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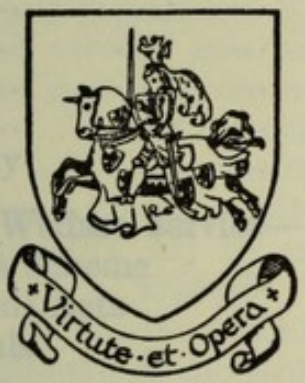

ANNUAL REPORT

ON THE

HEALTH AND SANITARY CONDITION OF THE COUNTY AND DISTRICTS

DURING

1947

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Miss BISSET.
Mrs BLACK.
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Miss PATERSON.
Miss SIME.
Miss SIMPSON.
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Miss WHITELAW.
Miss WILSON.

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FOREWORD.

Perhaps the most notable event of the year from the public health point of view, was an outbreak of infantile paralysis involving 57 persons of whom 6 died. The epidemic is fully described in the sections of this report dealing with Infectious Diseases, Hospital Services and the Orthopaedic Scheme. No effort was spared to save life and limb and there is little doubt but that the unremitting efforts of all those who were actively concerned with the patients went far to check mortality and curtail disability.

Pulmonary tuberculosis showed no sign of a return to pre-war incidence and deaths among infants were slightly increased. Both these circumstances are closely related to the grave shortcomings in the housing position and to the inadequacies of hospital accommodation. Better housing and better hospitals are urgently required in life but houses must come before hospitals.

Otherwise, the year was relatively uneventful and the general state of the public health was good. The health of the public depends to a large extent on the habits and inclinations of the individual. Every man is the custodian of his own health and responsible in some measure for the health of his neighbours. The Local Authority have placed at his disposal and that of his family a variety of means of assisting him to retain or regain health. If he fails to make use of them or of other similar facilities, he fails in his duty to himself, his family and his fellow citizens.

To the preparation of this report many members of the staff of the County Public Health Department have contributed. Their help is readily acknowledged and the opportunity is taken of recording gratitude for the ready support and encouragement afforded by the various Committees both Burghal and Landward now concerned with the working of the Public Health Department.

The Health of the County of Fife, 1947.

VITAL STATISTICS.

Population.

The population of Fife, excluding the Burghs of Dunfermline and Kirkcaldy, estimated to the middle of 1947, was 205,898, the Registrar General having allowed for an increase of 8,315.

Births.

A still further increase occurred in the number of births which reached the record figure of 4,661—2,406 males and 2,253 females. The birth rate per 1,000 of population was 22·6.

There were 146 *still-births* representing a rate of 30 per 1,000 total births (including still-births).

Illegitimate births numbered 239. Of recent years the number has been falling. The rate for 1947 was 5·1 per 1,000 live births as compared with 6·2 in 1946.

Marriages.

The number of marriages was 1,601. The rate—7·8 per 1,000 of population—remained higher than the peace-time rate for the decade 1930-39, which was 5·5 per 1,000.

Deaths.

A slight increase occurred in the number of deaths—2,609 (1,342 males and 1,267 females) in 1947 as compared with 2,528 in 1946. The rate per 1,000 of population remained relatively unchanged at 12·7.

The table on page 3 shows the causes of deaths classified according to age groups. The principal causes of death in order of frequency were, as formerly, diseases of the heart and arteries, cancer, and diseases of the respiratory system. There were 64 deaths from old age, 21 of them persons of 85 years and over.

A further increase in the mortality from *cancer* occurred. There were 364 deaths—177 males and 187 females—representing a rate of 1·77 per 1,000 of population. Mortality from the *principal epidemic diseases* continued to decline, the rate being 0·15 per 1,000 of population. Of a total of 30 deaths, 13 were due to influenza and 9 to whooping cough. There were no deaths from diphtheria. The death rate for all forms of *tuberculosis* remained unchanged at 0·53 per 1,000 of population, there having been 53 deaths among males and 56 among females. An increase, however, occurred in the number of deaths from pulmonary tuberculosis—42 males and 45 females—the rate having risen from 0·39 in 1946 to 0·42 in 1947. *Accidents* loom large as a cause of death. Road accidents and other forms of violence accounted for the lives of 74 men and 35 women and a sad feature was the fact that 21 of the deaths occurred among children under 15 years of age, 6 of them on the roads.

Infant Mortality.

During the year 236 children under one year of age died, the infant mortality rate being 51 per 1,000 live births. Of these deaths 126 occurred during the first month and 110 between the first and twelfth months. The causes of death were as follows :—

	Neo-natal.	1-12 Months.
Congenital Conditions	40	25
Prematurity	43	—
Infections and Toxaemias ...	20	70
Accidents, &c.	23	15
Total ...	126	110

About 76 per cent. of the deaths were preventible. As was indicated in the Annual Report for the War Years in which the County infant mortality for thirty years was discussed, there is no reason why this constant annual loss of life should not be substantially reduced, particularly in these days of notable advances in medical science. The County Council could play a part by hastening the removal of families from unfit and overcrowded houses and mothers could do much through cleanliness of habits and by returning to the normal healthy practice of breast feeding their infants.

Maternal Mortality.

There were 9 deaths among women in child birth, the rate being 1·9 per 1,000 live births. The average rate for the previous five years was 3·5. Four of the deaths occurred in Burghs (Burntisland, Buckhaven, Leslie, Lochgelly) and five in the landward part of the County—the respective death rates being 1·8 and 2·0.

Cause of Death. Landward Area and Small Burghs, 1947.

Cause of Death.	Both Sexes	Males	Females	-1	1-	5-	10-	15-	25-	35-	45-	55-	65-	75-	85-
Infectious and Parasitic Diseases ...	168	86	82	13	16	2	5	30	31	14	17	16	19	5	—
Cancer and Malignant Tumours ...	364	177	187	—	2	—	—	1	6	21	44	91	111	73	15
Tumours, Non-malignant or not defined	7	—	7	1	2	—	—	—	—	—	1	2	—	1	—
Acute Rheumatism	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diabetes Mellitis	35	14	21	—	—	—	1	2	2	—	—	7	14	9	—
Other General Diseases	44	17	27	1	—	1	—	—	3	4	5	13	11	4	2
Cerebral Haemorrhage: Diseases of Spinal Cord and other Diseases of Nervous System	344	164	180	8	3	1	—	3	5	8	22	52	112	108	22
Diseases of Circulatory System ...	854	415	439	—	—	—	—	1	3	19	47	130	238	312	104
Diseases of Respiratory System ...	217	130	87	37	7	1	—	3	2	11	17	28	43	56	12
Diseases of Digestive System ...	110	67	43	24	2	—	—	5	—	5	10	17	28	13	6
Diseases of Genito-Urinary System ...	96	57	39	1	—	—	—	—	3	6	12	15	33	22	4
Diseases of Pregnancy and Childbirth...	9	—	9	—	—	—	—	1	4	4	—	—	—	—	—
Diseases of Skin and Organs of Movement	9	6	3	—	—	—	—	—	1	1	2	—	4	—	1
Congenital Debility, Premature Birth, Malformations, &c.	146	83	63	139	2	—	—	—	2	—	3	—	—	—	—
Old Age	64	34	30	—	—	—	—	—	—	—	—	—	8	35	21
Suicide	13	8	5	—	—	—	—	2	—	3	2	3	2	1	—
Road Transport Accidents	16	14	2	—	3	1	2	2	2	—	4	1	1	—	—
Other Violence	93	60	33	11	1	3	—	4	8	11	12	12	14	14	3
Causes ill-defined or unknown ...	20	10	10	1	—	—	—	—	1	2	1	3	8	3	1
Total ...	2609	1342	1267	236	38	9	8	54	73	109	199	390	646	656	191

MATERNITY AND CHILD WELFARE SERVICE.

Maternity Services Scheme.

The number of births in the County which took place under the County Council's arrangements for domiciliary midwifery was 2,844. This shows a further increase on the figure (2,458) for the previous year, and amounted to 61 per cent. of the total births.

The number of women confined by doctors was 1,088 or 41 per cent., and 1,578 or 59 per cent. were confined by midwives while 178 cases were admitted to hospital and confined there.

Under the Scheme the cost of the services provided for domiciliary midwifery during the year 1947 was £11,380 3s 10d.

Midwives (Scotland) Acts.

In 1947 the number of midwives registered in the County Midwives Roll as practising midwives was 113—Dunfermline 22 Cowdenbeath and Lochgelly 22; Kirkcaldy 18; Wemyss 14 Cupar 18; St Andrews 13; and Anstruther 6. In 1946 the figure was 101.

The number of uncorrected births was 4,659 (4,374 in 194 and 3,670 in 1945). Under the Maternity Services Scheme ther were 2,670 domiciliary cases attended by midwives. There wer also 84 domiciliary cases attended by midwives under privat arrangements (and 383 by doctors). In addition midwives i Institutions attended 711 cases (whilst 765 cases in Institution were attended by doctors). The number of births not attended by midwife (or a doctor) booked under the Maternity Services Schem was 38, and by private arrangement 6. Two women had no booked a midwife.

The following figures relate to puerperal conditions.

	Total No. of Cases.	Number in Practice of Midwives. M. S. S.	Private.	In Institution
Deaths of new-born Children (within 14 days of Birth) ...	107	57	2	18
Ophthalmia Neonatorum	52	39	2	7
Puerperal Sepsis ...	5	3	—	—
Puerperal Pyrexia ...	10	8	—	—
Still Births	132	64	1	23

There was one death among the puerperal sepsis cases.

The midwives sent in the following number of forms to t Public Health Department :—

(*a*) Medical assistance 176; (*b*) Deaths (before Docto arrival) 2; (*c*) Still births 25; (*d*) Laying out of dead body

(*e*) Liability to be a source of infection 10 ; (*f*) Artificial feeding 66 ; (*g*) Failure to follow advice 0 ; (*h*) Inadequate accommodation 2.

The following were the conditions for which medical assistance was sought :—

	1947	1946
Delayed labour and uterine inertia	36	52
Abnormal labour	16	9
Torn perineum	30	31
Maternal haemorrhage—		
(*a*) Ante-partum	3	5
(*b*) Post-partum	4	5
Weakness of infant	4	3
Premature births	13	4
Stillbirths	16	14
Inflamed and discharging eyes	28	39
Adherent and retained placenta	13	8
Raised temperature of mother	3	5
Albuminuria	3	3
Precipitate labour	2	0
Miscellaneous conditions	5	6
	176	184

In the case of the still births, eleven were macerated foetuses. In most of the cases reported as inflamed or discharging eyes the condition was only " slight." The 5 miscellaneous cases were as follows :—Mothers—eclamptic fit, miscarriage, shocked patient ; baby with meningocele, and an anencephalic foetus.

Supervision of Midwives.

Dr Gumley (Cowdenbeath and West Fife) reported that in the Cowdenbeath area there were four midwives—all district nurses—and in the West of Fife there were ten midwives of whom one was not a district nurse. In all areas the work so far as he was able to gauge from periodic visitations was satisfactory and so far as he was aware no midwife was undertaking more cases than she could reasonably overtake, nor was there any midwife whose work appeared unsatisfactory.

Dr Wilson (Lochgelly-Glencraig) reported that under the Maternity Services Scheme, certain midwives rely too much on the doctors engaged to do all the necessary examinations, including urine examinations. She pointed out that the midwife ought to do urine examinations in all cases. If the doctor does not consider that it is necessary for the midwife to examine the expectant mother, then the midwife should be present when the doctor's examination is made.

There have been few complaints of attendance at confinements, but owing to the sickness of two nurses, reallocation of cases was necessary. A complaint was made by one mother that she had not been visited regularly by her midwife during the puerperium. In-

vestigation showed that this midwife had been occupied by a new confinement all that day, and that the lying-in mother had been visited in the evening of the day the complaint was made.

One midwife was warned that fuller details should be entered in the case report book, and that her ante-natal visits must be entered in her Midwives' Report Book. Several midwives complained that certain doctors send Form II. to the Public Health Office without giving them an opportunity to complete their part of the information. Post-natal care generally is adequate. The midwives are more helpful in insisting on and encouraging breast feeding.

Dr Wilson also drew attention to the fact that considering the still restricted diet, especially in the form of protein, there has been a remarkably low incidence of sepsis in parturient women, *e.g.*, puerperal sepsis and breast abscess. Ophthalmia neonatorum has also shown a low incidence.

There is a much smaller uptake of the Ministry of Food accessory foods by midwives' booked cases than by mothers attending the clinic, where the uptake is 100 per cent.

Dr Scott (Buckhaven and Methil) found very little change during the past year on the subject of the feeding of infants. The majority of the mothers in her area preferred to bottle feed their babies in spite of all the efforts of the midwives. As long as the midwife was in attendance, they breast fed but at the earliest opportunity the infants were weaned and put on the bottle. However, one midwife found an improvement during the past six months, and expressed the opinion that the outbreak of gastro-enteritis in Methilhill had frightened the mothers.

The family doctors are inclined to give in too promptly to mothers' requests to be relieved of breast feeding and stilboestrol is given too readily. It is unfortunate that the nurses are not given the support they should receive in this matter.

In the opinion of Dr Scott, overcrowding in the home and the need to consider the comfort of others, play a part in increasing the tendency to artificial feeding even among mothers who might otherwise be inclined to breast feed their infants.

Dr Somerville (Auchterderran, Burntisland, and Markinch area) in his report stated that midwives in the Cardenden area were using Argyrol in a strength below the percentage recommended by the County Authorities. They have been asked to comply with the County recommendation—using 20 per cent. of Argyrol instead of 10 per cent.

One midwife had to be instructed to write more legibly, to make fewer alterations in her record entries and in future to initial all such changes. Another midwife who used duplicate record books did not have corresponding entries in these duplicates. The

ase is under special supervision; in view of the duplication of ecords the registers will in future be numbered.

Dr Somerville draws attention to Rule D No. 8 (Disinfection f appliances). He feels that this Rule should be supplemented ith a direction that all instruments and appliances should be isinfected *after* use and again "freshly disinfected before being rought, &c."

Dr Comrie (North East Fife) reported that as in past years, the ork concerned midwives who also were district nurses. No points ad arisen during the year, except that in one case a complaint was eceived from a doctor regarding a nurse not having visited one of is patients frequently during the puerperium. It seems there as some misunderstanding, and the matter was cleared up to the atisfaction of the doctor and the nurse. No case of infringement f the Midwives' Rules came to notice during the year, but meetings ith the doctor gave the nurses an opportunity to clear up doubtful oints in connection with the working of the Maternity Services cheme. There was no case where temperature charts or other ecords were not available for inspection when required.

Midwives Acts (Claims).

The number of cases claiming under the Midwives Acts, 1915 nd 1927, was 111, and the total amount paid was £373 12s 7d.

Maternity Hospitals.

During the year 1947 the total number of women and infants dmitted to the various hospitals for maternity cases was 1092 073 women and 19 infants). There were 1022 women who paid ie recognised fees, while 7 were considered to be necessitous and vo partly necessitous. The number of cases referred to the appropriate department for collection of outstanding fees was 61. he number of cases admitted to hospital in 1946 was 1176.

The following table gives the number of cases admitted to the arious maternity hospitals :—

	Total.	Women.	Infants.
unfermline Maternity Hospital	619	608	11
orth Park, Kirkcaldy	345	337	8
eikleour, Perth	114	114	—
oyal Infirmary, Edinburgh	5	5	—
unfermline Home and Hospital	9	9	—
	1092	1073	19

A transfer of 17 cases took place from Meikleour to Perth oyal Infirmary, while 7 cases admitted to Perth Royal Infirmary ere transferred to Meikleour Hospital. Nine patients admitted Meikleour Hospital were not confined there.

Premature Infants.

On eight occasions during 1947, premature infant outfits were issued from the Public Health Department.

On 4th March the Ailing Babies Ward at the Child Welfare Centre, St Andrews, was reopened for the admission of infants requiring care and attention. The accommodation had been extended and the number of cots increased from five to ten. One ward containing 4 cots was set aside for the reception of premature babies. The other ward containing six cots received babies suffering from feeding and other difficulties. In the course of the year, several healthy babies were admitted from homes where domestic arrangements had been upset by such causes as the death or sudden illness of the mother. These babies were cared for until other arrangements could be made. Several babies were admitted for care and general comfort after neglect on the part of their parents. Three nursing mothers were admitted along with their babies. This arrangement was made to allow a breast-fed baby to continue its feeding or to permit of the establishment of breast feeding in the interest of the baby. Much more work on this line could be done, but the accommodation available does not favour the admission of mothers.

The total number of babies admitted to the Centre for the eight months under review was 38—8 premature babies, 3 nursing mothers and 26 babies for care and attention on account of domestic difficulties.

Health Visitors—Home Visitations.

Home visitations on or after the fourteenth day after the birth of all infants notified to the central office were made by 23 health visitors and 4 district nurses, acting as health visitors.

The total number of homes to which a " first " visit was made was 4,602 (this included 56 in which there were multiple births). The condition of the homes received special attention and according to the health visitors' reports there were 4,260 (or 92·5 per cent.) which were considered clean. There were 282 where the condition was stated to be indifferent, and 60 homes (or 1·3 per cent.) which were dirty. The areas in which the percentage of clean homes was 95 per cent. or more were Anstruther, Kirkcaldy, and Cupar. The percentage for the Dunfermline area was below 90. One of the nurses in her report states that at the first visit " homes are generally clean and tidy, there being extra help in the house. Another health visitor points out that a certain type of mother becomes careless and indifferent about the condition of the home as the family increases. " It is not always bad mothering but rather a state of indifference." Then there are the few who are incapable of good housekeeping or wise spending of money. " They are always in a muddle." In quite a number of the homes, " it is the house that is untidy although the clothing and person of the mother

nd baby are fairly clean and well attended to." This often occurs here more than one family is living in the house. Regarding nothers who have been removed to new houses the nurses report hat there is usually a great improvement in the condition of the omes. This applies particularly to the younger mothers. One urse in pointing out that the condition of the homes in her area ad not improved despite increased wages states " It seems difficult o obtain household furniture, curtains and linen because of the riority docket system. There is also the greatly increased cost of he various articles."

The number of mothers who were breast-feeding their babies hen the health visitors paid their first visits, was 2,623 or 58·5 er cent. of the total ; 1,715 had the infant on the bottle, and in 140 or 3·1 per cent.) cases the mothers were giving mixed feeding. The ercentage figure for breast feeding last year was 63·7, a low per-entage compared with previous years. The new percentage figure 58·5) shows that the number of mothers resorting to bottle feeding oon after the birth of the baby, is still on the increase.

The figures for breast feeding in the different areas of the ounty are :—

Anstruther 121 (51·4 per cent.) ; St Andrews 213 (51·8 per ent.) ; Cupar 296 (59·5 per cent.) ; Wemyss 513 (55·7 per cent.) ; Kirkcaldy 354 (74 per cent.) ; Cowdenbeath and Lochgelly 788 52·4 per cent.) ; and Dunfermline 338 (52·3 per cent.).

According to the nurses there are various reasons for the ncreased bottle-feeding of young infants : (*a*) Debility and under ourishment in the mothers ; (*b*) refusal to breast-feed following istory of difficulty with previous baby or history of breast abscess ; c) lack of privacy—living in sub-lets or with relatives—" In many ases Granny has long forgotten that her children cried and at the east sign of fretfulness the baby is put on the bottle." (*d*) disin-lination to be tied down by the necessity of feeding the baby. A urther difficulty usually arises when the child will not or cannot ix to the breast ; after a few days the mother gets worried about the hild not getting a proper feed, and as he does not sleep at night she oses courage and demands bottle feeding. More education on this ubject by doctors and nurses would raise the percentage of breast-eeding mothers. The necessity of queueing and lack of local hopping facilities in some places tend to influence the mother in er choice ; then there are mothers who are temperamentally nfit to breast feed, " They feel the responsibility of the baby, the ouse and the shopping too much for them " ; attendance at icture houses is considered by some nurses as tending indirectly o induce bottle-feeding, and one nurse points to the substitution of igarette smoking for the drinking of milk as definitely adversely ffecting the amount of milk a mother can produce ; (*e*) the well dvertised milk foods play a part—National Dried Milk is cheap

and easily obtained. One of the health visitors points to th tendency for babies on N. D. milk " to be grossly overweight, to th delight of the mothers."

The Health Visitors again report that the general conditio of the newly born infants is good. " They appear strong and c average weight ; the colour is good." One nurse states that th physical condition of the babies in her area (East Fife) " seems t vary with weather conditions—and in one locality, where the coa supply was limited, chest troubles were prevalent in damp weather. While the condition of these young babies is good, the conditio of the mothers is not always equally good. According to one nurs " Multipara are making a slower ' come back ' after confinement— this may be due to them sharing their rations with the family."

The concensus of opinion of the nurses is that on the whol the general condition of the toddler is very good and also tha clothing is satisfactory. A number of the health visitors stress th lack of care and attention which a number of young children ge from their mothers. This applies particularly where there is young infant. The toddler is left to himself, and as regards his die has the run of the house. They also emphasise that these youngster get insufficient rest during the day and " at night are put to be while the rest of the family have their evening meals to the tune of blaring wireless." Lack of rest or sleep is responsible for the pallo of some of the children but overcrowding and stuffy rooms also pla a part. One of the nurses points to the fretfulness and unsocial ability of some of these children. " This irritability may be due t teething, insecurity, lack of sleep, trouble with thread worms an inadequate clothing." Other nurses make reference to the difficult in obtaining satisfactory footwear, and many of the shoes last onl for a few months. Generally speaking there are not many cases c rickets but in one area (Kinglassie) there are a number of such case Here there are also a fair number with catarrhal conditions—it significant that the " dummy " is much in evidence.

The health visitors made 43,785 home visits under the Maternit and Child Welfare Scheme. In these visits they saw 27,796 infant and nursing mothers, as well as 23,608 children between the ages c 1-5 years—these figures include new and old cases. There were als 3,492 expectant mothers visited.

In addition, there were also visits paid as regards a number c other conditions.

(1) Ophthalmia Neonatorum—Inquiries were made as regar 52 cases and these necessitated 163 visits.

(2) Puerperal Sepsis—There were 5 cases to whom 8 visits we made.

(3) Puerperal Pyrexia—10 Cases were seen at 15 visits.

(4) Pneumonia—The Welfare Nurses had 364 cases referred to them and their inquiries caused them to make 529 visits. The distribution of these cases in the different areas was as follows :—

Anstruther 4 ; Cowdenbeath and Lochgelly 156 ; Cupar 17 ; unfermline 90 ; Kirkcaldy 17 ; St Andrews 13 ; and Wemyss 67.

(5) Tuberculosis Scheme—The Welfare Nurses made 4,236 visits to cases referred to them—2,312 were to pulmonary and 1,924 to non-pulmonary cases of tuberculosis. The number of cases notified to the nursing staff during the year for supervision was 215 (158 pulmonary and 57 non-pulmonary).

Infant Protection.

In 1947 the number of children seen by the Health Visitors their capacity as Infant Protection Visitors was 61, and 61 visits ere made.

The number of children on the register was 10 and there were so 15 new or preliminary cases. Of the 15 preliminary cases it as found that in 10 of the homes there was no fireguard. All the iardians signed the usual form which stated that they had been formed of their responsibility should any child be burned.

One child was removed from the district, four were returned relations, whilst seven were legally adopted by their guardians. one of the children died.

Two children were over the age of nine years.

Two cases were specially investigated. In one case the girl as admitted to Glenlomond Sanatorium as she was suffering from berculosis of the spine. The other case, a boy, was reported to registered as a vegetarian. It was stated that there was a ssibility of his being allergic to protein. On further inquiry is was not substantiated and he was put on a mixed diet. With e fuller diet he quickly gained in weight.

Maternity and Child Welfare Centres.

There has been no change in the number of welfare clinics 0 general, and eight weighing centres) and in 1947 the total mber of infants and toddlers seen was 3,469 (3,317 in 1946), and ese made 23,813 attendances during the year (21,563 in 1946).

The individual figures are given in the following table :—

Clinic.	New Cases.	Attendance
Crossgates	97	970
Torryburn	49	194
Blairhall	24	55
High Valleyfield	53	141
Steelend	24	144
Inverkeithing	17	119
Kincardine	46	151
Dunfermline Area	310	1774
Cowdenbeath	223	2890
Kelty	346	1230
Lochgelly	430	2631
Auchterderran	112	1206
Crosshill	481	1418
Lochgelly and Beath Areas ...	1592	9375
Burntisland	107	728
Kinghorn	29	354
Thornton	27	196
Markinch	62	631
Leslie	60	585
Coaltown of Balgonie	5	38
Kinglassie	11	32
Kirkcaldy Area	301	2564
Methil	354	3143
Leven	213	1580
Buckhaven-Leven Area	567	4723
Auchtermuchty	59	297
Castlehill, Cupar	120	1084
Ladybank	54	490
Newburgh	36	585
Cupar Area...	269	2456
St Andrews	184	1507
Tayport	141	518
Anstruther	105	896
Anstruther-St Andrews Area ...	430	2921
Grand Total ...	3469	23813

Ante-Natal Clinics.

The ante-natal services in the eastern area were continued in previous years. The clinics at Lochgelly and Auchterder were held twice monthly with the visiting obstetrician in attendar There was a weekly session at the Methil clinic with the obstetric in attendance twice monthly. Abnormalities occurring at th

linics were supervised by the obstetrician at the clinics or referred o Kirkcaldy Maternity Hospital for closer observation. Abnor- ıalities and emergencies continued throughout the year to be dmitted to this hospital.

The number of cases attending these clinics were as follows :—

Clinic.	New Cases.	Returns.	Attendances.
Auchterderran	47	273	320
Lochgelly—			
(*a*) Crosshill	19	159	178
(*b*) Lochgelly and Lumphinnans	25	111	136
Methil	60	242	302
	151	785	936

Dr Frame Flint, Obstetrician, Forth Park Maternity Hospital, as drawn up the following statement regarding County cases dmitted to this Maternity Hospital.

Patients admitted to this hospital are classified as booked, and on-booked (including emergencies). The total number of cases ·as 336, of which 183 were booked and 153 were non-booked. The :duction in the number of booked normals (82 less than 1946) was ue to reduction in the number of available beds. There was no :striction and consequently no reduction in the number of non- ooked and emergency cases (158—1946).

The 336 patients admitted came from the following districts :—

uchtertool	6	East Wemyss	11	Markinch ...	10		
berhill	2	Elie	4	Methil	25		
berdour	2	Falkland ...	2	Methilhill ...	9		
nstruther	5	Freuchie ...	1	Milton of Balgonie	2		
urntisland	23	Glencraig ...	29	Pittenweem ...	1		
uckhaven	22	Kinglassie ...	8	Peat Inn ...	1		
ardenden	40	Kinghorn ...	15	Newport ...	1		
ollessie	1	Kingskettle	1	St Andrews ...	9		
rail	1	Kennoway ...	2	St Monance ...	1		
rossgates	1	Ladybank ...	2	Springfield ...	1		
lunie	2	Lochgelly ...	15	Strathmiglo ...	1		
hapel	1	Lochore ...	13	Radernie ...	1		
eres	1	Leven ...	11	Thornton ...	7		
oaltown of Wemyss	2	Leslie ...	17	Windygates ...	3		
oaltown of Balgonie	3	Lindores ...	1				
upar	7	Largo ...	3				336
airsie	1	Lundin Links	1				
enbeath	3	Lumphinnans	5				

Non-booked cases (including emergencies)—153.

The analysis of non-booked cases corresponds to the classi- cation of C. M. B. emergency forms.

Complications of Pregnancy—			
Toxaemia	32	A. P. Haemorrhage ...	10
Eclampsia	3	Thyrotoxicosis	1
Pyelitis	5	Cardiac	1
Jaundice	1	Versions	12
Abortions	14	False Labour	6
Threatened abortion	2	Hyperemesis	1
Therapeutic abortion ...	4	Non-gravid	1
Missed abortion ...	2	Hydatidiform mole ...	1
Miscellaneous	4	Diagnostic exam. ...	4
Complications of Labour—			
Delayed Labour ...	—	Hydrocephalus	2
Forceps deliveries ...	17	Anencephalus	2
Craniotomy	—	Brow presentation ...	1
Decapitation	—	Face presentation ...	1
Caesarian Section ...	6	Shoulder presentation ...	1
Obstetric shock ...	2	Breech (primig)	8
Ruptured Uterus ...	—	Breech (multip.)	1
Prolapsed cord... ...	3	Fatty myocarditis ...	1
Occipitoposterior ...	2	Placenta praevia ...	—
Complications of Lying-in—			
Retained placenta (BBA)	10	Postpartum eclampsia (BBA)	3
Postpartum haemorrhage (BBA)	1	Pyrexia and Fever ...	—
Complications of Infant—			
Stillbirths	19	Ophthalmia neonatorum	—
Neonatal Deaths ...	15	Pemphigus	—

These allocations were made according to the major obstetri condition. It should be borne in mind that several patient exhibited more than one complication simultaneously, and tha the figures do not apply to booked cases, a proportion of whic developed complications before or at term and required treatmen or obstetric assistance.

The number of abortions and miscarriages did not give a tru picture of the frequency of this complication in the area since wit rare exceptions the only cases of this nature admitted were thos occurring in booked cases attending related clinics.

A welcome reduction in the number of destructive operatio was evident. Timely reference of patients not in labour within weeks of their calculated date may eliminate these catastrophies.

The incidence of toxaemia requiring admission appeare unchanged but there was a satisfying reduction in the number eclampsia cases (33 per cent.). There was also a reduction in th number of cases of antepartum haemorrhage but this was mo than balanced by the increase in postpartum haemorrhage an retained placenta especially when related to the demand f domiciliary transfusion in preference to hospitalisation for e sanguinated patients.

There was a considerable increase in the number of patien referred directly to the obstetrician at the specialist clinic at Kir caldy and a similar increase in the number of patients referr directly by practitioners to the hospital for investigation.

Of the 336 patients admitted, 35 were discharged antenatally ıd 14 were admitted after domiciliary delivery. Of the remaining 37, 22 had abortions or miscarriages, and 1 had a hydatidiform ole, 81 had obstetric assistance, and 183 had spontaneous deliveries. ne patient had triplets, and seven had twins.

There were 4 maternal deaths in the series (1946—7 deaths). etails of these are as follows :—

1. Hydatidiform Mole—Patient had protracted haemorrhage ıd had developed purulent discharge before summoning medical d. Removal of the mole was followed by the onset of peritonitis.

2. Fatty Myocarditis—Parturition, followed by collapse within few hours, associated with obesity and history of cardiac failure.

3. Obstetric Shock—Associated with recurrent pregnancy, xaemia and postpartum haemorrhage.

4. Obstetric Shock—Occipito-posterior, forceps delivery, moder- e postpartum loss, plasma infusion three pints, collapsed thereafter ree times before death. Possible effect of plasma ?

Stillbirths and Neo-natal Deaths.

The causes of stillbirth were as follows :—

* Dystocia	7
Foetal abnormalities...	6
Maceration	3
Antepartum haemorrhage	2
Toxaemia	1
	19

* Avoidable.

The causes of neo-natal deaths were as follows :—

Prematurity	9	(including one triplet).
Congenital abnormality	4	(including Rh manifestations).
Cerebral haemorrhage	1	
Haemorrhagic disease	1	
	15	

Both above total show a considerable improvement on the rresponding figures for 1946 (Stillbirths 32, Neo-natals 19).

The practice of the hospital was improved during the year y the introduction of gas-air analgesia as a routine measure. istrict nurses came from all parts of the County to be trained in this chnique and the ultimate benefit of this training will be felt roughout the County. The hospital became a full training school r midwives, by virtue of recognition for the second part training rtificate.

The post-natal clinic (held twice monthly) continues to be well tended, and the birth control clinic showed a considerable increase

in the number of new patients. It is regrettable that many of th patients attending are obliged to do so on account of housin difficulties.

Improved ante-natal care and additional facilities for cor finement are anticipated by the addition of several new clinics an two new maternity hospitals.

Ultra-Violet Radiation.

This form of treatment was given at three welfare clinics– Cowdenbeath (mercury vapour), Lochgelly (mercury vapour), an Methil (carbon arc lamps), and was made available to children an expectant or nursing mothers. The total number of cases treate was 957 and these received 5,570 treatments. In the followin table more detailed information is given :—

	Lochgelly.		Cowdenbeath.		Methil.	
Patients.	Cases.	Attendances.	Cases.	Attendances.	Cases.	Attendances.
Infants ...	4	31	—	—	5	14
Pre-school Children	86	656	14	202	244	655
School Children	223	1847	41	514	320	1350
Nursing Mothers	—	—	—	—	2	127
Others ...	5	111	—	—	13	63
Total ...	318	2645	55	716	584	2209
Totals for 1946 ...	93	2599	92	755	98	1757

Nursery Classes.

In the County there are nursery classes in the following schools —(1) Cellardyke P. S.—one class ; (2) Buckhaven P. S.—one class (3) Leslie Infant School—one class ; (4) Lumphinnans P. S.—on class ; (5) Kelty P. S.—three classes. Another class is to be opene shortly in Crosshill P. S.

Soon after the toddlers enter the nursery class arrangemen are made for their medical examination and in addition these class are visited weekly or fortnightly by the Welfare Nurse. From t reports of the nurses the children are well cared for and all seem good health. This may be partly due to the regular well cook meals given to them at school. In at least one school they are al given their daily supply of Cod Liver Oil as well as orange jui Even children where the mothers had stated that they would n take it at home, took the Cod Liver Oil without any fuss in school.

As regards cleanliness it is only rarely that the nurses find verminous head, and when such is found and the mother's attenti drawn to it she immediately takes steps to have the condition r right.

In Kelty the nursery classes were closed from 1st September o 17th October, 1947, when there was an outbreak of poliomyelitis.

County Radiological Scheme.

Dr Angus Campbell was responsible for the radiographic work n the County. The Welfare Clinics at which cases were seen and adiographed were :—Canmore School Clinic, Dunfermline ; Welare Clinic, Cowdenbeath ; Welfare Clinic, Lochgelly ; Adamson Iospital, Cupar ; and at the Wemyss Memorial Hospital, Buckaven.

The number of cases radiographed were as follows :—

Orthopaedic Cases	101	(155)
Dental Cases	49	(14)
Nasal Sinus	18	(3)
	168	(172)

The figures in brackets refer to the number done in 1946.

In addition to these radiographs there was also one case of ingworm of the scalp which was treated by radio-therapy.

The total cost for the work under this scheme was £142 2s 0d.

Home Help Scheme.

The work under this scheme was continued ; the most of the ome helpers were again available in the Wemyss and Kirkcaldy andward Districts. This distribution was :—

Wemyss District	60
Kirkcaldy District	3
Lochgelly District	2
Cowdenbeath District	1
Cupar	2
	68

The home helpers were all part-time and the number of cases o whom home help was rendered was 68 and the average period in vhich assistance was given was 14-21 days. Of the 68 cases payments vere received from 59 and there were 9 cases who were necessitous. The cost from 16th May, 1946, to 15th May, 1947, was £182.

SCHOOL MEDICAL SERVICES.

School Population :—

Total Roll at September, 1946	41,726
Average Roll, 1946-47	42,499·36
Average attendance	36,976·877
Percentage attendance	87%

Number of Schools :—

(*a*) Primary	133
(*b*) Secondary	22
(*c*) 1. Special Schools	1
2. Special Classes in ordinary schools	4
(*d*) 1. Nursery Schools	1
2. Nursery Classes attached to ordinary schools	5

School Buildings.

Work in connection with school buildings has been mainly concerned with the provision of (1) Nursery School accommodation, (2) school feeding service, and (3) improvement in the artificial lighting of a number of schools :—

(1) Nursery Schools.—Towards the close of the war, work had been started in Leslie with setting up of accommodation for nursery classes on the ground floor of the new building which had been started when the war broke out. It was decided to modify and complete the work for the nursery classes and also to make available accommodation for infant classes. This work was completed during the year.

Nursery room accommodation was also completed and made available in Crosshill Public School, Lumphinnans Public School, and Gallatown Public School. In each of these, classrooms were reconverted and adapted for their new use. Reconstruction work was also begun at Foulford but was not completed.

(2) School Meals Service.—Sculleries for the serving of meals and facilities for washing the dishes were completed at the following schools :—Abbotshall, Blairhall, Canmore (Dunfermline), Crail, Falkland, Fife Mining School, Guardbridge, Kingskettle, Largoward, Newport J. S., St Marie's R. C., and Wellwood.

Dining huts were completed and made available for the following schools :—Auchtermuchty, Blairhall, Crossgates, Kinglassie, Lochgelly South, Newburgh J. S., St Andrews West, and Thornton. In addition a classroom was also provided at St Andrews West.

(3) Lighting.—A number of schools were recommended for the introduction of electric light. It was agreed to effect the improvement in the following schools :—Auchterderran J. S., Balcurvie, Dunnikier, Leslie J. S., Methil, and Parkhill. The work was started in all with the exception of Parkhill.

(4) Other items of work carried out and completed were :—
1) The provision of playshed for the infant classes at Madras College
t Andrews. At this school and in the infant school a heating system
as introduced ; (2) at the Kirkgate School, annexe to Bell-Baxter,
upar, new latrines and water closets were installed.

Organisation and Administration.

The general organisation and administration of the School
ledical Service was on the same lines as in preceding years. Dr
. C. Barclay returned from military service on 20th January, 1947,
nd took over the Cupar and Leven areas from Dr Lundie who had
cted as *interim* Medical Officer. Dr Lundie's retirement brought
o an end many years of loyal and diligent work in the interest of
ie health and welfare of the County. Best wishes go to him for
iany happy years of leisure and contentment.

Twenty-two whole-time Welfare Nurses along with twenty-nine
istrict Nurses in the more rural areas assisted the Medical Officers.
n the Burghs of Burntisland, Cupar and Newport the school medical
ispection and treatment work was done by the district murses
nder the supervision of area Medical Officers.

During the year, the resignation of the Welfare Nurse for
allingry-Lochore and the transfer of the nurse responsible for
lencraig to this district left a vacancy in the whole-time staff.

During the school year, the Welfare Nurses (including the
istrict Nurses) made 2,372 visits to the County Schools—Dun-
rmline area 372 ; Cowdenbeath and Lochgelly area 649 ; Cupar
ea 306 ; Anstruther area 196 ; St Andrews area 219 ; Kirkcaldy
ea 230 ; Wemyss area 400. The nurses in Kirkcaldy Burgh
97) and Dunfermline Burgh (132) made 629 school visits. These
ith the County visits made a total of 3,001.

Physical Condition of thc School Children.

Nurses' Inspections.

County—Number of children inspected ...	...	19,428
Number of children re-inspected	...	41,571
Total ...	... ...	60,999

The number of children found with defects at the first inspection
as 3,363. The defects were as follows :—Head vermin 1,356 ;
dy vermin 2 ; ringworm of scalp 9 ; scabies 120 ; uncleanliness
neglect 110 ; impetigo contagiosa 239 ; other skin conditions 77 ;
orrhoea 68 ; eye disease (external) 154 ; ear cases 48 ; nose and
roat cases 97 ; other cases 579 ; cuts and bruises 222 ; septic
nditions 246 ; accidents 12.

It was found necessary in 1,570 cases for the nurses to visit
e homes to give advice to the mothers. The number of home
sits was 1,957.

An analysis of the 2,336 cases where re-inspections were neces sary shows the following distribution :—Head vermin 1,247 ; body vermin 1 ; ringworm 10 ; scabies 97 ; uncleanliness or neglec 215 ; impetigo contagiosa 102 ; other skin conditions 30 ; otorr hoea 36 ; eye disease (external) 98 ; ear cases 40 ; nose and throat cases 19 ; other cases 99 ; cuts and bruises 223 ; septi conditions 86 ; accidents 10.

These figures, as compared with those for the pervious year show that there was a marked improvement as regards genera cleanliness. Conditions such as scabies and impetigo which wer markedly increased during the war years showed a further decrease even on last year's figures.

Medical Inspection and Examinations.

The number of children examined and belonging to the routin age groups were distributed as follows :—Kirkcaldy Burgh 1,858 Dunfermline Burgh 1,977 ; North East Fife 2,005 ; Kirkcaldy Landward and Wemyss 1,506 ; Cowdenbeath and Lochgelly 2,252 Dunfermline Landward 952 ; the total (10,550) is analysed accordin to age groups in the following table :—

		Systematic Examinations.		Other Systemat Examinations.	
		County	Large Burghs.	County.	Large Burgh
(*a*) Ordinary Schools	Entrants	2654	1314	306	—
	Second Age Group (visual acuity)* ...	—	—	—	—
	Third age group ...	1264	1150	520	—
	Fourth age group ...	1868	1237	69	—
Secondary Schools	Age group	34	134	—	—
		5820	3835	895	—
(*b*) Other examinations :—					
Special cases		5044	293	—	—
Re-inspections		2503	866	—	—
Visual Acuity*		152	527	—	—
		7699	1686	—	—

The number of individual children inspected at the systemat examinations who were notified to the parents as requiring treatme (excluding uncleanliness and dental caries) was as follows :—

	County.	Large Burghs.
Entrants	731	289
Second age group	24	94
Third age group	333	238
Fourth age group	303	303
Secondary age group	3	20
Other systematic examinations ...	23	—
	1417	944

Table II.

Systematic Examinations.

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

Nature of Defect.	Entrants.		Third Age Group.		Fourth Age Group.		Secondary Age Group.		All Ages.		Nursery Classes.	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Clothing—												
Unsatisfactory in respect of	12	17	11	15	12	16	—	—	35	48	—	—
Footwear—												
Unsatisfactory in respect of	10	8	14	4	10	5	—	—	34	17	—	—
Cleanliness—												
(*a*) *Head—*												
Dirty, nits or vermin ...	34	131	10	124	19	198	—	—	63	453	1	3
(*b*) *Body—*												
Dirty or verminous ...	18	23	16	15	20	30	—	—	54	68	—	—
Skin—												
(*a*) *Head*—Ringworm ...	6	5	1	1	—	—	—	—	7	6	—	—
Impetigo ...	11	9	11	6	3	1	—	—	25	16	1	—
Other Diseases	17	23	13	12	8	6	3	1	41	42	—	—
(*b*) *Body*—Ringworm ...	2	1	—	—	1	2	—	—	3	3	—	—
Impetigo ...	5	3	2	5	—	1	—	—	7	9	—	—
Scabies	29	20	16	13	13	13	—	—	58	46	—	—
Other Diseases ...	57	45	35	19	32	34	9	5	133	103	1	2
Nutritional State—												
Slightly defective	141	130	80	67	95	73	2	4	318	274	2	5
Bad	5	3	1	4	3	1	—	—	9	8	—	—
Mouth and Teeth—												
Unhealthy	248	254	232	241	251	224	22	10	753	729	11	26
Naso pharynx—												
(*a*) *Nose—*												
(i) Obstruction requiring observation ...	103	89	39	24	16	16	1	—	159	129	—	3
(ii) Requiring operation	55	33	16	12	8	5	—	—	79	50	1	2
(iii) Other conditions ...	52	38	18	20	22	11	—	1	92	70	1	—
(*b*) *Throat—*												
(i) Tonsil requiring observation ...	273	284	124	135	97	113	1	1	495	533	4	8
(ii) Requiring operation	121	93	65	66	43	52	—	—	229	211	—	—
(*c*) *Glands—*												
(i) Requiring observation	205	195	150	115	90	65	—	1	445	376	4	—
(ii) Requiring operation	1	—	1	—	—	—	—	—	2	—	—	—
Eyes—												
(*a*) *External Diseases—*												
Blepharitis	18	16	8	19	16	12	1	—	43	47	1	1
Conjunctivitis	5	2	—	1	4	6	—	—	9	9	—	—
Corneal Opacities ...	1	—	—	—	2	—	—	—	3	—	—	—
Strabismus	51	61	36	43	27	23	—	—	114	127	1	2
Other diseases	7	2	7	5	7	6	—	—	21	13	—	—
(*b*) *Visual acuity—*												
$\frac{6}{6}$	1	3	1293	1378	1482	1401	67	71	2843	2853	—	—
$\frac{6}{9}-\frac{6}{12}$	2	7	83	102	106	122	13	12	204	243	—	—
$\frac{6}{18}$ and over	5	6	33	45	37	26	1	4	76	81	—	—
No. C Glasses	—	—	6	6	3	2	—	—	9	8	—	—
Recommended for refraction	30	32	76	81	68	89	10	5	184	207	—	—
Ears—												
(*a*) *Diseases—*												
Otorrhoea	22	31	16	18	18	16	1	3	57	68	2	1
Other diseases	101	89	79	57	80	49	—	1	260	196	5	4
(*b*) *Defective Hearing—*												
Grade I....	15	24	12	9	11	9	—	—	38	42	—	—
Grade IIa.	1	1	—	2	3	1	—	—	4	4	—	—
Grade IIb.	—	—	—	—	—	2	—	—	—	2	—	—
Grade III.	1	1	1	—	—	1	—	—	2	2	—	—

Table II.—*Continued.*

Nature of Defect.	Entrants.		Third Age Group.		Fourth Age Group.		Secondary Age Group.		All Ages.		Nur Cla
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys
10. **Speech**—											
Defective articulation ...	24	19	3	11	8	3	—	—	35	33	—
Stammering	7	3	2	—	1	1	—	—	10	4	—
11. **Mental and Nervous Condition**	6	5	4	1	1	—	—	—	11	6	—
(*a*) Backward (due to irregular attendance, &c.) ...	1	—	8	1	2	1	—	—	11	2	1
(*b*) Dull (intrinsically) ...	15	1	10	7	10	8	—	—	35	16	—
(*c*) Mentally defective (educable)	5	1	1	—	7	1	—	—	13	2	—
(*d*) (ineducable)	1	2	—	1	—	—	—	—	1	3	—
(*e*) Highly nervous or unstable	14	15	2	1	1	—	—	—	17	16	—
(*f*) Difficult in behaviour ...	6	1	3	—	—	1	—	—	9	2	—
12. **Circulatory System**—											
(*a*) *Organic Heart Disease*—											
(i) Congenital	7	2	2	6	2	5	—	—	11	13	—
(ii) Acquired	6	8	8	10	12	7	—	1	26	26	—
(*b*) *Functional Conditions* ...	23	29	7	11	10	15	1	1	41	56	—
13. **Lungs**—											
Chronic Bronchitis	21	17	22	4	9	3	1	1	53	25	—
Suspected Tuberculosis ...	5	5	—	2	—	4	—	—	5	11	—
Other diseases	78	86	38	14	21	14	3	—	140	114	1
14. **Deformities**—											
(*a*) Congenital	61	40	14	11	17	12	1	1	93	64	—
(*b*) Acquired (Infantile Paralysis)	2	2	3	2	2	3	—	—	7	7	1
(*c*) Acquired (probable) Rickets	38	27	15	13	22	4	—	1	75	45	2
(*d*) Acquired (other causes)	78	76	38	31	55	48	2	4	173	159	5
15. **Infectious Diseases**	9	13	1	—	—	1	—	—	10	14	1
16. **Other Diseases or Defects** ...	125	63	73	52	46	37	3	3	247	155	6

Systematic Medical Examinations (including two Large Burghs)

Classification	Entrants		Second Age-group		Third Age-group		Fourth Age-group		Total	
	No. of children.	Percentage of the children examined in this group.	No. of children.	Percentage of the children examined in this group.	No. of children.	Percentage of the children examined in this group.	No. of children.	Percentage of the children examined in this group.	No. of children.	Percentage of the children examined at systematic medical examinations
I. Children free from defects	2173	50·85%	1590	54·2%	1822	57·41%	108	64·3%	5693	53·97%
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	42	·98%	136	4·63%	175	5·51%	16	9·52%	369	3·5%
(*b*) Conditions of the mouth and teeth requiring treatment ...	293	6·85%	285	9·72%	310	9·77%	22	13·09%	910	8·62%
(*c*) Both (*a*) and (*b*)	6	·14%	20	·68%	30	·94%	2	1·19%	58	·55%
Total	341	7·97%	441	15·03%	515	16·22%	40	23·8%	1337	12·67%
III. Children suffering from ailments (other than those mentioned in II.) from which complete recovery is anticipated within a few weeks ...	1354	31·68%	620	21·13%	612	19·28%	14	8·33%	2600	24·64%
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;	356	8·33%	233	7·94%	178	5·61%	5	2·98%	772	7·32%
(*b*) Where improvement only is considered possible, *e.g.*, without complete restoration of function	50	1·17%	50	1·70%	47	1·48%	1	·59%	148	1·4%
Total	406	9·50%	283	9·64%	225	7·09%	6	3·57%	920	8·72%
Total number of children examined	4274	100%	2934	100%	3174	100%	168	100%	10550	100%

Table IV.

Return of All Exceptional Children of School Age in the Area, including Two Large Burghs.

Disability.	At Ordinary Schools.	At Special Schools or Classes.	At no School or institution.	Total.
1. Blind	—	1	3	4
2. Partially sighted—				
(*a*) Refractive errors in which the curriculum of an ordinary school would adversely affect the eye condition	21	—	—	21
(*b*) Other conditions of the eye, *e.g.*, cataract, ulceration, &c., which render the child unable to read ordinary school books or to see well enough to be taught in an ordinary school	2	—	1	3
3. Deaf—				
Grade I.	108	—	—	108
Grade IIa.	22	—	—	22
Grade IIb.	9	—	—	9
Grade III.	7	3	3	13
4. Defective Speech—				
(*a*) Defects of articulation requiring special educational measures	231	1	—	232
(*b*) Stammering requiring special educational measures ...	27	—	—	27
5. Mentally defective (Children between 5 and 16 years)—				
(*a*) Educable (I. Q. approx. 50-70)	33	125	7	165
(*b*) Ineducable (I. Q. generally less than 50) ...	6	6	27	39
6. Epilepsy—				
(*a*) Mild and occasional ...	23	4	2	29
(*b*) Severe (suitable for care in a residential school) ...	1	1	4	6
7. Physically Defective (Children between 5 and 16 years)—				
(*a*) Non-pulmonary tuberculosis (excluding cervical glands)	20	1	2	23
(*b*) General orthopaedic conditions	731	11	9	751
(*c*) Organic heart disease ...	105	—	3	108
(*d*) Other causes of ill-health*	19	—	6	25
8. Multiple Defects—				
(*a*)	—	2	3	
(*b*)	—	—	3	
T.B., Spine and Deaf/ Grade III.	—	—	1	

* 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."

Medical Treatment.

The number of clinics, where minor ailments of school children are treated, is twenty-four. In the report of 1946 the clinics and the treatments given were enumerated. As already reported the clinic arrangements at Auchtermuchty, St Andrews, Blairhall, and East Wemyss are practically non-existent in the first two and are very unsatisfactory at the other two.

Minor Ailments.

The Welfare Nurses made 2,168 visits (of these 466 were by District Nurses) to the clinics for the treatment of minor ailments. At these clinics the number of children treated was 9,360 and these made 38,253 attendances.

In the rural areas, too far distant from clinics, treatment was given to children in their homes. The number of such home treatments was 187.

In the two large burghs, Kirkcaldy and Dunfermline, the numbers treated for minor ailments were as follows :—

Kirkcaldy	1,745 children.	6,903 attendances.
Dunfermline	4,201 ,,	18,044 ,,

The figures for the number of cases and treatments given in the County and in the two large burghs, Kirkcaldy and Dunfermline, are tabulated in the two major tables.

It has to be reported that the " dirt " conditions—head vermin, scabies, and impetigo contagiosa show a further decrease. The number of cases of scabies treated at the clinics was 162 as against 331 last year, and impetigo fell from 985 to 712 cases. In the case of head vermin the reduction was not so marked—from 444 to 393.

1947.

The number of school children who received a first immunising injection against diphtheria was 362 and 322 received the second injection. Further, 1,817 received a boosting or third dose.

Treatments (Minor Ailments Clinics)—1946-1947.

	Cases.	Attendances.
Head Vermin	400	2648
Body Vermin	—	—
Ringworm (Scalp)	62	224
Scabies	379	1446
Uncleanliness or Neglect	27	84
Impetigo Contagiosa...	1282	6750
Other Skin Conditions	707	4616
Otorrhoea	320	4061
Eye Disease (external)	705	4465
Ear Cases	426	1687
Nose and Throat Cases	616	821
Other Cases	1878	5777
Cuts and Bruises	4393	12905
Septic Conditions	3632	15002
Accidents	114	175
Advisory Cases	181	198
Sunlight Treatment	130	2103
Atropine	53	92
T. B. Inunction	1	146
	15306	63200

Clinic Treatment (Minor Ailments)—1946-1947.

(a) New Cases.

CONDITION	Blairhall	Inverkeithing	Crossgates	Cowdenbeath	Kelty	Lumphinnans	Ballingry	Auchterderran	Markinch	Burntisland	East Wemyss	Methilhill	Buckhaven	Aberhill	Leven	Cupar	Newburgh	St Andrews	Tayport	Total for County	Total for Kirkcaldy Burgh	Total for Dunfermline Burgh	TOTALS
Head Vermin ...	2	24	—	10	—	53	39	17	4	26	—	39	55	93	31	—	—	—	—	393	3	4	400
Body Vermin ...	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	—	—	—	1	39	16	7	62
Ringworm (scalp) ...	—	—	—	12	—	4	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scabies	5	8	—	8	—	29	18	26	1	—	4	7	9	24	13	2	—	6	2	162	89	128	379
Uncleanliness or Neglect	6	—	—	—	—	—	—	—	—	—	—	—	—	8	11	—	—	—	—	25	2	—	27
Impetigo Contagiosa...	18	24	28	33	115	80	29	45	4	21	35	43	37	83	23	33	2	41	18	712	193	377	1282
Other Skin Conditions	5	—	4	15	2	24	1	—	—	8	1	2	2	9	12	10	—	—	13	108	100	499	707
Otorrhoea	7	7	5	41	6	4	8	7	—	4	8	14	28	31	19	—	1	1	—	191	38	91	320
Eye Disease (external)	6	31	11	2	8	45	15	30	—	18	102	24	20	50	31	15	1	—	1	410	69	226	705
Ear Cases	16	29	—	4	—	54	13	11	—	19	41	13	53	24	18	8	—	5	3	311	2	113	426
Nose and Throat Cases	8	1	—	30	—	—	11	—	—	11	29	—	—	—	12	—	—	—	—	102	—	514	616
Other Cases	120	30	49	66	—	208	109	—	—	58	1	97	—	3	44	7	—	—	157	949	243	686	1878
Cuts and Bruises ...	314	84	76	3	447	353	376	214	17	195	527	181	78	12	23	36	8	12	107	3063	474	856	4393
Septic Conditions ...	119	84	77	80	176	388	197	109	20	52	267	233	331	274	73	66	1	26	46	2619	443	570	3632
Accidents	19	—	11	2	—	6	11	7	13	15	—	1	—	5	2	8	—	—	—	100	14	—	114
Advisory Cases ...	36	—	11	26	—	2	—	—	4	4	18	—	—	—	14	7	—	—	—	122	59	—	181
Atropine	—	—	—	—	—	—	—	37	—	—	—	—	—	—	16	—	—	—	—	53	—	—	53
Sunlight	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130	130
Tuberculin Inunctions	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
TOTALS ...	681	322	272	332	754	1250	846	504	63	431	1033	655	613	617	343	192	13	91	348	9360	1745	4201	15306

Clinic Treatment (Minor Aliments)—1946-1947.

(*b*) Attendances.

CONDITION	Blairhall	Inverkeithing	Crossgates	Cowdenbeath	Kelty	Lumphinnans	Ballingry	Auchterderran	Markinch	Burntisland	East Wemyss	Methilhill	Buckhaven	Aberhill	Leven	Cupar	Newburgh	St Andrews	Tayport	Total for County	Total for Kirkcaldy Burgh	Total for Dunfermline Burgh	TOTALS
Head Vermin ...	28	279	—	15	—	470	597	102	14	166	—	136	133	423	236	—	6	34	—	2639	3	6	2648
Body Vermin ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ringworm (scalp) ...	—	—	—	26	—	4	55	—	—	—	—	19	—	29	4	—	—	—	3	140	53	31	224
Scabies	16	51	—	20	—	144	209	81	2	—	6	14	9	30	39	4	3	6	20	654	410	382	1446
Uncleanliness or Neglect	13	6	—	—	—	—	—	2	—	—	16	—	—	25	22	—	—	—	—	84	—	—	84
Impetigo Contagiosa...	55	261	567	110	288	464	288	186	18	88	102	154	184	254	136	95	5	252	48	3555	1431	1764	6750
Other Skin Conditions	24	2	97	58	39	217	39	—	—	45	1	19	19	70	30	24	—	—	28	712	399	3505	4616
Otorrhoea	46	114	189	156	81	199	174	56	—	91	84	210	704	294	248	—	1	59	—	2706	485	870	4061
Eye Disease (external)	39	216	415	2	103	798	298	114	—	32	183	72	451	247	182	46	1	—	2	3201	265	999	4465
Ear Cases	83	236	—	11	—	485	62	56	—	82	77	23	56	26	48	13	—	24	4	1286	40	361	1687
Nose and Throat Cases	33	14	—	31	—	—	40	—	—	14	32	—	—	—	40	—	—	—	—	204	—	617	821
Other Cases	294	403	400	360	—	906	328	—	—	119	1	218	—	70	118	11	—	—	157	3385	903	1489	5777
Cuts and Bruises ...	978	755	280	28	670	1517	1473	966	32	447	718	370	162	22	82	66	14	101	221	8902	963	3040	12905
Septic Conditions ...	589	928	353	215	421	1900	510	512	54	183	1139	793	1199	784	252	163	1	148	87	10231	1894	2877	15002
Accidents	42	—	11	3	—	—	20	12	19	23	—	4	—	9	4	10	—	—	—	157	18	—	175
Advisory Cases ...	51	4	11	34	—	2	—	—	6	10	18	—	—	—	15	8	—	—	—	159	39	—	198
Atropine	—	—	—	—	—	—	—	37	—	—	—	—	—	—	55	—	—	—	—	92	—	—	92
Sunlight	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2103	2103
Tuberculin Inunctions	—	—	—	—	—	—	—	146	—	—	—	—	—	—	—	—	—	—	—	146	—	—	146
TOTALS ...	2291	3269	2323	1069	1602	7106	4093	2270	145	1300	2377	2032	2917	2283	1511	440	31	624	570	38253	6903	18044	63200

Minor Accidents in Schools.

The number of accidents of a minor nature that required attention or first-aid treatment was 13,100. The figure for 1946 was 11,985. The number of accidents occurring in gymnasia or places used for physical exercises was 1,378; the number in class-rooms 3,780, and 7,942 occurred outside the school.

There were five schools that recorded no accidents as against 156 that reported minor accidents. Accidents in gymnasia (1,378) were less than last year (1,472) but still higher than in 1945 when the figure was 1,082. The main cause was splinters (1,032 or 74 per cent. of the accidents in gymnasium). The schools with outstanding number of " splinter " accidents were, Ballingry 160, Lochore R. C. 74, Pittenweem 63, and Dysart 60. The number of children who required attention because of cuts or bruises was 233.

There were 3,589 accidents in the classrooms and of these 1,329 were cuts and 266 bruises. The schools with the largest number of these accidents were Viewforth, Kirkcaldy (168), Waid Academy (90), Kirkcaldy High (87), and Bell-Baxter (85). There were 1,421 cases of sickness and fainting and the schools with out-standing numbers were, Dunfermline High 405, Kirkcaldy High 173, and Buckhaven High 74. The Primary School with the highest figure was Commercial, Dunfermline 56. In the classroom there were also 302 cases with " splints " and 292 children who required attention because of burns. Schools with largest number of burn accidents were Ballingry J. S. 50, Waid Academy 36, Moss-side J. S. 28, and Denbeath J. S. 25.

The number of accidents reported as having occurred in the playground or outside school buildings was 7,942. Here cuts (4,308) and bruises (2,644) made up the bulk of the cases. Individual school figures were :—St Leonards, Dunfermline 300; Dysart 300, Blairhall 247, Pittenweem 217, Lochgelly R. C. 180, Ballingry J. S. 156, Buckhaven Primary 153, Dunfermline High 143, Auchterderran South 121, Commercial, Dunfermline 115, Broad Street, Cowdenbeath 113, Leven J. S. 109, and Burgh School, St Andrews 106.

It must be recorded that the first-aid treatment of these " accidents " is given by the school staffs, and that many of the teachers show a high degree of skill in this by no means unimportant work.

Major Accidents.

The number of accidents coming into the category of major accidents—those requiring the attention of a medical practitioner—was 200 as against 146 last year. These accidents occurred in 6 schools—43 with 1 or 2 accidents, 6 with 3, 7 with 4, and 3 with 5. There were the following (8) with a greater number of such accidents :—

	Gymnasium.	Classroom.	Playground.	Total.
Pathhead P.S. ...	—	2	5	7
Denbeath J. S. ...	3	—	4	7
Dunfermline High	—	1	7	8
Buckhaven High ...	1	4	5	10
Queen Anne J. S. ...	4	2	4	10
Kirkcaldy High ...	—	8	3	11
Bell-Baxter ...	3	—	8	11
Newburgh J. S. ...	—	—	13	13
All Schools ...	16	35	149	200

County Dental Scheme.

During the early part of the year ten dental engines and ten hairs were obtained. These have been installed in various clinics, he chairs replacing obsolete models.

A Chief Dental Officer was appointed during the year in con-rmation with the School Health Service (Scotland) Regulations, 947, and commenced duties on 1st April, 1947.

A start was made with the systematic inspection and treatment each school in turn, but owing to shortage of staff it will be some me before the system is in full operation. Approval was obtained increase the number of area Dental Officers in the County to nine nd in the Burghs of Kirkcaldy and Dunfermline to two each, but is considered unlikely that this increased number will be obtained nder existing circumstances.

Plans are in course of preparation for a new clinic at St Andrews. he existing room is no longer considered fit for use as a surgery. lterations have also been approved for improvements at Castlehill linic. A McKesson general anaesthetic apparatus was obtained r this clinic.

An order was placed for a dental caravan for delivery early 1948 and it is hoped to give a full report of its usefulness next year.

At the systematic examinations at school the following numbers ere inspected in each age group. In addition 2,177 children tended the clinics as special and emergency cases.

Age.	(a) Systematic Examinations.	(b) Special and Emergency Cases.	(c) Total.
5	1337	—	—
6	1267	—	—
7	1167	—	—
8	1304	—	—
9	1583	—	—
10	1716	—	—
11	1692	—	—
12	1235	—	—
13	1220	—	—
14	462	—	—
15	249	—	—
	13232	2177	15409

The following table shows the number of children accepting treatment and the treatment carried out.

		Systematic.	Special and Emergency.
Found to require treatment		9031	2177
No. accepting treatment		5157	2177
No. of attendances made by children for treatment		13895	
Fillings	(*a*) Permanent teeth	5192	
	(*b*) Temporary teeth	2396	
Extractions	(*a*) Permanent teeth	619	
	(*b*) Temporary teeth	5291	
No. of administrations of general anaesthetic		120	
Other operations	(*a*) Permanent teeth ...	4003	
	(*b*) Temporary teeth ...	9056	
Half-days devoted to inspection		223	
Half-days devoted to treatment		2457	

The number of adults requiring dentures increased slightly during the year.

Under the Maternity Scheme the number of patients treated during the year and the work required was as follows :—

No. of Patients	20
No. of Patients treated (completed) ...	11
No. of Patients treatment continued in 1948	9
Dentures supplied—18 for 10 patients.	
Extractions	188
Fillings	12
Scaling	2

51 pre-school children required extraction for relief of pain under this scheme.

In the Police Scheme—

No. of Patients	18
Treatment completed	16
Treatment continued in 1948 ...	2
Dentures supplied—13 for 8 patients.	
Repairs to dentures	3
Extractions	21
Fillings	23
Scalings	7
X-ray	2

Under the Social Welfare Scheme the following treatment was carried out :—

No. of Patients	53
Treatment completed	47
Treatment continuing	6
Dentures supplied—69 for 35 Patients.	
Extractions	118
Scaling	5
Repairs to dentures	3

Eye Clinics.

County.

The Area Medical Officers examine school and pre-school children who have been referred for suspected eye defects at t

school eye clinics—Cupar, St Andrews, Tayport, Anstruther, Newburgh, Ladybank, Markinch, Methil, Burntisland, Auchterderran, Lochgelly, Cowdenbeath, Kelty, Canmore School (Dunfermline), and Torryburn. During 1946-47 the number of eye clinics held was 102 and the number of children examined was :—Pre-school 38 ; school 514 ; there were 160 re-examinations. Of these 11 children were referred to the clinics by the orthoptist.

The refractive conditions found in 344 new cases was as follows :—

Hypermetropia	108
Myopia	24
Hypermetropic Astigmatism	111
Myopic Astigmatism...	31
Mixed Astigmatism	18
Anisometropia	30
Other conditions	22
	344

Arising out of these examinations 293 school and 30 pre-school children had glasses prescribed for them. Two cases were referred to the Minor Ailments Clinic for treatment, and two children required to be kept under supervision.

More difficult cases requiring more expert advice were referred to the eye specialists.

Large Burghs.

The number of children examined by eye specialists in the two large burghs was 190 (at 10 clinics) in Kirkcaldy and 212 (at 37 clinics) in Dunfermline. There were 7 re-examinations at the former and 158 at the latter.

In an analysis of 363 children in Dunfermline the refractions were as follows :—

Hypermetropia	119
Myopia	45
Hypermetropic Astigmatism	133
Myopic Astigmatism...	32
Mixed Astigmatism	3
Emmetropia	31

Eye Specialist Clinics.

The two eye specialists for the County were Dr Allister MacGillivray and Dr R. D. Leeds. The former had been responsible for the eye clinics in the East of Fife—St Andrews, Cupar, Tayport, Anstruther, as well as Buckhaven. The latter clinic he had given up in the previous year and towards the end of 1946 he resigned on health grounds. He carried out his duties as an eye specialist with meticulous care and skill and his work for the partially sighted child was outstanding. The County staff very much regret his leaving especially since it terminated a family connection with the County of about 25 years. His successor is Dr Moodie, also of Dundee.

During the year Dr Leeds operated on 16 cases of squints in three sessions. These cases necessitated six subsequent visits to Cameron Hospital for further supervision and treatment. Dr Leeds, who is responsible for the school clinics in the West of Fife, took over work in the Methil clinic.

During the school year 1946-47 the following number of children were seen :—

Drs MacGillivray and Moodie—13 clinics—164 school and 33 pre-school children ; there were 127 re-examinations.

Dr Leeds—44 clinics—738 school and 93 pre-school children ; there were 447 re-examinations.

An analysis of the refractive conditions found is as follows :—

Analysis of 398 New Cases.

	West Fife.	East Fife.	Total
Hypermetropia	160	30	190
Myopia	16	2	18
Hypermetropic Astigmatism	78	14	92
Myopic Astigmatism ...	23	5	28
Mixed Astigmatism	13	—	13
Anisometropia	10	9	19
Other conditions	25	13	38
			398

Orthoptic Treatment of Squinters.

The examination and treatment of children with strabismus was continued in Lochgelly and Cowdenbeath. As already reported (1946) the scheme for orthoptic therapy was curtailed in November, 1946, through the orthoptist, Miss Halliday (now Mrs Macfarlane) going over to a part-time service. This continued until July, 1947, when she resigned from her appointment. By her resignation the County lost a capable official, who showed great skill in making parents aware of the importance and significance of this valuable form of eye treatment.

During the seven months that the work was done in Lochgelly and Cowdenbeath 177 cases were examined and treated. Of these, 22 were new cases of whom four were considered unsatisfactory for orthoptic therapy.

Of the eighteen cases passed on for treatment, 10 had left concomitant strabismus, 6 right concomitant strabismus and in one the strabismus was alternating. There was also one case of left concomitant divergent squint.

The number of attendances made by the 173 cases was 539. In the following table detailed figures are given for the two clinics :—

	Lochgelly.	Cowdenbeath.	Total.
Examination	10	12	22
Orthoptic Treatments ...	173	165	338
Occlusions	43	14	57
Absenteeism, &c. ...	80	42	122
	306	233	539

At the end of the period 5 children were discharged improved—two with operation and three without operation. Fourteen were discharged cured—one with operation and 13 without operation. There were 12 cases considered unsatisfactory—4 of these left the district, 3 failed to attend regularly, 4 would not wear the occluder and one child, although using the occluder, showed no improvement. There were 142 (Lochgelly 88 and Cowdenbeath 54) who were held over for further treatment.

It is very unfortunate that this form of treatment has had to be terminated through lack of trained staff. Despite the fact that many parents did not realise or were very slow to realise its significance and value orthoptic treatment was slowly becoming understood as was shown by an improvement in attendances. When it is realised that the number of children with squints forms a fairly big percentage of those with eye defects and further that satisfactory results obtained in Fife were one in every four cases, it will be appreciated that orthoptic therapy was of real value in giving the affected children vision with both eyes. With further experience and more education of parents we could expect even better results in the future. For these reasons every effort must be made to interest young women to train as orthoptists in order that a larger number may be available in the country.

Ear, Nose and Throat Scheme.

School children who are suffering from any conditions affecting the ear, nose or throat are, when deemed necessary by the Area Medical Officer or at the special request of general practitioners, referred to the Ear, Nose and Throat Specialist for examination. Specialist clinics are held in the following clinic centres—Dunfermline (Canmore School), Cowdenbeath (School Clinic, Stenhouse Street), Lochgelly Welfare Clinic, Burntisland School Clinic, Markinch Welfare Clinic, Buckhaven-Methil (Barrie Street Clinic), Cupar (Castlehill Clinic), St Andrews (Welfare Clinic), and Anstruther (Welfare Clinic).

During the school year, 1947, at these specialist clinics 150 pre-school and 914 school children were examined. Of this number 184 were re-examinations. In addition three adults were referred to the clinics by Social Welfare Officers.

Recommendations by the Specialist were as follows :—

Referred for clinic treatment :

(*a*) Ears (Syringing, &c.)	70
(*b*) Politzerisation	30
(*c*) Others	21
(*d*) Speech Therapy	19
(*e*) U. V. R.	3

Recommended for operative treatment :

(*a*) Removal of tonsils and adenoids	491
(*b*) Acute Mastoidectomy (at E. R. I.)	3
(*c*) Proof puncture of sinuses	15

Requiring special educational arrangements :

(*a*) Class	7
(*b*) Institutional	3
(*c*) Supervision	12

Dr I. Malcolm Farquharson, County Ear, Nose and Throat Specialist, reports as follows on the year's work :—

"As will be noted from the above figures, the work in the Ear, Nose and Throat Clinics has been active and numbers were high in spite of many unforeseen difficulties.

Firstly, during the storms in the early part of 1947 many children could not attend although no clinic had to be cancelled for that reason. Secondly, the epidemic of Acute Poliomyelitis caused a very serious interruption in the operative work at Cameron Hospital.

In the School Clinics, the work of special investigation and treatment of deafness in children has been further extended. An improved technique of examining and assessing these cases is being considered and it is hoped to bring this into use shortly.

It has been specially gratifying that the delay in admitting completely deaf children into Deaf Institutions and Schools has been very much reduced.

It is felt that there is still a need of facilities for training in breathing exercises in some of the smaller clinics and the suggestion is made that this work might be carried out by the Speech Therapists—a training in breathing exercises being considered an essential form of rehabilitation in many cases after the removal of tonsils and adenoids—neglect of this leading to unsatisfactory results.

With regard to the operative work at Cameron Hospital, 491 cases were operated upon for the removal of tonsils and adenoids. There were no deaths and no serious complications. Two cases had mild secondary haemorrhage. One girl required a blood transfusion—history of bleeding was later admitted by the parents. No case developed poliomyelitis following upon the operation up to the placing of the ban on removal of tonsils and adenoids."

Orthopaedic Scheme.

The County Orthopaedic Scheme of treatment was continued at the orthopaedic clinics in Dunfermline (for West Fife cases), at Lochgelly, Markinch, Burntisland, Methil, Anstruther, St Andrews, Cupar, and Tayport. The work at these clinics is under the general supervision of Miss Booth. Certain changes, however, took place—Mr Moig resigned and his place was taken by two physiotherapists, Misses Armstrong and Barr. Part-time work was also done by Miss Robinson (St Andrews and Cupar), and Mrs Backhouse (Burntisland and Lochgelly). Part-time service was given by several gymnastic teachers (Misses Foggo, Hogarth and Hardy).

Cases Seen at Orthopaedic Clinics.

Clinic.	No. of Cases on Register, January, 1947.		No. of New Cases.		No. of Cases Discharged.	
	Pre.	Sch.	Pre.	Sch.	Pre.	Sch.
Methil	53	77	70	208	12	44
Lochgelly ...	62	81	62	97	13	21
*Dunfermline ...	15	24	9	38	3	2
Markinch	15	5	10	11	2	1
Burntisland ...	11	12	9	13	—	4
St Andrews ...	13	18	7	15	3	6
Tayport	7	15	3	15	—	2
Anstruther ...	22	13	11	12	2	3
Cupar	21	18	14	17	2	1
Total ...	219	263	195	426	37	84

* Includes children from Crossgates.

There was a marked increase in the number of new cases brought forward and consequently the number discharged was much reduced on last year's figures, when 454 children were discharged. This increase in new cases was made possible by the increase in staff. The number of children kept under regular supervision was 80 pre-school and 128 school children. The number of unsatisfactory cases (poor and irregular attendances) was 136. It is hoped that with an increased staff this number may be reduced.

The number of domiciliary cases seen during the year was 154 and to these 198 visits were made. In 1946 there were 171 cases and 255 visits.

The total number of treatment clinics held was 531 and at these 3,514 attendances of pre-school children and 5,224 of school children were made. In the following table the number of attendances made at the various clinics is given :—

	Pre-School.	School.
Methil	893	1706
Lochgelly	1103	1640
*Dunfermline	174	488
Markinch	213	187
Burntisland	217	209
St Andrews	179	288
Tayport	96	152
Anstruther	322	196
Cupar	317	358
Total	3514	5224

* Includes children from Crossgates.

In 1946 the figures were 4528 pre-school and 4965 school children.

Children found to be suffering from orthopaedic defects are all referred to the County Orthopaedic Surgeon, Mr Robert Stirling, who was assisted by members of the staff of the Princess Margaret Rose Hospital—Messrs G. W. Baker and E. A. Jack.

The number of specialist cliniques held was 32. At these 751 school children and 433 pre-school children were seen. As a result of these examinations, 3 cases were referred to their own doctors for further treatment, 64 children were recommended hospital treatment, and 573 were referred to the orthopaedic clinics for treatment there; 94 cases were referred to the radiologist for radiography and 31 children were advised regarding apparatus (splints, special boots, &c.). While 446 children were continued under supervision, there were 59 who were considered cured.

The following is a classification of conditions found in 395 new cases :—

Congenital Deformities	40
Poliomyelitis	13
Other forms of Muscular Paralysis	3
Rickets	4
Arthritis (Rheumatism)	1
Injuries and Amputations	20
Other conditions	314

Under " other " conditions the bulk of these were conditions affecting the lower extremities (pes planus, genu valgum, &c.).

Children requiring operative treatment were admitted to the Princess Margaret Rose Hospital in Edinburgh. The number of children continued from the previous year was 33, and 26 cases were re-admissions. The new cases numbered 69. This gives a total of 128 children against 121 in the previous year.

The cost of maintenance for these cases was £7,027.

The County Orthopaedic Surgeon, Mr Robert I. Stirling, submitted the following note on the year's work :—

> " The outstanding event in the orthopaedic sphere in Fife during 1947 was the unprecedentedly large outbreak of acute anterior poliomyelitis—infantile paralysis. The treatment of this fell disease presents some problems. First, in its early stages, it is an infectious disease, and, as such its victims have to be treated for approximately one month in a fever hospital. Second, to obtain the most satisfactory final result, during the infectious period and after, the patients require orthopaedic treatment—mainly splinting, heat and exercises. The third problem is the disposal of the patients after the month's isolation. At the end of the infectious period most patients require several months continued treatment in hospital and some require years of treatment. It is obvious that no orthopaedic hospital—such as the Princess Margaret Rose Hospital, which is running to capacity to deal with the normal intake of orthopaedic cases from the region—could take all these cases as soon as they cease to be infectious without doing grave injustice to those already on the waiting lists. These are the problems, and the manner in which they were solved in Fife was not only satisfactory in itself but might well stand as a model for other areas, if a similar epidemic recurs. The infectious cases were admitted

to Cameron Infectious Diseases Hospital where they were visited by the orthopaedic staff, who provided plasters and splints—the latter supplied by the Princess Margaret Rose Hospital—and physiotherapy was instituted from the beginning. As the cases became non-infectious they were transferred to another block in the hospital, which became an infantile paralysis block. There the treatment was continued until the more severe cases could be transferred to other hospitals, and the less severe cases had reached a stage of recovery in which they could be sent home in safety to continue their treatment at the various clinics. While a few cases ended fatally, as is unavoidable in any such epidemic, the number was below the average. The high standard of recovery in the survivors is unquestionably due to the effective manner in which they were handled in the early stages.

It has been gratifying to see the very early age at which babies, showing abnormalities, have been brought to the clinics. This seems to indicate that the community at large is realising that the sooner such children are put under treatment the better is their chance of full restoration ; and that the pernicious belief, formerly so widely held, that the baby had to be " bigger and stronger " before anything could be done is dying out.

It cannot be too widely promulgated that in the Clinic System lies the most potent prophylactic method there is for preventing crippledom. Fully 60 per cent. of potential cripples, if seen early, can be cured at the Clinics without ever having to go to hospital. This refers particularly to early postural errors, knock knees, flat feet, curvatures of the spine and the like which if they are not corrected lead to static arthritis in later life.

During the year, the efficiency of the Clinics has fluctuated with the changing number of the Physiotherapeutic Staff. The members of the staff, under the inspiring leadership of Miss Booth, have been untiring in their efforts to cope with an ever increasing clientele.

Eastern and Central Fife have a good network of Clinics but Western Fife still requires the establishment of some Clinics. The present staff could not deal with these and it is hoped, therefore, that more help will be forthcoming. The assistance provided by the Mobile Red Cross vans for the treatment of some remote cases has been greatly appreciated."

Mobile Physiotherapy Vans.

The Red Cross Mobile Physiotherapy vans have indeed rendered valuable service. There are two, one operating in the East of Fife and one in the West. In the course of the year the two Physiotherapists dealt with 357 patients. Most of them were adults. For the convenience of patients and in order to effect co-operation between them and the County Orthopaedic Staff, the two Physiotherapists held clinics for adults in the Welfare Centres at Lochgelly and Methil, cases being from time to time examined by the Orthopaedic Specialist. There is no doubt about the benefits which a Mobile Physiotheraphy Service can confer. So often patients who are treated in hospital have to undertake long journeys home, whereby they lose the benefit of the treatment given. When further treatment is given by trained personnel in the houses of those in need of it, maximum results are obtained.

Speech Therapy.

The number of Speech Therapists was reduced to two by the resignation of Miss Watson (N. E. Fife area) in February, 1947, and Miss Boyd (Cowdenbeath-Lochgelly area) in March, 1947. These changes unfortunately affected the treatment of the children in these two areas.

The number of children who received treatment for speech defects were 484 (Cowdenbeath, Lochgelly 115, Kirkcaldy 137, Buckhaven 140, and North-East Fife 92). The main conditions for which treatment was given were—stutterers 114, defective articulation 356, defective speech with cleft palate 14, and " other " speech defects 10. The distribution of stutterers was as follows :— Cowdenbeath 24, Kirkcaldy 34, Buckhaven 26, and North-East Fife 30.

The speech therapists paid 82 visits to schools for the purpose of examining pupils or giving advice to teachers regarding particular cases. They also interviewed 58 parents and made 67 visits to the homes of some of the children. During the year 291 children were examined as possible new cases.

The total number of treatments given by the speech therapists was 12,462 (10,662 in the previous year). The figures for the four areas were :—

Cowdenbeath 1,960, Kirkcaldy 4,382, Buckhaven 4,144, and North-East Fife 1,960.

During the year 110 children were discharged from treatment. Of this number 93 were considered as having made satisfactory progress (stutterers 19, defective articulation 64, and other defects 10) ; 7 were not satisfactory (stutterers 1, defective articulation 5, and other 1) ; there were 10 in whom the results were considered as indefinite (stutterers 1, defective articulation 9). In addition there were 21 children who left without having completed the treatment. These results must be considered as, on the whole, satisfactory especially in view of the staff changes.

Mentally and Physically Defective Children.

(*a*) *Special Schools and Classes.*

In the following table the number of children in the special classes is given :—

School.	No. on Roll, Aug., 1946.	No. Admitted.	No. Left.	No. on Roll, July, 1947.
Buckhaven Primary ...	40	17	8	49
Castlehill, Cupar	35	18	14	39
Eastbank, Kirkcaldy ...	48	11	5	54
Lochgelly J. S. School ...	38	8	2	44
M'Lean Public School, Dunfermline	63	22	8	77
	224	76	37	263

b) Children in Institutions.

	Boys.	Girls.
PHYSICALLY HANDICAPPED—		
East Park Home for Infirm Children	1	1
Trefoil Residential School	3	4
Derwen Cripples' Training College	5	—
	9	5
Royal Blind School, Edinburgh	7	6
Dundee Institution for the Deaf	2	4
Donaldson's School for the Deaf	12	13
St Vincent's School (Deaf), Glasgow	1	4
	22	27
MENTALLY HANDICAPPED—		
Epileptic Colony, Bridge of Weir	1	1
St Joseph's Certificated Institution	3	2
Royal Scottish National Institution, Larbert ...	6	0
Waverley Park Home, Kirkintilloch	—	3
Rubislaw Special School, Aberdeen	—	1
Lennox Castle, Lennoxtown	2	1
St Charles Certified Institution, Carstairs Junction	1	—
Rudolph Steiner School, Camphill, Milltimber, Aberdeenshire	0	1
	13	9
Total	44	41

Physical Education and Personal Hygiene of Children.

A number of schools are provided with facilities for the giving f spray-baths to school children and the following schools made use f these baths :—Crossgates J. S. School ; in Cowdenbeath—St olumba's High and Moss-side J. S. Schools ; in Dunfermline—ıe High and Queen Anne J. S. Schools ; in Kirkcaldy—the High ıd Viewforth J. S. Schools ; as well as the Special Classes in East-ank ; Newburgh J. S. ; the Primary School at Methilhill ; as ell as the Waid Academy (Anstruther) and the Bell-Baxter School ı Cupar. In these twelve schools more than 10,055 spray-baths ere given during the year. Whilst there were various difficulties hich had not allowed for a larger number of boys and girls (over 000) to take sprays, it is important that the health value of spray ıths is not more generally made use of in these schools. This is ore emphasised when it is found that of these 10,055 " sprays " ore than 3,700 were given in one school alone (Moss-side J. S. :hool for girls). In the case of four schools no returns were ade.

The scheme of physical education has been further developed ıring the year under the capable guidance of Mr David Wilson

who as Supervisor of Physical Education has made the following report on physical education. It is fitting that a report on the health of the County should contain a record of the work and purpose of the Physical Education Department and Mr Wilson's report provides interesting and instructive reading.

" STAFF : During the school session 1946-47, the physical education staff numbered 34, 19 women teachers and 15 men. Several of these, including 2 women teachers, had returned from War Service with H.M. Forces, and had gained not only additional technical experience but also experience in handling, and dealing with, large numbers of men and women.

Despite a War Emergency Course designed to train additional numbers of men and women specialist teachers, the total output from the Training Colleges remains at too low a figure to meet staffing demands especially in view of the raising of the school leaving age. It may therefore be necessary to employ uncertificated teachers for a period until the position improves.

STUDENT TEACHING PRACTICE : With the return to Dunfermline of the College of Hygiene students from their war-time Centre at Aberdeen, a considerable stimulus to physical education was given in the schools in the Dunfermline, Cowdenbeath, Rosyth, and Torryburn districts. Arrangements have been put into operation whereby a number of schools in these districts will receive the benefit of regular instruction from the students. There is a happy spirit of collaboration between the College Staff and the County Physical Education Department, and many Head Teachers have commented favourably on the good work done by the students. Teachers and pupils alike welcome their bright virile treatment of syllabus and games lessons.

TRAINING COURSES : By arrangement with the County Youth Organiser, two consecutive residential week-end courses in Physical recreation for Youth Leaders, were conducted at the County Council's Youth Hostel at Strathkinness. Both of these courses were well attended by men and women leaders.

A course in Infant singing games was taken by an Infant Mistress who has specialised in Dalcroze Eurhythmics, and this course, held at the Parkhill School, Leven, was very well attended by the majority of the Infant teachers in the area.

An entirely new course of its kind, for recently-appointed Head Teachers, was organised by the Director of Education who kindly allocated a proportion of the available time to physical education. This part of the Course was conducted personally by the Physical Education Organiser, and was warmly received by the Head Teacher concerned. Some of the Head Teachers have since been visited at their schools, and it is gratifying to report that they are trying to follow out the work as discussed at the Training Course.

ATHLETICS MEETINGS : During the Summer term two area meetings were organised in pure Athletics. The North Fife Area meeting was held in the University Sports grounds, St Andrews, by kind permission of the University Authorities, and the East Fife meeting was held at Stark's Park, kindly granted by the Raith Rovers Football Club. These meetings were very successful, and in all some 250 boys took part. Thanks are due to the Head Teachers for their willing co-operation in this entirely new venture. Careful measurements and timings were taken, and with this data for reference it will be interesting and instructive to note progress at future meetings.

REMEDIAL WORK : Three members of the Physical Education staff, who hold the recognised physio-therapy qualifications, were employed on a part-time basis in County Clinics during the session for the purpose of carrying out remedial work as prescribed by the County Medical staff and visiting orthopaedic specialists. In addition, several teachers of Physical Education carried out work of a remedial nature in class groups at their respective schools. The entire Physical Education staff had the benefit of an address on the subject by Dr Krause, Deputy County Medical Officer. It is proposed to follow up this valuable work as opportunity permits, along the lines indicated by Dr Krause.

PLAYING FIELDS : During the year a survey was made of existing playing field accommodation. In collaboration with the County Planning Officer the County has been divided into several areas, and it is proposed to deal with these in turn making specific recommendations for Committee consideration. In this way it is hoped eventually to cover the needs of the whole County.

SWIMMING : Swimming instruction which to some extent had lapsed during the War was renewed during the school session, and attendances at Dunfermline, Burntisland, Kirkcaldy, &c., reached an aggregate of 7,647. All teachers of physical education have been advised to incorporate instruction in land-drills and resuscitation methods in their school scheme of work whether or not the pupils have access to a bathing pool for practical water-work.

SCHOOL CAMPS : Members of the Physical education staff willingly agreed to do work at the Broomlee Camp School held in 1946, and also at the Belmont Camp School held at Meigle in 1947. Their work was supplemented by students who were also made available for the girls' camp held at St Andrews. Thanks are due to the two Training Colleges for making students available to assist at these Camps.

DANCING : In terms of the Advisory Council's Report which advocates increased attention to the subject of folk-dancing, a start has been made in the formulation of a dancing scheme for schools. To assist schools where a pianist is not available, a supply of gramophone records has been provided in the County Gramophone Record library. It is hoped to add to these as the range of dances is increased.

FURTHER EDUCATION : In addition to work undertaken by physical education staff in Youth Clubs and in continuation classes a number of teachers willingly agreed to undertake the instruction of Scottish Country dancing in Miners' Welfare Institutes. The results on the whole were very satisfactory, and the classes built up at Methil, East Wemyss, Lochgelly, and Kelty showed great keenness throughout. It is hoped to extend this work during next winter."

Residential Camp Schools.

The Education Committee made arrangements for two sets of oys to attend Residential Camp Schools, one in September, 1946, at Broomlea " near West Linton, the other in June, 1947, at " Belont " near Meigle. Both camps were very successful and the boys ho had the opportunity of being in residence at the one or other of ese camp schools benefited educationally as well as in health.

The lists of names of the boys whose parents had agreed to hem attending at these camps were forwarded to the area Medical fficers and boys found requiring treatment were advised accordngly. They were all re-inspected by the Welfare Nurses and in a

few instances also by the Medical Officers before being allowed t proceed to the camp. A general analysis is made in the followin table :—

(a) Broomlee Residential Camp School.

(September, 1946).

Area.	No. Examined.	No. found Fit.	No. not Fit.
West Fife	26	26	—
Cowdenbeath	10	10	—
Lochgelly	8	8	—
Markinch-Burntisland ...	44	44	—
Buckhaven	33	33	—
Cupar	11	10	1
Dunfermline Burgh ...	9	9	—
Kirkcaldy Burgh ...	13	13	—
	154	153	1

A number of boys were referred for treatment because presence of head vermin. On re-examination only 1 boy was st found affected and his case was very slight.

(b) Belmont Residential Camp School.

(June, 1947).

Area.	No. Examined.	No. found Fit.	No. not Fit.
West Fife	18	18	—
Cowdenbeath	47	47	—
Lochgelly	11	11	—
Markinch-Burntisland ...	28	28	—
Buckhaven	27	25	2
Cupar	14	13	1
St Andrews	19	19	—
Dunfermline Burgh ...	37	37	—
Kirkcaldy Burgh ...	16	16	—
	217	214	3

The number of boys referred for treatment was four with ni in the hair, one a boil, and one requiring dental treatment. addition a number with asthma, enlarged tonsils and adenoids a other conditions were referred for special examinations. On three were eventually declared unfit—two cases of scabies and o with ringworm on the scalp.

These Camp Schools consist of a block containing dining h and kitchen, an assembly hall, and dormitory blocks, all central heated and lit by electric light. Each is provided with a hospit block with four single wards, and one with four beds.

There is a small dispensary where minor dressings can applied. The resident nurse periodically inspects the children f the presence of any contagious or infectious diseases. Cas suspected of developing an infectious condition can be kept und observation, isolated from the other members of the school.

Mothercraft Classes.

The teaching of Mothercraft to the older girls in a number Secondary Schools was continued. One of the nurses, Miss ilson, who has taught Mothercraft from the inception of arrange-ents in Fife, had unfortunately to resign because of ill-health. ie took a great interest in this work and was deservedly popular ith her pupils. Her place in the teaching of the pupils in the two irkcaldy schools was taken by two nurses attached to the Kirkcaldy urgh staff.

The nurses teaching Mothercraft in the various schools were :—) B. Scott—Viewforth J. S. School, Kirkcaldy—three classes (38) ;) J. M. McLuckie—Kirkcaldy High School—three classes (62) ;) M. A. G. McLean—Ballingry Public School—four classes (66) ; akfield J. S. School, Kelty—three classes (50) ; Queen Anne J. S. hool, Dunfermline—four classes (59) ; and St Margaret's R. C. hool, Dunfermline—two classes (30) ; (4) B. S. Meldrum and (5) . W. Berry—both in Aberhill J. S. School—three classes (43) ;) J. A. Kinnear, Buckhaven High School—two classes (34) ;) A. W. Bisset—Leven J. S. School—three classes (38) ; (8) M. Black—St Columba's High School, Cowdenbeath—three classes duced to two (27) ; (9) G. H. Moir—Moss-side J. S. School, wdenbeath—three classes (42) ; (10) H. R. Conway—Burgh S. School, St Andrews—one class (12). The figures in brackets e the average number of pupils in these classes. These give a tal of 501, but as there were changes every term the actual number girls who were taught this subject was very much greater.

Most of the nurses use the Syllabus of the National Association Maternity and Child Welfare as a guide in their teaching of thercraft. In the teaching of Mothercraft, theory is not ao portant as in some other school subjects and adequate practical struction is of the utmost importance especially in the case of the ckward and overage pupils. There are difficulties which prevent od practical teaching of this subject and the most important is e classroom in which it is taught—often with no facilities for eping equipment, bed, cots, &c. Unfortunately, in the majority the schools only makeshift arrangements are possible. In veral the class is taught in a science room, another in an ordinary ssroom—sometimes with desks and seats which have to be moved obtain the necessary space. As a result, the bed or cot is kept in e room and the mattress and other articles in another. A con-erable amount of time is therefore consumed in shifting and llecting these furnishings and setting them up for use. Owing to k of space a proper cupboard is very often not available for the aller articles and they become lost or soiled with dust. In one two instances the Mothercraft Class has to share a room with other such as sewing.

Headteachers are generally anxious that these classes should be successful and do their utmost to help the nurse, but with the shortage of accommodation they find that the best they can offer frequently leaves much to be desired.

Use of " Dusmo " Method of Cleaning in Fife Schools.

During the past year the use of the " Dusmo " method of cleaning was continued in the ten schools set apart, namely, McLean P. S., Dunfermline ; Kelty P. S. ; Beath R. A. Primary ; Lochgelly J. S. ; Kinghorn P. S. ; Methil P. S. ; Freuchie P. S. ; Castlehill P. S. ; and Tayport J. S. The following report regarding the " Dusmo " method was drawn up and submitted to the Education Committee by the School Medical Officer :—

" There has been a marked improvement during the past year in the use of ' Dusmo ' in the ten schools selected for the try-out ; this despite the severe weather conditions early this year and the continued presence of air-raid shelters in the playgrounds. During the past year this system of cleaning was extended to the whole of the school in each case as against last year's trial when half the school used ' Dusmo ' and the other half was cleaned and wet scrubbed as has been the customary method in all schools. The extension of this system of ' dry-cleaning ' has removed the comparison with the newly washed floor which appeared whiter than the floor only dry-scrubbed. This comparison had a psychological effect and in many cases it resulted in the cleaners comparing the newly washed floors with the dry-cleaned ones. What was forgotten was to compare the two floors a few days later after they had been in use and especially after wet weather. Also habit is difficult to remove, especially with the older and longer experienced cleaners. We therefore found last year that the results were very variable, and there was a strong feeling that the system had not been properly applied by all the cleaners.

This past session, 1946-47, all the cleaners in the schools had to use the same method, and the psychological effect was what one would have expected. The reports of the janitors bear this out. Steps were also taken to make sure that the method was properly understood by demonstrations given by the ' Dusmo ' representative. He was particularly careful to explain the need for and the method of periodic dry-scrubbing, and there is no doubt that the enhanced results are due to a better understanding and consequently more effective use of this system.

I must point out that, although the dry-cleaned floors appear darker than newly washed floors they are found, when closely examined, to be clean. In fact when one rubs one's fingers over the cleaned floor they are not found to be covered with dust. Floors swept by the usual ordinary methods are not so dust-free. The cleaners and janitors repeatedly pointed to the fact that there was less dust on the walls and these remain cleaner for a longer time. The use of ' Dusmo ' as a cleansing material has certainly reduced the incidence of colds among the cleaners, and the fact that less dust is found on the walls and the school furniture means less dust for the school children.

There is also the effect of ' Dusmo ' on the floor. Here the fine film of oil which gradually covers the floors helps to give the floor treated by this method a kind of sheen. The floor so treated is therefore going to stand up better to the ordinary wear and tear of everyday

use. Whilst these floors will not be prevented from eventually splintering from everyday use, they are certainly going to last longer, and the danger of splintering will be not only reduced but will also be less marked. Some years ago I was informed that the floors treated by the ' Dusmo ' method quickly deteriorated. I have carefully investigated this charge and I can find no corroborative evidence to support it. On the other hand, wood soaked with water, and particularly in the presence of soap and alkalies, will swell and become more brittle. It is under these circumstances more liable to splinter—some woods of course more than others. As there is increasing difficulty in obtaining a supply of soap, and there is an increasing use of substitutes, many of them very alkaline in reaction, the use of these may be expected to disintegrate wood fibres still more.

It has been suggested that spindle oil should be used in place of ' Dusmo.' This oil, just like ' hippo ' or other oils, is only of use as a covering and protective agent. It does not prevent dust from falling and remaining on the floor. The dust must still be periodically removed. By the use of ' Dusmo ' we have a combined method of removing dust with the minimum raising and scattering of such dust, but it also in small and repeated instalments adds a film of oil to the floor giving it a protective film without disintegrating the wood fibres. Additional use of spindle oil might give added protection to the wood but the application of a few ounces of spindle oil in two schools chosen for this purpose was valueless as a demonstration experiment.

The past year's experience of extended use of the ' Dusmo ' method has shown that the claims made by the makers are justified if the method is properly applied. The results will vary somewhat with the different kinds of woods, and of course old, worn wood will not give the same satisfactory results which one would obtain with newly laid woods.

Another militating factor against the best results is the spilling of milk on the floors of the classrooms. This would be very much reduced if straws could be used by all the children. Unfortunately the supply of straws is limited. Also the taking of milk in another room (dining-hut) would obviate the unpleasing looking stains where the milk has had to be wiped away.

I do not know whether the use of ' Dusmo ' is cheaper or more expensive, but I must emphasise the salient point in our experience of this method, namely, that as we are concerned with the health of the young people attending our schools, then not only should this method be continued in the present schools using it but it should also be extended to others. I know that janitors in the Wemyss, Kelty, and Lochgelly Areas have indicated their desire to use this method of dry-cleaning in preference to the customary wet-cleaning."

Table showing number of cases of Infectious Diseases recorded in Head Teachers' attendance returns during the year 1947.

School Management Areas.	Measles.	Scarlet Fever.	Diphtheria.	Mumps.	Whooping Cough.	Other Infectious Diseases.	Scabies.	Other Contagious Diseases.	Total.
Cupar	188	14	2	13	160	237	19	18	651
St Andrews	151	44	—	27	57	75	11	27	392
Anstruther	246	31	—	58	56	89	7	52	539
Wemyss	421	68	18	367	74	243	52	47	1290
Kirkcaldy	453	47	12	361	262	275	30	91	1531
Beath	471	53	21	201	274	208	57	162	1447
Dunfermline	624	93	12	328	227	248	83	111	1726
TOTALS ...	2554	350	65	1355	1110	1375	259	508	7576

CARNEGIE DUNFERMLINE TRUST

ANNUAL REPORT

ON THE

TREATMENT OF SCHOOL CHILDREN

IN

DUNFERMLINE AND ROSYTH CLINICS

FOR YEAR ENDED

—31st JULY, 1947—

STAFF ENGAGED IN THE SCHOOL TREATMENT SERVICE.

Administrative Medical Officer.

HARRY EMSLIE SMITH, M.D., Ch.B., D.T.M. and H., D.P.H. (Died 18th December, 1946).

Consulting Aural Surgeon.

B. ELIZABETH NESBITT, F.R.C.S.

Consulting Orthopaedic Surgeons.

R. I. STIRLING, F.R.C.S.
G. W. BAKER, F.R.C.S.

Defective Speech Clinic.

NORAH WOOD.

Dentist.

MADELEINE G. LESLIE, L.D.S., R.C.S. (Ed.).

Physiotherapist.

AGNES B. WHYTE.

Nurses.

A. E. BENNET.
E. B. STENHOUSE.

Secretary.

M. C. McLAREN.

Clinic Attendants.

E. D. McLAREN, A. CLARK, J. ROSS, E. SMALL, J. FRASER (part-time).

INTRODUCTION.

It is with very deep regret that the death, on 18th December, 1946, of Dr Harry Emslie Smith, Administrative Medical Officer to the Carnegie Dunfermline Trust, is recorded. Dr Emslie Smith was appointed a Medical Officer in 1923 in a part-time capacity, but in 1931 he was appointed full-time Administrative Medical Officer. Since that time he had been entirely responsible for the medical treatment of school children, and the supervision of Bandrum Children's Country Home until 1940. Dr Emslie Smith was devoted to his work and, although due to retire under the provisions of the Trustees' Superannuation Scheme, he willingly continued in service throughout the War and may be said to have died in harness. To all problems he brought a kindliness of manner and inherent courtesy, and many of his old patients felt they had lost a real friend.

Consequent upon the death of Dr Emslie Smith, the normal routine work of the Clinics has been carried out as far as possible under the supervision of Dr C. Barclay Reekie, Medical Officer of Health. The Trustees are much indebted to Dr Barclay Reekie for his able and willing help until such time as a permanent arrangement can be made.

During the year which ended on 31st July, 1947, the number of children treated at the Clinics in Dunfermline and Rosyth amounted to 4,599 new cases and 19,364 attendances. As compared with last year, these figures show a decrease, but this is probably attributable to the very prolonged severe weather during the months from February to April. In the case of eye affections, however, it was noted that there was a considerable increase in the number of cases treated, some of them being of a somewhat severe nature. These cases were more or less uniformly distributed throughout the year. There was a welcome decrease in the number of impetigo and scabies cases, and in the case of the latter, it is thought that this is due to stressing the importance of all members of an affected household receiving treatment at the same time, and thus avoiding re-infection by a mild unrecognised case in the same household.

Orthopaedie Clinic.—Three Orthopaedic Clinics were held by the Consulting Orthopaedic Surgeons, at which 37 new cases were examined, and 53 old cases re-examined, making a total of 90 examinations. As the result of these examinations, eleven cases were admitted to Princess Margaret Rose Hospital for operation during the year, and treatment by various orthopaedic methods was advised in the case of other children. The treatment is carried out by Miss A. B. Whyte under the supervision of Dr Barclay Reekie and his staff, who also examine new cases before treatment

is commenced. As a result of the return to Dunfermline in October last of the Dunfermline College of Hygiene and Physical Education, a certain amount of remedial work this year has been undertaken by the Senior Women Students, under the supervision of Miss Girling. New cases were first examined by Dr Wink, Assistant M.O.H., who recommended the cases suitable for treatment by the Students. It is proving most beneficial to have the help of the Students in this connection.

Defective Speech Clinic.—Owing to the retirement of Miss Margaret Fleming, the work of this Clinic is now being carried out solely by Miss Norah Wood, who formerly assisted Miss Fleming. An interesting account of her year's work is given in this report.

Ear, Nose and Throat Clinic.—The Consulting Aural Surgeon held regular monthly clinics during school terms, and advised suitable treatment. Where necessary, operative treatment was subsequently carried out by her at the Dunfermline and West Fife Hospital.

Artificial Sunlight Clinic.—Although there was a slight decrease in the number of cases treated as compared with last year, the numbers were still very high, and this Clinic continues to serve the useful purpose for which it was established.

Dental Clinic.—A satisfactory account of the work in the Dental Clinic is included in this report. Miss Leslie is responsible for both Inspection and Treatment of children's teeth.

The following report on the work of the Clinics is mainly statistical.

Minor Ailments (General Clinics), 1946-47.

The following tables give the number of cases treated during the year at Dunfermline and Rosyth.

Any child returning after a month's unprescribed absence was considered to be a new case, as were children returning after an interval with a different defect.

Return of Cases Treated.

	INGLIS STREET CLINIC.			
	No. of Cases.		No. of Attendances.	
EAR—				
Middle Ear Suppuration	68		703	
Other Conditions	74		268	
	—	142	—	971
NOSE AND THROAT—				
Nasal Conditions	213		262	
Sore Throat	8		8	
Other Throat Conditions	257		295	
	—	478	—	565
EYE—				
Blepharitis	37		295	
Styes	38		170	
Conjunctivitis	46		268	
Corneal Inflammation Ulceration ...	—		—	
Injuries	7		10	
Errors of Refraction	2		2	
Other Conditions	11		14	
	—	141	—	759
SKIN (Head)—				
Dirty	2		3	
Ringworm	1		3	
Impetigo	26		163	
Other Conditions	8		32	
	—	37	—	201
SKIN (Body)—				
Body Vermin	—		—	
Impetigo	174		1000	
Scabies	97		332	
Ringworm	2		19	
Molluscum	3		22	
Other Conditions	197		1424	
	—	473	—	2797
GENERAL—				
Septic Sores	266		1604	
Injuries	290		1264	
Other Conditions	523		1130	
Sunlight	130		2103	
	—	1209	—	6101
		2480		11394

Return of Cases Treated.

	ROSYTH CLINICS.			
	No. of Cases.		No. of Attendances.	
EAR—				
Middle Ear Supperation	23		167	
Other Conditions	39		93	
		62		260
NOSE AND THROAT—				
Nasal Conditions	8		14	
Throat Conditions	28		38	
		36		52
EYE—				
Blepharitis	24		84	
Styes	22		46	
Conjunctivitis	29		99	
Corneal Inflammation and Ulceration	—		—	
Injuries	3		3	
Errors of Refraction	—		—	
Other Conditions	7		8	
		85		240
SKIN (Head)—				
Dirty	2		3	
Ringworm	—		—	
Impetigo	11		46	
Other Conditions	7		45	
		20		94
SKIN (Body)—				
Body Vermin	—		—	
Impetigo	166		555	
Scabies	31		50	
Ringworm	4		9	
Molluscum	2		4	
Other Conditions	282		1978	
		485		2596
GENERAL—				
Septic Sores	304		1273	
Injuries	566		1776	
Other Conditions	163		359	
		1033		3408
Total—Rosyth Clinics		1721		6650
Add—Inglis Street Clinic Total		2480		11394
Total No. of School Children		4201		18044
Add—Pre-School Children—				
Inglis Street		372		1279
Rosyth Clinics		26		41
GRAND TOTAL		4599		19364

Diseases of the Ear, Nose and Throat.

The following table shows the distribution of new cases :—

	Inglis Street. Clinic.	Rosyth Clinics.	Pre-School Age.
Ear	142	62	24
Nose and Throat ...	478	36	51

The number of attendances for treatment amounted to :—

School Children	1848
Children of Pre-School Age	157
	2005

I. Affections of the Ear.

204 school children attended at Dunfermline and Rosyth Clinics on account of diseases of the ear. As compared with last year, this shows an increase of 14 cases of affections of the ear.

Otitis Media.—91 cases of otitis media in school children were treated.

The figures for the two types of the affection are :—

Acute Otitis Media	30
Chronic Otitis Media	61

II. Affections of the Nose and Throat.

514 new cases in school children were treated.

The following table gives the nature and distribution of the cases in the various groups :—

	Inglis Street Clinic.	Rosyth Clinics.
Nose—		
Catarrh	41	3
Other Conditions	172	5
Throat—		
Acute Sore Throat	8	14
Other Conditions	257	14

As compared with last year, the above figures show a decrease of 96 nose and throat affections.

The bulk of throat affections were cases of enlarged tonsils, many of whom were treated by operation.

Children of Pre-School Age.—The following table shows the diseases from which they suffered :—

	Inglis Street Clinic.	Rosyth Clinics.
Otitis Media	17	3
Other affections of the Ear ...	4	—
Affections of the Nose	24	1
Affections of the Throat	23	3

Defective Speech Clinic.

REPORT BY MISS NORAH WOOD.

During the year the following cases were dealt with :—

Stammerers	14
Defective Speech	22
Cleft Palate Speech	1
Backward Speech due to deafness	1
Nasal Tone following operation for tonsils	1
Too Rapid Speech	1
Poor Voice Production	1
	41
No. of Attendances	796

The work of the Speech Clinic during the session was varied and interesting. Attendances were good during the Autumn and Summer terms, but the weather and illness were responsible for very erratic attendances during the Spring term.

Since Miss Fleming's retirement, the work of this Clinic has been carried out single-handed, and it was found impossible to treat nearly every child twice a week as had been the custom in former years. Instead only the worst cases attended twice a week, and the rest attended once weekly. While this has necessarily meant slower progress, results have been satisfactory, and a number of cases have been discharged.

There was a drop in the number of cases treated compared with the previous year. This decrease showed itself principally in the number of stammerers, and may perhaps be partly explained by the gradual drift south of English children from the blitzed areas who had made their home in the district during the War years. Certainly, of the fourteen stammerers treated, only one was English —a very marked contrast with recent years when the proportion of English stammerers was high.

There was the usual number of very young children—some of pre-school age—with various faults of articulation. Several of these children will, at their parents' request, attend the elocution classes at the Music Institute during the coming winter so that their newly-corrected speech may still be under supervision.

It is interesting to note that the deaf boy who has attended the Clinic for a number of years has now, at the age of ten, been admitted to Donaldson's Hospital, Edinburgh, and his parents have received a good report of his progress there.

The cleft palate case, a girl of nine, is making as good progress as is possible, considering that she lacks most of her top teeth and that there is still a gap in her hard palate. At the moment it is not known whether a further operation is contemplated.

Perhaps the most gratifying feature of the year's work has been the increasing awareness among those whose defects had not been

roperly eradicated. All too often, especially in the case of stammerers, children return to the Clinic after a short interval with heir defects as bad as ever. At the end of this session, however, here were several requests from parents and teachers that children who were almost ready for discharge should be allowed to return fter the holidays in order that their good habits of speech might e more firmly established. The value of this co-operative spirit n the part of those responsible for the children's welfare cannot e too often stressed ; after all, of what use is a good education to hese boys and girls, if, when the time comes for them to leave school nd make their way in the world, they are unable to express their houghts clearly and fluently ?

Eye Clinic.

New cases among school children to the number of 226 were reated at the Clinics in Dunfermline and Rosyth. The number f attendances was 999. These figures show an increase of 81 ases of eye affection, some of them being of a somewhat severe ature. These cases were more or less uniformly distributed hroughout the year.

In addition to the above, 3 children of pre-school age received reatment and made 18 attendances.

The following table shows the distribution of the cases and the ain classes of the defects treated :—

	Inglis Street.		Rosyth.	
	School Children.	Pre-School Children.	School Children.	Pre-School Children.
Blepharitis	37	—	24	—
Styes	38	—	22	—
Conjunctivitis ...	46	3	29	—
Corneal Inflammation	—	—	—	—
Injuries	7	—	3	—
Errors of Refraction	2	—	—	—
Other Conditions ...	11	—	7	—
	141	3	85	—

Skin Diseases.

The number of new cases of skin affections among school hildren at all the Clinics was 1,015. The number of attendances mounted to 5,688. The average number of treatments per case as 5·6.

The number of new cases among infants and children of pre-chool age was 68, and the number of treatments 213.

Group I.—Impetigo Contagiosa.—In the year under review, 77 new cases among school children were treated. The number of ttendances was 1,764. These figures show a decrease of 32 cases nd 891 treatments.

In addition to the above, 23 children of pre-school age were sent for treatment. The attendances were 95. These figures also show decreases.

Group 2—Ringworm of the Head and Body.—There was only one case of Ringworm of the scalp. There were 6 of Ringworm of the body, the same number as last year.

Group 3—Warts, Chilblains and Corns.—The number of new cases was :—Warts 191, Chilblains 39, Corns 22.

Group 4— All Other Conditions—

(1) *Vermin.*—Only 4 cases of nits and pediculi of the head were sent for treatment during the year, a decrease of 16 cases as compared with last year.

(2) *Scabies.*—The number treated was 128, a decrease of 37 cases as compared with last year.

Children of Pre-School Age.—68 Infants and children of pre-school age were referred to the Clinics for treatment.

The following table shows the diseases and the numbers treated :—

Impetigo	23
Scabies	15
Ringworm	—
Pediculi and Nits	2
Other Conditions	28
	68

Defective Teeth.

DENTAL REPORT, 1946-47—DUNFERMLINE.

As in former years, the seven Primary Schools in Dunfermline were systematically inspected. All the children whose ages range from 5 years to 12 years were examined. The pupils of the two Secondary Schools and the Advanced Division of St Margaret's School are treated as casual cases.

The following table shows the number of children examined in each group, together with the number of children whose dentitions were sound in the corresponding group :—

	No. Examined.	No. with Sound Dentitions.
At 5 years	436	193
„ 6 „	407	174
„ 7 „	394	124
„ 8 „	334	97
„ 9 „	371	117
„ 10 „	410	138
„ 11 „	407	214
„ 12 „	62	36
	2821	1093

These figures show that 38·75 per cent. of the children examined had sound dentition. As in previous years, these children, if so desirous, were brought up to the Clinic for prophylactic treatment.

The following figures show the general state of the teeth as disclosed by examination and the numbers accepting and refusing treatment :—

		Per Cent.
1. No. Examined	2821	
2. No. with sound dentition	1093	38·75
3. No. requiring treatment	1728	61·25
4. No. in 3 accepting treatment at Clinic ...	1543	89·29
5. No. in 3 refusing treatment at Clinic ...	185	10·71

In the following table the 2821 children are classified according to the number of decayed teeth in the mouth which require attention :—

No. of Decayed Teeth.	Boys.	Girls.	Totals.
0	555	538	1093
1	276	279	555
2	246	236	482
3	119	131	250
4	117	94	211
5	34	35	69
6	39	30	69
7	12	9	21
8	9	11	20
More than 8	25	26	51
	1432	1389	2821

Dental Treatment.

During the year, 2,261 children attended the Clinic for treatment and made 3,519 attendances, an average of 1·56 attendances per child. 1,932 children attended as the result of systematic examination, and made 2,991 attendances. 329 attended as casual cases and made 528 attendances. 57 of these casual cases were of pre-school age, while the remainder came from the Secondary Schools.

The following figures show the treatment carried out throughout the school year :—

	Temporary Teeth.	Permanent Teeth.
EXTRACTIONS—		
Without local anaesthesia ...	835	3
With local anaesthesia ...	1316	80
FILLINGS—		
Cement	23	1
Amalgam	486	980
Silicate	—	213
Root Fillings	—	91
OTHER OPERATIONS—		
Silver Nitrate treatment ...	1311	49
Dressings inserted	262	
Scaling and Cleaning	1080	
Minor Regulation Visits ...	—	

The total amount of treatment carried out during the School year was as follows :—

Teeth extracted	2234
Fillings inserted...	1794
Teeth treated with Silver Nitrate	1360
Dressings inserted	262
Scaling and Cleaning	1080

Rosyth Report, 1946-47.

In September the following schools were systematically inspected :—King's Road, Park Road, and the Roman Catholic Schools. The age groups examined were from 5 years to 11 years. The children attending the Advanced Division of King's Road School were treated as casual cases.

The following table shows the number of children examined in each group, together with the number of children whose dentitions were sonnd in the corresponding group :—

	No. Examined.	No. with Sound Dentition.
At 5 years	199	87
,, 6 ,, ...	142	47
,, 7 ,, ...	219	61
,, 8 ,, ...	145	40
,, 9 ,, ...	202	57
,, 10 ,, ...	170	72
,, 11 ,, ...	129	50
	1206	414

These figures show that 34·33 per cent. of the children examined had sound dentitions. These children, if so desirous, were brought up to the Clinic for prophylactic treatment.

The following figures show the general state of the teeth as disclosed by examination and the numbers accepting and refusing treatment :—

		Per Cent.
1. No. Examined	1206	
2. No. with sound dentitions	414	34·33
3. No. requiring treatment	792	65·67
4. No. in 3 accepting treatment at Clinic ...	705	89·02
5. No. in 3 refusing treatment at Clinic ...	87	10·98

In the following table the 1,206 children are classified according to the number of decayed teeth in the mouth :—

	No. of Children.		
No. of Decayed Teeth.	Boys.	Girls.	Total.
0	231	183	414
1	137	132	269
2	130	118	248
3	53	47	100
4	55	52	107
5	4	7	11
6	19	18	37
7	1	3	4
8	3	3	6
More than 8	8	2	10
	641	565	1206

Dental Treatment.

During the year 877 children attended the Clinics and made ,273 attendances, an average of 1·45 attendances per child. 864 hildren attended as the result of systematic examination and made ,235 attendances. 29 attended as casual cases and made 38 attend- nces. 8 of these casual cases were of pre-school age.

The following figures show the treatment carried out throughout he school year :—

	Temporary Teeth.	Permanent Teeth.
XTRACTIONS—		
Without local anaesthesia ...	351	1
With local anaesthesia	569	19
ILLINGS—		
Cement	3	—
Amalgam	213	379
Silicate	—	26
Root Fillings	—	6
THER OPERATIONS—		
Silver Nitrate treatment	491	9
Dressings inserted	42	
Scaling and Cleaning	414	

The total amount of treatment carried out throughout the chool year was as follows :—

Teeth extracted	940
Fillings inserted	627
Teeth treated with Silver Nitrate	500
Dressings inserted	42
Scaling and Cleaning	414

eformities and Other Conditions Treated at the Orthopaedic Clinic.

Treatment by physiotherapy was carried out by Miss A. B. Vhyte. The defects treated included cases of postural Round houlders ; Antero-Posterior Curvature of the Spine ; Lateral urvature of the Spine ; Paralysis ; Flat Foot ; Club Foot ; nock Knees ; Sprains, Fractures and Injuries ; Rickets and ebility ; and other conditions.

During the year, 221 cases were treated. The total attendances ere 3,129. The average number of treatments per case was pproximately 14.

Most of the cases of local children on discharge from Princess argaret Rose Hospital, Edinburgh, were sent to attend the Ortho- aedic Clinic for further treatment.

Orthopaedic Specialist Clinics.

These clinics provide for the examination and treatment of hildren suffering from physical defects who require orthopaedic are in addition to what can be done for them by massage and other ethods at the Orthopaedic Clinic.

Eleven cases were admitted to Fairmilehead Hospital for operation on the recommendation of the Orthopaedic Specialist.

Treatment by various orthopaedic methods was advised in the case of other children who were seen at the Clinics.

Artifical Sunlight Clinic.

This Clinic remains open throughout the year, except during the summer months.

Most of the treatment is by a weekly general exposure of the body to a long flame Carbon Arc Lamp, but local applications from a Mercury Vapour lamp are given in suitable cases.

Attendances.—During the year the following children were treated, viz. :—

School Children	130
Infants and Children under School Age	66
	196

The number of treatments given was 2,644, of which 541 were to children under school age. The average number of treatments per case was 13·5.

A number of children who had been operated on for tubercular glands of the neck were referred to the Clinic for treatment by Ultra Violet light. The results obtained in these cases were most satisfactory.

INFECTIOUS AND OTHER DISEASES.

In 1947 the number of cases of infectious diseases notified, excluding tuberculosis, was 1,051. This is a decrease of 271 cases on the notifications received in 1946. Reference to tuberculosis notifications will be found under the section of the report dealing with tuberculosis.

The following table shows all cases of infectious diseases notified in the County, including Small Burghs, with the numbers removed to hospital or treated at home :—

Table I.

Return of Cases of Infectious Disease (excluding Tuberculosis) notified during the Year ended 31st December, 1947.

Number of Cases coming to the Knowledge of the Medical Officer of Health and accepted by him as Suffering from the Stated Disease

DISEASE.		At all ages	AT AGE—YEARS. Under 1	1 & under 5	5 & under 15	15 & under 25	25 & under 35	35 & under 45	45 & under 65	65 & upwards	Cases removed to hospital	Cases remo to hosp
		1	2	3	4	5	6	7	8	9	10	11
Cerebro-Spinal Fever	M.	23	4	3	5	7	—	—	4	—	23	—
	F.	15	2	7	5	—	—	—	1	—	15	—
Chickenpox	M.	—										
	F.	—										
Cholera	M.	—										
	F.	—										
Continued Fever	M.	2	—	—	—	—	2	—	—	—	1	
	F.	1	—	—	—	—	—	—	—	1	—	—
Diphtheria	M.	16	—	4	4	4	4	—	—	—	16	—
	F.	19	—	2	7	3	2	2	3	—	19	—
Dysentery	M.	7	1	2	2	—	—	1	1	—	4	
	F.	4	—	1	—	1	—	1	—	1	2	
Encephalitis Lethargica	M.	1	—	—	—	—	—	1	—	—	1	—
	F.	1	—	—	—	—	1	—	—	—	1	—
Erysipelas	M.	21	—	—	—	—	—	2	8	11	4	1
	F.	37	—	1	1	3	1	9	16	6	9	2
Jaundice Acute Infective	M.	1	—	—	—	—	—	—	1	—	1	—
	F.											
Malaria	M.	4	—	—	1	1	1	1	—	—	1	
	F.											
Ophthalmia Measles	M.	2	—	2	—	—	—	—	—	—	2	—
	F.	1	—	1	—	—	—	—	—	—	1	—
Ophthalmic Neonatorum	M.	30	30	—	—	—	—	—	—	—	3	2
	F.	20	20	—	—	—	—	—	—	—	2	1
Plague	M.	—										
	F.	—										
Pneumonia, Acute Influenzal	M.	20	—	—	2	2	—	9	6	1	11	
	F.	17	—	2	—	1	2	5	4	3	10	
Pneumonia Acute Primary	M.	186	29	32	22	21	17	19	25	21	133	5
	F.	145	20	28	30	10	9	13	19	16	114	3
Pneumonia (not otherwise notifiable)	M.	17	4	10	1	—	—	—	1	1	12	
	F.	25	5	13	3	—	2	1	—	1	20	
Poliomyelitis Acute	M.	30	3	11	8	4	2	2	—	—	29	
	F.	25	1	5	8	5	3	1	2	—	25	—
Puerperal Fever	M.	—										
	F.	9	—	—	—	4	4	1	—	—	8	
Puerperal Pyrexia	M.	—										
	F.	13	—	—	—	5	5	3	—	—	8	
Scarlet Fever	M.	175	—	67	95	8	2	2	1	—	173	
	F.	173	1	48	110	8	3	2	1	—	172	
Smallpox	M.	—										
	F.	—										
Typhoid Fever	M.	1	—	—	—	—	—	—	1	—	1	
	F.	2	—	—	—	—	—	—	2	—	2	
Para-Typhoid A.	M.	—										
	F.	—										
Para-Typhoid B.	M.	6	—	—	3	—	1	1	—	1	5	
	F.	2	—	—	1	1	—	—	—	—	2	
TOTAL	M.	542	71	131	143	47	29	38	48	35	420	1
	F.	509	49	108	165	41	32	38	48	28	410	

Apart from the undue incidence of Acute Poliomyelitis (Infantile Paralysis) the general incidence of other diseases was slightly below average and in none was there any threatened epidemic. As in 1946 pneumonia (all forms) caused the highest number of cases of any infectious disease, but in 1947 there was a decrease of 159 cases as compared with the previous year. The actual cases notified in 1947 numbered 410—pneumonia—all forms.

Scarlet fever notifications totalled 348; this figure is 49 fewer than in 1946.

Diphtheria notifications for 1947 reached a new low record, only 34 cases having been recorded compared with 107 cases in 1946. There were no deaths from the disease. Since the national scheme for diphtheria immunisation was started in January, 1941, the number of cases notified has fallen each year and if the scheme is pursued with vigour, diphtheria, like smallpox, will almost become a thing of the past and a triumph for preventive medicine. It is not claimed, however, that immunisation will ultimately abolish diphtheria, but in a fully immunised community the number of cases occurring and the number of deaths from it will undoubtedly be negligible. The decline in incidence is very clearly shown in the following table giving the total number of cases recorded each year since 1940 in Fife County.

Year.	Total Cases Recorded.
1940	475
1941	343
1942	259
1943	222
1944	203
1945	154
1946	107
1947	34

Infantile Paralysis:—

During the latter part of 1947, the County shared along with the rest of the country in a remarkable rise in the number of cases of infantile paralysis. During the previous nine years, cases notified were few in number as is shown by the following yearly number of notifications:—1938—8; 1939—1; 1940—2; 1941—9; 1942—3; 1943—1; 1944—1; 1945—5; 1946—0.

During the war years when conditions were favourable to the spread of many infectious diseases, no increase in this disease took place. From June to December, 1947, a total of 84 cases were notified and admitted to hospital and of these 57 cases were eventually confirmed. The monthly incidence was June—1; July—1; August—18; September—25; October—7; November—3; December—2. By the end of the year the epidemic had virtually ceased, the maximum incidence having been during September.

The following data refer only to the 57 cases confirmed. A note regarding the other cases follows.

Geographical Distribution.—The following figures show the number of cases in each locality and indicate the widely scattered incidence, involving both town and country districts :—Aberdour—1 ; Auchtermuchty—1 ; Auchtertool—1 ; Burntisland—2 ; Buckhaven—3 ; Cardenden—3 ; Colinsburgh—3 ; Donibristle—1 ; Falkland—1 ; Inverkeithing—1 ; Kelty—3 ; Kennoway 2 ; Kinghorn—3 ; Kinglassie—1 ; Kincardine—4 ; Leven—2 ; Leuchars—3 ; Lochore—3 ; Lower Largo—1 ; Lumphinnans—1 ; Markinch—1 ; Methil—4 ; Oakley—1 ; Pittenweem—1 ; St Andrews—4 ; Steelend—3 ; Tayport—1 ; Thornton—1 ; Windygates—1.

Age and Sex Distribution.—The following table shows the age and sex incidence and the number of deaths :—

Age.	Cases.				Deaths.			Case Mortality.
Group	Males	Females	Total	Per Cent.	Males	Females	Total	
0—	3	1	4	7·0	1	—	1	25
1—	13	5	18	31·7	2	—	2	11·1
5—	9	9	18	31·7	—	—	—	—
15—	3	4	7	12·3	—	2	2	28·5
25—	2	4	6	10·1	1	—	1	16·6
35—	2	1	3	5·3	—	—	—	—
45+	—	1	1	1·9	—	—	—	—
Total	32	25	57	100·0	4	2	6	10·0

The largest number of cases, 70 per cent., occurred in the age groups covering 1-15 years, but 30 per cent. of cases were in older age groups. The term " Infantile " paralysis is thus not an entirely accurate description of the disease. The total of 6 deaths gives a case mortality of 10 per cent., but the death of the infant in the first age group was primarily due to a recrudescence of gastro-enteritis to which it had been liable before admission to hospital. The true case mortality in this series was therefore somewhat below 10 per cent.

Relation to Overcrowding and Sanitary Conditions.—In 43 cases, sanitary conditions in the home were considered to be good, in 11 fair, 3 bad, and 18 homes were overcrowded. The incidence therefore bore little relation to bad or overcrowded home conditions.

Sources and Modes of Infection.—In general infectious diseases are transferred by two main methods, either by droplet infection from the throat or by the contamination of food or drink by excreta. It was formerly thought that the chief mode of spread in infantile paralysis was by droplet infection, but evidence is accumulating that the more common method is by excretal material. The latter can occur in many ways such as contamination of food by flies, or the washing of fruit and vegetables in sewage polluted water. Water

and milk supplies may be infected. Food may be infected by bad personal hygiene among food handlers. The position is analogous to the spread of dysentery and the enteric fevers. It is probable that in one outbreak the virus may be spread by more than one means. In spite of the fact that all of these methods of spread are possible the lack of obvious connections between cases is one of the striking and constant features of the epidemiology of this disease. For example in this epidemic, only two confirmed cases came from the same household. One of the main problems awaiting solution is why with possible means of spread so ample, so few cases contract the disease in a clinical form. During the epidemic, attention was drawn in the press to the pollution of railway tracks by excretal materials from trains and it was suggested that flies might be the vehicle of infection from this source. In the County at least, there was no evidence that the geographical incidence of the disease was in any way related to the line of railway tracks.

Almost all the patients had been consuming water which was well safeguarded from the hygenic point of view, viz. :—

Undertaking.	Treatment.	No. of Cases.
Public ...	...Filtered and Chlorinated	26
	Chlorinated	23
	Filtered	5
	Neither filtered nor chlorinated ...	2
Private ...	Well	1

Nineteen different public water supply undertakings were involved. The above facts do not provide any evidence that spread of the disease was related to infected water supplies.

Meteorological Conditions.—Several observers particularly in Sweden have stressed the point that certain weather conditions may have an effect on the incidence of the disease, and further information regarding such conditions in relation to epidemics would be of interest. The Superintendent of the Scottish Meteorological Office, Edinburgh, kindly supplied very full data regarding weather conditions in the County and the following figures give the salient facts.

Period.	Average Mean Temperature (°F.)	Average Rainfall (ins.)	Average Mean Daily Sunshine (hours).
Pre-epidemic period (April-May, 1947)	48·3 F.	3·41	4·60
Epidemic Period (June-December, 1947)	51·9°	1·75	4·13
Average values over a period of 15-20 years—			
(*a*) April-May	47·4	1·83	5·12
(*b*) June-December ...	50·8	2·93	3·91

The rainfall during the pre-epidemic period was considerably in excess of the average, the amount of sunshine was somewhat less than the average, and the mean temperature a little above the

average. During the epidemic period these differences had largely disappeared. No conclusions can be drawn from these facts, but they will form a useful basis for comparison should further epidemics occur.

Diagnosis.—It is well known that cases occur in which no paralysis follows at any stage, and in such cases diagnosis depends on clinical or laboratory evidence, or on both. In this epidemic 45 cases showed paralysis, 3 were accepted on clinical evidence, 1 on laboratory evidence, and 8 on clinical plus laboratory findings.

Severity of the Disease.—In the following table, cases in each age group have been classified to show the extent of paralysis at its maximum and also on discharge from hospital, or, in cases still in hospital at the end of the year, their condition at that time. The latter does not of course include the 6 cases who died.

Extent of Paralysis.	At Maximum.								On discharge from I.D. Hospital or at 31/12/47
	0—	1—	5—	15	—25	35—	45+ yrs.	Total	
None	1	3	6	—	—	1	—	11	20
Slight	1	—	2	1	1	—	1	6	11
Moderate ...	2	9	5	—	1	1	—	18	11
Severe ...	—	6	5	6	4	1	—	22	9
Total ...	4	18	18	7	6	3	1	57	51

The following table indicates the location of the disease in the nervous system of the cases showing paralysis.

	0—	1—	5—	15—	25—	35—	45+yrs.	Total
Cerebral ...	—	—	—	—	—	—	—	—
Bulbar ...	—	—	1	1	1	—	—	3
Upper Cervical	—	—	—	—	—	—	—	—
Lower Cervical	2	3	1	—	1	—	—	7
Thoracic ...	—	1	—	—	—	—	—	1
Lumbar or Sacral ...	1	9	4	2	—	—	1	17
One or more of above segments involved ...	—	2	6	4	4	1	—	17
Total ...	3	15	12	7	6	1	1	45

Association with Pregnancy.—It is considered by some that there is a special susceptibility to the disease during pregnancy. In this series there were 10 women of child-bearing age (15-45 years); of these one was admitted at full term and a healthy baby was delivered by ceasarean section immediately on admission to hospital, and one other had a miscarriage at the third month, four days after

admission to hospital. The percentage of cases pregnant at the time of illness was therefore 20 per cent. as against the accepted figure of 9 per cent. which represents the average percentage of women of child-bearing age who are pregnant in the general population at any one time. Although suggestive the figures are, however, too small to allow of any valid conclusions being drawn.

Use of Mechanical Respirator.—Paralysis of the muscles of respiration may lead rapidly to death. It is well known, however, that respiratory paralysis may be only temporary and that if artificial respiration can be applied until the muscles recover, life may be saved. This is the function of the mechanical respirator or iron-lung, which is a means of performing artificial respiration mechanically for any length of time. A Drinker respirator was available at both Dunfermline and Cameron Hospitals before the epidemic began, but it was necessary to borrow respirators from other hospitals as occasion arose. There is room for much research and experiment with a view to improvement in the design of mechanical respirators. At present the problem of nursing a patient in a respirator is a formidable one, and the responsibility on the nursing staff in such cases is serious. In this epidemic the mechanical respirator was used as a temporary measure in 5 cases, but two patients still in hospital at the end of the year required to be in the respirator at intervals each day. Indeed it is doubtful if either of them will be able to dispense with this cumbersome artificial device.

Means of Prevention.—In a disease where so little is known of the exact mode of spread, and of the factors controlling liability of the individual to infection, prevention of spread is necessarily difficult. The homes of all cases were visited by the Sanitary Inspector or Medical Officer, and immediate contacts were warned to go to bed and call in their own doctor should they become ill. There is now considerable evidence that muscular exertion persisted in during the period of onset, when a patient may try to " work it off," greatly increases the risk of subsequent paralysis, so that the admonition to go to bed at the first sign of illness was considered an important one. It was not considered advisable to enforce the closure of any school, although this decision gave rise to criticism from some parents. In one village three cases occurred in the village school, and vigorous demands were made by the inhabitants to have it closed. The decision not to close was justified by subsequent events in that no further cases arose either in the school or in the village. Home contacts of school age were excluded from school for 14 days. Adult contacts were allowed to continue at work unless engaged in some form of food handling. It is well established that during an epidemic infantile paralysis may follow removal of tonsils. Arrangements for such operations on pre-school and school children were cancelled during the period. For similar reasons, dental extractions were reduced to a minimum.

Treatment.—All cases were admitted to Cameron Infectious Diseases Hospital or to Dunfermline Infectious Diseases Hospital. For those showing paralysis, the end of the period of infectivity was only the beginning of a variable period of orthopaedic treatment, supervision and rehabilitation. The services of the County Orthopaedic Staff were utilised during their stay in hospital. For subsequent treatment of school children, the arrangements under the County Orthopaedic Scheme were available, but some difficulty was experienced in securing after treatment of adults owing to shortage of beds in general hospitals for orthopaedic cases. Even at the best some cases will be left with a degree of permanent disability sufficient to make resettlement in industry difficult. A few cases are likely to be permanently bedridden and in two cases, as has already been indicated, it is doubtful if the use of a mechanical respirator will ever be fully dispensed with. The permanent care of such cases raises new problems, and it has not been possible to make arrangements for their transfer from Cameron Hospital at the date of this report.

The above is a summary of the main points of the epidemic. What the future incidence of the disease may be, cannot be foretold, but the possibility of recurrence cannot be discounted. Much will depend upon epidemiological agents in 1948.

In spite of an enormous amount of investigation into all aspects of the disease in all parts of the world, and particularly in America, possibly in no condition is the need for more knowledge so necessary regarding the infecting virus itself, the mode of spread, susceptibility to infection and means of effective treatment. Technical difficulties in the investigation of the infecting agent are great and unless some quite unexpected light is thrown on the whole problem the disease must remain a hidden threat and a serious menace during times of epidemic prevalence.

Unconfirmed Cases.—Especially in young children, diagnosis of infantile paralysis is difficult and 27 suspected cases sent to hospital were eventually considered not to be infected. The final disgnosis in these cases can be summarised as follows :—

No abnormality detected—3 ; Injury—5 ; Respiratory Infection—4 ; Tuberculous Meningitis—2 ; Meningococcal Meningitis—1 ; Teething—1 ; Cerebral Thrombosis—1 ; Disseminated Sclerosis—1 ; Alimentary Infection—1 ; Septicaemia—1 ; Skin Sepsis—1 ; Neuritis—2 ; Hysteria—1 ; Rheumatic Fever—1 ; Otitis Media—1 ; Haemopneumothorax (? Tuberculous)—1.

Landward Distribution of Infectious Diseases.

The incidence of infectious diseases in each of the seven landward districts of the County is shown in the following tables. Cases occurring in Small Burghs are given in the burgh reports on each town.

TABLE II.

Distribution of Cases according to County Areas.

Disease.	St Andrews.	Anstruther.	Cupar.	Lochgelly and Beath.	Dunfermline.	Kirkcaldy.	Wemyss.
Cerebro-Spinal Fever	1	—	—	9	5	2	4
Chickenpox	—	—	—	—	—	—	—
Continued Fever	—	1	—	—	—	—	—
Diphtheria	1	1	1	5	3	6	1
Dysentery	—	—	—	5	1	5	—
Encephalitis Lethargica	—	—	—	—	—	—	—
Erysipelas	1	1	3	9	9	2	1
Jaundice, Acute Infective ...	—	—	—	—	—	—	—
Malaria	—	—	1	—	—	—	—
Measles	2	—	1	—	—	—	—
Ophthalmia Neonatorum ...	—	—	—	7	6	5	9
Pneumonia, Acute Influenzal ...	—	2	—	12	3	2	1
Pneumonia, Acute Primary ...	2	3	15	55	68	20	28
Pneumonia, other forms	—	4	3	15	5	1	—
Poliomyelitis, Acute	3	—	—	10	11	3	3
Puerperal Fever	—	—	—	—	2	1	—
Puerperal Pyrexia	—	—	—	2	1	—	—
Scarlet Fever	13	12	10	59	41	7	18
Smallpox	—	—	—	—	—	—	—
Typhoid Fever	—	—	3	—	—	—	—
Para-Typhoid A	—	—	—	—	—	—	—
Para-Typhoid B	1	2	—	—	—	—	—
Typhus Fever	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	—	—
TOTAL	24	26	37	188	155	54	65

Diphtheria Immunisation.—The scheme for immunisation against diphtheria was continued in 1947 and the following table shows the number of pre-school and school children dealt with during the year :—

First Injection.		Second Injection.		Third Injection.
Pre-School.	School.	Pre-School.	School.	School.
2887	386	2584	362	1205

To ensure mass protection it is considered that between 75 per cent. and 80 per cent. of the total child population should be immunised. It is essential therefore that immunisation against diphtheria should be pursued with vigour and this work must take a prominent and permanent place in the annual programme of work of every Public Health Department. Pre-school children are by far the most susceptible to diphtheria infection and it is therefore essential that all one-year-olds should be immunised so that the most dangerous years of life may be passed without danger. Further in order to maintain a high level of immunity during school life every child, on entering school at the age of 5 years should be given one additional dose. Two injections are necessary to give full protection but as immunity frequently tends to weaken in the course of a few years, a third injection, commonly called a " boosting dose " is given to school entrants to tide them over their school years. In the above table it will be noted that 1025 children were so treated in 1947. It is not easy to give the exact percentage of pre-school children who have been immunised but approximate figures have been worked out by Area Medical Officers and Health Visitors, as follows :—

Area.	Pre-School % Immunised.	School Entrants Boosting Dose.
Kirkcaldy Area	50—55%	70%
Wemyss Area...	77%	58%
Beath and Lochgelly Area	75%	84%
Cupar Area	72·5%	70%
St Andrews Anstruther } Area	75%	75%
Dunfermline Area	65%	60%

Whooping Cough Immunisation.—The scheme for immunising children against whooping cough was continued during the year The four dose method was largely replaced by completing the immunisation in two doses thus obviating the need for mothers attending the clinic so often. The following table shows the number of children who were inoculated during the year.

Whooping Cough Immunisation.

First Dose	Second Dose.	Third Dose.	Fourth Dose.
674	631	94	86

In Lochgelly—Crosshill—Auchterderran Area combined immunisation against diphtheria and whooping cough was carried out as under :—

Combined Diphtheria and Whooping Cough.

First Dose.	Second Dose.
87	111

Tuberculosis.

Consideration of the statistics detailed below give little cause for optimism as regards the position of tuberculosis on the County. The death rate for all forms of tuberculosis is a little lower than in either of the two preceding years, but the death rate for pulmonary disease is up and there has been a slight increase in the rate of incidence. The main factors militating against improvement—inadequate housing and too few hospital beds—showed no real change during the year. The housing drive is now well under way but there is a big leeway to make up and some years must elapse before the benefit of better housing conditions for a large section of the population is reflected in an improvement of the general health of the community. The existing hospital beds for the treatment of tuberculosis were not in full use on account of the shortage of staff. As a result there were, at any time during the year, some sixty or seventy persons on the waiting list for admission to the Sanatorium : not only did the delay in getting in to the Sanatorium in some instances lessen the chance of recovery, but it increased the risk of infection to the other members of the family. In an attempt to deal with the problem, patients in the Sanatorium were sent out to continue their convalescence at home, earlier than was sometimes really advisable, to make way for others. This partial solution, forced by circumstances, cannot be regarded as satisfactory : it seldom pays to cut the period of sanatorium treatment. The more rapid turnover of the sanatorium beds helped only partly : in spite of it some of the more advanced and hopeless cases did not get in at all and early cases were kept under observation as out-patients. The present incidence of the disease is such that even if all the sanatorium beds were in use they would be insufficient. Increased accommodation is urgently needed if patients are to be placed under treatment without delay and if the necessary period of sanatorium treatment is not to be curtailed.

NOTIFICATIONS.

	Pulmonary.		Non-Pulmonary.		Total.
	Male.	*Female.*	Male.	*Female.*	Male and Female
1946 ...	133 (121)	*127 (108)*	55 (46)	*56 (54)*	371 (329)
1947 ...	149 (136)	*146 (127)*	48 (42)	*53 (46)*	396 (351)

The numbers in brackets indicate confirmed cases.

NOTIFICATIONS—Age and Sex Distribution and Site affected in Confirmed Cases.

	–1		1–4		5–9		10–14		15–19		20–24		25–29		30–34		35–39		40–44		45–54		55–64		65–74		75 & over		Total		Total
	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M & *F.*
Pulmonary	—	*1*	2	*2*	4	*6*	5	*9*	20	*21*	31	*31*	15	*18*	11	*14*	9	*6*	6	*4*	17	*4*	11	*6*	4	*5*	1	—	136	*127*	263
Lymph Nodes ...	1	—	2	*2*	7	*4*	6	*3*	1	*3*	2	—	—	*4*	1	*4*	—	—	—	—	1	—	—	—	—	*1*	—	—	21	*21*	42
Meninges	1	*2*	4	*1*	—	—	1	*1*	—	—	—	*2*	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	7	*6*	13
Abdomen	—	—	1	*1*	3	*1*	1	—	—	*1*	1	—	—	—	—	—	—	—	—	*2*	—	*1*	—	—	—	—	—	—	6	*6*	12
Genito-Urinary ...	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	2	*1*	—	—	—	—	—	—	3	*1*	4
Knee	—	—	—	—	—	*1*	—	—	—	—	—	—	—	—	—	*1*	—	—	—	—	—	—	—	—	—	—	—	—	—	*2*	2
Hip	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2	—	2
Spine	—	—	—	—	—	*2*	—	*1*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*3*	3
Sacro-iliac	—	—	—	—	—	—	—	—	—	*1*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1*	1
Lupus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1*	—	—	—	—	—	—	1	—	—	—	—	—	1	*1*	2
Other Areas	—	—	—	—	1	—	—	—	—	*1*	1	—	—	*2*	—	*1*	—	—	—	*1*	—	—	—	—	—	—	—	—	2	*5*	7
TOTAL ...	2	*3*	10	*6*	15	*14*	13	*14*	21	*27*	35	*33*	16	*24*	13	*21*	9	*6*	6	*7*	20	*6*	12	*6*	5	*6*	1	—	178	*173*	351

If the incidence of pulmonary and meningeal disease in young children is taken as indicative of the rate of infection, then this remains high. The actual number of cases of meningeal tuberculosis in children under ten years of age was the same as in 1946 : there was a reduction in notifications of pulmonary tuberculosis in children under ten years of age, but for all children under fifteen years of age the number for 1947 was 29, against 28 for 1946. The most important feature in the table, showing the age and sex distribution of notifications, is the large number of cases of pulmonary tuberculosis in the age group 15-24 years—103 in 1947 compared with 83 in 1946. There is an increase of 34 in the total notifications of lung disease and most of the rise is due to the increase in the 15-24 year age group. It is this age group, particularly in females, that has always caused most worry. When the incidence and mortality from tuberculosis were falling in the years before 1939, the female age group 15-24 showed little or no improvement. Unfortunately at this age period pulmonary disease shows less tendency to stabilise and responds less well to treatment than in either the younger or older age groups. A peculiarity of the Fife figure is that the numbers for the two sexes were almost equal (51 males and 52 females) : as a rule there is a predominance of women. In the succeeding decade women outnumber men by 32 to 26. In the age group after that there are more cases among the men and this is the usual finding, but the predominance of male cases is not marked until the age period 45 to 64 is reached. There has been an appreciable decrease in the notifications of non-pulmonary disease.

Deaths and Rate per 100,000 Population.

	Pul.		Rate Pul.	Non-Pul.		Rate Non-Pul.	Pul. and Non-Pul.		Total	Rate all Forms.
	M.	*F.*		M.	*F.*		M.	*F.*		
946	46	*31*	39	14	*14*	14·1	60	*45*	105	53·1
947	42	*41*	40·3	12	*11*	10·2	54	*52*	106	51·5

(Estimated population in 1947 was 205,898).

DEATHS—PULMONARY and NON-PULMONARY—Age and Sex Distribution.

		–1		1–4		5–9		10–14		15–24		15–34		35–44		45–54		55–64		65–74		75 & over		Total		
		M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	
1946	Pulmonary	—	*1*	1	—	—	*1*	—	—	7	*10*	12	*10*	8	*5*	13	—	3	*2*	2	*2*	—	—	46	*31*	77
	Non-Pulmonary	2	*1*	5	*1*	3	*1*	—	—	1	*2*	1	*3*	—	—	—	*2*	1	*4*	1	—	—	—	14	*14*	28
	Total ...	2	*2*	6	*1*	3	*2*	—	—	8	*12*	13	*13*	8	*5*	13	*2*	4	*6*	3	*2*	—	—	60	*45*	105
1947	Pulmonary	—	—	—	—	—	—	1	*3*	13	*18*	9	*6*	4	*3*	6	*5*	7	*2*	2	*4*	—	—	42	*41*	83
	Non-Pulmonary	1	*1*	5	*3*	—	—	1	*2*	—	—	2	*3*	—	—	1	*2*	2	—	—	—	—	—	12	*11*	23
	Total ...	1	*1*	5	*3*	—	—	2	*5*	13	*18*	11	*9*	4	*3*	7	*7*	9	*2*	2	*4*	—	—	54	*52*	106

The actual number of deaths was one more than in 1946, but the estimated population of the County is up and consequently the death rate for all forms of tuberculosis is slightly lower than in either of the two preceding years. The pulmonary/non-pulmonary ratio is, however, raised. The greater number of deaths from pulmonary tuberculosis is mainly the result of the marked increase in the deaths from lung disease in the age group 15 to 24 years—a rise which parallels the high notification rate in the same group. Below the age of 15 years the figures are much the same as for 1946 : for the two decades after the 15-24 year age group there has been a slight drop and in the succeeding decades the numbers show little change.

Twelve persons died from meningeal tuberculosis and three from miliary disease : of these all but three were under 15 years old, and nine were under 5 years of age. It is to be hoped that in the near future, with a wider use of streptomycin, some of these children may be saved, but unfortunately the recovery rate even with streptomycin treatment is not high and the disease in very young children is particularly difficult to control. Meningeal tuberculosis appears to progress rapidly in children under three years old and by the time the diagnosis is made and they come for treatment, streptomycin is relatively ineffective.

Cases of Tuberculosis—Notification Register.

	Pulmonary.		Non-Pulmonary		Total.		Total.
	Male.	*Female.*	Male.	*Female.*	Male.	*Female.*	Male and Female.
1946	506	*401*	217	*262*	723	*663*	1386
1947	516	*452*	260	*262*	*776*	*714*	1490

The total number of persons on the register has been rising steadily for the past few years. This is to be expected : the notification rate has been high since 1942, the bulk of the cases have lung disease, and such cases cannot be removed from the register until the disease has been arrested for a period of five years. The wider use of X-Rays for diagnosis, mass radiography, and greater contact examination all tend to raise the notification rate and consequently the number on the register. The above figures should, however, be accepted with reserve : the register has not been revised completely for several years. A thorough overhaul and reclassification of the cases is long overdue, but the existing medical staff is insufficient to cover the day to day clinical work without embarking on so great a task and the revision of the register must wait.

Cases Examined.

	New.	Old.	Contacts.	Total.
1946 ...	506	2047	532	3085
1947 ...	569	1594	669	2832

Fewer examinations were made in the year under review than in 1946, when the figure was exceptionally high. The drop is largely accounted for by the fact that for six or seven weeks in February and March heavy snowfalls greatly restricted travelling. There being no clinics, all cases are seen by home visitation and this was for a long period almost impossible. Every effort was made to see new cases as soon as practicable and actually more were seen than in 1946. Contact examination also improved. It must be obvious, however, considering the number of notified cases in the County that supervision is far from adequate.

Patients Admitted to Sanatorium.

	Pulmonary.				Non-Pulmonary				Non-Tuberculous				Total
	Adults.		Children.		Adults.		Children.		Adults.		Children.		
	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	M.	*F.*	
1946 ...	52	*42*	6	*5*	5	*6*	8	*1*	—	—	2	—	127
1947 ...	74	*45*	4	*10*	5	*14*	14	*12*	—	—	—	—	178

The very considerable increase in the number of patients admitted to Sanatorium and hospital for treatment in 1947 is due to a number of factors. The wider use of part-time nurses at Glenlomond Sanatorium made it possible to open a few additional beds and the admissions there for the year were 125 compared with 110 for the previous year : even so the year ended with nearly 25 per cent. of the Glenlomond beds still out of commission. Of the 53 admissions to Institutions other than Glenlomond, about a third went to Bridge of Earn Hospital, the pleurisy unit there, by admitting cases of pleurisy with effusion, giving valuable assistance and relieving the demand for beds at Glenlomond. The main increase is due to the number of cases of meningeal and pulmonary tuberculosis admitted to Cameron Bridge Infectious Diseases Hospital. Although the pulmonary cases in Cameron Hospital were not admitted as cases of tuberculosis, they were proved to be so on investigation and as transfer to sanatorium was frequently impossible fairly prolonged periods of treatment were given. In view of this it was thought wise to include these patients in the numbers reported as having hospital treatment for tuberculosis. During the year three patients were accepted for treatment with streptomycin—two at Bangour and one at the City Hospital Aberdeen.

Many persons diagnosed as having pneumonia, bronchitis pleurisy, &c., find their way into Cameron Hospital. Investigation of these, and especially the use of X-Rays, has revealed quite a number of cases of pulmonary tuberculosis : most fall within two

groups—(1) elderly people with chronic lung disease, or (2) children either with pleural effusion or caseous hilar glands and areas of lung collapse. This fact is mentioned as the investigation of these patients is in part responsible for the high notification rate. In previous years, when such cases were treated in the smaller fever hospitals where X-Rays were not available, many cases of tuberculosis were probably missed.

In spite of an improvement in the number of beds available at Glenlomond and the assistance given by Bridge of Earn Hospital it was not possible during the year to deal adequately with the Sanatorium waiting list, which seldom had less than seventy names on it. Many patients had to wait several months before treatment could be started: some did not get it at all. Even if staff were available to bring all the Glenlomond beds into use this would still not cope with the waiting list as long as the high notification rate persists.

X-Ray Examinations.

Year.	Total Examinations.	X-Rays of Contacts.	No. of Contacts found to have Pulmonary Tuberculosis.
1942 ...	6	—	
1943 ...	275	47	4 (and four others subsequently developed tuberculosis).
1944 ...	521	100	5
1945 ...	837	198	12 (and 3 others had involvement of hilar glands).
1946 ...	1122	256	17 (and 5 with gross enlargement of the hilar glands).
1947 ...	1350	360	20 (and 7 had definite involvement of root glands).

The number of films taken has again increased but it is not high either for the number of cases on the register or the size of the population at risk. X-Ray examination is indispensable for diagnosis in the early and doubtful case and is one of the best methods of checking a patient's progress. The wider use of this diagnostic measure is undoubtedly in part responsible for the higher notification rate, in that more minimal cases are discovered. Its value in contact examination is indisputable as will be evident from the above figures. To be really effective in the supervision of contacts, X-Ray examination should be done at intervals as long as the contact continues and for some years after it has ceased.

Sputum Examinations.

	Number of Specimens.		
	Positive.	Negative.	Total.
Tuberculosis Officer ...	37	107	144
General Practitioners ...	12	90	108
Total	49	197	252

Examination of sputum from persons suspected of or actually suffering from tuberculosis is apt to be neglected to-day. It is

much easier to send a patient for an X-Ray examination than to issue a sputum flask and instruct him to send in a specimen for examination. This is unfortunate and should be remedied: important as X-Ray examination is, the finding of tubercle bacilli in the sputum is the final proof that the patient is suffering from tuberculosis. Conversely, a persistently negative sputum is a good sign, both for the prognosis of the case, and because he is not dangerous to others and can follow certain forms of employment not open to the infectious person. It is most important to check up on the sputum periodically in all cases under supervision.

In addition to the above direct examinations a considerable number of specimens, in which tubercle bacilli could not be found by direct microscopic examination, were sent to Glenlomond for more extended investigation by culture or animal inoculation.

Supply of Drugs and Dressings.

The cost to the County Council for the provision of drugs and dressings to persons suffering from tuberculosis for the year was £152 3s. This is an increase of £26 2s 6d over the previous year.

Supply of Extra Nourishment.

The cost of this for the year was £205 5s 3d—a reduction of £33 15s from 1946.

Lupus Treatment.

	No. of Patients.	Cost of Travel.	Cost of Lomholt Lamp Treatment.
1946 ...	8	£196 9 6	£28 2 0
1947 ...	—	£150 7 9	£68 11 6

General Comments on the Tuberculosis Service.

While there has been no appreciable worsening of the position in Fife, there has certainly been no improvement. The number of deaths has been remarkably constant for the past three years, but the notification rate is high, the waiting list for treatment is long and there is too high an incidence of tuberculosis in children. A part of the increase in notifications is undoubtedly due to the more thorough investigation of potential sufferers by the increased use of X-Ray examination and the examination of contacts: mass radiography has also yielded its quota, but even allowing for these factors there has been a true increase in the occurrence of tuberculosis during and after the war.

The most important immediate needs are better housing and increased hospital accommodation. The first will probably be achieved before long and there are indications that the supply of personnel for staffing hospitals is improving. In the long term view other things can and should be due to deal with the tuberculosis problem. The County of Fife lagged behind most other areas in not setting up dispensaries at certain populous centres in the County

before 1938 and since then it has been more or less impossible to rectify this want. The time has come, however, when a step in this direction must be taken. Dispensaries would ease the work of the Tuberculosis Medical Officers and make both investigation of cases and supervision of cases and contacts easier. At the moment the staff is quite inadequate to cover the field when every case has to be visited at home : dispensaries or clinics and additional medical and nursing staff would in the end prove a good investment.

At the Commonwealth Tuberculosis Conference in London in July it was mentioned that the B. C. G. Vaccine would probably be available in the near future. This was welcome news. This vaccine, although widely used on the Continent for many years, had always been suspect in Britain and America. Recent work, however, in Canada, U. S. A., and the Scandinavian countries leaves no doubt that it has a place in the prevention of tuberculosis. Wholesale use of the vaccine is not contemplated, and is in fact not advisable, but it should be used to protect certain groups, most notably tuberculin negative children who are contacts, and young adults who are tuberculin negative and who enter occupations (nurses, medical students, domestic staff in hospitals) where the risk of heavy primary infection is high. The use of B. C. G. vaccine will raise a number of administrative problems quite apart from the clinical work, but it should be tackled when the vaccine is available.

At the risk of being accused of repetition, the subject of rehabilitation is mentioned again.

The word " rehabilitation " has come into common use in recent years and has been applied to so many different things that one is apt to be confused as to what is meant. Rehabilitation for a man who has lost an arm but is otherwise perfectly well, is an entirely different thing from rehabilitation for a case of chronic pulmonary tuberculosis. For the tuberculous person rehabilitation starts in the sanatorium where treatment is directed to restoring physical and mental health as far as this is possible : it frequently includes, when the patient leaves the sanatorium, rehousing the family so that the patient may live under conditions which are not prejudicial to his own health, and which will minimise the risk of infection to the other members ; if he is fit to work, it entails placing him in an occupation which is not beyond his physical ability, but will yet yield an income sufficient to enable him to maintain his home and support his family without constant financial worry. In other words, in any one patient one must have regard to the physical, social and economic conditions.

By and large no satisfactory solution has been found for the problem of rehabilitation of the person with tuberculosis, excepting perhaps in the Village Settlement at Papworth and Preston Hall Colony, and these can deal with only a fraction of the tuberculous population. Indeed, few sanatoria in recent years have carried out

their primary function of restoring the patient's physical health to the maximum, as scarcity of staff and beds has led only too often to premature discharge. Equally few are equipped to train patients for new occupations and in most the so-called occupational therapy, valuable as it is, is nothing more than diversional therapy designed to hold the patient's interest and occupy his leisure hours.

Patients admitted to a sanatorium vary greatly in degree of illness and extent of disease, and they also vary greatly in their response to treatment. Some, in whom the disease has not been too extensive and who have progressed so well that the disease has become quiescent, may go out and resume their former employment provided it is of a suitable light type and provided social and economic conditions are satisfactory. Others, who have done equally well, but whose normal occupation involves hard physical exertion, cannot obviously resume their former work; one may advise light work, but light work for a man who has been a miner, engineer or a shipbuilder is difficult to find, and light work often means a light pay packet. Consequently, for the same economic reasons that frequently make both men and women delay in seeking advice and treatment until the disease is already advanced, these people tend to accept heavier work than their physical condition warrants and sooner or later they break down. The remainder of the patients leaving Sanatorium may broadly be classed into two groups, together greater than the quiescent group:—(1) those, with disease of moderate extent and chronic in character, whom it has been possible to patch up to a point where they could do some work under sheltered conditions, and (2) those with disease too extensive to do any work, even if they are fit to carry on quietly at home. The last group is purely a social problem, and it can be dismissed by saying that those constituting it require an allowance to maintain them: the former presents much greater difficulty.

The Disabled Persons (Employment) Act, which was designed to assist all types of disabled persons, is of very limited value to the ex-sanatorium patient. The majority of those requiring the assistance of the Ministry of Labour to find employment are untrained to follow the less arduous occupations, and one has also to overcome the aversion of most employers to accepting on their staff persons suffering from tuberculosis. Many from force of circumstances drift into unsuitable occupations; others drift into a state of chronic idleness. Nor can there be any supervision of the conditions under which the person works. Ministry of Labour Training Centres offer a little help but openings are few, the ex-patient has frequently to leave his home and live in lodgings or travel long distances daily, and the tuberculosis physician is asked to certify that the person is fit to do forty-eight hours weekly at the training centre—a thing which must cause him some misgiving even when dealing with a quiescent case. For the chronic, patched

up case probably with a positive sputum, there is no place in this scheme. He requires sheltered conditions and careful supervision and for him the sanatorium colony or village settlement is the ideal. Short of this he may carry on at home and be placed in a special workshop employing only tuberculous persons, but the special workshop can function economically only in the larger centres of population. The wider use of home industries, with marketing agencies is worthy of investigation as a means of providing work for the more seriously disabled.

Some sanatoria might profitably start schemes for training patients in new occupations over a period of two to three years, but the full development of the Village Settlement or special workshops should be done on a regional or national basis. A move in this direction is badly needed. To know that when treatment was completed, there was a niche in the scheme of things into which he could fit and earn his living, would do much to remove that feeling of frustration which is such a cardinal feature of the disease.

Venereal Diseases.

Dr G. A. H. Gumley, the Medical Officer in charge at the Dunfermline Treatment Centre reports as follows :—,

> " The Treatment Centres within the Scheme remain as hitherto, namely, long-established Clinics for diagnosis and treatment respectively at Dunfermline and at Kirkcaldy.
>
> The bulk of the work finds its way to these Centres in the currents of natural gravitation from the populous central and western districts of the County area, the less densely populated northern fringe having available, much more conveniently to it, the services and good offices of the Dundee Corporation Scheme.
>
> Throughout the years nothing has been brought to notice to suggest that these Centres are other than appropriately situated and, for the future, as the increase of population is likely to affect these same central and western districts, it is probable that whilst the exact locus of the treatment centres may well, and might with advantage, be changed, the centres of population originally selected for the establishment of the Clinics at the inception of the Scheme were well chosen.
>
> In reviewing the second complete year since the cessation of hostilities it is reassuring to record a sharp drop in the incidence of venereal diseases. This, as the following tables clearly illustrate, has been the common experience in all three Treatment Centres.

		Syphilis.		Gonorrhoea.		Other Ven. Disease.		Total Ven. Disease.		Non-Ven. Disease.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
DUNDEE CENTRE	1947	4	6	14	12	13	4	31	22	11	6
	1946	11	10	25	14	8	5	44	29	7	13
	1945	6	5	5	25	2	2	13	32	5	14
DUNFERMLINE CENTRE	1947	43	19	59	12	45	8	147	39	75	18
	1946	48	15	92	18	73	18	213	51	80	30
	1945	28	13	40	20	43	16	111	49	49	40
KIRKCALDY CENTRE	1947	67	42	72	19	33	1	172	62	35	30
	1946	87	42	153	28	103	7	343	77	71	36
	1945	33	21	76	29	53	1	162	51	66	54
ALL CENTRES	1947	114	67	145	40	90	13	350	120	121	54
	1946	146	67	270	60	184	30	600	157	158	79
	1945	67	39	121	74	98	19	286	132	120	108

These are gross figures and comprise all admissions to the Registers of the respective Treatment Centres throughout the year. If appropriate deductions are made in respect of cases readmitted, in the same period, to the Registers, for resumption of treatment in the case of those who have had second thoughts on the subject of their default, and, in respect of cases transferred for continued treatment or surveillance from other treatment centres, the residue will represent fresh infections.

With this adjustment the figures for the individual Treatment Centres are as shown in the following table :—

		Syphilis		Gonorrhoea		Other Venereal Disease		Total Venereal Disease		Non-Venereal Disease	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
DUNDEE CENTRE	1947	4	6	14	9	13	4	31	19	11	16
	1946	9	8	23	14	8	5	40	27	7	13
	1945	4	5	5	24	2	2	11	31	5	14
	% Incr./ Decr.	− 55%	− 25%	− 30%	− 36%	+ 62%	− 20%	− 22%	− 30%	+ 57%	+ 23%
DUNFERMLINE CENTRE	1947	28	17	47	12	41	8	116	37	75	17
	1946	26	12	60	14	71	18	157	44	70	27
	1945	19	12	34	18	43	16	96	46	49	40
	% Incr./ Decr.	+ 8%	+ 42%	− 22%	− 14%	− 42%	− 56%	− 29%	− 16%	+ 7%	− 36%
KIRKCALDY CENTRE	1947	44	27	68	19	32	1	144	47	35	30
	1946	41	30	111	25	92	7	244	62	70	36
	1945	10	14	61	26	45	1	116	41	66	54
	% Incr./ Decr.	+ 7%	− 10%	− 39%	− 24%	− 65%	− 86%	− 41%	− 24%	− 50%	− 17%
ALL CENTRES	1947	76	50	129	40	86	13	291	103	121	53
	1946	76	50	194	53	171	30	441	133	147	76
	1945	33	31	100	68	90	19	223	118	120	108
	% Incr./ Decr.	+ 0 −	+ 0 −	− 33%	− 24%	− 50%	− 57%	− 34%	− 23%	− 18%	− 30%

> In the report for 1946 it was pointed out in a final paragraph that ' there is now in civilian life, and largely contributing to these figures, a ' body of young people of both sexes amongst whom, no doubt, there ' has occurred in the years immediately gone, a certain incidence of ' venereal infection—one which would not be recorded in civilian ' statistics. To have any real comparative value the figures for the ' two years would require to be related to a common denominator. ' They are not so related and as the denominator in the year under ' review has been, by release from the Forces, a steadily growing one, ' too gloomy a view should not be taken of an apparently grim increase ' in major veneral infection '.

Experience of the past year has amply confirmed this sanguine advice and as the common denominator of a reasonably steady population at risk has been approximately the same in the two years, 1946 and 1947, there is good reason now for congratulation in viewing the very sharp recession in the figures for all major venereal infections. There is but one exception to this reduction, namely, the incidence of syphilis, but here at least it is satisfactory to record no increase over the previous year.

It is now probable that veneral infections will remain at a comparatively low level for several years to come, and it may be that, with possible fresh legislation, and with a more closely knit and well-integrated scheme of supervision and follow-up, the acknowledged advances in treatment of the individual case will now be able to exert, to the maximum, their contribution to lowered incidence in the mass.

That this downward trend will continue progressively and indefinitely is improbable, as the incidence of venereal diseases is governed by factors which may be complex, unpredictable, and perhaps of some magnitude. In this respect, particularly, the community is the plaything of economic circumstances, and it is notable that, in conditions of industrial prosperity, high wages, and full employment, the incidence of venereal infection tends to rise. It may be that the brake of high taxation is now, and may continue to be, a beneficial and moderating influence.

Factors which may operate at a later date, and are not amenable to precise forecast include, paradoxically, the now well-established and, meantime, essentially effective modern methods of treatment.

It is now apparent that, in the treatment of gonorrhoea, the very high rate of response to sulfa compounds, say 90-95 per cent., which obtained for some years after the advent of this therapeutic measure has now so far declined that a rate of susceptibility little over 50 per cent. is not unusual, and, were it not for the availability and effective strength of penicillin, the increasing proportion of infection by strains of organism resistant to these drugs would comprise a most disturbing circumstance.

What may be the position in the future is by no means clear, and it is at least possible that, at a later date, it will be found that the propagation of resistant strains of organism has led to a high

ncidence of gonococcal infections resistant to current methods of treatment.

For a like reason it may well come to pass, in the treatment of syphilis, that symptomless recurrence of active infection will bring, as a sequel, and at a much later date, a resurgence of tertiary lesions with all their potentiality for human suffering, incapacity, and loss. These are not idle speculations, and such ill-effects as may fall upon the community can only be avoided by the continued rigorous pursuit of still better methods of treatment. As in any other sphere of human activity, therapeutics does not stand still—we must either go forward or fall behind."

ATTENDANCES.

The total attendances at the three Treatment Centres, and in respect of the main classification of patients, are shown in the following table :—

	Syphilis.		Gonorrhoea.		Other Venereal Diseases.		Non-Venereal Diseases.	
	M.	F.	M.	F.	M.	F.	M.	F.
DUNDEE ...	577	644	197	392	75	25	45	49
DUNFERMLINE	1101	434	3001	219	457	46	160	71
KIRKCALDY ...	2798	1563	437	127	225	4	100	64

Hospital Cases.

	MALES.		FEMALES.	
	No.	Patient Days.	No.	Patient Days.
Dundee Treatment Centre ...	11	268	33	792
Dunfermline Treatment Centre	5	97	5	119
Kirkcaldy Treatment Centre ...	5	4	15	108

Diabetes.

SUPPLY OF FOOD AND INSULIN.

In terms of the scheme under the Public Health (Amendment) Act, 1925, 41 patients were granted insulin and special articles of diet free of cost or at reduced rates. The cost of insulin during the year was £80 8s, while the amount spent on grants of additional nourishment was £33 14s 6d.

Pathological Examinations.

The number of specimens submitted for examination by Medical Practitioners during 1947 was 137, namely Throat Swabs 112, of which 5 were positive for Diphtheria and 25 Bloods, of which 5 were positive for Enteric, 1 for Abortus, and 1 for Enteric and Abortus.

HOSPITAL SERVICES.

Cameron Hospital.

The Medical Superintendent reports as follows on the year's work :—

" During the year 1947, the new Cameron Hospital carried out its first complete year's work as an Infectious Diseases Hospital. With the prospect of the introduction of the National Health Service and the taking over of hospitals by Regional Hospital Boards it is possibly also the last year during which the Hospital will function under the authority of the County Council. The County Council, can, however, take pride in the fact that through their foresight the area possesses one of the most modern Infectious Diseases Hospitals in the country. The whole County, with the exception of Beath and Dunfermline areas, is served by the Hospital which has proved quite adequate to cope with all demands for hospitalisation.

" The following tables show the numbers and types of conditions admitted, with their distribution throughout the County. These are followed by some notes on the general aspect of the diseases and the particular cases treated. A poliomyelitis epidemic was the most serious occurrence of the year, while the most satisfactory feature was probably the declining incidence and severity of diphtheria. Other diseases were not of unduly high incidence or severity.

" While the Nursing Staff were kept very busy throughout the whole of the year, there were times when they were working to the limit of their capacity. At such times, they rose to the occasion admirably and voluntarily gave up part of their off-duty time. At the outset of the poliomyelitis epidemic the help of some part-time nurses was fortunately secured and the majority of them took a real interest in the work of the Hospital. Theoretical training of the Student Nurses has been handicapped through delay in the opening of the Preliminary Training School, but instruction was continued by the present staff with the facilities available to them.

" The loyalty and conscientious work of the nursing staff has been a great help and a word of appreciation is due to the clerkess, Miss Hutchison, who carried out her varied duties with efficiency."

Patients Admitted during the Year ending 31st December, 1947.

DISEASES (Final Hospital Diagnosis)	NUMBERS OF NON-SERVICE PATIENTS																							
	BURGHS																							
	Buckhaven and Methil	Burntisland	Leven	Markinch	Lochgelly	Kinghorn	Leslie	Inverkeithing	Tayport	Cupar	St Andrews	Ladybank	Newport	Anstruther	Newburgh	St Monance	Crail	Elie	Pittenweem	Auchtermuchty	Falkland	Landward	Service Cases	Total Admissions
Cerebro-Spinal Fever ...	5	1	2																			8	1	17
Diphtheria	6	2	3		1		2				2	2										16		34
Dysentery																						2		2
Enteritis (under 2 years)	6		5															1				8		20
Erysipelas		1	1			1																3		6
Measles	2		2	1	1						2			1					1			13		23
Ophthalmia Neonatorum										1												4		5
Paratyphoid Fever—B	1													5		1						1		8
Pneumonia	30	7	10	3	1	2	2			4	4	1		4	1	1	1	1	1			55		128
Poliomyelitis	6	2	3			3			1		4								1	1	1	19	1	42
Puerperal Pyrexia ...	6	1		2									2			1	2		1			8		23
Scarlet Fever	32	16	25	3	2	2	1		14	3	32	1	3	3	1	7		2		1		100		248
Scabies	4																					5		9
Tuberculosis	5		4		2	1								1						1		12		26
Whooping-Cough ...			4					3														12		19
Rubella	1		4						1													2	11	19
Mumps			1																					1
Spirochaetal Jaundice ...			1																					1
Tonsillitis	17		2				1			1	1								1			31	1	55
Chickenpox	1		1																			1		3
Miscellaneous*	11	3	5		2	1			3	3				2							2	53	5	90
TOTALS ...	133	33	73	9	9	10	6	3	19	12	45	4	5	16	2	10	3	4	5	3	3	353	19	779

* The Miscellaneous Cases comprised :—

Buckhaven and Methil	Laryngitis (1), Influenza (1), Cold (5), Erythema Multiforme (1), Hysteria (1), Teething Rash (1), Toxic Psychosis (1).
Burntisland	Bronchitis (1), Pulmonary Collapse (1), Chill (1).
Leven	Bronchitis (2), Influenza (2), Trauma (1).
Lochgelly	Cerebral Thrombosis (1), Chill (1).
Kinghorn	Cerebral Haemorrhage (1).
Service	Pharyngitis (3), Chill (1), Intestinal Colic (1).
Tayport	Chill (1), Trauma (1), Teething (1).
Cupar	Cerebral Thrombosis (1), Born in hospital (1), Nursing Mother (1).
Anstruther	Bronchitis (1), Intestinal Obstruction (1).
Falkland	Disseminated Sclerosis (1), Impetigo (1).
Landward	Pulmonary Embolism (2), Pulmonary Collapse (3), Bronchitis (4), Influenza (3), Laryngitis (3), Intestinal Colic (1), Nephritis (1), Pericarditis (1), Catarrhal Jaundice (1), Congenital Debility (3), Acute Rheumatic Myocarditis (1), Leukaemia (1), Diabetic Coma (1), Arsenical Agranulocytosis (1), Exfoliative Dermatitis (1), Quinsy (1), Meningo Vascular Syphilis (1), Impetigo (1), Food Rash (1), Acute Polyneuritis (1), Born in Hospital (3), Pneumococcal Meningitis (1), Congenital Heart Disease (1), Teething Rash (1), Mediastinal Neoplasm (1), N.A.D. (4), Chill,(1), Rheumatic Fever (2), Chronic Rhinitis (1), Septicaemia (1), Rectal Carcinoma (1), Cerebral Haemorrhage (1), Poliomyelitis contact (full-time Pregnancy) (1),Trauma(2).

Deaths in Cameron Hospital, 1947—Total 35.

No.	Sex	Age	Certified Cause of Death	Time in Hospital
1	F	11 mth	Cerebro Spinal Fever	45 min.
2	M	7 mth.	Acute Gastro Enteritis	5 days
3	M	7 mth.	Gastro Enteritis : Marasmus	46 days
4	M	2 wks.	Upper Respiratory Infections : Enteritis	1 day
5	F	5 mth.	Gastro Enteritis : Marasmus	51 days
6	M	6 mth.	Broncho Pneumonia	3 hrs.
7	F	3 mth.	Broncho Pneumonia	2 days
8	M	4 wks.	Broncho Pneumonia	1 day
9	F	19 yr.	Acute Poliomyelitis	1 day
10	M	2 yr.	Acute Polioencephalitis	3 hrs.
11	F	5 mth.	Whooping Cough : Post Measles Debility	4 days
12	F	6 wks.	Whooping Cough : Broncho Pneumonia	3 days
13	M	53 yr.	Chronic Fibroid Tuberculosis : Cardiac Failure ...	13 days
14	M	5 yr.	Acute Miliary Tuberculosis	23 days
15	M	14 yr.	Tuberculous Meningitis	13 days
16	F	1 yr.	Tuberculous Meningitis	8 days
17	M	4 yr.	Tuberculous Meningitis	7 days
18	M	8 mth.	Tuberculous Meningitis	3 days
19	M	45 yr.	Influenza : Toxic Encephalomyelitis	2 days
20	M	28 yr.	Pneumococcal Pericarditis and Meningitis	15 days
21	F	38 yr.	Rheumatic Carditis	10 hrs.
22	M	1 mth.	Congenital Debility : Aspiration Br. Pneumonia ...	3 days
23	M	3 yr.	Cerebral Agenesia, Spastic Diplegia, Terminal Br. Pneumonia	3 days
24	F	1 mth.	Congenital Debility, Terminal Br. Pneumonia	7 hrs.
25	F	45 yr.	Meningo Cerebellar Haemorrhage (P.M. Exam.) ...	2 hrs.
26	M	15 yr.	Dental Sepsis Septicaemia	2 days
27	F	18 yr.	Diabetic Coma	1 day
28	F	7 mth.	Acute Leukaemia : Multiple Haemorrhage	1 day
29	M	29 yr.	Acute Polioencephalitis	5 days
30	F	1 yr.	Post Measles, Broncho Pneumonia, and Enteritis ...	1 day
31	F	23 yr.	Tuberculous Broncho Pneumonia	28 days
32	F	13 yr.	Pulmonary Tuberculosis	49 days
33	F	30 yr.	Pulmonary Bone and Meningeal Tuberculosis ...	16 days
34	M	33 yr.	Ventriculo-Cerebral Haemorrhage (P.M. Exam.) ...	9 days
35	F	57 yr.	Infected Ovarian Cysts, Intestinal Obstruction, and Peritonitis (P.M. Exam.)	38 days

Patients in Hospital, 31/12/46	69
Admitted during 1947	779
Discharged during 1947	732
Died during 1947	35
Remaining in Hospital, 31/12/47...	81
Cases admitted for Tonsillectomy	186
,, Orthoptic operation	16
Total Patients admitted 1947	980
Average daily beds occupied	60
Maximum beds occupied	100

Scarlet Fever.

There were 264 admissions as scarlet fever. The diagnosis was confirmed in 248 of these. In the remaining 16 cases, the final diagnosis was rubella (6), tonsillitis (4), measles (2), C. S. F. (1), exfoliative dermatitis (1), food rash (1), and teething rash (1).

Of the confirmed cases, 240 were simple faucial infections of which 171 (69 per cent.) were considered clinically to be mild, and 69 (28 per cent) to be of moderate severity. The remaining 8 cases (3 per cent.) were surgical scarlet fever from streptococcal infection of wounds (4), burns (2), abscess (1), and scabies (1). There were no cases of septic toxic or haemorrhagic type. The admissions were fairly high, but were at no time of epidemic proportion, though a few sharp local outbreaks were noted.

Antiserum and sulphonamides continue to have their place in the treatment of scarlet fever and its complications, but there are indications that in future, penicillin will be the drug of choice in the treatment of both initial infection and complications. Antiserum will continue to be necessary in the treatment of severe toxic cases, the toxaemia of course being uninfluenced by chemotherapy. It has hitherto been impracticable to aim at bacteriological cure in scarlet fever and it has been estimated that up to 50 per cent. of cases, even in the absence of obvious complications, still harbour the causal organism in the naso-pharynx on discharge, after up to four weeks in hospital. Despite this, however, return cases (*i.e.*, cases presumably infected by a discharged patient within one month of discharge) are usually in the region of only 2 per cent.-4 per cent. Recent work, mainly on the Continent, indicates that with the routine use of penicillin, not only are complications reduced almost to *nil*, but practicaully 100 per cent. of cases are bacteriologically clear at the end of one week and may safely be discharged in 8-10 days. This would certainly be a great saving in beds and staff, but more work is required before such a course can be adopted as a routine. In any move to reduce drastically the stay in hospital or introduce home treatment, public reaction must be considered. Most parents, despite the mild type of the disease which has prevailed for many years, continue to consider scarlet fever as "The Fever," and would view with suspicion and disfavour, the speedy discharge or failure to hospitalise their child or more especially their neighbour's child, if suffering from scarlet fever. It is essential

that the safety and value of such procedures be definitely proven before widespread adoption.

The following complications were noted :—

(1) Otitis Media—
  (*a*) Subsiding without perforation of the drum—12 cases (4·8%).
  (*b*) Accompanied by perforation and otorrhoea—7 cases (2·9%).
  These were mostly present on admission or were recurrences in chronic cases.
(2) Skin Sepsis, including paronychia, &c.—11 cases (4·4%).
(3) Rhinitis—7 cases (2·9%).
(4) Faucial reinfection without rash—7 cases (2·9%).
(5) Adenitis—4 cases (1·6%).
(6) Nephritis, albuminuria, &c.—2 cases (·8%).
(7) Polyarticular rheumatism—2 cases (·8%).

There were no deaths.
Return cases—6 (2·4%).
Average stay in hospital, 24·8 days.

Puerperal Sepsis and Pyrexia.

Only 23 cases of puerperal conditions were admitted. The prophylactic use of sulphonamides and penicillin has greatly reduced the demand for hospital treatment for such cases. Thirteen cases followed full-time deliveries, 3 followed miscarriage, and 7 followed abortion. By law, all cases in women within 21 days of delivery or miscarriage, in which a temperature of 100·4°F. is sustained or recurs within 24 hours are notifiable as puerperal pyrexia. Ten of the cases admitted were so suffering, without any obvious sign of infection directly connected with childbirth. Three cases presented femoral venous thrombosis, 3 pelvic cellulitis, and 7 local uterine sepsis following abortion. Several cases were complicated by severe post-haemorrhagic anaemia requiring blood transfusion. In cases, removal of retained products of conception was required. The treatment of these cases by penicillin and sulphonamides with the minimum of local interference is satisfactory. There were no deaths.

Erysipelas.

This streptococcal infection is now becoming almost a rarity in hospital practice, due to the ease with which it is controlled by modern therapautics. Admission is usually requested only if the case presents complications or has failed to respond to treatment. Only 6 cases were admitted. There were no deaths.

Diphtheria.

A total of 98 cases was admitted, diagnosed as diphtheria. The diagnosis was confirmed on clinical and/or bacteriological grounds in only 34 of these. In the remaining 64 cases, the final hospital diagnosis was :—

Tonsillitis (ulcerative, follicular, &c.) 48, laryngitis and bronchitis 4, measles 3, pulmonary collapse 1, acute nephritis 1, diabetic coma 1, arsenical agranulocytosis 1, erythema multiforme 1, scarlet fever 1, chronic rhinitis 1, Vincent's Angina 1, quinsy 1.

There were no deaths from diphtheria throughout the year. While this very satisfactory result may be due in part to normal variation in the severity and incidence of the disease, the major part of the credit must undoubtedly go to the Diphtheria Immunisation Scheme. The value of immunisation has been proven beyond all doubt and the success so far obtained must lead to an intensification of immunisation. A reduction in incidence and mortality is being experienced throughout the country, but there is no evidence to suggest that in the absence of continued immunisation, diphtheria will not resume the role of a serious killing epidemic disease. It is the duty of the Public Health Doctor and a moral obligation on the general practitioner to intensify immunisation propaganda, with the object of attaining and maintaining a population 100 per cent. immune to diphtheria.

The following table, despite the small numbers involved, illustrates the diminished incidence and severity of the disease among the immunised as compared with the non-immunised. The older age groups show a greater comparative frequency among the non-immunised.

State of Immunity.	Clinical Type.				Diagnosis.			Number developing complications.	Average time in Hospital.
	Mild.	Moderate.	Severe.	Total	Clinical.	Clin & Bacter.	Bact. only.		
Immunised ...	8	1	—	9	5	2	2	—	32 days
Non-Immun. ...	9	10	6	25	7	17	1	4	46 days
TOTALS ...	17	11	6	34	12	19	3	4	42 days

Age Groups.	Immunised.	Non-Immunised.	Total Cases.
0-4 yrs.	2	5	7
5-9 yrs.	5	3	8
10-25 yrs.	2	7	9
25-	—	10	10

The treatment of diphtheria still consists in the main in the early administration of an adequate dose of antiserum plus prolonged skilled nursing. Penicillin has its place in treatment in severe cases with secondary infection and perhaps in laryngeal cases, where mechanical obstruction is more important than toxaemia. It clears up a secondary infection quickly and hastens bacteriological cure, but has little influence on the clearing of the local diphtheritic lesion or the incidence of complications. The most serious complications are due to the toxemia which must be combated with antiserum.

Pneumonia.

One hundred and seventy-one cases were admitted diagnosed as acute primary pneumonia. In 128 cases, the diagnosis was confirmed. The remaining 43 cases comprised pleurisy with effusion (8), pulmonary tuberculosis (8), bronchitis (7), pulmonary collapse (3), pulmonary embolism (2), carcinoma of bronchus (1),

haemo-pneumothorax (1), terminal pulmonary congestion (3), cold (2), influenza (1), cerebro spinal fever (2), cerebral thrombosis (1), enteritis (1), peritonitis (1), acute myocarditis (1), congenital heart disease (1).

In addition, 9 cases of broncho-pneumonia secondary to measles and 6 cases secondary to whooping cough were admitted.

Three cases were admitted in which a pulmonary congestion was present as a terminal feature. In 2 of these cases, the primary condition was congenital debility and in the other, cerebral agenesia with spastic diplegia and convulsions.

Of the total confirmed cases, 80 were clinically lobar pneumonia and 63 broncho-pneumonia (including 9 post-measles and 6 post-whooping cough cases). It was not found practical to separate the cases on an epidemiological basis into acute primary and acute influenzal groups with any degree of certainty.

Pneumonia cases requiring hospitalisation do not give a true picture of the incidence of the disease. Many cases, especially in otherwise healthy young adults, can be and are treated successfully at home with the powerful therapeutic agents now available. Those admitted to hospital have already undergone a process of selection on the grounds of gravity of illness or unsatisfactory home conditions. The main factors threatening the prognosis were extremes of age and concomitant chronic disease, *e.g.*, cardio-vascular degeneration. At the present stage a combination of sulphonamide and penicillin therapy is probably the best treatment. In the present series there were very few complications, the only serious ones being a case of empyema which cleared up with intercostal drainage and penicillin locally, and one each of the following :— Femeral thrombosis, thrombo phlebitis, congestive cardiac failure, coronary thrombosis, auricular fibrillation and sterile pleural effusion. There were three deaths from primary pneumonia, all in infants under one year. At this age pneumonia still has a considerable mortality rate. One infant died from post-measles and one from post-whooping cough, broncho pneumonia. Three of these deaths occurred within 24 hours of admission, before treatment had much chance of taking effect. The following table shows the age distribution of the cases admitted :—

Age Group.	No. of Cases.	Deaths.
0– 1	24	4 (16·7%)
1– 5	39	1 (2·6%)
6–15	12	—
16–40	35	—
41–60	16	—
60–	17	—
Total	143	5 (3·5%)

Average days in Hospital, 22·3.

Cerebro-Spinal Fever.

Although the incidence of cerebro-spinal fever never reached epidemic proportions, a fairly high incidence of acute sporadic cases was maintained throughout the year. Thirty-seven cases were admitted. In 12 of these the diagnosis was confirmed as meningococcal meningitis. The remaining 25 cases consisted of :—

Poliomylitis (4), tuberculous meningitis (3), pneumococcal meningitis (1), cerebral haemorrhage (1), influenza (4), meningo-vascular syphilis (1), toxic psychosis (1), Weil's disease (1), respiratory tract infections (5), acute leukaemia (1), meningismus (doubtful origin) (3).

In addition, 5 further cases of cerebro-spinal fever were admitted diagnosed as gastro-enteritis (2), pneumonia (2), scarlet fever (1).

In the 17 confirmed cases, there was only one death. This case was an infant of 11 months, who was suffering from a fulminating meningococcal infection and died within an hour of admission.

Sulphonamides are still more effective therapeutically than penicillin alone, but a combination of the two is probably the ideal form of treatment at present. Penicillin, to achieve its maximum efficiency, must be given intrathecally, when quite small doses can maintain a bactericidal action for 24 hours. In the present series of cases, there was only one complication—a case of purulent monarticular arthritis which cleared well with local installation of penicillin into the joint. No case on discharge was suffering from any sequelae.

The average duration of stay in hospital was 26·5 days.

Poliomyelitis.

In the late summer and autumn, an epidemic of poliomyelitis swept across Britain. It was the most severe epidemic of its kind that has been experienced in Fife in the history of the disease. The disease began to assume epidemic proportions in July, reached its peak in late August and September, and thereafter subsided fairly rapidly, though by the end of the year, the incidence was still above the inter-epidemic incidence for the season.

Poliomyelitis and polioencephalitis are due to a virus infection. Different strains of the virus may be responsible in different epidemics. It is a highly infectious condition, but fortunately in the majority of people infected produces a very mild illness or even a subclinical one. In a relatively small number of cases (variously estimated at from 2 per cent.-20 per cent.) the illness is more severe and paralyses appear.

Our knowledge of the epidemiology of this condition is far from complete. Subclinical and non-paralytic cases are probably important in the spread. It is to be noted that diagnosis is very difficult and failing the finding of changes in the cerebro-spinal

fever or the onset of typical paralyses, the diagnosis is at best, presumptive. There are practically no laboratory facilities in Britain for the isolation of the causal virus. The cost of primates is a major difficulty.

Infection may be by inhalation or ingestion. An infected person harbours the virus in the secretions and discharges of the nose and throat for about a week, but the virus is present in the faeces for a longer period—maybe several months. The virus has been isolated from the intestine of several species of flies which have been in contact with infected faeces. It may enter the body in infected water, milk or food. It has been suggested that the sanitary system in railway trains by the widespread disposal, within a short time, of infected excreta may have a bearing on a feature of poliomyelitis epidemics, whereby cases appear at widely separated points throughout a country within a short time of each other with no apparent connection.

It is not very common to find a history of case to case spread. It is generally accepted that pregnancy carries an increased susceptibility to infection. Hypovitaminosis is thought to diminish liability to infection.

There are still, however, very wide gaps in our knowledge of the epidemiology and immuniology and until these have been filled, the usual administrative steps taken during an epidemic, while possibly effective in preventing infection in individual cases, and necessary to prevent the spread of infection from declared cases, are unlikely to influence greatly, the general trend of the epidemic.

Attempts to prevent the disease by active immunisation have been found to be dangerous and passive immunisation by serum therapy has so far revealed no evidence of efficacy.

Specific treatment by antiserum has also been unsuccessful. In this connection it is perhaps unfortunate that poliomyelitis by its nature lends itself to newspaper publicity. From time to time, articles have appeared announcing the discovery of a certain cure. This is very distressing to a patient or the relatives of a patient who is suffering from the paralytic sequelae of the disease. It must be emphasised that no one has yet " cured " a case of poliomyelitis. All that can be done is to treat the illness symptomatically and try to minimise the subsequent paralyses by absolute rest as soon as the condition is suspected. Early rest is probably the only measure likely to lessen the extent and degree of paralysis. The treatment, apart from this, is designed to maintain the local health and blood supply of the affected part with a view to facilitating return of muscle function, should the nerve damage prove reversible and regeneration take place. This is mainly orthopaedic treatment and at a later stage, appliances or operation may prove necessary to minimise defects or improve function. The main recovery

nction is to be expected in the first six months, but if this is in-mplete, some further recovery is possible up to two years from the nset. Active treatment may have to be continued for this time. : will be seen that a large number of such cases place a great strain n the available facilities for orthopaedic treatment.

All the cases in Cameron Hospital had expert orthopaedic nd physiotherapeutic advice and treatment from the start and uring their stay in hospital.

The preceding tables show the widespread dispersal of the cases roughout the County. Forty-two confirmed cases were admitted. n addition, 18 cases were admitted in which the diagnosis was not nfirmed, the final diagnosis being—trauma (5), influenza (3), eumatism (2), cerebral thrombosis (1), hysteria (1), polyneuritis (1), pticaemia (1), teething (1), debility (1), and N. A. D. (2).

The three deaths were cases of (1) ascending landry type of ino-bulbar poliomyelitis, (2) bulbar poliomyelitis, (3) polioence-alitis. Pregnancy was a feature in two cases. One patient was the early stages of labour and presented rapidly spreading ralysis. A Caesarian section was carried out and the patient aced in the artificial respirator. The baby was well and was bsequently discharged and is thriving. The patient is un-rtunately still in the respirator with widespread paralysis, showing tle recovery of function after 6 months. The other patient, 3 onths' pregnant, had an uncomplicated spontaneous abortion ortly after admission.

The artificial respirator (Iron Lung) was employed in 5 cases. ne, who made a rapid recovery from extensive paralysis has been scharged well. Two died from involvement of the upper cardio spiratory centres—the artificial respirator is useless in these cases. vo others still require to be in the Lung for the greater part of the y and will probably never be able to dispense with it entirely.

The final disposal of the cases as far as can be stated at present, as follows :—

(1) Complete Recovery	15
(2) Improved. Discharged to Home	6
(3) Improved. Transferred	11
(4) Died	3
(5) Remaining in Hospital	7

Groups 2, 3 and 5 shall require orthopaedic treatment for a ther 3 months to 2 years. A greatly increased volume of work s been placed on the shoulders of the orthopaedic organisations of e country and they have responded very well to this unprecedented mand for such service.

Among the confirmed cases there were 23 males and 19 females, th the following age distribution and paralysis :—

Age Group	M.	F.	Total	Paralyses				Deaths
				None	Mild	Mod.	Severe	
0– 5	8	3	11	2	1	5	3	1
5–10	5	3	8	4	1	2	1	—
10–20	5	6	11	3	2	2	4	1
20–40	4	5	9	1	1	1	6	1
40–	1	2	3	—	2	—	1	—
Totals	23	19	42	10	7	10	15	3 (7·1%)

From the neurological point of view, the cases were of the following types :—

Preparalytic (Meningitic)	10
Spinal	23
Bulbar	4
Spino Bulbar	4
Polioencephalitic	1
Total	42

Tuberculosis.

Twenty-six cases were admitted in which some variety of tuberculosis was the main or only condition present. Only 4 cases were admitted with a provisional diagnosis of tuberculosis. These were 3 cases of tuberculous meningitis, one of which had pulmonary and bone lesions in addition and one case of miliary tuberculosis. The remainder were admitted as pneumonia (17), cerebro-spinal fever (3), and pyrexia of unknown origin (2).

The following shows the numbers of the different clinical varieties :—

Tuberculous Meningitis	5
Pulmonary Tuberculosis	9
Miliary Tuberculosis	2
Multiple Tuberculous Lesions	1
Abdominal Tuberculosis	1
Pleurisy with Effusion	8

In addition, 3 cases were detected suffering from tuberculosis in addition to the infectious disease for which they were admitted. These were 2 pulmonary (paratyphoid Beta : scarlet fever) and one glandular (diphtheria).

Nine cases terminated fatally. Of these, 4 were meningeal, 3 pulmonary, 1 miliary, and 1 miliary lesions. This represents 25·7 per cent. of the total deaths during the year. The reason for this relatively high mortality is that until very recently, miliary and meningeal tuberculosis were practically 100 per cent. fatal. Also, by the time a pulmonary lesion had become so extensive as to be confused clinically with pneumonia, little prospect of a really favourable outcome remained.

The other cases were retained and treated in Hospital until transfer to Glenlomond Sanatorium could be arranged, or until their condition was considered suitable for discharge and further observation and treatment at home.

Cases of pleurisy with effusion are now generally considered to be in the main, tuberculous in origin. They were treated as such and given sanatorium treatment, either in Cameron or in the Bridge of Earn Pleurisy Unit. They were notified as cases of tuberculosis, to be kept under observation after discharge.

One case of tuberculous meningitis and one case of miliary tuberculosis were transferred for streptomycin treatment. Facilities for this form of treatment are very limited but they provide an undoubted advance in the treatment of hitherto, almost invariably fatal conditions. Death can be postponed and clinical improvement obtained, but the exact value in actually permanently curing the conditions has not yet been properly assessed.

Intestinal Infections.

(*a*) *Enteric.*—A mild outbreak of paratyphoid (Beta) occurred in the autumn. 9 Cases were admitted, in 8 of which the diagnosis was confirmed. The cases were mainly in the Anstruther area (5 cases), and the source of the infection was not detected. The condition was generally of a mild clinical type and missed cases were probable.

(*b*) *Dysentery.*—Five cases were admitted in 2 of which the diagnosis was confirmed. Both cases resided in the same house in Lumphinnans and were presumably infected from a common source. However, rather strangely, a different organism was isolated from each case :—Flexner VY and Sonne Investigation did not reveal the source and no further cases arose.

(*c*) *Gastro-Enteritis.*—Nineteen cases of acute gastro-enteritis were admitted. In 2 other cases the final diagnosis was cerebro-spinal fever. Seventeen of the cases were in infants under 1 year of age. This condition is highly lethal in infants of this age, the death rate in epidemics often being in the region of 40 per cent. or more. In the present small series, 4 deaths occurred. In some cases a pathogenic or doubtful pathogenic infecting organism can be isolated, but in many, the bacteriological investigation is completely negative. Various theories, including virus infection, have been suggested regarding the aetiology of these cases.

The treatment on the whole is non-specific, although some of the recent chemotherapeutic drugs may be of value in some cases. The urgent need of introducing fluid into the infant's body, usually by a parenteral route, makes hospitalisation of the acute case essential. Considering our unsatisfactory, incomplete knowledge of this common and highly dangerous disease, it is rather unfortunate that one very reliable preventive measure, namely breast feeding, is

passing into relative disuse. Acute infective enteritis is unusual in the breast fed infant. Short of this, the main preventive line is the perfection by the mother of the hygiene of artificial feeding.

Measles and Whooping Cough.

These very common, highly infectious and often lethal diseases are not notifiable in Scotland. Hospitalisation is usually asked only in cases developing dangerous complications or occurring in Institutions, &c.

Both these conditions are to some extent preventable. A prophylactic serum obtained from immune humans is available for measles. It use, after exposure, can prevent or greatly modify the disease in susceptibles. Prevention is usually aimed at only in Institutions or in the very young or otherwise debilitated, in whom even a mild attack would be dangerous. In others, a modified (mild) attack, with subsequent lasting immunity is more desirable. These prophylactic sera are at present very scarce and expensive, and it is not yet practicable to use them generally, but in special circumstances they are of great value.

The effect of prophylactic immunisation of infants against whooping cough has been carried out in large scale tests. This may be carried out in combination with anti-diphtheria immunisation. The results have been very promising, but are not yet conclusive enough to have led to general adoption of the measure.

Nineteen cases of whooping cough, mostly suffering from complications, such as chest complications or convulsions, were treated. There were 2 deaths in infants under 6 months. The chest complications in this condition are often very intractable and respond poorly to treatment.

Twenty-three cases of measles were admitted. Some were admitted under a wrong diagnosis, but most were admitted for treatment of complications, chiefly broncho-pneumonia and enteritis. There was one death—an infant, 1 year old, who died within 24 hours of admission.

Ophthalmia Neonatorum.

Six cases only of ophthalmia neonatorum were admitted. They were all of non-gonococcal origin. These cases responded well to local and systematic treatment by penicillin or sulphonamides.

Weil's Disease.

This condition, leptospiral jaundice, is rather uncommon, but probably occurs more often than it is diagnosed. The final diagnosis is a laboratory procedure and difficulty arises from the rather protein manifestations of the disease and the fact that in about 50 per cent. of cases the typical jaundice does not appear. The disease is transmitted to man from infected rats and the condition is therefore most common in those whose occupation is likely to lead

to contact with rats, or who live in rat infested surroundings. The question of Workmen's Compensation may be involved. Only one case, admitted as meningitis, was finally diagnosed as suffering from this condition. A short time before falling ill, he had assisted in clearing out a nest of rats from the bank of a stream. He recovered.

Penicillin is an effective therapeutic agent in this disease.

Cross Infection.

On several occasions, children were admitted to the wards appropriate to the disease from which they were suffering, but who were subsequently found to have been incubating a second infectious disease. Chickenpox was the main offender in this way. It is fortunately, though highly infectious, a relatively trivial disease and its appearance in a ward can be classed more as an administrative nuisance than a cause for medical alarm. Any Institution in which children are gathered together, carries this risk of introduction of new infection. In the absence of a history of direct contact, there is no effective preventive steps that can be taken. Only 100 per cent. single wards could prevent such incidents, but apart from the fact that hospitals are not at present so constructed, this would have disadvantages, both from the point of view of the staff and patients. No cases of serious cross infection, either by new diseases or complications of existing conditions, occurred.

Tonsillectomy and Orthoptic Operations.

As in 1946, when the volume of infectious disease cases permitted, children were admitted to Cameron Hospital for removal of tonsils and adenoids. These children were nursed in complete isolation from the ordinary patients and the risk of cross infection reduced to an absolute minimum. Any slight potential risk was considered to be outweighed by the obvious advantage of having such necessary operations carried out, facilities elsewhere being inadequate. 186 children were operated on. There were no complications due to cross infection.

In addition, 16 children were admitted for Orthoptic Operations for correction of squint.

Therapeutics.

The armamentarium of an infectious diseases hospital consists of facilities for rest, fresh air, and adequate nourishment, supported always by skilled nursing and backed up, where necessary, by various therapeutic agents.

Among the latter, serum sulphonamides and penicillin stand out. With the advent of chemotherapy, sera passed into virtual disuse in many conditions, such as pneumonia and cerebro-spinal fever. It is, however, still the main line of attack in diphtheria and has a definite place in the treatment of scarlet fever. With the exception

of the virus diseases, most infectious conditions are effectively treated with sulphonamides or penicillin, or with a combination of both, depending on the causal organisms. A mild degree of anxiety was recently caused by publicity given to reports on the waning power of penicillin, but, so far, there is no obvious clinical cause for alarm. While the development of resistance by previously susceptible strains of organisms may be possible, there is little doubt that before a grave situation can develop, new and more effective antibiotics will have been discovered.

Bacteriology.

The routine bacteriological and serological investigations on patients were carried out as in previous years by Professor Tulloch and his Staff in Dundee. Such investigations form the basis of study of all infectious diseases. Professor Tulloch's advice and personal interest, in cases presenting unusual features, was very helpful at all times.

The following Bacteriological Investigations were carried out :—

VENEREAL DISEASE INVESTIGATIONS—		
Wassermann Reaction (blood)	7	
do. (C. S. F.)	20	
Gonococcus Complement Fixation Test	1	
Smears for gonococci	2	
	——	30
ROUTINE TESTS—		
Throat swabs for B. diphtheriae	318	
Sputum for tubercle bacilli	36	
Widal Reactions	22	
	——	376
SPECIAL INVESTIGATIONS—		
Exam. of cerebro-spinal fluid	109	
Bact. exam. of urine...	1	
Exam. of pleural fluid	26	
Exam. of faeces and urine for intestinal pathogens	95	
Exam. of throat and nasal swabs ? haemolytic streptococci	5	
Blood for dysentery agglutination	3	
Blood Culture	8	
Vesicle fluid for diagnosis of smallpox	1	
Throat swabs ? monilia	2	
Vesicle fluid ? organisms	1	
Joint fluid	2	
Paul Bunnell test	2	
Exam. of pus	1	
Blood for leptospira agglutination	3	
	——	259
		665

West Fife Infectious Diseases Hospital.

Dr Barclay Reekie, Medical Officer of Health, Dunfermline, ha submitted a Report on the year's work undertaken in this Hospita His Report indicates that 685 cases were treated during the year, which approximately two-thirds were resident in the County Area.

Ovenstone Hospital.

This hospital was established in 1896. It is of interest to note the change in the type of infectious disease which has occurred since then. During the 30 years, 1896-1925, 1,447 cases were admitted of whom 954 suffered from scarlet fever, 378 from diphtheria and 115 from typhoid fever. Typhoid, except for occasional minor outbreaks is now a rarity, and diphtheria is fast disappearing. The reduction in typhoid is due largely to improved sanitation and in diphtheria to the prophylactic methods now available. It is unlikely that scarlet fever cases will show a similar reduction, unless an effective prophylactic is developed.

The hospital ceased to admit cases of infectious disease on 12th July, 1947, after which date cases in the area were admitted to Cameron Hospital. During 1947, 2 cases of erysipelas, 1 case of measles, and 10 cases of scarlet fever were admitted to Ovenstone. There were no deaths and average length of stay per patient was 25·9 days. The hospital has been continued in use as a convalescent home for children.

Registration of Nursing Homes.

The following homes are registered in the County in terms of Section 1 (3) of the Nursing Homes Registration (Scotland) Act, 1938 :—

(1) Orcadia, Burntisland—Angus J. McDonald and Mrs Catherine Linklater or McDonald.

This home is mainly intended for elderly infirm persons, unable to care for themselves and in need of a certain amount of nursing care.

(2) Miramar Nursing Home, Marketgate, Crail—Miss Ann Mackenzie.

This home is mainly for elderly patients not requiring much nursing care, and has accommodation for 13 patients.

(3) Craigmount Nursing Home, St Andrews—Miss Rachel White.

This home takes medical and maternity cases and has 12 beds.

(4) Dunreggan Nursing Home, Elie—Miss Mollie Robb. This home takes medical cases only and has 12 beds.

Although, in addition to the above, several hospitals in the County have accommodation for private patients, nursing home facilities are by no means commensurate with the size of the population. Uncertainty as to the future of such homes under the National Health Service Act and serious difficulties in the supply of nursing and domestic staff make it unlikely that any expansion in this field will take place in the near future.

NUTRITION.

In the report for last year, attention was drawn to the following facts :—

(1) The nutritional state of infants pre-school and school children is in general satisfactory.

(2) In the case of elderly people and of adolescents without access to works canteens the position is more doubtful.

(3) The rationing system affords means for a fair distribution of available foodstuffs, but advantage is not always taken of available supplements.

(4) The national diet is now at the minimum compatible with health and efficiency.

The above facts still hold good for 1947.

The nutritional state of a county is unlikely to differ materially from that of the country as a whole, and as an indication of the country's food position at the end of 1947, one cannot do better than summarise the main points of an informative article published in a medical periodical by Sir Jack Drummond, D.Sc., F.R.S., a former Scientific Adviser to the Ministry of Food.

The dominating consideration concerns the problem of providing the energy needs of the population. On an average to provide this energy, food equivalent to 2550 calories per head per day must be actually consumed. This average covers the wide range of from the 800 calories required by a baby under 1 year to the 4500 required by a hard manual worker. During 1947 the food supply available to the civilian population in the U. K. was between 2800-2900 calories per head per day. Allowing for wastage it will be seen that the safety margin is not great. From the standpoint of energy provision it is safe to say that the salvation of the country during the war years was the unrestricted supply of bread and potatoes, which formed a reservoir of cheap and easily procurable food of high energy content.

Dietary surveys during the war showed that it was not uncommon to find that adolescents and heavy manual workers ate as much as $1\frac{1}{4}$ lb. of bread and 1 lb. of potatoes a day. This was how they provided themselves with the necessary energy, but it meant eating bulky and unattractive foods. From this it will be at once evident that rationing of bread and potatoes undermined the position. It, in fact, reduced the available supply to the equivalent of 2700 calories per head per day. Even with perfect distribution it is doubtful if this would provide the necessary 2550 calories per head per day of food actually eaten. In these circumstances adolescents, pregnant and nursing women are particularly vulnerable and the necessity of their securing for themselves all the supplements

available becomes more and more important. Apart, however, from some risk of an increase in anaemia among adolescent girls and younger women, it is unlikely that the restricted diet of to-day will lead to the appearance of marked signs of deficiency disorders attributed to lack of vitamins or mineral elements.

No one denies that our present food is dull, unappetising and monotonous. People were tired when the war came to an end, and all would have been well if they had been able to enjoy a steady amelioration of their lot. It is not surprising that practitioners are meeting with increasing numbers of patients complaining of being tired and nervy. Serious malnourishment among the general population is however quite another matter, and had such been the case it is difficult to believe it would not have been reflected in the vital statistics.

The outlook for the immediate future is undoubtedly discouraging. Calorie requirements may not be fully met. If so, production will not only be directly affected, but the psychological reaction to further restrictions will have an indirect effect. The grim truth is that there is little that can be done about it, but in comparison with the world food situation in general our position is enviable. The gap between production and requirements steadily grows. Populations in the Far East and elsewhere are increasing at an incredible rate, and will soon provide an insoluble problem as far as food is concerned. We may live to see world famines of dimensions never before experienced by man. It is hard to believe it can be otherwise.

FOOD INFECTIONS.

No cases of food poisoning have come to notice during 1947.

HEALTH CARE SCHEME.

When the Scheme was introduced in 1944 it was recognised that progress must be slow owing to the attitude of the public towards mental and nervous illness and to the conflict of opinion which existed among those who for the time being allowed specialism to cloud objectives in the investigation and treatment of children. It is all the more pleasing, therefore, to be able to report that signs are not wanting of a more ready approach on the part of the public towards the facilities which the County Council are offering for the improvement of mental health, and that the work of the team of specialists on whom the success of the Scheme depends has been characterised by a spirit of mutual understanding and co-operation : indeed it can be said that so far as the Fife Scheme is concerned, administrative procedure is more prone to originate difficulty than are opposing specialist opinions. From the beginning it has been recognised that the Scheme has a preventive as well as a curative aspect, that mental health cannot be divorced from physical health, and that psychiatrist and psychologist can bring their best efforts to bear upon the variety of problems with which they are confronted only if they study the individual *as a whole* against the background of his environment. It was for these reasons that it was deemed best that the psychiatrist should become, *primus inter pares*, the head of the child guidance clinic where preventive work can assume as much importance as remedial work.

In the near future the Scheme is likely to feel the impact of the new legislation for Health and Education. The success of a venture can best be measured by results, and the results of the Fife Scheme have been such as to encourage the hope that no activities under the new enactments will be permitted to disturb the present organisation, particularly since it incorporates much that is envisaged under recent statutes and thereby affords a sound foundation on which to build. Years must elapse before it is established how best the problem of mental health can be handled. The Fife Scheme presents a method which is already showing signs of success : it would be unwise to disturb it by introducing influences which would unfailingly disrupt its " wholeness."

This report has been compiled from reports submitted by those principally concerned in the operation of the Scheme. Their help is cordially acknowledged and the opportunity is taken of paying tribute to the zeal, energy and sympathy with which they have carried out their duties. Many months interyened before a psychiatric social worker could be found to take the place of Miss Pratt Yule, who, with her wide experience, rendered such valuable service, and it was not until October, 1947, that Miss Johnstone commenced duties. Her term of office has not been sufficiently lengthy to

permit of the submission of a separate chapter concerning the work she undertook.

(1) Adult Psychiatry.

Adult Psychiatric Out-Patient Clinics are established at the General Hospitals in Kirkcaldy, St Andrews, Cupar, and Dunfermline.

The Kirkcaldy Clinic functions officially from 2 p.m. to 7 p.m. on Mondays, Thursdays and Saturdays, but frequently it has been necessary to extend the time or refer the patients to one of the other clinics for an extra treatment session. The Kirkcaldy Clinic is now well established and being a suitable centre it is likely that more time will require to be devoted to this Clinic. Facilities have been provided by the General Hospitals for these Clinics but the accommodation is not altogether suitable. The room at Kirkcaldy Hospital is small and although treatment on general psychotherapeutic lines and by psycho-analysis can be carried out, the distracting noises prevent treatment by hypnosis. As there are no adequate recovery arrangements narco-analysis and electric convulsion therapy cannot be practised. Owing to the small size of the rooms it is not possible to practise group therapy. The Psychiatric Social Worker has assisted at this Clinic since October, 1947 being in attendance from 2-3 p.m. on Mondays and Thursdays. The accommodation for the Psychiatric Social Worker is not satisfactory but as the Clinic has only recently had the services of the Psychiatric Social Worker it is hoped that improved accommodation will be made available at a later date. From the number of patients attending the Clinic it will be obvious that much work has been achieved and there has been a most friendly co-operation from the staff of the hospital. The Clinic began the three weekly sessions in February, 1947.

New Out-patients		151
Consultations only	46	
Of these,		
Referred to Mental Hospital as Volunatry Patients	17	
Referred to Mental Hospital as Certified Patients	6	
Referred to Jordanburn Nerve Hospital, Edinburgh	4	
Referred to Nursing Home in Edinburgh	1	
Certification as Mental Defective recommended ...	2	
Referred to Neurological Unit	2	
Recommended for admission to Legal Institutions	3	
Returned to own Doctor	3	
Transferred to Dunfermline Psychiatrict Clinic ...	3	
Environmental Treatment advised	1	
Refused Treatment	3	
Found to be normal	1	
	46	

Discharged		56
As Recovered	20	
Relieved	21	
No Improvement	10	
(All of whom admitted to Hospital)		
Suicide	1	
Transferred to Dunfermline Clinic	2	
Investigation only	2	
	56	
Return Visits		938
Under Investigation or Treatment at 31st December, 1947 ...		49

The Dunfermline Clinic functioned originally by appointment ut latterly has been held regularly each Wednesday afternoon for urposes of treatment. In Dunfermline area the medical practitiiers do not make full use of this clinic as it is necessary to make ppointments in advance, and no such appointments are necessary Edinburgh Royal Infirmary to which patients were referred prior the opening of this Clinic. In the coming year it is hoped that fficient medical staff will be available to have a regular consultation rvice similar to Kirkcaldy. At this Clinic facilities are provided) to 4 p.m. only, and in future it will be necessary to make arrangeents for sessions till 7 p.m. The accommodation provided is not eal and as environmental adjustment is required in most of the ses from this area accommodation will be required for the Psyiatric Social Worker.

New Out-Patients		14
Of these,		
5 were transferred from Kirkcaldy Clinic. Of the 9 referred direct, 6 were for consultation only.		
Recommended for Admission to Jordanburn Nerve Hospital		1
Recommended for Certification as Mental Defectives		2
Admitted to Mental Hospital as Voluntary Patients		3
		6
Return Visits		65
Under Investigation or Treatment at 31st December, 1947		8
Cupar Clinic—		
New Patients		2
Of these,		
Admitted to Mental Hospital	1	
Transferred to Mental Hospital Clinic for Out-Patient Treatment	1	
St Andrews Clinic—		
New Patients		2
Of these,		
Admitted to Mental Hospital	1	
Recommended for admission to M. D. Institution	1	

Mental Hospital Clinic—

New Patients		8
Transfer from Cupar Clinic		1
Of these,		
Admitted to Mental Hospital	3	
Recommended for Home Treatment	3	
No Treatment recommended	1	
Discharged	1	
Under Treatment at 31st December, 1947 ...	1	
Return Visits		18

In addition to patients seen at the Clinics, 15 domiciliary visits were made for consultation.

Of these,	
Recommended for admission to Mental Hospital ...	5
Recommended for Treatment by Family Doctor ...	8
Refused Treatment	2

From the figures submitted, the need for a mental health service outwith the mental hospital is obvious, and much preventive work can be done in the Psychiatric Out-Patient Clinics. Although the medical staff has not been up to the numbers necessary for the full and efficient treatment of mental and nervous illness, it has been possible to allow Dr Louise Eickhoff to devote most of her time to the Out-patient and Child Guidance Clinics. Dr Eickhoff had made a special study of nervous illness and of the emotional disorders in children. She is recognised as one of the few psychiatrists qualified to deal with children.

The need for facilities for investigation and treatment outwith the Mental Hospital has been referred to in previous reports, and as the number of patients increase the need becomes greater for such in-patient facilities. A Psychiatric Unit in the General Hospital is desirable as well as a hospital for psycho-neurotic illness. In future planning, the provision of better facilities for the Psychiatric Out-patient Clinics will require consideration.

Mention has been made of the service given by the Psychiatric Social Worker. This is limited in scope owing to her duties in relation to the Child Guidance Service and at least 3 Psychiatric Social Workers are required. The County is most fortunate in having procured the services of Miss Johnstone as there is keen competition for the few Psychiatric Social Workers available, and if an efficient Mental Health Service is to be built up in Fife, the conditions of the staff taking part must be comparable to those in other Authorities.

The Psychiatric Social Worker took up duty in October, 1947 and as her work was insufficient in scope to permit of conclusions a separate report is not submitted. The work of the Psychiatric Social Worker in the adult psychiatric clinics was as follows :—

Number of Cases Investigated	40
Number of Interviews in Clinic	24
Number of Home Visits	51
Number of other Visits (Employers, Clubs, Social Welfare, &c.)	8

(2) Child Psychiatry.

During the year more time than formerly has been devoted to the Child Guidance Clinic, the services of Dr Eickhoff having been available during the forenoon of Monday, Thursday and Saturday. As a working arrangement, children referred from an educational source are seen in the first instance by the Psychologist who refers cases to the Psychiatrist for investigation and diagnosis when this is considered necessary. Children referred from sources other than educational are seen in the first instance by the Psychiatrist. The team consists of Psychiatrist, Psychologist and Psychiatric Social Worker, and it is hoped that application of the new Education and National Health Service Acts will not be allowed to disturb their collaboration. It must be recognised that although many mal-adjustments arise or are first noted within the school this does not mean that the cause or the cure is to be found in the educational field. Physical disorder or physical disability is present in children showing mental mal-adjustments in numbers which warrant medical examination and it is urged that the school medical report should be consulted in cases not referred to the Psychiatrist.

During the year teacher psychologists have been added to the staff of the Psychologist and it has been necessary to find accommodation for the additional staff by re-allocation of the rooms in Broomlee. The present arrangement is not ideal but meets the immediate needs pending decisions relative to Child Guidance under the National Health Service Act.

As in the case of adult psychiatry in-patient facilities are a pressing need. When the environment of the child is bad, removal to suitable surroundings is necessary before treatment can be instituted, while in the more disturbed children in-patient treatment permits of more continuous treatment.

Most of the treatment has been confined to Broomlee, Kirkcaldy, as no accommodation is available at other centres. This is unfortunate as parents are less willing to bring their children to the Clinic when a journey by 'bus is necessary, especially when it entails an absence from home for a considerable time.

The number of new cases dealt with by the Child Guidance Clinic team was 86. Of these, 30 were for consultation only and of these 30 there were :—

Defectives	17
Defectives with Neglect ...	3
Psychopaths	3
Mismanaged	4
Physical Defect	1
Normal	1
Anxiety State	1

Disposed thus—	
Removal from environment	17
Special Schooling ...	7
Speech Therapy and school alteration ...	2
Advice to Mother ...	1
Refused Treatment ...	1
Relatives reassured ...	1
Sent to Adult Clinic ...	1

56 cases received treatment as follows :—

(*a*) By 1 member of team 28, and of these by Psychiatrist 18, by Psychologist 6, by Psychiatric Social Worker 4.

(*b*) By 2 members of team 23, and of these by Psychiatrist and Psychologist 3, by Psychiatrist and Psychiatric Social Worker 10, by Psychologist and Psychiatric Social Worker 10.

(*c*) By 3 members of team, 5 cases.

The following types of disorder were treated :—

Depressions—		*Personality Disorders*—	
Adolescent	3	Hysterical	1
Reactive	5	Psychopathic—	
Migratory State ...	1	Inadequate ...	2
Obsessive	3	Epileptic	4
Psychopathic	1	Emotional and Social Immaturity	15
Anxiety—		Emotional Instability ...	3
Acute anxiety state ...	3	Mismanagement ...	1
Chronic anxiety state ...	6	Pre-paranoid	1
Adolescent anxiety state	1		
Anxiety Neurosis ...	3		
Hysterical Reaction	2		
Schizophrenic	1		

The total number of treatments given was 334.

Number of Patients Discharged		15
As Recovered	3	
As Relieved	8	
As Unchanged	4	

Sources of referral were as follows :—

Private Doctors	28
School Medical Services	27
Court Authorities	10
Psychologist	12
Jordanburn Nerve Hospital, Edinburgh	3
Sick Children's Hospital, Edinburgh	2
Medical Officer of Health, Fife	2
Other Sources	5

The reasons for referral were numerous and are given according to the predominant symptoms.

Physical Disorders, *e.g.*, Asthma, Eneuresis, Epilepsy	35
Emotional Disorders, *e.g.*, Anxieties, Fears, Depression ...	16
Behaviour Disorders, *e.g.*, Lying, Temper, Theft, Destructive Tendencies	26
Sexual Disorders, *e.g.*, Masturbation, Perversion	5
Retardation in development	7

The number of children under observation and treatment at 31st December, 1947, is 44.

The number of children awaiting treatment at 31st December, 1947, is 3.

The foundations of a mental health service covering all aspects of mental ill-health have been well laid in the County of Fife. This service requires extension, and to a large extent is handicapped by the absence of suitable in-patient facilities. It is hoped that the integration of mental ill-health with physical ill-health under the

National Health Service Act will result in a changed outlook towards mental illness, and it is hoped that patients will be able to receive treatment without the legal formalities incidental to treatment at the present time. Although emphasis is being placed on mental ill-health, the aim of the service is to create a realisation that the mind and body are indivisible and that sound mental health like sound physical health is something attainable. Knowledge on how to live adequately can be diffused and in due course it is hoped that instruction in schools and Child Welfare Clinics will be a means of spreading this knowledge.

The Psychiatrist also supervised Strathore Hospital, Thornton, during the initial stages pending instructions from the General Board of Control relative to its administration. The Matron has been appointed Superintendent and the services of the Psychiatrist are available in a consultative capacity.

(3) Child Guidance.

I. Sources of Referral.

During the year 728 cases were referred to the Clinic, an increase on the previous year of 135 cases, so that from its inception in 1944, the Psychological service in the County has slowly and steadily expanded.

For convenience of assessment, cases have been graded as A type where they have been referred to the Psychologist *via* the Psychiatrist and Medical Services, and B type where they have been referred, in the first instance, directly to the Psychologist. With the A type case psychiatric treatment was given in a limited number and some transferred for psychological treatment while with the B type the major factor appeared to arise from educational difficulty associated with emotional disturbance and with a few of this type some were transferred for psychiatric treatment. The cases were this segregated but in both types an intermingling of causes was evident and the case treated according to its needs.

The wide variety of sources of referral is indicated by the following list :—

	A.	B.	Total.
1. Head Teachers	—	477	
2. Director of Education's Dept. ...	—	27	
(*a*) Special Vocational Guidance	—	12	
(*b*) Backward Sheet	—	73	
3. Mental Survey	—	65	
4. M. O. H. Dept.	17	—	
5. Psychiatrist	29	—	
6. Court Cases	7	6	
7. Parents	—	11	
8. S. M. C.	—	4	
	53	675	728

II. Summary of Work Done.

Of the 728 children referred, 38 are carried forward for examination in the new year, while 690 cases were examined. Among these 690 cases examined were three special investigations :—

(*a*) Examination and diagnosis of children referred on the annual sheet for backward children which is referred *via* the Director of Education from the Head Teachers in the County.

(*b*) A special vocation guidance examination on a number of children due to leave the Special Classes, to assess their fitness for an occupation.

(*c*) Special examination for the National Survey of Child Intelligence being carried out on a group of 65 children born in the year 1936.

Of the total number of cases examined the following analysis is given on a percentage basis firstly for the three separate special examinations, and finally for all the remaining children, 481 in number, referred to the Clinic and examined on a test which yielded an I. Q. grading.

(*a*) Range of I. Q.'s test and %. Backward Sheet.

I. Q. Grading.	No.	%
Above average		
(120+)	—	—
(110—119)	—	—
Average—		
(100—109)	1	1·4
(90— 99)	2	2·7
Below Average—		
(80— 89)	14	19·1
(70— 79)	34	46·6
Borderline M. D.		
(60— 69)	12	16 ·4
Below 60	10	13·7
	73	

(*b*) No. and range of I. Q.'s for children leaving Special Class.

I. Q. Grading.	No.
Below Average	
(70—79)	1
Borderline M. D.	
(60—69)	4
Below 60	7

(*c*) No. and range of I. Q.'s tested and %. Mental Survey.

I. Q. Grading.	No.	%	%
Above Average—			
(120+)	14	21·5	36·9
(110—119)	14	15·4	
Average—			
(100—109)	14	21·5	35·3
(90— 99)	9	13·8	
Below Average—			
(80— 89)	12	18·5	26·2
(70— 79)	5	7·7	
Borderline M. D.			
(60— 69)	1	1·5	1·5
	65		

(*d*) Range of I. Q.'s of remainder of Clinic Cases.

I. Q. Grading.	No.	%	%
Above Average—			
(120+)	19	3·9	6·8
(110—119)	14	2·9	
Average—			
(100—109)	37	7·7	25·0
(90— 99)	83	17·3	
Below Average—			
(80— 89)	128	26·6	49·7
(70— 79)	111	23·1	
Borderline M. D.			
(60— 69)	55		
Below 60	34		7·1
	481		

The findings from these I.Q. ranges are interesting. In (*a*) the Backward Sheet range results are what might be expected. The Head Teachers are referring for examination children who are not only scholastically retarded but also the children who are innately dull, the majority falling into the 70-79 I. Q. range. They are therefore children who are and should be catered for in the Adjustment Class. The second highest majority are children grading below this category into the Special Class for whom adequate provision is made. The referrals are thus very satisfactory.

In (*b*) the investigation of a group of children leaving the Special Class the analysis reveals what should be expected—Special Class grade.

In (*c*) the Mental Survey review, an interesting picture of a random sampling of average Fife children is given. The results point to the high level of intelligence of the group selected as 72·2% were of average and above average intelligence. The number comprising the group is too small to make valid general deductions on the entire intelligence of Fife children, but tends to maintain the findings of the last survey that Fife children show above average general intelligence.

In (*d*) the classification of the remaining Clinic referrals there is a satisfactory distribution. This year the bulk of the cases have tended to move up the scale to the top gradings with a higher percentage of average and above average gradings. This results from the smooth working co-operation of parties dealing with the lower end of the scale so that cases are quickly allocated and Special Class transfers affected where necessary, leaving the higher grades of intelligence to be classified with reference to Adjustment Class placing, &c. It is significant that the higher intelligences tend to show severe emotional disorders and one must consider whether " special " class for the brightest of Fife's children would help their specific type of problem. These are " handicapped " children frequently on the emotional side and require specialised treatment in the classroom as well as clinic.

A more detailed analysis in numbers only of the causes for which children were referred is as follows :—

		Total.
1. *Education*—		
General Backwardness	382	
Backward Sheet	73	
Mental Survey	65	
Assessment of Intelligence	37	
Vocational Guidance	16	
Disability in Arithmetic	11	
,, Reading	9	
,, Spelling	4	
	597	597
2. *Emotional Disorders*—		
General Instability	12	
Speech	6	
Anxiety and obsessional states	5	
Night Terrors, Nightmares, Sleepwalking	2	
Eneurisis and Soiling	5	
Emotional Retardation and Regression	—	
Psycopathic Personalities	3	
Asthmatic	3	
	46	46
3. *Behaviour Disturbances*—		
Unmanageable Behaviour	5	
Aggression and Temper Tantrums	7	
Sadistic tendencies	1	
Exhibitionism	6	
Truancy and Wandering	10	
	29	29
4. *Delinquency*—		
Theft	13	
Lying	2	
Malicious Mischief	2	
Sex	1	
	18	18
No. of Children Examined		690

It must be remembered that such a classification does not show such clear-cut distinctions among children as many of the traits are associated, *e.g.*, lying with stealing, temper tantrums, with unmanageable behaviour, but the headings reflect the major causative factor in the referral.

The very heavy case load during the year has been well tackled and reduced to a minimum by the four assistant Teacher Psychologists appointed to the staff—Miss Taylor, Miss Alexander, Miss Potter, and Miss Ferguson.

A summary of the work covered by them is given below.

Child Examinations		907
In Schools	733	
In Homes	1	
Kirkcaldy Clinic	156	
Dunfermline Clinic	16	
Remand Home	1	
	907	
Treatment Sessions		4416
Kirkcaldy Clinic	3321	
Dunfermline Clinic	1030	
Cupar	65	
	4416	

In addition, of the 29 cases referred through the Psychiatrist, 18 were given psychological treatment.

Cases Discharged		62
As Adjusted	45	
No co-operation	10	
Discontinued, illness	2	
Improved	5	
	62	

Adjustment by transfer with school co-operation : approx. 300.

Continuing treatment : approx. 60+Play groups, approx. to 22 children.

Extra School Visits	140
Parent Interviews	219
Home Visits	65
Play Sessions	78

The examination of children may entail diagnosis with advice only, or necessitate longer treatment of individual cases. In addition, cases are classed as adjusted where the necessary transfer and appropriate remedial education is given in school as *e.g.*, in Adjustment Class transfers. It has been found that the resultant strain of coping with normal work, for which a dull child is not fitted, has been lessened by the appropriate educational measures, and co-operation of the teacher which in turn helps to resolve some of the school problems of behaviour and minor emotional upsets.

Play session treatments have been commenced and groups meet on a Saturday morning for therapeutic and general socialising, thereby enabling more children to be given help. Further sessions will be organised, but at present shortage of toys and materials is rendering it difficult to maintain two fully equipped playrooms in action.

In Cupar area accommodation for examining children is difficult to find and to meet this need a room was put at the disposal of the

Psychologist free of charge, through the good offices of the Rev. R. Alexander. A member of staff was established there and a limited number of children seen twice weekly. This favourable arrangement will not continue indefinitely, and it is a matter requiring urgent attention that a room be found where educational testing can be undertaken.

As well as administrating and organising the work of the Psychological Department throughout the County, guiding and training staff, the Principal Psychologist has contributed to the examining and treatment of children as listed both in advisory and executive capacities. School visits and parent interviews have been conducted and visits to Approved Schools, Factory *re* Vocational Guidance and Court were paid.

In addition, during the year the Psychologist gave 18 different lectures to professional and lay organisations in addition to organising and giving a course in mental testing for Head Teachers and Teachers of the Dunfermline area. This extra work was undertaken in the evenings on a voluntary basis.

Homeless Children.

Among the several commendable features of the Health Care Scheme are the arrangements made for the care of children rendered homeless for whatsoever reason. The official principally concerned is the Chief Social Welfare Officer and great credit is due to Mr William Wilson, recently retired, who took a leading part in organising a service which is highly efficient and at the same time enhanced by a humane and kindly understanding. Homeless children are invariably placed in one or other of the Children's Homes at St Andrews, Leven, and Ovenstone, where they are observed and receive such training as may be necessary. Thereafter they are placed in the charge of carefully selected foster parents. For various reasons it is not always possible to board out children of certain types with the result that with the passing of years a fair proportion of children, particularly boys, have become permanently resident: some of the boys are indeed now approaching young manhood and are employed in useful occupations. The Matrons of these homes and the foster parents are doing a fine piece of work. Needless to say all the requirements of the Home Department as regards supervision and medical inspection are duly carried out. The Children's Homes Sub-Committee are scrupulous in the attention they pay to the needs of each child and in reaching decisions consider the advice of the Probation, Education, Social Welfare and Health Officials. It is their rule not to remove a child from the care of its parents unless such a course is absolutely necessary.

The following is a summary of the year's work :—

hildren and Young Persons under Supervision of Sub-Committee during year.

	Education.	Social Welfare.
Position at 1st January, 1947	124	87
(*a*) New Cases during Year	29	33
	153	120
(*b*) Names removed from Register ...	6	20
(*c*) Position at 31st December, 1947 ...	147	100

New Cases during Year.

	Children and Young Persons committed to care of Education Authority
On Petitions by Education Authority	19
On Petitions by R. S. S. P. C. C.	10
	29

Names Removed from Register.

	Education.	Social Welfare.
Attained 18	6	—
Committed to Approved Schools	—	—
Order revoked (returned to parents)	—	9
To Certified Institutions	—	—
Legal Adoption	—	1
Self-supporting	—	6
Other Reasons	—	4
	6	20

Positions at beginning and end of Year.

	1st January, 1947.		31st December, 1948.	
	Educ'n.	S.W.	Educ'n.	S.W.
Boarded out with Guardians for Payment—				
(*a*) Within County	64	36	66	31
(*b*) Outwith County	—	16	2	19
Under Supervision	12	—	22	—
In Orphanages and Institutions ...	9	20	20	26
In Children's Homes—				
(*a*) Leven	19	7	18	9
(*b*) St Andrews	14	2	14	2
In Dunfermline Combination Home ...	—	6	—	2
In Ovenstone Convalescent Home ...	—	—	4	—
In Remand Home, Dysart	—	—	1	—
ı Other Authority Homes, &c.	—	—	—	11
	118	87	147	100

etitions Presented under Children and Young Persons (Scotland) Act, 1937.

On the instructions of the Committee, 13 Petitions were resented by the County Social Welfare Officer to the Juvenile ourts in respect of children who were neglected by or beyond the ontrol of their parents or guardians. The Petitions were disposed f as follows :—

Children committed to the care of the Education Authority ...	19
Children committed to Approved Schools	2
Children placed under Probation Officer's Supervision ...	6
Continued to future Juvenile Court	—
Cases not proved	—
	27

Petitions in respect of 13 children presented by the R.S.S.P.C.C. were dealt with as follows :—

Children committed to the care of the Education Authority ...	10
Children committed to Approved Schools	—
Children placed under supervision of Probation Officer ...	1
Children in respect of whom Petitions were dismissed	2
	13

In addition, the Committee have had under consideration, thirteen other cases of alleged neglect by parents, affecting 24 children. Of these, seven families are being kept under observation and warning given to the parents, and in the remaining six cases, involving six children, no action was taken.

Boarded-Out Children.

	Education.	Social Welfare.
Boarded-out for first time	16	5
Children removed from one Guardian to another	3	1
Children removed to Hospitals and Orphanages	10	6
Children returned by Guardian to Children's Home (unsuitable for boarding-out) ...	11	5
	40	17

All boarded-out children were visited quarterly, while special visits were made to guardians on a number of occasions.

Seven applications were received from parents to have their children returned to their custody, and of these three were refused. One was later withdrawn, two families were returned to parents on trial, and in the other case two of the children were returned to parents on trial. These three cases are under supervision of the Probation Officer.

There are fully 100 children boarded-out by other Authorities in this County and in terms of the Children (Boarding-Out, &c.) (Scotland) Rules and Regulations, 1947, the County Social Welfare Officer now acts as local supervisor of these children.

The Care of Children apart from their Parents.

During the year 46 children (11 girls and 35 boys) were admitted to the Remand Home at Dysart.

The following table indicated the number of days spent in the Home by the various inmates :—

16	Children	... ...	1 day
9	Children	... ...	2 days
8	Children	... ...	3 days
6	Children	... ...	4–7 days
6	Children	... ...	10–25 days
1	Boy	... ...	83 days

The boy who was an inmate for 83 days was mentally defective and a vacancy could not be found in a suitable Institution.

Nits were found on the hairs of most of the children on admission to the Home, but there was no outstanding case of general neglect, nor was there any case of scabies. The condition of clothing on admission was scanty and also unclean in most cases. Eneuresis was a general complaint, about 80 per cent. of the children being bed-wetters. One outstanding case was a boy, aged 16, who suffered from eneuresis on 26 out of the 28 nights he spent in the Home. The frequency of this condition in these children is not to be wondered at in view of the emotional upset from which most of them suffer.

Dr Girvan, the visiting medical officer, was required to examine 35 of the children and he or his assistant made 44 visits to the Home.

There was no epidemic. One boy had a broken ankle (fractured Os Calcis) and had to attend Kirkcaldy Hospital three times before his transfer from the Remand Home. Two of the girls were referred to the Kirkcaldy Clinic and were found to be pregnant as was suspected.

The Statutory Rules and Orders, 1946, No. 693/S25, Children and Young Persons (Scotland). The Rules and Orders enumerated in this pamphlet became obligatory in all Remand Homes in Scotland. A doctor has to be appointed as a medical officer and each child admitted must be thoroughly cleaned and examined by a doctor within 24 hours of admission. Where this is impracticable, examination must be carried out within 48 hours. Each case must be examined before removal to an Approved School.

There are regulations about schooling and recreation and discipline which must be maintained by the personal influence of the Superintendent. Methods of punishment to be adopted are indicated as well as conditions for corporal punishment. Punishments must be recorded in a log book. The Remand Home must be open at all times to inspection by an " Inspector." Also reasonable facilities must be made for visitors.

It is satisfactory to be able to report that most of the conditions laid down under the new legislation were already being applied at the Home.

Regarding the building, repairs were necessary to the roof in order to prevent the entrance of rain.

Arrangements for domestic staff cannot be regarded as entirely satisfactory. For a short period only part-time staff was available.

Owing to the small number of inmates at times in the Home the Superintendent agreed to a reduction in the number of hours of work for part-time staff. In practice this has not worked out as desired since it was found that it was difficult to obtain a person who was willing to undertake the shorter period of work. Further efforts will be made but it may be that the only solution is a whole-time residential appointment. A whole-time employee is more likely to take a general interest in the day to day working of the Home and its inmates.

A temporary appointment was made when the Superintendent and his wife went on holiday.

MILK SUPPLY.

The following table shows the number of registered producers of milk in the County of Fife in 1947 classified according to type, ordinary Certified, Tuberculin Tested, and Standard. The table also shows the total number of cows in each class of dairy.

	No. of Dairies.			No. of Cows.		
	East Fife.	West Fife.	Total	East Fife.	West Fife.	Total
Ordinary or non-designated	42	80	122	702	1862	2564
Certified	7	3	10	344	134	478
Tuberculin Tested... ...	44	83	127	1592	2856	4448
Standard	17	27	44	498	913	1411
TOTAL ...	110	193	303	3136	5765	8901

All milk produced under the Milk (Special Designations) Orders Scotland), 1936-44, is strictly controlled in the terms of these Orders oth as regards quality and cleanliness. Before any dairyman can ualify as a producer of one of the designated milks, Certified, . T., or Standard, he must satisfy the Local Authority that he is a uitable and proper person to hold a licence for the production of ne or other of the special grades of milk ; his dairy premises must omply with the terms of the County Dairy Byelaws, steam sterilisa- ion plant must be provided to deal with the dairy utensils so as to nsure absolute cleanliness and all the animals in a herd must be linically sound and free from disease. In addition, for the pro- uction of " Certified " and " T. T." milk the entire herd must ass a tuberculin test and be certified free from tuberculosis thus nsuring a supply of milk for young children which is safe so far as he spread of that dread disease is concerned.

The bacterial standard of cleanliness laid down in the (Special esignations) Orders must be strictly complied with for each type of ilk produced ; certified milk requiring a greater degree of bacterial urity than either T. T. or Standard milk, is therefore the finest rade of milk available to the public, but it must be stated that a reat many producers of both T. T. and Standard milk get bacterio- gical counts well within the limit laid down for certified milk. or the past few years efforts has been made to induce dairymen to pgrade their dairies. Results have indeed been gratifying and the enefit of this upgrading is now being enjoyed by the consumer in he form of a better and safer milk supply. The change in the past hree years is shown in the following table of registered producers censed by the Local Authority to produce designated milks.

Number of Registered Producers.

Year.	Certified.	T. T.	Standard.	Ordinary.	Total
1945	8	74	78	147	307
1946	8	93	65	149	315
1947	10	127	44	122	303

The above figures speak for themselves and while the upgradin has been mainly from " Standard " to " Tuberculin Tested " ther has also been considerable upgrading from " ordinary " or non designated to " Standard " and some of the ordinary producer have cleared out their entire herd and bought in cows from attested stock to qualify for a licence to produce T. T. milk. The benefi to the consumer in this policy of upgrading herds can best be show in the quantity of milk of each type produced. Based on an es timated average daily yield of 2 gallons per cow, the total milk yiel in 1945 was 5,703,490 gallons, in 1946, 6,494,080 gallons, and i 1947, 6,497,780 gallons. The quantity of each type for the pas three years is shown in the following table :—

Estimated Milk Yield in Gallons.

Type of Milk Produced.	1945	1946	1947
Ordinary	1,761,490	2,139,630	1,871,770
Certified	270,110	258,420	348,940
T. T.	1,932,310	2,517,770	3,247,040
Standard	1,739,590	1,578,260	1,030,030
TOTAL	5,703,490	6,494,080	6,497,780

For the two higher grades of milk (Certified and T. T.) th estimated yield was as follows :—1945—2,202,420 gallons ; 1946— 2,776,190 gallons ; 1947—3,595,980 gallons. While the total yiel has not altered greatly the quantity of certified and T. T. mill produced was increased by 573,770 gallons in 1946 when compare with the 1945 figure, and by 819,790 gallons in 1947 over the figur for 1946. The increase in gallons in 1947 over that produced i 1945 for certified and T. T. milk was 1,393,560. Thus year by yea a greater volume of the milk produced in the County is derive from animals which have passed the tuberculin test. It is of a hig standard of purity and, apart from external and accidental con tamination, is safe for drinking in the raw state even by youn children.

A considerable volume of ordinary or non-designated milk i still being produced in the County and strict supervision of th dairies producing this type of milk is maintained by the Milk Officer and other Public Health Officials. Samples are periodically take for chemical analysis and bacteriological examination and wher these fail to prove satisfactory the dairies are revisited, methods ar checked up and dairy workers advised on proper methods of pro duction. Fortunately the bulk of all non-designated milk produce in the County is dealt with by pasteurisation. By this means it i rendered safe and free from harmful organisms. As an additiona safeguard to the public there is a special testing scheme termed th " Scottish Milk Testing Scheme " in operation. This scheme wa devised with a view to improving the nation's milk supply and its mai objects are (1) to detect and eliminate, as far as possible, milk o unsatisfactory keeping quality, and (2) gradually to raise the gener

tandard of milk supplies. Under this scheme every can of milk rriving at a distributor's premises is tested daily and any clearly nfit for the liquid market is put aside immediately and disposed of or some other purpose. Where a sample fails to pass the daily est the distributor notifies the Local Authority and the Milk fficer or other appropriate officer visits the dai y supplying the ilk to ascertain the causes of failure with a view to their immediate imination. A record of conditions found at the dairy is kept and copy of this is sent to the dairyman in confirmation of any dis- ission which may have taken place during the visit of inspection. he distributor is also furnished with a report of the visit to the airy by the Milk Officer or Sanitary Inspector.

In 1947 under the Milk (Special Designations) Orders, Scotland, 936-44, 965 samples of designated milk were taken at producer's remises and submitted for bacteriological examination. Of these 57 samples failed to comply with the terms of the Orders. In ich case of failure advisory visits were paid by Milk Officers or her Public Health Officials to check up on methods of production id cleanliness of utensils, &c., with a view to eliminating the cause failure. On the whole the premises and methods of production designated dairies are very satisfactory and minor faults were ainly found to be the cause of failure where samples did not come to standard. In one case where samples continued to be adversely ported upon the licence for producing standard milk was suspended , despite repeated visits by officials and advice given, little or no fort was made by the producer to improve methods of production carry out instructions given by visiting officials.

Examination of Milk Samples for Tubercle Bacilli.

During the year 1947 a total of twelve samples were examined r the presence of tubercle bacilli by the methods of guinea pig oculation. Eight of the samples submitted were taken from herds vned by ordinary producers, three from producers of standard ilk, and one from a producer of T. T. milk. Care was taken to sure that each sample was from the mixed milk of the entire herd. none of the samples was the presence of tubercle bacilli demon- rated.

MEAT AND OTHER FOODS.

No change in the arrangements for meat inspection has taken place during the year, except that, in May, meat inspection at Markinch Slaughter-House was transferred from the charge of the Sanitary Inspector, Leslie Burgh, to the Sanitary Inspector, Kirkcaldy Area. Various structural alterations and improvements were carried out at Cupar Slaughter-House, the private booths being done away with and made into a killing hall. A separate cooling hall was also provided.

The following table shows the number of animals slaughtered and the weight in lbs. of meat condemned during 1947.

Area.	Slaughter-house.	No. of Animals Slaughtered. Cattle.	Sheep.	Pigs.	Lbs. of meat condemned or destroyed.	Lbs. of meat condemned per head of cattle slaughtered.
Anstruther	...Anstruther Public ...	1,238	4,324	33	23,401	18·9
Cupar ...	...Cupar	1,961	7,385	40	68,533	34·8
	Springfield Private ...	55	242	18	1,378	25·0
St Andrews	...St Andrews Public ...	994	5,489	6	21,091	21·2
Beath ...	...Cowdenbeath Public ...	2,443	14,437	27	36,655	15·0
	Lochgelly Public	1,548	7,830	8	19,716	12·7
Wemyss ...	...Buckhaven Public... ...	2,001	10,409	50	48,206	24·0
	Leven Public	859	4,586	47	27,460	31·9
Kirkcaldy	...Markinch Public	917	4,943	12	19,725	21·5
	TOTAL	12,016	59,645	241	266,165	21·1

During 1947, 300 more cattle, 1,971 more sheep and 29 less pigs were slaughtered as compared with 1946. The amount of meat condemned was 12,287 lbs., representing a reduction of 2·6 lbs. per head of cattle slaughtered.

Other Foods.

The following table shows the amount of other foods condemned during 1947 as unfit for human consumption. The amount involved does not differ materially from that condemned in 1946.

Seziures under Section 14 of the Public Health (Scotland) Act, 1897.

Tinned Foods.

Period 16/12/46 to 16/12/47.

Area	Meat			Milk			Fish			Fruit			Vegetables			Preserves			Soups		
	No. of Tins	Weight Lbs.	Ozs.	No. of Tins	Weight Lbs.	Ozs.	No. of Tins	Weight Lbs.	Ozs.	No. of Tins	Weight Lbs.	Ozs.	No. of Tins	Weight Lbs.	Ozs.	No. of Tins	Weight Lbs.	Ozs.	No. of Tins	Weight Lbs.	Ozs.
Anstruther ...	188	939	4	89	78	15	29	24	12	36	342	7	58	60	6	2	5	—	2	5	10
Cupar ...	361	2298	4	155	141	1	126	81	6	—	299	—	135	134	8	6	12	—	4	4	—
St Andrews	294	1578	1	184	166	13	76	98	9	4	86	13	52	75	15	28	46	—	27	25	15
Beath ...	252	1138	8	37	38	—	32	117	—	10	88	—	59	257	8	10	23	—	—	—	—
Dunfermline	34	180	12	6	5	1	14	11	10	—	108	—	17	17	1	1	2	—	2	1	14
Lochgelly ...	393	1874	1	116	107	15	53	125	8	10	245	12	263	287	14	32	58	4	29	28	5
Wemyss ...	508	2414	15	51	45	14	77	108	9	83	8964	2	118	128	7	8	16	—	56	41	4
Kirkcaldy ...	313	1470	12	304	219	4	57	43	4	—	68	—	79	113	1	11	23	8	14	14	—
Total ...	2343	11894	9	942	802	15	464	610	10	143	10202	2	781	1074	12	98	185	12	137	121	—

In addition to the above, 2937 Lbs. 5 Ozs. of Miscellaneous untinned foodstuffs required to be condemned.

SALE OF FOOD AND DRUGS ACTS.

	Official Samples		Test Samples		Total
	Total	Adulterated	Total	Adulterated	
Cupar Area	27	4	239	5	266
Burghs in Cupar Area ...	52	5	—	—	52
Anstruther Area	5	1	166	4	171
Burghs in Anstruther Area	26	1	—	—	26
St Andrews Area	5	—	65	1	70
Burghs in St Andrews Area	39	1	8	—	47
Kirkcaldy Area	—	—	209	5	209
Burghs in Kirkcaldy Area ...	—	—	—	—	—
Wemyss Area	—	—	77	—	77
Burghs in Wemyss Area ...	—	—	—	—	—
Lochgelly and Beath Area...	18	—	85	2	103
Burghs in Lochgelly and Beath	7	1	—	—	7
Dunfermline Area	46	4	377	11	423
Burghs in Dunfermline Area	3	—	—	—	3
	228	17	1226	28	1454

Adulterated Official Samples.—17 (sweet milk, 3 ; whisky, 6 ; rum, 3 mince, 4 ; gin, 1) ; 12 vendors were fined sums ranging from £3 to £15 involving a total of £75 ; five were admonished.

HOUSING.

The provision of new houses in 1947 was not up to expectation largely owing to scarcity of labour and material. While a certain number of houses were completed and occupied the need remains as acute as ever and the waiting list in each area is large. Overcrowding has not been relieved to any appreciable extent and the list of houses earmarked as unfit and to be replaced remains unaltered.

During 1947 the following new houses were completed and occupied :—

Village	Temporary	Permanent	Total
Cardenden	165	74	239
Crossgates	28	—	28
Kinglassie	—	16	16
Thornton	15	—	15
Kingskettle	—	10	10
Kelty	—	74	74
Comrie	85	—	85
Aberdour	—	14	14
Lochore	—	12	12
Kennoway	—	18	18
Cupar	—	5	5
TOTALS	293	223	516

In addition to the above houses completed by the Local Authority eleven other houses were completed by the Special Scottish Housing Association, viz., 8 at Lochore and 3 at Comrie, making a total of 527 houses completed in 1947.

Schemes were in progress during the year for the erection of 2,793 additional houses as under.

Site	Type of House	Houses in Progress	Remarks
Aberdour ...	Brick	20	Agreed price contract
Ballingry ...	Stuart	488	
	Cruden	300	
Cardenden ...	Stuart	326	
Colinsburgh ...	Brick	20	
Comrie ...	Brick	68	S.S.H.A. For transferred miners
	Pre-fabricated	246	
Crossford ...	Brick	20	Agreed price contract
Cupar ...	Brick	6	
Freuchie ...	Brick	24	Agreed price contract
Gateside ...	Brick	30	do.
Guardbridge ...	Brick	48	do.
Hill of Beath ...	Temporary	25	
Halbeath	Stuart	136	
High Valleyfield ...	Orlit	22	
Kelty ...	Brick	6	S.S.H.A. For transferred miners
	Pre-fabricated	338	
Forward ...			

Site	Type of House	Houses in Progress	Remarks
	Forward ...		
Kennoway	Brick	60	
	B.I.S.F.	288	
	Brick	98	
Kinglassie	Brick	36	
Kingskettle ...	Brick	20	
Lochore	Swedish	12	
	Brick	74	
Lower Largo ...	Brick	50	
North Queensferry	Brick	28	Agreed price contract
Strathmiglo ...	Swedish	4	
	Total	2793 Houses	

At the end of 1947 site preparation work was proceeding at Kincardine for 40 houses and at Woodside for 238 houses under agreed price contracts. At Kennoway site advance preparation was about to commence for the erection of 50 Whitson-Fairhurst houses. Working drawings had also been prepared for 50 permanent aluminium houses at Crossgates and at Hill of Beath.

The following schemes for 332 houses were at the stage of being prepared for submission to the Housing and Planning Committees and the Department of Health :—

Kelty—11 Development—284 permanent pre-fabricated houses.

Agricultural Traditional Brick Houses—Auchtertool 4, Boarhills 8, Balmullo 4, Kilmany 4, Letham 4, Luthrie 4, Largoward 6, Ovenstone 4, St Michaels 4, and Strathkinness 6=Total 48 houses.

Houses Built by Private Enterprise.

During the year a total of 26 houses (12 of 3 apartments and 14 of 4 apartments) were completed by Private Enterprise and all were for owner-occupation.

Building Byelaws.

During the year plans were examined and reported upon in regard to 85 new houses (private enterprise) and for alterations and improvements to 184 existing dwellings. Plans were also submitted in respect of 88 new buildings other than houses and for alterations to 54 existing buildings other than dwellings. (See table under).

Area	New Houses	Alterations and Improvements existing Houses	New Structures other than Houses	Alterations to Buildings other than Houses	Total Plans
Wemyss	2	9	11	6	28
Kirkcaldy ...	11	34	12	5	62
Lochgelly and Cowdenbeath	5	13	14	7	39
Dunfermline ...	52	33	33	15	133
Cupar	6	57	11	13	87
Anstruther ...	1	20	5	5	31
St Andrews ...	8	18	2	3	31
TOTALS ...	85	184	88	54	411

Housing (Agricultural Population) (Scotland) Act, 1938.

Plans were approved for grant under the above Act as follows :—

Cupar Area	... ...	7 houses of 4 apartments.
Anstruther Area	...	6 houses of 3 apartments.
St Andrews Area	...	2 houses of 3 apartments.

No plans under this Act were submitted in West Fife during the year. Payment of grant was recommended in respect of four houses, each of 3 apartments, in Cupar Area on completion of the work in accordance with plans previously approved under the Act.

Housing (Rural Workers) (Scotland) Act, 1926-38.

During the year payment of grant was recommended on completion of work on houses previously approved in terms of the above Acts as under :—

Cupar Area	... ...	12 houses.
Anstruther Area	...	3 houses.
St Andrews Area	...	2 houses.
Kirkcaldy Area	...	2 houses.
Wemyss Area	... ...	1 house.
Dunfermline Area	...	6 houses.

Total—26 houses.

Control of Civil Building.

During the year a considerable volume of work was undertaken by Officials of the Public Health Department in the Control of Civil Building in an attempt to ensure that the best use was made of the labour and building materials available. The legislation in force during the year stipulated that any works of maintenance and repair or of conversion and adaptation of buildings costing over £10 must be covered by a building licence and that no works may be carried out until a licence has been issued by the Local Authority or the Ministry of Works. Many hundreds of applications for licences were received and dealt with during the year. The extra work entailed on this alone may be judged by the fact that each case had to be investigated to ascertain whether the work stipulated was essential, and if priority for labour and materials to carry it out should be granted. The volume of the work tends to increase month by month as little or no repairs to houses and other buildings were possible during the war years. The need to-day for such work is undoubtedly clamant in many cases but, on the other hand, applications for building licences are received for work which is neither necessary nor justified at the present time. Each case must, therefore, be fully investigated on the site to ensure that labour and materials are used only to the best advantage where it is essential to maintain property in a fit state and to prevent further deterioration.

WATER SUPPLIES AND DRAINAGE.

Progress was made in the construction of the Regional Water Supply Main. In the section between Shank of Navity and Balfarg, approximately 5 miles of pipe were laid and in the section between Balfarg and Cupar a little over 1 mile of pipe was laid. The success of so many enterprises, including housing, dairy farming and industrial development in general, depends on an adequate supply of wholesome water so that completion of the main must mark the commencement of a new era in the social and economical welfare of the County. Regrettably, however, scarcity of labour and material is likely to postpone completion of the Scheme for a year or so yet.

There is talk of at least one new town with a population of approximately 30,000 people being created in open land in the County. The County Council have furthermore commenced to extend the villages of Kennoway, Oakley, Ballingry, and Cardenden to a degree which will bring into being communities with populations ranging from 3,000 to 10,000. Added to these growing centres of population, industrial developments are likely to occur following upon expansion of the coal mining industry. Meanwhile, the many Burghs in the County are building new houses and expanding each in accordance with its resources. All these activities entail an increased consumption of water and it is exceedingly doubtful if existing water supply reserves, either County or Burghal, are adequate to meet the demands which will arise in the course of the next 50 years. The County Council as a progressive authority must take a lead in this matter. The co-operation of the Burghs must be sought. Some, no doubt, will be glad to co-operate. Others, ever jealous of their independence and commendably so, will hold aloof. The time will come nevertheless, when almost all of them will be faced with a crisis in their water supply arrangements and for the most part it will be beyond their resources to construct new works. The County Council will feel obliged to assist these communities and they will therefore be well advised in planning an extension of their existing resources to make allowance for the future population of the County *as a whole* as well as for industrial developments.

There is nothing new to report regarding drainage arrangements. The River Leven continues to convey to the sea, the combined effluents of thousands of houses and hundreds of factories and other such premises. Housing activities are leading to an increased pollution of many of the other streams in the County. Matters will not be improved until intercepting sewers are laid down in the valleys of the Leven and the Eden and until the County Council obtain powers to control the quality of effluents and of river waters. Existing powers under the Rivers Pollution Prevention Act, 1876 are inadequate and legislative amendments are long overdue. The

procedure to be adopted against the offender is at present unduly cumbersome and slow. Indeed the elaborations which attend procedure are liable to afford offenders a means for escaping penalties. The position is well recognised in Scotland where the Secretary of State has been called upon to consent to prosecution in very few cases indeed. Another disadvantage of the Act is the fact that it does not prescribe standards of purity to which those who discharge effluents into rivers should conform. The final Report (1915) of the Royal Commission of Sewage Disposal made fairly comprehensive recommendations in regard to the nature of effluents which have not yet received any legal force. The County Council have all these facts under consideration, and it is likely that in due course they will attempt to secure through private legislation some of the powers for the prevention of rivers pollution which nationally are lacking.

SCAVENGING.

No new developments occurred in connection with the County arrangements for refuse disposal. Various types of refuse collectors were inspected with a view to replacement of vehicles which are no longer serviceable and with a view to extension of existing services. Demonstrations were given in various parts of the County where conditions differ. Some vehicles were found to be too large to permit passage along narrow streets. Others were not sufficiently manoeuvrable in narrow confines. Others again had too slow speed to allow for reasonably speedy journeys to dumps.

Further consideration was given to proposals in connection with the amalgamation of scavenging districts so as to allow for economy in vehicles, personnel and dumps. It has already become clear, however, that any rearrangements of special scavenging districts will leave large areas of the County without a scavenging service. Consideration will therefore require to be given to means for obviating this weakness in arrangements.

PORT HEALTH ADMINISTRATION.

There are no " Approved Ports " in the County of Fife in terms of the International Sanitary Convention of Paris. At Methil and Burntisland ports the volume of shipping is still very small as compared with the war years. Inspections are confined to specified complaints and to routine medical examination of passengers arriving from infected ports abroad. There were no incidents of special significance during 1947.

FACTORIES ACT, 1937.

The following table shows the number of factories on the register, the number of inspections made by Sanitary Inspectors, and particulars of defects found. The figures in brackets indicate the number of defects remedied during the year.

Area	No. on Register	Inspections	No of Cases in which Defects were Found					
			Want of Cleanliness	Overcrowding	Unreasonable Temperature	Inadequate Ventilation	Ineffective drainage of floors	Defective, Insufficient, or Unsuitable Sanitary Conveniences
Kirkcaldy ...	45	169	7 (7)	—	—	—	—	7 (7)
Lochgelly and Beath	83	225	2 (2)	—	—	—	—	1
Wemyss	39	60	—	—	—	—	—	—
Dunfermline ...	50	58	1 (1)	—	—	—	—	8 (6)
St Andrews ...	27	21	—	—	—	—	—	—
Anstruther ...	53	71	—	—	—	—	—	—
Cupar	66	54	19 (19)	—	—	—	—	3 (2)
Total	363	658	29 (29)	—	—	—	—	19 (15)

EXCERPTS FROM REPORTS BY SANITARY INSPECTORS.

The Sanitary Inspectors submitted to the Local Authority and the Department of Health reports on Sanitary Conditions in their respective areas. The following are excerpts from their reports :—

Anstruther Area—Mr T. Robertson.

Water Supply.

In this Area there are full gravitation water supplies to Colinsburgh, Upper Largo, Lower Largo, and Lundin Links. The supplies continue to be adequate and there were no complaints made during the year. Routine sampling from these undertakings was carried out in the Spring and Autumn, the results of which showed that before treatment the water was barely passable in quality for drinking purposes and other domestic purposes, but after filtration and/or chlorination marked improvement was shown and a reasonable standard of purity attained.

In the less populous villages in the Area, namely, Barnyards, Kilconquhar, Arncroach, Carnbee, New Gilston and Woodside supplies are in most instances obtained from wells and springs, a few exceptions being a small number of houses in Arncroach which have inside water supply, the supply being received from the water mains belonging to the Burghs of St Monance and Elie.

During the year repairs to wells at several farms were effected. In order that grants to cover repairs might be qualified for, under Department of Agriculture subsidy, samples were taken for analysis to ensure the potability of the water.

At one farm a new supply was found upon examination to be of doubtful quality. In this case a sand filter was suggested by the analyst in order to eliminate the impurities in the supply and this is being constructed.

There are still many farms and farm cottages utilising supplies which are doubtful in quality and to further the efforts towards clean milk production a plentiful supply of wholesome water is essential.

Milk Supply.

All registered premises are regularly visited during the year and all defects and irregularities brought to the notice of the producers concerned were duly remedied. The conditions of production of non-designated milk in most instances leave a lot to be desired. Further reaching regulations are necessary so that the producers would be compelled to give stricter attention to the conditions of production and on the whole cleaner milk would be the result.

During the year the largest retailer of Tuberculin Tested Milk in Anstruther Area has had a pasteurisation plant installed in his premises and now the whole of his milk retailed is Tuberculin Tested (Pasteurised). The milk is pasteurised by the Holder Method, a 100 gallon Batch Pasteuriser being used. Since the change over from Tuberculin Tested to Tuberculin Tested (Pasteurised) all samples to the end of the year have been satisfactory. Samples in this case are taken fortnightly.

In another instance a certificate of registration to retail milk was granted to a retailer who had taken over two milk rounds. He has suitably adapted his premises to bottle and store milk.

In this Area there are 49 dairies registered under the Milk and Dairies (Scotland) Act for the production of milk. Included in this number 32 are designated dairies, 2 producing Certified Milk, 16 Tuberculin Tested and 14 Standard.

Throughout the year 154 samples of milk were taken for Bacteriological Examination and Chemical Analysis. Of this number 125 samples complied with the standards prescribed by the Order. The average bacteriological count of all samples taken during the year was 173,213. The average bacteriological count of all samples which complied was 20,817. Where samples failed to comply with the prescribed standards the usual "follow-up" procedure was adopted to ascertain the source of trouble. Such methods invariably obtained the desired results.

No licences were revoked during the year.

Cupar Area—Mr Geo. Mark.

Scavenging.

There are 12 Special Scavenging Districts operating at the following villages :—Balmblae, Ceres, Dairsie, Freuchie, Gauldry Kingskettle, Newton of Falkland, Pitlessie, Springfield, Strathmiglo Balmerino and Bottomcraig. The district at Ceres has been extended to include the village of Pitscottie.

In all Special Districts refuse collection is done by contractors Full-time scavengers have now been appointed for the villages of Ceres, Kingskettle, Freuchie, and Strathmiglo.

Other villages where a systematic collection is contemplated are Gateside, Dunshalt and Letham. Throughout the year scavenging problems have arisen at the villages of Cupar Muir, Foodieash Collessie and Giffordtown, but so far no proper system of collection has been commenced.

The present scavenging districts are served by six dumps. All are maintained in a satisfactory condition. These are located at the following places and serve the villages of :—

Situation.	Villages Served.
Bleachfield, Ceres ...	Ceres district only.
West End, Gauldry ...	Gauldry district only.
Corston, Balmerino ...	Kirkton, Balmerino, and Bottomcraig.
Forthar, Freuchie ...	Freuchie and Newton of Falkland.
East End, Strathmiglo	Strathmiglo district only.
Springfield	Dairsie, Kettle, Pitlessie, and Springfield districts.

The long term view of forming the area into a complete scavenging zone is the only means whereby small villages will receive an economic service. Such a scheme was the subject of report in 1945 when it was visualised that the district could be divided into 3 ones. The fact that no active results have so far developed is dependent entirely on the financial aspect.

To keep the proposals in the forefront they are briefly :—

(*a*) Number one zone, comprising the existing districts of Ceres and Dairsie, and embracing the villages of Blebo Craigs, Pitscottie, Dura Den, Craigrothie, and Chance Inn.

(*b*) Number two zone, comprising the existing districts of Springfield and Pitlessie, and to include Cupar Muir, Brunton, Abdie, Letham, Collessie, and Giffordtown area, and

(*c*) Number three zone, comprising the existing districts of Freuchie, Kettle, and Strathmiglo, and to include Dunshalt, Gateside, and Burnside.

This scheme will means a change over to mechanical transport and direct labour and while the initial expenditure would be high, in time it would prove itself worthy of the expense. When it is considered that out of 42 villages or other populous places only 4 have full scavenging services it must be appreciated that a scheme on the lines indicated is long overdue.

In conjunction with the scavenging service is run a scheme for the collection of waste paper. This operated very satisfactorily during the war years but with a decline in public interest returns have fallen considerably. There is a difficulty in making collections in a scattered area such as Cupar, and while this factor has attributed to a falling away in returns the primary reason is undoubtedly lack of public interest. During the year only 14 tons of waste paper was collected. This is exceedingly poor when compared with the yearly amounts collected during the war years which averaged 36 tons.

In view of the numerous appeals for waste paper at the latter end of the year a scheme was devised incorporating all villages in the district. A rota was prepared giving the dates and places when collection would be made. While this gave a systematic collection in each village it meant that collections could only be undertaken once every five weeks. It was the only means whereby every village could be covered and has proved very satisfactory. It is hoped that the collections during the ensuing year will have increased considerably.

Cattle Courts.

The open court principle for housing cows is still favoured by certain producers and is becoming gradually popular. There are at present three producers operating under this system while there are others adapting their premises. Doubts are still expressed regarding the merits or demerits of cows courts as opposed to byres, but whatever the system the principal factors relative to any premises are the housing of cows under healthy and hygienic conditions and the production of clean milk. If a producer can therefore achieve and maintain these factors it is immaterial which method of housing is adopted. In actual practice, however, I find that where the court system is operated by intelligent and sensible personnel, and where the necessary adjustments have been made with regard to bedding and grooming, cows are definitely living under more cleanly and hygienic conditions than exist in many byres. Such a system must, of course, be supplemented by the use of a modern milking parlour and indeed the development of the system is only made possible by a proper milking plant and its related dairy premises. There is no doubt that milking parlours are a desirable feature of any dairy premises, as they provide possibilities of maintaining high standard routine methods.

Dunfermline Area—Mr A. M. Thomson.

Housing.

Members are kept informed of the position with regard to the provision of new houses in reports by the appropriate Officials and this information need not be reiterated here. Suffice it to remark, in passing, that, while progress is considerable, one would wish it to be more rapid still. The supply of certain materials appears to remain exceedingly slow and difficult.

One hundred and thirty-four visits of inspection were made to houses of older type, where the existence of defects calling for remedial measures were brought to our notice. The defects encountered were of the usual varied character—leaking roofs dampness, broken plasterwork, unserviceable sanitary fittings defective woodwork of floors, windows, and doors, &c. Fifty seven houses were found to be defective, and the owners were called upon to have the necessary repairs effected. In the great majority of cases satisfactory remedial measures were adopted, and the house restored to a reasonably habitable condition. The owners' great difficulty in procuring the services of competent tradesmen to do jobbing work just now is one which cannot be ignored by those in a position to enforce repairs. In many cases, months of waiting are experienced, and this tends to prove irksome to tenants, owners and officials alike. The cost of repairs nowadays is another matter of deep concern, especially to owners, comparatively minor repairs such as the replacement of a floor or the installation of a fire grate

often absorbing several years' rent. In such circumstances one must exercise one's authority with caution and reasonableness. The few outstanding cases where the repairs have not yet been carried out continue to have our attention. Only in one case was it found necessary to invoke the aid of the statutory provisions of the Housing Acts to secure repairs. In this instance we were convinced that the owners were procrastinating unduly, and a Notice in terms of Section 14 of the Housing (Scotland) Act, 1930, was served in respect of the defective condition of two houses. Proposals embodying the necessary repairs have now been submitted to, and approved by, the Council, and I anticipate that the work will be commenced soon.

Under the Council's byelaws regulating buildings, one hundred and eleven sets of plans submitted in respect of building operations of a major nature were lodged, examined and reported upon during the year. These related to the erection of new houses, shop premises, factories, &c., and additions to same. By the end of the year, twenty-one new houses built by private enterprise had been completed and thirty-five others were in course of erection.

Warrants issued in respect of building operations of a minor nature numbered 100.

Under the control of Civil Building Regulations, 388 applications for licences were received and reported upon after the necessary preliminary enquiries had been made. As each application necessitates at least two visits to the premises concerned, it will be readily appreciated that the amount of work involved imposed a serious drain on time.

Only two notices in terms of Section 40 of the Public Health Act, 1897, calling upon the occupiers of dirty houses to cleanse same, were served during the year. The houses were subsequently cleansed and thereafter kept under observation for some time. The progressive reduction in the number of occupiers requiring to be so dealt with, recorded during the past two decades or so, reveals only one of the many improvements attributable to better housing conditions and the improved amenities resulting therefrom.

Kirkcaldy Area—Mr I. L. Goodfellow.

Nuisances.

One of the main causes of complaint during this year was the fumes, &c., coming from the redd bing at Coaltown of Balgonie. The Coal Board however employed men and plant and kept the nuisance to a minimum, and at the same times levelled off the bing.

There are still far too many householders dumping garden refuse at the foot of roadside hedges or over on to fields or any place they can think of, instead of putting it into their compost heap. There are also a few, not having their ash bins out in time

for the cart, send children with barrows to the dump with their refuse. The children as soon as they get beyond the dump gate tip up their barrows and leave the entrance to the dump untidy. My scavengers do their best to stop this practice, but the time may come, when to bring the matter to the public's notice, persons will have to be prosecuted for this practice which is contrary to the County Council's Byelaws.

Housing.

Most of the defective houses in the villages in Kirkcaldy Area have been already dealt with, but when the housing census referred to in last year's report was made an opportunity was taken to classify those houses still in occupancy which should be put on the unfit list. The three "black" areas in Kirkcaldy District are (*a*) Kirkforthar Feus, by Markinch; (*b*) Walkerton, by Leslie and (*c*) Prinlaws, Leslie. As far as Kirkforthar Feus is concerned the houses there will shortly be represented to the County Council for condemnation, while those in Walkerton, by Leslie, have been condemned for many years though some are still occupied. It is agreed that when Leslie Burgh completes its scheme several houses will be made available for the rehousing of the remaining house holders at Walkerton. Prinlaws, by Leslie, is a "black" area only from an overcrowding point of view. The houses are chiefly tied houses—those who occupy the houses work in Prinlaws Mill. The owners, Messrs John Fergus & Co., have already completely remodelled and enlarged blocks of these houses, and are at present engaged in reconstructing the front row of houses which are structurally sound but in need of replanning to provide 4 and 5 apartment houses which will more adequately accommodate their workers.

Camping Sites.

The only recognised camping site in this Area is situated at Pettycur near Kinghorn. This camping site was never developed on planned lines, and as the huts and old bus bodies which had been erected had not been approved by the County Council, a meeting was held on the site with the representatives of the Sandhills Co. Ltd., and following this meeting notice was given to all hut tenants on the north section of this camping ground to demolish and remove their huts while an Architect was engaged and replanned the siting of the huts on the south side of the camping ground. This has resulted in a much better camping site and removed all cause for complaint. The owners have also instructed the erection of suitable latrine and ablution buildings, and with this restricted and planned camping area, Pettycur will become quite an ideal camping ground. Draft Byelaws concerning camping sites and camping in general were considered during the year as it is quite obvious that this type of holiday is yearly becoming more popular.

Lochgelly Area—Mr J. S. E. Riddle.

River Pollution.

A special questionnaire by the Department of Health concerning the Prevention of Pollution of Rivers was reported on, and it was pointed out that the sewage from Auchterderran, Kelty, and Kinglassie Special Districts passed through settling tanks before being discharged, but that the sewage from Lochore and Glencraig and Lumphinnans Districts and from the Burgh of Lochgelly was discharged crude into the River Ore.

All collieries discharge pit water into the River Ore or its tributaries but I do not consider that this causes pollution ; it is rather an improvement, as it keeps a supply of water in some of the small burns all the year round.

Where coal washing is carried out special attention has to be paid to the settling ponds. If the banks are not regularly heightened and strengthened there is a danger of serious pollution reaching the adjoining streams. During the severe snow storm the bank of the settling pond at Kinglassie Colliery burst, and the effluent overflowed on to ground adjoining the main road. The bank was repaired and is now in order. In wet weather there is also a considerable amount of coal dust washed down off the redd pings which in many cases adjoin the banks of streams.

Two samples of water were taken from the River Ore and sent to the County Analyst. The results of the analysis were as follows :—

Sample "A"—Contains 30·17 parts of suspended solids per 100,000 parts of water consisting mainly of coal dust with accompanying clayey or incombustible material. That amount equals 301·7 parts per million or 3017 per million gallons. That is to say, every million gallons of river water holds in suspension approximately 27 cwts. of solids derived from the coal washery plant.

Sample "B"—The suspended solids are 43·65 parts per 100,000 or 4365 lbs. per million gallons of river water. That is to say, every million gallons of river water holds in suspension 39 cwts. of solids derived from the coal washery plant.

Sample "A" was taken to the east of the Minto Colliery and sample "B" to the east of the washery settlement ponds at Bowhill Colliery.

The River Ore, especially in the vicinity of Auchterderran Special District, is very much in need of cleaning out. This would clear the bed of the stream, which is grossly polluted with coal dust, and would also allow land drains to function and prevent so much flooding of ground at the side of the river after a storm. The Lochty Burn at Kinglassie, from below the colliery to up past Kinglassie Church, is also very much in need of cleaning out. Some years ago the burn on either side of the above portion was cleaned out but I do not know for what reason this part was not done.

St Andrews Area—Mr R. Just.

Drainage.

Leuchars District.—At Leuchars the effluent from the two cesspools discharges into the Barrel Arch and thence to the Moutray Burn. In recent years several complaints have been received regarding the pollution of the Moutray—not without cause. At the time of writing a sewage scheme has been provided for the new houses being erected by the County Council at Station Road, Guardbridge. An extension of the sewer to take the drainage from the village of Leuchars would thereby remove the cause for complaint and the annual cost of cleaning out the cesspools at Leuchars would be avoided.

Balmullo District.—In Balmullo Village chokages occur in the drain running in footpath on the north side of the Cupar Road discharging into burn. Owing to the condition of the drain it is well nigh impossible to effect a satisfactory clearance. A new drain or sewer is required. As it is unlikely that a drainage scheme will be provided in this area in the near future, the renewal of this drain would be facilitated, if by its construction, the work would form part of the future Drainage Scheme for the village. At the time of writing plans have been prepared for the laying of 12 yards of new sewer and relative manholes to replace the existing defective drain. This sewer will form part of the future scheme for Balmullo Drainage District. It is to be hoped that the work will commence at an early date.

Scavenging.

There are three Scavenging Districts in the area, viz. :—Leuchars Guardbridge, and Kingsbarns. At Leuchars and Guardbridge collections are carried out three days per week. At Kingsbarns which was formed into a Scavenging District during the war years collection of refuse was delayed as no person could be obtained to undertake the work. Arrangements were made with the Crail Burgh Authorities to carry out a weekly collection of refuse which was commenced on 9th October, 1947. The work is being satisfactorily carried out.

Wemyss Area—Mr W. Falconer.

Scavenging.

There are six Special Scavenging Districts in Wemyss Area viz. :—Kennoway, Methilhill, Rosie, East Wemyss, Coaltown of Wemyss and West Wemyss.

Kennoway.—The collection of refuse in Kennoway is carried out by a Contractor who provides a motor lorry. This system has not been working smoothly as the contractor has not been adhering to the hours of collection and invariably neglects to provide a cover for the lorry. A change of contractor has been recommended by

the District Council but it will be necessary in the near future to make other scavenging arrangements for Kennoway to serve the increased population.

The refuse from Kennoway is being used to reclaim land at "The Spats" where dumping is carried out on the principle of controlled tipping.

Methilhill, Rosie, East Wemyss, Coaltown of Wemyss and West Wemyss.—A combined system of refuse collection is in operation for these villages whereby a twice weekly service is provided to each. The work is carried out by direct labour by a freighter and a team of loaders who are responsible for the collection of refuse and road sweepings, collection and packing of waste paper and the proper control of the refuse dump. In addition four men are employed on sweeping of streets and cleaning of gullies.

This system, which has worked admirably so far, is now becoming unworkable with the existing staff and vehicle, due principally to the number of new temporary houses erected in Methilhill and at MacDuff Park, East Wemyss.

The district where most difficulty is being experienced with the collection is East Wemyss, and it will be necessary to employ an outside contractor to augment the present staff if a satisfactory service is to be maintained.

I have suggested to the County Council through the District Council that this be done as a temporary measure, and that another refuse freighter be acquired for Wemyss Area. The purchase of another freighter would permit of a re-grouping of the districts, all of which would then be scavenged by direct labour and would also relieve the existing staff to devote more time to work which, at present, is not receiving sufficient attention.

It would, I think, be fitting at this stage of my report to direct attention to the condition of the public conveniences provided in Special Scavenging Districts at the expense of the ratepayers in these districts. Two conveniences have been provided in East Wemyss and one at Methilhill. Frequent and considerable expense is incurred in repairing damage caused by malicious mischief. The position is most serious at Methilhill where windows have been smashed, fittings damaged, locks stolen, water pipes removed, and slates torn from the roof. This damage could not altogether have been caused by children, and it reflects great discredit on householders in the vicinity of the convenience that culprits are unchecked by them. They should bear in mind that it is they themselves as ratepayers who require to foot the bill.

Nuisances.

Nuisances dealt with during the year were generally of a minor character, and were usually remedied when brought to the notice of the authors.

One frequent cause of complaint is the indiscriminate dumping of household, garden and other refuse at the sides of roads, in plantations and on the beach. The persons responsible appear to have no sense of civic pride and would seem to prefer this method of disposal. The worst offenders are at West Wemyss where the beach in some parts is heaped high with accumulations of refuse which, in addition to being unsightly, provide breeding places for rats and flies.

At Coaltown of Wemyss, East Wemyss, and Methilhill this practice is not as widespread, being confined at East Wemyss and Methilhill mainly to tenants of County Council houses who favour roadside dumping and at Coaltown of Wemyss to tenants of houses near a plantation.

It is difficult to break people of this habit, and offenders require to be caught red-handed before action can be taken. Such people should be severely dealt with. It is a sad commentary that despite the time and money spent on planning the lay-out of houses, providing modern homes, drainage facilities and scavenging services these efforts are nullified to some extent by the irresponsibility of retrograde persons in each village.

PUBLIC HEALTH SERVICES IN BURGHS.

The following is a summary of public health activities in burghs for which the County Medical Officer also acts as Burgh Medical Officer, and a brief report on transferred services in those burghs which still retain the services of their own Medical Officer.

Burgh of Anstruther.

Housing.—There is no doubt that the housing needs of the Burgh are considerable, and at the present rate of progress there is little prospect of requirements being met in the near future. The exact need will be known when the time comes to make a new survey to determine the extent of overcrowding and the number of unfit houses. Twenty-six houses were under construction during the year, and by the end of the year six were nearing completion. Plans for the erection of one five-roomed bungalow were approved by the Dean of Guild Court.

Factories and Workshops.—The number of factories on the register is 115. Sixty-eight visits of inspection were made by the Sanitary Inspector during the year, and written notices calling for improvement were issued in twelve cases. These notices were complied with.

Infectious Disease.—During the year 16 cases of infectious disease were notified as follows :—

Pneumonia	3
Scarlet Fever	6
Paratyphoid Fever	4
Pulmonary Tuberculosis	2
Non-Pulmonary Tuberculosis	1

This is an increase of 3 cases over 1946. The general incidence was small, but the total disappearance of Paratyphoid Fever cases from the locality would be welcomed.

Vital Statistics.—During the year there were 70 live births in the Burgh (M. 41, F. 29) of which one was illegitimate. Four still-births were registered. Marriages registered during the year numbered 23, and there were 43 deaths (M. 22, F. 21). One infant under one year of age died, giving an Infantile Mortality Rate of 14·4 per 1,000 live births. The chief causes of death were Heart Disease 13, Cerebral Haemorrhage 8, Cancer 6, Tuberculosis 3.

Burgh of Auchtermuchty.

Housing.—The site at Lochybank has accommodation for 56 houses and as a first development 12 4-apartment traditional houses and 10 4-apartment Cruden houses were in course of erection. Of those 22 houses, two traditional and 10 Cruden houses were completed by the end of the year. Site preparation work at the Lochy-

bank site continued satisfactorily during the year and was completed with the exception of the final surfacing of roads and footpaths. During the year six sets of plans were submitted to the Dean of Guild Court for approval and 11 warrants were issued for minor works. Forty-one applications under Civil Building control were dealt with, in 29 instances covering housing work to a value of £2,243, and 12 works of a non-housing nature. There is much leeway to be made up in rehousing persons living in unfit and overcrowded houses, and also in renovation and repair of houses generally. Seven years of enforced deferment of maintenance repairs is no contribution to a solution of the housing programme in the long run, and it is difficult to understand the merits of such a policy.

Factories and Workshops.—There are 21 factories on the register and during the year each factory was visited by the Sanitary Inspector. In seven cases defects were found, six being due to want of cleanliness and one due to unsuitable or defective sanitary conveniences. In two cases written notices under the Factories Act were issued. All defects were remedied.

Infectious Disease.—During the year three cases of infectious disease were notified as follows :—

Infantile Paralysis	1
Scarlet Fever	1
Non-Pulmonary Tuberculosis	1

The total number of cases is equal to that notified in 1946.

Vital Statistics.—During the year 32 live births were registered (M. 20, F. 12) of which one was illegitimate. One still-birth was registered. Registered marriages numbered 5 and deaths 26 (M. 10, F. 16). No infant under one year of age died. The main causes of death were Heart Disease 8, Cancer 5, Cerebral Haemorrhage 3, Diabetes 2, and Pneumonia 2.

Buckhaven Burgh.

Infectious Diseases.—During the year 106 cases of infectious diseases were notified in the burgh :—Scarlet Fever 33, Diphtheria 6, Erysipelas 2, Pneumonia 36, Cerebral-spinal Fever 9, Para-Typhoid "B" 1, Poliomyelitis 5, Ophthalmia Neonatorum 8, Puerperal Pyrexia 4, Puerperal Fever 2.

In 1946 there were 178 cases recorded so that the incidence of disease in 1947 was well below the yearly average.

Housing.—The housing position is still acute ; overcrowding and sub-letting have been little changed during the year. To meet this need and to replace unfit houses the estimated need is 2,000 houses. Housing progress as shown at 31st December, 1947, was as follows :—250 temporary houses completed and occupied, 8 permanent houses completed (70 of 4 apartments and 10 of 5 apart

ients). In addition the following houses were in course of rection :—70 of 3 apartments, 286 of 4 apartments, and 150 of 5 partments, making a total of 506 permanent houses building. Vhile the above number on completion will ease the acute position will by no means meet existing needs.

Sewage Disposal.—All sewage in crude state is discharged to ie Firth of Forth and no complaints were received during the year f nuisance or pollution of the foreshore.

Factories Act, 1937.—There are 67 factories and other premises n the register in the Burgh. During the year 150 inspections were iade to these and all were found to be well conducted and satis-ictory.

Vital Events.—The population of the Burgh as estimated by ie Registrar-General is given as 19,957. During the year there ere 480 live births (M. 240, F, 240). Illegitimate births numbered 9 and still births 15. There were 213 marriages registered and the eaths recorded numbered 225 (M. 135, F. 90). Infant deaths under ie age of 1 year numbered 18, the infantile mortality rate being 7·5 per 1,000 live births.

The chief causes of death were :—Heart Disease 52, Cancer 34, erebral Haemorrhage 15, Bronchitis 19, Pulmonary Tuberculosis 6, :her forms of Tuberculosis 6, Old Age 10, Congenital Debility, rematurity and Malformation 18.

Burntisland Burgh (Transferred Services).

Infectious Diseases.—There were 35 cases of infectious diseases otified in the Burgh in 1947 :—Scarlet Fever 15, Diphtheria 2, rysipelas 5, Pneumonia 9, Cerebro Spinal Fever 2, Malaria 1, oliomyelitis 1.

In 1946 77 cases of infectious diseases were notified.

Vital Events.—The population, as estimated by the Registrar. eneral, is 5,793. There were 93 live births registered (M. 54, F. 39)-legitimate births numbered 7 and there were 2 still births. The arriages registered numbered 50, and the deaths 68 (M. 33, F. 35). ne infant under the age of 1 year died, the infantile mortality rate eing 10·7 per 1,000 live births.

The chief causes of death were :—Heart Disease 15, Cancer 11, erebral Haemorrhage 4, Bronchitis 4, Pulmonary Tuberculosis 3, ld Age 5.

Cowdenbeath Burgh.

Infectious Diseases.—During the year there were 97 cases of fectious diseases notified as compared with 166 in 1946 ; scarlet ver 23, erysipelas 3, pneumonia 60, cerebro-spinal fever 3, encepha-is lethargica 1, ophthalmia neonatorum 6, puerperal pyrexia 1. iere were no confirmed cases of diphtheria in the Burgh

in 1947. No doubt this highly satisfactory result was due to the high degree of immunity which has been established by the intensive campaign of immunisation which has been carried out since 1941. It is the first time that no cases of this disease have been recorded in the course of a year. The Burgh may well be proud of their record.

Housing.—Despite the fact that 134 temporary houses were completed and occupied in 1947 the housing position still remains acute. Many of the old dwellings are totally unfit for habitation but in view of the housing shortage no action has been taken to close these dwellings when they become vacant on the transference of tenants to Council houses. Sub-letting and overcrowding are still a problem which can be solved only by the provision of many more houses. No permanent houses were completed in 1947 but there were 216 under construction and in addition 77 temporary houses were in course of erection. Many more will be required to meet the ultimate needs which were previously assessed at 1300 houses.

Water Supply.—Cowdenbeath Burgh is fortunate in having an ample and excellent supply of water, quite sufficient for the Burgh's needs for all time despite the large housing programme envisaged. Lochgelly Burgh still continues to draw a supply from Cowdenbeath in periods of shortage during the summer months.

Sewage Disposal.—The sewage disposal works provided in 1932 continued to function satisfactorily during the year. This plant is capable of dealing with all sewage from the town, including new housing schemes. A small area of the Burgh at Perth road is not yet linked up with the works but this will be done when labour and materials are available. Mineral subsidence caused a certain amount of damage to sewers during the year. The effluent from the sewage works is discharged into Lochgelly burn in a clear and inoffensive state and ultimately passes to Lochgelly Loch. The outlet from the loch finds its way by a tortuous course as a small burn into the River Ore at Cardenden, and so far there has been no evidence of pollution.

Vital Events.—The population of the Burgh as estimated by the Registrar-General is 13,318. During the year there were 2[illegible] live births (M. 159, F. 127). Illegitimate births numbered 18, and there were 7 still births. Marriages registered numbered 140 and there were 144 deaths (M. 90, F. 54). Thirteen children under the age of 1 year died, the infantile mortality rate being 45·4 per 1,000 live births. The chief causes of death were :—Heart disease 42, cancer 18, cerebral haemorrhage 15, congenital debility premature birth, and malformation 13, pulmonary tuberculosis 7.

Burgh of Crail.

Housing.—The number of unfit houses in the Burgh is small, but new housing is required to cope with overcrowding. The demand may be gauged by the fact that fifty applications were received for the tenancy of one house which had become vacant, and of these 85 per cent. were married with one or two children. The present plan is to provide 16 new houses but it is not possible to say when these will be completed.

Factories and Workshops.—The number of factories on the register is 49, and during the year 31 visits of inspection were made by the Sanitary Inspector. Fifteen notices calling for improvement were issued. No prosecutions were undertaken, as improvements were effected without this procedure being necessary.

Infectious Disease.—During the year there were five cases of infectious disease notified as follows :—

Erysipelas	1
Scarlet Fever	1
Puerperal Fever	1
Pulmonary Tuberculosis	2

The numbers show a decrease as compared with 1946 when a total of eight cases were notified.

Vital Statistics.—During the year there were 17 live births in the Burgh (M. 6, F. 11) of which two were illegitimate. One still-birth was registered. Marriages registered during the year numbered seven, and there were 20 deaths (M. 10, F. 10). No infant under one year of age died during the year. The chief causes of death were heart disease 13, cancer 3, and cerebral haemorrhage 2.

Culross Burgh.

Infectious Diseases.—During the year there were only two cases of infectious diseases notified, scarlet fever 1 and pneumonia 1.

Housing.—No new houses were completed in 1947, but thirty permanent houses each of 4 apartments were in course of erection. Many of the existing houses are very old and some of considerable historic interest. During the year four houses were restored by the National Trust and are again occupied. The estimated needs of the Burgh are forty houses, so that when those in course of erection are completed the housing needs will be largely met.

Water Supply.—The Burgh is supplied from Glendevon by Fife County, and an ample supply is available for all purposes.

Sewage Disposal.—All sewage in crude state is discharged to the Firth of Forth below low water mark, and no complaints were received of any nuisance or pollution of the foreshore.

Vital Events.—The population of the Burgh, as estimated by the Registrar General, is given as 543. There were 7 live births (M. 4, F. 3). Marriages registered numbered 17, and there were

9 deaths registered (M. 3, F. 6). No children under the age of 1 year died in 1947. The chief causes of death were :—Cerebral haemorrhage 2, violence 2, non-pulmonary tuberculosis 2.

Burgh of Cupar (Transferred Services).

Infectious Diseases.—During the year 40 cases of infectious diseases were notified as follows :—

Erysipelas	2
Opthalmia Neonatorum	2
Acute Influenzal Pneumonia	3
Acute Primary Pneumonia	13
Pneumonia (other forms)	2
Scarlet Fever	6
Pulmonary Tuberculosis	11
Non-Pulmonary Tuberculosis	1

The total number of cases is equal to that notified in 1946.

Vital Statistics.—During the year 120 live births were registered (M. 59, F. 61) of which eight were illegitimate. Two still-births were registered. Registered marriages numbered 57, and deaths 67 (M. 28, F. 39). Two infants under one year of age died, and the infantile mortality rate per 1000 live births was 16·6. The main causes of death were :—Heart disease 22, cancer 13, cerebral haemorrhage 13, tuberculosis 3, pneumonia 3.

Burgh of Elie and Earlsferry.

Housing.—In the 1946 report it was noted that the Local Authority had been able to resume house building, and that a start had been made with twelve houses. Progress has been lamentably slow, and these houses were not completed during 1947. Although the number of unfit houses in the Burgh is not so great as in some places of a similar size, progress towards the provision of new houses bears little relation to the needs of the community, but this is largely due to causes generally applicable and outwith local control.

Factories and Workshops.—There are 18 factories on the register, and during the year 18 visits were paid by the Sanitary Inspector under the provision of the Factories Act. No defects falling within the jurisdiction of the Local Authority were found.

Infectious Disease.—During the year eight cases of infectious disease were notified as follows :—

Erysipelas	2
Acute Influenzal Pneumonia	1
Scarlet Fever	4
Pulmonary Tuberculosis	1

This is five cases more than in 1946. In relation to population however, the incidence has been low.

Vital Statistics.—There were 17 live births in the Burgh during the year (M. 9, F. 8) of which two were illegitimate. There

ere no still-births registered. Marriages numbered seven and eaths 25 (M. 6, F. 19). One infant under one year of age died, ving an infantile mortality rate of 58·8 per 1000 live births. The ain causes of death were heart disease 13, cancer 5, cerebral emorrhage 4. No deaths from tuberculosis were recorded.

Burgh of Falkland (Transferred Services).

Infectious Diseases.—During the year seven cases of infectious sease were notified as follows :—

Ophthalmia Neonatorum	1
Infantile Paralysis	1
Pulmonary Tuberculosis	4
Non-Pulmonary Tuberculosis	1

This number is three cases less than in 1946.

Vital Statistics.—During the year 12 live births were registered . 3, F. 9), all being legitimate There were no still-births and no aths of infants under one year of age. Marriages registered mbered 12 and deaths 14 (M. 4, F. 10). The causes of death re :—Heart disease 10, tuberculosis 2, cancer 1, and cerebral emorrhage 1.

Inverkeithing Burgh.

Infectious Diseases.—During the year there were only four nfirmed cases of infectious diseases notified within the Burgh, . :—Primary pneumonia 1, Poliomyelitis 1, ophthalmia neon-rum 1, puerperal pyrexia 1. The case of poliomyelitis or infantile ralysis occurred in a young married woman, aged 20 years, and ved fatal. There were no confirmed cases of scarlet fever or htheria during the year.

Housing.—No fresh survey of housing conditions was made in 8 but towards the end of 1946 stock was taken of all houses sidered to be unfit for habitation and these numbered 167. ers definitely sub-standard are gradually deteriorating and there now approximately 200 houses unfit or unsuitable for continued upation. Restrictions under Control of Civil Building and lack abour and materials for repair work have not improved matters. ercrowding and sub-letting are still acute despite the fact that balance of 49 of the 82 temporary houses sanctioned were pleted and occupied in 1947. Thirty-three of these were com-ed and occupied in 1946. Of the 48 permanent houses building 946 none were completed in 1947. These comprise 33 houses of partments each and 15 5-apartment houses.

Water Supply.—This is supplied by Fife County Council and an ple supply of excellent water is available for all needs.

Sewage Disposal.—All sewage continues to be discharged in le state to the Firth of Forth by two outfall sewers. No com-nts were received of pollution of the foreshore and dispersion

of the material continues to be satisfactory. The sewerage syste is meantime working to capacity and as housing developme proceeds it will be necessary to enlarge and relay certain sewers.

Vital Events.—The population of the Burgh has been estimat by the Registrar-General as 3,701. Live births registered duri the year numbered 97 (M. 48, F. 49). There were 7 illegitima births and 5 still births. The number of marriages registered w 43 and the deaths registered numbered 49 (M. 27, F. 22). The was one infant death under the age of 1 year, the infantile mortali rate being 10·3 per 1,000 live births. The chief causes of dea were :—Heart disease 20, cerebral haemorrhage 6, cancer 3, pu monary tuberculosis 2, other respiratory diseases 2, nephritis and old age 4.

Kinghorn Burgh.

Infectious Diseases.—During the year there were 16 cases infectious diseases notified within the Burgh as follows :—Scar fever 2, erysipelas 5, primary pneumonia 3, influenzal pneumonia poliomyelitis 3. No cases of diphtheria occurred in 1947. The were three cases of infantile paralysis or poliomyelitis, two adults a mother and daughter and a child of 6 years.

Housing.—A survey was made in the Burgh during the year ascertain the state of overcrowding and to assess the condition existing houses. It was found that there are still 93 houses witl the Burgh in an unfit condition and not reasonably habitable wh 66 houses are meantime overcrowded.

Six 3-apartment Council houses were completed and occup during the year while three houses each of three apartments w completed under Private Enterprise.

Water Supply.—As indicated in previous reports, the Bu water supply is not very satisfactory, insufficient storage acc modation being available to meet Burgh needs. The agreem with Kirkcaldy Burgh whereby water can be drawn from th main as required still holds good. During the latter half of year, under conditions of almost constant drought, recourse had be made to Kirkcaldy Burgh supply to augment that from the lo reservoir which, for most of the time, remained much deplet Over 12 million gallons of water had to be purchased during the y Chemical analysis of the reservoir water, prior to filtration, indica that it was not quite up to the required standard for drinking other domestic purposes but subsequent treatment by filtrat made the water quite safe.

Sewage Disposal.—All Burgh sewage in crude state continue be discharged into the Firth of Forth. No complaints were recei of soiling of the foreshore, tidal action remaining favourable dispersion of the material which is discharged from two pipes be low water mark.

Vital Events.—The population as estimated by the Registrar-General is given as 2,190. Live births registered during the year numbered 48 (M. 21, F. 27). There were 4 illegitimate births and 2 still births. The marriages registered numbered 19 and there were 32 deaths registered (M. 20, F. 12). Only 1 child under the age of 1 year died the infantile mortality rate being 20·8 per 1,000 live births. The chief causes of death were :—Heart disease 10, cerebral haemorrhage 4, cancer 3, pulmonary tuberculosis 1, other forms of tuberculosis 1, bronchitis 2, old age 3.

Burgh of Ladybank (Transferred Services).

Infectious Diseases.—During the year six cases of infectious disease were notified as follows :—

Diphtheria	2
Pneumonia	1
Scarlet Fever	1
Pulmonary Tuberculosis	2

The cases were equal in number to those notified during 1946.

Vital Statistics.—During the year 17 live births were registered (M. 9, F. 8), one being illegitimate. Two still-births were registered. Marriages numbered 11, and deaths 23 (M. 12, F. 11). No child under the age of one year died. The main causes of death were :—Heart disease 5, cerebral haemorrhage 5, cancer 3, diabetes 2.

Leslie Burgh.

Infectious Diseases.—During the year only 9 cases of infectious diseases were notified, viz. :—Scarlet fever 1, diphtheria 1, erysipelas and primary pneumonia 4.

Housing.—The position has altered little during the year. There is still an urgent need for more houses. A survey was undertaken during the year ; this revealed 241 cases of overcrowding and 126 unfit houses still in occupation. Fifteen houses previously condemned which were re-opened during the war to house homeless people and nine old army huts are still occupied. Sixteen new houses each of three apartments, the construction of which was held up during the war years, were completed and occupied and a start was made with the erection of 24 houses each of 4 apartments. Plans have been prepared for 210 additional houses but permission to proceed with the work is still awaited.

Water Supply.—The Burgh water supply remains as formerly described but steps were taken with a view to increasing the supply by building a dam to impound the Balgillie Burn. Final approval of the proposed works had not been received at the end of the year. With the exception of a short period in August when water was received from Kirkcaldy the supply met Burgh needs. Samples of Burgh water before and after filtration submitted for bacteriological examination and chemical analysis were satisfactorily

reported upon. Once the dam on the Balgillie Burn is complet Leslie should be independent of Kirkcaldy Burgh with whom the have an agreement to augment their supply in case of shortage emergency. It remains, however, a matter for debate wheth the Town Council might not be better advised to seek an augment supply from the projected County Regional water supply ma which will pass nearby.

Drainage.—The drainage system remains as described previous reports and no decision has yet been come to in regard the ultimate method of disposal. The existing sewage works a already fully taxed and can only deal with normal dry weath flow. With the additional houses in course of erection and othe which will ultimately be required the position will become mo acute and some decision should be come to on the question sewage disposal, preferably by a link up with the County Regio Sewer along the Leven Valley. The work of providing new sewe and relaying others where necessary is one which should not unduly delayed.

Vital Events.—The population as estimated by the Registra General is given as 2,546. During the year there were 60 live birt registered (M. 33, F. 27). There were 2 still births and the marriag registered numbered 13. The deaths registered numbered 30 (M. 1 F. 17). There were 2 infant deaths under the age of 1 year and t infantile mortality rate was 33·3 per 1,000 live births. The ch causes of death during the year were :—Heart disease 11, cereb haemorrhage 4, and cancer 5.

Leven Burgh.

Infectious Diseases.—During the year 57 cases of infectio diseases were notified in the Burgh :—Scarlet fever 28, diphtheria erysipelas 1, pneumonia 15, cerebral-spinal fever 2, encephali lethargica 1, infective jaundice 1, continued fever 1, poliomyelitis ophthalmia neonatorum 3, puerperal pyrexia 1.

The incidence of scarlet fever was slightly greater than in 19 but otherwise the incidence of other diseases was fairly normal.

Housing.—During the year 33 permanent houses, 2 of 5 apa ments, and 31 of 4 apartments were completed and occupied. Th were in addition the following permanent houses in course erection :—24 of 5 apartments and 73 of 4 apartments. T Scottish Special Housing Association were also building 100 p manent houses in the Burgh, 8 of 5 apartments and 92 of 4 apa ments. No temporary houses were provided or in course of erect but the above numbers, with the 70 aluminium houses erected 1946, make a total of 300. In view of the large number of un and overcrowded houses in the Burgh this will not meet exist needs.

Water Supply.—The water supply position in the Burgh is not altogether a happy one. Full details were given by the Sanitary Inspector in his annual report for 1946, and there has been little change since then. The Burgh has a fairly large building programme in hand with more to follow so there is need to look ahead to insure an ample supply of water for all Burgh purposes in the future.

Sewage Disposal.—The method of disposal of sewage by discharging it to the Firth of Forth and River Leven remains as formerly described. No complaints were received of pollution of the foreshore.

Vital Events.—The population of the Burgh as estimated by the Registrar-General is given as 8,546. There were 166 live births (M. 85, F. 81) during the year. Illegitimate births numbered 11 and there were 2 still births. The marriages registered numbered 79 and deaths 108 (M. 64, F. 44). Four infants under the age of 1 year died and the infantile mortality rate was 24 per 1,000 live births.

The chief causes of death were :—Heart disease 38, cancer 17, cerebral haemorrhage 10, pulmonary tuberculosis 3, other forms of tuberculosis 1, bronchitis 4, pneumonia 4, other circulatory diseases 4.

Lochgelly Burgh.

Infectious Diseases.—During the year there were only 10 cases of infectious diseases notified :—Scarlet fever 2, diphtheria 1, erysipelas 1, pneumonia 5, cerebro-spinal fever 1. In 1946 40 cases of infectious diseases were notified. The remarkably low incidence of infection in a Burgh of this size is noteworthy, and the number of cases coming to notice is the lowest on record.

Housing.—A housing survey undertaken in 1946 revealed that 990 houses were overcrowded while 349 were regarded as unfit for habitable purpose. During 1947, 97 temporary houses of 3 apartments and 18 permanent houses were completed and occupied, but the actual needs at 31st December, 1947, were 911 additional houses (453 of 3 apartments, 285 of 4 apartments, 129 of 5 apartments, and 44 of 6 apartments or more). No action has been taken so far to deal with those houses which are known to be unfit, and they will require to remain occupied until a far greater number of new houses can be provided. During the year there were 164 permanent houses in course of construction, 114 of 4 apartments and 50 of 5 apartments.

Water Supply.—The Burgh water supply available from the two impounding reservoirs at Lochornie is totally inadequate for Burgh needs. It is augmented by agreements with Fife County Council and Cowdenbeath Burgh from their public supplies. Every year, especially during the summer months, the question of shortage arises, and but for the aid of the Cowdenbeath and County supplies the Burgh would be often without water. With the addition of

further housing schemes the position will become much worse, and steps should be taken to secure an adequate supply for all Burgh needs, future as well as present, without undue delay. Mr Millar, Burgh Surveyor, has already submitted a full report to the Town Council on this matter, and has indicated three alternatives as to how this additional supply could be obtained, viz. :—

1. Adoption of the County Council's proposals in connection with their Regional Scheme.
2. Enlarging the storage capacity at Lochornie with enlarging of the trunk mains therefrom to the filter house and from the filter house to the storage tanks.
3. The utilisation of pit water meantime being pumped to waste from the Jenny Gray Pit. As this is a very hard water it would require softening as well as filtration and chlorination before being pumped to the high level tank at Spion Kop. As the capacity of this tank is only 100,000 gallons, future development envisaged to the south of South Street of some 600 houses can only be undertaken if an adequate supply of water can be assured at this point.

Lochornie reservoirs have only a capacity of 32,000,000 gallons and the daily consumpt is meantime 480,000 gallons, but this will increase as the housing programme develops to the region of 660,000-700,000 gallons per day. The storage capacity at Lochornie is therefore much too small and, for safety, would require to be increased to four times the present capacity. The gathering ground at Lochornie is estimated to yield some 230,000,000 gallons so that enlargement of the existing reservoirs or the formation of a new dam with enlarging of all trunk mains would solve the problem and adequately meet the needs of the Burgh. On the other hand, a long term view indicates that there would be greater advantages, financial and technical, in linking up with the County Regional main.

Sewage Disposal.—As indicated in previous reports, all Burgh sewage in crude state is discharged into the River Ore, thus causing gross pollution of this stream.

Vital Events.—The population of the Burgh as estimated by the Registrar-General is 9,405. There were 210 live births during the year (M. 107, F. 103). Illegitimate births numbered 4 and still-births 8. The marriages registered numbered 98, and there were 116 deaths registered (M. 63, F. 53). There were 5 infant deaths under the age of 1 year, and the infantile mortality rate was 23·8 per 1,000 live births. The chief causes of death were :—Heart disease 27, cerebral haemorrhage 18, cancer 10, pulmonary tuberculosis 7, bronchitis 9, nephritis 5, other violence 8.

Markinch Burgh.

Infectious Diseases.—There were only seven cases of infectious diseases notified in 1947 as follows :—Scarlet fever 2, pneumonia 3, poliomyelitis 1, and puerperal pyrexia 1.

Housing.—The housing position remains unaltered, and the 38 permanent houses (33 of 4 apartments and 5 of 5 apartments) commenced in 1946 had not been completed at 31st December, 1947. In addition to a considerable number of houses now regarded as unfit for habitable purposes there is a considerable amount of subletting and overcrowding. The estimated needs of the Burgh are 300, but it is intended to make a fresh survey of the Burgh during the present year to ascertain the true position.

Water Supply.—The position so far as water supply is concurred remains as described in previous reports. The existing supply derived from three sources is barely sufficient for Burgh needs. Storage accommodation is inadequate, and much water runs to waste which might otherwise be available. With the addition of the houses now in course of erection, and those contemplated, it will become imperative to secure an additional supply of water. This can best be secured by a connection from Fife County water main, and an agreement has now been come to with the County Authority on this matter.

Sewage Disposal.—As indicated in the report for 1946, the sewage works, though still efficient and working satisfactorily, are working to full capacity. The additional housing programme when fully developed will overload the existing plant and consideration will have to be given to the problem. Extension of the existing works would be possible but costly, and in view of this the most favourable course appears to be a linking up with the River Leven Regional Scheme.

Vital Events.—The population of the Burgh, as estimated by the Registrar-General, is given as 2,229. During the year there were 56 live births (M. 21, F. 35). Illegitimate births numbered 4. There were 29 marriages registered and deaths registered numbered 32 (M. 16, F. 16). Only one child under 1 year of age died, the infantile mortality rate being 17·8 per 1,000 live births. The chief causes of death were :—Heart disease 11, cancer 5, old age 3.

Burgh of Newburgh (Transferred Services).

Infectious Disease.—During the year two cases of infectious disease were notified as follows :—

Pulmonary Tuberculosis	1
Non-Pulmonary Tuberculosis	1

This number is 13 cases fewer than 1946, a remarkably low incidence for a Burgh the size of Newburgh.

Vital Statistics.—During the year 54 live births were register (M. 30, F. 24), one being illegitimate. There were no still-birt registered. Marriages numbered 12 and deaths 34 (M. 18, F. 1 Two children under the age of one year died, and the infant mortality rate per 1,000 live births was 37·0. The main cau of death were :—Heart disease 13, cancer 6, cerebral haemorrhage pneumonia 2.

Burgh of Newport.

Housing.—Progress towards the supply of the necessary numb of houses to meet the needs of the population has been trivial. the Flass Road Scheme, only four permanent houses were complet during the year, and a further four were in course of erection. August a start was made with 30 houses as a first development of t Craighead site, and rapid progress was made. For this to contin however, a smooth supply of materials will be necessary. Duri the year 13 large houses were converted by private enterprise provide 29 up-to-date flats, and authority was given an own occupier to build one new house. While unfit houses in the Bur are few, the demand for new houses on account of overcrowding a other reasons is greatly in excess of the likely supply in the ne future.

Factories and Workshops.—The number of factories register is as follows, viz. :—

Factories with mechanical power	7
Factories without mechanical power ...	10

All were visited periodically.

Infectious Disease.—During the year 11 cases of infectio disease were notified as follows :—

Erysipelas	3
Acute Primary Pneumonia	2
Puerperal Pyrexia	2
Scarlet Fever	3
Pulmonary Tuberculosis	1

The total number of cases being nine less than in 1946. T incidence was low for a Burgh the size of Newport.

Vital Statistics.—There were 59 live births in the Burgh duri the year (M. 30, F. 29) of which one was illegitimate. Three sti births were registered. Marriages registered during the year we 22, and there were 65 deaths (M. 24, F. 41). Two infants under o year of age died, giving an infantile mortality rate of 33·9 per 1,0 live births. The main causes of death were :—Heart disease 2 cancer 8, cerebral haemorrhage 6, nephritis 4, and tuberculosis 2.

Burgh of Pittenweem.

Housing.—Work on 38 new houses was commenced in 194 but was not completed by the end of 1497. This slow progress w mainly due to shortage of timber, and priority of supply of tl

essential material was obtained for only four houses. Even so, this small number has not been completed. The completion of 38 houses will by no means be sufficient to deal with overcrowding, unfitness, and the needs of newly married couples. The exact needs will not be known until a new survey to determine the number of unfit and overcrowded houses has been undertaken. A number of houses the subject of either action or representation under the Housing Acts are still occupied, and no further action was possible, owing to lack of alternative accommodation for the occupants.

Factories and Workshops.—There are 21 factories on the register and during the year 21 visits were paid by the Sanitary Inspector under the provision of the Factories Act. No defects falling within the jurisdiction of the Local Authority were found.

Infectious Diseases.—During the year three cases of infectious disease were notified as follows :—

Infantile Paralysis	1
Puerperal Pyrexia	1
Scarlet Fever	1

This number is five less than in 1946, a very low incidence.

Vital Statistics.—There were 36 live births in the Burgh during the year (M. 17, F. 19) of which one was illegitimate. There were two still-births and nine marriages registered. Thirty-two deaths were registered (M. 7, F. 25) the main causes being :—Heart disease 11, cancer 7, cerebral haemorrhage 4, and bronchitis 2. No child under one year of age died.

Burgh of St Andrews.

Housing.—No official action was taken during the year in connection with the inspection, closure and demolition of unfit houses, nor in regard to overcrowding.

At the end of the year there were 506 local applicants for municipal houses.

None of the houses in the 12th Development of the Housing schemes were available for occupation during the year.

Two houses of 4 apartments, built by private enterprise, were passed fit for occupation during the year, and 13 additional houses were provided by means of conversion of existing houses.

With the exception of 50 temporary houses, no new houses have been completed by the Local Authority since 1940, but during the years 1941-1947 inclusive, 8 new houses were erected by private enterprise. In addition, 37 houses have been converted into 89 houses by reconstruction and sub-division of large houses.

Factories and Workshops.—Thirty-seven visits were paid to factories in the Burgh by the Sanitary Inspector, as a result of which three notices regarding defective sanitary accommodation

were issued. Two were complied with and one was still pending at the end of the year.

Infectious Disease.—Sixty-five cases of infectious disease were notified during the year as follows :—

Continued (Undulant) Fever	1
Diphtheria	2
Erysipelas	1
Malaria	2
Acute Influenzal Pneumonia	2
Acute Primary Pneumonia	2
Pneumonia (other forms)	1
Infantile Paralysis	4
Scarlet Fever	34
Pulmonary Tuberculosis	10
Non-Pulmonary Tuberculosis	6

The total cases were 16 more than in 1946, the increase being largely due to the much higher incidence of scarlet fever, 34 cases as against 13 in 1946. The number of cases of diphtheria was the same as in 1946. The continued low incidence of this disease is satisfactory.

Vital Statistics.—During the year 159 live births were registered (M. 73, F. 86), of which five were illegitimate. One still-birth was registered. Registered marriages numbered 105, and deaths 127 (M. 72, F. 55). Eight infants under one year of age died, giving an infantile mortality rate of 50·3 per 1,000 live births. Deaths of infants under one year were three less than in 1946. The main causes of deaths in the general population were :—Heart disease 37, cancer 25, cerebral haemorrhage 17, and bronchitis 6.

Burgh of St Monance.

Housing.—By the end of the year four of the 28 houses commenced during 1946 were occupied and another four were nearly complete. Progress was thus very slow, and the need for a more rapid provision of houses is urgent. Until this is attained, there is no possibility of dealing with houses the subject of either past action or representation under the Housing Acts, to say nothing of other houses which have deteriorated and are suitable for such action now. In addition, there is the problem of overcrowding and the needs of newly married couples, the exact extent of which will not be known until a further survey is undertaken.

Factories and Workshops.—There are 17 factories on the register and during the year 17 visits under the provision of the Factories Act were made. No defects falling under the jurisdiction of the Local Authority were found.

Infectious Disease.—During the year 10 cases of infectious disease were notified as follows :—

Scarlet Fever	7
Pulmonary Tuberculosis	1
Non-Pulmonary Tuberculosis	2

The total number is five more than in 1946. The incidence of scarlet fever has been unusually high during the year.

Vital Statistics.—There were 29 live births registered during the year (M. 15, F. 14), of which one was illegitimate. Three still-births and 29 deaths were registered (M. 18, F. 11). Marriages registered numbered four. One infant under one year of age died, giving an infantile mortality rate of 34·5 per 1,000 live births. The main causes of death were :—Heart disease 9, cancer 6, cerebral haemorrhage 6, and tuberculosis 2.

Burgh of Tayport.

Housing.—The following is a summary of the position at the end of 1947 as regards new housing at various sites in the Burgh.

Bobbin Mill Site.—Twenty-four houses have been occupied and the remaining four are nearing completion.

Glebe Site.—The four houses at this site have been completed and occupied.

Cruden Housing Site.—The twenty houses comprising this scheme have been completed and occupied, and few complaints have been received from the tenants of these non-traditional houses.

Tay Street Site.—Four houses have been completed and occupied and the remaining six are in course of erection.

The need for houses in the Burgh is urgent. Of total applicants numbering 236, 62 have been allocated houses. Over 100 people are living in furnished or partly furnished rooms, many are recently married and with few exceptions are all local people.

Factories and Workshops.—There are a total of 29 factories in the Burgh, and during the year 48 visits of inspection were made by the Sanitary Inspector. In eight cases defects were pointed out and all were remedied.

Infectious Disease.—During the year 26 cases of infectious disease were notified as follows :—

Erysipelas	3
Pneumonia	1
Infantile Paralysis	1
Scarlet Fever	15
Pulmonary Tuberculosis	4
Non-Pulmonary Tuberculosis	2

The total number was 18 cases less than in 1946. The number of scarlet fever cases was relatively high during the year.

Vital Statistics.—There were 65 live births in the Burgh during the year (M. 26, F. 39) of which two were illegitimate. There were four still-births. Marriages registered numbered 17 and there were 45 deaths (M. 20, F. 25). Four infants under the age of one year died, giving an infantile mortality rate of 61·5 per 1,000 live births. The main causes of deaths were :—Heart disease 16, cancer 8, and tuberculosis 3.

EXAMINATION AND CERTIFICATION OF BLIND PERSONS.

The examination of persons who applied for certification as "blind persons" was done by the County Eye Specialists—Dr Moodie and Dr Leeds. The examinations were done at the following clinics in the County :—Dunfermline Hospital, Glebe Park Clinic, Kirkcaldy, St Andrews. One case was examined at the Dundee Eye Clinic. In addition a number of patients who could not attend at a Clinic were visited and examined at their homes—seventeen home visits were made.

The total number of persons who were examined in 1947 was 58 (these were—resident in the County 37, in Kirkcaldy 13, and in Dunfermline 8). The following table gives an analysis of the results :—

	Clinic Cases		Bedridden Cases		Total.	
	Blind	Not Blind	Blind	Not Blind	Blind	Not Blind
County ...	13	19	9	4	22	15
Kirkcaldy Burgh ...	5	4	3	1	8	5
Dunfermline Burgh	5	3	—	—	5	3
	23	18	12	5	35	23

Of those certified blind 15 were over 65 and 20 under 65 years of age.

The ophthalmic surgeon recommended treatment as well as certifying blindness. This treatment is summarised as follows :—

Type of Treatment Recommended.

	Blind	Not Blind	Total
Medical	—	1	1
Surgical	2	2	4
Optical	—	11	11
	2	14	16

The primary eye conditions recorded by the eye specialists were as follows :—Primary cataract 11 ; senile cataract 8, myopia 11, primary optic atropy 5, ophthalmia neonatorum, superficial keratitis, choroiditis, trauma (to one eye), primary glaucoma, retinitis pigmentosa, amblyopia—each of these, two cases, and one of each of the following :—Keratitis, conjunctivitis, interstitial keratitis, exudative keratitis, pigmentary degeneration, occlusion of the central artery, congenital cataract, congenital coloboma and primary detachment of the retina.

EXAMINATION AND CERTIFICATION OF BLIND PERSONS.