

## **Medical Officer's annual report [to] Durban Corporation.**

### **Contributors**

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# DURBAN CORPORATION



## MEDICAL OFFICER'S REPORT

FOR THE

Municipal Year ended  
31st July, 1924.

[Clegg (S.I.)]

Medical Officer of Health

DURBAN :  
COMMERCIAL PRINTING COMPANY.

1925.



*With the Compliments  
of the*

*Medical Officer of Health.*



M.O. 24.



## MEDICAL OFFICER'S REPORT.

### PUBLIC HEALTH COMMITTEE, 1923-24.

COUNCILLOR MRS. E. A. BENSON.  
COUNCILLOR MRS. A. M. SIEDLE.  
COUNCILLOR MRS. E. L. KNIGHT.  
COUNCILLOR DR. C. A. FRANCOIS.  
COUNCILLOR H. H. KEMP.  
COUNCILLOR S. J. SMITH.

### PUBLIC HEALTH DEPARTMENT.

#### STAFF.

#### ADMINISTRATIVE AND OFFICE:

1 Medical Officer of Health .. S. J. CLEGG, O.B.E., M.D., Ch.B., D.P.H.  
1 Asst. Medical Officer of Health Vacant.  
1 Clerk .. .. . E. POSNER.  
1 Typiste .. .. . D. TAYLOR.  
1 Indian (Office Messenger).

#### LABORATORY:

1 Indian (Attendant).

#### MATERNITY AND CHILD WELFARE:

1 Medical Officer-in-charge .. K. McNEILL, M.B., Ch.B., D.P.H.  
2 Health Visitors .. .. . A. DAVIES, General Nursing Training Certificate, C.M.B.  
S. G. STANDING, R.S.I. Certificates (2), Nursing Certificate C.M.B.  
1 Lady Assistant .. .. . O. WRIGHT.  
1 Attendant .. .. . D. FOX.

#### INFECTIOUS DISEASES HOSPITAL, CONGELLA.

1 Matron .. .. . A. S. DAVIES, R.G.N., Scotland.  
2 Ward Sisters  
2 Staff Nurses.  
6 Probationers.  
1 Seamstress.  
11 Indians (1 Cook, 6 Ward Orderlies, 2 Domestic Boys, 2 Housemaids).



## DISINFECTING STATION.

- 1 Superintendent .. .. C. D. MORNING.  
 2 Assistant Disinfectors .. .. P. W. ANDERSON, J. DRISCOLL (temporary).  
 12 Indians (2 Dhobies, 1 Sirdar,  
 9 Assistants).

## SANITARY DEPARTMENT:

- 1 Chief Sanitary Inspector .. R. WALKER, Cert. R.S.A., Scotland.  
 10 Asst. Sanitary Inspectors .. T. HYSLOP, Cert. R.S.A., Scotland, Cert. Registered Plumber.  
 J. D. WOOD, Cert. R.S.I. (Eng.), City and Guilds of London Inst., Cert. Dept. Science and Art, London.  
 F. W. HOLMES, Cert. R.S.I. (S.A.).  
 A. E. MOORMAN, Cert. R.S.I. (S.A.).  
 A. A. MICKIE, Cert. R.S.I. (S.A.).  
 J. W. H. MCGREAVEY, Cert. R.S.I. (S.A.).  
 E. H. SURGESON, Cert. R.S.I. (Eng.),  
 C. C. DELUCY, Cert. Sant. Meat and Food Inspection (Manchester), Cert. Sanitary Science (Hons.), Cert. City and Guilds of London Inst.  
 H. M. TEDDER, Cert. R.S.I. (S.A.).  
 A. KELSO.  
 1 Chief Clerk .. .. A. M. McIVER.  
 1 Second Clerk .. .. A. S. WOOD.  
 1 Third Clerk .. .. R. E. BOUTLE.  
 1 Junior Clerk .. .. H. S. HELLETT.

## SANITARY SUB-DEPARTMENTS:

## ANTI-MALARIA:

- 1 European Overseer .. A. E. CLARKE.  
 15 Indians.

## ANTIPLAGUE:

- 1 European Overseer .. F. DRAKE, M.B.E.  
 2 Rat-catchers.

## BARRACKS MANAGEMENT:

- 1 European Caretaker .. T. J. ESPITALIER.  
 14 Indians.

## CLEANSING SERVICE:

- 5 European Overseers .. Chief Overseer: E. A. R. SAVAGE ; 4 Assistant Overseers.  
 4 Sirdars and 102 Rubbish Collectors (Indian).  
 5 Sirdars and 166 Street Cleaners (Indian).

## NIGHTSOIL REMOVAL:

- 1 Sirdar.  
 19 Indian Labourers.

## PUBLIC CONVENIENCES:

- 10 European Attendants.  
 6 Indian Attendants.

## CORPORATION CEMETERIES:

- 2 European Overseers .. Stellawood, J. BULLOUGH ; General, L. LOWE,  
 21 Indian Labourers,

Health Department,

Municipal Buildings,

Durban, 31st December, 1924

TO HIS WORSHIP THE MAYOR AND

TOWN COUNCILLORS OF THE BOROUGH OF DURBAN.

MR. MAYOR, LADIES AND GENTLEMEN,

I have the honour to submit the Twenty-third Annual Report dealing with the health and sanitary conditions of the Borough of Durban for the year ending 30th June, 1924.

#### POPULATION.

The estimated population at 31st December, 1923, compared with the estimated population the previous year, was:—

	1922	1923
	Estimate.	Estimate.
European .. .. .	50,100	50,792
Coloured .. .. .	4,750	4,471
Native .. .. .	33,500	35,000
Asiatic .. .. .	15,650	16,150
Total .. .. .	<u>104,000</u>	<u>106,413</u>

#### BIRTHS.

Nine hundred and nineteen European births were registered, giving a birth-rate per 1,000 population of 18.09, as against 23.7 the previous year, and is the lowest on record for the Borough. The corresponding figure for England and Wales was 19.7, which also, with the exception of the year 1919, constituted a record.

Amongst the Asiatic population, which is estimated to be 16,150, 770 births were registered, giving a birth-rate of 47.67, a figure which, high though it is, is probably an understatement.

#### DEATHS.

A total of 1,030 deaths of Borough residents occurred during the year—473 European, 23 Coloured, 234 Native and 300 Asiatic. The European death-rate corrected for non-residents was 9.31, which though slightly higher than the previous year, is approximately equal to the average rate for the previous five years, and compares favourably with the other towns of the Union and with England and Wales. Upon further analysis, however, the conditions are seen to be not as satisfactory as would at first appear. For purposes of comparison the following table is given, the basis being the proportion of deaths from certain diseases per 1,000 deaths from all causes and is for European residents only.



Disease.	No. of Deaths.	Proportion per 1,000 Deaths from all causes.		
		Durban 1923-24.	Durban average 5 years, 1919-23.	England and Wales, 1923.
Infective Intestinal Disease (Enteric Fever, Dysentery, Diarrhoea, Enteritis) .. .. .	66	139	87	20
Cancer .. .. .	61	129	98	109
Heart and Circulatory System ..	58	122.6	—	164
Diseases of Nervous System .. ..	34	72	—	107
Diseases of Birth and Development	32	68	64	47
Pneumonia and Bronchitis .. ..	27	57.08	79	149
Pulmonary Tuberculosis .. .. .	13	27	43	72
Other forms of Tuberculosis .. ..	11	23	8	20

Below, the figures for Natives and Asiatics for 1923-24 are similarly classified:—

Disease.	No. of Deaths.		Proportion per 1,000 Death: from all causes.	
	Native.	Asiatic.	Native.	Asiatic.
Infective Intestinal Disease (Enteric Fever, Dysentery, Diarrhoea and Enteritis) .. .. .	32	49	137	163
Cancer .. .. .	6	4	26	13
Heart and Circulatory System ..	27	17	115	57
Diseases of Nervous System .. ..	9	12	38	40
Diseases of Birth and Development	8	50	34	167
Pneumonia and Bronchitis .. ..	49	56	209	187
Pulmonary Tuberculosis .. .. .	15	11	64	36
Other forms of Tuberculosis .. ..	9	7	38	23

Although circumstances have not permitted an exhaustive analysis of the above figures, certain facts may be commented upon.

One of the chief indications of the healthiness or otherwise of a town is the incidence of intestinal diseases of infective origin, particularly Enteric Fever, Dysentery, Diarrhoea and Enteritis. The infection of these diseases is contained in the excretions of any person who is suffering or has more or less recently suffered from an attack, or who may be infected and a potential source of danger although no illness has ever been complained of. The infection from these sources is spread by means of water, milk, and food supplies generally, and a high incidence of these diseases indicates either an impure water supply or that conditions exist which predispose to the contamination of food by infected dust, flies, or persons. During the year 152 deaths occurred in Borough residents from the above diseases, of which 66 were Europeans, 5 Coloured, 32 Natives and 49 Asiatics, representing a death-rate of 1.43 per 1,000 population. Whereas in Durban, out of every 1,000 deaths due to all causes, 147 were due to these diseases, the corresponding figure for England and Wales was only 20. These are excessive figures and reflect a position which is very unsatisfactory. The question of water supplies will be referred to later, but it may be stated at once that, in my opinion, this high incidence was not attributable to any contamination of the Borough supply, the results of bacteriological and chemical examinations remaining excellent throughout the year. Infected food was undoubtedly responsible, and attention should be directed to the removal of the causes predisposing to this. A report with reference to the Scavenging, Conservancy and Refuse Disposal services is at present being discussed by the Public Health Committee; the operation of the new Milk By-Laws should greatly improve matters, and the whole question of food protection generally will shortly be submitted for consideration. It should be pointed out



that the existence of an overcrowded and frequently insanitary area in the centre of the town, and the presence on the outskirts of the chief residential areas of even more insanitary conditions under which a number of those handling food supplies in the Borough live, constitute a definite menace to the public health of the town.

Deaths from Cancer show a definite increase over previous year with the exception of the year 1921, 61 deaths in European residents being registered, equivalent to 129 per 1,000 deaths from all causes, as against an average of 98 over the previous five years. The increase in the mortality from Cancer has been arousing interest for some years and has stimulated research and enquiry all over the world. Amongst other bodies directing special attention to the subject may be mentioned the Departmental Committee of the Ministry of Health, London; the Committee of the Health Organisation of the League of Nations, the Medical Research Council, the Grand Council of the British Empire Campaign, and the Imperial Cancer Research Fund. These bodies are making close enquiry into every aspect of the disease, and it is to be hoped that some tangible result may be gained in the near future.

Other points of interest are the comparatively low figures in Europeans for Diseases of the Heart and Circulatory System, Diseases of the Nervous System, Respiratory Diseases, and Pulmonary Tuberculosis; the high figures for Pneumonia and Bronchitis in Natives and Asiatics, particularly the former, as compared with those for Europeans; and the unsatisfactory position with regard to Diseases of Birth and Development.

#### EPIDEMIC AND INFECTIVE DISEASES.

A prevalence of MALARIA during the last quarter of the year resulted in 27 deaths—11 Europeans, 6 Natives and 10 Asiatics. An enquiry from the medical practitioners of the town in May indicated that at that time there were between 250 and 300 cases under treatment in all parts of the town, whilst there was an unduly high incidence in the surrounding districts also.

The essentials in the prevention of Malaria are adequate treatment of the sick and the eradication of mosquito breeding places, and it is unfortunate that financial considerations precluded the adoption of any systematic scheme of dealing with the dangerous swampy areas of the Borough. Many individual property owners also do not appear to appreciate their own responsibilities with regard to the prevention of mosquito breeding.

The work of the Anti-Malarial Gang continued during the year, drains being cleared and new ones cut where necessary, and collections of standing water being sprayed weekly with crude oil, of which 2,583 gallons were used as against 1,879 gallons the previous year.

An outbreak of TYPHUS occurred in November, 1923, at one of the Native compounds in the Point area, and 88 cases came to the notice of the Health Department. The de-verminising measures adopted quickly checked the outbreak, which remained localised, although a few sporadic cases continued to be reported in various parts of the town. Employers of Native labour were circularised pointing out their responsibility under the Typhus Regulations with regard to the provision of cleansing facilities for their employees, and the appropriate sections were also advertised in the Press. In view of the fact of the constant influx of Natives from areas where Typhus Fever existed, it was considered advisable to institute routine de-lousing measures for all incoming Natives at the Disinfecting Station prior to their registration, and although some little difficulty was experienced at first owing to the prejudice of the Native against what he called "dipping," this was soon overcome, and up to the end of June, 1924, 18,732 boys were bathed and 84,094 articles of their clothing disinfected. Typhus Fever is a serious and formidable epidemic disease, yet is probably the disease which is most easily controlled by means of efficient de-lousing, and the routine cleansing at the Disinfecting Station is a valuable prophylactic measure which, however, should be regarded as only temporary pending the provision of more adequate facilities on private premises.

No cases of PLAGUE occurred in the Borough, but special attention was given to building out and destruction of rats, owing to the presence of the disease in the Orange Free State. During the year 5,347 inspections of property were made, 212 notices served upon occupiers of rat-infected property, and special



advice given in 668 cases. In all 7,172 rats were accounted for. The Rodent Infestation Regulations and Plague Regulations give Local Authorities wide powers with regard to rat prevention, and under these steady improvement is being effected, particularly with regard to the all-important question of "Building-out."

Sixty cases of ENTERIC FEVER in Borough residents were notified, of which 37 were Europeans, 3 Coloured, 12 Native and 8 Asiatics; and there were 18 deaths, giving a respective case mortality of 24.3%, nil, 50% and 37.5%. figures which appear to indicate that certain cases occurred which were not notified. Although considerable improvement can still be looked for, these figures are the lowest recorded for many years.

Enteric Fever is a preventable disease and it is regrettable that more use is not made of anti-typhoid inoculation, which has been proved to be of such great value as a prophylactic. Enquiries are being made at present as to the efficacy of a method of inducing immunity by the administration of vaccine by mouth, which it is hoped will very largely remove the existing prejudice against inoculation.

DIPHTHERIA caused 69 cases and 4 deaths, of which 60 cases and 3 deaths were in Europeans. This represents a case mortality of 5%, a comparatively low figure, which indicates that the importance of early administration of antitoxin is generally recognised. Ninety per cent. of the cases and all the deaths were in children under 15 years of age.

In this disease, again, it is possible to confer protection against attack by means of the injection of a "Toxin-antitoxin mixture," and it is hoped to make arrangements whereby such facilities will be available.

No cases of SMALLPOX were notified during the year, although several outbreaks occurred in various parts of the Union, chiefly in Native areas. Small-pox is essentially a preventable disease and vaccination is compulsory; but it is regretted that the law is not being enforced, the Government having decided not to prosecute "genuine conscientious objectors" pending an amendment of the law in this respect. The result of this has been that in 1923 throughout the Union there were 146,000 vaccinations less than in the previous year and 225,000 less than in 1921. In Durban the ratio of vaccinations to births registered was 37.4% and only 50% of 12-year-old children were re-vaccinated. This indicates the existence of a large unprotected population and constitutes a serious menace to the public health. The apparently increasing prejudice against vaccination cannot be too strongly condemned, and any legislation which would have the effect of encouraging this would be a distinctly retrograde step.

Seventy deaths from all forms of TUBERCULOSIS occurred amongst all classes of Borough residents, 24 being Europeans, 4 Coloured, 24 Native and 18 Asiatic.

The table below gives a comparison between the death-rates from Tuberculosis for the year ending 30th June, 1924, and the average death-rates for the two quinquennia 1915-19 and 1920-24.

Race.	Type of Tuberculosis.	Average Death-rates per 1,000 Population.		Death-rates per 1,000 Population, 1924.
		Five years 1915-19.	Five years 1920-24.	
European, including Coloured	All forms .. ..	0.57	0.45	0.50
	Pulmonary .. ..	0.43	0.35	0.29
	Non-pulmonary ..	0.14	0.10	0.21
Native .. .. .	All forms .. ..	0.45	0.39	0.67
	Pulmonary .. ..	0.34	0.29	0.42
	Non-pulmonary ..	0.11	0.10	0.25
Asiatic .. .. .	All forms .. ..	1.24	1.46	1.11
	Pulmonary .. ..	0.94	1.21	0.68
	Non-pulmonary ..	0.3	0.25	0.43

The above figures indicate a satisfactory decrease in the incidence of Pulmonary Tuberculosis in Europeans and Asiatics, compared with the average for the previous five years, the figure for the Asiatics being less than half that of the previous year.



A big increase is shown amongst Natives in all forms of the disease.

A significant feature is that the death-rate from Non-pulmonary Tuberculosis, i.e., Tuberculosis of bones and joints, glands, meninges, etc., shows a marked increase in all races. In this connection the work of the Royal Commission on Tuberculosis, continued by Dr. Griffiths, is of interest. In a series of cases of Non-pulmonary Tuberculosis in children under 10 years of age it was found that more than 50% were caused by Tubercle Bacilli of bovine origin, i.e., Tubercle Bacilli from infected milk. It is estimated that in England and Wales 6% of all deaths from Tuberculosis are due to infected milk, and it is known that between 7% and 10% of all milk samples taken contain Tubercle Bacilli. The figures for Natal, and for Durban in particular, are at present incomplete, but such as they are they indicate that the percentage of infected milk samples is very similar to the above, and that in the Cape the position is even worse. In 1923 the Agricultural Department withdrew the restrictions regarding removal of cattle not tested by Tuberculin from the Cape and Stellenbosch districts, and in November, 1923 the Council of Public Health passed the following resolution:—

“This Council regards the action of the Agricultural Department in withdrawing the restrictions regarding the removal of cattle not tested by Tuberculin from the Cape and Stellenbosch districts as a retrograde step and inimical to the general health of the community, and is of opinion that this prohibition should be restored.

“The Council further desires to draw the attention of local authorities to the serious prevalence of tuberculosis in bovines, and especially in dairy cattle, in the Cape and south-western districts and other parts of the Union, since the drinking of tuberculosis milk is a serious menace to the health of the juvenile population and an important factor in the tuberculosis problem. Efforts on the part of the Health Department to secure the co-operation of the Department of Agriculture in the matter having failed, this Council feels that the only solution lies in the hands of local health authorities, who are urged to take steps to establish the ‘certified-milk’ system and to stop the sale of tuberculosis milk within their areas.”

A report has been submitted to the Public Health Committee proposing the adoption of a Tuberculosis Scheme, to include a Tuberculosis Clinic under the control of a Tuberculosis Medical Officer, Visiting Nurses, beds at Nelspoort Sanatorium for early cases, beds at the Infectious Diseases Hospital for advanced and observation cases, and the formation of an After-care Committee. It is felt that such an organised scheme is necessary, in spite of the fact that the death-rate in Europeans is comparatively low, as anti-tuberculosis measures are very definitely indicated amongst the Native and Asiatic populations, who are the chief handlers of our food supplies.

The Draft Milk By-Laws which are at present under consideration include provision for the regular examination of all cattle and for the tuberculin testing of cattle producing milk which is to be consumed in its raw state, a procedure which aims at the elimination of tuberculosis from this class of dairy cattle. It is admitted that this is a contentious clause, but in view of the above figures it appears to be a very necessary one.

Two hundred and eighty-one cases of infectious disease were admitted to the INFECTIOUS DISEASES HOSPITAL at Congella, as against 156 during the previous year. This increase in the number of patients was made possible by alterations to one of the pavilions so that a modified cubicle system of nursing could be adopted, and this has proved very successful during the year.

Approval of the plans for the new Infectious Diseases Hospital at Cato Manor has been obtained, and work should be commenced in the very near future.

Four hundred and sixty-five specimens were examined in the Bacteriological Laboratory from patients in the Infectious Diseases Hospital, chiefly diphtheria swabs.

The VENEREAL DISEASES Scheme did not get into full working order until the clinic and wards were open at Addington Hospital on 9th June, and the figures of attendances up to the end of the year are of course small.



Up to the date of this Report, however, the figures definitely show that the scheme is proving its usefulness, and in the three months ending 31st December, 1924, there was a total attendance of 794. This was in spite of the lack of any active propaganda work, which must be developed in future.

The MATERNITY AND CHILD WELFARE Medical Officer (Dr. K. McNeill) reports that the attendances at the Clinics again show an increase over the previous year, showing that the objects of that department are being more and more appreciated. Staff sickness interrupted work to a certain extent, but the Clinics were successfully carried on by two part-time Lady Medical Officers.

A total of 3,087 visits were paid by the two Health Visitors, but this could be increased with advantage, and a report submitted for consideration proposes the appointment of two additional Health Visitors.

The European Infant Mortality rate—i.e., the number of deaths of children under one year of age per 1,000 births—was 73.9, as compared with a rate of 58.3 for the previous year. This is not a satisfactory figure and indicates that increased activity in the direction of infant care is necessary. Of the 68 deaths of European infants, 32, or 47%, were due to diseases of birth and development, of which 21 died within the first four weeks. These diseases refer to the ante-natal and natal stages of the infant's life, and can only be improved by increasing ante-natal supervision of the mother and by the provision of a more efficient midwifery service.

The importance of maternity and child welfare work is now generally recognised, and in the report referred to above suggestions are made whereby the work in Durban may be improved.

The Chief Sanitary Inspector (Mr. R. Walker) reports that 49,807 visits of inspection were paid by the District Inspectors to various premises within the Borough, and 4,007 nuisances were dealt with. 9,829 written intimations and notices were sent out, and 3,219 reports were made on Licence applications. The system whereby certain trading premises must be licensed yearly and must be inspected by the Public Health Department is one of very great value from a public health point of view. It involves a large amount of work on the part of the inspecting staff, but this is well repaid by the control which it enables the Department to exercise over the general sanitary conditions of such premises, powers which many other Municipalities would envy.

With regard to HOUSING, 2,464 special visits of inspection were paid as part of a special enquiry into the housing conditions of the Borough. This survey is not yet complete, but it would appear that although insanitary property does exist it is the overcrowding, particularly among the poorer classes of the community, which would appear to constitute the chief evil. The statutory requirement of 300 cubic feet per head often permits of overcrowding and commingling of sexes, which can only be to the detriment of the people, both physically and morally.

Although 469 new houses have been erected during the year—93 under the Municipal Housing Scheme and 376 by private enterprise—it will be some time before the provision of that class of house can affect the conditions of the poorer sections of the community. Excellent accommodation is provided for Natives in the various Municipal compounds, but it would appear that this is quite insufficient and many of them continue to live under bad conditions, whilst the conditions under which the majority of the Asiatic population live are deplorable.

Two hundred and fifty samples of food and drugs were taken during the year, of which 205 were genuine. 17 prosecutions under the Adulteration of Food Act were instituted, with 16 convictions; and 21 prosecutions under Section 113 of the Public Health Act for the sale of unsound food, with 14 convictions. 35 samples of various articles of food, including milk, bacon, brawn, sausages, jam, sponge cakes and fruit drinks, were examined for presence of preservative. Two out of seven samples of milk were found to contain boric acid, and the dealers were communicated with. One sample of bacon contained an excessive quantity of boric acid, but the remaining samples were satisfactory.

Two hundred and twenty six samples of new milk were submitted to the Borough Analyst, 41 of which were found to be below standard. For the whole of the milk samples, including those under standard, the average composition was:—Milk fat, 3.37%; solids not fat, 8.68%; total solids, 12.06%.

EUROPEANS-BOROUGH.





p to the end of the year 115 samples were examined for presence of bacillus Coli and for the total number of organisms present. In 6 of these samples enumeration was impossible owing to spreading organisms. Of the remaining 109 samples, 14 (or 13%) contained less than 50,000 bacteria in one c.c (i.e. about 17 drops); 46 (or 42%) contained between 50,000 and 500,000 organisms; 49 (or 45%) contained over 500,000 of which 9 contained over 2,000,000, one sample reaching the appalling figure of 7,600,000, approximately 1,000,000 organisms in every drop of milk.



of the year 1955 were examined for presence of  
and for the total number of organisms present. In 1951  
enumeration was made by using a spreading plate  
method. 109 samples, 14 (or 13%) contained less than 10,  
one c.c. (1.8% about 17 organisms; 43 (or 42%) contained  
10,000 organisms; 49 (or 45%) contained over 100,000 c.c.  
over 2,000,000; one sample reaching the appalling figure  
approximately 1,000,000 organisms in one c.c. of milk.

Seven hundred and seventy-eight visits of inspection were paid to the 86 dairies in the Municipal area and the immediately surrounding district, for the purpose of enforcing the Borough Milk By-Laws.

In November a regular bacteriological examination of samples of milk was instituted for the purpose of ascertaining the standard of bacterial cleanliness and as to whether tubercle bacilli were present.

Up to the end of the year 115 samples were examined for presence of *Bacillus Coli* and for the total number of organisms present. Fourteen, or 12.1%, contained less than 50,000 bacteria in one cubic centimetre (i.e., about 17 drops); 45, or 39.1%, contained between 50,000 and 500,000 organisms; 48, or 41.7%, contained over 500,000; whilst 19, or 16.5%, contained over 2,000,000, one sample reaching the appalling figure of 17,600,000, approximately 1,000,000 organisms in every drop of milk.

It is evident from the above that there is considerable room for improvement in the cleanliness of the milk of the Borough, and it is hoped that the new Milk By-Laws when put in force will constitute a marked advance in this direction.

Nineteen samples of milk were examined for the presence of the Tubercle Bacilli, which was found in one, or 5.3%.

These figures are, of course, small; but later investigation indicates that this percentage will prove to be a fair average.

By courtesy of the Water Engineer (Mr. Walter Campbell), a more detailed statement with regard to the water supply is included later in the body of this Report.

Four samples of water from different parts of the town are taken weekly for bacteriological examination and one for chemical analysis. Results of these tests show that throughout the year the quality of the water has been maintained at a very high standard, and indicates the efficiency of the methods of purification employed. It is anticipated also with the completion of the Shongweni Dam, allowing of more storage capacity, that these results will be even better.

The experience of the work of the Public Health Department has indicated that certain alterations in organisation are necessary to meet more efficiently both present and future requirements, and a report has been submitted for consideration dealing with the staffing of the Department, Maternity and Child Welfare work, Tuberculosis work, medical services of the Corporation other than purely public health, and the question of allocating various extraneous services to more appropriate departments. These last include refuse disposal, street cleansing services, night soil removal, public conveniences, cemeteries, and barracks amangement, upon which a total staff of 14 Europeans and 302 Indians are employed. The detailed management of these services, the bulk of which falls upon the Chief Sanitary Inspector, is certainly not a function of a department whose essential duty is that of sanitary supervision and education, and it is neither economical nor conducive to the efficiency of the Department in its true sphere that such work should continue to form part of its duties.

I would like to express my warm appreciation of the loyal service of each member of the Staff of the Department, and to add my grateful thanks to you, Sir, to your predecessor in office, to the Members of Council and of the Public Health Committee in particular, for the invariable kindness and courtesy which have been extended to me. In the general desire to develop the Borough industrially and commercially, public health progress has not been forgotten, as so often happens, and the keenness evidenced in this respect has been most encouraging and stimulating.

I have the honour to be,

Mr. Mayor, Ladies and Gentlemen,

Your obedient Servant,

S. J. CLEGG, M.D., D.P.H.,  
*Medical Officer of Health,*



## POPULATION.

The following table shows the estimated population for 1923-24, the previous census of the Borough being shown for comparison:—

	Govt. Census, 1919.	Govt. Census, 1921.	Estimate, 1922.	Estimate, 1923.	Estimate, 1924.
European .. ..	41,865	46,113	48,550	50,100	50,792
Coloured .. ..	19,872	18,391	4,400	4,750	4,471
Asiatic .. ..			15,150	15,650	16,150
Native .. ..	17,925	29,011	30,000	33,500	35,000
Total .. ..	79,662	93,515	98,100	104,000	106,413

## BIRTHS.

Table showing the Monthly Distribution of Births occurring among **Borough Residents**, giving Race and Sex, 1923-24:—

	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1923.										
July .. ..	42	33	—	3	1	1	33	29	76	66
August ..	32	24	4	1	—	1	23	27	59	53
September	39	23	2	6	—	—	40	24	81	53
October ..	43	33	2	2	2	1	36	37	83	73
November	48	39	3	2	—	—	31	19	82	60
December	27	29	—	1	—	—	35	29	62	59
1924.										
January ..	57	58	2	—	—	—	47	42	106	100
February..	35	38	3	4	—	1	43	38	81	81
March ..	35	34	5	1	—	2	42	35	82	72
April ..	42	50	2	1	3	1	25	25	72	77
May ..	32	44	2	3	1	2	27	25	62	74
June ..	38	44	3	2	3	—	31	27	75	73
Totals ..	470	449	28	26	10	9	413	357	921	841

Table showing Monthly Distribution of Births occurring among **Non-residents**, giving Race and Sex, 1923-24:—

	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1923.										
July.. ..	9	5	—	—	—	—	—	—	9	5
August ..	16	8	—	—	—	—	1	1	17	9
September	6	5	—	1	—	—	1	—	7	6
October ..	5	7	—	—	—	—	—	—	5	7
November	9	7	—	—	—	—	—	—	9	7
December	4	5	—	—	—	—	—	1	4	6
1924.										
January ..	15	18	—	—	—	1	—	—	15	19
February..	13	6	—	—	—	1	—	2	13	9
March ..	6	7	—	—	—	—	—	1	6	8
April.. ..	6	13	—	—	5	3	1	1	12	17
May ..	8	19	2	2	2	—	—	1	12	22
June.. ..	13	10	—	—	10	10	—	—	23	20
Totals ..	110	110	2	3	17	15	3	7	132	135

Table showing **Illegitimate Births** occurring among **Borough Residents**, 1923-24:—

European.		Coloured.		Native.		Asiatic.		Total.	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
13	12	7	7	1	1	2	1	23	21

European Birth Rate (gross) .. .. .	22.42
European Birth Rate (corrected for non-residents) .. .. .	18.09
Coloured Birth Rate (corrected for non-residents) .. .. .	12.07
Native Birth Rate (corrected for non-residents) .. .. .	1.17
Asiatic Birth Rate (corrected for non-residents) .. .. .	47.67
Birth Rate, England and Wales, 1923 .. .. .	19.7

Table showing Total Registered European Births and Birth Rates for the past seven years:—

	1918.	1919.	1920.	1921.	1922.	1923.	1924. Gross.	1923. Boro. only.
Births .. ..	1,105	1,128	1,252	1,338	1,350	1,301	1,139	919
Birth Rates ..	25.6	23.8	24.9	26.6	26.8	23.7	22.4	18.09

Table showing **Illegitimate Births** occurring among **Borough Residents**, 1923-24:—

	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Births .. ..	13	12	7	7	1	1	2	1	23	21
Percentages	2.72		25.9		10.52		.44		—	

## INFANTILE MORTALITY—AGES AND CAUSES OF DEATHS.

	Weeks.			Months.			Total under 1 year.
	0—1	1—2	2—4	1—3	3—6	6—12	
Whooping Cough .. .. .	—	—	—	—	—	1	1
Malaria .. .. .	—	—	—	—	—	1	1
Meningitis .. .. .	—	—	—	1	—	—	1
Convulsions .. .. .	—	—	—	—	1	—	1
Broncho-Pneumonia .. ..	—	—	—	2	2	—	4
Acute Pulmonary Congestion	1	—	—	—	—	—	1
Empyema .. .. .	—	—	—	—	1	—	1
Miliary Tuberculosis .. ..	—	—	—	—	1	—	1
Dysentery .. .. .	—	—	—	1	1	3	5
Diarrhoea, Enteritis, etc. ..	—	—	1	3*	1	16*	21
Debility, Marasmus .. ..	2	—	2	2	3	1*	10
Congenital Malformations ..	—	—	—	1	1	—	2
Prematurity .. .. .	13*	2	—	1	2	—	18
Atelectasis .. .. .	1	—	—	—	—	—	1
Congenital Heart Disease ..	1	—	—	—	—	—	1
Congenital Syphilis .. ..	2*	—	—	—	—	—	2
Strangulated Hernia .. ..	—	—	—	—	1	—	1
Cellulitis .. .. .	—	—	—	1	—	—	1
Totals .. .. .	20	2	3	12	14	22	73

\* One Coloured included.



## EUROPEAN INFANTILE MORTALITY.

	Male.	Female.	Total.
Infantile Deaths during 1923-24.. ..	38	30	68
Registered Births .. .. .	470	449	919

This equals 73.99 infantile deaths per 1,000 births and represents the "Infantile Mortality Figure" for Durban.

The following table shows the Infantile Mortality Figure for England and Wales during 1922:—

England and Wales .. .. .	69
105 Great Towns, including London .. .. .	73
157 Smaller Towns .. .. .	68
London .. .. .	61

## INFANTILE DEATHS IN WARDS FOR THE PAST FIVE YEARS.

Wards ..	1	2	3	4	5	6	7	8	9	Total.
1919-20 ..	18	10	9	6	3	24	10	3	14	97
1920-21 ..	10	6	6	12	3	13	—	3	7	60
1921-22 ..	18	17	6	9	6	10	4	8	11	89
1922-23 ..	6	9	3	8	5	12	6	4	11	64
1923-24 ..	14	6	7	5	5	16	5	3	7	68

## INFANT MORTALITY RATE FOR PAST SIX YEARS.

	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.
Infant Deaths ..	67	97	60	89	64	68
Rate .. .. .	71.5	90.4	54.2	77.8	58.34	73.99

## DEATHS.

## BOROUGH DEATHS, EUROPEAN AND COLOURED—AGE AND SEX DISTRIBUTION.

	European.		Coloured.		Total.	
	Male.	Female.	Male.	Female.	Male.	Female.
Under 1 year .. .. .	38	30	3	2	41	32
1—2 years .. .. .	12	8	—	1	12	9
2—5 years .. .. .	15	6	—	—	15	6
5—15 years .. .. .	8	5	1	1	9	6
15—25 years .. .. .	12	8	—	—	12	8
25—45 years .. .. .	41	33	7	3	48	36
45—65 years .. .. .	94	50	2	2	96	52
65 and over .. .. .	66	47	1	—	67	47
Totals .. .. .	286	187	14	9	300	196

# IMPORTED DEATHS, EUROPEAN AND COLOURED—AGE AND SEX DISTRIBUTION.

	European.		Coloured.		Total.	
	Male.	Female.	Male.	Female.	Male.	Female.
Under 1 year .. .. .	5	4	—	—	5	4
1— 2 years .. .. .	2	2	—	—	2	2
2— 5 years .. .. .	2	5	—	—	2	5
5—15 years .. .. .	1	3	1	1	2	4
15— 25 years .. .. .	12	5	—	—	12	5
25—45 years .. .. .	12	15	3	—	15	15
45—65 years .. .. .	25	10	1	—	26	10
65 and over .. .. .	12	6	—	—	12	6
Totals .. .. .	71	50	5	1	76	51

TABLE SHOWING CHIEF STATISTICS OF DEATHS OF ALL RACES IN THE BOROUGH DURING THE PAST FIVE YEARS.

Race.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.
European .. .. .	461	449	276	450	473
Coloured .. .. .	—	—	—	—	23
Native .. .. .	224	172	198	133	234
Asiatic .. .. .	355	329	306	288	300
Totals .. .. .	1,040	950	780	871	1,030

Death Rate per 1,000 of population:—

Race.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.
European .. .. .	9.6	8.9	9.4	8.2	9.31
Coloured .. .. .					5.14
Native .. .. .	6.7	5.6	6.8	3.9	6.68
Asiatic .. .. .	15.7	23.16	20.19	18.4	18.57

TABLE FOR COMPARISON SHOWING RECORDED DEATH RATE PER 1,000 IN ENGLAND AND WALES IN 1923.

England and Wales .. .. .	11.6
105 Great Towns, including London .. .. .	11.6
157 Smaller Towns .. .. .	10.6
London .. .. .	11.2

TABLE OF ALL DEATHS IN INSTITUTIONS AND NURSING HOMES.

	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Addington Hospital..	139	61	7	1	203	16	26	15	375	93
Gaol Hospital .. .. .	—	—	—	—	18	1	3	—	21	1
Sanatorium .. .. .	16	24	—	—	—	—	—	—	16	24
Indian Depot Hospital	—	—	—	—	—	—	18	1	18	1
S.A.R. Hospital .. .. .	—	—	—	—	28	—	3	—	31	—
Musgrave Nursing Home .. .. .	20	12	—	—	—	—	—	—	20	12
Corporation Hospital	4	2	—	—	5	—	—	—	9	2
Private Hospitals .. .. .	13	15	1	1	2	4	1	6	17	26
Totals .. .. .	192	114	8	2	256	21	51	22	507	159



## DEATHS.

1.—TABLE SHOWING MONTHLY DISTRIBUTION OF DEATHS OF ALL RACES, AMONG **BOROUGH RESIDENTS.**

	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1923.										
July.. ..	28	14	2	1	19	—	20	19	69	34
August ..	17	13	1	—	8	—	9	12	35	25
September	16	17	1	—	14	—	17	13	48	30
October ..	26	21	—	—	25	1	9	10	60	32
November	18	21	—	—	34	2	10	6	62	29
December	20	18	2	1	16	—	11	13	49	32
1924.										
January ..	36	13	2	2	16	1	13	9	67	25
February..	16	16	2	—	13	2	11	7	42	25
March ..	41	18	2	1	17	—	18	9	78	28
April.. ..	28	9	1	—	17	1	12	14	58	24
May .. ..	16	11	1	2	25	3	14	9	56	25
June.. ..	24	16	—	2	16	4	16	19	56	41
Totals ..	286	187	14	9	220	14	160	140	680	350

2.—TABLE SHOWING MONTHLY DISTRIBUTION OF DEATHS OF ALL RACES, AMONG **NON-RESIDENTS.**

	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1923.										
July.. ..	7	4	—	—	8	2	2	1	17	7
August ..	6	6	—	—	11	2	5	1	22	9
September	6	2	—	—	16	—	6	—	28	2
October ..	8	3	—	—	25	4	4	2	37	9
November	3	3	—	—	26	4	3	2	32	9
December	6	2	—	—	15	2	3	2	24	6
1924.										
January ..	11	5	3	1	13	7	1	—	28	13
February..	4	6	—	—	6	1	3	—	13	7
March ..	3	3	—	—	10	—	6	1	19	4
April.. ..	8	4	—	—	18	2	4	2	30	8
May .. ..	4	3	—	—	7	—	1	1	12	4
June.. ..	5	9	2	—	4	1	2	—	13	10
Totals ..	71	50	5	1	159	25	40	12	275	88

## DEATHS OF ALL RACES IN THE BOROUGH.

ARRANGED ACCORDING TO CERTAIN DISEASES.

Diseases.	European	Coloured.	Native.	Asiatic.	Totals.
Typhus .. .. .	—	—	2	—	2
Dysentery .. .. .	17	1	18	7	43
Enteric Fever.. .. .	9	—	6	3	18
Diphtheria .. .. .	3	—	—	1	4
Scarlet Fever .. .. .	1	—	—	—	1
Measles .. .. .	1	—	—	—	1
Whooping Cough .. .. .	1	—	—	—	1
Tetanus .. .. .	1	—	—	1	2
Malaria .. .. .	11	—	6	10	27
Venereal Disease .. .. .	1	1	2	3	7
Puerperal Fever .. .. .	—	—	—	2	2
Sceptic Diseases .. .. .	8	1	3	2	14
Phthisis .. .. .	13	3	15	11	42
Other forms of Tuberculosis..	11	1	9	7	28
Other Infectious Diseases ..	2	—	1	—	3
Influenza.. .. .	7	1	9	12	29
Cancer .. .. .	61	2	6	4	73
Diseases of Birth and Develop- ment .. .. .	32	2	8	50	92
Senile Decay .. .. .	24	1	—	17	42
Diseases of Nervous System .	34	—	9	12	55
Diseases of Heart and Circu- latory System .. .. .	58	2	27	17	104
Pneumonia .. .. .	20	—	46	36	102
Bronchitis .. .. .	7	1	3	20	31
Other Diseases of Respiratory System .. .. .	6	—	4	2	12
Diarrhoea and Catarrh .. ..	40	4	8	39	91
Other Diseases of Liver and Alimentary Track .. ..	26	1	5	5	37
Diseases of Urinary System..	16	1	5	5	27
Diseases of Childbirth .. ..	4	—	1	3	8
Diseases of Reproductive Sys- tem .. .. .	1	—	—	—	1
Accidents .. .. .	24	1	16	12	53
Homicide .. .. .	—	—	—	—	—
Suicide .. .. .	8	—	—	1	9
Execution .. .. .	—	—	—	—	—
Other Causes .. .. .	26	—	25	18	69
Totals .. .. .	473	23	234	300	1,030



## NON-RESIDENT DEATHS—ALL RACES.

ARRANGED ACCORDING TO CERTAIN DISEASES.

Diseases.	European	Coloured	Native.	Asiatic.	Totals.
Typhus .. .. .	—	—	7	—	7
Dysentery .. .. .	4	—	17	1	22
Enteric Fever .. .. .	6	1	10	2	19
Diphtheria Fever .. .. .	2	—	—	—	2
Scarlet Fever .. .. .	—	—	—	—	—
Measles .. .. .	—	—	—	—	—
Whooping Cough .. .. .	—	—	—	—	—
Tetanus .. .. .	2	1	1	—	4
Malaria .. .. .	5	—	6	2	13
Venereal Disease .. .. .	3	—	1	—	4
Puerperal Fever .. .. .	—	—	—	1	1
Septic Diseases .. .. .	5	—	—	1	6
Phthisis .. .. .	6	1	29	6	42
Other forms of Tuberculosis ..	1	1	20	2	24
Other Infectious Diseases ..	—	—	1	—	1
Influenza .. .. .	4	—	12	1	17
Cancer .. .. .	15	—	2	2	19
Diseases of Birth and Develop- ment .. .. .	4	—	2	1	7
Senile Decay .. .. .	2	—	—	4	6
Diseases of Nervous System ..	11	—	3	1	15
Diseases of Heart and Circu- latory System .. .. .	13	—	16	9	38
Pneumonia .. .. .	6	—	34	5	45
Bronchitis .. .. .	—	—	5	—	5
Other Diseases of Respiratory System .. .. .	—	—	3	1	4
Catarrh and Diarrhoea .. ..	3	—	4	2	9
Other Diseases of Liver and Alimentary Tract .. .. .	8	—	1	—	9
Diseases of Urinary System ..	6	1	—	2	9
Diseases of Childbirth .. ..	1	—	1	—	2
Diseases of Reproductive Sys- tem .. .. .	—	—	—	—	—
Accidents .. .. .	6	1	2	3	12
Homicide .. .. .	—	—	—	—	—
Suicide .. .. .	—	—	—	—	—
Execution .. .. .	—	—	—	—	—
Other Causes .. .. .	7	—	7	6	20
Totals .. .. .	121	6	184	52	363

The following table shows the Comparative Rates (Europeans, not including Coloured), from the principal towns of South Africa:—

Town.	Popu- lation.	Birth Rate.	Death Rate.	Infantile Mortality.	Tuber- culosis Death Rate.
Pretoria .. .. .	36,600	23.58	7.48	76.47	—
Johannesburg .. .. .	—	25.16	9.76	81.22	0.35
Cape Town .. .. .	111,490	21.92	9.87	72.42	0.71
Bloemfontein .. .. .	19,500	24.3	10.5	81.0	0.41
Maritzburg .. .. .	18,538	28.1	8.9	49.9	0.64
East London .. .. .	17,800	26.5	9.1	—	—
Port Elizabeth .. .. .	23,022	27.1	9.4	112.8	0.61
Durban .. .. .	50,792	18.09	9.31	73.99	0.47

TABLE OF CASES OF NOTIFIABLE INFECTIOUS DISEASES,  
ARRANGED ACCORDING TO RACES, 1923-24.

Diseases.	European.		Coloured.		Native.		Asiatic.		Total	
	Boro.	Imp.	Boro.	Imp.	Boro.	Imp.	Boro.	Imp.	Boro.	Imp.
Diphtheria .. .. .	60	16	4	—	2	3	3	—	69	19
Scarlet Fever .. ..	22	7	—	—	—	—	1	—	23	7
Enteric Fever .. ..	37	33	3	4	12	20	8	8	60	65
Pulmonary Tuberculosis .. .. .	23	14	6	4	16	41	30	32	75	91
Other forms of Tuberculosis .. .. .	13	3	—	1	19	7	13	2	45	13
Puerperal Fever .. .	4	—	—	—	—	—	4	3	8	3
Cerebro-Spinal Meningitis .. .. .	1	—	1	—	1	—	—	—	3	—
Leprosy .. .. .	—	—	—	—	—	1	—	—	—	1
Erysipelas .. .. .	2	1	—	—	1	1	—	—	3	2
Ophthalmia Neonatorum .. .. .	2	—	—	—	—	1	1	—	3	1
Ophthalmia (Gonorrhœal) .. .. .	—	—	—	—	1	—	—	—	1	—
Typhus Fever .. .. .	5	3	—	—	74	4	2	—	81	7
Acute Anterior Poliomyelitis .. .. .	—	—	—	—	—	—	1	—	1	—
Encephalitis Lethargica .. .. .	—	1	—	—	—	—	—	—	—	1
Totals .. .. .	169	78	14	9	126	78	63	45	372	210
Cases treated in Hospital .. .. .	115	63	10	9	118	76	30	37	273	185
Cases treated at home or privately .. ..	54	15	4	—	8	2	33	8	99	25

The following also are notifiable infectious diseases, but there have been no cases during the past year: Plague, Cholera, Smallpox, Relapsing Fever, Glanders Rabies, Yellow Fever, Sleeping Sickness.

#### SCARLET FEVER.

The following table shows the Cases Notified and Deaths from Scarlet Fever registered during the past six years:—

Year .. ..	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	
						Boro.	Imptd.
Cases ..: .. .	34	30	24	20	32	23	7
Deaths .. .. .	1	—	—	—	1	1	—

Borough Europeans only:—

Case Mortality, 4.54.

Case Incidence per 1,000 of population equals .43.

Death Rate per 1,000 of population equals .0196.









## BOROUGH DEATHS: AGE AND SEX DISTRIBUTION.

Ages.	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
0—1 year .. ..	—	—	—	—	—	—	1	—	1	—
1—2 years .. ..	1	—	—	—	—	—	—	—	1	—
2—5 years .. ..	2	—	—	—	—	—	—	—	2	—
5—15 years .. ..	—	—	—	—	—	—	—	—	—	—
15—25 years .. ..	—	—	—	—	—	—	—	—	—	—
25—45 years .. ..	—	—	—	—	—	—	—	—	—	—
45—65 years .. ..	—	—	—	—	—	—	—	—	—	—
Totals .. ..	3	—	—	—	—	—	1	—	4	—

## ENTERIC FEVER.

The following table shows the Cases Notified and Deaths from Enteric Fever registered during the past six years:—

Year .. ..	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	
						Boro.	Imptd.
Cases .. ..	103	259	110	139	353	60	65
Deaths .. ..	21	36	11	26	52	18	19

Borough Europeans only (not including Coloured):—

Case Mortality, 24.3 per cent.

Case Incidence per 1,000 of population equals 0.72.

Death Rate per 1,000 of population equals 0.17.

## CASES: WARD DISTRIBUTION.

Wards ..	1	2	3	4	5	6	7	8	9	Imptd.	Total.
European ..	6	5	2	2	5	6	5	1	5	33	70
Coloured ..	—	1	—	1	—	1	—	—	—	4	7
Native .. ..	8	—	—	2	—	—	1	—	1	20	32
Asiatic .. ..	1	—	—	3	1	2	—	1	—	8	16
Totals .. ..	15	6	2	8	6	9	6	2	6	65	125

## BOROUGH CASES: AGE AND SEX DISTRIBUTION.

Ages.	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
0—1 year .. ..	—	—	—	—	—	—	—	—	—	—
1—2 years .. ..	—	—	—	—	—	—	—	—	—	—
2—5 years .. ..	1	2	—	—	—	—	—	1	1	3
5—15 years .. ..	8	6	—	1	—	—	4	—	12	7
15—25 years .. ..	3	5	—	2	7	1	—	1	10	9
25—45 years .. ..	5	4	—	—	4	—	2	—	11	4
45—65 years .. ..	2	1	—	—	—	—	—	—	2	1
Totals .. ..	19	18	—	3	11	1	6	2	36	24

## DEATHS: WARD DISTRIBUTION.

Wards.. ..	1	2	3	4	5	6	7	8	9	Imptd.	Total.
European ..	-	-	2	-	-	2	2	1	2	6	15
Coloured ..	-	-	-	-	-	-	-	-	-	1	1
Native ..	4	-	-	-	-	-	1	-	1	10	16
Asiatic ..	1	-	-	2	-	-	-	-	-	2	5
Totals ..	5	-	2	2	-	2	3	1	3	19	37

## BOROUGH DEATHS: AGE AND SEX DISTRIBUTION.

Ages.	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
0—1 year ..	-	-	-	-	-	-	-	-	-	-
1—2 years ..	-	-	-	-	-	-	-	-	-	-
2—5 years ..	-	1	-	-	-	-	-	-	-	1
5—15 years ..	-	1	-	-	-	-	1	1	1	2
15—25 years ..	2	1	-	-	4	-	-	1	6	2
25—45 years ..	3	-	-	-	1	1	-	-	4	1
45—65 years ..	1	-	-	-	-	-	-	-	1	-
Totals ..	6	3	-	-	5	1	1	2	12	6

## INFECTIOUS DISEASES HOSPITAL.

During the past year 281 cases of Infectious Diseases have been isolated at the Infectious Diseases Hospital, Congella, viz.:—

Diseases.	European.		Coloured.		Native.		Asiatic.		Total.	
	Boro.	Imptd.	Boro.	Impt.	Boro.	Impt.	Boro.	Impt.	Boro.	Imptd.
Diphtheria ..	43	9	4	1	2	3	1	-	50	13
Scarlet Fever ..	12	6	-	-	-	-	-	-	12	6
Measles ..	32	16	2	-	12	-	-	-	46	16
Chickenpox ..	13	-	-	-	41	3	-	-	54	3
Mumps ..	2	1	-	-	6	-	-	-	8	1
Whooping Cough	1	-	-	-	-	-	-	-	1	-
Venereal Diseases	1	1	1	-	5	-	-	-	7	1
Cerebro - Spinal Meningitis ..	2	-	-	-	2	-	-	1	4	1
Pulmonary Tu- berculosis ..	4	-	-	-	-	-	-	-	4	-
Typhus ..	2	3	-	-	15	4	2	-	19	7
Influenza ..	-	-	-	-	3	-	-	2	3	2
Pneumonia ..	-	-	-	-	2	2	-	-	2	2
Observation ..	3	2	1	-	7	6	-	-	11	8
Totals.. ..	115	38	8	1	95	18	3	3	221	60



## DIPHTHERIA: AGE AND SEX DISTRIBUTION.

	0—1 year.	1—2 years.	2—5 years.	5—15 years.	15—25 years.	25 and over.	Total.
Male .. .. .	—	3	4	21	5	3	36
Female .. .. .	—	2	7	15	1	2	27
Total .. .. .	—	5	11	36	6	5	63

The average length of stay in Hospital for the above 63 patients was 37 days.  
DEATHS.—1.

## SCARLET FEVER: AGE AND SEX DISTRIBUTION.

	0—1 year.	1—2 years.	2—5 years.	5—15 years.	15—25 years.	25 and over.	Total.
Male .. .. .	—	—	2	2	2	—	6
Female .. .. .	—	—	4	6	—	2	12
Total .. .. .	—	—	6	8	2	2	18

The average length of stay in Hospital for the above 18 patients was 35 days.  
DEATHS.—1.

## TOTAL DEATHS AT INFECTIOUS DISEASES HOSPITAL.

Diseases.	European.		Coloured.		Native.		Asiatic.		Total.	
	Boro.	Impt.	Boro.	Impt.	Boro.	Imgt.	Boro.	Impt.	Boro.	Imptd.
Diphtheria .. ..	1	—	—	—	—	—	—	—	1	—
Scarlet Fever ..	1	—	—	—	—	—	—	—	1	—
Chickenpox .. ..	1	—	—	—	1	—	—	—	2	—
Cerebro-Spinal Meningitis .. .. .	2	—	—	—	2	—	—	1	4	1
Typhus Fever ..	—	—	—	—	2	—	—	—	2	—
Pneumonia .. ..	—	—	—	—	2	2	—	—	2	2
Measles .. .. .	1	—	—	—	—	—	—	—	1	—
Totals .. .. .	6	—	—	—	7	2	—	1	13	3

## PULMONARY TUBERCULOSIS.

The following table shows the Cases Notified and Deaths from Pulmonary Tuberculosis registered during the past six years:—

Year.	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	
						Boro.	Imptd.
Cases .. .. .	119	129	84	83	115	75	91
Deaths .. .. .	80	58	79	61	107	42	42

Borough Europeans only:—

Case Incidence per 1,000 of population equals .452.

Death Rate per 1,000 of population equals .255.

## CASES: WARD DISTRIBUTION.

Wards ..	1	2	3	4	5	6	7	8	9	Imptd.	Total.
European ..	7	5	3	1	—	1	1	4	1	14	37
Coloured ..	4	—	1	1	—	—	—	—	—	4	10
Native .. ..	8	2	1	—	—	5	—	—	—	41	57
Asiatic .. ..	3	1	—	5	1	14	—	1	5	32	62
Totals ..	22	8	5	7	1	20	1	5	6	91	166

## BOROUGH CASES: AGE AND SEX DISTRIBUTION.

Ages.	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
0—1 year .. ..	—	—	—	—	—	—	—	—	—	—
1—2 years .. ..	—	—	—	—	—	—	—	—	—	—
2—5 years .. ..	—	—	—	—	—	—	—	—	—	—
5—15 years .. ..	—	—	—	—	—	—	—	2	—	2
15—25 years .. ..	—	3	2	1	5	—	7	1	14	5
25—45 years .. ..	12	4	2	1	11	—	4	8	29	13
45—64 years .. ..	3	1	—	—	—	—	7	—	10	1
65 and over .. ..	—	—	—	—	—	—	1	—	1	—
Totals .. ..	15	8	4	2	16	—	19	11	54	21

## DEATHS: WARD DISTRIBUTION.

Wards ..	1	2	3	4	5	6	7	8	9	Imptd.	Total.
European ..	3	2	1	3	—	2	—	1	1	6	19
Coloured ..	2	—	—	—	—	1	—	—	—	1	4
Native .. ..	6	—	1	1	—	5	—	2	—	29	44
Asiatic .. ..	1	—	—	2	—	8	—	—	—	6	17
Totals ..	12	2	2	6	—	16	—	3	1	42	84

## BOROUGH DEATHS: AGE AND SEX DISTRIBUTION.

Diseases.	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
0—1 year .. ..	—	—	—	—	—	—	—	—	—	—
1—2 years .. ..	—	—	—	—	—	—	—	—	—	—
2—5 years .. ..	—	—	—	—	—	—	—	—	—	—
5—15 years .. ..	—	—	—	—	—	—	—	1	—	1
15—25 years .. ..	1	—	—	—	1	—	2	1	4	1
25—45 years .. ..	1	2	1	1	13	—	1	1	16	4
45—65 years .. ..	8	1	1	—	1	—	4	1	14	2
Totals .. ..	10	3	2	1	15	—	7	4	34	8



## OTHER FORMS OF TUBERCULOSIS.

The following table shows Cases Notified and Deaths from Other forms of Tuberculosis registered during the past six years:—

Year .. ..	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	
						Boro.	Imptd.
Cases .. ..	—	26	14	14	18	45	13
Deaths .. ..	17	18	7	11	23	28	24

Borough Europeans only:—

Case Incidence per 1,000 of population equals .255.

Death Rate per 1,000 of population equals .2165.

## CASES: WARD DISTRIBUTION.

Wards ..	1	2	3	4	5	6	7	8	9	Imptd.	Total.
European ..	2	—	1	4	—	—	3	1	2	3	16
Coloured ..	—	—	—	—	—	—	—	—	—	1	1
Native ..	3	—	—	—	—	13	—	3	—	7	26
Asiatic ..	2	—	—	2	—	7	—	—	2	2	15
Totals ..	7	—	1	6	—	20	3	4	4	13	58

## BOROUGH CASES: AGE AND SEX DISTRIBUTION.

Ages.	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
0—1 year ..	—	1	—	—	—	—	—	—	—	1
1—2 years ..	—	1	—	—	—	—	—	—	—	1
2—5 years ..	—	—	—	—	—	—	—	—	—	—
5—15 years ..	3	1	—	—	—	—	1	—	4	1
15—25 years ..	—	1	—	—	5	—	1	1	6	2
25—45 years ..	2	1	—	—	13	—	8	—	23	1
45—65 years ..	2	1	—	—	1	—	2	—	5	1
65 and over ..	—	—	—	—	—	—	—	—	—	—
Totals ..	7	6	—	—	19	—	12	1	38	7

## DEATHS: WARD DISTRIBUTION.

Wards ..	1	2	3	4	5	6	7	8	9	Imptd.	Total.
European ..	2	1	2	—	1	2	—	1	2	1	12
Coloured ..	—	—	—	1	—	—	—	—	—	1	2
Native ..	3	—	—	—	—	5	—	1	—	20	29
Asiatic ..	3	—	—	2	—	2	—	—	—	2	9
Totals ..	8	1	2	3	1	9	—	2	2	24	52

## BOROUGH DEATHS: AGE AND SEX DISTRIBUTION.

Ages.	European.		Coloured.		Native.		Asiatic.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
0—1 year .. ..	—	1	—	—	—	—	1	—	1	1
1—2 years .. ..	—	1	—	—	—	—	—	—	—	1
2—5 years .. ..	—	—	—	—	—	—	—	—	—	—
5—15 years .. ..	—	1	—	—	—	—	1	—	1	1
15—25 years .. ..	—	1	—	—	—	—	2	—	2	1
25—45 years .. ..	2	—	1	—	6	—	2	—	11	—
45—65 years .. ..	3	1	—	—	3	—	1	—	7	1
65 and over .. ..	1	—	—	—	—	—	—	—	1	—
Totals .. ..	6	5	1	—	9	—	7	—	23	5

## RETURN OF WORK DONE AT THE DISINFECTING STATION.

1ST JULY, 1923, TO 30TH JUNE, 1924.

1. Number of Houses and Rooms disinfected.
2. Number of Articles washed and disinfected: Private houses.
3. Number of Articles washed and disinfected: Infectious Diseases Hospital.
4. Number of Articles disinfected: Typhus precautions.

Months.	1. Rooms, etc.	2. Private Houses.	3. Hospital.	4. Typhus.
1923.				
July .. .. .	42	802	2,124	—
August .. .. .	40	1,290	2,046	—
September .. .. .	33	802	2,246	—
October .. .. .	47	794	3,540	—
November .. .. .	49	832	3,452	10,108
December .. .. .	35	740	3,589	12,528
1924.				
January .. .. .	47	536	3,070	15,922
February .. .. .	37	429	2,097	11,168
March .. .. .	30	382	2,475	10,280
April .. .. .	30	497	2,535	9,032
May .. .. .	39	776	2,505	7,312
June .. .. .	49	962	2,514	7,744
Totals .. .. .	478	8,842	32,193	84,094

## AMBULANCE REMOVALS.

Hospital.	European.	Coloured.	Native.	Asiatic.	Total.
Infectious Diseases Hos- pital .. .. .	140	3	103	6	252
Addington Hospital ..	44	3	49	4	100
Other Hospitals .. ..	39	1	1	2	43
Totals .. .. .	223	7	153	12	395



## CORPORATION DEPARTMENTS.

Department.	Towels.	Coats.	Trousers.	Blankets.	Total.
Sanitary .. .. .	10,051	—	—	—	10,051
Abattoir .. .. .	696	285	94	—	1,075
Electrical .. .. .	419	—	—	—	419
Fire .. .. .	240	52	—	490	782
Foreman of Works ..	240	—	—	—	240
Water .. .. .	350	—	—	—	350
Tramways .. .. .	260	—	—	—	260
Market .. .. .	146	255	4	—	405
Police .. .. .	—	—	—	3,827	3,827
Totals .. .. .	12,402	592	98	4,317	17,409

## CLEANSING STATION.

1st July, 1923, to 30th June, 1924.. .. .	EUROPEANS Cleansed ..	8,477
November, 1923, to 30th June, 1924 .. ..	NATIVES Cleansed .. ..	18,732
Total .. .. .		27,209

## OCEAN BEACH.

Month.	Towels.	Costumes.	Slips.	Totals.
1923.				
July .. .. .	6,013	5,884	522	12,419
August .. .. .	3,393	3,058	384	6,835
September .. .. .	2,919	2,600	490	6,009
October .. .. .	3,770	3,524	757	8,051
November .. .. .	5,502	4,720	1,185	11,407
December .. .. .	5,880	5,368	1,291	12,539
1924.				
January .. .. .	8,633	7,233	1,637	17,503
February .. .. .	6,514	5,694	1,509	13,717
March .. .. .	4,645	3,791	935	9,371
April .. .. .	4,781	4,376	936	10,093
May .. .. .	3,409	2,784	569	6,762
June .. .. .	3,081	2,477	400	5,958
Totals .. .. .	58,540	51,509	10,615	120,664

## TOWN BATHS.

Month.	Towels.	Cos- tumes.	Turkish Towels.	Sheets.	Sundry Articles.	Blank- ets.	Total.
1923.							
July .. .. .	7,495	133	177	116	121	—	8,042
August .. .. .	6,765	100	140	63	51	6	7,125
September .. .. .	6,142	105	83	56	52	18	6,456
October .. .. .	5,747	54	103	55	58	20	6,037
November .. .. .	5,582	110	123	47	80	6	5,949
December .. .. .	5,119	47	84	58	88	12	5,408
1924.							
January .. .. .	5,790	82	111	46	49	6	6,084
February .. .. .	4,832	77	112	38	50	—	5,109
March .. .. .	5,345	56	109	71	64	20	5,665
April .. .. .	4,212	53	111	43	110	28	4,557
May .. .. .	4,682	98	169	40	47	7	5,043
June .. .. .	5,066	76	141	65	65	9	5,442
Totals .. .. .	66,777	991	1,464	698	835	132	70,897

## MATERNITY AND CHILD WELFARE DEPARTMENT.

(From the report of the Medical Officer-in-Charge.)

The same lines have been followed in the Maternity and Child Welfare Department as has been described in the last two Annual Reports.

There has been no increase in the Staff since the last Report.

The numbers attending the Clinics again show an increase over the numbers attending last year of 2,634, showing the growing popularity of this institution.

The object of the Clinic is mainly educational, and that end is kept in view both at the Clinics for Infants, Toddlers, and Expectant Mothers as far as practicable.

The mother is taught how to have a healthy baby, and how to keep a healthy baby healthy.

"Health Talks" have been given by one of the Health Visitors on every Thursday afternoon, where the mothers are instructed in elementary hygiene, suitable clothing, and infant care and feeding.

A certain amount of minor Curative work is also undertaken at the Centre. I described fully in my report of 1921-22 the condition of many of the children when first brought to the Centre—their debilitated condition, being due to wrong feeding from birth. In these cases curative measures have to be adopted in order to bring the gastro-intestinal canal and other parts of the body into a healthy condition, before the mother can be instructed how to keep the child healthy.

The need for more efficient supervision of midwives is still evident, and it is regrettable that no powers exist to enforce registration with the local authority.

The following are the main figures for the year:—

Total Sessions . . . . .	504	Average attendance at each	20
Total Medical Sessions . . . . .	201	Average attendance at each	41
Total Ante-Natal Sessions . . . . .	51	Average attendance at each	5
Total attendances at the Clinic . . . . .	10,470		
1,071 new cases out of above number.			
Total Mothercraft Lectures (commenced March, 1924) . . . . .	16		
Total number of Mothers attending . . . . .	32		
Total visits by Health Visitors . . . . .	3,087		
Total Notifications of Births . . . . .	754		
Number of Cases who have received Dry Food at cost price	107		
Number of Cases who have received Dry Food free . . . . .	122		
Amount of Dry Food bought at cost price . . . . .	1,524 lbs.		
Amount of Dry Food given free . . . . .	2,094 lbs.		
Number of Cases who have received Sterilised Milk free . . . . .	45		

## ABATTOIR.

The Abattoir Director reports that during the Municipal year the number of animals slaughtered was:—

Cattle . . . . .	27,528
Calves . . . . .	1,770
Sheep and Goats . . . . .	140,112
Pigs . . . . .	11,857
Total . . . . .	181,267



The number of carcasses found to be diseased, necessitating condemnation, were:—

	Beef.	Mutton.	Pork.	Veal.
Cysticercus Bovis.. .. .	351	—	—	57
Cysticercus Cellusosæ.. ..	—	—	1,159	—
Dropsy and Emaciation .. ..	127	1,085	1	36
Tuberculosis.. .. .	3	—	26	—
Moribund .. .. .	4	23	9	1
Abscesses .. .. .	—	2	—	—
Jaundice .. .. .	1	60	1	—
Dead in pen.. .. .	2	5	1	—
Injuries .. .. .	15	12	—	—
Sarcosperidæ.. .. .	1	—	—	1
Septicæmia .. .. .	3	—	—	—
Purpera Hæmorrhagica .. ..	2	—	—	—
Totals .. .. .	509	1,187	1,197	95

During the year 191,318 portions of carcasses, meat and offals were condemned and destroyed as being unfit for human consumption.

## SANITARY.

(Submitted by Chief Sanitary Inspector.)

Report, in summarised form, of the work and operations of the Sanitary Department for the year ended 30th June, 1924:—

INSPECTIONAL WORK.—For this purpose the town is divided into nine districts, each of which is in charge of a District Sanitary Inspector.

In addition, there is one Dairies and Food Inspector, whose duties comprise the supervision of dairies and cowsheds, markets, etc., and the sampling of food and drugs under the Adulteration of Food Act.

The following tables show the work carried out under this heading, viz.:—

Nature of premises.	No. of visits.
Hotels and boarding-houses .. .. .	1,272
Restaurants, tea-rooms and eating-houses .. .. .	2,681
Bakeries .. .. .	311
Butcheries.. .. .	3,413
Dairies, within the Borough .. .. .	483
Dairies, outside the Borough.. .. .	295
Laundries .. .. .	1,473
Markets .. .. .	500
Offensive trades .. .. .	206
Night inspections .. .. .	29
General inspections.. .. .	37,984
	<hr/> 48,647
Written intimations .. .. .	3,481
Personal notices .. .. .	5,582
Reports to other Departments .. .. .	766
Complaints investigated.. .. .	1,091
Reports on licence applications .. .. .	3,219
Visits re fumigation by cyanide .. .. .	320
Visits re infectious diseases .. .. .	840
Visits re Housing Survey .. .. .	2,464

The following table shows the NUISANCES dealt with by the Sanitary Department:—

Stables, kraals, cowsheds, etc. . . . .	183
Factories or trade premises . . . . .	58
Dirty yards, gullies, waterclosets, etc. . . . .	2,566
Discharge of foul liquids to streets, etc. . . . .	293
Unauthorised deposits of refuse . . . . .	490
Accumulations of offensive matter . . . . .	291
Smoke . . . . .	9
Overgrown lands, etc. (vegetable matter cut down) . . . . .	117

IMPROVEMENTS effected at the instance of the Department:—

#### STRUCTURAL REPAIRS:

General . . . . .	211
Chimneys . . . . .	13
Roofs . . . . .	223
Gutters and down-pipes . . . . .	301
Floors . . . . .	191
Lighting . . . . .	73
Ventilation . . . . .	86

#### SANITARY FITTINGS—Repairs, Improvements or Renewals effected:

W.C. pans, sinks, baths, and gullies . . . . .	480
W.C. cisterns . . . . .	489
Waste and flush pipes . . . . .	281
W.C. buildings . . . . .	86
Privies . . . . .	11

#### DRAINAGE:

Waterclosets provided for Europeans . . . . .	9
Waterclosets provided for Natives . . . . .	15
Sanitary accommodation provided for females (business premises) . . . . .	13

#### REPAIRS, RENEWALS, OR IMPROVEMENTS EFFECTED.

Manholes, traps, vents, etc. . . . .	131
Drains connected to sewer drainage system . . . . .	16
Stormwater drains disconnected from sewer drainage system . . . . .	64
Stormwater drains provided or repaired . . . . .	76
Stormwater connected to road gutter . . . . .	129
Yard paving carried out . . . . .	80

#### GENERAL:

Water supply installed or improved . . . . .	22
Water supply defective fittings repaired . . . . .	133
Verminous premises de-verminised . . . . .	215
Premises cleaned and lime-washed . . . . .	942
Refuse and manure receptacles provided or renewed. . . . .	1,551
Refuse receptacles covered . . . . .	87

#### HOUSING:

Shanties unfit for habitation—vacated or demolished . . . . .	96
Illegal housing of Natives discontinued . . . . .	90
Sleeping in unapproved premises discontinued . . . . .	156



## ANTI-PLAGUE PRECAUTIONS.

Inspection of private premises has been carried out by the European Overseer employed for this purpose. In addition, the District Sanitary Inspectors were instructed to pay particular attention to all premises visited by them, and to give advice to the occupiers of premises where traces of rodents were found or facilities existed for the harbourage thereof.

Total inspections made .. .. .	5,347
Rats destroyed on Corporation properties .. .. .	2,722
Rats reported to have been destroyed on private premises .. .. .	2,287
Rats caught by Departmental Rat-catcher .. .. .	2,163
Notices served on occupiers of rat-infested premises .. .. .	212
Advice given to occupiers and repairs required .. .. .	668

## FLY-PREVENTION.

Particular attention is given to stables and other premises where flies are likely to breed. The occupiers are required to keep their manure in covered receptacles and have it removed from the premises thrice weekly.

All refuse deposited at the refuse tips is sprayed with fly poison (Arsenic of Soda), and fly-poison traps are set at these spots.

Gallons of fly poison used .. .. . 33,144

## OFFENSIVE TRADES.

List of offensive trades on our register as at 30th June, 1924:—

Soapmakers .. .. .	2
Dealers in hides and skins and wool .. .. .	18
Brewery .. .. .	1
Wattle bark grinding .. .. .	3
Refuse depositing sites .. .. .	7
Wool washeries .. .. .	2
Abattoir .. .. .	1
Manufacture of fertiliser .. .. .	1
Refuse destructor .. .. .	1

The Abattoir, Refuse Destructor and Refuse Depositing sites are Municipal institutions.

## CYANIDE FUMIGATIONS.

The cyanide fumigation process was carried out at 306 premises. An Inspector of this Department was present on each occasion to ensure compliance with the By-laws dealing with this process. Ten letters of warning were sent to licensed fumigators for failure to take all necessary precautions. There are 6 licensed fumigators.

## HOUSING.

With the continued activity of the Corporation and private enterprise in building new houses, there has undoubtedly been some improvement in the housing question, but the matter is still acute for the poorly-paid sections of the Community.

The numbers of families living in the Beach Huts and Lords Ground have diminished, and an effort is being made to get these places completely evacuated.

Although there is very little unlawful overcrowding of dwellings, there are still very many cases where two and more families share one house. Among the poorer Asiatics, this is the general rule; and where the responsibility for keeping yards, bathrooms, and conveniences clean is shared by a number of persons, it is almost impossible to maintain such premises in a satisfactory sanitary condition.

## MILK SUPPLIES.

There are 21 dairies within the Municipal area, and 65 in the surrounding districts, from which milk is sold within the Borough. 483 inspections were made, representing an average of 23 to each dairy in the Borough, and 295, which is equal to an average of 4.53 to each dairy in the outside districts.

The following improvements were effected at the instance of this Department:—

## COWSHEDS:

Within the Borough, newly erected .. .. .	1
Outside the Borough, newly erected .. .. .	11
Erected to replace unsatisfactory buildings .. .. .	10
Extensions to existing buildings .. .. .	5
General repairs effected .. .. .	18
New dairies licensed .. .. .	10
New applications refused .. .. .	6
Repairs to walls, floors, etc. .. .. .	19
Overcrowding of cowsheds abated .. .. .	2
Water supplies improved .. .. .	5
Dairies given up or closed down .. .. .	12
Dairies changed ownership .. .. .	5
Premises lime-washed after notice given .. .. .	11
Servants' quarters lime-washed .. .. .	2

## MILK ROOMS:

Erected (8 new and 1 renewal) .. .. .	9
Fly-screened .. .. .	6

## BOILERS:

Provided .. .. .	3
Repaired .. .. .	3
Renewed .. .. .	2
Not regularly used, warnings given .. .. .	21

## BAKERIES AND OTHER FOOD FACTORIES:

Change rooms provided .. .. .	1
Lavatory basins installed .. .. .	8
Overalls provided .. .. .	43
Fly-screening provided .. .. .	7
Floors repaired or renewed .. .. .	19
W.C.'s, drains, etc., removed from the interior of the main building .. .. .	8
Walls, etc., lime-washed, painted, or otherwise cleaned .. .. .	99
Sleeping in store- or work-rooms discontinued .. .. .	7
Unsuitable food receptacles or utensils replaced or improved .. .. .	10
Unclean clothes .. .. .	43

## ANTI-MALARIA PRECAUTIONS.

The usual small gang of Indians, under European supervision, has been employed on Anti-Malaria operations.

Spraying of all swampy areas has been carried out during the summer months, when 2,583 gallons of crude oil were used, as against 1,879 gallons during the year ended 30th June, 1923.

During the colder months, the gang was employed in draining and reclamation works.



## NATIVE OR ASIATIC COMPOUNDS OR BARRACKS.

CORPORATION INDIAN BARRACKS.—These barracks have been kept in as good order as their age and construction permits, and have been regularly inspected and supervised. A few cases of malaria occurred in the Magazine and the old sanitary stable barracks, but, on the whole, the health of the inmates was good.

INDIAN BARRACKS (PRIVATE).—There are 14 private Indian barracks, containing a population of 816. Of these, 9 are under European supervision, the remainder being managed by Indians.

All have the Corporation water supply, but 7 are out of the sewered area. They are classified as: Good, 6; fair, 6; poor, 2. The health of the inmates has been good, no outbreaks of infectious disease being reported.

NATIVE BARRACKS (PRIVATE).—There are 121 private Native barracks or compounds, in which not less than 10 men are housed, and the total number of residents is 5,739. The majority are under direct European control and supervision, the remainder being managed by Indians or Natives.

The structural and sanitary classification is:—

Good	..	..	..	..	..	78
Fair	..	..	..	..	..	33
Poor	..	..	..	..	..	6
Bad	..	..	..	..	..	4

In November last an outbreak of Typhus occurred in private barracks at the Point.

A few sporadic cases occurred in other barracks or compounds, but there was no spread of the disease.

No other outbreaks of serious diseases were reported.

## FOODS AND DRUGS.

The following samples were taken and submitted to the Public Analyst:—

Article.	Number of Samples.	Genuine.	Adulteration.
New milk .. .. .	226	185	41
Cream of tartar.. .. .	3	2	1
Lard .. .. .	3	2	1
Herrings .. .. .	3	3	—
Ice cream .. .. .	1	1	—
Butter, blended.. .. .	1	1	—
Camphorated oil .. .. .	2	2	—
Iodine .. .. .	3	2	1
Baking powder .. .. .	1	1	—
Sausages .. .. .	2	2	—
Pepper, white .. .. .	4	3	1
Pepper, black .. .. .	1	1	—
Totals .. .. .	250	205	45

## MILK.

Of the 226 samples of new milk submitted to the Public Analyst, 41 were certified by him to be below the standard of 3.0 per cent. milk fat, and 8.5 per cent. solids not fat, fixed by the regulations.

In 17 cases, proceedings were taken and 16 of the dairymen fined, one summons being dismissed.

In six instances, following official purchase and analysis of milk samples which were found to be below the regulation standard, requests were made by the dairymen concerned for samples to be taken from the mixed milk of all cows, immediately following milking operations. In every case, analysis showed the test samples to be below the standard required by law.

Warnings were therefore given to the dairymen to improve the quality of their milk.

In the remaining cases, the deficiency was so slight that letters of warning only were sent to the dairymen concerned.

For the whole of the milk samples, including those under standard, the average composition was:—

Milk fat .. .. .	3.37
Solids not fat .. .. .	8.68
Total solids .. .. .	12.06

UN SOUND FOOD: SEIZED AND DESTROYED AT OWNER'S REQUEST,  
OR ON AN ORDER SIGNED BY HIS WORSHIP THE MAYOR.

Article.	Quantity.	Where Seized.
Bacon .. .. .	140 lbs. .. ..	Borough Market.
Sausages .. .. .	52 lbs. .. ..	Private premises and Borough Market.
Beef .. .. .	42 lbs., 82 pieces	Borough Market.
Ox Hearts .. .. .	9 only .. ..	Borough Market.
Mutton .. .. .	23 lbs. .. ..	Borough Market and private premises.
Sheep's Pluck .. ..	1 .. ..	Borough Indian Market.
Fish, tinned .. ..	98 cases .. ..	Private premises.
Fish, cured .. ..	100 bales .. ..	Private premises.
Salmon .. .. .	9 tins .. ..	Private premises.
Pilchards .. .. .	5 tins .. ..	Private premises.
Lobster .. .. .	35 tins .. ..	Private premises.
Herrings .. .. .	112 tins .. ..	Private premises.
Sardines .. .. .	890 tins .. ..	Private premises.
Geese, dressed .. ..	6 .. ..	Borough Market.
Turkeys, dressed ..	3 .. ..	Borough Market.
Fowls .. .. .	30 .. ..	Borough Market.
Jam .. .. .	2 cases, 21 tins ..	Private premises.
Jellies .. .. .	68 tins .. ..	Private premises.
Fruit, canned .. ..	4 tins .. ..	Private premises.
Chutney and Pickles ..	33 bottles .. ..	Indian Market.
Fruit Syrup .. .. .	21 bottles .. ..	Indian Market.
Raisins .. .. .	36 boxes .. ..	Indian Market.
Apple Rings .. .. .	12 rolls .. ..	Indian Market.
Cheese .. .. .	67 tins .. ..	Private premises.
Cafe-au-lait .. .. .	7 tins .. ..	Private premises.

UN SOUND FOOD: HANDED OVER TO THE DEPARTMENT  
BY THE OWNERS FOR DESTRUCTION.

Article.	Quantity.
Fruit, canned .. .. .	14 cases and 60 tins.
Jam .. .. .	5 cases and 40 tins.
Currants .. .. .	1½ cases.
Raisins .. .. .	39 cases.
Pickles .. .. .	1 case and 16 bottles.
Condensed Milk .. ..	1 case and 138 tins.
Herrings .. .. .	698 tins.
Salmon .. .. .	20 tins.
Sardines .. .. .	40 tins.
Bombay Duck .. .. .	1 bag.
Shrimps, dried .. ..	3 cases.
Corned Beef .. .. .	4 tins.
Eggs .. .. .	100 dozen.
Lard .. .. .	1,050 lbs.
Lentils .. .. .	13 bags.
Tamil .. .. .	1½ bags.



## PROSECUTIONS.

Law or By-Law relating to	Cases.	Convictions.	Dismissals.	Bails Forfeited.	Fines Imposed and Bails Forfeited.		
					£	s.	d.
ADULTERATION OF FOOD ACT NO. 45 OF 1901.							
Sec. 7: New milk below regulation standard..	14	13	1	—	30	10	0
Sec. 7: Adulteration of cream of tartar, white pepper, and iodine ..	3	3	—	—	5	0	0
PUBLIC HEALTH ACT NO. 36 OF 1919.							
Sec. 113: Exposure for sale of unsound food..	21	14	1	6	90	2	6
Sec. 146: Refusing admittance to Inspector	1	1	—	—	1	0	0
PUBLIC HEALTH BY-LAWS, DURBAN.							
Manufacture of food ..	4	3	—	1	9	0	0
Nuisances .. .. .	33	32	—	1	53	0	0
House drainage .. ..	5	5	—	—	6	0	0
Slaughter of animals ..	1	—	—	1	0	10	0
Amended abattoir .. ..	2	2	—	—	C.	and	D.
Laundries .. .. .	3	3	—	—	7	0	0
Removal of refuse .. ..	2	2	—	—	3	0	0
Dairies (Sale of milk without licence) ..	4	4	—	—	6	0	0
RODENT INFESTATION REGULATIONS .. ..	1	1	—	—	3	0	0
Totals .. .. .	94	83	2	9	£214	2	6

## SANITARY SERVICES.

The following table shows the average number of carts, vans and tank-carts employed daily, and the quantity of material-rubbish, street sweeping, and manure removed:—

## CARTS:

Rubbish .. .. .	52
Street-cleaning .. .. .	13
Sand (refuse tips) .. .. .	2
Tank (Nightsoil) .. .. .	3
	70

## MATERIALS REMOVED:

	Loads.
Rubbish .. .. .	51,830
Street sweepings .. .. .	19,458
Manure .. .. .	1,469
Sand used for covering tips .. .. .	13,678
	86,435

## DISPOSAL OF REFUSE.

Where disposed of.	Number of Loads.	
	Rubbish.	Street Sweepings.
Western Vlei .. .. .	27	6,556
Point Destructor.. .. .	3,517	—
Brickhill Road .. .. .	—	276
Depot (Eastern Vlei) .. .. .	335	432
Sports Ground (Eastern Vlei) .. .. .	28,316	2,260
Aviation Ground (Eastern Vlei) .. .. .	3,319	888
Botanic Gardens .. .. .	12,216	2,610
Congella .. .. .	3,419	410
Miscellaneous .. .. .	681	6,026
	<u>51,830</u>	<u>19,458</u>

LABOUR.		Rubbish.	Street Cleaning
Chief Overseer .. .. .	1	—	—
Overseers .. .. .	4	—	—
Sirdars (Indian) .. .. .	—	3	5
Collectors (Indian) .. .. .	—	100	—
Scavengers (Indian) .. .. .	—	—	162
	<u>5</u>	<u>103</u>	<u>167</u>

(b) REMOVAL OF MANURE.—Thirty-three premises are receiving a tri-weekly manure-removal service, for which a charge is made at the rate of 4s. per animal per month. Where animals are kept for private use, the manure is removed free of charge.

(c) DISPOSAL OF MANURE.—Two hundred and forty-nine loads of manure were consigned under contract to Avoca, the revenue from this source amounting to £189 10s. 4d.

(d) TRADE REFUSE.—Charges are made for the removal of trade refuse from 42 premises.

Draft By-Laws to authorise the imposition of charges for the removal of garden and trade refuse were, on the instructions of the Public Health Committee, again submitted and recommended by the Committee for the approval of the Town Council.

The Town Council at its meeting on the 6th June decided to refer consideration of the By-Laws to the Council-in-Committee.

Undernoted is a list of dead animals removed and/or buried by the Department:—

Bears .. .. .	1
Cattle .. .. .	80
Horses .. .. .	132
Donkeys .. .. .	16
Mules .. .. .	22
Sheep .. .. .	7
Dogs .. .. .	24
	<u>282</u>



NIGHTSOIL.—The average number of nightsoil pails in use in the unsewered areas during the year under review was 843, a tri-weekly service being given to:—

Private dwellings .. .. .	349
Business premises .. .. .	29
Government institutions .. .. .	9
Municipal institutions .. .. .	12

#### LABOUR (INDIAN).

Tinsmith .. .. .	1
Sirdar .. .. .	2
Collectors .. .. .	17
Total .. .. .	20

It is desirable to direct attention to the very widespread practice of dumping refuse on vacant land, in lanes and passages, and even on the public roads.

Most of the material so dumped is garden refuse and is more or less innocuous, but it is always unsightly, and the initial deposit appears to be taken as a precedent for further accumulations to follow. So long as there was plenty of vacant land on which to dump, the matter was not serious; but with the rapid progress of building throughout the town, the places available where occupiers can deposit such rubbish are daily becoming more scarce. The resultant concentration of rubbish is becoming a serious disfigurement of the amenities of the town, and in some places an intolerable nuisance. Much of this indiscriminate dumping is probably the work of careless and ignorant Native servants, but employers of such labour have a moral responsibility for the actions of their servants.

In the towns of England and Wales the average amount of refuse removed per 1,000 of the population is probably less than 250 cartloads per annum.

In Durban, the amount removed is approximately 500 cartloads per, 1000 of the population for the past year.

On the other hand, the cost of refuse removed in England and Wales, according to a responsible official of the Ministry of Health, works out at a little over 1d. per head of the population per week, and the cost of street-cleaning at a little less.

The cost for *both services* in Durban during the period covered by this Report worked out under 4s. 7d. per head of the population, or just over 1d. per week.

PUBLIC CONVENIENCES.—On instruction from the Town Council, that half of the water-closet accommodation at the various public conveniences were to be free, the "penny-in-the-slot" locks were removed from the following places:—

Gardiner Street (men's) .. .. .	2
West Street (ladies') .. .. .	2
Field Street (men's) .. .. .	2
Point (men's) .. .. .	1
Point (ladies') .. .. .	1
Greyville (ladies') .. .. .	1
Greyville (men's) .. .. .	1
Overport (men's) .. .. .	1
Overport (ladies') .. .. .	1

The attendants report that there has been considerable abuse of this privilege, and the revenue has fallen off to about a third of that previously obtained from this source.

The takings for the month of July, 1923, when locks were fitted to all the doors, amounted to £74 7s. 6d., as against £28 5s. 7d. for June, 1924, when half the water-closet accommodation was free—a difference of £46 0s. 8d.

## CORPORATION CEMETERIES.

GENERAL CEMETERY.—Interments were made as follows:—

Europeans .. .. .	41
Asiatics .. .. .	113
Others .. .. .	—
Total .. .. .	<u>154</u>

Bodies received at the Borough Mortuary:—

Europeans .. .. .	57
Asiatics .. .. .	59
Natives .. .. .	22
Coloured .. .. .	3
Total .. .. .	<u>141</u>

## GENERAL CEMETERY:

Recommendations submitted during the previous year, that the Council should take over the care and control of the denominational cemeteries in the area of the General Cemetery, were considered and approved by the Council.

The matter was discussed with the representatives of the various denominations concerned, who were agreeable to the proposals.

The agreement has now to be ratified by the passing of an Ordinance to authorise the carrying out of the scheme.

The erection of a wall along the West Street, Theatre Lane and Brook Street frontages of the cemetery was started during the year.

STELLAWOOD CEMETERY.—Interments were made as follows:—

Europeans .. .. .	377
Asiatics .. .. .	272
Natives .. .. .	483
Total .. .. .	<u>1,132</u>

Two hundred and twenty-five grave sites were purchased in perpetuity, and 15 grave sites are being maintained at the usual charges.

LABOUR:	General Cemetery.	Stellawood.
Curator .. .. .	—	1
Caretaker .. .. .	1	—
Sirdars .. .. .	1	1
Labourers .. .. .	2	17

REMARKS.—The whole of the graves in the Military section were enclosed with kerbs, and afterwards planted with flowers by the Parks Department.

## ROBING-ROOM AND SHELTER.

With the extension of the Cemetery, the existing robing-room and shelter are very inconveniently situated to the area in which interments are now taking place.

Plans and an estimate of the cost of an additional shelter, with robing-room attached, were submitted by the Borough Engineer, but the Public Health Committee were of opinion that the cost was too high, and ordered the matter to stand down for a year.



## OUTSIDE AREAS.

On instructions received from the Town Clerk, an Inspector of this Department was employed during the months of November and December, 1923, and January, 1924, making a survey of the Sea View and South Coast Junction district, for the collection of necessary data in connection with the proposed incorporation of the area within the Borough.

A report, with an estimate of the cost of carrying out a nightsoil service in the district, was submitted from the Department for the information of the Joint Committee of Council and district representatives, and the information required by the Borough Engineer, Estates Manager and the Water Engineer was handed to these officials.

## WATER SUPPLY.

(By courtesy of the Water Engineer.)

**SOURCE: UMLAAS RIVER.**—The catchment area draining to the storage reservoir at Camperdown is 172 square miles in extent. An additional catchment of 138 square miles will drain to the new storage reservoir now under construction at Shongweni. A further area of 33 square miles to the Intake, making an aggregate of 343 square miles. The total acreage within the catchment area owned by the Corporation is 9,940 acres.

**POSSIBILITIES OF POLLUTION ON CATCHMENT AREA.**—The supply in the river and tributaries from such an extensive catchment area is, of course, subject to pollution, but almost all the human habitations are situated at such distance from streams as renders them innocuous. The Corporation is empowered by the Durban Waterworks Consolidation Act No. 24 of 1921 to take drastic measures if need be to prevent serious contamination.

**STORAGE.**—The total reservoir capacity is made up as follows:—

## STORAGE RESERVOIRS.

	Original Capacity. Million Gallons.	Present Capacity. Million Gallons.
Camperdown .. .. .	500	212
Intake .. .. .	11	11
Clear Water, Umlaas .. .. .	107	100
Total .. .. .	618	323

## SERVICE RESERVOIRS.

	Gallons.
Congella .. .. .	7,300,000
Stella .. .. .	2,000,000
Cato Road .. .. .	10,000
Campbell's Tank .. .. .	110,000
St. Thomas' .. .. .	300,000
Murchie's Tank .. .. .	30,000
Botanic Gardens .. .. .	110,000
Florida Road .. .. .	650,000
Goble Road .. .. .	20,000
North Ridge .. .. .	2,000,000
	12,520,000

## SUMMARY OF AVAILABLE RESERVOIR CAPACITY.

	Million Gallons.
Storage Reservoirs .. .. .	323
Service Reservoirs .. .. .	12.5
Total .. .. .	335.5

**PURIFICATION.**—When necessary, the raw water is treated with ALUMINO FERRIC for the purpose of sedimentation before entering the lines of supply. Two sets of filter-beds are in operation, one to Umlaas and the other at Coedmore; both are of the slow sand type.

The Umlaas Filters, feeding the low level supply, deal with an average 2½ million gallons per day. The Coedmore Filters, feeding the high level supply, deal with an average 3 million gallons per day. The effluent from each of the beds is sterilised by treatment with liquid chlorine on the most modern principles, and with effectual results.

**SYSTEM OF SUPPLY.**—From the Intake the water is conveyed by means of open conduits, tunnels and syphons to the filters, and from there is conveyed to town by cast-iron and steel pipes.

**ADEQUACY.**—The present supply is inadequate in view of the rapidly increasing population and growing trade demands, although recent filter extensions have relieved the immediate position.

**NEW SCHEME.**—An entirely new scheme is now under construction, consisting of a storage reservoir to hold 2,600 million gallons, much further downstream than the existing Camperdown storage reservoir. From this storage reservoir the water will be conveyed to Durban through tunnels (at present under construction), conduits and pipe lines. Purification arrangements will be established at Northdene on the route of the pipe line.

The length of the aqueduct from the new reservoir to Durban will be 17.25 miles.

**BACTERIOLOGICAL EXAMINATIONS.**—Regular bacteriological examinations for the presence of bacillus coli have been made in the Bacteriological Laboratory established at Coedmore Filters, and without exception have yielded results comparable with those of any other water supply in the world. It might be stated that the Durban standard of negative B. Coli in 100 c.c. is the highest in the country. Weekly tests are made at the Government Laboratory, yielding consistently good results.



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