

[Report 1914] / Medical Officer of Health, Chatham Borough.

Contributors

Chatham (Kent, England). Borough Council.

Publication/Creation

1914

Persistent URL

<https://wellcomecollection.org/works/eezy7av2>

License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.




Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>



Borough of Chatham.

Annual Report
OF THE
MEDICAL OFFICER
OF HEALTH,
For the Year 1914.

CHATHAM :
CLEMENTS BROS., Meeting House Lane.



Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b29098932>

INDEX TO REPORT.

	PAGE.
PREFATORY REMARKS	5
LOCAL GOVERNMENT TABLES	7
SUMMARY OF VITAL STATISTICS	11
L.G.B. CIRCULARS, MEMORANDA, ETC., ISSUED IN 1914	11
A.—NATURAL AND SOCIAL CONDITIONS OF DISTRICT	11
Poor Law Relief	13
Vaccination	13
B.—SANITARY CIRCUMSTANCES OF DISTRICT	14
Water Supply	14
Analysis of Water	15
River Pollution	16
Drainage and Sewerage	16
Closet Accommodation	16
Household Refuse	18
Disposal	19
Manure and Flies	20
Housing	21
Overcrowding	25
PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BYE LAWS OR REGULATIONS	29
New Buildings	29
Common Lodging Houses	29
Houses Let in Lodgings	30
Slaughterhouses and Meat Inspection	30
Contagious Diseases (Animals) Act	32
Tuberculosis Order, 1913	32
Food and Drugs	33
Milk and Cream Regulations, 1912	34
Dairies, Cow Sheds and Milkshops	34
Offensive Trades	35
Ice Cream	36
STATEMENT OF INSPECTOR OF NUISANCES	36

INDEX.—continued.

C.—SANITARY ADMINISTRATION	40
Adoptive Acts	41
Bye Laws	41
Bacteriological Work	42
D.—PREVALENCE AND CONTROL OVER ACUTE INFECTIOUS DISEASES	42
Hospital Accommodation	44
Disinfection	45
Schools and Infectious Disease	45
Notifiable Infectious Diseases	46
Scarlet Fever	46
Diphtheria and Membranous Croup	47
Enteric Fever	49
Erysipelas	49
Cerebro-Spinal Meningitis and Polio Myelettis	50
Ophthalmia Neonatorum	50
Non-Notifiable Diseases	51
Measles	51
Whooping Cough	51
E.—PREVALENCE OF AND CONTROL OVER TUBERCULOSIS	52
Pulmonary Tuberculosis	52
Non-Pulmonary Tuberculosis	53
Administrative Measures	54
F.—INVESTIGATION OF OTHER DISEASES	56
G.—MEANS FOR PREVENTING MORTALITY IN CHILDBIRTH AND INFANCY	56
Infantile Mortality.. .. .	60
Diarrhœa and Enteritis	60
H.—VITAL STATISTICS	61
Births	62
Deaths	62
Illegitimate Births and Deaths	66
FACTORY AND WORKSHOP ACT, 1901	66
Home Work	67
Bakehouses	68
HOME OFFICE TABLE	69
RAINFALL	71

Borough of Chatham.

TO THE MAYOR AND CORPORATION.

GENTLEMEN,

I have the honour to submit for your consideration my Report on the Sanitary Condition, Incidence of Sickness, and Mortality, of the Borough of Chatham, during the twelve months ending December 31, 1914.

Owing to the requirements of the Local Government Board and other Central Authorities who are supplied with Copies of the Report, it is necessary to include certain matters of local interest, which have appeared in previous reports.

The arrangement of the subject matter is in accordance with the Memorandum of the Local Government Board, and it follows the lines of previous reports, by which comparison is facilitated and uniformity secured.

The object of a report is not merely that of recording facts, but of educating the public in matters which concern their health, by bringing to their notice the directions in which danger to health threatens.

The progress and prosperity of every locality is dependent on its sanitary condition, and in the present day to neglect measures of Public Health is a most unwise policy. Your Council is fully alive to its duties and responsibilities in this matter, and a general improvement in Sanitary Administration has been a marked feature of the past few years, but if public effort is to be successful it must be backed up by co-operation on the part of the public, and above all by individual effort. Improvement in houses must be accompanied by improvement in house-keeping.

BIRTH AND DEATH RATES.

There is no marked change. Both are low, but whilst a low death rate is satisfactory, a low birth rate is not so.

The important subject of Main Drainage has made substantial progress, and the present position is discussed.

With respect to Infectious Diseases, I have to record a considerable prevalence of Diphtheria and Scarlet Fever. To the list of notifiable diseases, Ophthalmia Neonatorum has been added.

Special attention has been given to the important subject of Infant and Child Mortality, and in regard to a memorandum of the Local Government on this subject, I made a special report to your Council.

Other matters receiving special notice in the Report are Housing Conditions, Refuse Disposal, Nuisances and Flies.

The effect of the War on Municipal Work calls for comment, and I am glad to report that most satisfactory co-operation exists between the Civil and Military and Naval Authorities, based on mutual interest, and on a common desire to preserve a high standard of health amongst all sections of the population, whether soldiers, sailors or civilians. The Local Government Board have issued various circulars in connection with this subject, and at the end of August the principal points on which co-operation should be effected were set out in detail.

There has been a very large increase in the number of soldiers in the district, and in many cases accommodation has been required for the wives and families of the men. Many houses have also been requisitioned for billets. No locality has been selected for this purpose without the previous approval of your Medical Officer, and I have also personally inspected many of the billets. The very large increase of labour in the Dockyard has caused a temporary shortage of house accommodation, and at present the demand for houses is in excess of the supply.

The supervision of the preparation of food supplies for the troops has also called for co-operation, and special attention is being given to all premises occupied by food contractors.

Your Sanitary Staff has been very fully occupied in its numerous duties, and the very few complaints that are received point to the efficiency with which these duties are carried out.

My thanks are due to Mr. Coles Finch for his records of rainfall in the district, and to the members of your Council for their kind consideration and support of the various measures I have from time to time brought to their notice.

I am, Gentlemen,

Your obedient servant,

J. HOLROYDE., F.R.C.S., D.P.H.,

Medical Officer of Health.

Chatham,

February, 1915.

TABLE I.

CHATHAM DISTRICT.*Vital Statistics of Whole District during 1914 and Previous Years.*

YEAR.	Popula- tion estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NET DEATHS BELONGING TO THE DISTRICT.			
		Un- corrected Number.	Nett.		Number.	Rate.	of Non- residents registered in the District.	of Resi- dents not registered in the District.	Under 1 year of Age		At all Ages.	
			Number.	Rate.					Number.	Rate per 1,000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1909
1910
1911
1912
1913
1914

Area of District in acres (land and inland water:).

4356

Total Population at all ages 42250

Total Families or Separate Occupiers 9251

At Census, 1911.

TABLE II.

CHATHAM DISTRICT.*Cases of Infectious Disease notified during the Year 1914.*

Notifiable Diseases.	Number of Cases Notified.								Total Cases Notified in each Locality.				Total Cases removed to Hospital.
	At all Ages.	At Ages—Years.						ST. MARY'S WARD.	LUTON WARD.	ST. JOHN'S WARD.	MEDWAY WORKHOUSE.		
		Under 1	1 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.					65 and upwards.	
Diphtheria (including Membranous Croup)	202	3	30	133	19	6	2		37	123	42		96
Erysipelas	35			2	3	10	18	2	13	14	8		
Scarlet Fever... ..	107		16	77	10	3	1		13	80	14		71
Enteric Fever	8		2	4		2			4	1	3		6
Cerebro-spinal Meningitis	1						1				1		1
Ophthalmia Neonatorum	7	7							1	1	5		
Pulmonary Tuberculosis	99	2	2	12	18	41	22	2	19	44	26	10	
Other forms of Tuberculosis	25	1	6	8	6	3	1		8	9	8		
Totals	484	13	65	236	56	65	45	4	95	272	107	10	174

TABLE IV.

CHATHAM BOROUGH.*Infant Mortality during the Year, 1914.*

Nett Deaths from stated Causes at various Ages under 1 Year of Age.

Causes of Death.		Under 1 Week.	1 to 2 Weeks.	2 to 3 Weeks.	3 to 4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total Deaths under 1 year.
All Causes	Certified	23	9	8	4	44	22	12	15	11	104
	Uncertified	2				2				1	3
Measles										2	2
Whooping-Cough							1				1
Abdominal Tuberculosis									1	1	2
Other Tuberculous Diseases								1		1	2
Meningitis (not Tuberculous)										2	2
Convulsions				2	1	3				2	5
Bronchitis							2	1	2	1	6
Pneumonia (all forms)							1	3	1	2	7
Diarrhoea				1		1	6	2	5	1	15
Enteritis		1			2	3	5	1	2		11
Gastritis			1	1		2		1	2		5
Syphilis			1			1	2		1		4
Suffocation, overlying		1				1					1
Injury at Birth			1			1					1
Congenital Malformations			3	1		4		1			5
Premature birth.....		20	1	2		23	1	1			25
Atrophy, Debility and Marasmus		3	2	1	1	7	3	1	1		12
Other Causes							1				1
		25	9	8	4	46	22	12	15	12	107

Nett Births in the year :—Legitimate, 1068 ; Illegitimate, 31.

Nett Deaths in the year :—Legitimate Infants, 91 ; Illegitimate Infants, 16.

SUMMARY OF VITAL STATISTICS, 1914.

Area in Acres, inclusive of water	4,443·298
„ „ (inland water only)	4,356
Population (Census 1911)	42,450
„ (Estimated)	44,100
Births registered	1,099
Birth rate per 1,000	25
Net Deaths registered	610
Death rate per 1,000	13·8
Zymotic Death Rate (7 principal zymotic diseases)	1·9
All Forms of Tuberculosis, including Phthisis	1·7
Phthisis Death Rate	1·3
Infantile Mortality per 1,000 Births	97
Number of Occupied Houses (1912-9574)	9627
Total Rates in the £	8s. 9d.
A 1d. Rate produces	£633

LOCAL GOVERNMENT BOARD CIRCULARS, MEMORANDA
AND ORDERS ISSUED DURING 1914.

Circular.—Regulation of Underground Places as Sleeping Rooms.

„ Regulations under P.H. (Reg. as to Food) Act, 1907.

Memorandum.—Provision of New Residential Institutions for
Treatment of Tuberculosis.

Order.—Notification of Ophthalmia Neonatorum.

Circular.—Maternity and Child Welfare.

„ Notification of Births Act.

„ Prevention of Epidemic Diarrhoea.

„ Children's Country Holidays.

„ Co-operation between Civil and Military Sanitary
Services.

„ Small Pox.

Memoranda.

Steps to be taken on Notification.

„ „ when prevalent.

**A.—NATURAL AND SOCIAL CONDITIONS OF THE
DISTRICT.**

Chatham is situated on the southern bank of the Medway.
It is bounded to the north by the City of Rochester and to the east

by the Borough of Gillingham, and is centrally situated between the two. Its extension is necessarily to the south-west, south, and south-east.

The general description given in previous reports with respect to its geology, its houses, and its population need not be repeated. It is essentially a Naval and a Military centre, and has no large industries except that of the Dockyard—on which its prosperity depends, and where the bulk of its male population is employed.

Its central situation between Rochester and Gillingham gives it certain advantages, and its boundaries insensibly merge into the other districts.

The older part of the town is that in proximity to the river, and the main business street runs through this part. As the town grew it extended primarily in the valleys between the hills running down to the river, and as these were filled up, later buildings have been erected on the slopes and summits of the hills. Old houses are therefore found at low levels and in the more central districts in which the streets are narrow, and the space round the dwellings limited. In the newer districts there is plenty of space at the rear for each house, and many possess forecourts.

A gradual diminution of the number of old houses is taking place, partly owing to street improvement, and partly to action under Sec. 17, Housing Act.

The chief centre of industry is the Dockyard, in which the bulk of skilled artisans, and general labourers are employed. There are a considerable number of soldiers and sailors on active service, retired naval, military and civil servants, and others employed in various subsidiary industries and businesses necessitated by the ordinary wants of the population. A few clothing factories give employment both as factory hands and outworkers to a number of females. The following figures, taken from the census returns of 1911, show

MALES.	
OCCUPIED.	UNOCCUPIED OR RETIRED.
14,289	2,839
FEMALES.	
4,158	11,829

Although there is little unemployment in the district, Chatham seems to have a large number of the casual labourer class, whose work is intermittent and wages low, and also a number of

loafers who appear to live without the necessity of labour. Possibly the presence of this latter class is an indication of general prosperity. At all events, it is a factor of no small importance in connection with the question of housing.

POOR LAW RELIEF AND HOSPITAL ACCOMMODATION.

The administrative area of the Poor Law Authority comprises the Boroughs of Chatham and Gillingham and a portion of the City of Rochester. The exact figures as to Poor Law Relief in Chatham are therefore difficult to give with accuracy, but by the courtesy of the Clerk to the Medway Guardians I have been supplied with the following information, which is approximately correct. They deal with Out Relief only, and are for the year ending September 30, 1914. The total amount expended was £4,848, and calculated according to population, the share of Chatham would be about £1,700.

The Institutions for the treatment of the sick comprise a large Poor Law Infirmary, with about 700 beds, and a block for the treatment of Tuberculosis, a General Hospital, with over 100 beds, and a large out-patient Department, and Naval and Military Hospitals. Some of the buildings are outside the municipal boundary of Chatham, and their utility extends over an extensive area.

It is impossible to estimate the value of the Hospital to the District, but the following figures taken from the last Annual Report convey some idea of the scope of its work :

In-patients	1,148
Out-patients.....	6,713
Daily average in Hospital	91.5
Out-patient attendances	30,386

A return of New Cases of Pauper Sickness is sent every week by the Clerk to the Guardians. The total number during 1914 was 394, as compared with 476 in 1913. Weekly average, 8. The majority are chronic in character, and amongst old people.

VACCINATION.

The following figures as to Vaccination in the Chatham and Rochester Districts of the Medway Union merit consideration :

Children born.....	1,486
Vaccinated	895
Postponed	110
Declarations of Objection	460

Insusceptible	1
Traced to other Districts	23
Not found.....	16
Percentage of Vaccinated Children ...	60

These figures although better than in some districts are not altogether satisfactory, and if an epidemic of Small Pox should occur, the mortality in the unvaccinated part of the population will be heavy.

B.—SANITARY CIRCUMSTANCES OF THE DISTRICT.

WATER SUPPLY.

The Water Supply is in the hands of the Chatham, Rochester and Gillingham Waterworks Company. The pumping station, borings and headings are in the Luton Valley, and the storage resevoirs into which the water is lifted are situated on the Rainham Road (two), and at Bridgewood Gate, on the Maidstone Road. Their joint capacity is about 9,000,000 gallons. The water is derived from the chalk formation, and is supplemented by a small quantity from a boring into the lower greensand. The watershed area comprises an extensive slope of the North Downs.

The supply is constant, the pressure is good, and the quantity is abundant. It is of excellent quality as a drinking water, but for domestic purposes its hardness is a drawback.

The present average daily consumption is about 16 gallons per head. When a water carriage system of sewerage is in complete operation, this quantity will be largely increased, and the daily average required will be from 25 to 30 gallons per head.

In some of the elevated rural parts of the Borough, it is not possible for the Company to give a water service, and the supply is entirely dependent on rainfall.

I have on many occasions referred to the danger of contamination of underground water supplies, and it is gratifying to record that the Company have been for some time back employed in carrying out measures to avoid any risk of this occurring. These measures consist in the clearing of ground in the immediate vicinity of their works, and of rendering cesspools water tight, so as to prevent leakage of their contents. The result of this procedure is the cause of nuisance to the householders residing in the dwellings so treated, owing to the necessity of frequent emptying of cesspits, but the safety of the water supply is the paramount object, and the Sanitary Authority and the Company are alike convinced of the necessity of such measures as the above.

The Company have arranged for periodical analyses (Chemical and Bacteriological) of their water, and the Secretary has kindly supplied me with copies of the most recent analysis.

In addition, arrangements have been made with the County Bacteriological Laboratory for the examination—twice yearly, of samples of the water supply. These results are of a very satisfactory character, and show a water of high organic purity. The freedom from Bacteria of the Coli group is noteworthy.

CHEMICAL ANALYSIS OF WATER.

Date received, November 10, 1914.

From the Chatham Waterworks Company.
House Tap, Chatham.

Appearance in 2 ft. Tube	Clear.
Colour	Pale blue.
Odour	None.
Reaction	Neutral
Colour of Residue.....	White
Total solid matter	25·83 grs. per gal.
Chlorine	1·728 " "
Common salt	2·832 " "
Nitrogen as Nitrates	·286 " "
Nitrogen as Ammonia	·000 " "
Oxygen absorbed by organic matter	·003 " "
Degree of Hardness	22·10 " "
do. after boiling	4·10 " "
Organic Carbon	0·013 " "
Organic Nitrogen	0·004 " "

The chemical analysis shows the water to be of high organic purity.

BACTERIOLOGICAL ANALYSIS OF WATER.

The following are the results of a bacterial examination of samples of water taken at Chatham on October 30, 1914.

No. 1.—Pumping Station, Luton.

„ 2—146 Rainham Road, Chatham.

„ 3—301 Canterbury Street, Gillingham.

„ 4—4 Star Hill, Rochester.

1.....	39	Not present in 30 c.c.
2.....	3	ditto.
3.....	12	ditto.
4.....	27	ditto.

These results show that the quality of the water is excellent, and they are confirmed by analyses of two samples of water sent to the County Bacteriological Laboratory at Maidstone.

One shallow well has recently been discovered in a populous part of Chatham. A Bacterial examination of the water has shown it to be dangerously polluted, and notice to discontinue its use has been issued.

RIVER POLLUTION.

A considerable amount of crude sewage is discharged into the river Medway, chiefly from Government establishments, and from war and other vessels in the river. The completion of main drainage will result in a diminution of pollution, but a certain amount is unavoidable.

DRAINAGE AND SEWERAGE.

I have not much to add to the remarks I made on this subject in last year's Report. Matters then under discussion and consideration have now been satisfactorily settled, and the present position is as follows :

The application for a Provisional Order for the purchase of a site for sewage disposal works at Motley Hill was considered by an Inspector of the Local Government Board, in February, 1914. There was some opposition, which was not of a formidable character, and the Order was granted and received the Royal Assent on July 31st. An agreement has been concluded between the Corporations of Rochester and Chatham, and the Rochester Fishery Company, by which the former have purchased the rights of the latter, and become the creditors of the shareholders.

The purchase of the site has been completed, and a Joint Sewerage Board has been formed, and has held several meetings.

The Engineer's plans have been submitted, and are now under consideration. It will be seen that substantial progress has been made in this important matter.

CLOSET ACCOMMODATION.

The following types of sanitary conveniences are in use in the district :—

- (a) Water Closets with flushing apparatus.
- (b) Closets with pans and traps but without a flush.
- (c) Trough Closets in use at schools, flushed once or more daily.
- (d) Open privies.

Some of the open privies are in yards common to several houses, the privy vault is very large, and contains several loads of excrement. The resulting nuisance, especially in the summer months, is very marked, and further than this, one always finds large quantities of flies in their vicinity, from whence they fly into the houses, and pollute food and drink. I am glad to state that a gradual reduction of this class of accommodation is being effected.

The number of open privies converted into panned and trapped closets during 1914 was 147.

The approximate number of each type of Closet is as follows :

Open Privies	1,895
W.-C.'s with flush	4,933
W.-C.'s hand flushed	2,458
Pail and Earth Closets	45
No. of houses without separate accom- modation	396

Open Privies shown thus, less thus

Sec. 15	54	
Sec. 17	30	
Sec. 36 & 91	32	
Voluntary	9	
By demolition of Houses, 1914	8	
Reported in 1913 and demolished in 1914	14	
	Total	<u>147</u>

W.-C.'s with flush added :—

100	New buildings.
50	Old buildings.
<hr/>	
150	more.

W.-C.'s without flush added :—

Old buildings	96
W.-C.'s without flush lost by demolition	15
	<hr/>
Total	<u>81</u>

HOUSEHOLD REFUSE AND ITS REMOVAL.

This very important matter merits special consideration, and in last year's Report I drew your attention to several points in which I thought an improvement could be effected. The primary difficulty is in connection with the provision of suitable covered receptacles, and there is difference of opinion—first, as to whether the Council have power to insist on a particular kind of receptacle for every house, and second, as to who is responsible for its provision. In the case of new houses, the Council can insist on the owner providing a receptacle in accordance with existing byelaws, and I venture to state that the solution of difficulty No. 1 can be overcome by making an application to the L.G.B. for a new Byelaw defining the size and character of the refuse receptacle for general use in the Borough, and as to difficulty No. 2, that of liability, I believe several owners are only too anxious to submit this question to the decision of a Court of summary jurisdiction.

There is no need to again describe the medley of unsuitable and unsightly objects which adorn our pavements at all hours of the day, the only matter for surprise is at their continued toleration.

The present powers are contained in the following sections :—

Public Health Act, 1875.

Section 35—Compulsory provision of ashpits.

„ 36—Defines position of owners and occupiers.

„ 45—Powers of Sanitary Authorities to provide temporary receptacles.

Public Health Amendment Act, 1890 :—

Section II.—Enlarges definition of “ ashpit ” to include other receptacles.

Bye Laws :—

No. 80—Defines kind and size of receptacle.

Both owners and occupiers appear anxious to solve the difficulty, but each side prefers it to be at the expense of the other.

I again strongly urge that steps be taken to come to a definite policy in this matter.

Acting under the instructions of the Council, the Sanitary Inspector has served 42 notices on a selected area, with the following result :—

Provided	16
Not provided	26

My firm conviction is that unless a New Bye Law is sanctioned the Council have not the power to alter the nuisance complained of. It is clearly the duty of the Sanitary Authority to endeavour to remedy all insanitary conditions. In regard to this particular subject a state of disorder exists, and control is imperfect. This disorder should be converted to order, and proper control should be secured. I have indicated the remedy, and I venture to suggest the preparation of a set of bye laws dealing with the construction, keeping, using, and collection of ashbins.

Failing these measures, we shall continue to tolerate an intolerable nuisance.

Since writing the above, a Bye Law partly securing the above objects has received the approval of the Local Government Board.

The number of houses from which refuse has to be removed is nearly 10,000.

In the principal thoroughfares removal takes place daily, and in other parts of the town on two days weekly. Carts are occupied all day in this work, but a great improvement would be effected if the streets were cleared by an early hour in the morning. Some of the carts are properly covered, others partly so. The collection of household refuse is worked by the Surveyor's department. Fish offal is removed by the Sanitary Department. It is placed in covered bins, collected daily, removed in a closed van. Every bin and the interior of the van is cleansed daily.

DISPOSAL.

The place of deposit is on land known as the Pickle Valley, situate on the outskirts of Luton. The size of the heap increases year by year, concurrently with the increase of population on the one hand, and with the decreased use of the material for brick-making and for application to cultivated land on the other. For these and for other reasons it has been decided to adopt other measures for the disposal of the refuse, and the problem resolves itself into two parts. First of all, the only sanitary and effective method of disposal is by burning in a suitable destructor. This is admitted, and I have reason to think will be acted upon with the least possible delay. The preliminary measures necessitate the provision of a suitable site, and the approval of the Local Government Board to the scheme. Meanwhile the refuse has to be disposed of, and if the Pickle Valley ceases to be available it will be necessary to provide a fresh site for the temporary disposal of the refuse, pending the erection of the destructor. I trust this course

will not be necessary, and that the present place of deposit will be retained. Any other policy will, in my judgment, only increase the possibility of nuisance, which is at present reduced to a minimum, consistent with the method of disposal.

MANURE AND FLIES.

The regular and frequent removal of manure from stables is desirable. During the past year several improvements in connection with the storage of stable manure have been effected, and the conversion of large open pits into covered ones has been effected in many places. In others, no manure pit at all exists, and owners have been called upon to construct suitable receptacles.

Sections 49 and 50 of the Public Health Act, 1875, give the necessary powers to compel removal of manure at fixed intervals. Notices were issued during the summer, and an Inspector is charged with the duty of seeing that the work is carried out.

Many people think that manure is quite harmless, and do not realise the necessity either for covering pits, or for frequent removal. I may say that this opinion is not generally shared by neighbours who live in the vicinity of stables.

Large accumulations of manure are a nuisance, and cause pollution of the surrounding air. Further, they form the favourite breeding ground of flies. These insects are carriers of filth and infection, and common sense tells us that if their chances of breeding are lessened there will be fewer to be killed.

HOUSE FLIES.

The common house fly is concerned in the communication of certain zymotic diseases, and its presence in large numbers is an indication of insanitary conditions.

Typhoid Fever, Epidemic Diarrhœa and Tuberculosis are the more common diseases propagated by its agency.

The measures taken were the distribution of handbills—drawn up by the County Medical Officer, and of posters illustrating the habits of the fly, and the publication of a joint letter to the press by the M.O.H.'s of Rochester, Gillingham and Chatham.

The measures recommended may be briefly summed up as follows :—

The cleansing out at regular short intervals of all manure heaps and stable refuse, all garbage and litter from the vicinity of dwellings, all collections of waste food, dustbins, ash-boxes and

all filthy places. Burn rags, paper, and decaying vegetable refuse, and secure proper ventilation of all apartments by through currents of air.

Protect all food, especially milk and meat, and last but not least, kill every fly.

In connection with flies, one often sees food and food stuffs exposed in shop windows, and swarming with flies. This is not right, and the public would be well advised to avoid food exposed in this way, without a protective cover.

HOUSING.

The objects of a Sanitary Authority are of two kinds—one, the removal or renovation of insanitary property, the other, the provision of suitable dwelling houses in place of those not fit for habitation.

A little reflection shows that a pursual of a policy which results in the necessary demolition of certain houses will, unless private effort is prepared to supply the deficiency, bring Local Authorities face to face with the question of rehousing the dispossessed tenants.

The necessary legal powers for dealing with defective housing conditions are found in the Housing and Town Planning Act of 1909, which amended many of the provisions of previous Acts, simplified procedure, and increased the powers of Local Authorities.

The Sections chiefly used are 15 and 17, the former restricted to houses of a certain rental and occupation, the latter applying to any house. By Section 15 owners can be compelled to keep their property in a reasonably habitable condition ; by Section 17, intended for more extreme cases, Closing Orders may be issued, and tenants can be removed from the houses within 14 days of the confirmation of this Order. The owner has the opportunity of endeavouring to render the house fit for human habitation, but if he fails to do this, after a definite period, he is cited to appear before the Council, to show cause why demolition should not follow.

Under Section 17, the L.G.B. have issued regulations with respect to the inspection of houses. The effects of these regulations is :

- (1) That inspection is compulsory.
- (2) That it must be carried out on definite lines.
- (3) That systematic records of the inspections shall be kept, and
- (4) That the Medical Officer of Health shall include in his Annual Report, information and particulars in tabular form in regard to the work done under this Section.

In making an inspection, the Officer doing it examines the state of the dwelling house in relation to the following matters :—

1. The arrangements for preventing the contamination of the water supply.
2. Closet accommodation.
3. Drainage.
4. The condition of the dwelling house in regard to light, the free circulation of air, dampness and cleanliness.
5. The paving, drainage, and sanitary condition of any yard or outhouses belonging to or occupied with the dwelling house.
6. The arrangements for the deposit of refuse and ashes.
7. The existence of any room which would in pursuance of Sub Section (7) of Section 17 of the Act of 1909 be a dwelling house so dangerous or injurious to health as to be unfit for human habitation.
8. Any defects in other matters which may render the dwelling house dangerous or injurious to the health of an inhabitant.

The inspection of houses is the main duty of one of your Inspectors, but all houses scheduled and reported upon under the above Sections have been personally inspected by myself. By this means I accept the responsibility of deciding whether a dwelling is or is not fit for habitation.

A matter for surprise is that whilst in many cases one finds owners only too willing to do what is required when the defects are pointed out to them by the Sanitary Authority, yet they rarely act on their own initiative. In this, as in many other matters, a little personal supervision would save much subsequent expenditure. When a visit is paid by owner or collector, it seldom gets beyond a conversation at the door, and is mainly devoted to the question of rent.

Generally speaking, the owner is or can be made amenable to the law, and the greatest difficulty occurs with a certain type of tenant, who makes no attempt to observe the decencies and obligations of occupation. I see no reason to modify opinions which I have previously expressed with regard to the "dirty tenant," and only wish it was as easy to deal with him as it is with the neglectful owner.

In asking who is to blame for the conditions under which many people live, I fear a satisfactory answer will be difficult. It is often due to economic reasons. Old houses fall out of repair, and the owner does not possess the necessary capital to renovate or rebuild. No doubt there are faults both on the part of landlords and of tenants, and it probable that a bad landlord creates a bad tenant, and vice versa. Each ought to realise and carry out their responsibilities in this important matter. A distressing feature is that many people neither care where or how they live if the rent is low, and this does not apply solely to those who can only afford a very little, but many who could afford more, will not, preferring rather to apply their money to more selfish purposes than to the improvement and comfort of their homes and the welfare of their children. This is the salient outstanding fact, the apathy and indifference to a better and cleaner mode of life, which has beset a large section of the population. They are ready enough to grumble, but they will not move to help themselves, and will misuse a drain or foul a privy, and then loudly protest that the condition is unhealthy.

In connection with the question of housing, and having a very important bearing on its standard and sufficiency is the subject of casual labour. Of this there is obviously a large quantity in Chatham. The census returns of 1911 showed that under the head of General and Undefined Labourers, the number was 1370 for Chatham, 827 for Gillingham, and 604 for Rochester. Calculated on the census populations, the following significant percentages are obtained :—

Chatham	3·2	per cent.
Gillingham	1·5	„ „
Rochester	1·9	„ „

or about 50 per cent. more in Chatham than in adjoining Boroughs. The large proportion of casual labour found during an inquiry made in 1913 respecting an insanitary area on the Brook bears this out, and tends to show very clearly that there is a relationship between casual labour and defective housing. In the course of this inquiry I discovered that excluding publicans, proprietors of

lodging houses and shopkeepers, there were, out of 120 people in regular and casual occupation, only 6 earning more than 30s. a week. The exact percentages were as under:—

Earning over	25s. weekly.....	10 per cent.
„ under	25s. „	90 „ „
„ „	20s. „	55 „ „
„ „	15s. „	37 „ „

The latter group might be further subdivided into one where the average earnings are under 10s. a week.

Casual labour has always in association uncertainty of work and of wages, together with careless and improvident habits.

Its prevalence may not be the whole and sole cause of the “Housing Problem,” which is the result of various complex conditions, but it is a very prominent factor in the matter.

Given the existence of a large class of people whose employment is casual and irregular, whose wages are low, many unemployed and incapable, and who for these reasons cannot afford to pay more than a very small rent, still they must be housed, and in some cases they solve the question for themselves by the method of house sharing, or of renting so called furnished rooms, both undesirable.

The question arises, can or will private owners erect houses to let at rents within the means of this class of people? If this question cannot be answered in the affirmative, then one of three things must occur.

The first is, they must go on living as they are doing.

The second, their present dwellings must be altered.

The third, more suitable dwellings must be built.

The first alternative cannot be entertained, the second only partly meets the evil, the third, although it brings about a radical alteration for the better, carries with it certain complications, not the least being an obligation on the part of the Local Government to provide dwellings of a better character, after or during the clearing away of unhealthy ones.

There can be no doubt that bad housing is an extravagance. It tends to increase both the sickness and death rates; it impairs the working capacity, and in the long run increases the expenditure on institutions which deal with the ultimate results of these conditions. There can be no greater stimulus to the prosperity of a District than the provision of suitable and sanitary dwellings for all classes of its population.

OVERCROWDING.

The number of cases of overcrowding reported during 1914, was 15. 7 Notices were issued.

Each case has to be dealt with on its merits, and with regard to the house accommodation available. The amount of rent which the family income will permit has also to be considered. In some instances leniency has to be shown, as removal means merely a change of quarters and not an actual abatement of the nuisance. The working standard adopted is that of the Registrar General, namely, more than 2 persons per room.

The following figures taken from the Census Report of 1911 are interesting. They are confined to houses with less than 6 rooms.

CHATHAM.—

	Total	Total Population	Overcrowded	Percentage
1 Room Tenement	184	295	21	11·4
2 " "	478	1,185	31	6·5
3 " "	728	2,570	70	9·6
4 " "	1,650	6,542	41	2·5
5 " "	3,001	13,254	13	·4

Total of tenements with more than 2 occupants per room, 174.
Population, 1314.

Proportion per cent. to population in private families, 3·4

Before detailing the work carried out in connection with housing, the subject of the Brook area calls for consideration. Pending the final decision of the Council as to the best method of dealing with the insanitary conditions there existing, it may be remarked that if owing to financial considerations, shortage of labour, and the high prices of materials, hesitation is felt in acquiring, clearing, and rebuilding on even a portion of this area, then a large number of houses must be dealt with under Sections 15 and 17 of the Housing Act.

The real difficulty of any procedure is that one cannot indefinitely close and demolish houses unless steps are taken for the rehousing of the dispossessed tenants. Neglect of this must lead to overcrowding.

At all events, the real question for a Health Official to decide is whether a house is or is not fit for habitation. If he is convinced that it is not, no other considerations should prevent him from giving expression to his opinion.

Housing defects discovered in the inspection of various classes of property resolve themselves into such as are inherent in the building itself, and such as result from mismanagement by the occupier.

Many of the defects common to the first class render good management difficult.

In many working class dwellings the ingenuity of the designer seems to expend itself in the external appearance of the house, and as regards the planning of the interior he rarely breaks away from conventional ideas. A list of imperfections would include :—

Want of cupboard room, and of suitable storage for food.

Defective lighting of staircases.

Defective ventilation.

Back extensions with very small bedroom over ; the attic and floor space being further diminished by the presence of a double bed.

The provision of indoor coppers, which when used only fill the house with steam.

The small parlour and kitchen instead of one large comfortable apartment.

The absence of sinks, and insufficient water supply.

The absence of provision for a hot water supply.

The use of paper on walls.

The arrangements for refuse disposal and privy accommodation.

Inefficient firegrates.

Windows which will not open.

In the more recently constructed houses there is in some directions an improvement, especially in regard to the provision of sinks, water supply, privy accommodation, windows, and ventilation.

The following Table shows the number of premises where improved ventilation has been secured by the provision of extra windows.

The gain in comfort, health and cleanliness is much appreciated by the majority of the occupants.

WINDOWS PROVIDED.

No. of Houses.	Premises.	Sect. 17	Sect. 15	Voluntarily.	Total.
5	Caroline Square			13	13
11	Russell Square			11	11
5	Millers Court		5		5
8	Hards Town	6	6		12
2	Old Road		2		2
5	Union Yard		5		5
1	Hill View Cottages		1		1
1	Jenkins Place			1	1
1	Best Street		1		1
4	Cross Street			8	8
		6	20	33	59

The following Tables, drawn up in accordance with Article V. of the Housing (Inspection of District) Regulations give particulars of the work carried out in respect to housing during 1914 :—

Tabular statement showing :—

Number of Dwelling Houses inspected under Section 17 (1909)	22
Number of houses which were considered unfit for habitation	22
Number of Representations made with a view to a Closing Order being made	22
Number of Closing Orders made	22
Number of houses....defects remedied without Closing Orders	0
The number of houses....after Closing Orders served....made fit	14

GENERAL CHARACTER OF DEFECTS.

1. Back to back.
2. Non through ventilation.
3. Insufficient W.C. accommodation.
4. No sinks.
5. No water inside houses.
6. Dampness.
7. Dilapidated.
8. Unpaved yards.

Number demolished	0
Houses (cited to appear)	3

SECTION 17, HOUSING AND TOWN PLANNING ACT.

Houses reported under the Housing and Town Planning Act,
Section 17 :—

8, 8a Hards Town	Renovated and through ventilation provided.
1 James Street	
3 James Street	Converted into one house.
14 Richard Street	
22, 22a Hards Town	Converted into one house.
26, 26a Hards Town	Converted into one house.
30, 30a Hards Town	
9, 9a Rhode Street	Converted into one house.
18 Mill Lane	House renovated.
12, 14 Old Road	Houses uninhabited. The consideration of demolition left in abeyance till ease falls in.
37, 39, 45 Prospect Place	Owner cited to appear the Council, Jan. 21st, 1915.
279, 281 High Street	Work in hand.
23 Charles Street	Notice not expired.
In abeyance for Pumping Station (Main Drainage	6
Work not completed	8
Houses standing on Books, December 31st, 1913	75

Of the houses standing on Books, December 31st, 1913, the undermentioned were demolished in 1914.

12, 13 Jenkin's Dale.
57, 57a Best Street.
59, 59a Best Street.
61, 61a Best Street.
63, 63a Best Street.
27 Richard Street.
2 & 3 Bishops Court.
6 & 7 Slicketts Hill.
25 Brook.
4 Solomons Terrace.
1, 2, 3, 4 Solomons Square.

The following statement shows the total number of houses inspected and reported upon during 1914 :—

Number of houses inspected.....	261
Number of houses reported	
Section 17	22
Section 15	119
Number put in fit state, Section 15	82
Number outstanding, Section 15	37
Number demolished, Section 15	0

Eleven of the 37 outstanding are held in abeyance, having been referred to the Education Committee.

Number dealt with under the provisions of
the Public Health Acts, 1875 and 1890 120

Many houses in which the defects were of a slight character, and where sinks were required, were dealt with under the last named Acts.

NEW BUILDINGS, 1914.

Plans were approved for the erection of 67 new houses and 16 shops.

Plans for alterations to existing premises, 26.

PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BYE LAWS OR REGULATIONS.

REGISTERED COMMON LODGING HOUSES.

Number on Register, December, 1914	16
,, of Notices served	17
,, of cases of Infectious Disease ...	1
Total number of beds provided, single ...	404
double ..	15

These premises are regularly inspected, and surprise visits are also paid, and evening visits in order to check overcrowding. At present the accommodation is in excess of the demand. The usual price of a bed is 4d. per night, and in some cases better accommodation and more comfort is provided for 6d.

The minimum cubic space per inmate is 300 cubic feet.

Reports regarding defects have been made at intervals during the year, chiefly referring to neglect of linen-washing, want of cleanliness, defective paving, broken ceilings, etc.

HOUSES LET IN LODGINGS.

Number on Register	34
„ removed from Register in 1914 ..	8
„ added to Register in 1914	1

The supervision of these houses, especially in regard to overcrowding, and attention to Bye Laws is very important.

The standard of cubic space is for

Adults, in rooms occupied day and night	400
Children under 10 ditto	20
Adults, in rooms occupied at night only	300
Children under 10 ditto	150

The Bye Laws give powers in addition to the above respecting the cleansing of rooms, staircases, windows and woodwork, ventilation, water supply, drainage, excrement and refuse disposal, and periodical lime washing, and infectious diseases.

The landlord also furnishes to the M.O.H. the information requested in the following form.

FORM 2.

Information supplied in accordance with the requirements of Bye Laws relating to Houses let in Lodgings, or occupied by members of more than one family.

Premises.

Name of tenant.

Rent of premises.

Total number of rooms in house.

Number of rooms let in lodgings.

The occupation of the rooms is as follows :

SLAUGHTER-HOUSES.

Number on Register, including 1 Licensed Slaughterhouse	14
Number in use	13
Notices and Intimations served	
For Cleanliness	10
„ Repairs	1

There are no premises controlled by Bye Laws which are more important than Slaughter-houses. A condition of cleanliness and good order is necessary not only for the security of food, but for the prevention of nuisance to surrounding dwellings. The effect of

constant inspection and supervision is that as a general rule they are well kept and clean, and it is only by constant inspection that this result is attained.

In spite of every effort, it is impossible to extend the same degree of supervision over private slaughter-houses, situated in different parts of the district, as it would be if there was a Public Abbatoir in existence. The advantages of such an institution to the public cannot be gainsaid, and to all butchers desirous of selling good meat it offers a guarantee. Until compulsory powers for closing private slaughterhouses are granted, I see no prospect of the erection of a Public Abbatoir.

There is one Horse Slaughtering establishment, situated in the rural part of the Borough, and well away from all dwellings.

The Bye Laws in respect to Slaughter-houses were amplified at my suggestion during 1914, in order to meet the difficulty of slaughtering animals at any day or time that the owner of the slaughter-house chose to fix. By this means it was quite possible to bring in animals of inferior quality, and to kill them at such times that it was impossible for your officials to be cognisant of the procedure, and by the time an official appeared on the scenes, all suspicious organs, etc., had been removed. There is no doubt that a surreptitious trade of this character was being carried out, and I trust that the new Bye Law will render this more difficult. The Bye Law is in substance as follows :—

No animal shall be slaughtered between the hours of 11 p.m. and 7 a.m. during the months of October to March inclusive, or between 11 p.m. and 5 a.m. during the months April to September inclusive, or at any time of the day or night on a Sunday, without giving at least one hour's notice in writing on week-days, and three hours on Sunday to the Inspector of Nuisances. The 14 days preceding Christmas Day are exempt.

This Bye Law came into force at the end of August, and since then 5 Notices have been received, and in each case a visit was made at the time of slaughtering.

The routine work of the Inspector charged with this duty, who is a certificated Meat Inspector, is carried out on the following lines :—

He attends the Cattle Market at Rochester every week, and is enabled to see the character of the animals purchased, and to note their destination, and he is instructed to pay particular attention to the future of poor and inferior priced animals. He

also attends at one or more slaughter-houses at the time of killing.

Many butchers now give notice of any suspicious animal, and are ready to surrender if disease be present.

In connection with this subject, the Butchers' Insurance Association established two years ago a scheme by which butchers who buy an animal over £12 in value are indemnified if the carcass should turn out to be diseased and not suitable for food. The effect of this procedure has been to check the sale of inferior animals in the open market, and it removes the tendency to conceal diseased meat, which must exist when its discovery results in complete loss.

In the statement of the Inspector of Nuisances will be found a summary of meat seized.

CONTAGIOUS DISEASES (ANIMALS) ACT.

There is a special Committee for the administration of this Act, and the chief Officials concerned are the Veterinary Surgeon, the Inspector under the Act, and the Police.

The usual procedure is for the owner of a suspected animal to give notice to the Police, who notify the Board of Agriculture and Fisheries by telegram, and also notify the Local Authority. It is then the duty of the Local Inspector to serve a notice on the owner, a copy of which is forwarded to the Central Authority, and to the Police. This notice remains in force until modified or removed by an Officer of the Board.

During 1914, six cases of suspected Swine Fever were reported, four of which were confirmed by the Board.

NOTICES SERVED.

Form A. Articles 2 & 19	6
„ B. „ 4 & 19	2
Article 8 (5)	
Notice to cleanse and disinfect or burn and destroy	4
Total	12

TUBERCULOSIS ORDER 1913.

This order came into force on May 1st, 1913.

Under its provisions owners of cattle are compelled to notify to the Local Authority the suspected existence of Tuberculosis of the udder, and Tuberculosis with emaciation, in any of their

animals. Veterinary Surgeons attending such animals are also required to notify.

On receipt of notification, the Veterinary Inspector of the Local Authority examines the whole herd, and if the disease in either form exists animals are slaughtered after a valuation for compensation has been made.

Provision is also made for the detention and isolation of suspected animals and for prohibiting the sale of suspected milk.

One case occurred, and was dealt with under the above order.

FOOD AND DRUGS ACT.

The administration of this Act is in the hands of the County Police. Samples are taken by the Superintendent or by an Officer deputed by him, and are sent to the County Analyst at Maidstone for examination.

Return of samples taken in Chatham under the Food and Drugs Act during 1914.—

New Milk	94
Butter	20
Margarine	14
Mustard	1
Lard	11
Jam	4
Whiskey.....	14
Cocoa	3
Flour	1
Cheese	1
Gin	5
Brandy.....	5
Olive oil	1
Tea	2
Cream.....	1
Pearl barley	1
Glycerine	2
Boric Acid Ointment	1
Demarara Sugar	1
Rum	1
Liniment of Camphor	1
Citric Acid	1
Cod Liver Oil	1
Coffee	1
Tapioca	1
Total	188

Proceedings were taken in 8 cases, in all of which convictions were obtained.

Offence		Result.	
Sample 1.	Margarine not duly branded or marked	Fined £2 and costs.	
„	3. Milk with 3·14% added water	„ £1	„ „
Sample 2.	Butter deficient of fat, etc...	„ £2	„ „
„	4. „ „ 6% added water .	„ £2	„ „
„	5. Whiskey not of quality demanded	„ £1	„ „
„	6. Milk deficient of Milk Fat to extent of 6·6%	„ £1	„ „
„	7. Milk, 21% deficient of fat...	„ £1	„ „
„	8. Milk with 16·7% added water	„ £1	„ „

MILK AND CREAM REGULATIONS, 1912.

There have been no prosecutions under there regulations during 1914.

DAIRIES, COWSHEDS, AND MILKSHOPS.

Number of Registered Cowkeepers	11
Number of Registered Dairymen and Purveyors of Milk	44
Number of Cowsheds in use	14
„ „ not in use	5
Demolished „ „	1
Number of Dairies	12
„ „ Milkshops	32

The Dairies, Cowsheds and Milkshops Order, 1885 (amended 1886 and 1889) applies to England and Wales, and the Regulations issued by the Local Government Board have the following objects :

- (a) The inspection of cattle in dairies.
- (b) For prescribing and regulating the lighting, ventilation, cleansing, drainage, and water supply of dairies and cowsheds occupied by cowkeepers or dairymen.
- (c) For securing the cleanliness of milk stores, milkshops, and milk vessels, used for containing milk for sale by such persons.
- (d) For prescribing precautions to be taken by purveyors of milk, and persons selling milk by retail, against infection or contamination.

Inspections are of a dual character ; one being with regard to the health and condition of the cows, and the other with regard to the sanitary conditions embodied in the above order.

The Veterinary Inspector (Mr. E. Ebbetts, M.R.C.V.S.) visits the sheds every three months, and examines the cows.

He reports on a special form for each cowshed, the points noted being

1. Signs or symptoms of Tuberculosis.
2. Disease of udder or teats.
3. Any other illness.
4. Cleanliness of animals.

The Sanitary Inspections are made by myself and the Chief Sanitary Inspector, and frequent irregular visits are also made. For recording the results of these inspections a system of marking has been adopted, which renders it easier to see where defect exists, and the proper remedy.

The effect of inspection is to secure a certain standard of cleanliness, but even in the best managed establishments there is room for improvement.

The chief faults are due to non-removal of manure from the sheds, to imperfect cleansing of floors—all of which add to the difficulty of keeping the animals clean, and to the fact that the process of milking is carried out by men whose other occupations are not of a character to ensure personal cleanliness.

The Registered Milkshops are regularly visited, and compliance with the regulations is enforced.

The operation of the Milk and Dairies Bill, passed in 1914, has been postponed.

Four samples of milk examined for Tubercle bacilli gave no evidence of disease.

OFFENSIVE TRADES.

There are two classes of offensive trades carried on in the Borough, viz., Gut Scraping and Fish Frying.

Gut Scraper.....	1
Fish Fryers	25

The Gut Scraping business is on the outskirts of the District, and well away from dwellings.

With regard to Fish Frying, frequent visits are paid by an Inspector to see that bye laws and regulations are complied with.

COWSHEDS.

In use	14
Not in use	5
Demolished (by storm)	1
Dairies	12
Milkshops	32
Number of Registered Cowkeepers	11
Number of Registered Dairymen and Purveyors of Milk.....	44
Number removed from Register	0
Number of Stat. Notices served	8

FISH OFFAL COLLECTION.

Number of Shops collected from	
(1) Fried Fish Shops	15
(2) Ordinary Fish Shops	3
Approximate amount of Fish Offal collected during the year	156 tons.

INFECTIOUS DISEASES.

Number of Loads of Bedding disinfected.....	335
Number of Library Books disinfected	35
Work prohibited in homes of Outworkers (Temporary)	21

OVERCROWDING.

Notices served for overcrowding	7
---------------------------------------	---

OBNOXIOUS TRADES.

(1) Gut Scraper	1
(2) Fried Fish Business (Fryers)	25
Notices served (a) Repairs.....	1
(b) Cleanliness	3

ASHBINS.

Number of Notices issued	42
Number of Bins provided	16

REGISTERED COMMON LODGING HOUSES.

Number on Register December, 1913	16
Number on Register December, 1914	16
Number of Notices served	17
Number of cases Infectious Diseases	1
Paving and Drainage.....	3
Further ventilation	1
Repairs	4
Cleanliness	9

HOUSES LET IN LODGINGS.

Number on Register	34
--------------------------	----

NOTICES AND INTIMATIONS SERVED.

For cleanliness	2
For repairs	4
Number removed from Register in 1914	8
Number added to Register in 1914	1
Number provided with through ventilation ...	0

SLAUGHTER-HOUSES.

Number on Register	14
Number in use	13

NOTICES AND INTIMATIONS SERVED.

For cleanliness	10
For repairs	1

BAKEHOUSES.

Number of bakehouses	
Workshop bakehouses	
Factory bakehouses	3
Underground	
Number of bakehouses in use	20
Notices served	4

UN SOUND FOOD, 1914.

The following has been surrendered during the year :—

Beef Carcases	6
Sheep „	5
Pig „	3
Edible Organs	15
Round of Beef	40 lbs.
Rabbits, foreign, case	1

FISH.

Mackerel, boxes	1
Haddock, Fresh, trunks	3
Plaice, trunks	1

VISITS.

Common Lodging Houses	194
Cesspool Work	71
Complaints and General Nuisances	120
Drainage Work	291
Factory and Workshop Act	99
Housing and Town Planning Act	420
Houses let in Lodgings.....	128
Homes of Outworkers	1,086
House to House Inspection	261
Infected Houses	588

NOTICES SERVED.

Preliminary Notices	120
Public Health Act '75. Section 91.....	84
" " 41.....	1
" " 36.....	42
(a) Dust Bins	
(b) Sufficient w.c.'s	24
Public Health Act, '75. Section 49 & 50 ..	0
P.H.A. Amendment Act, 1890, Section 22...	0
" " 1907 " 25...	15
" " " 35...	3
" " " 37...	0
" " " 43...	0
" " " 45...	0
Housing and Town Planning Act, " 77...	22
" " " 15...	100

SUMMARY OF NUISANCES ABATED.

Accumulation of manure removed	21
Bell traps removed	8
Broken w.c. pans renewed	10
Brick drains removed	3
Concrete yards repaired	45
Concrete yards provided	39
Cesspools constructed	96
Cesspools ventilated.....	96
Cesspools enlarged or repaired	54
Closet structure built or rebuilt	83
Drains repaired.....	21
Drainage to new buildings inspected	101
Drainage to old buildings inspected	146

Further water supply provided	75
Flushing cisterns provided	50
Houses with old drains replaced with new ..	49
Houses with privies supplied with drainage .	146
New sink waste drains	83
Overcrowding abated	7
Keeping of animals in unfit state	12
Privies repaired	38
Privies filled in	146
Panned and trapped closets provided.....	146
Sinks provided	75
Stables undrained	2
Urinals built or repaired	2
Choked drains cleared	309
Wash houses provided.....	23
Ventilation provided under floors	4
Manure pits provided	6
Manure pits renewed	20

C.—SANITARY ADMINISTRATION OF THE DISTRICT.

The following staff is employed in carrying out the duties under the above head :—

- 1 Medical Officer of Health.
- 1 Chief Inspector of Nuisances.
- 2 Assistant do.
- 1 Clerk.
- 1 Disinfector and Mortuary Attendant.
- 1 Foreman of Yard and Cesspool Work.
- 1 Nurse for work in connection with Notification of Births Act.

Besides a varying number of men employed in the work of emptying cesspools and privies, average number, 26.

The Inspectors of Nuisances work under the supervision of the Medical Officer of Health. Each Inspector is charged with certain general duties, which he carries out as a matter of routine, in addition to special matters which constantly require urgent attention. It may happen from time to time that extra attention is required in connection with one or other branch of administration, for instance, if there is an undue prevalence of infectious disease, the time of an Inspector may be almost entirely occupied in connection with it.

The duties of the Health Department need the constant supervision of the Sanitary Staff at my disposal.

One Inspector was called up for service at the outbreak of War, and a number of men employed in sanitary work also joined the colours. The Inspector's services were only lost for a short period, and owing to the urgent necessity of efficient sanitary inspection he was permitted to resume his ordinary duties.

The general routine of work has been so arranged that special attention is given to billets and hired premises occupied by troops. Several of these I have personally visited, and all conservancy work required is treated as an emergency matter, and receives prompt attention.

The utmost cordiality prevails between the Civil and Military Authorities, and your Medical Officer of Health has been consulted in respect of various questions likely to affect the health of the troops quartered in the district.

ADOPTIVE ACTS IN FORCE IN THE BOROUGH.

The Infectious Diseases Prevention Act, 1890.

Public Health Amendment Act, 1890.

Public Health Amendment Act, 1907.

Notification of Births Act, 1907.

Included in the statement of the Inspector of Nuisances which is incorporated in this Report is a list of notices served under

Sec. 22, Public Health Amendment Act, 1890, and
Sections 35, 37, 43, Public Health Amendment Act, 1907.

BYE LAWS.

The following Bye Laws and Regulations are in use :---

1. New streets and buildings.
2. Drainage of existing buildings.
3. The cleansing of footways and pavements, the removal of house refuse, the cleansing of earth closets, privies, ashpits and cesspools.
4. Nuisances.
5. The removal of offensive matter through the streets.
6. The duties of the occupier in respect of house refuse.
7. Offensive trades.
8. Slaughter-houses:
9. Common Lodging Houses.
10. Houses let in lodgings.
11. Tents, vans, sheds, and similar structures used for human habitation.
12. Mortuary Regulations.
13. Dairies, Cowsheds, and Milkshops regulations.

CHEMICAL AND BACTERIOLOGICAL WORK.

Chemical Analyses of Food, Drugs, etc., are carried out by the County Analyst, and in this District the administration is in the hands of the County Police.

Bacteriological work is performed at the County Council Laboratory at Maidstone. The work is of a comprehensive character, including inquiry into infective diseases, skin affections, water contamination, syphilis, food poisoning, milk, and under special circumstances examination of air, soils, sewage effluents, etc.

The system in operation works well, and results are promptly forwarded in duplicate—one to the practitioner forwarding the specimen, and one to the Medical Officer of Health.

The following Tables shows the number of specimens sent during 1914, and the results of examination :—

	Total No. forwarded	No. giving Positive Results.	No. giving Negative Results.
Diphtheria	184	71	113
Enteric Fever	12	4	8
Pulmonary Tuberculosis	82	26	56
Ringworms	17	10	7
Cerebro-Spinal Meningitis	1	1	
Milk (for Tubercle)	4		4
Total	300	112	188

Of the Diphtheria specimens, 12 were suspicious cases discovered at School, and sent by myself. All the Ringworm cases were sent by the School Medical Officer.

I am glad to note that Medical Practitioners are availing themselves more largely of the advantages of Bacteriological examination. Respecting diseases such as Diphtheria or Enteric Fever, which vary in prevalence, little reliance can be placed on the figures, but in the case of Pulmonary Tuberculosis, which is not subject to the same variation, a considerable increase is shown.

1912.....	26 specimens.
1913.....	51 „
1914.....	82 „

D.—PREVALENCE AND CONTROL OVER ACUTE INFECTIOUS DISEASES.

Infectious Diseases are NOTIFIABLE and NON-NOTIFIABLE.

To the list of notifiable diseases has been added "Ophthalmia Neonatorum," an infective inflammation of the eyes occurring in the newly born. This disease became compulsorily notifiable on April 1, 1914.

Table II., appended to the Report shows the number of cases of Infectious Disease notified during 1914 in each division of the Borough.

Including Pulmonary and Non-Pulmonary Tuberculosis, the total number of cases notified was 491.

The subjoined Table shows the number of yearly notifications from 1905 to 1914 :—

1905	117
1906	302
1907	208
1908	197
1909	124
1910	173
1911	349
1912	605
1913	424
1914 ⁷	491

The large increase first noted in 1911, and continued is due to two reasons—one, the inclusion of Tuberculosis, and the other, the prevalence of Scarlet Fever and Diphtheria.

The following Table shows the monthly prevalence of Infectious Diseases during 1914.

Month.	Scarlet Fever.	Diphtheria.	Enteric.	Totals.
January	9	22		31
February	5	30		35
March	8	22		30
April	3	10	3	16
May	5	9		14
June	9	12	1	22
July	8	6		14
August	15	7		22
September	2	19	1	22
October	19	20	2	41
November	14	25	1	40
December	16	27	1	44
	113	209	9	331

Included in the above totals, there were 15 cases which were admitted into the Isolation Hospital, and which proved to be wrongly diagnosed. They were as follows :—

Scarlet Fever	6 cases
Diphtheria ?	7 „
Enteric Fever	2 „

The mortality from Acute Infectious Diseases and including Diarrhœa and Enteritis is shown below :—

Scarlet Fever	1	1	Nil
Diphtheria and Mem- branous Croup . . .	8	23	+15
Enteric Fever	2	1	—1
Measles	10	18	+8
Whooping Cough	4	3	—1
Diarrhœa and Enteritis	22	38	+16

The general administrative measures for dealing with Infectious Diseases are as described in former Reports.

A Return of all cases is sent every week to the Local Government Board and the County Council, and a weekly Circular is also received from the Local Government Board showing the number of cases of infectious disease notified in all districts of England and Wales.

A Return of cases is also sent weekly to the chief Naval and Military Medical Officers.

HOSPITAL ACCOMMODATION.

The Hospital for the isolation of Infectious Cases is situated in Rochester, and is used jointly by the two Boroughs. It has accommodation for 80 patients, and observation wards for doubtful cases. The diseases treated are Scarlet Fever, Diphtheria and Enteric Fever.

There is a separate building for the isolation of Small Pox.

The present day difficulty is not in urging patients to enter the Hospital, but in finding accommodation for those willing to go. The true function of an Isolation Hospital should be clearly understood. It exists in order to prevent disease, rather than to treat all individuals who contract disease. It is impossible to maintain such a number of beds as will accommodate all cases during excessive prevalence of disease, and frequently admission has had to be refused, and the result is that when a large number of cases are notified the percentage of admission declines, and then preference is given to those cases where home conditions and other circumstances render home treatment unsuitable.

During the Autumn of 1914, extra pressure on the accommodation was felt, owing to the occurrence of several cases of Scarlet Fever amongst men of the Royal Navy. This has now been relieved, and cases are admitted into the Royal Naval Hospital. Owing to the presence of large numbers of troops in the District, the War Office has made arrangements for the reception of infectious diseases occurring amongst soldiers at a fixed rate of contribution, and in order to meet the extra accommodation which may be necessary have offered to erect temporary buildings on existing sites on terms which will render it easy for Local Authorities to co-operate on this very important matter.

On no account should overcrowding take place in the wards of an Infectious Hospital.

The total percentage of cases admitted was 53.

DISINFECTION.

Clothing, bedding, etc., is disinfected by current steam in a Thresh's Steam Disinfecting Apparatus.

The bedding is removed in a specially constructed van, and suitable overalls are worn by the disinfectors.

Rooms are fumigated by formalin vapour or sulphurous acid gas.

Enteric Fever excreta are treated with a solution of Perchloride of Mercury, and Izal is supplied on application for use with sputum of Tuberculosis.

Regarding the efficiency of Steam Disinfection, I have no doubt ; but as regards Room Fumigation, I am less certain, and think that free ventilation, soap, water and scrubbing would be equally efficacious. Owing to the large number of requests for disinfectants received at the Sanitary Depot, for the mere purpose of pouring down drains, etc., and as a substitute for cleanliness, it was found necessary to put a check on this indiscriminate distribution, and disinfectants are now only supplied on a written order signed by myself or an Inspector, who is satisfied by actual observation that they are required.

SCHOOLS AND INFECTIOUS DISEASE.

The aggregation of children at Schools has an important relation to the prevalence of infectious disease, and any prevalence

of certain acute diseases such as Scarlet Fever, Diphtheria, or Measles, renders investigation on School incidence imperative. The general rule is to exclude all known cases, and children from infected houses, and to search for contacts and exclude them also.

Complete School Closure is rarely required, and has not taken place during 1914.

The Head Teachers of the School attended by me are informed of all notifiable diseases, and all children from infected houses are excluded for definite periods.

Teachers are supplied with a printed schedule of the various infectious diseases. This shows the early symptoms and appearances presented by children recently attacked, the mode of onset, the incubation period, the day and appearance of rash and the period of isolation for (1) those attacked ; (2) those who have been in contact with the patient.

The general sanitary condition of Elementary Schools is dealt with in the Annual Report of the School Medical Officer.

NOTIFIABLE INFECTIOUS DISEASES.

SCARLET FEVER.

The number of notifications received was 113. Of these, 6 were cases of mistaken diagnosis, and were withdrawn, reducing the total to 107.

The number of households affected was 93, and 74 cases were removed to the Isolation Hospital.

In St. Mary's Ward there were 13 cases

„ Luton	„	80	„
„ St. John's	„	14	„

45 per cent. of the cases were notified during the last quarter of the year.

Regarding its prevalence, and the difficulty of restricting its spread, I have nothing to add to my remarks in last year's Report.

In one instance where the whole family including parents were affected, and no cases could be received into Hospital, I made arrangements for the daily purchase of household necessities by an Inspector. It should be noted that the father declined admission for the first case, which could have been taken to Hospital.

In the following Table will be found particulars of Scarlet Fever during the past ten years :—

YEAR.	Total No. of cases notified.	No. under 5 years.	Deaths registered	Treated in Hospital.	Attack rate per 1,000 of Population.	Mortality per 1,000.	Percentage removed to Hospital.
1905	42	8	1	32	1.02		71
1906	200	54	1	149	4.8	.002	75
1907	81	33	4	67	1.9	.009	83
1908	81	29		56	1.8		69
1909	87	31	4	63	1.9	.009	70
1910	34	5		30	0.8		81
1911	145	35	3	88	3.4	.007	60
1912	207	36		131	4.8		63
1913	96	22	1	65	2.2	.002	68
1914	107	17		74	2.5		65

DIPHTHERIA AND MEMBRANOUS CROUP.

The diminution in Diphtheria during 1913, after its excessive prevalence in 1912, has not been continuous, and an increased number of cases were reported during 1914. On several occasions it was not possible to admit cases to St. William's Hospital.

The number of notifications received was 209, but 7 were cases of mistaken diagnosis. Actual number, 202.

Number of deaths registered, 23.

The numbers in each locality were :—

St. Mary's Ward.....	37
Luton Ward	123
St. John's Ward	42

The age groups of cases notified were as follows :—

Under 5 years	42
5 and under 15 years	133
15 „ „ 25 „	19
25 and upwards	8
Number of households affected, 170.	

Removed to Hospital, 95—or 45.5 per cent.

Antitoxic Serum was supplied and administered in 96 cases.

Table showing cases notified and deaths from Diphtheria during the past ten years.

Year.	Cases Notified.	Deaths.	Death-Rate per cent. of cases attacked.
1905	25	2	8
1906	29	3	10
1907	30	4	13
1908	34	7	20
1909	65	16	23
1910	77	8	10
1911	74	5	6
1912	269	15	5
1913	139	8	5
1914	202	23	11

The quarterly notifications during 1914 were :—

1st Quarter	74
2nd „	28
3rd „	30
4th „	70

The incidence of the disease has been widespread, and has not at any time been confined to any particular school.

Sore throats in children, unless severe, are often neglected by parents, and inquiries into the causation of Diphtheria often reveal a history of antecedent sore throats, which have not been treated.

I am glad to state that the advantages of Bacteriological diagnosis have been utilised more frequently than in past years. The numbers are given in another section of this Report.

Antitoxin is supplied free of charge, and is stocked at the Town Hall, and at the Fire Station. It can be obtained at any hour of the day or night.

I cannot help feeling that a more extended use of this valuable remedy would both limit the duration of an attack, and also lessen the mortality from Diphtheria.

The minimum dose to be administered is 4,000 units, and assuming that this quantity was given in each case for which it was supplied only 23 per cent. were so treated.

I can only point out this unsatisfactory feature, and hope for future improvement.

The precautionary measures adopted in addition to isolation are the exclusion of all contacts, of cases of sore throat occurring amongst school children, and a search for Diphtheria carriers.

ENTERIC FEVER.

Number of cases notified, 8.

Number of deaths, 1.

Table showing the number of cases of Enteric Fever, and of deaths from Enteric during the past ten years :—

Year	No. of Cases	No. of Deaths
1905	26	7
1906	51	6
1907	78	14
1908	51	8
1909	18	3
1910	25	1
1911	15	2
1912	18	Nil
1913	8	2
1914	8	1

Of suspected cases, 12 were subjected to Bacteriological tests. The results were positive, 4 ; negative, 8.

In 2 cases the evidence pointed to shell-fish as the means of causation.

There were 2 cases of mistaken diagnosis.

There is accumulating evidence of the value of protective inoculation in this disease. The aim of this inoculation is not as some suppose, to introduce typhoid bacteria into the system, but to introduce certain chemical substances, which have the power of killing off any typhoid bacteria which may get into the tissues. In the majority of instances the protective influence lasts two years. The results of its use in our own and other armies show that in addition to sanitary measures, we now possess an additional weapon of defence against Enteric Fever, which will, I think, become largely used amongst the civil population in the event of any epidemic prevalence of the disease.

False statements about this treatment are being widely circulated. There is not the slightest doubt that it does protect men against typhoid fever. Its advocates do not claim that it is perfect, nothing is, but if fatigue is avoided and care taken for forty-eight hours after inoculation, the risks are infinitesimal.

ERYSIPELAS.

There were 35 cases notified, and there was 1 death.

CEREBRO-SPINAL MENINGITIS AND POLIO MYELETIS.

Notification received, 1.

This case occurred in the person of a female, aged 56, who was admitted into the Medway Union Infirmary.

I saw the patient with the Medical Officer, and took a specimen of Cerebro-Spinal Fluid. This was examined at the Kent County Laboratory at Maidstone, and the characteristic organism was found to be present.

No other case was reported, and full details were sent to the Local Government Board.

The causation of this disease is obscure, but its occurrence and spread is often associated with such insanitary conditions as dirt, overcrowding, and deficient ventilation.

OPHTHALMIA NEONATORUM.

This disease is the most recent to become compulsorily notifiable. The order came into force on April 1, 1914.

Number of notifications received, 7.

Medical practitioners, 5.

Certified Midwives, 2.

The disease is a very serious one, which attacks the eyes of newly born infants, and which is the cause of permanent damage to sight in many instances. This disastrous result, answerable for about one-third of the cases in schools for the blind, can be avoided by early and efficacious treatment, and by the use of preventive measures at the time of birth. For this reason it is highly important that midwives should realise the serious nature of the disease, and adopt routine measures of prevention.

In this District the supervision of midwives is no longer in the hands of your Council, and I am therefore not in a position to direct administrative measures. The disease often owes its origin to discharges of a purulent and infective character in the parents, and the use of preventive applications to the eyes of newly born children is not always successful. The difficulty of treating this disease when once established is very great, and owing to the swollen and inflamed state of the eyes and lids, satisfactory treatment at home is rarely secured. The regular, painstaking, skilful and frequent application of remedies is essen-

tial and this can only be secured in a Hospital., Local Authorities should be able to effect this object, and two or three beds could be kept for the purpose.

NON-NOTIFIABLE INFECTIOUS DISEASES.

The chief of these are Measles, Whooping Cough, Diarrhœa and Enteritis, all of which are often of a fatal character.

MEASLES.

18 deaths were registered, all of which occurred during the early part of the year.

The disease is now almost entirely absent from the District.

When prevalent, it is shown in the Mortality Returns, and information is also obtained from the schools.

Every week the Head Teacher of each department forwards to the Health Office a form giving the names and addresses of all children absent from school on account of Measles. In the Infant Departments all children from infected houses are excluded, and in the Boys' and Girls' Departments only those children who have not had the disease previously are excluded. Infected houses are visited, a leaflet of advice is given, and the Inspector is directed to advocate isolation, and especially the provision of adequate measures of treatment designed to prevent or to minimise the complications which render Measles such a fatal disease to young children.

The nature and onset of the disease is such that notification which has been advocated and adopted in some localities, has failed to be of any real service. The great hope of amelioration lies in better nursing and treatment. Every child who dies from Measles, dies either from Bronchitis or Pneumonia, which are particularly prone to occur.

Common sense would indicate that if a child is put to bed in a warm and well ventilated room, when the disease first shows itself, and is carefully watched and nursed, he will be less likely to develop these complications, and will be more likely to recover from them.

WHOOPING COUGH.

3 deaths were registered.

The remarks respecting Measles are equally applicable to this disease. The maximum infectivity of Whooping Cough is during the first fourteen days of the illness. After that period the "bacillus pertussis" is seldom found, and it is reasonable to infer that with its disappearance the infectivity diminishes.

E.—PREVALENCE OF AND CONTROL OVER TUBERCULOSIS.

Deaths registered :—

Pulmonary Tuberculosis	58
Tuberculous Meningitis	5
Other Tuberculous Diseases	14

Table showing deaths from Pulmonary and other forms of Tuberculosis for past 10 years :—

Year	Pulmonary Tuberculosis	Other forms of Tuberculosis
1905	63	14
1906	56	16
1907	56	19
1908	51	16
1909	39	20
1910	50	10
1911	64	9
1912	60	16
1913	52	20
1914	58	19

PULMONARY TUBERCULOSIS.

Primary notifications received during 1914, 99.

Apportioned as follows :—

Poor Law Cases	10
Hospital „	17
Private Practitioner Cases	72

They were thus distributed :—

St. Mary's Ward.....	19
Luton „	44
St. John's „	26
Workhouse Infirmary .	10

The age distribution was as follows :—

Under 1 year.....	2
1 to 5 years	2
5 „ 15 „	2
5 „ 15 „	12
15 „ 25 „	18
25 „ 35 „	19
35 „ 45 „	22
45 „ 55 „	17
55 „ 65 „	5
65 upwards	2

Sex.—Males, 49 ; Females, 50.

NON-PULMONARY TUBERCULOSIS.

Total notifications, 25, from	
Private Practitioners ..	17
Hospital Cases	7
Tuberculosis Dispensary	1

Distribution :—

St. Mary's Ward.....	8
Luton „	9
St. John's „	8

Ages :—

Under 1 year.....	1
1 and under 5 years	6
5 „ „ 15 „	8
15 „ „ 25 „	8
15 „ „ 25 „	6
25 „ „ 35 „	2
35 „ „ 45 „	1
45 „ „ 55 „	1

Sex.—Males, 13 ; Females, 12.

CLASSIFICATION.

Cervical or Axillary Glands	7
Joints	5
Peritoneum	3
Meninges	4
Other parts of body	6

Visits made by Inspector :

Primary Visits	124
Subsequent „	157
Houses Disinfected ..	49
„ Cleansed	9

Of the cases notified who received Institutional treatment, there were at

Hospitals	10
Infirmaries.....	10
Sanatorium	18

Many cases are treated for a time at home by private practitioners, and a proportion of these become Dispensary patients, or are admitted into Institutions for limited periods.

Respecting Dispensary treatment, I am indebted to the Tuberculosis Officer of the District for the following particulars :—

New Cases examined at Dispensary	74
Tuberculosis of Lungs diagnosed	46
Doubtful Cases	6
Chronic Bronchitis (? Tuberculous)	
Adults, 2 ; Children, 4	6
Surgical Tuberculosis (being also in 4 lung cases)	13
Diagnosed. No Tuberculous disease	7
Number of patients who have received Institutional Treatment, 1914	18
Number of patients who have received Dispensary Treatment, 1914	84
Total Attendances at Dispensary, 1914	1,144

The compulsory notification of all forms of Tuberculosis came into operation on February 1st, 1913, and the Regulations then made superseded all previous ones.

These present Regulations require notification under four heads, viz., A. B. C. D.

Form A. By Medical Practitioners for primary cases.

Form B. By School Medical Officers for weekly return of cases discovered in the course of medical inspection of school children.

Form C. Applies only to cases previously notified on Form A., and is for the use of Medical Officers of Poor Law Institutions and Sanatoria, to make a weekly return of cases admitted to their Institutions.

Form D. Similar to Form C., is a weekly return of cases discharged and of their intended destination.

ADMINISTRATIVE MEASURES.

These are concerned with the causation and prevention of disease, and with arrangements for its treatment.

In this District the latter provision is under County Administration, and the work of the Sanitary Authority is limited to the prevention of infection by endeavouring to secure improvement in the sanitary environment of the patient and of those in contact with him.

The methods adopted and the facilities given have been fully detailed in previous Reports. The work of visitation is always carried out by the same Inspector. This I regard as very useful and important.

Briefly the objects of Home Visitation are as follows :—

1. To secure adequate ventilation.
2. To urge the necessity of separate sleeping accommodation for the patient.
3. To see that sputum is properly disposed of, and to supply sputum flasks.
4. To see that the general sanitation is satisfactory, and that due cleanliness is observed.
5. To bring to the notice of the M.O.H. defective housing conditions.

Endeavours are made to secure the examination of as many contacts as possible, and on the recommendation of a medical man this can always be done at the Tuberculosis Dispensary.

A Register is kept of all children attending Elementary Schools who reside in infected houses, and arrangements are in force for their attendance from time to time at the Medical Inspection Clinic, whence, if necessary, they are referred to the Tuberculosis Dispensary for treatment.

There is no doubt that in the Tuberculosis Dispensary we have an organisation of very great utility, and I believe that before long an additional centre will be opened, which will be easily reached from Strood, Rochester, and a portion of Chatham.

The Voluntary After Care Committee, to which I alluded in my Report for 1913, still awaits formation.

One aspect of the Tuberculosis problem deserves special attention, and that is the treatment and nursing of advanced cases, especially in small and overcrowded dwellings. In these cases, where the patient is debilitated and coughing up large quantities of sputum, swarming with Tubercle Bacilli, the infectivity is at its greatest. The family resources are depleted owing to inability to work, and to the expense of a long illness, there is little prospect of recovery, and the rest of the household, especially the younger ones, are exposed to great danger of infection. It is in these cases especially that Institutional treatment is necessary, and in a few cases I have been able to secure it by inducing the patient to enter the Infirmary.

In my judgement, segregation of these advanced cases should be compulsory whenever in the opinion of the Medical Officer of Health the home surroundings and circumstances are unsuitable.

Again, in many cases the influence of poverty is felt, in the direction of a diminution of nourishing food. When the patient is an insured person it is possible to give help to some extent, but in many cases of non-insured persons this is not possible. The Medway Guardians recognise that it is always cheaper and better to expedite recovery and enable men to get back to work, and the practical application of these views is carried out by the Relieving Officers, who in any cases that I have brought before their notice, have given temporary help in the shape of Bovril, eggs, etc. Fresh air is very helpful, but good feeding is equally so. The more the problem of Tuberculosis is studied, the more are seen the difficulties which surround it both as regards preventive and curative measures. It is only by the careful recording of facts and by studying the results of the various theories and schemes which are being practised that definite conclusions can be formed. A few years ago the early abolition of the disease was looked forward to with confidence by the general public, and hopes which are gradually being shattered were built on the effects of Sanatorium treatment. I do not say that this is useless, but it has not and will not realise expectations, and so long as poverty and its associated conditions in the shape of cramped houses, insanitary surroundings, and insufficient food continue to prevail, so long will cases of Tuberculosis develop. Measures which would prevent poverty and overcrowding will prove ultimately cheaper than the provision of Institutions whose function is to deal with the results of these conditions.

F.—INVESTIGATION OF OTHER DISEASES.

There has been no excessive prevalence of any diseases other than those mentioned specially in the Report, nor have there been any outbreaks of food poisoning.

G.—MEANS FOR PREVENTING MORTALITY IN CHILDBIRTH AND IN INFANCY.

The administration of the Midwives Act, 1902, is carried out by the County Council, and local Medical Officers of Health exercise no supervision.

There is no work undertaken in your District for the welfare of mothers or expectant mothers.

To do this effectually, it would be necessary for the Corporation to administer the Midwives Act.

On July 30th a Circular and Memorandum was issued by the Local Government Board relative to Maternity and Child Welfare, advocating an extension of work on two lines—one in connection with ante-natal and natal conditions, and the other, with children after the first year of life, until the period of school entrance—thus completing a chain of supervision, and ensuring continuity in dealing with the whole period from before birth until the child passes under the control of the School Medical Officer.

A complete scheme would entail :

1. Arrangements for the local supervision of Midwives.
2. Arrangements for Ante-Natal work, such as
 - (a) Ante-Natal " Clinics " for expectant mothers.
 - (b) Home visiting of expectant mothers.
 - (c) Hospital beds for the treatment of complicated cases of pregnancy.
3. Arrangements for Natal work, such as
 - (a) The provision of skilled and prompt attendance during confinement at house.
 - (b) Hospital treatment for such conditions as involve danger to mother or infant.
4. Arrangements for Post Natal work, such as
 - (a) Hospital treatment for complications arising after parturition.
 - (b) The provision of baby clinics or infant dispensaries, available also for children up to school age.
 - (c) The home visitation of such children.

For work under the above heads a grant in aid is to be allocated.

At the request of your Committee, I reported at length on the subjects of this Circular. The views put forward in that report may be briefly summarised as follows :—

Except in the case of large Boroughs, it is not likely that a scheme of this magnitude will be adopted.

The objects outlined can be undertaken

1. As private enterprises.
 - (a) as an independent organisation.
 - (b) as a special branch of a Health Society.
2. As Municipal undertakings.
3. As departments of local Medical Institutions.

Many of the elements of the scheme could be dealt with partly by voluntary agencies, partly by extension of the work of existing institutions.

The Supervision of Midwives I have previously mentioned.

The suggested arrangements for Ante-Natal treatment open up a very important question. If they are to be carried out with complete efficacy, pregnancy must become notifiable. Such a procedure is, in my judgment, to be deprecated.

There remains the question of educational methods, in the shape of Schools for Mothers, Infant Consultations, and Home Visitation. Work of this kind is very useful, and could be carried out by voluntary committees, who would work in touch with official agencies.

I do not at present recommend the Council to take any active steps in the matter, thinking it better to await further developments, and to note the progress which attends organisations formed in larger areas.

In taking up this attitude I do not condemn the objects of the scheme, because no doubt there is a large loss of life amongst infants which should be avoided. The chief causes of a high infantile mortality are of a varied and complex character. Many of them are unfortunately the direct outcome of ignorance and neglect on the part of those in charge of young infants. In the case of Diarrhoea, which invariably prevails in hot summers, food pollution is the chief cause. The disease is comparatively rare in breast-fed infants, and is largely fostered by the substitution of other foods of an unsuitable character, which become polluted before being given to the child.

The NOTIFICATION OF BIRTHS ACT, 1907 is in force in the Borough.

The Nurse appointed for the duty of carrying out its provisions acts strictly in accordance with the instructions of your Medical Officer.

The total number of Births registered as belonging to Chatham during 1914 was 1099, of these 845 were notified or 77 per cent.

Table shewing results of Administration of Notification of Births Act. 1907 :—

Number of Births notified by Midwives....	748
" " " Doctors	97
Total number of Mothers visited	714
" " of visits paid by Nurse.....	2653
Number of breast-fed children	658
" bottle-fed " 	56
Defective addresses	42
Changed " 	27
Refused admission	2
Number of houses clean	479
" " fairly clean	168
" " dirty	67
Number improved during visitation	54
Number of still born children	38
Deaths during Nurse's visits	32
Of these 32 deaths	
10 died during the first week	
18 " between the second and fourth weeks	
4 " " " fourth and sixth "	
Mothers employed	78
(a) Outworkers	41
(b) Factory ..	3
(c) Hawkers..	8
(d) Charwomen	10
(e) Various...	16

The percentage of notifications received is lower than during the previous year, and this is especially notable in connection with medical men.

During 1913, out of a total of 931, 202 were received from doctors, whilst during 1914, out of a total of 845, only 97 were received. The difference is remarkable.

The figures regarding breast-feeding are misleading. The majority attempt to suckle their infants, but for various reasons this is discarded in favour of artificial feeding after a few weeks.

The Nurse is instructed to make a note of dirty or insanitary houses, and an Inspector visits and reports such measures as are necessary to secure improvement.

INFANTILE MORTALITY.

Total deaths under 1 year	107
Rate per 1,000 nett births	97

It is realised that there always will be a relatively high rate of mortality during the earlier period of life, but at the same time a large number of deaths take place which ought to be avoided. It is only by systematic attempts to diffuse hygienic knowledge and to dispel ignorance that any degree of success will be attained.

The three main groups of diseases most prevalent and fatal amongst infants are

1. The congenital group, including Premature Birth, Malformation, Debility, etc.
2. The acute diarrhœal diseases.
3. Acute respiratory diseases.

In the first group, the child is heavily handicapped from the start, in the second and third, he is generally the victim of errors in feeding, management, clothing and exposure, all of which are accentuated when the home surroundings are insanitary.

If improper food does not bring on epidemic diarrhœa, as it usually does during the hot summer and autumn months, it predisposes to rickets, and the rickety child is more liable to acquire and to succumb to respiratory disease, and to acute infectious disorders.

Many of the deaths in the first group are due to causes operating before the child is born, and although they are often returned as due to Premature Birth, Atrophy or Marasmus, a large number are due to the effects of syphilis.

DIARRHŒA AND ENTERITIS.

Zymotic or Infective Enteritis comprises deaths registered as Diarrhœa, Enteritis, or Gastritis. It is the most fatal disease of infancy, and although not confined to infants, more than four-fifths of the deaths from this cause occurred amongst children under 1 year of age.

The following Table shows the number of deaths from this cause during the past 5 years.

Year	Total	Under 1 year.	1 & under 2 years.	Temperature
1910	15	8	4	Low
1911	58	39	11	High
1912	12	11	1	Low
1913	22	15	3	Moderate
1914	38	31	7	High

The chief causes are insanitary surroundings, dirty habits, improper feeding and a temperature favourable to putrefaction and the development of bacteria.

When these exist the food of young infants, unless it is the natural food drawn from the mother's breast, is liable to become contaminated by putrefactive organisms, which cause Diarrhœa. Recent investigations point to the house fly as being a means of carrying these organisms on to food. To any one familiar with houses in poor neighbourhoods, where there is no place for the storage of food except the kitchen, and where flies exist in swarms, this is not surprising.

To place some check on this form of illness, the following measures were taken during the summer and autumn months.

The Nurse was directed to pay special visits to mothers in certain houses, and to give advice in regard to methods of feeding, to food storage, and to cleanliness of the house and its surroundings. An Inspector was also detailed to give attention to the sanitary condition of closets, yards and streets, and refuse accumulations. Notices with respect to the weekly removal of manure, and the provision of covered pits for the same were issued, and courts and alleys were flushed out by the Surveyor's staff.

H.—VITAL STATISTICS.

Estimated population up to the middle of 1914, 44,100

The number of inhabited houses as shown by the Rate Books is 9,627.

There are very few empty houses in the Borough, probably not more than 15 or 20.

I think that if there were more suitable houses, tenants would be forthcoming, and would reside in Chatham rather than in adjoining districts, but with the present high prices for building materials, and the scarcity of skilled labour, there is little progress in this direction.

The numbers of houses in each ward of the Borough for 1913 and 1914 are thus shown :—

St. Mary's Ward.....	2,048	2,052
Luton ,,	4,535	4,549
St. John's ,,	2,991	3,026

Average number of persons per house, 4·6

BIRTHS.

The total number of Births registered during 1914 was 1099.

This total is made up as follows :—

Number registered in Chatham	1,079
Number occurring outside the Borough of persons belonging to it	28
	<hr/>
	1,107
Number in the Borough, but belonging to other localities	8
	<hr/>
	Nett Total 1,099
Birth Rate	25 per 1,000

Of Males there were 537 ; and of Females, 562.

The illegitimate births numbered 31, or 2·8 per cent. of the total.

The following Table shows the material increase of population, that is, the increase of births over deaths in each division of the Borough.

St. Mary's Ward.....	213	118	95
Luton ,,	573	218	355
St. John's ,,	293	134	159
	<hr/>	<hr/>	<hr/>
	1,079	470	609
Deaths in Institutions ..		109	109
	<hr/>	<hr/>	<hr/>
		579	500

The nett result is an increase of births over deaths of 500.

The figures in this Table deal with births and deaths actually registered in the Borough and do not include transfers.

DEATHS.

It is customary to estimate the health of a District by its Mortality Returns, and if the estimate is confined to one locality and compared year by year, it is a very good indication, but when the comparison between a number of localities is instituted, it is not such a trustworthy guide. Apart from local sanitary conditions, a great factor influencing the mortality of any place is the relative number of individuals living at the various age groups. A large proportion of very old, or very young people tends to raise the mortality, whilst the presence of large numbers of people

from 20 to 30 tends to lower it. In order to arrive at a standard rate, the Registrar General has issued a factor for each town by which the nett death rate must be multiplied in order to get the necessary correction for age and sex distribution. The factor for correction in Chatham is 1.0055, which scarcely alters the nett rate.

All deaths occurring in the Borough are registered locally, but arrangements are in force by which deaths are allocated to the area to which the persons dying properly belong.

Through the agency of the Registrar General's Department, these transferable deaths are forwarded to the County Medical Officers of Health, who transmit them to Local Medical Officers. If accepted as correct by the latter, they are included in his returns. By this means greater accuracy is secured.

The nett total of registered deaths belonging to Chatham for 1914 after these corrections is 610.

The term "resident" is used to indicate persons dying outside the district, but belonging to it, and "non-resident" implies the exact opposite.

With few exceptions, the deaths of "non-residents" occurred in the Medway Union Workhouse, whilst the deaths of "residents" were in St. Bartholomew's Hospital, St. William's Hospital, and Fort Pitt Military Hospital (all in Rochester), the Royal Naval Hospital, and the Military Families' Hospital, in Gillingham, and in addition to these local institutions, deaths in other parts of the country, several being in Lunatic Asylums, or London Hospitals.

The total number of deaths of residents occurring outside the district, was 32, and of non-residents occurring in the district, 101.

Table I., supplied by the Local Government Board shows the vital statistics of the whole district during 1914, and the five previous years.

The rate of mortality for 1914 is 13.8 per 1,000.

What is known as the corrected death rate is the one which would be recorded if the age and sex distribution for the district were the same as that of the whole country. The factor for correction in the case of Chatham is 1.0055, which practically leaves the above rate unaltered.

In the following Chart is shown in graphic form the progressive decline in the death rate of Chatham during the series of years 1900 to 1914.

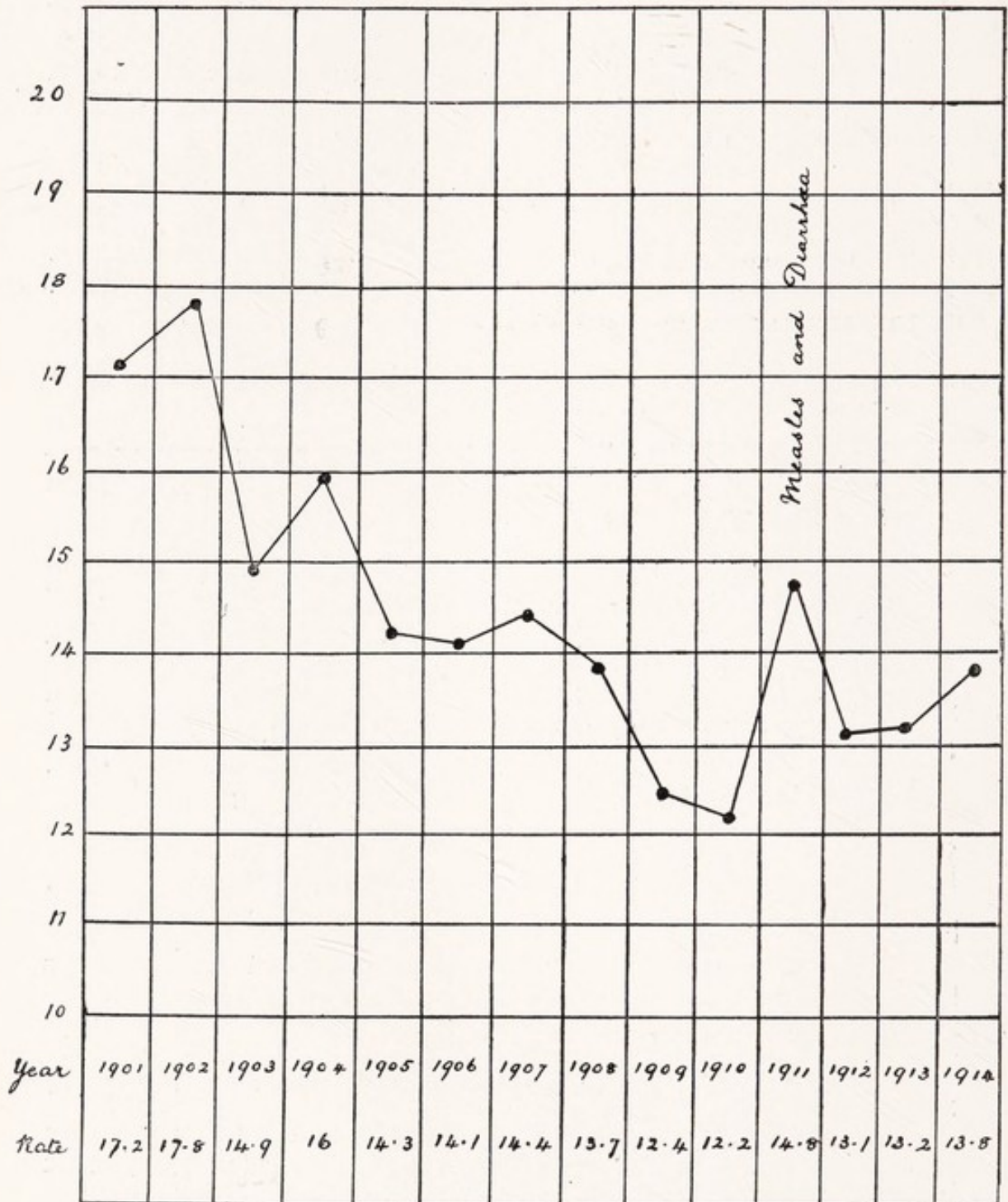


Table showing the Mortality in England and Wales as compared with Chatham during 1914 :—

	Annual Rates per 1000 living		Death under 1 year to every 1000 Births
	Births	Deaths	
England and Wales	23·6	13·6	105
97 Great Towns, including London ..	24·9	14·9	113
145 Smaller Towns	23·6	12·9	104
England and Wales, less 242 Towns ..	21·9	12·2	93
Chatham	25	13·8	97

The ages at which deaths occurred were as follows :—

Under 1 year.....	107
1 and under 5 years	76
5 „ „ 15 „	35
15 „ „ 25 „	18
25 „ „ 65 „	226
65 years and upwards	148

Including transferable deaths the numbers registered during each Quarter were :—

First Quarter	147
Second „	132
Third „	158
Fourth „	163

The numbers credited to each ward were :—

St. Mary's Ward.....	128
Luton „	234
St. John's „	128

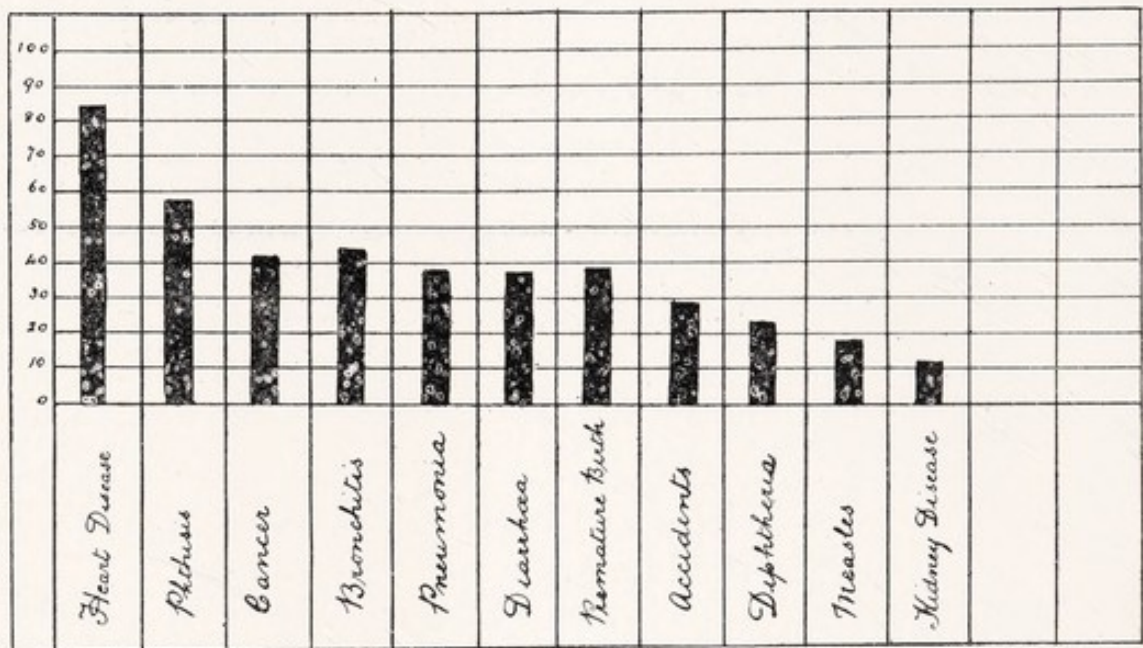
SEX.—Amongst Males there were 317 deaths
 „ Females „ 293 „

ILLEGITIMATE BIRTHS AND DEATHS.

The births of illegitimate children number 31, and there were 16 deaths, or more than 50 per cent.

Facts of this kind speak eloquently of the effects of the maternal neglect, which from various reasons is inseparable from these cases.

*Comparative view of the principal causes of death
during 1914*



FACTORY AND WORKSHOP ACT, 1901.

Section 132 of the above Act requires that the Medical Officer of Health of every District Council shall in his Annual Report to them, report specifically on the administration of the Act in workshops and workplaces, and he shall send a copy of his Annual Report, or so much of it as deals with this subject, to the Secretary of State.

The Table issued by the Home Office giving such particulars as lend themselves to statistical treatment has been filled in and appended to this Report.

All District Councils have duties in respect to factories, workshops, and work-places.

With regard to factories, these duties are limited, and with regard to insanitary conditions, their discovery is left to the Factory Inspectors, who communicate the nature of the defect to the local Sanitary Authorities, whose duty is to secure remedy.

In regard to bakehouses and domestic factories, there are special provisions, and the chief sanitary requirement is the enforcement of suitable and sufficient sanitary conveniences (Section 22, Public Health Amendment Act, 1890, and Section 38 Public Health Act, 1875).

Respecting Workshops and Workplaces, the duties are important, and are as follows :—

1. Sanitary condition of Workshops and Workplaces, including :—
 - (a) Cleanliness.
 - (b) Air space.
 - (c) Ventilation.
 - (d) Drainage of floors where wet processes are carried on.
 - (e) Provision of suitable and sufficient sanitary accommodation.
2. Special Sanitary provisions for Bakehouses.
3. The prevention of housework being carried on in dwellings which are injurious to the health of the workers through overcrowding, want of ventilation, or other sanitary defects, or in dwellings in which notifiable infectious disease exists.
4. The keeping of lists of outworkers in certain branches of industry, which are furnished by employers, and the transmission of the name and place of any such outworker to the Council of the district in which he resides.
5. Keeping a register of Workshops.

HOME WORK.

From a sanitary point of view, the effective control of home work is the most important duty under the Act.

Home work is carried on by people known as "outworkers," who are often very poor, whose homes are small, and where generally speaking sanitary supervision is especially needed.

Their earnings are low, their hours of work are long, and the time occupied in the work prevents proper attention being given to such domestic matters as the care of the household and family

The majority of outworkers are females chiefly occupied in the making of wearing apparel. A large proportion are wives of Royal Marines, and since the outbreak of War their numbers have very greatly increased.

It is the duty of employers to submit twice yearly revised lists of outworkers, their addresses, and the nature of their employment, and whilst some firms perform this duty with promptitude and regularity, others invariably need written reminders before they comply.

As far as is possible with the staff at my disposal, visits are paid twice a year to outworkers dwellings in order to see that the provisions of the Act are being observed.

The risks of communicating infectious disease are very considerable, and for this reason all work is prohibited in infected dwellings.

BAKEHOUSES.

The control of Bakehouses is carried out under the Public Health Acts, and under Sections 97 to 102 of the Factory and Workshops Act.

Bakehouses are either factories or workshops, according as mechanical power is or is not utilised for bread-making.

They are thus subject to the general provisions of the Act, and in addition the special regulations require that

- (1) Closets must not communicate with a bakehouse.
- (2) Drains must not open into one.
- (3) The cistern supplying water must be separate and distinct from the W.C. cistern.
4. No sleeping place is permitted on the same floor as a bakehouse.
- (5) The inside walls and ceilings of bakehouses must be limewashed, or painted with oil and varnished.
- (6) Limewashing and cleansing of paint must be done every six months.
- (7) A record of the date of limewashing must be kept.

Factories, Workshops, Workplaces and Homework

BOROUGH OF CHATHAM.

1.—Inspection.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections	Written Notices.	Prosecutions.
Factories (including Factory Laundries)	10	0	
Workshops (including Workshop Laundries)	84	16	
Workplaces (other than Outworkers' premises included in Part 3 of this Report)	5	0	
Total	99	16	

2.—Defects Found.

Particulars.	No. of Defects.			Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under the Public Health Acts :—				
Want of cleanliness	10	9		
Want of ventilation	0	0		
Overcrowding	2	2		
Want of Drainage of floors	0	0		
Other Nuisances	0	0		
Sanitary Accommodation { insufficient	0	0		
{ unsuitable or defective	4	4		
{ not separate for sexes	0	0		
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground bakehouse ..	0	0		
Breach of special sanitary requirements for bakehouses	0	0		
Other offences (excluding offences relating to outwork which are included in Past 3 of this Report)	0	0		
Total	16	15		

3.—Homework.

Nature of Work.	Outworkers' Lists.							Outwork in infected premises	
	Lists received from employers.						Notices served on Occupiers as to keeping or sending lists.	Instance.	Orders made.
	Sending twice in the year.			Sending once in the year.					
	Lists.	Contractors.	Workmen.	Lists.	Contractors.	Workmen.			
Wearing Apparel— (1) making, &c...	20	1	1034	4		6	12	21	21
Total	20	1	1034	4		6	12	21	21

4.—Registered Workshops.

Workshops on the Register at the end of the year.	Number.
Tenement Workshops	0
Workshop Bakehouses	22
Domestic Workshops	30
Laundries (Workshops)	6
Other Workshops	218
Total number of Workshops on Register	276

5.—Other Matters.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Acts ..	0
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshops Acts :—	
Notified by H.M. Inspector	12
Reports (of action taken) sent to H.M. Inspector ..	6
Other	0
Underground Bakehouses :—	
In use at the end of the year	4

RAINFALL DURING 1914.

Taken at Luton Waterworks, Chatham, by Mr. Coles Finch.

January36
February	2.26
March	5.52
April	1.16
May	1.54
June	1.17
July	1.19
August49
September55
October	2.17
November	2.78
December	5.67

Total 24.86 inches.

