

[Report of the Medical Officer of Health for Sutton UDC 1908]

Contributors

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SUTTON (SURREY)
URBAN DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR

✻ 1908. ✻

Public Health Committee.

Chairman of the Council, E. J. HOLLAND, J.P., C.C.

Chairman,

G. H. HOOPER, M.D.

S. CARPENTER.


A. R. DAGG.

C. R. C. GOSLIN.

R. J. HUMPHRIS.

G. LEAVER.

R. W. WOOTTEN.



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**To the Chairman and Members of the Sutton (Surrey)
Urban District Council.**

GENTLEMEN,

In accordance with the Regulations of the Local Government Board, I present my Annual Report for the year 1908.

My appointment having been made in March last, I am indebted to your late Medical Officer, Dr. Bower, for the records of the first quarter of the year.

The very careful and able reports he made during his years of office, as well as the reports of his predecessor, Dr. Jacob, have been of great service to me in gaining an insight into the progress in sanitary reform that has taken place in your district during the past thirty years.

That part of my report dealing with Vital Statistics shows that for all those diseases affected by sanitation your district has enjoyed a steadily declining death rate.

I desire to express my thanks to the Health Committee and to the Officials of the Council for kind assistance given me in many ways.

I am,

Gentlemen,

Your obedient servant,

WILLIAM HABGOOD.

To the Honorable and Members of the Senate (2007)

Washington, D.C.

Dear Senators:

I am pleased to have the opportunity to meet with you and discuss the progress of the National Commission on the Causes and Prevention of Violence.

The Commission was established in 1969 and has since that time been engaged in a comprehensive study of the causes and prevention of violence in the United States.

Our report, "The Causes and Prevention of Violence," is a comprehensive study of the causes and prevention of violence in the United States. It is a landmark study that will help us to understand the causes of violence and to develop effective strategies for its prevention.

I am pleased to have the opportunity to meet with you and discuss the progress of the National Commission on the Causes and Prevention of Violence.

I am pleased to have the opportunity to meet with you and discuss the progress of the National Commission on the Causes and Prevention of Violence.

Sincerely,

William J. Blum

Your obedient servant,

WILLIAM J. BLUM

SUTTON URBAN DISTRICT.

Medical Officer's Report for the Year 1908.

SITUATION.—Sutton is situated 11 miles south of Whitehall in the watershed of the Thames in the north-east portion of the County of Surrey, the centre of the town being a little above the line where the chalk of the London Basin comes to the surface to form the North Downs. A narrow band of the London Tertiaries, running due east and west, appears between the chalk and the clay.

Towards the north and north-west and on the clay is the lowest land—81 feet above sea level—and through it runs the Pyl Brook, receiving the chief part of the surface water of the whole district and the outflow from the sewage works. The rest of the surface water drains into a small brook discharging on the north-east into the Wandle. Further north, where the London and Brighton Road crosses the border, the ground rises to 147 feet. This is the most rural part. Southwards, on the chalk, towards Banstead Downs, there is a gradual ascent to 293 feet.

AREA.—The length of the district is three miles, and has an average breadth of one mile and an area of 1,836 acres or nearly three square miles.

BOUNDARIES.—It is bounded on the north by Morden, east by Carshalton, south by Banstead, and west by Cheam, and on all sides, except where the towns of Sutton and Carshalton join, has a rural aspect. Rateable value, £152,802 10s.

OCCUPATION OF RESIDENTS.—A great part of the population is engaged in business in London. The

remainder consists chiefly of tradesmen and their assistants, gardeners, and those connected with the building trade.

POPULATION.—Assuming that the population has continued to increase since the last census of 1901 at the same proportional rate as during the previous inter-censal period, it will have amounted by the middle of 1908 to 18,780.

There has been an increase of 758 inhabited houses since 1901; and, provided that there are now, as then, 5·2 persons per house, the population so calculated would be 19,430.

From enquiry, however, it appears probable that there are not now more than 5·1 persons per house, and on this estimate of the population—19,040—the birth and death rates have been calculated.

On June 30th, 1908, there were resident in the Metropolitan Asylums Board Ringworm Schools 349 children and 77 staff; and in the Belmont Asylum* 222 patients and 85 staff. There were also in the Diocesan Friendless Girls' Home, "Crossways," 17 girls and 22 infants.

Including these inmates the gross population of the district amounts to 19,802.

Year.	Gross population.	Nett population.	No. of inhabited houses.	No. per house on nett population.	Increase of nett population.	Increase of inhabited houses.
1881 (census)		8662	1514	5·5		
1891 (census)	13977	11987	2202	5·4	3325	688
1901 (census)	17224	15486	2976	5·2	3499	774
1908	19802	19040	3734	5·1	3554	758

* This Asylum was closed on the 31st August, 1908, and handed over to the Fulham Guardians on 29th September, 1908.

BIRTHS.—There were 405 births registered, giving a rate of 21·3 per 1,000 of the population, and the lowest rate yet recorded in the district. The previous thirty years with 9,940 births gave an average rate of 26·5; the respective rates for each ten-year period being 33·3, 25·0 (a fall of 25 per cent.) and 23·8 (a further fall of 4·8 per cent.)

The falls in the rates for England and Wales for the same decennia were equal to 8·9 and 7·6 per cent. respectively.

	Period.	Mean annual birth-rate per 1000 living.	Mean annual death-rate per 1000 living.	Mean annual rate of increase by excess of births over deaths per 1000 living.
Sutton.	1878—1887	33·3	14·5	18·8
	1888—1897	25·0	11·8	13·2
	1898—1907	23·8	10·9	12·9
	1908	21·3	10·8	10·5
England and Wales.	1878—1887	33·7	19·8	13·9
	1888—1897	30·4	18·4	12·0
	1898—1907	28·1	16·4	11·7
	1908	26·5	14·7	11·8

DEATHS.—The number of deaths registered, exclusive of 44 belonging to other districts, was 186, and to these must be added 13 deaths in the Epsom Union Workhouse, 2 in Brookwood Asylum, 2 in St. George's Hospital, 1 in Earlswood Asylum, and 1 in a London nursing home of persons belonging to the district. These 205 deaths give a rate of 10·8 per 1,000 of the population.

The previous 30 years with 4,527 deaths gave an average rate of 12·1; the respective rates for each decennium being 14·5, 11·8 (fall of 18·6 per cent.) and 10·9 (fall of 7·6 per cent.) For England and Wales the falls were 7 and 10·8 per cent. respectively.

The reduction in the death rate is partly due to the lessened birth rate, deaths amongst infants being more numerous in proportion to the population than at other ages.

Inquests were held on 19 deaths, three of these being deaths in public institutions.

All the deaths were certified.

ENGLAND AND WALES

Annual Birth-rates, Death-rates, and the Death-rates from the Principal Epidemic Diseases.

1908.	Annual Rate per 1000 living.				Deaths under One Year to 1000 Births.
	Births.	Deaths.		Principal Epidemic Diseases.	
		Crude.	Cor-rected*		
England and Wales	26·5	14·7	14·7	1·29	121
76 great towns	27·0	14·9	15·8	1·59	128
142 smaller towns	26·0	14·0	14·7	1·26	124
England and Wales less the 218 towns	26·2	14·7	13·8	0·99	110
Sutton	21·3	10·8	?	0·6	69

* The corrected death-rates are the rates which would have been recorded had the sex and age constitution of the populations of the several areas been identical with that of England and Wales enumerated in the last census, 1901.

Vital Statistics of Whole District during 1908 and Previous Years.

YEAR.	Gross Population estimated to Middle of each Year, including residents in Public Institutions in the District.	BIRTHS.		Net population estimated to middle of each year, excluding residents in the Public Institutions in the District.	BIRTH RATE Per 1,000 of the net population.	TOTAL DEATHS REGISTERED IN THE DISTRICT.			Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT.			
		Number.	Rate per 1,000 of the gross population.			Under 1 Year of Age.	At all Ages.	Total Deaths in Public Institutions in the District.			Number.	Rate per 1,000 of the net population.		
1	2	3	4			5	6	7	8	9	10	11	12	13
1898	16,590	324	19.5	14,600	22.2	44	136	160	9.7	5	5	20	175	12.0
1899	16,990	366	21.5	15,000	24.4	51	140	160	9.5	2	2	18	176	11.7
1900	17,990	380	21.1	16,000	23.7	31	82	177	10.0	4	4	17	190	12.0
1901	17,310	367	21.2	15,572	23.4	43	117	175	10.1	8	4	20	191	12.2
1902	17,638	364	20.6	15,900	22.9	40	109	171	9.7	14	5	29	195	12.3
1903	17,168	388	22.6	16,200	24.0	32	82	131	7.6	10	3	22	150	9.2
1904	16,997	377	22.2	16,500	22.8	57	98	154	9.0	11	6	18	166	10.0
1905	17,512	395	22.5	16,800	23.5	34	86	138	7.9	10	6	18	150	8.9
1906	17,983	434	24.1	17,200	25.3	45	103	226	12.5	70	68	14	172	10.0
1907	18,355	443	24.1	17,600	25.2	27	61	211	11.5	46	42	23	192	10.9
Average for the ten years.	17,453	384	22.0	16,137	23.8	38	99	170	9.7	18	14	20	176	10.9
1908	19,802	405	20.5	19,040	21.3	27	69	230	11.6	45	44	19	205	10.8

NOTE.—The deaths to be included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public institutions" to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums.

Area of District in acres } 1836
 (exclusive of area }
 covered by water) }

Nett population at all ages ... 15,486 } At
 Number of inhabited houses ... 2,976 } Census
 Average number of persons per house ... 5.2 } of 1901.

Institutions within the District receiving sick and infirm persons from outside the District—

Belmont Asylum, Metropolitan Asylums Board Ringworm School, Diocesan Friendless Girls' Homes—
 "Crosways," "The Limes," Cottage Hospital.

Institutions outside the District receiving sick and infirm persons from the District—

County Asylum, Epsom Union Workhouse, Cuddington Isolation Hospital, St. George's Hospital,
 Westminster, Earlswood Asylum.

Other Institutions, the deaths in which have been distributed among the several localities in the District—
 Cottage Hospital, Sutton; Nursing Home, Belgrave Road, Westminster.

Is the Union Workhouse in the District?—No.

Table showing the Death-rates per 1000 persons living for the seven principal Zymotic Diseases (separately and combined), for phthisis, and diseases of the respiratory system; also the infantile mortality rate per 1000 births, and the birth-rates and death-rates for three decennial periods.

(Sutton's Aggregate population, 375,320; births, 9940; deaths, 4527; and deaths under one year of age, 1045).

Period.	Death Rate per 1,000 persons living.											Infantile Mortality. per 1,000 births.	Birth Rate.
	Smallpox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Measles.	Whooping Cough.	Diarrhoea.	The 7 principal Zymotic Diseases.	Phthisis.	Diseases of the Respiratory System.	All Causes.		
1878-1887	0.01	0.32	0.35	0.11	0.38	0.48	0.50	2.20	1.24	1.93	14.5	10.9	33.3
1888-1897	0.00	0.03	0.11	0.08	0.18	0.34	0.47	1.20	0.89	1.88	11.8	10.8	25.0
1898-1907	0.00	0.07	0.08	0.02	0.14	0.24	0.45	1.08	0.90	1.57	10.9	10.0	23.8
1878-1887	0.05	0.48	0.14	0.22	0.42	0.49	0.77	2.6	1.8	2.8	19.8	14.3	33.69
1888-1897	0.01	0.19	0.23	0.17	0.43	0.41	0.64	2.1	1.5	2.4	18.4	14.9	30.41
1898-1907	0.01	0.12	0.22	0.13	0.34	0.30	0.72	1.8	1.2	1.6	16.4	14.2	28.10

Period.	Notification Rate per 1,000 persons living.					Case mortality, or deaths per 100 cases notified.						
	Smallpox.	Scarlet Fever.	Diphtheria	Enteric Fever.	Smallpox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Smallpox.	Scarlet Fever.	Diphtheria.	Enteric Fever.
1878-1887	0.24	4.6	1.39	0.43	18.2	7.0	26.0	25.6	0.0	1.0	20.0	18.2
1888-1897	0.03	3.0	0.54	0.44	0.0	1.0	20.0	18.2	0.0	2.2	7.0	9.7
1898-1907	0.02	3.4	1.19	0.19	0.0	2.2	7.0	9.7	0.0	2.2	7.0	9.7

INFANTILE MORTALITY.—There were 27 deaths under one year of age, and the infantile mortality, expressed as deaths per 1,000 births, was 69. Once only, last year has the figure been lower. The rates for the three decennia of the 1878-1907 period were 109, 108, 100, and the proportion of deaths under one year of age to each 100 deaths of the community 24·1, 22·8, and 21·8. In 1907 the proportion was 14, and 13·6 this year.

INFANTILE MORTALITY DURING THE YEAR 1908.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Deaths from stated Causes in Weeks and Months under One Year of Age.												Total Deaths under One Year.				
	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.		8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.
ALL CAUSES—	27
Certified	0
Uncertified
Common Infectious Diseases—																	
Small-pox
Chicken-Pox
Measles
Scarlet Fever
Diphtheria (including Membranous Croup)
Whooping Cough
Diarrhoeal Diseases—																	
Diarrhoea, all forms
Enteritis, Mucosa-enteritis, Gastro-enteritis
Gastritis, Gastro-intestinal Catarrh
Wasting Diseases—																	
Premature Birth
Congenital Defects
Injury at Birth
Want of Breast-milk Starvation
Atrophy, Debility, Marasmus
Tuberculous Diseases—																	
Tuberculous Meningitis
Tuberculous Peritonitis: Tabes Mesenterica
Other Tuberculous Diseases
Other Causes—																	
Erysipelas
Syphilis
Rickets
Meningitis (not Tuberculous)
Convulsions
Bronchitis
Laryngitis
Pneumonia
Suffocation, overlaying
Other Causes
	2	1	1	1	5	4	1	3	3	2	2	2	1	3	1	..	27

Births in the year—
 Legitimate 397.
 Illegitimate 8.

Deaths from all Causes at all Ages 205.

Deaths in the year—
 Legitimate Infants 25.
 Illegitimate Infants 2.

Nett Population—Estimated to middle of 1908, 19,040.

No.	Name	Age	Sex	Remarks
1	John Smith	25	M	...
2	Mary Jones	22	F	...
3	James Brown	30	M	...
4	Sarah White	28	F	...
5	Robert Black	35	M	...
6	Elizabeth Green	20	F	...
7	William Grey	40	M	...
8	Ann Hill	24	F	...
9	Thomas Lee	32	M	...
10	Jane King	26	F	...
11	George King	38	M	...
12	Charlotte King	18	F	...
13	Henry King	45	M	...
14	Elizabeth King	21	F	...
15	John King	50	M	...
16	Mary King	15	F	...
17	James King	55	M	...
18	Sarah King	12	F	...
19	Robert King	60	M	...
20	Elizabeth King	10	F	...

This is a list of the names of the persons who were
 present at the meeting held on the 1st day of
 January 1850.

SMALL-POX.—No case has been notified since 1902 and no death has occurred since 1882.

VACCINATION.—During the year the proportion of children born returned as successfully vaccinated was 74 per cent.

SCARLET FEVER. — Forty-three cases were notified and there was no death. Twenty-one houses—in 16 of which other children were living—had one case; three houses had two cases; two houses had three cases; one house had four cases; and one house six cases.

The proportion of children per house where one case occurred was 2·5, and in others 4·3.

Thirty-nine cases—90·7 per cent.—were removed to the Isolation Hospital, and all, except three notified late in the day, removed on the day of notification.

In houses with single cases the average interval between the date of sickening and removal was 2·4 days, in the others 2·8 days. The average duration of stay in hospital was seven weeks and only one instance was discovered of a discharged patient infecting another.

The notification rate was 2·3 per 1,000; the rates for the three decennial periods of 1878-1907 being 4·6, 3·0, and 3·4.

The disease is of a milder type than formerly. In the epidemic of 1880 there were 19 deaths in 146 cases, whereas in 1899 and 1900 only 3 and 5 deaths occurred in 129 and 127 cases.

The case mortality, or deaths per 100 cases notified for the three decennial periods 1878-1907 was 7, 1 and 2·2.

There has been no death in the last five years. The decennial death rates were 0·32, 0·03, and 0·07.

The lowest notification and death rates and case mortality are found after the severe epidemic of 1880, the decennium 1888-97 showing respective falls of 35, 91, and 86 per cent. below those for the previous decennium.

Hospital Isolation has been resorted to in 77·4 per cent. of the notified cases during the last 18 years.

DIPHTHERIA. — Eighteen cases were notified; and, deducting the five cases which occurred amongst the children of the Metropolitan Asylums Board Schools, the rate was 0·7 per 1,000.

These 13 cases occurred in 13 houses, in 10 of which houses were living other children.

Eleven cases—84·6 per cent.—were removed to the Isolation Hospital on the day of notification and after an average interval of 4·6 days from date of sickening.

The average duration of stay in hospital was 23 days. No death occurred. The disease is less fatal than in past years. In the epidemic of 1883 there were 13 deaths in 60 cases, whereas in that of 1898 only five deaths resulted from the same number of cases.

The case mortality for the last three previous decennia was 26, 20, and 7, and the death rates were 0·35, 0·11, and 0·08. The notification rates were 1·39, 0·54, and 1·19. The reduction in the death rate and case mortality is chiefly due to the anti-toxin treatment which became general at the end of the decennium 1888-97; but, probably, the notification by the aid of bacteriological diagnosis of mild cases, which have in former years escaped, has been a participating factor.

The Council defrays the expense of a bacteriological examination of swabs^s (at the Lister Institute) brought to the Health Offices by medical men, and on the report of the bacteriologist depends whether these cases are notified and, perhaps, sent to the Isolation Hospital.

No bacteriological examination, however, is made before discharging cases from the hospital; yet there is no evidence that fresh, or "return," cases have arisen from those discharged this year, nor is there any allusion made to return cases in the past reports of the Medical Officer of Health.

There is undoubted evidence that persons may harbour the bacillus causing the disease in the throat and nose, and, while being themselves immune and showing no signs of illness, may be a cause of infection—perhaps fatal—to others. It is also well known that the virulence of the bacillus is very variable; and if a season of virulence happened, such persons as the above ("carriers") might easily be a source of danger to the community.

ENTERIC OR TYPHOID FEVER.—Two cases were notified giving a rate of 0·1 per 1,000 and there was no death.

No death has occurred for the past six years, and only 23 deaths have been registered in the previous 30 years. The notification rates for the three decennia of that period were 0·43, 0·44 and 0·19; the death rates 0·11, 0·08, and 0·02, and the deaths per 100 cases 25·6, 18·2, and 9·7.

MEASLES.—Three deaths were registered giving a rate of 0·16. The mean rate for the previous 30 years was 0·21 and the decennial rates 0·38, 0·18, and 0·14.

There has been no severe epidemic since 1886 when the death rate reached 2·0 per 1,000.

During the 30 years it caused twice as many deaths as Scarlet Fever.

WHOOPING COUGH.—Two deaths were registered, giving a death rate of 0·1 per thousand. The mean rate for the previous 30 years was 0·33, and the decennial rates 0·48, 0·34, and 0·24.

Although the highest rate of any year was 1·6 there were several small epidemics, and in 1880 and 1886 it helped to produce the highest infant mortality rates in the 30 years, and has caused thrice as many deaths as scarlet fever.

It is interesting to observe that although no isolation beyond exclusion from school has been practised both measles and whooping cough show considerable and progressive reductions in their death rates.

DIARRHŒA.—Six deaths, equal to a rate of 0·32 per thousand, and all under one year of age, were registered. This rate is 0·15 below the mean for the previous 30 years, the decennial rates of which were 0·50, 0·47, and 0·45.

These rates show the smallest fall—10 per cent.—of all the zymotic diseases, and if the rate be calculated per thousand births—and, as in this disease practically all the deaths have occurred in the first year of life, this is a reasonable way of expressing the rate—instead of a fall there is a rise of 33 per cent., the rates per thousand births for the decennia being 15, 20, and 20.

This increase is due to a greater proportion of bottle-fed infants, the mortality amongst whom is, in some cities, thrice that among the breast-fed.

The great danger in bottle feeding is the opportunity offered for infective matter to enter the milk.

Careful observation has shown that epidemics of diarrhœa are coincident with the presence of large numbers of flies. These breed in decomposing matter, and their bodies and legs become loaded with living organisms which they convey to the food and milk. It is in those houses where food is most carelessly handled and milk stands uncovered that deaths from summer diarrhœa largely predominate.

As there seems to be no likelihood of an increase in breast-fed infants, every effort should be made to obtain a pure milk supply, and—what is perhaps equally important—to so instruct the mothers that pollution of milk may be prevented in their homes.

To afford opportunities for giving such instruction was one of the chief causes of the passing of the Notification of Births Act, 1907. This Act has not yet been adopted by the Council.

ZYMOTIC DISEASES.—Taking these seven principal zymotic diseases as a whole there were 11 deaths, and a rate of 0·6 per thousand, or less than half of the rate for the previous 30 years.

The decennial rates for that period were 2·2, 1·2 (fall of 50 per cent.), and 1·08 (fall of 15 per cent.).

Excluding the four deaths from small pox and 23 from enteric fever, practically the remaining 484, or 95 per cent., of the whole deaths occurred in children.

There are no figures showing the proportion of the population at various ages in this district, but if these 95 per cent. of deaths from zymotic diseases be calculated per thousand births, it is seen that the respective falls in the death rates at the end of

the second and third decennia are only one half that from calculating the rate per thousand of the population, and there is justification for supposing that the reduction that has steadily been taking place in the proportion of children to adults in the last 30 years has had considerable effect in reducing the death rate from zymotic diseases.

Cases of Infectious Disease notified during the year 1908.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							NO. OF CASES REMOVED TO HOSPITAL.*
	At all Ages.	At Ages—Years.						
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	
Small pox..	..	..	..	..	..	..	..	..
Cholera ..	..	..	..	..	..	..	..	..
Diphtheria including Membranous Croup	18	3	14	..	1	..	11	..
Erysipelas ..	7	..	..	..	5	..	..	..
Scarlet Fever ..	43	12	20	9	..	..	39	..
Typhus Fever ..	..	..	..	..	..	..	..	..
Enteric Fever ..	2	..	..	..	2	..	..	..
Relapsing Fever ..	..	..	..	..	..	..	..	..
Continued Fever ..	..	..	..	..	..	..	..	..
Puerperal Fever ..	1	..	..	..	..	..	..	..
Plague ..	..	..	..	..	..	..	..	..
TOTALS ..	71	15	34	9	9	1	50	..

* Isolation Hospital, Sutton, Carshalton, and Leatherhead (Urban) and Epsom (Rural) Districts Joint Hospital at Cuddington.

Total available beds, 92. Number of diseases that can be concurrently treated, 3.

METHODS OF DEALING WITH INFECTIOUS DISEASES.—On receipt of a notification of an infectious disease the house is forthwith visited by the Medical Officer of Health and Sanitary Inspector, the case, where possible, removed to the Isolation Hospital, and the disinfection of the house carried out. All infected clothing remains in the sick room, which is sealed until the following day, when it is removed to the Isolation Hospital for steam disinfection.

In every house where there are children attending either Day or Sunday Schools notice is sent by post to the Head Teacher, to the Attendance Officer of the Day Schools, and to the Manager of the Sunday School. Of the Scarlet Fever cases 91 per cent., and of the Diphtheria 85 per cent. were removed to the Hospital.

Sutton, Carshalton, and Leatherhead Urban Districts and Epsom Rural District, with, in 1907, an estimated population of 56,000, have an Isolation Hospital at Cuddington, under the management of a Board of representatives of the four Councils. The Hospital receives cases of Scarlet Fever, Diphtheria, and Enteric Fever, and has accommodation for 92 beds, of which number about 46 are in general use.

PULMONARY TUBERCULOSIS OR PHTHISIS.—There were registered 15 deaths from Phthisis, giving a rate of 0·79 per 1,000, and 0·18 below the average for the previous 30 years, the decennial rates of which period were 1·24, 0·89, and 0·90.

TUBERCULOSIS: METHODS OF CONTROL.—There is no system of notification of cases of Pulmonary Tuberculosis, but circulars have been sent to the

Medical Practitioners stating that the Sanitary Authority is prepared to disinfect all rooms vacated by consumptives.

On a death occurring the Health Authority receives early information from the Registrar, and disinfection of rooms is offered, and usually accepted.

The only accommodation beyond their homes for the isolation and treatment of those suffering is at the Union Workhouse Infirmary.

OTHER TUBERCULAR DISEASES.—There were 9 deaths registered from other Tubercular Diseases, a rate of 0·5. Records exist for the previous 8 years, and give the same average rate.

PUERPERAL FEVER.—One case of Puerperal Fever was notified, and recovered. It occurred in the practice of a midwife.

SUPERVISION OF MIDWIVES. — The County Council is the Local Supervising Authority for the Midwives Act of 1902, and has arranged with this Council to allow its Medical Officer to perform the following duties :—

To receive from the midwife notice of death of mother or child ; of a still birth ; and of sending for medical help ; to inspect midwife's case book, bag of appliances, place of residence, and mode of practice ; and to send during January to the County Medical Officer of Health a report relating to the provisions of the Act, and the action he may have taken thereunder during the previous year.

There were 9 registered midwives practising in 1908, and 43·2 per cent. of the births were attended by them.

INFLUENZA.—There were registered 10 deaths from Influenza, giving a rate of 0·52 per 1,000.

Records existing for the previous 8 years give an average rate of 0·21.

ERYSIPELAS.—There were 7 cases of Erysipelas notified, and no death registered.

CANCER AND MALIGNANT DISEASE.—Nineteen deaths from Cancer, giving a rate of 1·0 per 1,000, were registered.

Records existing for the previous 8 years give an average rate of 0·9.

DISEASAS OF THE RESPIRATORY SYSTEM, EXCLUDING PHTHISIS.—There were 14 deaths from Pneumonia and 9 from Bronchitis, the combined deaths yielding a rate of 1·2 per 1,000, or 0·56 below the average rate for diseases of the respiratory system for the previous 30 years.

Causes of, and Ages at, Death during year 1908.

CAUSES OF DEATH.	DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING IN OR BEYOND THE DISTRICT.							TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT.
	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	
1	2	3	4	5	6	7	8	9
Small-pox .. .. .	..	..	..	..	..	..	..	..
Measles	3	1	2	..	..	..	..	..
Scarlet Fever .. .. .	..	..	..	..	..	..	..	..
Whooping-cough	2	..	2	..	..	..	..	2
Diphtheria (includ'g Membranous Croup	..	..	..	..	..	..	..	..
Croup .. .. .	..	..	..	..	..	..	..	..
Fever { Typhus .. .. .	..	..	..	..	..	..	..	..
Enteric .. .. .	..	..	..	..	..	..	..	..
Other continued .. .. .	..	..	..	..	..	..	..	..
Epidemic Influenza	10	..	1	..	2	2	5	..
Cholera .. .. .	..	..	..	..	..	..	..	..
Plague .. .. .	..	..	..	..	..	..	..	..
Diarrhœa	6	6	..	..	..	..	..	3
Enteritis .. .. .	..	..	..	..	..	..	..	..
Puerperal Fever .. .. .	..	..	..	..	..	..	..	..
Erysipelas .. .. .	..	..	..	..	..	..	..	..
Phthisis (Pulmonary Tuberculosis) ..	15	..	..	2	3	9	1	5
Other tuberculous diseases	9	3	5	1	..	..	..	4
Cancer, malignant disease	19	..	..	..	..	10	9	1
Bronchitis	9	3	..	..	..	1	5	..
Pneumonia	14	2	3	..	..	4	5	6
Pleurisy .. .. .	..	..	..	..	..	..	..	..
Other diseases of Respiratory Organs ..	..	..	..	..	..	..	..	..
Alcoholism	4	..	..	..	..	4	..	..
Cirrhosis of Liver }	1	..	1	..	..	..	..	2
Venereal diseases	3	3	..	..	..	..	..	..
Premature Birth .. .. .	..	..	..	..	..	..	..	..
Diseases and Accidents of Parturition ..	..	..	..	..	..	..	..	..
Heart Diseases	16	..	..	..	1	12	3	1
Accidents	4	..	2	..	..	..	2	1
Suicides	5	..	..	..	1	4	..	1
Arterio-Sclerosis	3	..	..	..	..	1	2	..
Cerebral hemorrhage	15	..	..	..	..	7	8	..
Diseases of spinal cord	3	..	..	..	..	2	1	..
Bright's disease of kidneys	11	..	..	..	..	5	6	..
Rheumatic fever	3	..	..	1	1	1	..	..
Age	19	..	..	..	..	..	19	..
All other Causes	31	9	4	2	1	8	7	19
All Causes	205	27	20	6	9	70	73	45

MILK SUPPLY.— There were 6 farms with grazing land attached and accommodating in the sheds an average number of 114 milch cows, and there was one cowshed with 4 cows without grazing land.

There were 17 shops where milk was sold. Both milkshops and cowsheds were regularly inspected and found on the whole fairly well kept.

Such inspection as would be necessary to see that the regulations made under the Dairies, Cowsheds and Milkshops Order, as to the thorough cleansing of the cows' teats and udders and the milkers' hands, were properly carried out would require a considerable increase in the sanitary staff. Indeed, until the public become earnest in a demand for milk free from all impurities and be willing to pay for it, such milk generally will not be obtainable.

In the inspection of milkshops special stress has been laid upon the importance of keeping the milk exposed for sale on the counter covered with gauze.

The Council employs a Veterinary Surgeon to inspect all the cows in the district and make quarterly reports. Mr. Vincent's reports gave an average of 130 cows inspected quarterly and no case of tuberculous disease of udder discovered.

The recently issued third report of the Royal Commission on Tuberculosis states that tubercle bacilli have been found in the milk of cows suffering from tuberculosis yet showing no signs of disease of udder, and that the bacilli have been found also in the excreta of these animals. The report of the Medical Officer of Health of Islington for 1907 stated that out of 70 samples of milk examined one only was free from cowdung.

A large quantity of the milk sold in the district is brought by rail, and many of the churns are of a pattern that allows the milk to be shaken through the covers into the hollow dished top, wash out the dust and dirt, and return with it into the churn. This form should be replaced by the more modern one which has an outside capped lid.

Seeing that outbreaks of typhoid fever, scarlet fever and diphtheria have been traced on many occasions to infected milk, and that the most experienced bacteriologists report the presence of tubercle bacilli, of cowdung, and of other impurities in the public milk supply, it seems that the only safe course to take is to boil the milk immediately on receipt, and take care that, afterwards, no impurity gains access; and this last measure is very important, for careful enquiry has shown that in the very fatal disease called summer diarrhœa the worst contamination of the milk takes place in the house of the consumer.

Proceedings were taken against one milkvender for improper storage of milk and for obstructing the Sanitary Inspector in the course of his duties and a fine was imposed for the latter offence.

SALE OF FOOD AND DRUGS ACT.—The administration of the Sale of Food and Drugs Act, so far as the taking of samples is concerned, is carried out by the Inspector of Weights and Measures of the County Council. I have been unable to obtain any details of the results of taking samples in this district.

OTHER FOODS.—The only unsound foods dealt with have been fish and vegetables brought by hawkers to the Health Offices. Such as after examination have been found to be unfit for food, have been condemned and disposed of by the Department.

BAKEHOUSES.—There are 14 bakehouses. These have been regularly inspected and found to be satisfactory. There is no underground bakehouse.

SLAUGHTERHOUSES. — There are 6 slaughterhouses and they have been efficiently inspected and generally found in decent condition.

The greater part of the meat consumed is from animals slaughtered outside the district.

HOUSE ACCOMMODATION. — House accommodation for the working classes has become yearly more adequate, the 1881 census showing 5·5 persons per house, that of 1891 5·4, and of 1901 5·2; and it has been estimated that there were not more than 5·1 per house in 1908.

Owing to the rent of most cottages being nine shillings and upwards per week, there were many instances of two families sharing a six-roomed house; but cases of over-crowding were rare. Still, the difficulty of keeping in an orderly condition cottages designed for one family, and having but one kitchen, scullery, larder, water tap and closet, and occupied by two families, is very evident.

BYE-LAWS AS TO HOUSES LET IN LODGINGS.—The Council passed in 1902 Bye-laws as to Houses let in Lodgings. Registration of such houses, however, has not been enforced, but inspection has been carried out, and there has been only very rarely any difficulty in getting notices for amending defects and nuisances complied with.

WATER SUPPLY. — The water supply is from deep wells in the chalk just above the strip of London Tertiaries and situated in the town. The Sutton District Water Company is bound by Act to soften the water to not less than 9 degrees of hard-

ness; and, excluding a period when the plant got out of order, the water has been supplied softened generally below the required standard.

Recent analyses carried out by experts engaged by the District Council have shown the chemical and bacteriological purity of the water to be of a very high standard.

SEWERAGE AND DRAINAGE. — The district is seweraged, except with regard to a few houses in the outlying rural and sparsely populated parts on the clay, where cesspools are still in use and emptied from time to time by the Health Department.

The sewage is treated by contact beds, and—a small part—by broad irrigation.

By the close of the year a percolating filter with rotating sprinkler capable of treating 111,600 gallons daily was completed, and—by this much—treatment by irrigation will be lessened.

There is a separate system for dealing with storm water. Some of these sewers discharge into soakaways in the chalk, but more sewers are being laid, and it is intended to abolish the soakaways.

Except in rare instances in the rural parts, where excreta can be treated on the dry earth system, water closets are in use.

There are 9 cesspools in the chalk, some belonging to houses with drains lower than the sewer level, and plans for dealing with this difficulty are being considered.

During the year the house drains from 3 cesspools in the chalk have been connected with the sewers.

REMOVAL OF HOUSE AND TRADE REFUSE AND STABLE MANURE.—The removal of house and trade refuse is carried out by the Council's servants under the direction of the Sanitary Inspector, the refuse being tipped in situations least likely to cause offence.

The prevalence of flies near such tips has been evident, and, when excessive, a layer of chloride of lime is spread over the heap.

Stress has been laid upon the importance of the weekly removal of manure, as required in the bye-laws, by owners of stables, and especially in warm weather, as horse manure forms the favourite breeding place of flies.

It would be well if nursery gardeners would avoid, as far as possible, the collection of large heaps in the warm season of the year.

NUISANCES.—Most of the owners of property are ready to carry out the necessary steps for the abatement of nuisances on receipt of a preliminary notice. Twenty-three statutory notices were issued, and legal proceedings taken in one instance.

SCHOOLS.—There are 5 public elementary schools with accommodation for over 2,600 children. The average number on the register in 1908 was 2,465, and of those attending 2,218.

The sanitary condition of these schools and the water supply were satisfactory. Overcrowding in some class-rooms, due to temporary teaching difficulties, was reported to the County Education Medical Officer and quickly remedied.

On the notification of a notifiable infectious disease, if any member of the family attends school, the school is visited and necessary examination

made of children and instruction given to teachers.

The same course is followed when notice is received of other infectious diseases from the teachers.

By arrangement with the County Education Medical Officer examinations of children are made for contagious diseases and school-attendance purposes.

No school was closed for infectious disease, but one class, in which measles had broken out, was closed for a fortnight before the summer vacation.

The inspection of school children under the Education Act, 1907, is carried out by the whole-time Medical Officers of the County Council.

FACTORY AND WORKSHOPS ACT.—The number of workshops on the register at the end of the year was 119 and 241 visits of inspection were made. The various premises were generally found to be in a satisfactory condition. Notices were served in 7 instances as follows:—3 to cleanse premises, 1 to provide ventilation, 1 in respect of overcrowding, and 2 in connection with drainage. No other offences under the Factory and Workshops Act were reported. The following list gives the various industries as carried on at the registered workshops:—

Bakehouses	....	....	....	...	14
Laundries	....	...	...	....	17
Dressmakers and Milliners	....	....	....	...	26
Tailors, Outfitters, Watchmakers, Bootmakers, and others				...	62

BYE-LAWS RELATING TO NEW STREETS AND BUILDINGS.—The following table shows the work done under these Bye-Laws in 1908 and the ten preceding years :—

	In 1898	In 1899	In 1900	In 1901	In 1902	In 1903	In 1904	In 1905	In 1906	In 1907	In 1908
The number of new buildings, and of additions to buildings, of which plans were submitted for approval under the Bye-Laws, was.....	263	257	153	201	174	192	171	355	223	175	142
The number of new streets, ditto, was...	4	5	2	3	1	4	5	2	2	3	2
The number of times that legal proceedings were taken for breach of the Bye-laws relating to streets and buildings was.....	none	1	none	none	none	none	none	none	none	none	none

The number of private streets metalled, channelled, paved, &c., under the Private Street Works Act, 1892, during 1908 was 10.

AS TO HOUSE DRAINAGE, &c.—I am informed by the Surveyor that the drains of 66 premises were connected with the sewers of the district during the year.

THE SANITARY INSPECTOR'S REPORT

For the year ending December 31st, 1908.

Number of complaints received in writing	....	125
Number of premises inspected under Sec. 92 of the Public Health Act, 1875	....	414
Number of nuisances discovered	....	332
Ditto remedied without being reported	... ..	25
Number of nuisances reported to the Sanitary Authority	... ..	307
Number of nuisances remedied after report	....	295
Number of preliminary notices served by the Inspector for the abatement of nuisances	....	159
Number of notices for the abatement of nuisances served by order of the Sanitary Authority	....	23

Particulars of Work done by owners or occupiers for the abatement of nuisances, in compliance with notices.

Number of privies, cesspools, ditches, pools, water courses, urinals, ashpits, and drains, cleansed, and number of deposits removed	...	105
Number of new privies or water-closets provided		1
Number of premises at which the drains were re-constructed, ventilated, trapped, or disconnected from the house pipes	... ..	95
Number of houses at which the water closets were provided with water under Sec. 36 of the Public Health Act, 1875	....	2
Number of premises from which animals, improperly kept, were removed	....	5
Number of houses which were provided with efficient ventilation	... ..	6
Number of houses at which injurious overcrowding was abated	....	—
Legal proceedings taken under Sec. 96 for abatement of nuisances (number of times)	....	1
Houses closed as unfit for human habitation	....	—

Number of houses at which disinfection was carried out, after notice under Sec. 5 of the Infectious Diseases (Prevention) Act, 1890	51
Number of foul houses cleansed and white-washed, after notice under Sec. 46 of the Public Health Act, 1875	15
Number of premises from which offensive accumulations have been removed after notice, under Sec. 49 of the Public Health Act, 1875	7
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Seizure of unwholesome meat, poultry, fish, fruit, vegetables, corn, bread, flour or milk, under Sec. 116 of the Public Health Act, 1875	3

F. W. KAIN, *Sanitary Inspector.*

The Inspector of Dairies, Cowsheds, & Milkshops makes the following return for the year 1908 :—

Number of registered cowkeepers, dairyman, and purveyors of milk carrying on business at the commencement of the year	....	...	....	21
Number since registered	....	....	....	3
Number who gave up or transferred their business during the year	. .	....	....	1
Number of registered premises inspected during the year	...	....	....	24
Total number of visits paid during the year	...			78
Number of cowsheds and dairies at which improvements in the lighting, ventilation, paving, drainage, means of cleaning, or water supply, were made during the year	...	...	....	1
Number of cowsheds or dairies which were found in a dirty state	...	....	...	1
Number of premises at which the milk vessels were found in an unclean state	...	...	....	1
Number of new cowsheds erected	....	....	....	1

METEOROLOGICAL NOTES, 1908.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for year 1908.	Total for year 1907.	Total for year 1906.	Total for year 1905.	Total for year 1904.
Rainfall as recorded at— Sutton Sewage Works ..	inch 1.54	inch 1.04	inch 2.80	inch 2.50	inch 1.86	inch 1.92	inch 2.74	inch 3.37	inch 1.69	inch 2.62	inch .66	inch 2.22	inch 24.96	inch 22.88	inch 22.72	inch 23.61	inch 22.88
Hours of sunlight .. (recorded at Wallington)	50.2	61.6	91.4	132.5	195.9	256.2	193.2	196.3	165.2	135.5	84.9	18.6	1581.5	1381.9	1673.6	1582.5	1654.8
Mean temperature .. (recorded at Wallington)	36.5	41.8	40.5	44.2	56.3	59.5	62.3	59.9	56.6	53.9	46.4	39.7	Aver. 49.8	Aver. 49.4	Aver. 50.5	Aver. 49.8	Aver. 49.5

RAINFALL FOR 1908

AT

SUTTON SEWAGE FARM,

As compared with that of previous years.

Year.	Total Depth.	Greatest Fall in 24 Hours.		Number of Days upon which .01 or more fell.
		Depth.	Date.	
1898	19.31 Inches.	1.11 Inches.	Dec. 6th.	136
1899	22.76 do.	1.50 do.	Nov. 5th.	140
1900	24.21 do.	.90 do.	Feb. 15th.	165
1901	21.27 do.	1.12 do.	Dec. 12th.	144
1902	21.03 do.	.97 do.	Sept. 10th.	183
1903	37.64 do.	1.78 do.	June 10th.	190
1904	22.89 do.	.82 do.	Dec. 6th.	184
1905	23.61 do.	1.12 do.	June 6th.	177
1906	22.72 do.	1.98 do.	June 28th.	162
1907	22.88 do.	.90 do.	April 6th.	180
1908	24.96 do.	1.10 do.	Jan. 7th.	165

