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Publication/Creation

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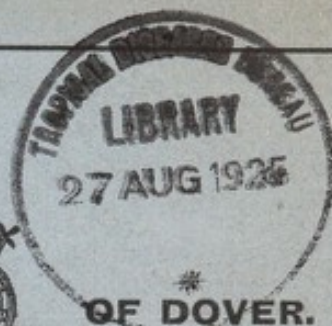
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BOROUGH



OF DOVER.

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE

TOWN and PORT of DOVER

1924.

A. B. McMASTER, M.D., B.CH., B.A.O., D.P.H.
Medical Officer of Health,
Port Medical Officer of Health,
School Medical Officer,
Medical Superintendent of Isolation Hospital,
Medical Officer in Charge of Maternity and
Child Welfare.

DOVER:

A. R. ADAMS, PRINTER, 37, CASTLE STREET,

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1925.

Public Health Department,

BROOK HOUSE,

DOVER,

18th July, 1925.

To the Chairman and Members of the Public Health Committee :

GENTLEMEN,

I have the honour to submit the Annual Report on the Public Health Administration of the Borough and the Port Sanitary District for the year 1924.

A death-rate lower, a birth-rate higher, and an infantile mortality rate much lower than the corresponding figures for England and Wales, are desirable vital statistics for the town. An absence of deaths from Diphtheria has again to be recorded ; while the death-rate from Cancer and other malignant diseases is below the high record of last year.

The outbreak of Para-typhoid Fever is fully reviewed, and two charts have been prepared to illustrate (A) the approximate dates of onset of the disease, and (B) the sources from which milk was obtained in each case. The epidemic ceased when the active "carrier" was discovered and isolated.

Owing to the continued lack of adequate housing accommodation there is an increasing number of families occupying in many cases one room, and in others two rooms, in 'houses-let-in-lodgings.'

The difficulties experienced in the working of the Sanitary Section of the Department were considerable, and changes of staff have delayed the publication of this report.

For the first time, the Borough Engineer's Report on the Meteorological Station is submitted with this Health Report.

To my medical colleagues, and Mr. Hogbin, the chief clerk in the Department, my thanks are due for all their loyal assistance.

I thank you, Gentlemen, for your continued support, and the consideration you have given the Public Health problems of 1924.

I am, Gentlemen,

Your obedient Servant,

A. B. McMASTER.



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BOROUGH OF DOVER.

HEALTH COMMITTEE:

1924-5.

Chairman :

HIS WORSHIP THE MAYOR (COUNCILLOR S. J. LIVINGS, J.P.)

Members :

ALDERMAN W. J. BARNES, J.P.

„ H. E. RUSSELL

„ C. J. SELLENS, J.P.

COUNCILLOR C. T. BOYTON

„ J. R. CAIRNS

„ A. R. DAWES

„ W. H. EAST

„ P. GOLDFINCH

„ P. KENNETT

COUNCILLOR J. S. LEARMONT

„ F. H. MORECROFT

„ G. M. NORMAN

„ A. J. PEARCE

„ F. R. POWELL

MATERNITY AND CHILD WELFARE COMMITTEE :

1924-5.

Chairman :

ALDERMAN C. J. SELLENS, J.P.

Members :

HIS WORSHIP THE MAYOR (COUNCILLOR S. J. LIVINGS, J.P.)

ALDERMAN W. J. BARNES, J.P.

COUNCILLOR C. T. BOYTON

„ W. DONALD, M.C.

„ W. H. EAST

„ W. J. GEORGE

„ P. GOLDFINCH

„ P. KENNETT

„ J. S. LEARMONT

„ A. J. PEARCE

„ F. R. POWELL

MR. M. KOETTLITZ, L.R.C.P.

MISS. H. DOWLE

MRS. F. M. E. BUTLAND

MRS. E. M. BEAUFOY

MISS L. BOMFORD

MRS. E. M. ORD

ANNUAL REPORT, 1924.

1. GENERAL STATISTICS.

Area (Acres) ...	2,024
Population (Census, 1921, revised) ...	39,995
Housing data at Census, 1921:—	
Number of structurally separate dwellings:—	
Occupied ...	8,482
Vacant on Census Night ...	346
	8,828
Number of private families occupying the separate dwellings...	8,482
No. of persons in the 9,351 private families ...	9,351
Average number of persons per separate dwelling...	37,526
Population (Registrar-General's Estimate, 1924)	4.4
for Birth Rate	43,160
for Death Rate	40,460
Rateable Value..	£209,865
Sum represented by a penny rate...	£833

2. EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

Births.

	Males.	Females.	Total
Legitimate ...	411	404	815
Illegitimate ...	16	17	33
Total ...	427	421	848

Birth Rate (per 1,000) : 19.65.

Deaths.

Registered in Borough ...	230	210	440
Deaths of Non-residents deducted	17	12	29
Total in Borough ..	213	198	411
Transferred Deaths ...	12	14	26
Net total Deaths in 1924 ...	225	212	437

Death Rate (per 1,000) : 10.80.

Number of women dying in, or in consequence of, childbirth:—

 From sepsis ... nil. From other causes ... 2

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

 Legitimate ... 39 Illegitimate ... 121 Total ... 42.14

Deaths from Measles... .. nil.

 " " Whooping Cough nil.

 " " Diarrhoea (under 2 years of age) 5

**Causes of Death in the Borough of Dover during 1924.
(Civilians only) :**

				Males.	Females.	Total.
	All causes	...	...	225	212	437
1.	Enteric Fever	...	...	—	1	1
2.	Small-pox	...	...	—	—	—
3.	Measles	...	...	—	—	—
4.	Scarlet Fever	...	...	—	—	—
5.	Whooping Cough	...	...	—	—	—
6.	Diphtheria	...	...	—	—	—
7.	Influenza	...	...	13	10	23
8.	Encephalitis Lethargica	...	...	—	1	1
9.	Meningococcal Meningitis	...	...	1	—	1
10.	Pulmonary Tuberculosis	...	...	17	15	32
11.	Other tuberculous diseases	...	...	4	6	10
12.	Cancer, malignant disease	...	...	21	32	53
13.	Rheumatic Fever	...	...	2	2	4
14.	Diabetes	...	...	2	—	2
15.	Cerebral hæmorrhage, etc.	...	...	13	15	28
16.	Heart disease	...	...	23	21	44
17.	Arterio Sclerosis	...	...	10	6	16
18.	Bronchitis	...	...	19	16	35
19.	Pneumonia (all forms)	...	...	17	13	30
20.	Other respiratory diseases	...	...	3	3	6
21.	Ulcer of stomach or duodenum	...	...	2	—	2
22.	Diarrhœa, etc., (under 2 years)	...	...	1	—	1
23.	Appendicitis and typhlitis...	...	...	—	—	—
24.	Cirrhosis of liver	...	...	—	—	—
25.	Acute and chronic nephritis	...	...	3	5	8
26.	Puerperal sepsis	...	...	—	—	—
27.	Other accidents and diseases of pregnancy and parturition	...	...	—	2	2
28.	Congenital debility and malformation, premature birth	...	...	12	7	19
29.	Suicide	...	...	4	2	6
30.	Other deaths from violence	...	...	9	2	11
31.	Other defined diseases	...	...	48	53	101
32.	Causes ill-defined or unknown	...	...	1	—	1

Special Causes included above :—

Poliomyelitis	...	...	—	—	—
Polioencephalitis	...	...	—	—	—

Deaths of Infants under one
year of age :—

				Males.	Females.	Total.
Total	...	...	...	21	15	36
Illegitimate	...	...	...	2	2	4
<hr/>						
Total Births	...	...	...	427	421	848
Legitimate	...	...	...	411	404	815
Illegitimate	...	...	...	16	17	33
<hr/>						
The number of uncertified deaths was...	...	...	...	...	...	4
The number of Coroner's Inquests was	...	...	...	...	...	28

Mortality in Relation to Season :

			Total Number of Deaths.	Death- rate per 1000 of Population.	Deaths under One Year.	Infantile Mortality per 1000 Births.
January	...	...	38	11.3	2	28
February	...	...	58	17.2	4	57
March	...	...	60	17.8	6	85
April	...	...	45	13.3	1	14
May	...	...	34	10.1	4	57
June	...	...	23	8.3	1	14
July	...	...	21	6.2	3	42
August	...	...	26	7.7	2	28
September	...	...	27	8.0	4	57
October	...	...	19	5.6	1	14
November	...	...	40	11.9	6	85
December	...	...	41	12.1	2	28
<hr/>						
Total	...	...	437	10.80	36	42

Ward Distribution of Deaths :

	WARDS.						
	River.	Castle.	Barton.	St. Barts.	Town and Pier.	Hough- ham.	Total
Under 1 year	3	7	1	7	16	2	36
1 and under 5	3	1	5	2	10	1	22
5 and under 15	1	2	1	3	3	1	11
15 and under 25	3	2	—	2	4	3	14
25 and under 65	20	33	19	24	36	23	155
65 and upwards	27	44	30	20	45	33	199
<hr/>							
All Ages...	57	89	56	58	114	63	437

3. NOTIFIABLE DISEASES DURING 1924.

Disease.	Total Cases Notified :								Total Cases	Cases admitted to Hospital	Total Deaths :								Total	
	1 yr	1-2	2-5	5-15	15-25	25-45	45-65	65 and over			1 yr.	1-2	2-5	5-15	15-25	25-45	45-65	65 and over		
Small-pox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria ...	—	2	3	6	3	—	1	—	15	14	—	—	—	—	—	—	—	—	—	—
Scarlet Fever ...	—	2	12	23	7	2	—	—	46	39	—	—	—	—	—	—	—	—	—	—
Enteric Fever (including Paratyphoid)	—	2	11	21	6	9	—	1	50	36	—	—	—	—	—	—	—	—	—	1
Continued Fever ...	—	—	—	2	—	—	—	—	2	1	—	—	—	1	—	—	—	—	—	—
Puerperal Fever ...	—	—	—	—	—	2	—	—	2	1	—	—	—	—	—	—	—	—	—	—
Pneumonia...	3	1	6	8	3	6	4	1	32	—	—	—	—	—	1	—	2	—	—	4
Erysipelas ..	—	—	1	—	—	2	2	1	6	1	—	—	—	—	—	—	—	—	—	—
Malaria ...	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Encephalitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lethargica ...	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	1
Polio-myelitis ...	—	—	1	1	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal Fever ...	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Dysentery ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ophthalmia ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Neonatorum ...	10	—	—	29	—	—	—	—	10	1	—	—	—	—	—	—	—	—	—	—
Chicken Pox ...	2	3	10	—	2	—	—	—	46	3	—	—	—	—	—	—	—	—	—	—
Tuberculosis :																				
(a) Pulmonary :																				
M. ...	—	—	—	5	11	14	5	—	35	2	—	—	—	4	8	3	1	—	—	17
F. ...	—	—	1	9	8	23	4	2	47	1	—	1	2	7	3	1	—	—	—	15
Total ...	—	—	1	14	19	37	9	2	82	3	—	1	6	15	6	2	—	—	—	32
(b) Non-Pulmonary																				
M. ...	—	—	1	9	2	—	—	—	12	—	—	1	—	2	—	—	—	—	—	4
F. ...	—	—	1	8	3	2	—	—	14	—	—	2	1	2	—	—	—	—	—	6
Total ...	—	—	2	17	5	2	—	—	26	—	—	2	1	4	—	—	—	—	—	10

Ophthalmia Neonatorum. 1924 :

Ophthalmia Neonatorum.	Cases.			Vision Unimpaired.	Vision Impaired.	Total Blindness.	Deaths.
	Notified.	Treated.					
		At Home.	In Hospital				
	†10	*8	1	8	1	—	—

* One of these cases was treated as an out-patient at the Royal Victoria Hospital, Dover. The one hospital case was treated in the Borough Isolation Hospital.

† One of the notified cases occurred in Military Quarters and was dealt with by the Military Medical Authorities.

The child who has impaired vision is one whose parents declined to follow their doctor's advice to allow the child to be sent to hospital; when they finally agreed to do so, the sight of one eye was already lost. On admission the second eye was slightly infected, but this yielded to treatment.

4. CAUSES OF SICKNESS.

Scarlet Fever.

The number of cases notified in each ward was :—

		River.	Barton.	St. Bartholo- mew's.	Castle.	Hougham.	Town and Pier.	Total.
1924	...	1	6	4	13	6	16	46

The age distribution of the cases was as follows :—

Age.		No. of Cases.	No. of Deaths.	Case Mortality.
Under 5 years	...	14	—	—
5—15	..	23	—	—
15—25	...	7	—	—
25—45	...	2	—	—
45—65	...	—	—	—

Attack-rate per 1,000 of population=1.14.

Death-rate per 1,000 of population=*Nil*.

Attack-rate per 1,000 of population England & Wales=2.16.

Diphtheria.

The number of cases notified in each ward was :—

		River.	Barton.	St. Bartholo- mew's.	Castle.	Hougham.	Town and Pier.	Total.
1924	...	—	1	1	4	7	2	15

The age distribution of the cases was as follows :—

Age.			No. of Cases.	No. of Deaths.	Case Mortality.
Under 5 years	...	...	5	—	—
5—15	„	...	6	—	—
15—25	„	...	3	—	—
25—45	„	...	—	—	—
45—65	„	...	1	—	—

Attack-rate per 1,000 of population=0.37.

Death-rate per 1,000 of population=*Nil*.

Attack-rate per 1,000 of population England & Wales=1.07.

Enteric Fever.

The number of cases notified in each ward was :—

		River.	Barton.	St. Bartholo- mew's.	Castle.	Hougham.	Town and Pier.	Total.
1924	...	19	16	1	10	2	2	50

Attack-rate per 1,000 of population=1.24.

Death-rate per 1,000 of population=0.02.

Case-mortality per cent. =2.00.

Attack-rate per 1,000 of population England & Wales=0.11.

During the year an outbreak of Enteric Fever occurred which proved to be one of the most extensive experienced in the town since 1915. Fifty cases were notified, one other was admitted to hospital from the Rural District which proved to have been infected in the Borough, and a "missed" case was discovered during the investigation.

The first case was notified on the 26th April, and the last on the 22nd October. The epidemic terminated at the end of July, as the three cases notified after that date were infected from outside sources.

Of the total 52 cases, one was due to infection by the *Bacillus Typhosus*, and 51 to the *Bacillus Para-typhosus* "B."

(A) The Typhoid case was a nurse at the Isolation Hospital, who declined to be inoculated with T.A.B. Vaccine when nursing the Para-typhoid patients, and who was subsequently infected by a case of Typhoid Fever which was admitted to the Hospital from the Port, suffering from infection contracted in South America.

(B) Para-typhoid Fever Outbreak :

1. History of the Epidemic :

In the seven weeks following that in which the first case was notified, twelve others occurred ; in the next three weeks twenty-five cases ; and in the last four weeks eleven cases. The dates of notification are given on chart "A," together with the probable dates of onset of illness in each case. It was not until some thirteen cases had been investigated that it could be concluded that infected milk was the probable means of spreading the disease, by which time some five retail dealers were concerned, who obtained their supplies from four farms. These four farms were all in rural districts in the County. No sources of infection could be traced at these farms by the Medical Officer of the district, or amongst those handling the milk from them in transit to the consumers.

The cases continued to occur—some twelve being notified in one week—and others developed until 15 days after the active carrier was isolated in hospital. Since that date, no cases have developed which were infected in the Borough or the immediate neighbourhood.

2. Age and Sex incidence of the Disease :

Age.	Males.	Females.	Total Cases.
Under 5 years	5	8	13
5—15	7	14	21
15—25	—	5	5
25—45	2	8	10
Over 45	1	1	2
	15	36	51

3. Type of the Disease :

All the primary cases were mild, and many of them would not have been detected clinically but for the Widal reaction. This applies specially to the children, in whom a history of indefinite illness, with or without abdominal symptoms, and with only slight temperatures, was found to be accompanied by a positive Widal reaction. 66% of these cases were under 15 years of age.

Two secondary cases were infected. The first one—a woman of 66 years of age, was infected while nursing her daughter at home. After both had been removed to hospital, the mother's condition became acute, with hæmorrhage and pulmonary complications. After more than sixteen weeks in hospital, the patient was discharged. The last four weeks of her isolation were caused by her "carrier" condition, and she was still a carrier when discharged. In the second case—that of a woman of 23 years, infected from one of the early cases—the disease was very acute, and complicated with hæmorrhage, pneumonia and meningeal symptoms. She died on the twentieth day of the disease, six days after admission to hospital. All the other fifty cases recovered.

4. Measures taken to detect the Disease :

(a) When four cases had been notified, the medical practitioners in the town were informed of the existence of the disease, and asked to co-operate in tracing further cases by taking specimens for Widal reaction in any doubtful cases in their practices. It was also suggested to them that all such specimens taken should be tested for the Para-typhoid bacillus, as well as the typhoid one.

(b) Similar precautions were adopted at the School Clinic and Infant Welfare Centre. As a result, several mild cases were discovered.

(c) Those patients who had proved to be carriers in the smaller outbreaks which occurred in previous years were followed up and re-tested, with negative results.

5. Measures taken to trace the Source of Infection :

(a) When a number of cases who obtained their milk from four retail dealers had occurred, it was ascertained that these four dealers obtained some or all of their milk from a farm ("B") in the Rural District. The Medical Officer of Health of the District was consulted, and he informed me that no source of infection could be found then on that farm.

(b) Those handling this particular milk in the Borough were seen, and tests carried out to discover possible carriers. The man delivering the milk from the farm to the retail dealers was also tested, but no carrier was discovered.

(c) When eighteen cases had been notified, there were seven retailers involved, and the supplies from nine farms were under suspicion. Samples of milk were taken for bacteriological examination from the first two farms concerned. These were both unsatisfactory :—

Producer "A" :

Bacterial count=755,000 germs per cc.
and B. Coli in 1/100th cc.

Producer "B" :

Bacterial count=1,444,000 germs per cc.
and B. Coli in 1/100th cc.

When these results were communicated to the producers ; producer "B" wrote informing me that this milk was not produced on his farm, but on another farm owned by his brother, producer "C." (The Sanitary Inspector's records did not show that any milk from "C" was coming into the town, and the man from whom samples were taken always stated that the milk was produced by "B.")

Further samples were examined, two from "B" and one from "C," and the results were :—

"B" 1 : Bacterial count=362,000 germs per cc.
B. Coli in 1/100th cc.

"B" 2 : Bacterial count=485,000 germs per cc.
B. Coli in 1/100th cc.

Producer "C" :

Bacterial count=4,752,000 germs per cc.
B. Coli in 1/100th cc.

In view of these bad bacterial counts, I asked the County Medical Officer of Health for further assistance in the bacteriological investigation, and the County Bacteriologist visited the farm with the Medical Officer of the Rural District. Specimens for the Widal test were collected from all the persons milking or handling the milk on farm "C," and also those on farm "B."

Both the farmer and one of the milkers on farm "C" gave a positive reaction for *Bacillus Para-typhosus* "B"; all those on farm "B" were negative.

Further research proved that the farmer was not an active "carrier," but that the milker was : and within a fortnight of the latter's isolation in hospital, no more cases developed.

6. Source of Infection :

Of the 51 cases which occurred, forty were supplied with milk directly or indirectly from the infected farm where the active carrier was discovered. This man's presence on the farm staff was concealed when the Medical Officer of Health of the District first visited the premises. The fact that milk from this farm was coming into the town was only admitted to me by the whole sale producer when I asked for an explanation of why the sample of milk said to be produced by him on another farm (Producer "B") was so grossly contaminated by bacilli coli communis. It was then revealed that this dirty milk was produced on farm "C."

Chart "B" illustrates how the infected milk reached the consumers, and also shows the difficulties met with in the investigation. With some six retailers of milk, who obtained their supplies from eight producers, the problem of where the infection originated took some time to elucidate. The trade custom of "accommodation" milk complicated the problem, as in the case of retailer No. 5 on the chart. The seven cases on his round were found to have been infected during the period he had an additional supply of milk from retailer No. 2, part of whose supply came from the infected farm.

The source of infection of the 51 cases is classified as follows :-

- (a) 40 cases by milk from the infected farm.
- (b) 1 secondary case to one in series (a).
- (c) 1 case by ice cream made with milk from the infected farm.
- (d) 1 case where the milk used was carried in the same cart as the infected milk, and probably infected by the milk measures used in common.
- (e) 4 cases where connection with the infected farm through accommodation milk was probable, or through "missed" cases infected by that milk.
- (f) 2 cases where no connection with other cases could be traced.
- (g) 2 cases that were infected when away from home, in other areas.

7. Action taken to Prevent the Spread of Infection :

(a) When milk became the suspected vehicle of infection, the public were advised through the press to boil all milk immediately after delivery, unless they used pasteurised milk. Had this advice been adopted by every household, a considerable number of cases would have been prevented.

A.

BOROUGH OF DOVER. OUTBREAK OF PARA TYPHOID FEVER. 1924.

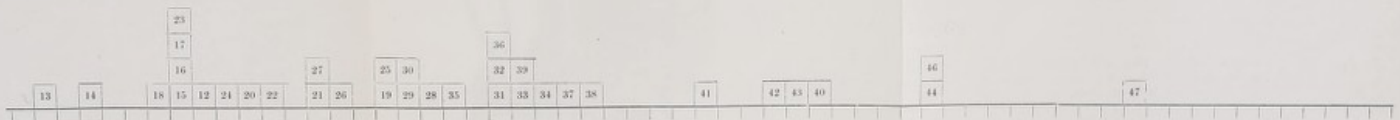
Approximate Dates of Onset of Illness.



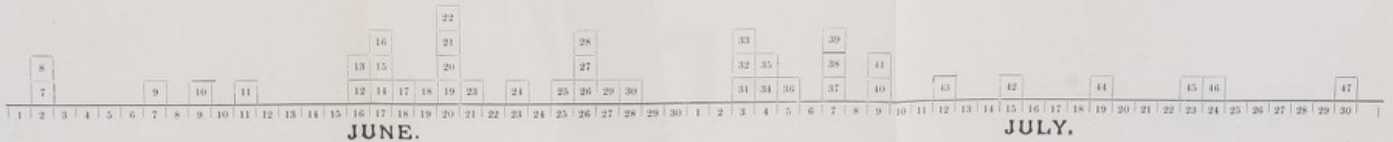
Dates of Notification.



Approximate Dates of Onset of Illness.



Dates of Notification.



NOTES.—The 3 cases which occurred after July had no connection with the epidemic.
The numbers in squares are the case numbers, by which date of onset and notification of each case can be identified.

(b) The cattle from the infected farm ("C") were transferred to farm "B", where they were milked by the staff of that farm; and an Order under Section 4 of the Infectious Diseases (Prevention) Act served on the producer, prohibiting any milk from farm "C" coming into the Borough. The sanitary defects at the farm were such that the Order was not rescinded until these were remedied.

(c) As the farmer refused to be isolated otherwise than at home, and as the active carrier did not come into hospital at once, the milk supply to the Isolation Hospital from farm "B" was discontinued.

(d) As the investigation of the probable carrier's condition could not be satisfactorily out at his own home—a cottage on farm "B," and there was reluctance on his part to enter hospital, the producer at farm "B" was advised that the milk from his farm would come under suspicion unless the milker was willing to go into hospital for special examination. This he then agreed to do. The man proved to be a positive carrier (faecal) of the para-typhoid bacillus "B," and, during the two months he remained in hospital, was an active carrier. He left hospital at his own request, and gave an undertaking that he would not in future follow an occupation which involved the handling of any foodstuffs used by the public. The necessary notice under the Public Health (Pneumonia, Malaria, Dysentery, etc.) Regulations, 1919, was given to him. He now works in another adjoining rural district, and is evidently no source of infection, as no cases have been notified in that area.

(e) The public were advised to obtain the protection against the infection which inoculation would afford, but only a limited number followed this course.

(f) From the commencement of the outbreak, all cases were adequately isolated, either in hospital or at home. Thirty-six of the 51 cases were treated in hospital, and no patients were released from isolation until the question of their "carrier" condition was decided. Those who proved to be chronic carriers were prohibited from handling foodstuffs.

(g) The absence of methods of prevention at the infected farm contributed to the spread of infection. If facilities had been available for the milkers to wash their hands thoroughly before milking, the risk of a carrier infecting the milk would have been much reduced. Further, if the milk had been cooled immediately, the multiplication of the bacillus therein would have been less, while the absence of a water-carriage system of sewage disposal increased the risk of infection by flies.

8. Observations on the Bacteriological Aspect of the Outbreak :

(a) There was no definite evidence of when or how the milker who was a carrier became infected. He served in Salonika during the war, but there was no record of his having had para-typhoid fever then, and he had been inoculated. He was working on a farm in another area as a milker before being employed on farm "C," and no cases of para-typhoid were notified there during that period. In February, 1924, he was away ill with influenza.

His blood gave a typical para-typhoid reaction early in July, and, when admitted to hospital, the bacillus was isolated from his faeces. Between July 15th and September 15th some twelve tests were done, and on eleven occasions the results were positive—almost a pure culture being found in several specimens. During no single test was he found to be a urinary carrier.

(b) The length of time which elapsed between the early cases leads one to conclude that during April and May, either the activity of the carrier was intermittent, or the growth of the bacillus in the milk was not great. It is of interest to note that the increase in the number of cases in June and July coincided with the seasonal increase in the maximum and minimum mean temperatures during these months :—

MEAN TEMPERATURES.				Cases.
		Maximum.	Minimum.	
April	...	49.8	40.4	3
May	...	59.1	49.1	5
June	...	61.9	52.2	24
July	...	65.9	55.1	17

(c) The Widal reactions were in most cases obtained with a dilution of 1 in 60, some were 1 in 20 to 60, others 1 in 20, and a few 1 in 100.

9. Conclusions and Recommendations :

(a) That the records kept by the Sanitary Inspector of the retail milk purveyors in the Borough should include all the producers from whom the milk is obtained—whether they live inside or outside the Borough.

(b) That the general use of T.A.B. Vaccine as a protection against the infection of the Enteric group of organisms should be adopted by the public.

(c) That when no facilities are provided on a farm for the milkers to wash their hands before and during milking, and no cooler is used, and due regard is not paid to thorough cleanliness generally, the risk from a "carrier" is greatly increased.

Small-pox.

Although Small-pox was again prevalent in various parts of the country during 1924, and the 3 cases which occurred in the Dover Rural District were nursed at Poulton Hospital, no cases appeared in the Borough.

Measles.

Number of Deaths ... Nil.

Chicken-pox.

The compulsory notification of Chicken-pox, initiated on the 28th July, 1923, was continued in the Borough until the 9th August, 1924. From 1st January, 1924 to the 9th August, 1924, the following cases were notified :—

WARDS.						
	River.	Barton.	St. Bartholo- mew's.	Castle.	Hougham.	Town and Pier. Total.
1924.	6	7	3	7	15	8 46

The age distribution of the cases was :—

Age.	No. of Cases.	No. of Deaths.	Case Mortality
Under 5 years	15	—	—
5—15	29	—	—
15—25	2	—	—
25—45	—	—	—
45—65	—	—	—

Diarrhœa and Enteritis.

Death in age-group :

Under 1 year.
1

Influenza.

Influenza developed a marked prevalence during the first quarter of the year. The number of deaths from Influenza, all forms of Pneumonia, and all forms of Bronchitis in 1924, were :—

	Influenza.	Pneumonia	Bronchitis.
No. of Deaths	23	30	35
Death-rate 1924...	0.57	0.74	0.86
Death-rate 1923...	0.12	0.61	0.86

**Public Health (Pneumonia, Malaria, Dysentery, etc.) Regulations,
1919.**

One case of Malaria was notified, the patient having contracted the disease overseas. No cases of Dysentery were notified during the year.

Thirty-two cases of primary Pneumonia were notified in accordance with the Regulations. Three of the notified cases had a fatal termination.

Tuberculosis.

	Pulmonary.	Other Forms.
Cases notified	82	26
Deaths	32	10
Death-rate	0.79	0.25

Thirteen of the patients notified during 1924 died in the course of the year.

Of the total deaths from Tuberculosis, 16 or 38 per cent. were those of cases not notified in the Borough.

Continuous effort is necessary to secure a fair standard of notification of Tuberculosis in the Borough. The ratio of non-notified deaths shows an increase of 2 per cent. over the record for 1923.

Under the Public Health (Tuberculosis) Regulations, 1924, dated 18th December (which come into operation on the 1st January, 1925), the following statement was compiled, showing the exact numbers of Tuberculous cases remaining on the Departmental Register at the 31st December, 1924:—

Cases on register at 31st December, 1924—	Pulmonary.	Non-Pulmonary.
Males ...	164	47
Females ..	154	49
Total...	318	96
All forms	414	

Hospital accomodation for cases of advanced Pulmonary Tuberculosis:—

Towards the end of the year an agreement was entered into between the Town Council and the County Council, under which one of the blocks at the Isolation Hospital will be adapted by the Corporation for the treatment of nine patients sent in by the County Council. So far, advanced cases in the town have been admitted to a small ward (two beds) with a balcony, where the home conditions were such as to require this preventive measure. From the number of cases on the notification register in the Borough, the need for this additional provision locally is evident.

5. SUMMARY OF NURSING ARRANGEMENTS, HOSPITALS, AND OTHER INSTITUTIONS AVAILABLE FOR DISTRICT :

Professional Nursing in the Home.

(a) **General :** There is no provision by the Local Authority for general nursing in the home. Parochial nurses, supported by voluntary funds, are available in some of the parishes.

There is a Town Nurses' Association, supported by voluntary contributions, from which nurses are sent to aid poor persons on payment of 1d. per week by the assisted persons.

Under the Council's Maternity and Child Welfare Scheme, there is a voluntary fund for the provision of "home helps" to expectant and nursing mothers in case of need.

(b) **For Infectious Diseases :** There is no provision for nursing assistance in the home in cases of infectious diseases. All cases of non-notifiable infectious diseases—measles, etc.—are visited by the Health Visiting Staff, who render all assistance and advice possible. In cases of necessity, patients suffering from Measles, Pneumonia, Ophthalmia Neonatorum, Infantile Diarrhoea or Puerperal Fever are treated at the Isolation Hospital.

All cases of notifiable infectious diseases are, unless in exceptional cases, accommodated in the Isolation Hospital.

Midwives : There is no employment of, or subsidy to, practising Midwives, by the Local Authority.

There are seven midwives practising in the Borough.

Clinics and Treatment Centres.

Maternity and Child Welfare Centre :

One, at Brook House, Dover, provided by the Local Authority.

Pre-natal and Infant Consultations, Infant Operations, supply of fresh milk and dried milk in necessitous cases ; also supply of medicaments.

School Clinic : Treatment Clinic, provided by the Local Education Authority, at Royal Victoria Hospital, Dover:—

Sections : Minor Ailments Clinic.

Ophthalmic Clinic.

Defects of Nose and Throat Clinic.

Dental Clinic.

An Inspection Clinic is also held twice a week at the Infant Welfare Centre, Brook House, by arrangement with the Maternity and Child Welfare Committee.

Tuberculosis Dispensary :

Provided by the Kent County Council, and held at 9, Eastbrook Place, Dover, each Thursday from 10 to 12 (noon), and from 1.30 to 4 p.m., also on the first Thursday in the month from 4.30 to 6 p.m.

Venereal Diseases Clinic :

Provided by the Kent County Council, and held in the Out-patient Department of the Royal Victoria Hospital, Dover, as follows :—

FOR MEN Mondays at 8 p.m.
 Thursdays at 4 p.m.

FOR WOMEN: Mondays at 8 p.m.
Thursdays at 4 p.m.

Hospitals Provided or Subsidised by the Local Authority.

Tuberculosis : *Pavilion at Borough Isolation Hospital.*

Maternity : Nil. Children : Nil.

Fever :

Provided by Local Authority, situated at Tower Hamlets, within the Borough. Accommodation for Scarlet Fever, Diphtheria and Enteric Fever. Contains 55 beds. Cases of Puerperal Fever, Ophthalmia Neonatorum, Infantile Diarrhœa, Measles, Pneumonia, etc., are admitted as circumstances permit.

Small Pox :

Provided by Local Authority, situated at Poulton, near Dover, in Dover Rural District, distance of 2½ miles from Dover Town Hall. Accommodation, 20 beds, with ample ground for additional accommodation if necessary.

**Any Institutional Provision for Unmarried Mothers, Illegitimate Infants,
and Homeless Children :**

No provision by Local Authority.

(a) The Dover Preventive and Rescue Association, supported by voluntary contributions, affords shelter for suitable cases: (b) the Dover Gordon Boys' Orphanage and Home, and (c) the Dover Training Home for Orphan Girls, both supported voluntarily, accommodate homeless children.

Ambulance Facilities :

(a) For Infectious Cases :

Motor Ambulance. This is kept at the Fever Hospital, and used for the transport of infectious cases. This equipment, which in 1922 replaced a horse-drawn ambulance, has added materially to the efficiency of the arrangements for the transport of patients.

(b) For Non-Infectious and Accident Cases :

The Local Police and St. John Ambulance Brigade have stretchers for non-infectious and accident cases. There is also a motor ambulance, provided by public subscriptions and presented to the Dover Town Division of the Brigade in 1923.

ISOLATION HOSPITAL.

(a) The following is a summary of the patients treated at the Isolation Hospital during the year :--

Disease.	Category.	Remaining in Hospital 31-12-23.	Admitted during 1924.	Total treated 1924.	Discharged 1924.	Deaths 1924.	Remaining in Hospital 31-12-24.	Case Mortality.
Scarlet Fever	Borough	5	37	42	37	—	5	—
	Rural ...	—	3	3	3	—	—	—
	Military	—	18	18	15	—	3	—
Diphtheria	Borough	1	14	15	14	—	1	—
	Rural ...	1	1	2	2	—	—	—
	Military	—	1	1	1	—	—	—
Diphtheria Carriers	Borough	—	1	1	1	—	—	—
Puerperal Fever	Borough	—	1	1	1	—	—	—
Ophthalmia Neonatorum " (<i>Nursing Mother</i>)	Borough	—	1	1	1	—	—	—
	"	—	1	1	1	—	—	—
Enteric Fever	Borough	1	36	37	36	1	—	2.7
	Rural ...	—	1	1	1	—	—	—
	Port ...	—	1	1	1	—	—	—
Typhoid Carriers	Borough	—	1	1	1	—	—	—
	Rural ...	—	1	1	1	—	—	—
Continued Fever	Borough	—	1	1	1	—	—	—

6. LABORATORY WORK.

The bacteriological examination of swabs from Diphtheria cases and contacts is carried out as a routine practice. The specimens are examined at the County Laboratory at Maidstone, where the examinations are carried out without fee. In times of pressure, specimens are also sent to the Clinical Research Association, London.

Total pathological specimens examined at County Laboratory during the year	...	...	...	...	890
Total pathological specimens examined at the Clinical Research Association Laboratory	...				30
					<hr/>
Total	...	...	...		920
					<hr/>

Results.

	No. Submitted.	No. giving Positive Results.	No. giving Negative Results.
Diphtheria :			
Cases	112	21	91
Contacts	108	6	102
Enteric Fever	478	104	374
Pulmonary Tuberculosis	163	37	126
Ringworm of Scalp	48	25	23
Other Specimens	11	2	9
	<hr/>	<hr/>	<hr/>
Total	920	195	725
	<hr/>	<hr/>	<hr/>

In addition, 19 specimens of Fresh Milk, and six samples of Pasteurised Milk, were forwarded to the County Laboratory for bacteriological examination.

Sera and Vaccines.

Diphtheria anti-toxin is available for use by medical practitioners when required, and is also used extensively at the Isolation Hospital.

Anti-Influenzal Vaccine is also available for use by medical practitioners; while other special sera or vaccines are obtained and utilised as occasion arises.

7. SANITARY ADMINISTRATION.

Adoptive Acts, Local Orders, etc.

The adoptive Acts in force in the Borough are:—

- Infectious Disease (Prevention) Act, 1890.
- Public Health Acts Amendment Act, 1890.
- Public Health Acts Amendment Act, 1907—The whole of Part II. and III., Sections 52 to 67 of Part IV., the whole of Part V., and Sections 93 and 95 of Part X. of the Act.

Orders :

- Offensive Trades: Order of Local Government Board, dated 17th November, 1911, under Section 51 of the Public Health Acts Amendment Act, 1907, declaring the trades of dealer in rags and bones and fish fryer in the Borough to be offensive trades.
- Port Sanitary: Dover Port Order, 1922, constituting Dover a Port Sanitary Authority as from 1st October, 1922.

Bye-Laws and Regulations.

Prevention of Nuisances from Snow, Filth etc., and Keeping of Animals	... ..	9th Nov., 1859
Removal of Refuse, and Cleansing of Privies, etc.	... ..	9th Nov., 1859
*Streets and Buildings	... ..	4th Aug., 1868
Common Lodging Houses	... ..	7th May, 1872
*New Streets and Buildings	... ..	26th May, 1877
*Alteration of Buildings	... ..	16th Aug., 1892
Tents, Vans, Sheds, etc.	... ..	25th May, 1897
Good Rule and Government, and Prevention and Suppression of Nuisances	... ..	11th July, 1892
Dairies, Cowsheds and Milkshops	... ..	30th May, 1899
Good Rule and Government, and Prevention and Suppression of Nuisances	... ..	29th Mar., 1904
Common Lodging Houses	... ..	31st July, 1906
Slaughterhouses	... ..	31st July, 1906 (Revised 29th Nov., 1910)
Wholesale Fishmarket	... ..	25th June, 1907
Regulation of Offensive Trades	... ..	31st Dec., 1912
Dangerous Infectious Disorders (Ships)	... ..	24th Feb., 1914

*New Bye-Laws and Regulations relative to Streets and Buildings are under consideration, and if confirmed will repeal these.

**SALE OF FOOD AND DRUGS ACTS, AND PUBLIC HEALTH
(MILK & CREAM) REGULATIONS, 1912 & 1917.**

Milk and Cream Regulations :

1. Milk, and Cream not sold as Preserved Cream :

	(1)	(2)
	Number of samples examined for the presence of a Preserva- tive.	Number in which Preser- vative was reported to be present, and the amount of Preservative found in each sample (percentage).
Milk	<i>Nil.</i>	<i>Nil.</i>
Cream... ..	4	<i>Nil.</i>

Nature of Preservative in each case in column (2), and action taken under the Regulations in regard to it:

None detected.

2. Cream sold as Preserved Cream :

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the labels as to preservatives were correct:

(1) Correct statements	... ..	4
(2) Statements incorrect	... ..	<i>Nil</i>
Total	... ..	4
(3) <i>Percentage of Preservative found in each sample:</i>	<i>Percentage stated on Statutory Label :</i>	
0.29%, 0.13%, 0.21%, and 0.23%	"Not exceeding 0.4%" in each case	

(b) Determinations made of Milk Fat in Cream sold as Preserved Cream :

(1) Above 35 per cent.	... ..	1
(2) Below 35 per cent.	... ..	3
Total	... ..	4

(c) and (d), there were no breaches of requirements as to labelling or declaration of Preserved Cream.

3. Thickening Substances :

There was no evidence of addition of thickening substances.

Sale of Food and Drugs Acts.

1. Samples taken and submitted to Public Analyst :

Milk	46	Carbonate of Magnesia	4
Butter	9	Ale	3
Lemon Curd	8	Yellow Crystals ...	2
Margarine	7	Chocolate	1
Cheese	6	Wine	1
Cake	4	Sweetmeat	1
Golden Syrup	4		—
Fish Paste	4		108
Dripping	4		—
Whisky	4		

Samples taken informally :

Milk	7	Ale	3
Cheese	6	Chocolate	1
Butter	5	Yellow Crystals ...	1
Golden Syrup	4	Wine	1
Lemon Curd	4		—
Fish Paste	4		43
Dripping	4		—
Margarine	3		

Purchased by Agents	62
Milk taken in course of delivery, at place of delivery ...	4
Number of Agents employed	8

2. Adulterated Samples :

No. of Samples.	Deficient in Fat.	Extraneous Water.	Preservatives.	Other Deleterious Substances.
Milk (6)	21%, 3%, 27%, 7%, and 32%	—	—	One with colouring matter
Lemon Curd (4)	—	—	1.85, 1.12, 1.26 and 1.12 grains per lb. re- spectively of Salicylic Acid	—

3. Action Taken :

- (a) Sample of Milk reported as being 21% deficient in fat: Proceedings were withdrawn, after explanation by the vendor and further samples being taken.
- (b) Sample of Milk reported as being 3 % deficient in fat: This was an informal sample, taken in course of supply to a public institution. Further samples taken did not warrant action.
- (c) Samples of Milk reported as being 27% and 7% deficient in fat: These were informal samples, followed up by further samples, and no subsequent action was found necessary.
- (d) Sample of Milk reported as containing colouring matter: Police Court proceedings were taken against the vendor, who was fined 5/-.
- (e) Sample of Milk reported as being 32% deficient in fat: Sample submitted by relatives of an invalid after some had been used. No reason to believe that the milk when supplied was otherwise than satisfactory.
- (f) Samples of Lemon Curd containing 1.85, 1.12, 1.26, and 1.12 grains of Salicylic Acid per pound: The vendors were cautioned by order of the Committee.

Milk Samples :

The percentage of fat and non-fatty solids in the samples reported as genuine averaged 3.76 and 8.94, respectively, as compared with 3.60 and 8.87 in 1923.

Public Health (Condensed Milk) Regulations, 1923.

Under these Regulations, which were put in operation on the 1st November, 1923, eight samples were taken.

The tins in each case were labelled in accordance with the Regulations, and the second Schedule, specifying the percentage of milk fat, and milk solids including fat, was complied with.

Four of the samples were taken for the purpose of verifying the statements on the labels as to the equivalent of milk or skimmed milk, as required under the first Schedule; one sample was slightly below the amount declared, but stated by the Public Analyst to be within unavoidable error; the statements regarding the other three samples were found to be correct.

Public Health (Dried Milk) Regulations, 1923.

Under these Regulations, which were put in operation on the 1st May, 1924, eight samples were taken, and were reported as satisfactory throughout, the requirements as to milk fat being complied with.

Of the eight samples, five were supplied in tins, one in an airtight cardboard carton, and two in paper packets, the last three contained the highest percentage of moisture.

All divided samples were transmitted to the Public Analyst in securely sealed bottles or non-absorbent airtight containers.

The declarations on the labels were as follows:—

No. 28 as equivalent to 3 pints of milk.

No. 29 as equivalent to 2 pints of milk.

No. 30 as equivalent to $1\frac{1}{2}$ pints of milk.

No. 31 as equivalent to $4\frac{3}{4}$ pints of milk.

No. 32 as equivalent to $5\frac{3}{4}$ pints of milk.

No. 33 as equivalent to $5\frac{1}{2}$ pints of milk.

No. 35 as equivalent to 5 pints of milk.

(No. 34 was prepared before the regulations became operative and was unlabelled).

The samples were certified as follows:—

No. 28 as equivalent to 2.93 pints of milk.

No. 29 as equivalent to 2.02 pints of milk.

No. 30 as equivalent to 1.56 pints of milk.

No. 31 as equivalent to 4.93 pints of milk.

No. 32 as equivalent to 5.70 pints of milk.

No. 33 as equivalent to 5.37 pints of milk.

No. 35 as equivalent to 5.56 pints of milk.

The deficiency in Nos. 28, 32 and 33 was attributed by the Public Analyst to absorption of moisture, undoubtedly due, in the case of Nos. 32 and 33, to the package in which the powder was supplied by the makers.

The samples were all correctly labelled in accordance with the Regulations.

**The Milk (Special Designations) Order, 1923, issued under Section 3
of the Milk and Dairies (Amendment) Act, 1922.**

Under the above-mentioned Regulations, one firm in the Borough is licensed to use the designation "Pasteurised" milk in connection with the sale of milk treated at their local depot.

Samples of the milk taken for bacteriological examination, before and after the issue of the licence, have shown the product to be well within the limits of bacterial purity specified in the Order.

The plant is well designed and carefully maintained, and its efficiency is checked by samples taken independently from time to time for bacteriological examination.

Inspection of Food.

Dairies, Cowsheds and Milkshops :

Seventy-four premises are registered under the Dairies, Cowsheds and Milkshops Order, 1885, as follows :—

Cowsheds	...	...	...	...	...	6
Dairies	...	...	...	...	...	19
Milkshops	...	...	...	...	...	49

These were inspected, and attention to proper storage of milk insisted on. Notices served where necessary were complied with in all cases, and no further action was required.

In addition to the above 11 persons, whose premises are outside the Borough, are registered as retail purveyors of milk. No action was found necessary with regard to any of these.

The Production of Clean Milk. While the above records of the Sanitary Inspector indicate what has been done in the supervision of the cowsheds, dairies and milkshops in the Borough, the problem of a clean milk supply for the town has a much wider significance. Only a small proportion of the total quantity of milk distributed in the Borough is produced inside the boundary.

Samples of milk were taken as delivered from the farms during the year, for bacteriological examination, and while none of them showed evidence of infection by the tubercle bacillus, the high bacterial counts, and the presence of bacillus coli communis, were evidence of dirty methods of production. The danger to the public health which arises where a "carrier" of infection is a member of the milking staff on a farm was only too well demonstrated during the outbreak of paratyphoid fever.

Until all producers realise that clean milk should be sold to the public, and that it can be produced on farms where the cowsheds may be old, poorly ventilated, inadequately lighted, and difficult to work, provided methods of thorough cleanliness are rigidly followed, this reasonable standard for the public safety will not be reached. The pasteurisation of milk for general use would not be necessary if clean milk were dispatched from the farms.

The Clean Milk Competitions which the County Council have organised during the past three years, have resulted in the production of much more clean milk than was the case three years ago. It is to be hoped that the farms in the rural districts around Dover will enter for these competitions, and in this way give their workers an opportunity of instruction in modern methods of clean milk production.

Slaughterhouses :

The premises on the register are classified as follows :—

			Number in 1914.	Number in December, 1923.	Number in December, 1924.
Registered	...	...	11	5	5
Licensed	...	...	9	8	8
			—	—	—
Total	...		20	13	13
			—	—	—

These were kept under regular observation, and any unsatisfactory matters dealt with by the Sanitary Inspector and the Meat Inspector, who make a practice of visiting during the process of slaughtering.

Shops, etc., Barrows and Stalls :

In connection with the food supply in the Borough, the following inspections were made of places where food is prepared or exposed for sale, exclusive of slaughterhouses, fried fish shops, dairies, cowsheds and milkshops :—

Shops, etc.	...	...	...	...	2971
Barrows and stalls	...	...	...	...	1650
					—
Total	...	...	...	...	4621
					—

The total amount of food condemned in the Borough amounted to, approximately, 12 cwt. 1 qr. 7 lbs., and consisted of :—

1 Cow Carcase.	25 lbs. Corned Beef.
1 Pig Carcase.	29 lbs. Rice.
48 Rabbits.	9 Boxes Kippers.
442 lbs. Beef.	2½ Boxes Bananas.

Of the above, the cow carcase was tuberculous, and the pig carcase was suspected to be infected with Swine Fever. The remainder of the foodstuffs were decomposed.

**Premises and Occupations which can be controlled by Bye-Laws
or Regulations :**

The premises controlled by Bye-Laws are as follows :—

Slaughterhouses	... ..	13
Common-lodging houses	... ..	5
Dairies	... ..	19
Cowsheds	... ..	6
Milkshops	... ..	49
Tents and Vans	... ..	Variable

Bye-Laws for the control of houses let in lodgings are still under consideration by the Local Authority.

The offensive trades in the Borough are :—

Rag and Bone Dealers	... ..	4
Fried Fish Shops	... ..	23

All the above were regularly inspected, and action taken where necessary.

There are no knackers' yards.

All stables and piggeries were kept under observation, and action taken where necessary.

Common-lodging Houses :

The five common-lodging houses are now registered annually, from January 1st. They are regularly inspected, and action taken where necessary.

Disinfection :

During 1924, the following were disinfected :—

Houses	... ..	194
School-rooms	... ..	237

Number and Nature of Inspections made during the Year :

Nature.	Inspections and Visits.
Dwelling Houses	4755
Slaughter-houses	695
Bakehouses	62
Dairies, Cowsheds and Milkshops	182
Offensive Trades	351
Common-Lodging Houses	66
Factories and Workshops	177
Smoke observations	41
Marine Stores	18
Schools	11
Public Institutions	29

Number of Notices served during Year :

Informal Notices	...	...	...	...	...	...	...	862
Statutory Notices (Housing)	...	...	...	...	...	...	...	30
Statutory Notices (Public Health Acts)	...	...	...	...	...	...	...	15
Statutory Notices (Bye-Laws)	...	...	...	...	...	...	...	4

Result of Service of Notices :

Defective drainage repaired	...	...	...	...	...	...	...	329
Structural repairs executed	...	...	...	...	...	...	...	158
Defective sanitary fittings repaired	...	...	...	...	...	...	...	93
Dangerous structures remedied	...	...	...	...	...	...	...	49
Defective paving repaired	...	...	...	...	...	...	...	66
Premises cleansed, limewashed, etc.	...	...	...	...	...	...	...	44
Offensive accumulations removed	...	...	...	...	...	...	...	44
Premises ventilated	...	...	...	...	...	...	...	52
Nuisances from dampness abated	...	...	...	...	...	...	...	56
Nuisances from improper keeping of animals abated	...	...	...	...	...	...	...	20
Improper storage of milk remedied	...	...	...	...	...	...	...	4
Overcrowding abated	...	...	...	...	...	...	...	11
Breach of Factory Act remedied	...	...	...	...	...	...	...	2
Improper storage of manure abated	...	...	...	...	...	...	...	17
Improper storage of refuse abated	...	...	...	...	...	...	...	12
Smoke nuisances abated	...	...	...	...	...	...	...	2
Miscellaneous	...	...	...	...	...	...	...	6

Closet Accommodation :

The sewerage system of the Borough was fully described in the survey report for 1920. The number of each type of sanitary convenience now existing in the Borough is, approximately:—

Houses connected with a sewerage system	...	9053
Houses draining into cesspools	...	60
Houses with earth-closets	...	9
Houses with pail-closets	...	26

No earth or pail-closets were converted to the water-carriage system during the year.

Scavenging.

The system described in the 1920 report was continued during 1924.

Factories and Workshops.

Inspections :

Factories	...	...	...	...	...	...	...	...	13
Workshops	...	...	...	...	...	...	...	...	123
Workp'aces	...	...	...	...	...	...	...	...	41
Total	...	...	...	...	...	...	...	...	177

Informal Notices to remedy Defects :

Factories	...	...	...	...	...	...	...	...	1
Workshops	...	...	...	...	...	...	...	...	20
Workplaces	...	...	...	...	...	...	...	...	4

In no case was legal procedure necessary.

Defects found :

	Number found.	Number remedied.
With regard to cleanliness	10	10
With regard to drainage, etc.	7	7
With regard to sanitary accommodation	3	3
Miscellaneous	5	5

Registered Workshops at 31st December, 1924 :

Workshop bakehouses	...	36	(including 3 underground)
Other workshops	...	262	
Total	...	298	

NOTE : The three underground bakehouses are certified.

Outworkers :

Twenty-nine lists of outworkers were received and entered in the register. The total number of these is now 26. The premises were all inspected during the year.

Other Matters :

Nil.

Rats and Mice (Destruction) Act, 1919.

The following rodents were caught in the Town area on bird-lime and in traps during the year :—

Brown rats	...	...	...	...	3,138
Mice	...	...	...	...	1,360

In addition, 578 brown rats were caught at the Corporation laystall, Coombe Farm, outside the Borough. Barium biscuits to the amount of 12½lbs. were placed in dwelling houses, stores, etc., and 245lbs. of arsenical compounds, chiefly made of condemned meat, were placed in the sewers, and other places to which domestic animals could not gain access. These poisonous compounds were kept under observation by the ratcatcher until they were consumed by the rodents, and accounted for a large number of rats beyond the number totalled above. Barium biscuits to the value of £1 15s. 8d. were purchased by the public during 1924.

The destruction of rodents in the Port Area is referred to in the Port Sanitary section of this report.

8. PUBLIC HEALTH STAFF.

*Medical Officer of Health	... ..	Whole time.
*Assistant Medical Officer of Health and Medical Inspector of Aliens	... ..	„
*Assistant Medical Officer of Health and Assistant School Medical Officer	... ..	„
*Senior Sanitary Inspector	... ..	„
*Sanitary Inspector (Port Food Inspection and Town Meat Inspection)	... ..	„
Assistant Sanitary Inspector	... ..	„
Assistant Sanitary Inspector	... ..	Part-time sanitary work and part- time Clerical duty.
Three members of clerical staff	... ..	Whole time.
(one of these for School Medical Service).		

The Senior Sanitary Inspector and the Sanitary Inspector are Certificated Meat Inspectors.

Maternity and Child Welfare, etc.

*One Lady Superintendent and Senior Health Visitor	... ..	Half M.C.W. work and half School Medical Service.
*Four Health Visitors	... ..	„ „

All the members of the Health Visiting Staff hold the C.M.B. Certificate and are Trained Nurses. There were no changes of personnel during the year.

*Contributions received towards salaries under Public Health Acts or by Exchequer Grants.

The difficulties which arose during the year in the Sanitary Section of the Department have been the subject of a special report to the Committee.

8. (a). HEALTH PROPAGANDA.

Dover Health Week : October 5th to 11th, 1924.

PROGRAMME :

MONDAY, OCTOBER 6th, at Holy Trinity Girls' School	} A Series of Lantern Lectures on " Bad Teeth and Ill-Health " by F. CONSTANT ESQ. L.D.S., R.C.S., ENG. (Dental Surgeon, Astor Dental Clinic and School Clinic.)
TUESDAY, OCTOBER 7th at Christ Church Parish Hall	
WEDNESDAY, OCTOBER 8th at Barton Road Girls' School	
THURSDAY, OCTOBER 9th at St. Mary's Parish Hall	
FRIDAY, OCTOBER 10th at St. Bartholomew's Parish Hall	
FRIDAY, OCTOBER 10th at Town Hall, Dover	Lantern Lecture on " Cancer " by A. GREENWOOD, ESQ., M.D., B.SC., D.P.H. ETC., County Medical Officer for Kent.

Leaflets were distributed to the Head Teachers of the Elementary Schools in the Borough. In a good many instances the teachers arranged special lessons during Health Week.

The various meetings were well attended, and the local press assisted very materially by the reports published in the newspapers.

9. HOUSING.

Number of new working-class houses erected in Borough by private enterprise :—

Year.	Number of Houses.
1924.	4

Number of new houses erected during 1924 under Municipal Housing Scheme :—

Ropewalk Site	23
---------------	-----	-----	-----	----

1. Unfit Dwelling Houses :

Inspection :	Brought forward from 1923.	Originating in 1924.	Standing over at end of 1924.
(1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	—	157	—
(2) Number of dwelling houses which were inspected and recorded under the housing (Inspection of District) Regulations, 1910...	—	132	—

Inspection :	Brought forward from 1923.	Originating in 1924.	Standing over at end of 1924.
(3) Number of dwelling houses found in a state so dangerous or injurious to health as to be unfit for human habitation (Including 'Insanitary Areas')	41	43	76
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-heading) found to be not in all respects reasonably fit for human habitation	—	84	—
(5) Houses where no action was necessary	—	5	—
2. Remedy of Defects without Service of Formal Notice :			
Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their Officers	20	50	—
3. Action under Statutory Powers :			
A. Proceedings under Section 28, H.T.P. Act, 1919 :			
(1) Number of dwelling houses in respect of which notices were served requiring repairs	11	31	13
(2) Number of houses which were rendered fit :—			
(a) by Owners	11	18	—
(b) by Local Authority in default	—	—	—
(3) Number of houses in respect of which Closing Orders became operative in pursuance of declarations of owners of intention to close	—	—	—
B. Proceedings under the Public Health Acts :			
(1) Number of houses in respect of which notices were served requiring defects to be remedied	—	25	—
(2) Number of dwelling houses in which defects were remedied :—			
(a) by Owners	—	25	—
(b) by Local Authority in default	—	—	—

C. Proceedings under Section 17 and 18 H.T.P. Act, 1909 :

(1) Number of representations made with a view to the making of Closing Orders ...	—	13	—
(2) Number of dwelling houses in respect of which Closing Orders were made ...	4	13	9
(3) Number of houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit ...	—	2	—
(4) Number of dwelling houses in respect of which Demolition Orders were made ...	7	5	5
(5) Number of dwelling houses demolished in pursuance of Demolition Orders ...	—	6	—
(6) Number demolished without Demolition Orders ...	—	3	—
(7) Dwelling houses represented for re-construction schemes under Part II. of the Housing of the Working Classes Act, 1890, (including 8 houses with Closing Orders and 2 with Demolition Orders) ...	34	39	73

Condensed analysis of the Year's work :—

Inspections :

Unfit houses not remedied in 1923, (less Closing Orders) ...	79
Unfit houses dealt with under S. 17, 1909 Act ...	11
Unfit houses inspected in 1924 and dealt with under S. 28, 1919 Act ...	31
Houses inspected and dealt with by informal notice ...	50
Houses inspected and records under consideration in various "insanitary areas" ...	39
Houses inspected and found fit in 1924 ...	5

Total number of houses dealt with ... 215

Action :

Houses demolished under Demolition Orders ...	6
Houses remedied after Closing Orders ...	2
Preliminary notices complied with ...	70
Statutory notices complied with (S. 28) ...	29
No action required ...	5
Scheduled in "insanitary areas" ...	73
Standing over at end of 1924 ...	30

Total number of houses dealt with ... 215

Special Reports on Housing :

In addition to the premises dealt with in 1922 and 1923, the following representations under Section 39 of the Housing of the Working Classes Acts, 1890, were made this year:—

22nd July, 1924, with regard to:—

Nos. 1, 2, 3, 4, 5, 6, 7 and 8, Mount Pleasant,
Half Moon Cottage,
Half Moon Inn,
Nos. 1, 2, 3, 4, 5 and 6, Blucher Row,
Nos. 7, 9, 11, 13 and 15, Bowling Green Lane,
Mount Pleasant Cottage.

18th September, 1924, with regard to:—

Nos. 1, 2 and 3, Pierce's Court, Last Lane.

12th November, 1924, with regard to:—

Nos. 3, 4, 5, 6, 8, 9, 10 & 11, Seven Star Street,
Nos. 2, 3 and 4, Middle Row.

All these properties were inspected by the Insanitary Areas Sub-Committee, who recommended that No. 7, Seven Star Street, 10 and 11, Council House Street, the Sailors' Home, Blenheim Square, the site of No. 1, Middle Row, and the disused mineral water store should be added to the list, for the preparation of draft schemes.

Increase of Rent and Mortgage Interest (Restriction) Act, 1920 :

Twenty-five applications for certificates were received, and the houses were all inspected and reported on to the Public Health Committee, when a certificate was granted in each case.

Owing to the refusal of the tenants to take proceedings in the County Court, as provided for under the Act, further action was taken in four cases under the Housing Acts. As a result of the action taken, 21 houses (of which seven were standing over from 1923) were made reasonably fit for human habitation, and 11 houses were standing over at the end of the year.

10. MATERNITY AND CHILD WELFARE.**Infantile Mortality :****Rates per 1,000 Registered Births :**

England and Wales	...	...	...	...	...	75
105 Great Towns	...	...	...	...	...	80
157 Smaller Towns (Dover included)	...	...	...	...	...	71
Dover	...	...	...	...	...	42

Infantile mortality rates in Dover during the year at various ages :—

Under 1 week.	Under 1 month.	Under 3 months.	3—6 months.	6—12 months.	Total Infantile Mortality.
18.9	25.9	29.5	4.7	8.2	42.4

The deaths of infants under one year per 1,000 births from various diseases in Dover were :—

Premature Birth	...	...	...	...	14.1
Broncho-Pneumonia	...	...	...	...	8.3
Bronchitis	...	...	...	...	5.9
Atrophy, debility and marasmus	...	...	...	...	4.7
Congenital defects	...	...	...	...	3.5
Convulsions	...	...	...	...	3.5
Lack of care (under 3/12 year)	...	...	...	...	1.2
Diarrhoea and enteritis	...	...	...	...	1.2

Stillbirths :

Of the total number of births, 16 were stillborn, a considerable reduction below the number for 1922 (31), and two less than in 1923. Had all the births been living children, the birth-rate would have been 20.01 per 1,000.

Deaths of Illegitimate Children :

Age.	Sex.	Cause of Death.
3 months	F.	Broncho-Pneumonia
5 months	F.	"
4 hours	M.	Premature Birth
10 days	M.	"

Death-rate per 1,000 births of each class amongst legitimate and illegitimate children under one year of age :—

	1924.	1923.	1922.	1921.	1920.	1919.	1918.
Infantile mortality amongst legitimate children	... 39	45	52	54	75	62	51
Infantile mortality amongst illegitimate children	...121	182	68	152	98	122	75

NOTIFICATION OF BIRTHS ACTS.

779 notifications were received, and these referred to the following births :—

Single living births	...	...	...	743 children
Twin living births	...	...	...	20 „
Stillbirths	...	...	...	16 „

The births registered by the Registrar-General as belonging to the Borough (corrected by inward and outward transfers) were 848.

Of the notifications received, 702 (90%) were sent by midwives, and 77 (10%) by doctors and others.

The births registered by the local Registrar as actually occurring within the Borough, irrespective of the parents' permanent places of residence, were 816. Of these, 95% were notified to the Public Health Department prior to registration, while 5% were unnotified. In each of the latter cases, the attention of the persons concerned was drawn to the requirements of the Acts. No legal proceedings were taken for failure to comply with the Acts.

HOME VISITING.

Miss Barker, the Lady Superintendent of the Health Visiting Staff, submits the following report on the results of the visits paid:—

	Total Visits
1. First visits paid to living children ...	809
Visits re stillbirths	15
	824
2. Revisits:—	
(a) Infants under one year	2,142
(b) Infants 1—5 years	4,685
(c) Visits re Infantile Mortality	39
	6,866
3. Visits to expectant mothers	260
4. Visits to sick mothers	2
5. Visits re Milk Order	53
6. Visits re Midwives Act (on behalf of County Council)	4
7. Visits re Ophthalmia Neonatorum ...	44
8. Visits re Puerperal Fever	3
	47
9. Visits re Children Act, 1908	136
10. Visits re Blind Persons	48
	8,240
Total ...	933
Lost Visits	6,157
Houses Visited ...	

WELFARE CENTRE.

1. Infant Clinic :

The Centre was open three afternoons each week—Tuesday, Wednesday and Thursday.

A. Record of Attendances for Weighing and Nursing Advice :

(1) Infants under 1 year on register for first time ...	366
(2) Infants and children who attended last year ...	380
Total on register	746
(3) Number of sessions	155
(4) Total attendances	4,055
(5) Average attendance per session	26

B. Medical Consultations :

Infants under 12 months of age to the number of 245, and 166 children between one and five years of age, were brought to see the Medical Officer at the Centre. The diseases from which the children suffered were:—

Diseases of:—		Number of Infants under 1 year.	No. of Children between 1 and 5 years.
1.	Debility	5	2
2.	Malnutrition	5	4
3.	Prematurity	1	—
4.	Rickets	4	5
5.	Enlarged Glands	4	7
6.	Rheumatism	—	1
7.	Hernia	17	3
8.	Congenital Defects and Deformities	14	8
9.	Congenital Syphilis	—	2
10.	Minor Injuries	—	7
11.	Mentally Deficient	—	4
12.	Diseases of the Eye	7	10
13.	Diseases of the Ear	5	4
14.	Diseases of the Nose and Throat	7	10
15.	Diseases of the Alimentary System	53	26
16.	Diseases of the Genito-Urinary System	25	8
17.	Diseases of the Nervous System	4	3
18.	Diseases of the Respiratory System	26	33
19.	Diseases of the Skin	23	17
	Healthy	45	12
Total ...		245	166

Number of Sessions	...	...	...	...	50
Number of cases seen by M.O.	...	...	...	...	411
(a) New cases for 1924	...	..	...	...	274
(b) Old cases	...	...	...	...	137
Total attendances	...	...	...	...	832
Average attendance per session	...	...	...	...	16

2. Pre-Natal Clinic :

Expectant mothers are encouraged to attend the Clinic. Those who consult the Health Visitors are advised either to see their own doctors or to come to the Clinic. Other expectant mothers are sent by midwives, and, in all such cases, the midwife is communicated with, and informed if her patient's condition requires domiciliary medical attention. Post-natal cases also are seen. The cases seen are classified below :—

(a) Ante-natal :

Normal pregnancy	...	...	...	...	...	28
Pregnancy complicated by :						
Toxaemia	...	...	...	...	...	5
Alimentary disorders	...	...	...	...	...	8
Respiratory disorders	...	...	...	...	...	3
Cardio vascular disorders	...	...	...	...	...	3
Varicose veins	...	...	...	...	...	13
Oedema	...	...	...	...	...	2
Diseases of the skin	...	...	...	...	...	2
Enlarged thyroid	...	...	...	...	...	1
Threatened abortion	...	...	...	...	...	2
Venereal disease	...	...	...	...	...	1
Tuberculosis	...	...	...	...	...	2
						—
				Total	...	70
						—

(b) Post-natal :

Subinvolution	...	...	...	...	...	2
Misplacements	...	...	...	...	...	1
Debility	...	...	...	...	...	4
						—
				Total	...	7
						—

Number of cases seen by the Medical Officer :—

(a) New cases	...	...	...	...	...	65
(b) Old cases	...	...	...	...	...	12
						—
						77
						—
Number of sessions	...	...	...	...	...	46
Total attendances	...	...	...	...	...	148

3. Mothercraft :

Classes in mothercraft have been arranged during the year. Instruction in the making of baby clothes has been given by some of the Voluntary Workers, and the garments made at the Centre under supervision. At the same time, the Lady Superintendent gives instruction on infant care and management.

There were some 37 sessions held, at which 26 mothers made 290 attendances.

Maternal Mortality.

Following on the consideration of Circular 517 from the Ministry of Health, I presented this special Report:—

13th November, 1924.

“1. Prior to 1920, there is no available data in the Department, as all the records prepared by the late Dr. Robinson, going back to about 1885, were destroyed after his death, as he kept most of them at his private house.

“2. Four years make rather too short a period for accurate conclusions to be drawn from the data which has been collected.

“3. The following table, however, indicates the position:—

Year.	Maternal Deaths.	Living Births.	Still Births.	Maternal Death-rate.	
				Per 1000 Living Births	Per 1000 Living and Stillbirths combined.
1920	8	1117	26	7.2	7.0
1921	3	932	33	3.2	3.1
1922	3	829	31	3.6	3.5
1923	3	875	18	3.4	3.3
Totals	17	3753	108	—	—

“4. The causes of death in the 17 maternal cases analysed were:—

“Accidents of pregnancy	3 deaths
“Haemorrhage during or after labour	6 deaths
“Puerperal fever	1 death
“Toxaemias of pregnancy	4 deaths
“Accidents of labour and puerperium	3 deaths

“5. From these records, it is found that the maternal mortality rate for the Borough averaged 4.5 deaths for every 1,000 live births during the period.

"The maternal mortality rate for the County as a whole has remained fairly constant for more than 20 years, at 4 per 1,000 live births. From the small data available locally, one can only state that the local maternal mortality rate during four years compared fairly with that for the country generally.

"While this maternal death-rate has shown little sign of improvement, it is interesting and important to note what a marked decline has occurred in the infantile mortality:—

	Per 1000 Births:	
	England and Wales.	Dover.
In 1909 the Infantile Mortality was	154	138
In 1923 " "	69	50

"6. What can be done to bring about a reduction in the Maternal Mortality?

"This subject is discussed exhaustively in the report prepared by Dame Janet Campbell, and issued this year by the Ministry of Health. There it is laid down that the prevention and remedy of the present high rate of maternal mortality is a matter that calls for the most careful attention and action by local authorities, and that the broad lines of action should be under the following sections:—

- (a) Ante-natal supervision.
- (b) Maternity beds.
- (c) Domestic midwifery and maternity nursing.
- (d) Investigations into all maternal deaths.
- (e) Educational measures.

"The local scheme already includes action under three of these five headings—i.e., ante-natal supervision, investigations, and educational measures. One section—domestic midwifery—is outside your power as an Authority, and in the care of the County Council; while the remaining section—the provision of maternity beds—has not been considered.

"(a) **Ante-Natal Supervision.**—This is the most important portion of any maternity scheme, as adequate professional care of the expectant mother is a great factor in contributing to a normal confinement. Every doctor and midwife should give this subject attention, if their patients are to be fully prepared for what is a normal physiological function; and, on the other hand, every mother must be willing to accept and follow the advice given by her professional attendant.

"(b) **Complicated Cases.**—The cases that are likely to be complicated ones can best be looked after in an institution, and the most economical method of doing this locally would be by the provision of a small ward at the Royal Victoria Hospital. Some five or six beds in such a ward would be adequate for the present needs of the Borough.

"Until such time as funds are available for such a ward, I would suggest that the Committee might approach the Committee of the Royal Victoria Hospital, and ascertain on what terms one or two beds would be always available for such complicated cases.

"If the Committee were satisfied with the suggested terms, then a detailed scheme for working the same would be prepared in consultation with the Local Medical Society.

"(c) **Educational Measures.**— As a means of bringing still further before the mothers the importance of ante-natal medical supervision, I think it will be well for me again to arrange a few lectures to the Midwives in the town, after consultation with the County Medical Officer. By this means one can bring to their notice the local causes of maternal mortality referred to in this report, and, by their assistance and support, endeavour to impress upon expectant mothers the importance of pre-natal care.

"As the Committee know, from our systematic work at the Clinic, the number of mothers who come to the Ante-Natal Clinic is only a small proportion of the expectant mothers in the town. As midwives attend professionally a large proportion of the other expectant mothers, their greater interest in the question of ante-natal supervision will be of considerable assistance."

During 1924, four maternal deaths occurred in the Borough:

	Age.	Cause.
1.	34	Obstructed labour. Caesarian section. Post-operative ileus.
2.	29	Pulmonary embolism. Caesarian section 12 days. Previously contracted pelvis.
3.	21	Childbirth. Aortic and mitral disease.
4.	19	Pre-natal eclampsia.

Cases 1 and 3 were classified by the Registrar-General under the general disease, rather than the obstetrical condition.

A scheme for the provision of beds for complicated cases, as suggested in the special report, was prepared, and approved by the Local Authority early in 1925.

ADMINISTRATION OF NECESSITOUS MILK SCHEME.

The scheme in force was carefully administered during the year. No one received free milk under it. Applicants so necessitous as to require free milk were referred to the Voluntary Committee, whose funds are available for use in special cases.

The following scale was in operation:—

Weekly income per head of family, after rent deducted.	Cost per quart to Authority (pence).	Applicants pay (pence).
A. Under 5/-	4	2 (or more, according to retail price.
B. 5/- to 6/-	3	3 do.
Dried Milk.	Local Authority.	Applicant.
Under Scale A.	1/-	6d.
Under Scale B.	6d.	1/-

The number of persons supplied each month was :—

				Expectant Mothers.	Nursing Mothers.	Children.	Total.
January	...	...	...	5	30	73	108
February	...	...	...	7	26	63	96
March	...	...	...	5	22	47	74
April	...	...	...	3	22	44	69
May	...	...	...	2	19	39	60
June	...	...	...	1	18	36	55
July	...	...	...	3	16	35	54
August	...	...	...	3	15	33	51
September	...	...	...	3	14	32	49
October	...	...	...	2	14	39	55
November	...	...	...	4	15	44	63
December	...	...	...	7	11	42	60
				45	222	527	794

During 1924, 148 individual families were assisted, of which number 15 had dried milk in lieu of fresh milk.

In these 148 families, 201 cases were helped, and the applications were in respect of :—

Expectant mothers	...	...	...	...	...	20
Nursing mothers	...	...	...	...	...	58
Children under 18 months	...	...	...	...	...	56
Children 18 months to 3 years	...	...	...	...	...	66
Children from 3 to 5 years	...	...	...	...	...	1
						201

		Number.	Orders issued.
Families assisted for 12 months	...	11	132
Families assisted for 11 months	...	3	33
Families assisted for 10 months	...	4	40
Families assisted for 9 months	...	3	27
Families assisted for 8 months	...	6	48
Families assisted for 7 months	...	4	28
Families assisted for 6 months	...	7	42
Families assisted for 5 months	...	7	35
Families assisted for 4 months	...	9	36
Families assisted for 3 months	...	23	69
Families assisted for 2 months	...	38	76
Families assisted for 1 month	...	33	33
Total	...	148	599

Quantities supplied under scheme during 1924.	Fresh Milk.	Dried Milk.
	2,760 galls. 1 quart	152 lbs.
Cost to the Local Authority	£176 16s. 2d.	£7 16s. 4d.
<hr/>		
Total	...	£184 12s. 6d.

Irregularities in Milk Applications :

In the systematic examination of all applications, evidence was produced to the Committee that certain persons had made false declarations as to their total income, with the result that they had obtained milk to which they were not entitled under the present scale. Five such cases were investigated, and the following action adopted:—

	Milk Supply.	Legal proceedings.	Result.
Case 1	Cancelled...	For false declaration	Fined £1
" 2	" ...	" "	" £5
" 3	" ...	" "	" £5
" 4	" ...	Waived	Money refunded
" 5	" .	"	Inaccuracy not so grave as in other cases.

11. PORT SANITARY ADMINISTRATION.

1. Shipping.

TABLE A.

H.M Collector of Customs has kindly supplied the details of the number of ships and their tonnage. The continuous courtesy and help of himself and his staff has considerably facilitated the public health work at the Port :—

	Number.	Tonnage.	Number Inspected.		Number Reported to be Defective.	Number of Orders Issued.
			By the Medical Officer of Health.	By the Sanitary Inspector.		
Foreign :						
Steamers ..	2626	1564005	1	35	2	—
Sailing ..	73	7156	—	12	2	—
Motor ..	20	2487	1	—	—	—
Fishing ..	—	—	—	—	—	—
Total ..	2721	1573648	2	47	4	—
Coastwise :						
Steamers ..	126	94252	—	52	1	—
Sailing ..	491	31877	—	208	—	—
Motor ..	22	1784	—	—	—	—
Fishing ..	165	5812	—	37	—	—
Total ..	804	133725	—	297	1	—
Grand Total ...	3525	1707373	2	344	5	—

2. Plague, Cholera and Yellow Fever Regulations, etc. :—

The following ships were visited by the Deputy Medical Officer of Health on their arrival, for medical reasons :—

Date.	Vessel.	Port.	Port Infected with.	Remarks.
Aug. 5th	Motor Ship <i>Cruar</i>	Canary Is. ...	<i>Nil.</i> ...	Steward landed with Enteric Fever Removed to Isolation Hospital.
Dec. 23rd	ss. <i>Holsatia</i>	Santander ...	<i>Nil.</i> ...	Medical inspection of passengers landing.

RATS DESTRUCTION.

TABLE B.

Rats Destroyed in 1924.

Number of	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total in Year.
Black rats	—	—	—	—	—	—	—	—	—	—	—	—	—
Brown rats	53	41	39	38	54	35	29	32	38	42	35	33	469
Rats examined	—	—	—	—	—	—	—	—	—	—	—	—	—
Rats infected with Plague ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Rats not infected with Plague	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE C.

Plague Precautions—Measures against Rats.

Names of Vessels arriving in the Port Sanitary District.				Vessels subjected to measures of Rat Destruction.			
Plague infected.	Plague suspected.	From infected Port.	Names of Vessels.			Number of other Vessels.	Measures employed (trapping, poisoning, fumigating, etc.)
			Plague infected.	Plague suspected.	From infected Ports.		
—	—	—	—	—	—	ss. "Victoria"	Traps
						ss. "Deal"	"
							12
							20

3. Food Inspection :

Summary of food inspection carried out under the Public Health (Foreign Meat and Unsound Food) Regulations, issued under the Public Health Regulations as to Food) Act, 1907 :—

Foods*ufis.	Cargoes arrived from :			
	France.	Belgium.	Other Foreign Ports.	Coastwise
	Tons cwt. lbs.	Tons cwt. lbs.	Tons cwt. lbs.	Tons cwt. lbs.
Fruit, Nuts and Vegetables ...	11974 19 —	32 11 —	— — —	— — —
Preserved Fruits ...	2171 7 —	— — —	— — —	— — —
Yeast ...	665 12 —	422 6 —	— — —	— — —
Poultry ...	47 12 —	194 7 —	— — —	— — —
Meat Offal ...	37 15 96	18 9 94	— — —	— — —
Butter ...	30 10 —	— — —	— — —	— 56
Eggs ...	11 8 —	35 17 —	— — —	— — —
Fish ...	8 4 —	53 10 —	— — —	— — —
Nuts (dried) ...	7 9 —	— — —	— — —	— — —
Tinned and Potted Meats ...	6 17 53	1 — 56	— — —	— — —
Rabbits ...	6 4 —	525 15 —	— — —	— — —
Flour ...	3 18 —	— — —	— — —	— — —
Cheese ...	3 1 25	— 6 56	— — —	— — —
Caviare ...	1 14 32	— — —	— — —	— — —
Shell Fish ...	1 8 56	— — —	— — —	45 —
Biscuits ...	1 6 —	— — —	— — —	— 2 —
Tinned Vegetables ...	1 5 56	— 4 —	— — —	— 40
Hams ...	— 18 —	— 1 56	— — —	— — —
Sausages ...	— 15 18	2 5 76	— — —	— — —
Suet ...	— 13 —	— — —	— — —	— — —
Snails ...	— 8 14	— — —	— — —	— — —
Honey ...	— 7 —	— — —	— — —	— — —
Pickles ...	— 5 —	— — —	— — —	— — —
Venison ...	— 2 56	— — —	— — —	— — —
Veal ...	— 2 —	21 12 78	— — —	— — —
Meat Pies ...	— 2 —	20 12 58	— — —	— — —
Tinned Fish ...	— 1 56	— — 56	— — —	— — —
Rice ...	— 1 —	— — —	— — —	— — —
Shrimps ...	— 1 —	71 14 —	— — —	— — —
Beef ...	— — —	— 9 —	— — —	— — —
Wheat ...	— — —	— — —	— — —	19345 —
Pickled Beef ...	— — —	— — —	— — —	— 3 —
Pickled Pork ...	— — —	— — —	— — —	— 3 —
TOTAL ...	14984 8 14	1401 2 82	— — —	19390 8 96

GRAND TOTAL ... 35,775 tons, 19 cwt., 80 lbs.

Of the above consignments, the following were condemned as unfit for human food, and seized. These articles were either destroyed, or utilised in certain industrial manufactures, to the satisfaction of the Medical Officer of Health :—

	Tons.	Cwts.	Lbs.
Fruit	13	1	100
Meat Offal	—	18	10
Veal	—	9	50
Pickled Pork	—	3	—
Pickled Beef	—	3	—
Rabbits	—	2	—
Biscuits	—	2	—
Shrimps	—	—	56
Tinned Peas	—	—	40
„ Meats	—	—	33
„ Tomatoes ..	—	—	4
	—	—	—
	15	—	69
	—	—	—

The following specimens were submitted to either chemical or bacteriological examination during 1924 :—

Date.	Sample.	Chemical Examination.	Result.	Bacteriological Examination.	Result.
Jan. 12th	Fruit Pulp ... (Bilbury)	1	Free from preservative.		
„ 16th	Butter ...	2	Both genuine.		
Apl. 4th	“ Sheep's Glands ”	1	Both the solid glands and the liquid contained about 1 part of Formaldehyde in 3000. (Sampled in transit).		
„ 29th	“ Sheep's Glands ”	2	Both the solid glands and the liquid contained about 1 part of Formaldehyde in 1200. (Consignment seized).		

Date.	Sample.	Chemical Examination.	Result.	Bacteriological Examination.	Result.
May 6th	"Sheep's Glands"	1	Both the solid glands and the liquid contained about 1 part of Formaldehyde in 1200. (Consignment seized).		
" 6th	"Sheep's Glands" (Testes)	1	In a saturated solution of Ammonia Alum. No other preservative. (Consignment seized).		
" 9th	"Sheep's Glands"	1	Free from preservative.		
" 13th	"Sheep's Glands"	1	Free from preservative.		
" 15th	Escallop ...			1	Satisfactory.
June 6th	Caviare ..	1	Free from preservative.		
" 19th	Fruit Pulp .. (strawberry)	1	Sulphur Dioxide 17.5 grains per lb.		
July 19th	"Caviare Russe"	1	Boric Acid 0.45%.		
Sept. 17th	Fruit Pulp ... (apricot)	1	Tin, 3.23 grains per lb. (Consignment seized).		
" 17th	Tomatoes ... (tinned)	1	Tin, 1.02 grains per lb.		
Oct. 26th	Meat (Veal)	1	Free from preservative.		
Total		16		1	

NOTES.—The "Sheep's Glands" sampled on April 4th, were taken from a consignment in transit. Subsequent consignments were detained until the results of analyses were received.

The number of vessels concerned in carrying the foodstuffs examined each month was :—

				Actual Number of Vessels engaged in Traffic.	Number of occasions these Vessels entered Port.
January	...	...	...	26	150
February	...	...	...	24	140
March	...	...	...	24	140
April	...	...	...	22	120
May	...	...	...	26	147
June	..	...	...	25	155
July	...	...	...	30	176
August	..	...	...	17	139
September	...	...	..	24	145
October	...	...	..	25	160
November	...	...	...	28	143
December	...	...	...	18	143
Cargoes examined					1758

4. Port Sanitary Authorities (Infectious Diseases) Regulations, 1920 :

a. Cleansing Station :

It was not found necessary to cleanse any persons at the cleansing station at the Isolation Hospital during 1924.

b. Infectious Disease :

The following cases were landed at Dover and treated in the Isolation Hospital :—

Measles : One alien girl, passenger.

Enteric Fever : One adult male, Norwegian, (member of crew.)

c. The risks of the Introduction of Infectious Diseases to which the Port is exposed :—

This question was dealt with fully last year and no new problems arose in 1924.

5. Aliens Order, 1919-20.

The arrangements made under this Order were fully described in the report for 1920. The following is a record of the inspection work during 1924 :—

Aliens landing at Port of Dover.	Total.	Medically Inspected.	Medically Examined	CERTIFICATES.						Trans-migrants.	
				(a)	(b)	(c)	(d)			Clean-sing.	Dis-ease.
Tempary Residents :											
Vis.	60459	60155	304	1	5	2	—				
B. Vis.	28216	28200	16	—	—	—	—				
Diplomatic ...	3135	3135	—	—	—	—	—				
Seamen	31	30	1	—	—	—	1				
Con. Seamen ...	929	927	2	—	—	—	—				
Permanent Residents :											
Ret. Res.	26371	26338	33	—	—	—	—				
M.L. PERMITS :											
Males	669	410	259	—	1	2	—				
Females	762	268	494	—	1	2	—				
Children	36	30	6	—	—	—	—				
IMMIGRANTS :											
Males	501	152	349	—	11	6	—				
Females	808	242	566	—	8	2	—				
Children	295	76	219	—	8	—	—				
In Transit	12733	12729	4	—	—	—	—				
Totals	134945	132692	2253	1	34	14	1				
Rejections from all Causes, add ...	758	748	10								
Transmigrants ...	904	301	3						Nil.	Nil.	
Grand Totals ...	136607	134341	2266	1	34	14	1		Nil.	Nil.	

Classifications :

Visitors.	Contract Seamen.
Business Visitors.	Returning Residents
Diplomatic.	Ministry of Labour Permits.
Seamen.	Immigrants.

6. Passenger Traffic.

	1921.	1922.	1923.	1924.
Number of vessels carrying passengers	1742	1811	1821	1843
Number of British passengers	244373	294705	349147	372498
Number of Alien passengers	133652	131799	123381	134945
Total number of passengers arriving at Port of Dover from Cross-Channel Ports	378025	426504	472528	507443

METEOROLOGICAL STATION,
DOVER.

Meteorological Report

BY

Wm. BOULTON SMITH,

M.SC. (ENG.) A.M.I.C.E., F.S.I.,

Borough Engineer.

MAISON DIEU HOUSE,
DOVER.

APRIL, 1925.

Borough Engineer's Office,

MAISON DIEU HOUSE,

DOVER.

6th April, 1925.

To the Mayor, Aldermen and Councillors of the Borough of Dover :

GENTLEMEN,

Through the courtesy of the Medical Officer of Health in placing a portion of his Annual Report at my disposal I am able, for the first time since a Station has been in existence in Dover, to submit a Meteorological Report.

The following is the Annual Report for the year 1924, upon the administration of the Station together with statistics of observations.

The Station, which was re-established in July, 1923, occupies a prominent position on the portion of the Sea Front known as the Gun Wharf. It consists of a circular grass plot laid out with flower beds, together with an office of pleasing design, and is surrounded by an unclimbable iron fence.

INSTRUMENTS.

At the Station the following instruments are maintained :—

BAROMETER (Kew Pattern, Mercury).

BAROGRAPH (placed in the window of the office).

HYETOGRAPH (self recording rain gauge).

STEVENSON'S SCREEN.

DRY BULB, WET BULB, MAXIMUM AND MINIMUM
THERMOMETERS.

GRASS MINIMUM THERMOMETER.

1FT. EARTH THERMOMETER.

4FT. " "

1-8IN. RAIN GAUGE (Snowdown pattern).

1-5IN. " " " "

In addition to the above, the Dover Harbour Board have very kindly allowed the enclosure of a small portion of the third bay on the Prince of Wales Pier and here has been erected the pillar supporting the

CAMPBELL STOKES SUNSHINE RECORDER.

In the Tide Recorder Hut adjoining, is housed the
DINES PRESSURE TUBE ANEMOMETER
and from this portion of the pier is also taken the daily readings of
Sea Temperature.

Other instruments maintained by the Corporation are as
follows :—

SUNSHINE RECORDER AT THE ISOLATION HOSPITAL, TOWER
HAMLETS.

5IN. RAIN GAUGE AT WATERWORKS.

5IN. RAIN GAUGE AT MESSRS. G. & A. CLARK'S NURSERIES,
CHILTON, NR. DOVER.

STATION.

The Station was officially inspected by Mr. R. M. Stanhope of
H.M. Air Ministry on the 26th March, 1924, and an official
certificate certifying the correctness of the various instruments and
their exposure was received on the 14th June, 1924, signed by
Dr. M. C. Simpson, Director of the Air Ministry. It is interest-
ing to note that the Director in his covering letter states — "The
Inspector reported favourably upon the meteorological work
which is being done in Dover."

During the early part of the year considerable difficulty was
experienced in obtaining a satisfactory record from the Anemometer
due to a small leak in the float. This however was overcome by
the time of the official inspection and the instrument has since
proved very reliable.

In the early summer the sunshine record compared somewhat
unfavourably with surrounding towns and a very careful watch was
kept of the instrument and its records. It was found that about
10 minutes record per day was being lost owing to the obstruction
caused by an adjacent lamp post. To correct this the recorder
pillar was raised by about four feet. Even then the records did
not seem satisfactory and the glass ball was suspected. Finally
after a long series of exhaustive tests and comparisons it was found
necessary in September to condemn the glass ball and replace it
by the one erected at the Hospital. It will thus be seen that it
was impossible to properly record the high percentage of sunshine
enjoyed by Dover, but in spite of this the total for the year was
considerably above the "District Value," which is the highest in
Great Britain, and above the average of the 25 Seaside Resorts
giving the highest records. The instrument is still being very
carefully watched and checked.

STAFF.

The staff consists of the Observer, Mr. B. C. Bowler, who is responsible for taking the two daily readings and records, and the Meteorological Assistant, Mr. J. F. Lockwood, who is responsible to me for the maintenance and efficient working of the Station, the preparation of statistics and general supervision etc.

I am pleased to state and put on record that the whole of their work has been exceedingly well done, that no reading has been missed or even taken later than the proper hours of 9 a.m. and 5 p.m. (G.M.T.) and the Council will be glad to learn that Dover has been congratulated during the year upon the accuracy of its reports and the regularity with which they appeared in the Daily Weather Report of the Air Ministry.

GENERALLY.

Every endeavour has been maintained to ensure the general publication of the information obtained. The readings are posted daily after the morning reading upon special bold type monthly charts at the Gun Wharf, Granville Gardens and also in the glass case at the Town Hall. Weekly reports of the weather conditions are handed to the local press and during the summer months sunshine and rainfall comparisons with 24 other Seaside Resorts are compiled and issued each week and month. At 4 p.m. daily by special arrangement with the Air Ministry, a weather forecast for the following day is issued. This latter has proved to be very successful and it has been noted that upon the few occasions when telephonic breakdowns have delayed its publication many enquiries have been received, especially from visitors. It is hoped to make even further use of this feature during the coming year especially for local events etc. as it was found to be of very great service and interest during the last County Cricket Week. Besides the foregoing, meteorological information is prepared from time to time and no opportunity is lost of bringing to the notice, especially of the London Press, the claims of Dover as a Seaside Resort.

In the space at my disposal I am unable to comment on the tabulated figures which follow, except to say that they have been carefully selected as being the most interesting and useful of the large amount of information obtained during the year.

WM. BOULTON SMITH,

M.SC. (ENG.), A.M.I.C.E., F.S.I.,

Borough Engineer.

BAROMETER, 1924. (Corrected to Sea Level and 32° F.)

MILLIBARS.

INCHES.

Month.	Mean.	Highest.	Date.	Lowest.	Date.	Mean.	Highest.	Lowest.
January ...	1017.6	1040.3	26th	987.7	9th	30.05	30.72	29.17
February ...	1018.8	1037.6	17th	987.0	10th	30.09	30.64	29.15
March ...	1014.5	1035.1	7th	990.9	25th	29.96	30.57	29.26
April ...	1013.9	1036.3	19th	996.3	12th	29.94	30.60	29.42
May ...	1014.9	1028.2	17th	1002.1	24th	29.97	30.36	29.50
June ...	1018.8	1028.5	25th	1001.4	12th	30.09	30.37	29.57
July ...	1015.0	1029.7	14th	996.5	3rd	29.97	30.41	29.43
August ...	1013.5	1033.3	9th	997.2	17th	29.93	30.51	29.45
September ...	1013.5	1029.5	28th	1000.5	9th	29.93	30.40	29.54
October ...	1015.6	1032.4	14th	998.4	8th	29.99	30.49	29.48
November ...	1020.5	1036.9	21st	993.8	26th	30.14	30.62	29.55
December ...	1018.6	1036.6	20th	989.3	2nd	30.08	30.61	29.22
Total ...	12195.2					360.14		
Mean ...	1016.2					30.01		

TEMPERATURE 1924.

Month.	Mean.	Absolute.		Mean.		Mean Daily Range.	Relative Humidity (Saturation = 100).	Ground.		Grass Minimum.	
		Max.	Min.	Max.	Min.			1 ft.	4 ft.	Mean.	Absolute Min.
	°F	°F	°F	°F	°F	°F		°F	°F	°F	°F
January ...	41.8	50	27	44.6	39.0	5.6	88	39.8	42.3	36.9	25
February ...	38.7	50	25	41.8	35.6	6.1	83	38.6	42.5	33.4	23
March ...	40.8	55	28	45.8	35.8	10.0	78	40.4	41.9	32.9	25
April ...	45.1	65	29	49.8	40.4	9.4	80	46.1	44.8	37.8	27
May ...	54.1	71	40	59.1	49.1	10.0	77	55.8	49.2	46.0	35
June ...	57.1	72	44	61.9	52.2	9.4	77	60.7	56.6	49.7	41
July ...	60.5	77	50	65.9	55.1	10.8	75	63.7	60.1	51.3	47
August ...	59.5	70	46	64.7	54.3	10.4	73	61.6	60.9	50.6	43
September ...	59.1	72	42	63.6	54.6	9.0	78	59.5	59.8	51.1	40
October ...	53.7	67	40	57.9	49.4	8.5	80	54.4	57.1	46.3	37
November ...	47.1	59	28	50.5	43.7	6.8	83	47.5	52.3	40.2	26
December ...	45.4	55	29	48.5	42.3	6.2	86	44.8	48.6	39.5	27
Totals ...	602.9	763	428	654.1	551.5	102.2	938	612.9	616.1	515.7	396
Means ...	50.2	63.6	35.7	54.5	46.0	8.5	80				

RAINFALL, 1924.

	GUN WHARF.		WATERWORKS.		CHILTON.	
	Inches.	Days.	Inches.	Days.	Inches.	Days.
January	2.15	14	2.02	12	3.29	15
February ...	.97	12	.91	12	.90	10
March	1.41	11	1.34	9	1.77	10
April	2.61	18	2.86	16	3.57	18
May	2.90	17	3.19	15	3.97	18
June	1.91	14	2.01	13	1.90	12
July	3.36	16	3.57	14	4.60	16
August	3.11	14	3.56	17	3.61	17
September ...	2.95	15	3.42	17	3.57	19
October	3.80	14	4.67	16	5.81	14
November ...	2.53	12	2.89	13	3.71	13
December ...	3.19	15	3.81	15	5.39	13
	30.89	172	34.25	169	42.09	175

WIND 1924. (Two observations per day). 9 a.m. and 5 p.m.

FORCE.

DIRECTION.

	Over 40 m.p.h.	12-40 m.p.h.	1-12 m.p.h.	Calm.	N.	N.N.E.	N.E.	E.N.E.	E.	F.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.
January	—	25	30	7	3	1	1	2	5	2	5	3	4	5	7	5	4	—	7	1
February	—	31	21	6	5	8	8	3	2	2	—	—	1	1	1	6	6	—	6	3
March	—	28	32	2	1	4	12	5	12	1	3	—	—	2	13	5	1	—	1	—
April	—	28	28	4	2	2	10	3	1	3	—	—	2	2	13	7	4	1	2	4
May	—	27	31	4	—	—	1	5	6	—	—	1	—	5	19	17	2	1	1	—
June	—	27	29	4	2	1	1	3	5	—	—	—	5	5	21	9	2	—	1	1
July	—	27	34	1	1	—	—	3	2	—	1	1	3	9	25	7	3	2	4	—
August	—	34	27	1	2	1	—	2	2	1	—	—	—	8	16	13	9	3	4	—
September	—	38	20	2	3	2	4	1	3	1	1	1	5	5	7	16	6	1	1	1
October	—	31	24	7	4	1	2	5	2	3	2	2	6	6	4	12	5	—	1	—
November	1	31	28	—	1	2	4	6	4	2	6	—	6	5	4	9	1	—	6	4
December	3	34	25	—	6	—	—	—	—	1	1	3	9	8	16	10	3	2	2	1
Total No. of observations	...	...	...	38	30	22	43	38	44	16	19	11	41	61	146	116	46	10	36	15
Percentage	...	...	...	5%	4%	3%	6%	5%	6%	2%	3%	1%	6%	9%	20%	16%	6%	1%	5%	2%

VISIBILITY 1924. (Two observations per day). 9 a.m. and 5 p.m.

		DISTANCE IN YARDS.							DISTANCE IN MILES.						
		Less than 30.	A 30.	B 60.	C 110.	D 220.	E 550.	F 1130.	G 1½	H 2½.	I 4¼.	J 6¼.	K 12½.	L 21.	More than 21.
January	...	—	—	—	—	1	2	5	7	12	10	8	16	1	—
February	...	—	—	—	—	—	1	—	6	14	10	15	11	1	—
March	...	—	—	—	—	1	1	2	5	5	5	18	18	7	—
April	...	—	—	—	—	1	—	2	—	6	11	17	21	2	—
May	...	—	—	—	—	—	—	2	—	2	7	15	29	7	—
June	...	—	—	—	—	3	1	—	1	2	4	19	20	10	—
July	...	—	—	—	—	—	—	—	1	8	5	13	26	9	—
August	...	—	—	—	—	—	—	—	—	2	3	10	24	23	—
September	...	—	—	—	—	—	—	1	—	1	8	14	27	9	—
October	...	—	—	—	—	—	1	1	4	12	9	11	19	4	1
November	...	—	—	—	1	—	—	4	2	9	6	16	19	3	—
December	...	—	—	—	3	2	1	2	5	4	7	18	14	6	—
Total No. of observations		—	—	—	4	8	7	19	31	77	85	174	244	82	1

SUNSHINE 1924.

	Total Hours.	Daily Average	Days of Sunshine.	Sunniest Day.	
				Hours.	Date.
January ...	65.2	2.1	17	6.8	6th
February ..	69.1	2.4	21	8.9	16th & 17th
March ...	182.4	5.9	26	10.5	10th
April ...	145.2	4.8	27	11.5	18th
May ...	227.6	7.3	31	14.2	28th
June ...	179.0	6.0	28	13.4	21st
July ...	242.9	7.8	30	14.8	14th
August ...	190.7	6.1	31	13.3	8th
September ...	125.3	4.2	28	11.5	8th
October ...	107.4	3.5	25	9.3	13th
November ...	65.8	2.2	24	7.4	4th
December ...	54.2	1.7	19	6.4	6th
	1654.8		307		

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