—11 samples, all Official, were forwarded to the Analyst, one of which was returned as containing an excess of preservative. This contravention was reported to the Crown Procurator Fiscal and the seller fined £4.

Food and Drugs (Adulteration) Act, 1928.

Undernoted I give a statement of the number of samples purchased under these Acts during the last five years:—

	Purchased.	Genuine.	Adulterated.
1942, ...	608	595	13
1943, ...	614	593	21
1944, ...	602	583	19
1945, ...	623	611	12
1946, ...	625	604	21

Synopsis of the Samples Purchased this Year:—

I.—Samples taken in the ordinary course, with a view of following up by prosecution, if necessary, should adulteration be discovered.

	Purchased.	Certified to be Genuine.	Adulterated.
Sweet Milk, ...	198	186	12
Margarine, ...	12	12	—
Coffee, ...	5	5	—
Soya Flour, ...	1	1	—
Dried Fruit, ...	1	1	—
Lard and Cooking Fat, ...	7	7	—
Sausages, ...	11	10	1
Semolina, ...	4	4	—
Ground Cinnamon, ...	3	3	—
Mince, ...	11	9	2
Pepper, ...	3	3	—
Cream of Tartar, ...	5	5	—
Ground Ginger, ...	4	4	—
Macaroni, ...	1	1	—
Barley, ...	5	5	—
Butter, ...	12	12	—
Pudding Mixture, ...	1	1	—
Baking Powder, ...	2	2	—
Baking Soda, ...	4	4	—
Coffee with Chicory, ...	1	1	—
Mixed Spice, ...	1	1	—
Total, ...	292	277	15

II.—The following samples were taken in terms of Section 8 of the 1928 Act:—

	Taken.	Genuine.	Adulterated.
Sweet or Fresh Butter, ...	1	1	0

III.—The undernoted "test" samples were purchased or taken:—

	Purchased or Taken.	Certified to be Genuine.	Adulterated.
Sweet Milk, ...	29	27	2
Baking Powder, ...	4	4	—
Soya Flour, ...	2	2	—
Egg Substitute, ...	1	1	—
Margarine, ...	3	3	—
Coffee and Coffee Essence,	11	11	—
Dried Milk, ...	2	1	1*
Ground Cinnamon, ...	10	10	—
Gelatine Powder, ...	5	5	—
Chopped Ham, ...	1	—	1*
Pepper, ...	3	3	—
Fish Dressing, etc., ...	2	2	—
Pot Barley, ...	8	8	—
Cream of Tartar, ...	5	5	—
Ground Ginger, ...	10	10	—
Baking Soda, ...	10	10	—
Meat and Fish Pastes, etc.	32	32	—
Flour, ...	8	8	—
Oatmeal, ...	6	6	—
Butter (Salt and Fresh), ...	3	3	—
Lard, etc., ...	4	4	—
Sponge Mixture, ...	3	3	—
Sugar, ...	1	1	—
Spaghetti, ...	1	1	—
Pudding Mixtures, ...	13	13	—
Tinned Vegetables, etc., ...	7	7	—
Vinegar, ...	7	7	—
Sandwiches, ...	2	2	—
Green Peas (Dried), ...	2	2	—
Cocoa, ...	4	4	—
Mustard, ...	8	8	—
Jams, etc., ...	8	8	—
Flavouring Essences, etc. ...	5	5	—
Semolina, ...	15	15	—
Sauce, Pickles, etc., ...	11	11	—
Oils, Medicinal, ...	10	10	—
Ginger Wine, ...	1	1	—
Lemonade, ...	1	—	1*
Macaroni, ...	4	4	—
Spices (Various), etc., ...	9	9	—
Soups (Tinned, etc.), ...	8	8	—
Saccharin, ...	1	1	—
Medicinal Salts, etc., ...	10	10	—
Tinned Macaroni and Cheese,	2	1	1*
Tinned Sardines, Salmon, Sild, etc., ...	14	14	—

	Purchased or Taken.	Certified to be Genuine.	Adulterated.
Ice Cream, ...	26	26	—
Total, ...	332	326	6
Add Table I.	292	277	15
Add Table II.	1	1	—
Total, ...	625	604	21

With a population of 169,197, this works out to 3.69 samples for every 1,000 persons.

The average milk fat of the official samples taken each month was as follows:—

	No. of Samples Purchased.	Average Fat.
January, ...	16	3.76
February, ...	19	3.36
March, ...	16	3.47
April, ...	17	3.33
May, ...	16	3.40
June, ...	16	3.63
July, ...	18	3.34
August, ...	16	4.00
September, ...	16	4.09
October, ...	16	3.98
November, ...	16	3.77
December, ...	16	3.67
	198	3.65

The lowest milk fat recorded this year in **official samples** was 2.04 per cent. and the highest 6.84 per cent. The number of samples with milk fat below 3 per cent. was 9, and the number of samples with milk fat of 4 per cent. and over was 34.

Test samples of milk as supplied to King's Cross Hospital, were submitted on 23 occasions, and the results as declared by the City Analyst showed an average of 4.46 per cent. of fat.

The highest fat content was 7.12 per cent. and the lowest 3.31 per cent.

The number of samples returned by the Analyst as adulterated or not up to requisite standard amounted to 21.

Details concerning the samples of Mince and Sausages included in Table I. as being adulterated are dealt with under the heading "The Public Health (Preservatives, etc., in Food) Regulations (Scotland), 1925 to 1927."

Out of a toal of 227 samples of Sweet Milk, 14 were adversely reported upon, i.e.,

2 were deficient in both Fat and Non-Fatty Solids;
9 were deficient in Fat alone; and
3 were deficient in Non-Fatty Solids only.

Four of the samples were subjected to the Hortvet Test and the depression of freezing point in each case negatived the addition of water. The producers were informed of the deficiency and warned to mix the milk thoroughly in future.

One sample, low in fat content, was followed by sampling on delivery, and the same state of affairs again being manifest, a prosecution was instituted and a fine of £2 imposed.

In the instance of another fat shortage, the cowkeeper, on being informed, expressed his suspicion of the quality of milk from certain of his herd. He asked our attendance when sampling of the product of each cow was undertaken. The individual samples were submitted to the Public Analyst, who reported adversely on the product of certain of the herd. A new arrangement for the proper mixing of the milk was undertaken on our recommendation, since when subsequent sampling showed the milk as a whole to conform to required standards.

Another sample, low in fat content, merited for the seller a warning. This action was taken after the County Authorities, on advice from us, had procured a sample from the supplier of our local salesmen which was reported by their Analyst as being deficient. At the request of a local dairy, 3 test samples of milk were taken on delivery at their premises, two of which were below the necessary standard in fat. Two official samples were taken under similar circumstances, and 1 of these being deficient, the matter was reported for prosecution, but rejected by the Procurator Fiscal on the grounds that there was no valid contract in existence between the producer and the Milk Marketing Board indicating the true point of delivery, the milk being transported from producer to seller by means of a common carrier.

The remaining three cases formed the subjects of prosecutions and fines of £2, £3 and £5 respectively were imposed.

Test Samples.—Apart from the 2 cases of milk adulteration dealt with above, as they were in reality " pathfinders " to Official sampling, there were 4 test samples reported on adversely and are identified by an asterisk in Table III. These samples were not submitted in the ordinary sense for analysis as to purity, etc., but were examined solely on account of their suspicious appearance.

Dried Milk returned as having undergone fermentation changes and consequently unfit for human consumption.

Chopped Ham revealed indication of incipient decomposition.

Lemonade, obnoxious odour and taste due to generation of sulphurated hydrogen. This condition was traced to the action of the lemonade on the stopper, which contained sulphur or sulphide impurities, a finding which was substantiated by the generation of the aforesaid Gas by the action of Citric Acid on the ground stopper. The lemonade was deleterious to health. This was the first case of this nature occurring in the City, though such have been met with elsewhere. The question of the stopper was taken up with the makers of the lemonade, who examined all stoppers and rejected anything suspicious. They also took up the matter with the S.D.I., who received assurance from the manufacturers that all stoppers would be tested before leaving the factory.

Tinned Macaroni and Cheese.—When the container was opened there was an obnoxious odour and visual signs of gas evolution with apparent action on the tin which rendered the contents unfit for use.

While on the subject of Foodstuffs, mention might be made of a sample of Beef and Tomato Paste returned by the analyst as being composed mainly of fish. This was reported to the Divisional Food Officer, who made enquiries and informed us the contents of the jar conformed to proper requirements of fish paste, and that the attention of the makers had been directed to the incident so as to avoid any future mislabelling.

Ice-Cream.—Twenty-six samples of this commodity were submitted for analysis, and the fat content ranged from 0.21% to

10.22%, with an average of 2.88%. Five of the samples had under 1% Fat and only 4 possessed an excess of 4%. Only on one occasion was dried egg returned as a constituent of the samples submitted, and the makers of this particular brand (also high in fat) were licensed by the Ministry of Food in terms of the Dried Egg (Control of Use) Order, 1945.

The paucity of the Fat Content of the foregoing samples, owing an average of 2.88% solely to 4 samples containing a combined fat content of 35.96%, emphasises the need for a definite standard. At the moment it is acknowledged that the ingredients are not available, but it is hoped that at a not too distant future sufficient and suitable ingredients will be obtainable, and when that time comes there should be a strict fat content prescribed.

A welcome should be extended to the proposed regulations for heat treatment in the preparation of ice-cream. The enforcing of such will do much to assist us in our fight for a clean and pure article.

If we can look forward to ice-cream being a product containing a definite fat content and capable of passing a prescribed bacteriological examination, coupled with adequate penalties for those makers whose product falls short of either requirement, then it will be felt that something has been accomplished.

Butter and Margarine.

At the end of the year there were 33 Wholesale Dealers in **Margarine** on the Register and four factories, where, by way of trade, **Butter** is **Re-worked.** These were duly inspected and found to be satisfactory.

1 Official sample of Reworked Butter was obtained and returned by the Analyst as genuine.

Milk for Bacteriological Examination.

Samples were purchased or taken for bacteriological examination as follows:—

Sweet Milk,	.....	177
,, (Pasteurised),	.....	71
,, (T.T.),	.....	32
,, (Certified),	.....	40
,, (Sterilised),	.....	21
,, (Standard),	.....	61
		402

These were submitted to Prof. W. J. Tulloch at the University College, the duly appointed Bacteriologist.

The results of the examinations will be found fully dealt with by the Medical Officer of Health in his Report for the year.

Rag Flock Acts, 1911 — 1928.

Four samples of Rag Flock, obtained in the premises of upholsterers, etc., were submitted for examination, and the analyst reported them as containing 6.25, 16, 24 and 80 parts chlorine per 100,000 parts of Rag Flock respectively.

The first three samples conformed to the requirements, but the last sample contained an excess of 50 parts chlorine over the statutory allowance of 30. The makers and users alike were served with a warning against future contravention.

Mr Andrew Dargie, B.Sc., F.R.I.C., Public Analyst, kindly supplies the following interesting figures and particulars:—

" The average quality of the Milk Supply for the year was as follows:—

Water, ...		87.52
Total Solids, ...		12.48
Fat, ...	3.71	
Non-Fatty Solids, ...	8.77	
		100.00

The distributive frequencies of Butter Fat and Non-Fatty Solids are as follows:—

Butter Fat Per Cent.	Frequencies.	Non-Fatty Solids Per Cent.	Fequencies.
Below 2.59	5	Below 7.90	3
2.60—2.79	5	7.90—8.09	2
2.80—2.99	1	8.10—8.29	—
3.00—3.19	25	8.30—8.49	—
3.20—3.39	38	8.50—8.69	71
3.40—3.59	41	8.70—8.89	87
3.60—3.79	34	8.90—9.09	49
3.80—3.99	28	9.10—9.29	14
4.00—4.19	16	9.30 and over	1
4.20—4.39	10		227
4.40—4.59	4		
4.60—4.79	7		
4.80—4.99	4		
5.00 and over	9		
	227		

Fourteen samples were deficient in Milk Fat or Non-Fatty Solids or in both constituents, but four, although deficient in Non-Fatty Solids, had a normal Depression of Freezing Point indicating absence of extraneous water. The results of the deficient samples are shown below:—

	Butter Fat Per Cent.	Non-Fatty Solids Per Cent.	Depression of Freezing Point.	Deficient in Milk Fat.
Official	2.04	8.77		0.96%
	2.56	8.59		0.44%
	2.35	8.71		0.65%
	2.73	8.53		0.27%
	2.71	8.73		0.29%
	2.69	8.84		0.31%
Test	2.29	8.69		0.71%
	2.72	8.58		0.28%
Delivery	2.13	8.83		0.87%
Official	3.14	7.93	—.478°C=9.8% added water.	
	6.29	7.97	—.538°C. Genuine.	
	3.45	7.92	—.540°C. Genuine.	
	2.75	7.65	—.538°C.	Single cow's milk—
	2.80	7.64	—.545°C.	connected with sample immediately above.

Mince (11), Sausages (11).—Eight samples of Mince were free from Preservatives, 2 contained 80 parts sulphur dioxide per million parts sample in the prohibited period, and one contained 192 p.p.m. SO_2. Two of the Sausages were free from SO_2 and one contained 848 parts per million, being an excess of 398 parts per million. The amounts in the others were 48, 48, 80, 96, 112, 120, 140 and 160 respectively.

Butter (16), Margarine (15).—All these samples were genuine and conformed to the Preservatives, etc., in Food Regulations. The water content in the Butters varied from 12.81 per cent. to 15.11 per cent., and in the Margarines from 14.64 to 15.65 per cent.

Black Pepper (6), Cinnamon (13), Ginger (14), Mustard (7), French Mustard (1).—The maximum and minmum ash or mineral matter in these spices were as follows:—

Black Pepper, ... 4.74 to 5.04 per cent.
Cinnamon, ... 4.02 to 5.35 per cent.
Ginger ..... 3.25 to 5.55 per cent.

The Mustards contained from 27.57 to 34.14 per cent. of Mustard Oil and the Allyl Isothiocyanate only varied from 0.35 to 0.39 per cent.

Meat and Fish Pastes (32).—The total meat contents varied from 52.15 to 71.17 per cent., and one sample of Fish Cakes contained 39.64 per cent. of total meat. One sample of Beef and Tomato Paste was found to be mainly composed of Fish Paste and did not conform to the description on label.

Ice-Cream (26).—The full analyses of these Ice-Creams have already been submitted, and I therefore propose to summarise the results showing the maximum and minimum and averages of the various ingredients and the energy values in calories per 100 grams.

	Maximum.	Minimum.	Average.
Fat, ...	10.22	0.21	2.88
Proteins, ...	5.42	1.87	3.20
Lactose, ...	8.03	2.55	4.48
Cane Sugar, ...	14.50	3.44	8.71
Starch, etc., ...	9.33	1.32	3.85
Ash, ...	1.18	0.22	0.66
Phosphoric Acid (P_2O_5),	0.350	0.070	0.205
Energy Value, ...	192	69	106

The distribution frequencies of the Fat Content in the Ice-Creams were:—

Below 1.00%	5
1.00 — 2.00%	7
2.00 — 3.00%	9
3.00 — 4.00%	1
8.00 — 9.00%	2
9.00 — 10.00%	1
Over 10.00%	1
	26

Tinned Foods.—Metallic contamination of these foods was negligible in every case. The proportions of Tin, expressed in grains per pound, were as follows:—

Sardines (6), 0.07, 0.09, 0.12, 0.13, 0.20 and 0.25.
Pilchards (3), 0.06, 0.16, 0.26.
Brisling (2), 0.08, 0.14.
Salmon (2), 0.04, 0.06.
Sild (1), 0.16.
Pate de Foie (2), 0.04, 0.08.
Beans (3), 0.10, 0.10, 0.11.
Meat and Vegetables (2), 0.09, 0.26.
Soups (5), 0.05, 0.20, 0.14, 0.14, 0.10.
Vegetables with Beans, 0.10.

Household Dried Skimmed Milk Powder (2).—One sample had undergone fermentative changes and developed an acidity which prevented emulsification with water. It was unfit for human consumption. The other was genuine.

Chopped Ham.—This article was unfit for human consumption.

Lemonade.—Bad odour and taste due to presence of sulphuretted hydrogen produced by the action of the Lemonade on the stopper. This sample was unfit for use.

Miscellaneous Samples.—The samples of Cream of Tartar and Baking Soda were of almost 100 per cent. purity, the available CO_2 in Baking Powders ranged from 9.67 to 11.68 per cent.

Semolina.—This was examined for poisonous substances, but the result was negative, and a Cooking Fat was also examined for deleterious substances but it was sound and wholesome.

Macaroni and Cheese.—One sample was adversely reported on, but a subsequent batch of eight tins (one sample) was passed as sound, the content of Tin varying from 0.29 to 0.87 grains per pound.

All the other articles not specifically mentioned were of normal composition and satisfied the various limits and standards.

Rag Flock.—Four samples were examined and found to contain 6.25, 16.0, 24.0 and 80 parts of Chlorine per 100,000 parts of Rag Flock respectively. The last sample contained an excess of Chlorine and was adversely reported on.

Fertilisers and Feeding Stuffs Act.

A summary of the results is as follows:—

2 National Cattle Food.—Conformed to Statutory Rules and Orders.

1 National Cattle Food Meal.—Conformed in Oil and Proteins; an excess of Fibre of 4.36 per cent.

2 Dried Grains.—Conformed.

1 Compound Meal.—Conformed in Oil, excess of Protein and Fibre.

Sangral.—Conformed in Nitrogen, deficient in Potash 3.98 per cent. below guarantee.

Fertiliser P.P. Plus.—Conformed in Nitrogen and K_2O. Excess 1.37 per cent. Sol. Phos.

Tomato Fertiliser.—Conformed in Nitrogen and K_2O; excess 0.70 per cent. Sol. Phos., excess 1.15 per cent. Insol. Phos.

Tomarite.—Excess 0.99 per cent. Nitrogen, 1.69 per cent. Insol. Phos., 1.43 per cent. K_2O, deficiency 1.41 per cent. Sol. Phos.

Grow More Fertiliser.—Excess 1.08 per cent. Nitrogen, 1.36 per cent. Phos., 0.99 per cent K_2O.

Bone Meal.—Conformed."

Fertilisers and Feeding Stuffs Act, 1926.

Six samples each of Feeding Stuffs and Fertilisers were obtained during the year, full particulars of which are detailed by the City Analyst in the data supplied by him and included in this Report.

In the case of a Compound Meal showing an excess of 4.36% of Crude Fibre over the maximum, the matter was referred to the appropriate section of the Ministry of Food for investigation. They sent an advisory letter to the makers.

Another sample of the same material showed an excess of albuminoids to the extent of 1.31% and Crude Fibre 2.30% above the permitted quantity. This also was the subject of a report to the Ministry of Food.

A sample of Tomato Fertiliser did not conform to the guarantee as given with the article at time of sale. This was intimated to the merchant who contacted the manufacturers. They averred that the article on face value appeared to be superior to that guaranteed and ventured to suggest that it was possible that soluble phosphates might revert to insoluble phosphates. Our analyst agreed with those statements.

No formal samples were obtained nor was any request received for sampling operations to be undertaken in terms of Section 3 of the Act.

Pharmacy and Poisons Act, 1933, etc.

All premises where Part II. poisons are on sale were kept under observation, and the arrangements made for the storage of same were found to be satisfactory. In shops carrying mixed stocks the owners were instructed to segregate their poisonous wares so that in cases of accident (i.e., breakages) no foodstuffs would be contaminated also risk of mistakes would be eliminated.

It was observed that a few small shopkeeners were exhibiting a disinfectant among their stock, but had failed to take out the necessary registration. When informed that such was necessary they decided to cease the sale of the article concerned. No intent to evade statutory requirements is imputed as they bought the goods in all innocence from travellers, and if any blame is attachable for the omission it should be laid at the feet of the importunate salesmen.

At the end of the year there were 141 listed sellers entitled to trade under the above Act. 330 visits were made to such premises during 1946.

Shops Acts, 1912/38.

There are 3,133 shops, wholesale shops and warehouses within the City, and to these 3,679 visits of inspection were made throughout 1946. Empty shops number 100.

Contraventions numbering 193, more or less technical trivialities, were discovered, and it was felt that admonitory advice was sufficient to ensure future compliance with the Acts. Offenders were given to understand, however, that failure to listen to warnings would inevitably lead to sterner measures.

Street patrol was undertaken regularly, 382 hours being thus expended. Indicative of the return to normal conditions through assistants being more readily obtained, there is a gradual trend to abolish the closing of shops for luncheon intervals.

The earlier closing hours of shops enables shopkeepers to meet the statutory requirements for their younger employees, and no intimation of this class of person being employed longer hours than those permitted was received.

Winter hours of closing as prescribed for in Defence Regulation 60AB, were put into force for the period laid down in the Home Department Circular, and after consideration the Local Authority decided that the hour of closing would be 6 p.m. on other days and 7.30 p.m. on Saturday, with the exception of hairdressers whose hours were fixed at 7.30 p.m. on Saturdays and 7 p.m. for other days.

Early in the year the Home Secretary and Secretary of State for Scotland set up a Committee of Enquiry to deal with the Closing Hours of Shops and conditions in places not regulated by the Factories or Mines and the Quarries Acts; also the Hours of Employment of Young Persons.

Reports have been submitted in this connection and various meetings convened and we now await the finding of the Committee. It is hoped that legislation acceptable to shopkeepers and public alike will be evolved and that statutory measures applicable to premises and workers presently unprotected by legal requirements will come into being and thereby remove hardships to certain classes.

Places for Public Refreshment.—On receipt of application for registration these premises are duly inspected to ascertain if they are in all respects suitable for the trade. If not, registration is refused or withheld until our requirements are met.

There were 206 such places on the register, and all were in receipt of regular inspection.

Ice-Cream Shops.—At the close of the year the register showed 246 persons and 312 premises registered in terms of Section 35 of the Dundee Corporation Order, 1935.

A survey of these premises, together with full details of manufacture, etc., is contemplated in view of proposed new legislation governing this trade. Arrangements to undertake this work in 1947 have been completed.

Theatres, Cinemas and Dance Halls.

This Department's main concern with the above premises is directed to sanitary accommodation, ventilation and cleanliness and the granting or refusal of licences, so far as we are concerned, hinges on those essentials.

Inspections revealed that those responsible for the management of such resorts were alive to their responsibility and willingly carried out any suggestions for the betterment of their establishment suggested by this Department. Inspections numbered 106. Apart from the above recognised places of amusement, small buildings such as church halls where operettas, etc., are produced are also subject to approval before permission for use is sanctioned.

A scheme of alteration, including the provision of additional sanitary accommodation is in progress at one of our theatres.

PORT INSPECTION — 1946.

The volume of foreign-going vessels arriving at this Port throughout the year showed a considerable increase in numbers and tonnage, and in the case of coasting ships, a slight decrease:—

Volume of Shipping Entering the Port in 1946.

		Number.	Tonnage.
(1)	Foreign, ...	123	211,894
(2)	Coastwise, ...	428	144,150
		551	356,044

Vermin Infestation.

In no case did inspection disclose traces of fleas or lice, and only on one vessel was action taken regarding the presence of bugs. One ship was cleared of cockroaches by fumigation while the ship was undergoing deratization by H.C.N.

Deratization.

Details of Deratization are given in tabulated form at the end of this report.

The Parrots (Prohibition of Import) Regulations (Scotland), 1930.

There was no occasion demanding action under the above Regulations.

During the year the work at the Harbour was carried out on normal lines. Nothing of an unusual nature falls to be reported.

Total number of verbal intimations, ...			123
Total number of rat notices issued, ...			Nil
Number of visits to ships, ...			195
Number of ships from infected Ports (direct), ...	11		
Number of ships from infected Ports (indirect), ...	36		
Number of ships from free Ports (direct), ...	63		
Number of ships from free Ports (indirect), ...	13		
Total number of ships from Foreign Ports, ...			123
Nuisances and defects attended to, ...			88
Forecastles cleaned, ...			18
Messrooms cleaned, ...			12
Galleys and storerooms cleaned, ...			15
Choked or defective water closets, ...			19
Dirty Water Closets, ...			10
Discharge of foul water on quay, ...			8
Leaking forecastles, ...			6

In addition the following work was carried out while the vessels were in Port:—

Freshwater tanks cleaned out, ...	18
Forecastles washed or painted, ...	14
Bathrooms or wash places painted, ...	8
Crews messrooms washed or painted, ...	16
Water closets painted, ...	8

"A"

Number of vessels subjected to measures of rat destruction,	6
On Ships —Number of dead rats recovered	129
Number of rats examined bacteriologically, ...	Nil
On Shore —Number of rats destroyed (other than on ships),	369
Number of rats examined bacteriologically, ...	Nil

Species of rats recovered—On ships, 119 Black; 10 Brown.
On shore, 149 Black; 220 Brown.

"B"

Number of vessels fumigated by S.O.2, ...	Nil
Number of vessels fumigated by H.C.N., ...	4
Number of dead rats recovered, ...	109
Number of vessels in which poisoning, etc., was employed,	2
Number of dead rats recovered, ...	20
Deratization Certificates issued, ...	4
Deratization Exemption Certificates issued, ...	17

Two of H.M. Submarines were fumigated at this Port during the year.

Section 164 of the Burgh Police (Scotland) Act, 1892.

PROVISION AND RENEWAL OF RAIN WATER SPOUTS AND DOWNPIPES.

Under the above Section the following work was executed, viz.:—

	Lineal Feet.
New rain water conducting channel rhones or gutter pipes used in the renewing or repairing of the same, ...	1,047
New rain water conducting or downfall pipes used in the same way at the different properties, ...	1,928

General Prosecutions.

The prosecutions for the year were as under:—

Preservatives in Food		Foods and Drugs (Adulteration) Act — Milk.
(Mince)	(Sausages)	(Milk)
2	1	4

Total — 7.

Detailed particulars of each are given under the various heads.

I am, Mesdames and Gentlemen,

Your obedient servant,

W. M. SMITH,
Chief Sanitary Inspector.