[Report 1957] / Medical Officer of Health, Dartford Borough.

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Rural District Council of Dartford

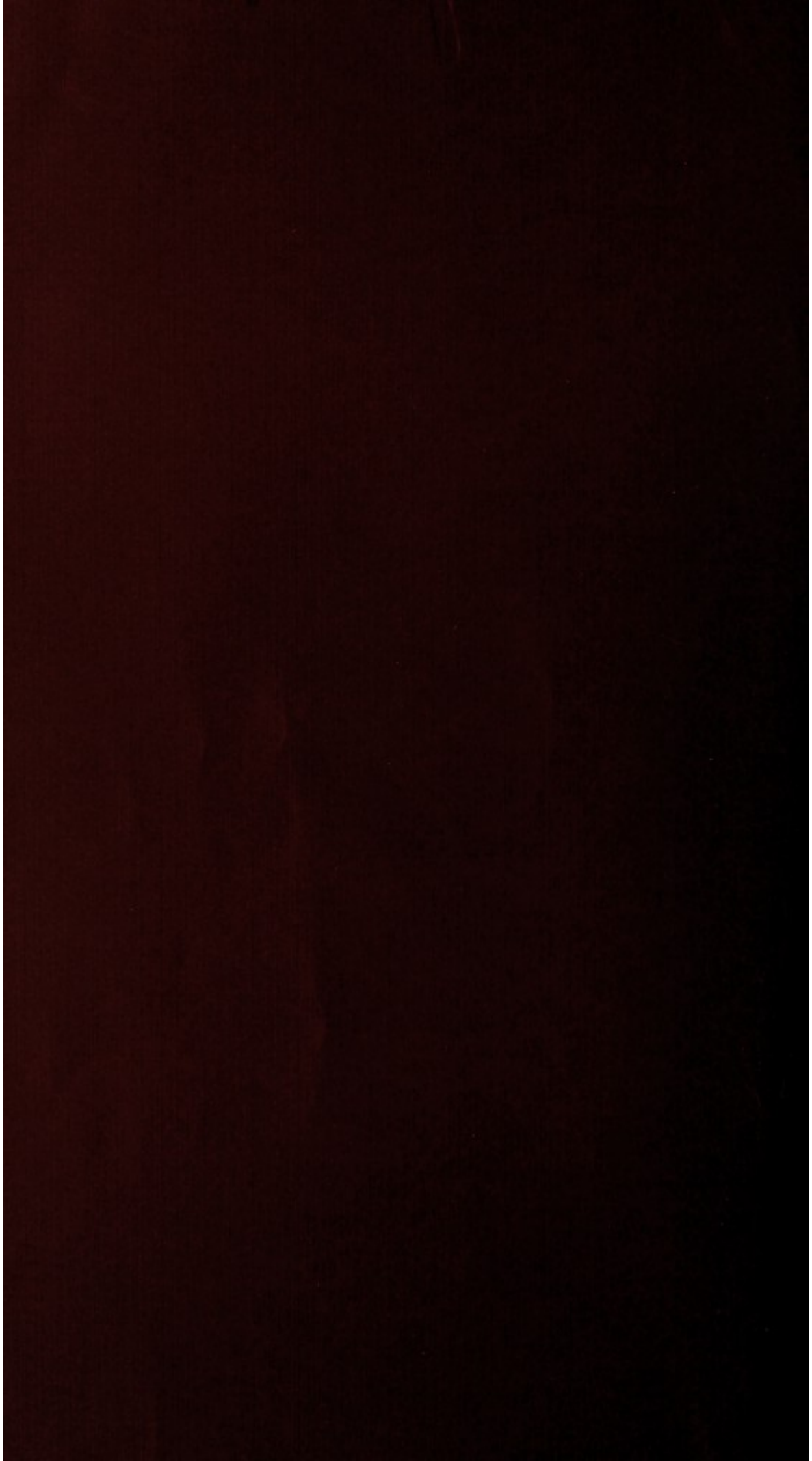
ANNUAL REPORT

ON CERTAIN MATTERS
CONCERNING

Public Health

FOR THE YEAR

1957



S U M M A R Y

In 1957 the upward trend in the population of recent years continued but was modified by a change of boundary.

The number of births was the highest on record. The birth rate was the highest since 1947.

The pattern of death was that to be expected in an area of South East England well provided with social services.

For the first time the greatest number of quarterly deaths was contained in the last quarter.

Influenza visited the district in autumn.

Measles made its biennial visit.

Poliomyelitis caused nine paralytic and nine non-paralytic cases in the third quarter.

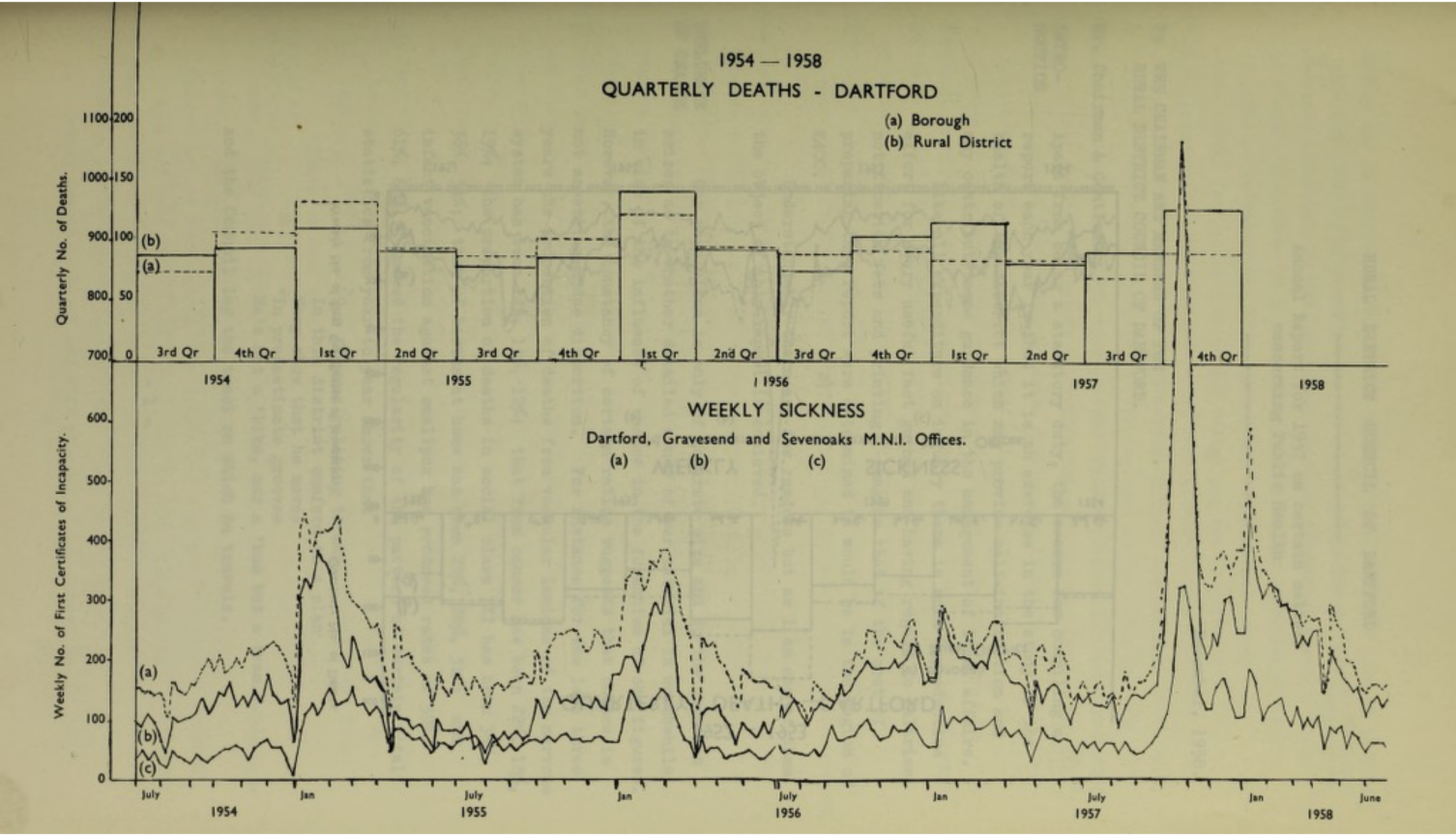
The re-vaccination of children against smallpox was again negligible. Several cases of smallpox were cared for in the hospital which adjoins this district.

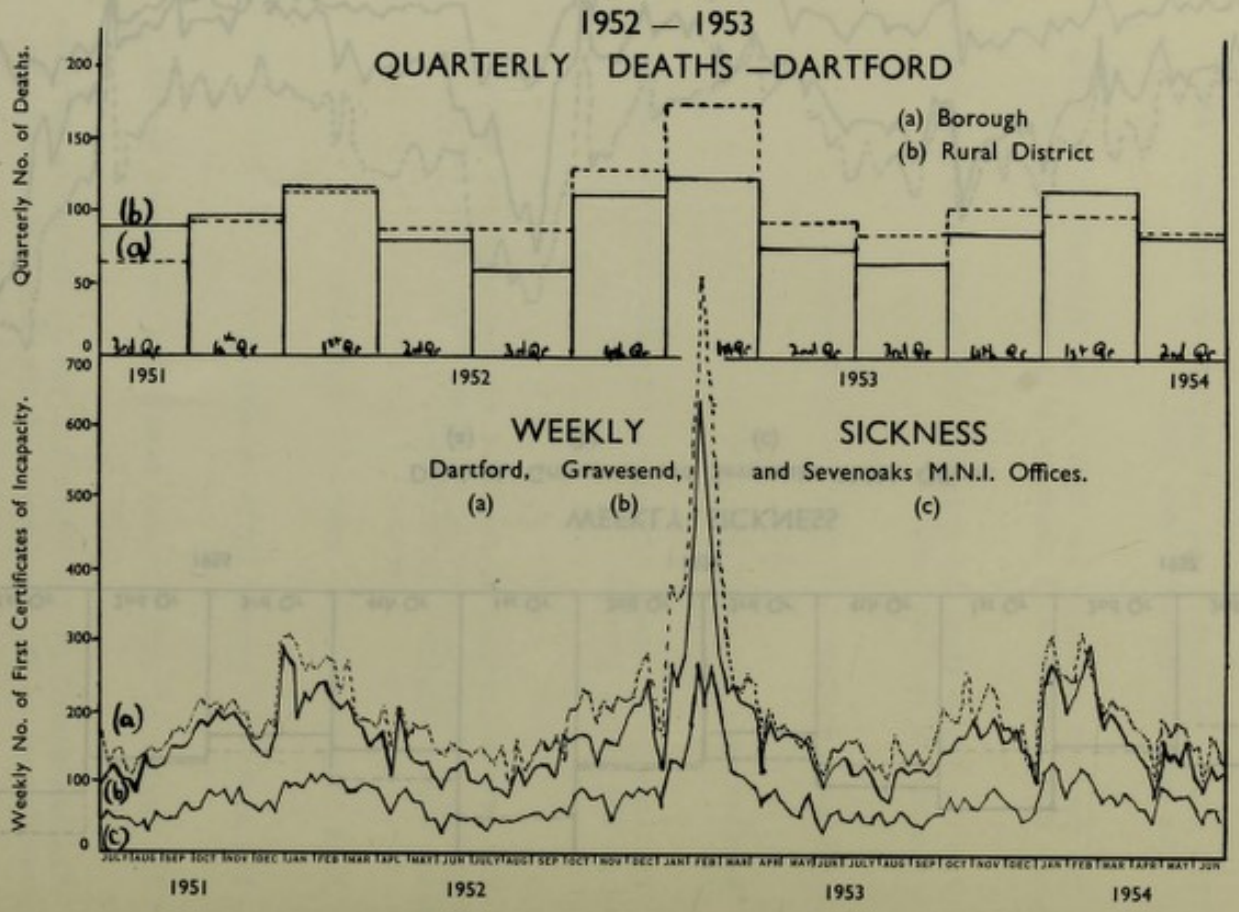
Meat inspection again markedly increased.

The number of houses built was ~~820~~. 866

The number of unfit houses demolished or closed was 41.

The management of the Council's public cleansing services was transferred to the Department of the Engineer & Surveyor.


1954 — 1958
QUARTERLY DEATHS - DARTFORD
(a) Borough
(b) Rural District
Quarterly No. of Deaths.
1100
1000
900
800
700
200
150
100
50
0
(b)
(a)
3rd Qr
4th Qr
1st Qr
2nd Qr
3rd Qr
4th Qr
1st Qr
2nd Qr
3rd Qr
4th Qr
1st Qr
2nd Qr
3rd Qr
4th Qr
1954
1955
1956
1957
1958
WEEKLY SICKNESS
Dartford, Gravesend and Sevenoaks M.N.I. Offices.
(a) (b) (c)
Weekly No. of First Certificates of Incapacity.
600
500
400
300
200
100
0
(a)
(b)
(c)
July
Jan
July
Jan
July
Jan
July
Jan
June
1954
1955
1956
1957
1958


1952 — 1953
QUARTERLY DEATHS —DARTFORD
(a) Borough
(b) Rural District
Quarterly No. of Deaths.
200
150
100
50
0
(b)
(a)
1951
1952
1953
1954
WEEKLY SICKNESS
Dartford, Gravesend, and Sevenoaks M.N.I. Offices.
(a) (b) (c)
Weekly No. of First Certificates of Incapacity.
700
600
500
400
300
200
100
0
(a)
(b)
(c)
1951
1952
1953
1954

RURAL DISTRICT COUNCIL OF DARTFORD

Annual Report for 1957 on certain matters concerning Public Health

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December, 1958.

To THE CHAIRMAN AND MEMBERS OF THE
RURAL DISTRICT COUNCIL OF DARTFORD.

Mr. Chairman & Gentlemen,

INTRO-DUCTION

Apart from being a statutory duty, the reason for compiling a report each year is that it is an exercise in the study of the health of the district which may provide self-instruction and may contribute some guidance in the management of local affairs.

Like all expenditure on inquiry there is much unproductive effort for every useful fact gained and having regard to salaries, notification fees and printing I imagine that if the cost of preparing this report were determined it would be in the region of £400.

Understandably there are few readers but as I am one of them the object of this report is achieved.

INFLUENCE OF CHANCE

Our population is only of moderate size and so the question arises as to whether detailed study of our material is worthwhile in view of the influence of chance in the formation of our figures. However, the constancy of certain ratios suggests that chance is not asserting undue distortion. For instance for the last three years the proportion of deaths from vascular lesions of the nervous system has been 14%, 13%, 12%; that from cancer has been 22%, 18%, 19%; the proportion of deaths in social class III has been 38%, 36%, 34%; that of births at home has been 25%, 28%, 31%; and infant vaccination against smallpox has produced rates of 59%, 61%, 60%. Indeed the regularity of the pattern of certain vital statistics from year to year shows that

> Our figures relating to man
> In this district conform to a plan
> They show that he moves
> "In predestinate grooves
> He's not a 'bike, nor a 'bus but a tram."

and the Council lay the track on which he travels.

AGED AS INDICATORS OF ENVIRONMENT

A considerable amount of attention is given in the tables to the old age group. The reason for this is that, not only does this group face the community with an increasing responsibility, but this fragile section of the community forms a useful indicator of the influence of environmental hazards. Formerly we had our infant deaths as a guide, but infant care is now so effective that infant deaths from environmental hazards are happily too few to give us guidance.

SOCIAL CLASS AS AN INDICATOR

It may be thought curious that attention is paid to social class but the reason is that the social classes are really occupational groups each of which has its own environmental hazards, for example the hazard of the office desk and animal fat in class I or of overcrowding and starchy diet in class V. Owing to differences in environment death rates vary in different occupational groups just as the death rates of one country differ from those of another. These gradients require observation to find where adjustment is required to provide healthier conditions and to see whether our gradients harmonise with the national pattern.

Births have been classified socially with a view to observing the effects on our future population of housing policy through which the Council have a powerful influence on the choice of the characteristics from which the future population is drawn. Unfortunately in housing the welfare of the individual is largely in conflict with that of the community as the Council allocate the tenancies of their houses according to need although generally the characteristics which place an applicant in need are those which should not be propagated. On the other hand house ownership selects for rehousing a group who qualify by their ability to borrow which is related to their mental, physical and social well being all features which should be nurtured.

As in other aspects of health and welfare it may be that in housing we are moving too far from the influence of natural selection. Should not the council house be of a type that the public will not seek but will do their best to avoid?

POPULATION

The population increase of 1,870 was less than in the previous year but this was due to the fact that some 1,500 persons in almost 500 houses were transferred to the Borough in the early part of the year. Had it not been for this change of boundary the increase of population would have been in the region of 3,400 and this would have been the greatest on record and in keeping with the trend of recent years.

Nevertheless, the houses built in 1957 were less than in the previous year and no doubt the annual increase in the population will tend to diminish in subsequent years as areas available for development get used up and immigration returns to that of a stable community.

BIRTHS

There was again a notable increase in the number of births in 1957 and the birth rate, like the national birth rate, noticeably increased. The increase in our birth rate was accentuated by a higher comparability factor than in recent years, which seems to have compensated for our fertile females in institutions and to the fertile population we lost with the change of boundary.

The growing trend in this district for mothers to have their second and further babies at home increased the percentage of home births to 31% compared with 21% in this Local Health Authority area containing this and four neighbouring urban districts. No doubt our increase is largely due to the housing development that has taken place at Swanley, where home confinement is an established social habit.

Social classification of the births for 1957 maintains the trend of the past three years of the increase of class III, namely the skilled worker. This might be in keeping with the increased accommodation available through house purchase to thrifty persons of this group.

DEATHS

In 1957 there was an increase in the number of deaths over the previous years owing to the high figure in the last quarter when the death rate was high both here and in the country as a whole. There was no increase on the previous year in the number of deaths of those aged 75 and over but as in other age groups the greatest number occurred in the last quarter and not in the first as in previous years. For this last quarter to contain the greatest number of deaths was most unusual and no doubt the cause was the respiratory disease discussed below.

DISEASES OF THE RESPIRATORY SYSTEM

Diseases of the respiratory system in 1957 showed an increase in deaths to 69 according to the Registrar General; to 72 according to our own compilation.

The first quarter of the year, a period usually associated with the highest number of deaths from both respiratory diseases and from all causes, showed nothing unusual the figures were;

	Deaths in first quarter	
	Respiratory diseases	All causes
1950	16	101
1951 (Influenza A)	30	144
1952	13	118
1953 (Influenza A)	36*	124*
1954	14*	115*
1955 (Mild Influenza)	20*	110*
1956	27*	142*
1957	21*	122*

*According to pre-1953 method of allotting deaths.

Deaths from respiratory disease by quarters for 1957 were:

	1st Qr.		2nd Qr.		3rd Qr.		4th Qr.		
	G.P.*	M.H.**	G.P.	M.H.	G.P.	M.H.	G.P.	M.H.	1957
Influenza	-	-	-	-	-	-	-	3	3
Pneumonia	5	2	3	-	4	2	10	4†	30
Bronchitis	14	-	7	-	3	-	10	-	34
Other dis. of resp. system	2	-	1	-	-	-	2	-	5
	21	2	11	-	7	2	22	7	72

*General Public **Mental Hospitals

It will be seen that deaths from respiratory disease were most frequent in the last quarter and in this quarter there was a visit of influenza in October and a fog in December. The following is an analysis of the deaths in the last quarter by month of occurrence (i.e. not of registration).

Month	All Causes	Influenza	Pneumonia	Bronchitis	Other dis.of resp.system	Total
October	37	-	7†	3	2	12
November	51	2	2	3	-	7
December	59	1	6	4	-	11
Fourth Quarter	147	3	15	10	2	30

Aged respiratory mortality, by which I mean the percentage of respiratory deaths to deaths from all causes, showed nothing unusual in the first quarter and in spite of influenza showed nothing unusual in the last quarter or for the year:

	First Quarter	Year
Aged respiratory mortality 1955	21%	13%
" " " 1956	20%	17%
" " " 1957	16%	14%

† Including one virus pneumonia considered influenzal.

CANCER OF THE LUNG

Cancer of the lung caused 14 deaths in 1957, none of these were in mental hospitals. The figures for previous years were 20, 11, 11, 8, 24 and 17. The death rate in 1957 was 0.31 per 1,000 population compared with 0.43 for England and Wales and 0.61 for London.

CORONARY DISEASE

Of the 60 deaths from coronary disease in 1957 three occurred in mental hospitals, all were over 45 years of age, and 50 were aged 65 or older. The Registrar General allocated 63 deaths to this cause and on this basis the death rate was 1.38 per 1,000 population compared with 1.70 for England and Wales and 1.70 for London.

DEATHS FROM VIOLENCE

Road accidents: there were 12 motor vehicle accident deaths, 7 were pedestrians aged 2, 4, 10, 41, 57, 70 and 85, 3 were motor cyclists aged 19, 56 and 57, 2 were drivers of a motor car or lorry, aged 49 and 72.

The 2 toddlers were killed by two separate accidents through being knocked down by electrically propelled delivery trucks.

Other accidents: there were 5, 2 in institutions, a drowning accident to a man of 22, an accident in the home of a man of 74 who was drowned in his own bath and an 89 year old female who fractured the neck of the femur.

Suicide: there were 3, all males, aged 39, 47 and 73.

DEATHS RELATING TO THE WELFARE OF MOTHERS & INFANTS

Maternal deaths: there were none.

Still births: there were 20 compared with 11 and 15 the previous two years, the rate was similar to that of England and Wales.

Neonatal deaths: deaths under four weeks of age numbered 16 compared with 11 each of the previous two years. 10 were due to prematurity and 1 to asphyxia, all under 2 days of age; 2 deaths were due to congenital abnormalities, and in another death allocated to a different cause, there was congenital malformation; 2 deaths from pneumonia occurred at the age of 2 days and 2 weeks; the remaining death was the body of an abandoned infant found by the police.

Deaths over 4 weeks and under 1 year: there were 5 deaths, 1 was due to enteritis at 2 months, 1 was due to bronchiolitis and enteritis at 7 months and 1 was due to tracheobronchitis at 8 months. 1 death from enteritis occurred in a well cared for infant, the illness only lasted three days and the mother had influenza at the time. The other enteritis case died after 3 weeks in hospital to which he was referred by the clinic via the family doctor. The death from tracheobronchitis occurred

in a healthy infant after only a few hours' illness. 2 deaths were due to congenital malformations at 5 and 11 months.

The infant mortality rate both for neonatal deaths and for infant deaths under 1 year of age, was much the same as that for England and Wales.

Perinatal mortality: (still births and deaths of infants aged under 1 week per 1,000 total live and still births) was 36; in England and Wales it is 36.2.

SOCIAL GRADIENT

Deaths from coronary disease and bronchitis have been analysed for 1957 but have displayed no social gradient, but as there were only 60 deaths of the former and 34 of the latter, the search for a social gradient will have to wait until several years' figures can be analysed.

INFECTIOUS DISEASE

POLIO-MYELITIS

We had a record number of cases in 1957, namely 9 paralytic and 9 non-paralytic, the diagnosis of one of the latter was not confirmed. All of these cases except 4 occurred in August. There appeared to be two foci of infection, namely Swanley and Wilmington, Swanley having 8 cases and Wilmington 5. Adjacent local authorities also had a high incidence, Malling Rural District had 23 cases, 10 of which were paralytic; beyond Malling, Maidstone Borough had 66 cases, of which 34 were paralytic and Maidstone Rural District had 14 cases, 10 of which were paralytic. There seems, therefore, to have been something like a spread of infection along the lines of communication between Swanley Junction and Maidstone.

The focus at Wilmington also illustrated a chain of infection, the first 2 children infected were contacts of a non-paralytic case at Orpington. These children infected their mother, who died, and a contact of these children developed poliomyelitis a few days after leaving this district for a holiday in Leicester. Specimens from the mother of the latter showed type 1 virus.

None of the children affected had been vaccinated against poliomyelitis although some had been registered.

Stool specimens from family contacts were taken in two of the cases; out of 5 in one family all were negative, out of 4 in another family, 2 were positive for type 1 virus. About a score of stool specimens from children under 5 selected at random were examined by the Public Health Laboratory and 2 were found to be positive for type 1 virus, 1 at Stone and 1 at Hextable; the

latter was in a four month old infant who had a brother aged 4 years, this brother was then sampled and also found to be carrying type 1 virus.

During an outbreak the practice is for the household of each case to be visited by me in order that the problems arising can be dealt with by personal discussion. The head of the household is informed that the infection is mainly one of the bowel and the need for hand cleanliness is emphasised by providing a strong solution of iodine (liq. Iodi fortis) which he is advised to add to water (1 teaspoon to 1 pint) and the family are asked to immerse their hands in this for one minute after washing. The family contacts are warned against excessive fatigue and those handling food or working in close contact with children are excluded from work. Other contacts from time to time have to be sent back to work with suitable explanations, after they have been excluded by their employers. A circular is sent to medical practitioners of the district informing them of each case as it occurs.

Vaccination against poliomyelitis was started in 1956 by the Local Health Authority when there was apprehension amongst the public created by the accident which had occurred in America where live vaccine had slipped through the safety tests. Numerous inquiries were received here and one meeting was addressed. Inquiries were answered describing the safety tests to which the British vaccine was subjected, emphasising that the risks associated with taking the vaccine were negligible and estimating that the protection gained was an 80% reduction in the chances of incurring the disease.

MEASLES

In view of the fact that the biennial appearance of measles began in January, the full cycle was contained in the year 1957 and so the number of cases notified in that year was the greatest annual number recorded. The distribution of the disease through the parishes displays how a breath borne virus infection spreads and provides the same picture that has appeared on previous occasions.

Measles notification is not followed by preventive action and indeed it is doubtful if such is justified in school children; at any rate in summer time. Notification therefore serves no useful purpose apart from providing the statistics of the incidence of the disease, an idea of which can in any case be obtained from school records. Consequently I have taken such action as is feasible to obtain the revocation of these regulations but without

success. Notifications in 1957 cost £130 in fees alone in this district and £80,000 in England and Wales. Postage and administration will double this cost.

As we have to have measles notified whether we like it or not, I have attempted to put the notifications to use for estimating the amount of lung damage caused by measles and whooping cough. For this an approach was made to the Kent Child Health Society, but after studying the possibilities of such a survey it seemed beyond our resources and the proposal was shelved.

INFLUENZA

The influenza of 1957 first appeared in February in China, in April in Malaya and in July in the Middle East and this country, where it got underway in September, its zenith in the London and south-east region occurring in mid October, see graph.

No doubt it was this influenza that was behind the number of deaths in the last quarter of 1957, but as has been shown, this increase in deaths did not unduly affect the aged who may have incurred immunity at the end of the last century when the same unusual strain of virus A influenza was about. Schools were markedly affected, the absence at the secondary school here amounting to 38%. As influenza usually appears in January and February and as it was possible that the disease might recur later, certain exposed groups received inoculations of vaccine in December, but the second wave did not appear.

SMALLPOX

Infant vaccination rates in Dartford Rural District were much the same as the previous year and a little below the rates for Kent County and Dartford Borough. The rate compared favourably with that of England and Wales being almost half as much again. Where we are lacking is in the re-vaccination of school children, the numbers re-vaccinated being negligible, but throughout England and Wales the position is little better. I have drawn attention to this lack of re-vaccination in previous reports.

In July several smallpox cases were cared for in the smallpox hospital which is adjacent to the boundaries of this District.

TUBERCULOSIS The facts for 1957 are given in the tables. A feature of interest was our endeavour to obtain notification of the disease from the medical practitioners engaged in mass-radiography in accordance with their statutory duty under the 1952 regulations. In 1956 the mass-radiography unit visited an institution in this district and in 1957 the director kindly let me have the statistics, for which I thanked him, and asked for the notification of the cases enumerated therein as "considered tuberculous". With the backing of the Ministry of Health the director declined to let me have these notifications and unfortunately this Council could not enforce the regulations as we did not know precisely the medical practitioner who had interpreted the radiographs.

Medical practitioners of the radiography unit presumably go through two stages of thought in regard to the cases that come before them. They form an opinion on the examination of the large radiographs and then form a conclusion when they receive a clinical report from the examining medical practitioner. Counsel's view of the regulations is that a medical practitioner is under a duty to notify the case where he has personally formed an opinion (using his own powers of reasoning) that tuberculosis exists. Whether a particular radiograph (with or without a clinical report) produces this state of mind is a question of fact in each case but it would require strong expert evidence to the contrary to show that such an opinion cannot be formed on radiographic evidence alone.

The reasons for medical practitioners engaged in mass-radiography declining to notify cases of tuberculosis are, I believe, that the information that comes to them by mass-radiography is to remain confidential and that cases discovered will ultimately be notified by the chest physician. Confidentiality, however, is still preserved by notification, as the regulations themselves require every notification to be regarded as confidential. Not all cases will ultimately be notified by the chest physician, some will not be seen by him and cases cared for by hospitals generally stand a slim chance of being notified while cases declining to undergo observation or treatment will never be notified.

Tuberculosis is an important communicable disease and the more progress that is made towards its eradication the more difficult is the task that remains to be done. Each case of tuberculosis discovered by mass-radiography is the product of great expense and effort and the administrative position whereby the Ministry opposes the local authorities who have the statutory duty of enforcing notification is unsound. If statutory regulations used in the control of this disease are to be respected, they should be followed.

Either medical practitioners engaged in mass-radiography should notify in accordance with article 5 of the regulations cases which they consider to be suffering from tuberculosis or, alternatively, article 5 should be amended to make an exception of an opinion formed from evidence derived solely from radiography, as it does with an opinion formed from evidence derived solely from tuberculin tests.

The number on the register is a further increase on that of the previous year and continues the upward trend of the past decade. This is partly due to immigration and partly to the register containing names which should be removed. A meticulous register whose contents are sound requires much attention but it is no longer a statutory duty to maintain this register and the statutory code of practice regarding its maintenance has been revoked; we do our best but we are dependant on the co-operation of others. Notification and registration should either be done well or not at all, if the quality is not to be improved registration should perhaps cease.

The difference between the Registrar General's statement of tuberculous deaths and our own is due to the fact that a miliary tuberculosis death has been attributed by the Registrar General to "tuberculosis other" when we know that the lungs were affected and that the classification should be "tuberculosis respiratory". One of the deaths allocated by the Registrar General to "tuberculosis respiratory" was a death which should have been allocated to "other malignant neoplasms".

The age groups notified were in keeping with the national picture, namely an emphasis on young adult life in the females and on young middle age in the males.

DIPHTHERIA

The vaccination rate is slightly less than that of Kent County or Dartford Borough but the percentage of immune children under 5 is the same as in these areas and in England and Wales. 1957 was the ninth year in succession in which no diphtheria occurred in this district.

BOWEL INFECTIONS

Dysentery. The two cases notified produced no disease-bearing organisms.

Food Poisoning. A child admitted to hospital for appendicitis was found to be infected with S. typhimurium and on returning home the child still had the infection. In the other two cases of food poisoning no disease-bearing organisms were identified. The fourth case of food poisoning was an infestation with beef tapeworm (T. saginata) in an elderly person who had not been out of the country. She had been infested for two years and originally she obtained her meat from a shop in a neighbouring district which sold both home killed and imported meat. The patient was successfully treated in hospital.

Tapeworm infestations are not common but are important to us in view of our duties of meat inspection, the need to ensure that cesspool contents are not emptied on pasture land, and the use of sludge from sewage works for agriculture.

Paratyphoid B. The paratyphoid B. (phage type 1 var.1) infection occurred in a boy of 12, the source of infection remained unknown.

ACCIDENTS IN THE HOME

HOSPITAL ADMISSIONS

The figures were much the same as in 1956 and 1955. In addition to the death mentioned above in deaths from violence, there are the following details kindly provided by the Dartford Hospital Management Committee.

Persons receiving in-patient treatment*

Age	Falls	Burns & Scalds	Poisoning	Other	Total
0 - 4	1	3	-	1	5
5 - 64	4	1	1	5	11
65+	4	1	-	-	5
	9	5	1	6	21

Length of stay in hospital

Under 1 week	1-	2-	3-	4-	8-	12-	13+	Total
6	8	1	2	1	1	1	1	21

*In these details there are two deaths; one a female aged 89 who fractured the neck of the left femur, the other a male aged 63, whc fractured a femur but the bone was already diseased.

One child was admitted to hospital in 1951 suffering from extensive burns caused by his night clothes having been set alight by the flame of a candle. The burns were so extensive that this unfortunate child is still in hospital and is, I believe, likely to be in hospital indefinitely.

It must be remembered that not all accidents in Dartford Rural District are admitted to the Dartford Group of Hospitals, accidents at the Swanley part of the district tend to go to the Sidcup & Swanley Group, and at the Southfleet part, they tend to go to the Gravesend and North Kent Hospital.

ENVIRONMENTAL MATTERS

HOUSING

Appendix I illustrates the attention given to housing problems. The number of houses demolished or closed in 1957 was an increase on previous years. An item not included in the appendix concerned the repair of 4 houses which by a devious route had become subject to action under Section 11 of the Housing Act, 1936. There was pressure for demolition orders to be served but eventually the offer of the owner to make these houses fit for habitation was accepted and these houses were not only made fit but one of them has obtained a grant for improvement from the Council. The point of interest in this is that it had to be made clear that had a demolition order been served and had the owner appealed against it the evidence of the Council's officers would not have supported the Council's action.

WATER

Details of the quality and quantity of water supplied to the population of this district are included in appendix II and I have there included information on the gathering grounds here which provide water for this and neighbouring communities.

This district gathers its water in the chalk which would keep this water were it not traversed by fissures tapped by wells. These fissures are of unknown length and whether they reach the surface and if so the whereabouts of their surfacing is unknown. The chalk may be exposed or may be covered by gravel which filters, or by clay which is impermeable.

CESSPOOLS AND WATER SUPPLIES

In this district there are some 2,600 cesspools draining some 3,500 houses and more than 50% of these cesspools leak. In addition to leaking cesspools there are 180 dwellings draining to septic tanks emptying their effluent into the ground and 7 such tanks have been provided for Council estates on the advice of the Ministry.

What measure of hazard is risked by public water supplies on account of leaking cesspools? Before a cesspool can convey disease it must first receive a contribution to its contents from a person with an infection capable of being carried by water and such persons are not common here. Having arrived at the cesspool the infection may not survive its sojourn therein as its expectation of life in this environment is a matter of days while its passage through takes a matter of weeks.

The possibilities of a leaking effluent containing disease-bearing organisms are thus remote and furthermore, while it is seeping from the cesspool the effluent is bacteriologically filtered by biological growth and organic matter in the interstices of the surrounding material and stratum especially if the latter contains sand. When the effluent arrives at the chalk it will again be filtered unless it gains direct access to a fissure. In the fissure the effluent will be oxygenated by water from natural sources and unless a pumping station is in the vicinity, the flow will be so slow that it is unlikely that any disease-bearing organisms will survive a distance of more than a mile and even if they do the fissure containing them may not have access to a well. If these organisms, in spite of the above obstacles, do arrive at a well they will be killed by routine chlorination.

ILLUS-TRATIONS

A well in Clement Street used for domestic and horticultural purposes is about 100 ft. from a cesspool in use but never emptied. This well water is wholesome (E. coli absent in 100 ml.). Green St. Green pumping station is 400 yds. from four houses on gravel the cesspools of which have never required emptying. Hartley pumping station is 400 yds. from four cesspools which although in use never require emptying.

PRESENT CONTROL PRACTICE

To obviate the risks of pollution to water supplies cesspools are built to be impervious and although the cost in concrete and brickwork is not insignificant, half of them leak when put to use ("our cesspool has been treated"). The cost of emptying those that remain impervious is £10,000 a year and if all cesspools were impervious the cost would be doubled. The risk of cesspools to water supplies is also given attention in the consideration of applications for planning permission for residential development and these have at times been refused on the grounds that cesspools create a risk of pollution.

A SUGGESTION

Expense and inconvenience would be saved if cesspools were controlled by planning on a geological basis. The site of each cesspool should receive consideration on its own merits and generally within a mile of a pumping station ~~and when~~ or where cesspools are directly on chalk there should be meticulous attention to ensure that cesspools are impervious. On these sites even more should be required than is asked for by the existing byelaws, e.g. the provision of a bed of clay for each cesspool. Elsewhere cesspools should be encouraged to dispose of their contents into the ground and the existing byelaws modified accordingly. Should the water undertakers require a different standard of protection they can seek the Ministry's sanction to make their own byelaws or they can buy the land they wish to protect.

To reduce the amount of expense and inconvenience in cesspool emptying I have suggested that where cesspools are more than two miles from a pumping station they should be provided with soak-aways so that they can work in effect as septic tanks. This proposal which is in harmony with the existing law was put to the two Ministries for their observations, but they advised that such an arrangement would be highly dangerous.

However, the Council are contemplating charging for the emptying of those cesspools emptied more than four times a year and no doubt this may encourage leakage. Unfortunately, this may occur in areas which warrant protection.

AIR

The atmospheric pollution measurements of this district and the action taken on its problems are given in the annual reports of the Thames-side Joint Committee and are therefore not referred to in this report.

TRANSFER OF PUBLIC CLEANSING

Up to April, 1957, public cleansing (i.e. refuse disposal and cesspool emptying) was the responsibility of this office. The annual expenditure incurred was of the order of £40,000 and a large slice of administrative time had to be diverted to this responsibility, while its problems had to find their place amongst numerous other items in the business of the Public Health Committee. Having regard to the importance of this service in a growing district and the expenditure involved I ventilated the idea several years ago that a Public Cleansing Inspector should be appointed, a Public Cleansing Committee should be created and that the service should come under the care of the Council's Engineer & Surveyor. Not only would such an arrangement give more attention to the needs of public cleansing but it would relieve our small office of a task which tended to upset our administrative balance. In April 1956 a Public Cleansing Committee was appointed but there was still reluctance to transfer this service away from this office. However, in April, 1957, this service was finally off-loaded to the Council's Engineer although this office still cares for any public health problem associated with the service.

ACKNOWLEDGEMENTS

I wish to emphasise that the detailed day-to-day work of housing, water, drainage and food inspection is done by the Council's Public Health Inspectors.

All the members of this department have contributed to this report and contributions have been made by colleagues both here and elsewhere.

We wish to thank the Chairman and Members of the Public Health Committee for their interest and support during the year under review.

I am, Mr. Chairman and Gentlemen,
Your obedient servant,

John H. Hudson.

Medical Officer of Health.

TABLE I - SOCIAL CONDITIONS

Area (acres)1956		34,103
Area (acres)1957 (boundary adjustment)		34,026
Population (Census 1931)		31,253
Population (Census 1951)		37,905
Mid-year home population 1957 (R.G.'s estimate)		45,810
Number of ~~inhabited~~ houses (~~according to Rate Books~~) domestic & agricultural dwelling (assessed to rates)		
31.3.57.	12,791	~~13,081~~
31.3.58.	13,143	~~14,978~~
Rateable value 31.3.57.		£521,374
Rateable value 31.3.58. (boundary adjustment)		£516,988
Sum represented by 1d. rate 31.3.57.		£2,089
Sum represented by 1d. rate 31.3.58.		£2,070

The 1957 comparability factor for births governed by the proportion of women aged 18-44 years is 1.02 and the factor for deaths, governed by the proportion of all age groups, is 1.01 These factors have been adjusted to take account of the presence of populations in residential institutions, e.g. those for the mentally ill or mentally deficient. The factors given for use in 1956 were 0.96 and 1.08. When local crude birth and death rates are multiplied by the appropriate area comparability factor they are comparable with the crude rate for England and Wales or with the corresponding adjusted rate for any other area.

POPULATION. In 1957 the estimated mid-year home population increased by 1,870 on the previous year. Increases in the population are due to natural causes, i.e. excess of births over deaths, and immigration, both being related to new houses built. On 1.4.57. 486 houses went to the Borough with the change of boundary and in the table below these have been subtracted from the 866 houses built in the year 1957:

	1950	1951	1952	1953	1954	1955	1956	1957
Est. mid-year home population	36,870	37,520	38,250	38,610	39,110	41,290	43,940	45,810
Increase on previous year	980	650	730	360	500	2,180	2,650	1,870
Natural increase	211	149	143	187	170	222	323	362
Immigration	769	501	587	173	330	1,958	2,327	1,508
Houses built	353*	223*	231	439	573*	847*	1,018*	380*

*Including 69, 31, 35, 67, 219 and 46 houses built by Dartford Borough in 1950, 1951, 1954, 1955, 1956 and 1957 respectively.

Social conditions for 1957 may be indicated by:

Cases dealt with by N.S.P.C.C.;	Neglect	9
	Ill-treatment	2
	Children involved	24
	Prosecutions	-

Unemployed on December 31st, 1957, (Dartford Borough & Dartford Rural):

Men 202 Women 46

Illegitimate birth rate 1957 per thousand live births:

Dartford Rural District 20 England & Wales 46

TABLE II (a) - GENERAL VITAL STATISTICS, 1957

Live Births:	Males	Females	Total
Legitimate	431	400	831
Illegitimate	8	9	17
	439	409	848
Crude live birth rate (per 1,000 estimated home population)			18.5
Birth rate adjusted by comparability factor			18.9
Crude live birth rate, England and Wales, 1957			16.1

Still Births:	Males	Females	Total
Legitimate	8	9	17
Illegitimate	1	2	3
	9	11	20
Still birth rate (per 1,000 live and still births)			23.2
Still birth rate, England and Wales			22.4

	Males	Females	Total
Deaths from all causes	251	235	486
Crude death rate (per 1,000 estimated home population)			10.6
Death rate adjusted by comparability factor			10.7
Death rate adjusted for Stone House and Darenth Park and by comparability factor (pre 1953 method)			9.6
Crude death rate, England and Wales			11.5

Deaths from puerperal causes	Total Number	Rate per 1,000 (Live & Still) Births
Dartford Rural District	0	0
England and Wales	349	0.47

Deaths of Infants under one year of age	Males	Females	Total
Legitimate under 4 weeks	8	7	15
Illegitimate under 4 weeks	0	1	1
Legitimate over 4 weeks	5	-	5
	13	8	21

Deaths per 1,000 live births of infants under 1 year of age:

Dartford Rural District	24.8
Dartford Borough	8.6
England and Wales	23.1
London and South-east Region	19.9
Sweden	17

Deaths per 1,000 live births of infants under 4 weeks of age:

Dartford Rural District	18.8
England and Wales	16.5
Dartford Borough	4.3

TABLE II (b) - QUARTERLY DEATHS

Before 1953 the only deaths in Stone House and Darenth Park allotted to Dartford R.D. were those whose home addresses were either in Dartford R.D. or were unknown. For the years 1953 to 1957 all deaths of persons in these hospitals during those years were allotted to Dartford R.D. and this increased liability did not seem to be allowed for in the comparability factor. If we are to follow the trend of deaths in Dartford R.D. since before 1953 we require to adjust our figures for deaths to bring them into line with the pre-1953 method:

	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year 1957
Total deaths allotted to Rural District by Registrar General*	138	89	105	153	485
Less deaths in Mental Hospitals	18	8	12	23	61
Deaths excluding Mental Hospitals	120	81	93	130	424
Add average number of deaths in Mental Hospitals allotted to R.D. pre 1953	2	2	2	2	8
Deaths by pre-1953 method	122	83	95	132	432

Quarterly number of deaths (pre-1953 method of allotting deaths)

Year	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total
1950	101	76	89	68	334
1951	144	96	90	97	427
1952	118	81	60	112	371
1953	124	76	66	86	352
1954	115	85	87	93	380
1955	110	91	79	86	366
1956	142	96	77	110	425
1957	122	83	95	132	432

Quarterly death rates (pre-1953 method of calculating death rates)

Year	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Year
Dartford Rural District:					
1950	11.0	8.2	9.7	7.4	9.2
1951	15.3	10.2	9.6	10.3	11.4
1952	12.3	8.5	6.3	11.7	9.7
1953	12.9	7.8	6.6	8.8	9.0
1954	11.7	8.7	8.9	9.5	9.7
1955	10.6	8.8	7.5	8.2	8.8
1956	13.9	9.4	7.5	10.8	10.5
1957	10.8	7.4	8.4	11.7	9.6
England and Wales:					
1950	14.0	11.1	9.3	12.3	11.6
1951	19.1	11.1	9.1	11.0	12.5
1952	13.4	10.6	8.9	12.4	11.3
1953	15.8	10.5	8.9	10.7	11.4
1954	14.0	10.6	9.3	11.4	11.3
1955	15.4	11.2	9.1	11.1	11.7
1956	15.3	10.8	9.3	11.3	11.7
1957	12.2	10.6	9.7	13.4	11.5

* Compiled locally.

TABLE II (c) - MAIN CAUSES OF DEATH, ETC.

ALL AGES

	All causes	Main causes	Other causes	Main Causes in Detail (440-468) Circulatory diseases	(140-205) Cancer	(330-334) Vascular dis.C.N.S.	(470-527) Respiratory diseases
1955*	405	326	79	133	88	57	48
%	100%	81%	19%	33%	22%	14%	12%
1956*	451	376	81	177	85	58	56
%	100%	82%	18%	38%	18%	13%	12%
1957*	486	392	94	173	93	57	69
%	100%	81%	19%	36%	19%	12%	14%
England & Wales							
1957	514,870	418,215	96,655	188,456	94,017	73,669	62,073
%	100%	81.6%	18.4%	36.8%	18.4%	14.3%	12.1%

DEATHS OF THOSE AGED 75 YEARS AND OVER

Quarters							
1st.	56	49	7	27	4	9	9
2nd.	44	38	6	22	7	3	6
3rd.	33	28	5	18	4	3	3
4th.	64	57	7	33	8	7	9
1957*	197	172	25	100	23	22	27
%	100%	88%	12%	51%	12%	11%	14%
1956*	199	173	26	93	15	32	33
%	100%	87%	13%	47%	8%	17%	17%
1955*	188	164	24	75	32	33	24
%	100%	87%	13%	40%	17%	18%	13%

DEATHS AT THE AGES OF 65 TO 74, AND 75 AND OVER

	65 to 74	75 and over
1950	84 (24%)	145 (45%)
1951	117 (27%)	161 (38%)
1952	102 (27%)	161 (44%)
1953*	85 (22%)	175 (44%)
1954*	103 (25%)	164 (39%)
1955*	86 (22%)	187 (46%)
1956*	117 (25%)	199 (44%)
1957*	129 (27%)	197 (41%)

DEATHS IN HOSPITAL AND AT HOME

	All Ages:		Aged 75 and over:	
	Hospital	Home	Hospital	Home
1950	126	207	51	94
1951	175	252	56	105
1952	171	200	60	101
1953*	176*	219	73*	102
1954*	225*	191	73*	93
1955*	217*	188	79*	109
1956*	221*	236	81*	118
1957*	249*	236	74*	123

*including Stone House and Darenth Park.

TABLE II (d) - BIRTHS

BIRTH RATES

	1950	1951	1952	1953	1954	1955	1956	1957
Births	545	576	514	539	586	627	770	848
Birth rate (adjusted by comp. factor)	15.5	16.1	13.9	14.0	15.0	15.2	16.8	18.9
Birth rate (England & Wales)	15.8	15.5	15.3	15.5	15.2	15.0	15.6	16.1

BIRTHS CLASSIFIED ACCORDING TO PLACE OF EVENT

Classification by Registrar General

	1957	Percentage: 1957	1956	1955
Born at home	259	31%	28%	25%
Born in hospital or nursing home	589	69%	72%	75%
	848	100%	100%	100%

Classification by County Medical Officer for area 6 of the Local Health Authority (Bexley, Crayford, Erith, Dartford Borough & Rural District)

	1951	1952	1953	1954	1955	1956	1957
Born at home	23%	22%	20%	21%	20%	21%	22%
Born in hospital or nursing home	77%	78%	80%	79%	80%	79%	78%

BIRTHS BY SOCIAL CLASS

Social Class	Legitimate births by social class of father	Illegitimate births by social class of mother	Total	Percentage 1957	1956	1955
I	57	-	57	7%	5%	7%
II	158	2	160	19%	16%	19%
III	440	7	447	53%	51%	46%
IV	88	6	94	11%	13%	14%
V	86	1	87	10%	14%	13%
Not stated	2	1	3	0%	1%	1%
	831	17	848	100%	100%	100%

DEATHS BY SOCIAL CLASS (including Stone House and Darenth Park)

	1957	1957	1956	1955	1954	1953
Class I	19	4%	3%	3%	4%	3%
Class II	80	17%	17%	18%	16%	19%
Class III	169	34%	36%	38%	38%	30%
Class IV	106	22%	19%	20%	19%	24%
Class V	67	14%	18%	16%	16%	15%
Unclassified	44	9%	7%	5%	7%	9%
	485	100%	100%	100%	100%	100%

TABLE III - CAUSES OF DEATH ACCORDING TO SEX

1957.

Registrar General's Return.

	Male	Female	Persons	
All causes	251	235	486	
Tuberculosis, respiratory	2	-	2	
Tuberculosis, other	-	1	1	
Syphilitic disease	-	1	1	
Diphtheria	-	-	-	
Whooping Cough	-	-	-	
Meningococcal infections	-	-	-	
Acute Poliomyelitis	-	1	1	
Measles	-	-	-	
Other infective and parasitic diseases	-	1	1	
Malignant neoplasm, stomach	11	6	17	
Malignant neoplasm, lung, bronchus	12	2	14	
Malignant neoplasm, breast	-	5	5	
Malignant neoplasm, uterus	-	8	8	93
Other malignant and lymphatic neoplasms	24	23	47	
Leukaemia, aleukaemia	2	-	2	
Diabetes	2	2	4	
Vascular lesions of nervous system	24	33	57	57
Coronary disease, angina	36	27	63	
Hypertension with heart disease	5	7	12	
Other heart disease	32	46	78	173
Other circulatory disease	10	10	20	
Influenza	1	2	3	
Pneumonia	17	9	26	
Bronchitis	28	7	35	69
Other diseases of the respiratory system	4	1	5	
Ulcer of stomach and duodenum	3	2	5	
Gastritis, enteritis and diarrhoea	3	3	6	
Nephritis and nephrosis	-	-	-	
Hyperplasia of prostate	-	-	-	
Pregnancy, childbirth, abortion	-	-	-	
Congenital malformation	2	3	5	
Other defined and ill-defined diseases	18	29	47	
Motor Vehicle accidents	7	5	12	
All other accidents	5	1	6	
Suicide	3	-	3	
Homicide and operations of war	-	-	-	

TABLE IV - CAUSES OF DEATH ACCORDING TO AGE, 1957

Compiled locally.

	All ages	Under 4 weeks	4 wks.- 1 yr.	1 - 2	2 - 5	5 - 15	15 - 25	25 - 35	35 - 45	45 - 55	55 - 65	65 - 75	75+
All causes	485	15	6	3	1	3	4	6	18	28	75	129	197
Tuberculosis, respiratory	2	-	-	-	-	-	-	-	-	-	1	1	-
Tuberculosis, other	-	-	-	-	-	-	-	-	-	-	-	-	-
Syphilitic disease	1	-	-	-	-	-	-	-	-	-	1	-	-
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-
Whooping Cough	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal infections	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Poliomyelitis	1	-	-	-	-	-	-	1	-	-	-	-	-
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-
Other infective and parasitic diseases	1	-	-	-	-	-	-	-	-	-	-	1	-
Malignant neoplasm, stomach	16	-	-	-	-	-	-	-	1	2	5	4	4
Malignant neoplasm, lung, bronchus	14	-	-	-	-	-	-	-	1	1	8	3	1
Malignant neoplasm, breast	5	-	-	-	-	-	-	-	-	1	-	1	3
Malignant neoplasm, uterus	7	-	-	-	-	-	-	-	1	1	1	4	-
Other malignant and lymphatic neoplasms	47	-	-	-	-	-	-	-	4	4	11	14	14
Leukaemia, aleukaemia	2	-	-	-	-	-	-	-	-	-	1	-	1
Diabetes	4	-	-	-	-	-	-	1	-	-	2	-	1
Vascular lesions of nervous system	58	-	-	1	-	-	-	-	1	2	8	24	22
Coronary disease, angina	60	-	-	-	-	-	-	-	-	4	6	18	32
Hypertension with heart disease	4	-	-	-	-	-	-	-	-	-	-	2	2
Other heart disease	81	-	-	-	-	-	-	1	1	2	3	19	55
Other circulatory disease	25	-	-	-	-	-	-	-	2	-	3	9	11
Influenza	3	-	-	-	-	-	-	-	-	-	1	1	1
Pneumonia	30	2	1	1	-	-	1	-	-	4	5	7	9
Bronchitis	34	-	1	-	-	-	-	-	1	2	5	9	16
Other diseases of the respiratory system	5	-	-	-	-	-	-	-	-	-	3	1	1
Ulcer of stomach & duodenum	5	-	-	-	-	-	-	-	-	-	2	-	3
Gastritis, enteritis & diarrhoea	5	-	1	-	-	-	-	1	1	-	1	1	-
Nephritis & nephrosis	-	-	-	-	-	-	-	-	-	-	-	-	-
Hyperplasia of prostate	-	-	-	-	-	-	-	-	-	-	-	-	-
Pregnancy, childbirth, abortion	-	-	-	-	-	-	-	-	-	-	-	-	-
Congenital malformation	6	2	2	-	-	-	-	1	-	-	-	-	1
Other defined and ill-defined diseases	49	11	1	-	-	2	1	1	2	2	5	6	18
Motor vehicle accidents	12	-	-	1	1	1	1	-	1	1	3	2	1
All other accidents	5	-	-	-	-	-	1	-	1	1	-	1	1
Suicide	3	-	-	-	-	-	-	-	1	1	-	1	-
Homicide and operations of war	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE V - CAUSES OF DEATH

Ages 75 and over

	Total males & females	Total	75-79	80-84	85-89	90-94	95-99	Total	75-79	80-84	85-89	90-94	95-99
All causes	197	76	35	23	16	2	-	121	37	47	30	6	1
Tuberculosis, respiratory	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis, other	-	-	-	-	-	-	-	-	-	-	-	-	-
Syphilitic disease	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-
Whooping Cough	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal infections	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Poliomyelitis	-	-	-	-	-	-	-	-	-	-	-	-	-
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-
Other infective and parasitic diseases	-	-	-	-	-	-	-	-	-	-	-	-	-
Malignant neoplasm, stomach	4	2	1	1	-	-	-	2	-	2	-	-	-
Malignant neoplasm,lung,bronchus	1	1	1	-	-	-	-	-	-	-	-	-	-
Malignant neoplasm, breast	3	-	-	-	-	-	-	3	2	1	-	-	-
Malignant neoplasm, uterus	-	-	-	-	-	-	-	-	-	-	-	-	-
Other malignant and lymphatic neoplasms	14	7	4	1	2	-	-	7	3	3	1	-	-
Leukaemia and aleukaemia	1	1	1	-	-	-	-	-	-	-	-	-	-
Diabetes	1	-	-	-	-	-	-	1	1	-	-	-	-
Vascular lesions of nervous system	22	8	4	3	1	-	-	14	5	8	1	-	-
Coronary disease, angina	32	14	9	3	2	-	-	18	6	4	7	1	-
Hypertension with heart disease	2	1	-	-	-	1	-	1	1	-	-	-	-
Other heart disease	55	15	5	7	3	-	-	40	11	17	9	2	1
Other circulatory disease	11	5	2	2	1	-	-	6	1	3	2	-	-
Influenza	1	-	-	-	-	-	-	1	1	-	-	-	-
Pneumonia	9	6	2	1	2	1	-	3	1	1	1	-	-
Bronchitis	16	10	4	3	3	-	-	6	2	1	3	-	-
Other diseases of respiratory system	1	1	-	1	-	-	-	-	-	-	-	-	-
Ulcer of stomach & duodenum	3	1	1	-	-	-	-	2	1	-	1	-	-
Gastritis, enteritis & diarrhoea	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephritis and nephrosis	-	-	-	-	-	-	-	-	-	-	-	-	-
Hyperplasia of prostate	-	-	-	-	-	-	-	-	-	-	-	-	-
Congenital malformations	1	-	-	-	-	-	-	1	-	1	-	-	-
Other defined and ill-defined diseases	18	4	1	1	2	-	-	14	2	6	3	3	-
Motor vehicle accidents	1	-	-	-	-	-	-	1	-	-	1	-	-
All other accidents	1	-	-	-	-	-	-	1	-	-	1	-	-
Suicide	-	-	-	-	-	-	-	-	-	-	-	-	-
Homicide and operations of war	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE VI - CAUSES OF DEATH ACCORDING TO SOCIAL CLASS

MALES	All classes	I	II	IIIa	IIIb	IIIc	IIId	IIIe	IVa	IVb	Va	Vb	X
All causes	249	11	43	-	6	11	1	72	23	25	6	37	14
Tuberculosis, respiratory	1	-	-	-	-	-	-	-	-	-	-	-	1
Malignant neoplasm, stomach	9	-	-	-	-	1	-	4	-	2	-	1	1
Malignant neoplasm,lung,bronchus	12	1	2	-	-	1	-	6	1	-	1	-	-
Other malignant and lymphatic neoplasms	25	1	5	-	1	1	-	6	1	2	1	4	3
Leukaemia & aleukaemia	2	-	-	-	-	1	-	1	-	-	-	-	-
Diabetes	2	-	1	-	-	-	-	-	-	-	-	1	-
Vascular lesions of nervous system	25	-	7	-	-	2	-	6	-	2	2	6	-
Coronary disease, angina	33	3	3	-	-	1	-	11	5	6	-	3	1
Hypertension with heart disease	2	-	-	-	-	-	-	-	1	-	1	-	-
Other heart disease	32	2	7	-	1	1	-	5	8	2	-	6	-
Other circulatory disease	14	2	2	-	-	-	-	3	1	3	-	3	-
Influenza	1	-	-	-	-	-	-	-	-	-	-	-	1
Pneumonia	19	1	3	-	1	-	-	9	2	-	-	1	2
Bronchitis	27	-	5	-	1	-	-	9	2	6	-	3	1
Other diseases of respiratory system	4	-	2	-	-	1	-	1	-	-	-	-	-
Ulcer of stomach and duodenum	3	-	-	-	-	1	-	2	-	-	-	-	-
Gastritis, enteritis & diarrhoea	2	-	-	-	-	-	-	1	-	-	1	-	-
Congenital malformations	3	-	2	-	-	-	-	-	-	-	-	-	1
Other defined and ill-defined diseases	19	1	3	-	1	1	-	5	1	2	-	3	2
Motor vehicle accidents	7	-	1	-	1	-	-	2	-	-	-	3	-
All other accidents	4	-	-	-	-	-	-	-	-	-	-	3	1
Suicide	3	-	-	-	-	-	1	1	1	-	-	-	-

FEMALES													
All causes	236	8	37	-	6	2	2	69	25	33	5	19	30
Tuberculosis, respiratory	1	-	-	-	-	-	-	1	-	-	-	-	-
Syphilitic disease	1	-	-	-	-	-	-	-	-	1	-	-	-
Acute Poliomyelitis	1	-	-	-	-	-	-	1	-	-	-	-	-
Other infective & parasitic diseases	1	-	-	-	-	-	-	-	-	1	-	-	-
Malignant neoplasm, stomach	7	-	2	-	-	-	-	3	-	2	-	-	-
Malignant neoplasm,lung,bronchus	2	-	-	-	-	-	-	1	-	-	1	-	-
Malignant neoplasm, breast	5	1	-	-	-	-	-	1	-	2	-	-	1
Malignant neoplasm, uterus	7	-	-	-	-	-	-	3	2	-	-	1	1
Other malignant and lymphatic neoplasms	22	2	5	-	-	-	-	6	2	3	1	-	3
Diabetes	2	-	-	-	-	-	-	1	-	-	-	-	1
Vascular lesions of nervous system	33	-	3	-	1	-	-	11	8	3	1	4	2
Coronary disease, angina	27	-	3	-	3	1	-	8	2	3	1	4	2
Hypertension with heart disease	2	-	-	-	-	-	-	-	-	2	-	-	-
Other heart disease	49	4	9	-	-	1	1	10	5	5	1	4	9
Other circulatory disease	11	-	2	-	-	-	1	3	-	2	-	1	2
Influenza	2	-	-	-	-	-	-	-	-	-	-	-	2
Pneumonia	11	-	2	-	-	-	-	1	2	2	-	1	3
Bronchitis	7	-	1	-	2	-	-	2	1	-	-	1	-
Other diseases of respiratory system	1	-	-	-	-	-	-	1	-	-	-	-	-
Ulcer of stomach and duodenum	2	-	-	-	-	-	-	2	-	-	-	-	-
Gastritis, enteritis & diarrhoea	3	-	1	-	-	-	-	-	-	1	-	-	1
Congenital malformations	3	-	1	-	-	-	-	2	-	-	-	-	-
Other defined & ill-def. diseases	30	1	8	-	-	-	-	10	2	6	-	2	1
Motor vehicle accidents	5	-	-	-	-	-	-	2	1	-	-	1	1
All other accidents	1	-	-	-	-	-	-	-	-	-	-	-	1

TABLE VII - PREVALENCE OF INFECTIOUS DISEASES

Notifiable diseases (other than tuberculosis) during 1957;

Disease General Population	Total	0-1	1-3	3-5	5-10	10-15	15-25	25-45	45-65+
Measles	1,045	22	190	230	567	30	2	3	1
Whooping Cough	153	13	44	36	59	-	-	-	-
Scarlet Fever	10	-	1	3	4	1	1	-	-
Pneumonia	12	-	-	1	-	-	-	1	10
Poliomyelitis, paralytic	10	-	2	-	3	1	-	4	-
Poliomyelitis, non-paralytic	9	-	-	-	4	1	2	2	-
Erysipelas	3	-	-	-	-	1	-	1	1
Dysentery	2	-	-	-	1	1	-	-	-
Food Poisoning	4	-	-	-	-	1	-	1	2
Meningococcal Infection	1	-	-	-	-	-	-	-	1
Paratyphoid B.	1	-	-	-	-	1	-	-	-
	1,250	35	237	270	638	37	5	13	15

Residential Institutions of more than 100 population

Pneumonia	2	-	-	-	-	-	-	-	2

Measles 1957

	Ash	Darenth	Eynsford	Farningham	Fawkham	Hartley	Horton Kirby	West Kingsdown	Longfield	Southfleet	Stone	Sutton-at-Hone	Swanley	Wilmington	TOTAL
January							1						13	3	16
February	3	6	-	-	-	-	1	-	-	1	5	1	6	3	26
March	1	93	-	-	-	1	1	-	1	-	7	4	1	44	153
April	6	17	-	-	-	1	5	2	-	-	4	10	17	57	119
May	2	5	18	6	-	-	34	8	-	-	17	4	77	7	178
June	-	-	56	24	5	-	47	22	3	1	21	1	142	7	329
July	3	-	14	2	11	8	4	15	33	16	2	1	53	5	167
August	1	-	8	1	-	1	2	-	10	3	1	-	29	-	56
Sept/Oct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nov/Dec	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16	121	96	33	16	11	95	47	47	21	57	21	338	126	1045

Number of Notifications

	November	December	January	February	March	April
1949-1950	-	-	1	-	-	-
1950-1951	16	102	67	127	150	78
1951-1952	-	-	-	-	2	3
1952-1953	26	210	284	164	147	61
1953-1954	-	-	-	-	-	-
1954-1955	1	1	5	4	43	76*
1955-1956	-	1	-	2	-	4
1956-1957	-	-	16	26	153	119*
1957-1958	-	-	1	-	-	1

*still increasing

TABLE VII - continued

Poliomyelitis 1957

Date of Onset	Age	Sex	Paralytic or Non-paralytic	Parish
*14.10.56	7	M	P.	Fawkham
13.7.57	14	M	P.	Sutton-at-Hone
15.7.57	5	M	N.P.	Swanley
1.8.57	7	F	P.	Wilmington
6.8.57	13	F	N.P.	Farningham
8.8.57	33	F	P.	Wilmington
10.8.57	9	M	N.P.	Wilmington
13.8.57	2	M	P.	Swanley
14.8.57	33	M	P.	Wilmington
15.8.57	9	M	N.P.	Wilmington
16.8.57	28	F	P.	Swanley
17.8.57	26	F	N.P.	Swanley
18.8.57	29	F	N.P.	Swanley
18.8.57	24	F	N.P.	Swanley
24.8.57	9	M	P.	Eynsford
24.8.57	15	F	N.P.	Eynsford
27.8.57	27	F	P.	Swanley
10.9.57	1	M	P.	Hartley
19.9.57	6	F	N.P.	Swanley

* This case was mentioned in the 1956 Annual Report but the notification was not received until 1957.

Summary:

Paralytic		Non-paralytic	
Swanley	3	Swanley	5
Wilmington	3	Wilmington	2
Eynsford	1	Eynsford	1
Fawkham	1	Farningham	1
Hartley	1		
Sutton-at-Hone	1	Total	9
Total	10		

Pneumonia 1957

Eynsford	1
Darenth	4
Stone	5
Swanley	1
Wilmington	1
Total	12

Non-notifiable diseases 1957

The following non-notifiable diseases were reported from the schools:

Chicken pox	83
Mumps	30
Impetigo	3

TABLE VIII - TUBERCULOSIS, 1957

(a) RESPIRATORY

NOTIFICATIONS IN RECENT YEARS

1952	47
1953	53
1954	27
1955	36
1956	29
1957	33

NOTIFICATIONS IN 1957 BY AGE

	Total	0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65+
Males	17	-	-	-	-	-	1	5	5	4	1	1
Females	16	-	1	3	1	2	3	3	1	2	-	-
	33	-	1	3	1	2	4	8	6	6	1	1

Of the cases notified in 1957, 7 were notified from institutions and of the remaining 26 the infectious state of 25 was known and 7 were infectious. The infectious cases included a green-grocer, a school teacher, an office manager and two females from an overcrowded family.

NUMBER OF CASES OF RESPIRATORY TUBERCULOSIS ON THE REGISTER

	Male	Female	Persons
Number on register at 31.12.51	160	105	265
-ditto- 31.12.52	173	114	287
-ditto- 31.12.53	201	127	328
-ditto- 31.12.54	211	129	340
-ditto- 31.12.55	228	144	372
-ditto- 31.12.56	245	165	410
-ditto- 31.12.57	265	181	446

CHANGES IN THE REGISTER IN 1957 WERE AS FOLLOWS:

Additions:	New notifications	33
	Came into district	35
	Restored to register (moved back into district)	-
		68
Removals:	Lost sight of	1
	Left district	19
	Died	4
	Recovered	8
		32

DEATHS

The cases removed from the register by death were a male aged 51, whose death was classified to chronic bronchitis, a male aged 42, whose death was classified to malignant neoplasms, a male aged 63 and a male aged 68. The latter was notified from one of the general hospitals and was on our register as it was not until after the patient had died that we knew his address was in a neighbouring district. All four deaths were infectious cases, at one time.

TABLE VIII - TUBERCULOSIS, 1957

(b) NON-RESPIRATORY

NOTIFICATIONS IN RECENT YEARS

1952	13
1953	5
1954	5
1955	7
1956	1
1957	3

The ages of the three new cases (2 males and 1 female) were 3, 7, and 34. The organs affected were cervical glands in the first two and testis in the latter.

NUMBER OF CASES OF NON-RESPIRATORY TUBERCULOSIS ON THE REGISTER

	Male	Female	Persons
Number on register at 31.12.51	19	21	40
-ditto- 31.12.52	26	26	52
-ditto- 31.12.53	27	28	55
-ditto- 31.12.54	28	32	60
-ditto- 31.12.55	28	30	58
-ditto- 31.12.56	29	30	59
-ditto- 31.12.57	28	27	55

CHANGES IN THE REGISTER IN 1957 WERE AS FOLLOWS:

Additions	New notifications	3
	Came into district	1
	Restored to register (moved back into district)	-
		4
Removals	Lost sight of	-
	Left district	1
	Died	-
	Recovered	7
		8

DEATHS

There were again no non-respiratory deaths in 1957 among the cases registered. There was, however, a death from miliary tuberculosis in an unnotified immigrant. This death was classified to non-respiratory tuberculosis in view of the wording of the certificate but post mortem examination showed the lungs to be affected.

TABLE IX - VACCINATIONS

(a) Diphtheria

From the figures supplied by the County Medical Officer the following are derived:

INOCULATIONS DONE EACH YEAR:

	Age at 31st December	Primary Inoculations done in the year	Re-inforcing Inoculations done in the year
1957	0 - 4 years	528	20
	5 -14 years	25	275
1956	0 - 4 years	451	39
	5 -14 years	64	686
1955	0 - 4 years	396	18
	5 -14 years	19	270
1954	0 - 4 years	395	21
	5 -14 years	49	275
1953	0 - 4 years	363	23
	5 -14 years	79	367

PERCENTAGE OF CHILDREN WITH EFFECTIVE IMMUNITY

Immunisation is effective for about five years and then requires to be re-inforced. Hence -

December 31st	Age group	Children vaccinated at any time in their life	Children vaccinated in the last 5 years	Population Census 1951*	Percentage children immune
1957	0 - 4 years	1,726	1,726		55%
	5 -14 years	4,309	2,368		45%
	0 -14 years	6,035	4,094		48%
1956	0 - 4 years	1,586	1,586	3,175	50%
	5 -14 years	4,110	2,398	5,319	45%
	0 -14 years	5,696	3,984	8,494	47%
1955	0 - 4 years	1,527	1,527		48%
	5 -14 years	3,711	2,165		41%
	0 -14 years	5,238	3,692		43%
1954	0 - 4 years	1,501	1,501		47%
	5 -14 years	3,547	2,101		40%
	0 -14 years	5,048	3,602		42%

*In view of the changing birth rate and development of the district, these population figures for recent years are unreliable and are less than the true figures.

INFANT VACCINATION RATE

Percentage of those born in a given year who were vaccinated in that year or the next:

Year of birth	Number of live births	Year vaccinated	Number vaccinated	%	Total	%
1957	848	1957	62	7	?	?
		1958	?	?		
1956	770	1956	69	9	439	57
		1957	370	48		
1955	627	1955	40	6	405	65
		1956	365	59		
1954	586	1954	41	7	344	59
		1955	303	52		
1953	539	1953	34	6	344	62
		1954	300	56		

TABLE IX - continued

INFANT VACCINATION RATE (Continued)(Diphtheria)

Vaccination by age at date of vaccination:

	Number of live births	Number under 1 year of age, vaccinated	Percentage of births of previous year
1957	848	266	35%
1956	770	273	44%
1955	627	232	40%
1954	586	251	44%
1953	539		

COMPARISON WITH OTHER AREAS

	Dartford Rural Dist.	Dartford Borough	Kent A.C.	England & Wales
Percentage of those born in 1956 vaccinated in 1956 or 1957	57%	65%	61%	-
Percentage of births of previous year of those vaccinated at age of under 1 year	35%	47%	-	-
Percentage of children under 15 years vaccinated in the 5 years ending 31.12.1957	48%	58%	52%	-
Children under 5 years	55%	55%	54%	53%

(b) Smallpox

Numbers vaccinated:

		Age at December 31st Under 1	1 - 4	5 - 14
1957	Vaccinated	288	233	58
	Revaccinated	-	3	8
1956	Vaccinated	252	180	27
	Revaccinated	-	2	15
1955	Vaccinated	221	147	9
	Revaccinated	-	-	12
1954	Vaccinated	216	110	28
	Revaccinated	-	2	8
1953	Vaccinated	169	119	19
	Revaccinated	-	1	3
1952	Vaccinated	163	118	18
	Revaccinated	-	3	18

TABLE IX - continued

Smallpox (Continued)

INFANT VACCINATION RATE

Percentage of those born in a given year who were vaccinated in that year or the next:

Year of birth	Number of live births	Year vaccinated	Number vaccinated	%	Total	%
1957	848	1957	288	34	?	?
		1958	?	?		
1956	770	1956	252	33	457	60
		1957	205	27		
1955	627	1955	221	35	383	61
		1956	162	26		
1954	586	1954	216	37	343	59
		1955	127	22		
1953	539	1953	169	32	269	50
		1954	100	19		
1952	514	1952	163	32	271	53
		1953	108	21		

Vaccination by age at date of vaccination:

	Number of live births	Number vaccinated by age at date of vaccination			Percentages of births of those vaccinated under one year
		Under 1	1 - 4	5 - 14	
1957	848	484	45	54	58%
1956	770	406	27	11	53%
1955	627	343	23	11	55%
1954	586	309	16	32	53%
1953	539	273	19	14	50%
1952	514	272	13	15	53%

VACCINATIONS DONE BY PRIVATE DOCTORS AND CLINICS

The analysis for 1957 is as follows:

Age Group	Vaccinated: Private Doctors	Vaccinated: Clinics	Revaccinated: Private Doctors	Revaccinated: Clinics
Under 1	330	154	-	-
1 - 4	36	9	4	-
5 - 14	54	-	8	-
Total under 15	420	163	12	-

COMPARISON WITH OTHER AREAS

	Dartford Rural Dist.	Dartford Borough	Kent A.C.	England & Wales
Percentage of those born in 1956 vaccinated in 1956 or 1957	60%	70%	65%	-
Percentage of births of those vaccinated in 1957 at age under 1 year	58%	63%	62%	43%

TABLE IX - continued

Smallpox (Continued)

RE-VACCINATION

The number of children due each year for re-vaccination in school life (assuming only one re-vaccination during that period) is roughly the number of infant vaccinations done five years previously and the percentage re-vaccinated is shown by the following calculations:

	Dartford Rural Dist.	Dartford Borough	Kent A.C.	England & Wales
Infant vaccinations done in 1952	272	359	13,394	206,131
Children aged 5-14 re-vaccinated	8	18	513	18,052
Percentage of possible number of those re-vaccinated	3%*	5%	4%	9%

*Correction for increase in school population through immigration and other errors would result in an even lower percentage.

(c) Poliomyelitis

The following table gives the numbers of children who received a course of two injections against poliomyelitis during the year ended 31st December, 1957:

Born in -	Dartford Rural District	Dartford Borough
1947	211	325
1948	197	277
1949	173	265
1950	163	228
1951	79	106
1952	48	77
1953	44	64
1954	29	59
1955	2	4
1956	-	2
1957	-	-
Total	946	1,407

(d) Tuberculosis (vaccinated with B.C.G.)

The following figures are kindly provided by the Chest Physician, Dartford:

Children under 15 years of age	Dartford Rural District	Dartford Borough
	102	122

It must be remembered, however, that some persons from those parts of the rural district adjacent to other urban areas attend other clinics and, therefore, these figures are not quite complete for the rural district.

APPENDIX I - HOUSING

NEW HOUSES: The following dwellings have been completed in the last five years:-

	1953	1954	1955	1956	1957	
By Dartford Rural District Council	312	224	158	106	182	
By Dartford Borough Council	-	35	67	219	-	46
By private enterprise	127	314	622	693	638	
	439	573	847	1,018	820	866

HOUSING PROVIDED BY COUNCIL: The effective waiting list of housing applicants at the end of March 1957, numbered 1,081 (exclusive of engaged couples), the total registered applications for the year being 1,354. During the year ended March, 1958, 251 families were rehoused by the Council.

Families Re-housed:

	April-March 1955-56	April-March 1956-57	April-March 1957-58
Ash-cum-Ridley	2	1	4
Fawkham	1	5	1
Hartley	1	2	1
West Kingsdown	1	4	3
Longfield	5	8	5
Southfleet	3	3	4
Betsham	3	3	4
Bean	1	1	2
Darenth	14	9	24
Stone	21	34	36
Eynsford	7	10	5
Farningham	6	5	6
Horton Kirby	3	5	5
South Darenth	3	5	6
Sutton-at-Hone	1	7	7
Swanley	51	30	73
Crockenhill	10	2	16
Hextable	3	3	6
Wilmington	14	2	15
Hawley	-	-	4
Outside Rural District	13	13	24
	163	152	251

159 Council tenants were moved to accommodation more suitable to their requirements.

HOUSING PRIORITY ON MEDICAL GROUNDS: The following are the details of applications, supported by medical certificates, received during the year for priority in rehousing on medical grounds:

	Applications received	Some degree of priority recommended	No priority recommended
Tuberculosis	23	15	8
Other than tuberculosis	87	54	33
TOTAL	110	69	41

IMPROVEMENTS: In 1957, 28 applications for improvement grants under the Housing Act, 1949 were received relating to 35 houses. 27 of these applications relating to 34 houses were approved and 1 relating to 1 house was turned down. The lowest estimates for the improvement works contemplated summed up to £12,748. The grants approved totalled £4,729.

Improvement work with the aid of a grant completed in 1957 dealt with 41 houses. The total of the lowest estimates for the work was £14,966. The grants totalled £7,969.

REPAIRS: 552 dwellings were rendered fit as the result of informal action. 4 statutory notices were served under the Public Health Act or Housing Act. The following are the details of repairs initiated by the Council's Public Health Inspectors:

New W.C. pans provided	27
New sinks provided	9
Roofs repaired	50
External walls repaired	34
Dampness to walls abated including insertion of damp proof courses	30
Gutters and rainwater pipes repaired	22
Floors repaired	14
Sub floor ventilation provided	3
Ceiling plaster and wall plaster repaired	48
Flushing cisterns repaired or renewed	15
New dustbins provided	2
Chimney stacks and chimney pots repaired or renewed	12
Window sashes and frames repaired	45
Yard paving provided or repaired	6
Firegrates, kitchener stoves repaired or renewed	17
Staircases repaired	4
Doors repaired or renewed	20
Sink waste pipes repaired	4
Water supply pipes repaired	5
Soil and ventilating pipes repaired	2
Offensive accumulations removed	5
Smoke observations	5

One property was rendered fit by the Council in default of the owner complying with a Nuisance Order made in the Court of Summary Jurisdiction in 1956.

RENT ACTS 1954 & 1957

The following certificates have been received and issued:-

Housing Repairs and Rents Act 1954

Applications received for Certificates of Disrepair	2
Certificates of Disrepair issued	2
Certificates of Disrepair revoked (including two brought forward from 1956.)	4

Rent Act 1957

Applications received for Certificates of Disrepair	24
Notices issued to Landlords (Form J)	24
Undertakings received from Landlords (Form K)	16
Certificates of Disrepair issued	8

DEMOLITION OR CLOSURE OF HOUSES

The following houses were declared by the Council to be a clearance area:

Nos. 1 - 8, and Nos. 10 - 15, Ifield Terrace, Stone.

Objections to the Clearance Orders were heard on the 23rd April, 1958.

DEMOLITION OR CLOSURE OF HOUSES (contd.)

Houses demolished or closed or subject to undertakings under Section 16 of the Housing Act, 1957, are shown in the table, of which the following is a summary:-

Number of demolition orders issued		27
Number of closing orders issued		14
Number of undertakings not to relet		3
Number of houses demolished		27
Persons displaced:-	Families	32
	Adults	71
	Children	11
Number of undertakings cancelled		1

CARAVANS

The following are the details of licences issued during the year under Section 269, Public Health Act, 1936:

Number of annual licences granted authorising the use of moveable dwellings	137
Number of licences authorising persons to allow land to be used as sites for moveable dwellings	Nil
Number of unlicensed caravans removed during the year	2

DEMOLITION OR CLOSURE OF HOUSES, 1957.

Address	No. of Houses.	Undertaking not to relet	Closing Order made	Demolition Order made	Month demolished	Persons Displaced Adults	Children	Families
Nos. 2,3,5,6,7, Whitbreads Cottages, Darenth.	5	-	-	10.Jan.57.	-	13	-	5
33, High Rd. Wilmington.	1	-	16.May.57.	-	-	2	1	1
Spring Villa, Hawley.	1	-	-	6.March.57.	-	3	-	1
44, Main Rd. Sutton-at-Hone.	1	-	-	16.May.57.	-	-	-	-
Old College Shop, Swanley.	1	-	20.May.57.	-	-	3	-	1
207, Hawley Rd. Wilmington.	1	-	20.May.57.	-	June.57.	1	-	1
Nos. 1/3 Lilac Cotts. Betsham.	3	-	-	13.June.57.	Nov. 57.	3	-	1
1, Hedge Place Cotts. Stone.	1	-	-	13.June.57.	-	2	-	1
30 & 40, Main Rd. Sutton.	2	-	-	16.July.57.	-	3	1	2
169 & 171, High Rd. Wilmington.	2	-	-	16.July.57.	-	6	9	2
Nos. 1,2,3, The Rookery, Darenth.	3	-	-	11.Sept.57.	-	3	-	1
Nos. 1-10, Sharps Row, Horton Kirby.	10	-	12.Sept.57.	-	-	-	-	-
Nos. 1,2,3,4,5, Forge Cotts. Swanley.	5	-	-	9.Oct.57.	-	10	2	5
Nos. 1,2,3,4, Days Cotts. Horton Kirby.	4	-	-	9.Oct.57.	-	8	2	4
'Five Ways', Southfleet.	1	-	14.Nov.57.	-	-	2	1	1
Ladywood Herb Farm, Darenth.	1	April.55.	-	-	Feb.57.	2	-	1
Nos. 1,2,4, Invicta Cotts.	3	-	-	9.June.55.	April.57.	2	-	1
No. 3, Invicta Cotts.	1	-	9.June.55.	-	April.57.	Vacant	-	-
'Pine Dale' Main Rd. West Kingsdown.	1	-	-	19.June.56.	April.57.	?	?	?
1-5, Ford Cotts. Eynsford.	5	Demolished by Informal Action				2	-	1
1/2 Black Lion Cotts.Southfleet.	2	-	-	-	June.57.	1	-	1
1/4, Alice Cotts. Stone.	4	Purchased by the Council, Tenants rehoused, demolished June, 57.				7	-	4
1/4, Cooks Cotts. Southfleet.	4	" " " " "		"	" July, 57.	11	6	4
1/2, Peckham Wood Corner.	2	-	-	11.July.56.	July.57.	?	?	?
Hillside Cottage, Darenth.	1	July.57.	-	-	-	2	1	1
5, Giffords Cotts. S. Darenth.	1	Nov.57.	-	-	-	2	-	1
1, Anthonys Lane, Swanley.	1	April.57.	-	-	-	Vacant	-	-
Holts Farm.	1	28.Feb.55.	-	Cancelled 1957.	-	-	-	-

APPENDIX II - WATER

Water supplies interest us in regard to the source of supply, accessibility and quantity and quality available to the population in the district.

This district is also a gathering ground for water supplies to this part of Kent and we should keep ourselves informed of the possibilities of these becoming polluted.

SOURCES OF SUPPLY & ACCESSIBILITY

Piped supplies into houses

The position at 31/3/58 was approximately as follows:

Supply	Parish	Houses	Totals
Metropolitan Water Board	Darenth	695	
	Crockenhill	424	
	Eynsford	474	
	Farningham	402	
	Horton Kirby	702	
	Southfleet	334	
	Stone	2,012	
	Sutton-at-Hone	843	
	Swanley	3,047	
	Wilmington	1,537	
			10,470
Mid Kent Water Company	Ash	280	
	Fawkham	165	
	Hartley	662	
	Longfield	566	
	Southfleet	161	
	West Kingsdown	731	
			2,565
Lullingstone Estate Supply	Eynsford	65	65
Houses on supply of Hospital	Darenth	8	8
Sutton House Well	Sutton-at-Hone	9	9
1 house supplied by well at A.P.C.M. clay pit, Bean	Stone	1	1

Supplies not piped into houses

Domestic wells, Clement St.	Sutton-at-Hone	11	11
Rainwater tanks	West Kingsdown	6	6
	Farningham	1	1
	Darenth	1	1
Standpipe (M.W.B.)	Horton Kirby	6	6
			13,143

Piped supplies into hospitals

Metropolitan Water Board	Stone	Stone House Hospital (Pop. 500)
	Swanley	Westminster Aux. Hosp. (Parkwood) (Pop. 81)
Metropolitan Water Board and hospital well	Darenth	Darenth Park & Southern Hospitals (Pop. 2,500)

QUANTITY

Supplies by the Metropolitan Water Board and the Mid Kent Water Company for domestic purposes are abundant. The quantity supplied by the Lullingstone Park well and Sutton House well is satisfactory. The supplies dependent on pump and/or bucket in certain wells in Clement Street, namely: Whiffens Cottages and Ayres Cottages, are insufficient, and the practice initiated in 1956, of taking M.W.B. water to these houses by road was continued during the whole of 1957. It seems that in general the water available in wells is diminishing presumably owing to the increased extraction of water lowering the water table.

The quantity available by rainwater tanks generally meets the householders' requirements but in exceptionally dry weather it may be that water is available from neighbours with main supplies. A cottage on rainwater in Farningham Parish was repaired and improved and pending negotiations with M.W.B. for extension of the main, a supply of Mid Kent Water Co., water was obtained by road.

QUALITY

The number of E. coli type 1 per 100 ml. in the bacteriological analyses and albuminoid ammonia in parts per million in the chemical analyses are here used to summarise the information provided by sampling.

Metropolitan Water Board

Bacteriological

Raw water - 2,294 samples taken
Treated water - 1,926 samples taken
} for results see following table.*

Chemical

Raw water - 40 samples taken

Mid Kent Water Company - Hartley Pumping Station

Bacteriological

Raw water - 12 samples taken
Treated water - 12 samples taken
} results in each case 0

Chemical

Raw water - 4 samples taken
Treated water - 1 sample taken
} results in each case 0

Lullingstone Estate Well (treated)

No samples taken.

Eight houses supplied from Darenth Park Hospital supply

Bacteriological

Treated water - 1 sample taken from house - results 0

* 1 M.W.B. bacteriological sample taken by Public Health Inspector 29th May - results 0

One house supplied from clay pits well, Stone. (Raw)

Bacteriological - 2 samples taken - results in each case 0

Chemical - 1 sample taken - results 0

Nine houses supplied from well at Sutton House (Raw)

No samples taken.

Twelve houses supplied by pump and/or bucket from wells in Clement St. (Raw)

Bacteriological - 34 samples taken - results in each case 0 with the exception of samples producing the following estimates:
1, 2, 2, 2, 7, 10, 20, 50, 50, 250, (1 showed 5 faecal strep.)

Chemical - 12 samples taken - results in each case 0 except for results showing: 0.01, 0.02, 0.02, 0.14, 0.14, 0.22.

Eight houses supplied by rain water at West Kingsdown, Farningham & Darenth

No samples taken.

Hospital well Darenth Park

Bacteriological - 52 samples taken.

Copper and Galvanized Iron in Domestic Water Installations

Since the war there has been an increase in the use of copper and galvanized iron in domestic water installations.

Hard chalk well waters passing through galvanized iron piping attack the zinc and form a sandy deposit of zinc carbonate. They also take up copper from copper tubing and by electrolytic action this can cause corrosion when the water is in contact with other metals.

In 1956 we had two and in 1957 one complaint of sandy deposit drawn off in the houses with galvanized iron service pipes.

In 1957 we had one complaint of corrosion in an aluminium electric kettle which had occurred after less than a year's use. In 1953 and 1954 this Council found the need to replace 24 aluminium kettles of their tenants for chromium plated copper kettles to avoid corrosion.

The amount of copper and zinc in the water which causes this trouble is not harmful to health, indeed it may be beneficial.

To avoid this nuisance the water undertakers advise against incorporating different metals such as copper tubing and galvanized steel tanks in water installations and prefer lead supply pipes to the use of galvanized iron or copper.

The problem is discussed in the thirty-sixth report of the Director of Water Examination, Metropolitan Water Board.

Gathering Ground

The chalk of this district forms a gathering ground of water for a large population living in and adjacent to the district and for industrial purposes. 3,875 houses in the district, as detailed in Appendix III, are in areas unsewered and the need for the protection of the gathering ground has been included in the reasons for the provision of the Hartley/Longfield Sewerage Scheme.

In 1957 the sewer was extended a quarter of a mile to drain four houses with leaking cesspools a quarter of a mile from the Green St. Green pumping station. In the vicinity of the Hartley pumping station we also made a tentative start at dealing with leaking cesspools.

The Medway Water Board who had obtained powers to sink a test bore hole at Fawkham, expressed concern at the possibility of pollution of their future water supply by cesspools and in view of this the Kent County Council, as local planning authority, has refused certain applications for development. Thus it behoves us to keep under observation the available records of the quality of the water in our chalk.

In addition to the reports on raw samples given above, the following reports are of interest:

Fawkham Trial Bore Hole (Medway Water Board)

Bacteriological - 3 samples taken - results in each case 0

Chemical - 2 samples taken - results 0.08, 0.00

Factory Waters not Used for Human Consumption

Bacteriological - 6 samples taken - results 0, 0, 1, 2, 50, 180+ (including one result with 5 faecal strep.)

Chemical - 4 samples taken - results in each case 0

Swimming Pools

There were three open air swimming pools available to the public in 1957. A bacteriological sample was taken from the deep and shallow end of each during the season; results in four samples 0 and in two 1.

RESULTS OF THE BACTERIOLOGICAL AND CHEMICAL EXAMINATION OF WELL WATERS SUPPLYING DARTFORD BOROUGH AND DARTFORD RURAL DISTRICT FOR 1957*

WELL	BEFORE CHLORINATION (RAW WATER) NUMBER OF SAMPLES	Coliform test Percentage samples negative in 100 ml Coliform	E.coli	AFTER CHLORINATION (WATER PASSING INTO SUPPLY) NUMBER OF SAMPLES	Coliform test Percentage samples negative in 100 ml Coliform	E.coli	CHEMICAL EXAMINATION (RAW WATER) NUMBER OF SAMPLES	Average Albuminoid Nitrogen
Darenth Well	239	94.98	100.0	255	100.0	100.0	4	0.020
Darenth Bore Hole	209	95.69	99.04				4	0.020
Dartford Well	221	98.64	100.0	225	100.0	100.0	4	0.023
Eynsford Well	231	97.40	99.57	234	97.44	100.0	4	0.020
Eynsford Bore Hole	121	99.17	99.17	124	100.0	100.0	4	0.019
Green St. Green Well	202	92.57	95.05	207	98.55	100.0	3	0.018
Horton Kirby Well	241	96.27	98.76	246	99.59	100.0	2	0.023
Lullingstone Well	237	98.73	99.58	242	97.93	100.0	4	0.015
Southfleet Well	132	62.88	98.48	138	96.38	100.0	3	0.017
Wilmington Well 1	236	88.98	99.58	255	98.82	100.0	4	0.025
Wilmington Well 2	225	88.80	99.56				4	0.030

* Kindly supplied by the Director of Water Examination, Metropolitan Water Board.

APPENDIX III - DRAINAGE

An account of the drainage and sewerage of this district is given in our previous reports.

During 1957 the sewer at Lanes End, Darenth, was extended and 6 dwellings about a quarter of a mile from the Metropolitan Water Board pumping station, were connected thereto and their cesspools abolished. The cost was £1,820.

176 dwellings built by the Council and 448 built by private enterprise were connected to the sewer.

190 dwellings built by private enterprise were connected to cesspools.

6 dwellings built by the Council were connected to septic tanks.

The effluent from Stone Outfall Works was sampled by the Port of London Authority on one occasion and the report was unsatisfactory. Albuminoid ammonia 0.75, oxygen absorbed from acid permanganate in 3 hours was 4.00 in parts per 100,000. Odour offensive with sulphuretted hydrogen.

The following are the details of the work initiated by the Council's Public Health Inspectors during 1957:

Cesspools abolished and property connected to sewer	7
New cesspools provided to replace defective cesspools	1
Drainage relaid	5
Drains repaired	34
Drains cleansed	68

At the end of the year, the sanitary accommodation and drainage was approximately as follows:

Dwellings with waterclosets discharging into the drainage system	9,268
Dwellings with waterclosets discharging into septic tanks	180
Dwellings with waterclosets discharging into cesspools	3,647
Dwellings provided with pail closets	44
Dwellings provided with privies	4
TOTAL (i.e. number of dwellings at 31/3/58)	13,143

APPENDIX IV - FOOD

MILK; Regulations require this Council to register (i) dairies not being dairy farms and (ii) distributors, i.e. dairymen other than dairy farmers. The Council also have the duty to grant or refuse to grant, dealers' licences to distributors authorising the use of a special designation in relation to milk sold from premises in this district. Those holding dealers' licences for trade from premises outside this district can be granted supplementary licences authorising them to use a designation in relation to milk sold in this district.

The following are the figures for registrations and licences during the recent years:

	1954	1955	1956	1957
Dairies registered	2	2	6	6
Distributors registered	37	37	37	35
Distributors of undesignated milk	1	-	-	-
Dealers' licences for:				
Tuberculin tested milk	19	19	19	13
Pasteurised milk	21	21	21	15
Sterilised milk	31	29	28	20
Supplementary licences for:				
Tuberculin tested milk	8	7	6	6
Pasteurised milk	6	6	6	5
Sterilised milk	9	9	7	7
Number of visits to dairy premises by Council's Public Health Inspectors	53	12	4	22

Sampling for designation or infection tests:

10 samples were submitted to the County Laboratory for designation tests and none for infection tests.

Grade of Milk.	Samples Satisfactory.	Samples Unsatisfactory.
Tuberculin Tested (Pasteurised)	1	-
Tuberculin Tested	2	1
Pasteurised	4	-
Sterilised	1	-
Undesignated	-	-
TOTALS	8	1

1 sample of Tuberculin Tested (Pasteurised) milk exceeded atmospheric shade temperature (65°F.) which rendered the methylene blue reduction test invalid.

Sampling for Adulteration:

61 samples of milk were taken by the County Sampling Officers in Dartford Rural District and a report, kindly supplied by the County Chief Inspector, Weights and Measures, shows that with the exception of the following all these samples were genuine.

MILK (continued):

Sample of	Analysis	Action Taken
Milk	Contains on inside of bottle five 'lumps' of brown yellow colour. Specks of foreign matter on inside in addition (Micro of foreign matter: vegetable debris and one insect leg).	Written caution.
Milk	On inside of bottle: one lump and number of smears; mould filaments present.	Written caution.
Milk	Contained one piece of vegetable debris. Probably part of flower petal.	Written caution.
Milk	A sample of milk containing a small beetle.	Written caution.
Milk	Contained a small quantity of sour milk and a piece of wood approximately $3\frac{1}{4}$" x 1" x $\frac{3}{8}$". It is improbable that it could have been introduced via the hole in the cap.	Written caution.

ICE CREAM:

Premises previously registered for the sale of ice cream	111
Premises previously registered for the manufacture of ice cream	Nil
Premises registered for the sale of ice cream in 1957	5
Premises registered for the manufacture of ice cream in 1957	Nil

10 samples were obtained and examined for cleanliness by the methylene blue test:

Grade I	2
Grade II	7
Grade III	1
Grade IV	-
TOTALS	10

3 samples of ice-cream taken by the County Sampling Officers were reported on as genuine, i.e., had a fat content of not less than 5% fat, 10% sugar not derived from milk and 7.5% milk solids other than fat.

MEAT:

	1954	1955	1956	1957
The number of slaughtermen licensed	21	19	21	22
The number of slaughterhouses licensed	6	6	4	6

Although there were 6 slaughterhouses registered in 1957, only 5 were in use and by far the greatest amount of slaughtering is done at one slaughterhouse. The increase in slaughtering there in recent years can be seen from the following figures for the whole district.

MEAT (continued)

Number of Animals killed

Year	Cattle inc.Cows	Calves	Sheep	Pigs	Total
1952	8	25	8	126	167
1953	4	3	3	74	84
1954	231	178	416	797	1,622
1955	358	376	1,519	2,819	5,072
1956	638	436	1,983	5,231	8,288
1957	597	358	3,679	6,595	11,229

By month, the numbers of animals killed and inspected in 1957 was:

Month	Cows	Heifers	Steers	Calves	Sheep	Pigs	Bulls
January	27	33	15	41	128	544	-
February	30	14	15	24	71	468	-
March	19	15	13	20	95	534	-
April	25	14	14	23	144	559	1
May	16	14	8	35	227	581	-
June	19	11	19	19	551	350	-
July & August	26	22	30	34	1,499	702	1
September	15	19	13	59	475	647	-
October	25	14	11	51	276	647	-
November	27	14	11	36	146	678	-
December	12	22	13	26	67	885	-
TOTALS	241	192	162	358	3,679	6,595	2

The following are the details regarding meat inspection by the Council's Public Health Inspectors:

Summary of animals killed and carcases inspected:

Particulars	Cows	Heifers	Steers	Calves	Sheep	Pigs	Bulls
Number killed	241	192	162	358	3,679	6,595	2
Number inspected	241	192	162	358	3,679	6,595	2

(1) All diseases except Tuberculosis and Cystercosis:

Whole carcase rejected	-	1	1	6	3	17
Carcase of which some part or organ was rejected	15	8	14	2	28	363
Percentage of number inspected with disease other than tuberculosis or cyster-cosis	6.2%	4.6%	9.2%	2.5%	.84%	5.7%

MEAT (continued)

	Cows	Heifers	Steers	Calves	Sheep	Pigs
(2) Tuberculosis only:						
Whole carcase rejected	-	-	-	-	-	2
Carcase of which some part or organ was rejected	35	3	4	-	-	79
Percentage of number inspected	14.5%	1.5%	2.4%	-	-	1.2%
(3) Cysticercosis:						
Carcase of which some part or organ was rejected	-	-	-	-	-	-

The following items were rejected:

Diseases other than Tuberculosis

(a) Whole carcases rejected:

1 heifer carcase	Septic pericarditis
1 steer	Generalised actinomycosis
6 calves	3 carcases immaturity
	2 carcases fevered flesh
	1 carcase joint ill
3 sheep	1 ewe carcase emaciated with a pair of still born lambs
	1 sheep pneumonia and emaciation
	1 ewe carcase fevered flesh
17 pigs	2 pig carcases pneumonia & fevered flesh
	2 pig carcases pleurisy & pericarditis
	1 sow carcase jaundice
	5 pig carcases fevered flesh
	2 pig carcases died in transit
	2 pig carcases moribund, badly bled and fevered
	1 pig carcase extensive bruising
	2 pig carcases swine erysipelas

(b) Parts of carcases rejected:

14 Cows

5 livers	Abscesses
3 livers	Distomatosis
2 livers	Cirrhosis
1 pluck	Traumatic pericarditis
1 liver	Cavernous angioma
1 abscess on diaphragm	
25 lbs. ribs	Bruised

2 Calves

1 pr. lungs	Pleurisy
8 lbs. hind leg	Abscesses

14 Steers

6 livers	Multiple Abscesses
3 livers	Cirrhosis
4 livers	Distomatosis
1 pr. lungs	Distomatosis
35 lbs.flank	Badly bruised

7 Heifers

1 liver	Multiple Abscesses
2 livers	Cirrhosis
1 pr. lungs	Pleurisy
39 lbs.	Bruising

MEAT (continued)

(b) Parts of carcases rejected (continued)

28 Sheep		354 Pigs	
4 livers	Abscesses	77 livers	Cirrhosis
2 lungs	Abscesses	40 plucks	Pneumonia
2 livers	Distomatosis	112 lungs	Pneumonia
7 lungs	Strongylus Rufescens	51 plucks	Pleurisy
		32 livers	Milk spot
3 livers	Degenerated	30 hearts	Pericarditis
	Tenuicollis cysts	6 kidneys	Hydronephrosis
		1 kidney	Nephritis
2 lungs	Pneumonia	36½ lbs. of Pork	Abscesses,
2 lbs. torn leg muscle	Bruising, etc.		bruising, arthritis, etc.

Tuberculosis

(a) Whole carcases rejected:

Heifers	-
Steers	-
Cows	-
Pigs	2 carcases, generalised tuberculosis.

(b) Parts of carcases rejected:

Heifers:	3	1 head
		1 lung
		1 mesentery
Steers:	4	1 head
		1 liver
		1 lung
		1 mesentery
Cows:	35	18 lungs
		11 heads
		5 livers
		2 mesentery
Pigs:	79	78 heads
		1 mesentery

Specimens from 1 carcase were submitted to the hospital pathological laboratory and the following is the positive findings:-

Bullock: Section from spleen, liver, retro-pharyngeal gland and tongue all show typical actinomycotic granulomas with central fungal colonies.

The following items were surrendered from shops:

325 lbs. Beef.
203 lbs. Pigs liver.
11 lbs. Lambs liver.

OTHER FOODS:

24 lbs. of tinned corned beef, 9 lbs. of tinned ham, 6lbs. of tinned jellied veal, 85 lbs. of ox tongues, 28lbs. of Madeira slices, 1 case of dog fish, 104 lbs. of dehydrated vegetables and 80 lbs. of potatoes were surrendered from shops and canteens as unfit for human consumption.

SAMPLING: In addition to the 61 samples of milk and 3 samples of ice-cream mentioned above, the County sampling officers took the following samples during 1957:

Drugs	9
Spirits	6
Other samples	44
	59

All these samples were genuine except for the following:

Sample of	Analysis	Action Taken
Apple Tart	On the inside of the tart (actually a 'turnover') was a small area of mould.	Written caution
Bread	Embedded in the surface is a small brown beetle 3 mm. long.	Written caution
Bread	Four top slices have a patch of foreign matter in the crumb. This patch is about 1 inch long and $\frac{1}{8}$th inch wide on the top slice. Microscopically it is a piece of brown bread which is badly soiled in parts.	Written caution
Cod Liver Oil Emulsion	Vitamin A 144 I.U./Gm. (372 I.U. /Gm. in oil).	Old stock. Withdrawn from sale.
Cheese Roll	Consists of a roll cut for buttering and insertion of cheese. The roll contains a nail approximately $1\frac{1}{2}$ inches long.	Written caution
Fruit Ice Lollies	Sucrose 13.4%, Total solids 14.5%. Fruit juice content approximately 3.5%. Insufficient to justify name.	Makers to discontinue use of description.
Skip	Orange approximately 10%. Benzoates 430 p.p.m., Vitamin C 30.4 m.gms. per ounce. Presumably this should comply with the Soft Drinks Order for a dring to be diluted (i.e. 25% fruit at least).	Makers informed

FOOD PREPARATION PREMISES

During 1957 a total of 294 visits were made to food premises and 20 informal notices issued against occupiers to comply with the requirements of the Food Hygiene Regulations, 1955.

FOOD PREPARATION PREMISES (continued)

The following action was initiated by the Council's Public Health Inspectors:

12 food premises	walls and ceilings redecorated.
2 food premises	new floors laid.
2 food premises	hot water installed.
2 food premises	washing facilities provided for employees.
2 food premises	sinks provided for washing equipment.
2 food premises	nail brushes and towels provided.
1 food premises	additional sanitary accommodation provided for staff.
6 food premises	toilets labelled - re washing of hands.
1 factory canteen	lighting and ventilation improved and walls redecorated.
1 factory canteen	stainless steel sinks, wash hand basins and a dish washing machine provided.

APPENDIX V

REFUSE DEPOSITED IN THIS DISTRICT BY BODIES OTHER THAN DARTFORD RURAL DISTRICT COUNCIL

There was little change in 1957 from the conditions described in the report for 1956. Planning permission was granted to the owner of the disused gravel pit at Lanes End for this to be filled with excavated earth or house refuse with suitable safeguards to protect amenity and the underground water supply.

Planning permission was given up to 30th June, 1958, for the use of ground at Chimhams Farm for the deposit of industrial waste from B.O.C.M.

APPENDIX VI - VERMIN, ETC.

RODENTS: The following is a summary of the work carried out in 1957 by the Council's Rodent Operator:

	1956	1957
Number of complaints received	207	172
Infestations found:		
Rats, major	6	3
Rats, minor	327	138
Mice, major	1	-
Mice, minor	24	22
Infestations found as a result of a survey:		
Rats, major	-	-
Rats, minor	234	23
Mice, major	1	-
Mice, minor	11	5
Business premises treated	13	17
Private dwellings treated	345	409
Estimated kill, Ministry of Food formula:		
Rats	1,382	1,464
Dead bodies found:		
Rats	1,352	1,919
Mice	316	235
By traps or other means:		
Rats (gassed)	265	323
Mice	83	5
Sewer treatment:		
Manholes tested	178	178
Infestations found	7	6
Infestations treated	7	6

OTHER VERMIN:

Council houses disinfested of bed bugs	3	1
Private dwellings - ditto -	6	-
Council houses disinfested of fleas	2	5
Private dwellings - ditto -	4	4
Houses disinfested of ants	4	3
Houses disinfested of woodworm	1	-
Houses disinfested of beetles	1	1
Houses disinfested of swarms of flies	3	1
Houses disinfested of swarms of bees	2	-
Wasps nests destroyed	16	55
Houses disinfested of silver fish	-	-
Houses disinfested of cockroaches	-	1

DISINFECTION:

Houses disinfected after infectious disease	10	10

APPENDIX VII - FACTORIES and SHOPS

The following work was carried out by the Council's Public Health Inspectors:

1. INSPECTIONS UNDER PART I, FACTORIES ACT, 1937

	Premises	Number on Register	Number of Inspections	Number of written Notices	Number of Occupiers Prosecuted
i)	Factories in which Sections 1,2,3,4 and 6, are to be enforced by the Local Authority	13	15	-	-
ii)	Factories not included in (i) in which s. 7 is enforced by the Local Authority	110	80	4	-
iii)	Other premises in which s.7 is enforced by Local Authority (excluding Out-workers' premises)	8	8	1	-
	Totals:	131	103	5	-

2. PARTICULARS OF DEFECTS FOUND:

Particulars	Number of Defects Found	Defects Remedied	Referred to H.M. Inspector	Referred by H.M. Inspector	Number of Prosecutions
Want of cleanliness (s.1.)	-	-	-	-	-
Overcrowding (s.2.)	-	-	-	-	-
Unreasonable temperature (s.3.)	-	-	-	-	-
Inadequate ventilation (s.4.)	-	-	-	-	-
Ineffective drainage of floors (s.6.)	-	-	-	-	-
Sanitary conveniences (s.7.)					
(a) Insufficient	1	1	-	-	-
(b) Unsuitable or defective	8	8	-	2	-
(c) Not separate for the sexes	-	-	-	-	-
(d) Other offences against the Act (Excluding Out-workers)	1	1	-	1	-
Totals	10	10	Nil	3	Nil

Outworkers:

(a)	Total number of outworkers notified to the Council by firms in the Dartford Rural District under Section 110 (1c) Factories Act, 1937	51
(b)	Total number of outworkers notified by Dartford Rural District Council to other Councils under Section 110 (2) Factories Act, 1937	2
(c)	Total number of outworkers notified to Dartford Rural District Council by other Councils, under Section 110 (2)	28
(d)	Total number of outworkers employed in Dartford Rural District	77
(e)	Total number of inspections of work-places under Section 111 (i) Factories Act, 1937	Nil
(f)	Scheduled occupations followed by out-workers in Dartford Rural District	
	Making of wearing apparel	17
	Making of boxes or other receptacles or parts thereof made wholly or partially of paper, cardboard, chip or similar material	59
	Making or filling of cosaques, Christ-mas crackers, Christmas stockings, or similar articles or parts of articles	1

Shops:

There are 245 shops in the rural area. The total number of inspections during the year by the Council's Public Health Inspectors of shops, other that food preparing premises, was 66.

PUBLIC HEALTH COMMITTEE

1957 - 58

Chairman: Mr. G.T. Jones

Vice-Chairman: Mr. J.D. Salmon

Mr. A.C. Bush	Mr. W.G. Mundy
Mr. K.C. Clinch	Mr. E. Petty
Mr. W. Dale Cooper	Mr. L.L. Reeves
Mr. B.D. Doig	Mr. G.J. Russell
Mr. A.E. Edward	Mr. R.C. Simmonds
Mr. M.G. Hepburn	Mr. F.T.C. Sims
Mr. M.F. Goodwin	Mr. D.G. Sweetland
Mr. P.J. Matthews	Mr. F. Tanner
Mr. G. Mellor	Mr. K.A. Walmsley

PUBLIC HEALTH OFFICERS

Medical Officer of Health (Part Time)	J.H. HUDSON, B.Sc., M.B., M.R.C.S., D.T.M.&H., D.P.H.
Chief Public Health Inspector	F. SUTCH, Certificate R.S.I., Certificate R.S.I., Meat and Other Foods.
Public Health Inspectors	J. MARTINDALE, Certificate R.S.I., & S.I.J.B., Certificate R.S.I., Meat and Other Foods.
	F.W. DRURY, Certificate R.S.I., & S.I.J.B., Certificate R.S.I., Meat and Other Foods.
Clerical Assistant	A.E. RICHARDSON.
(from 16.12.57)	A.M.T. COCKBURN.