

**Annual report of the Medical Officer of Health [to] the Corporation of the City of Capetown.**

**Contributors**

Cape Town (South Africa). City Health Department.

**Publication/Creation**

[Capetown] : [Cape Times], [1929]

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*2. Inspected*

**The Corporation**

OF

**The City of Capetown**



**ANNUAL REPORT**

OF THE

**Medical Officer of Health,**

T. SHADICK HIGGINS,

M.D., B.S., B.Sc., Lond.; M.R.C.S., Eng., L.R.C.P., Lond.; D.P.H., Cantab.;  
Fellow of the Royal Sanitary Institute.

For the year ended 30th June, 1929.

CAPE TIMES LIMITED.









*THE CORPORATION OF THE CITY OF CAPE TOWN.*

**APPENDIX No. 8.**

**Report of the Medical Officer of Health**

FOR THE YEAR ENDED 30th JUNE, 1929.

TO HIS WORSHIP THE MAYOR AND  
COUNCILLORS OF THE CITY OF CAPE TOWN.

MADAM AND GENTLEMEN,

I have the honour to present the annual report on the health and sanitary conditions of the City of Capetown for the year 1928-29, together with an account of the work of the City Health Department during the year.

*Vital Statistics\**

The birth rate, both European and non-European, was about the same as the average of the past five years. The non-European rate was more than double (2.4 times) the European rate.

The European death rate was 1 per cent. greater than in the previous year and 4 per cent. greater than the average for the past five years. The non-European death rate was 11 per cent. less than in the previous year and 8 per cent. less than the average for the past five years. The non-European death rate was 2.4 times as great as the European rate.

The European infant mortality rate was 5 per cent. greater than in the previous year and 9 per cent. less than the average of the past five years. The non-European rate was 17 per cent. less than in the previous year and 12 per cent. less than the average of the past five years. For all races the infant mortality rate for 1928-29 was the lowest yet recorded for the City. The non-European infant mortality rate was 2.6 times as great as the European rate.

The natural increase (*i.e.*, the excess of births over deaths) of non-Europeans (2,982) was more than double that of Europeans (1,412). The estimated actual increase in population was 8,237 (Europeans 2,820, non-Europeans 5,417).

*Infectious Diseases.*

The outbreak of cerebrospinal fever which was reported in 1927-28 continued with somewhat abated severity in 1928-29. Its greatest incidence was amongst non-Europeans. One of the important factors in the spread of this disease is overcrowding.

Diphtheria was rather more prevalent than in 1927-28, but less so than in the previous four years. It affects Europeans more than non-Europeans. Some preliminary work was done in connection with protective inoculation against diphtheria, and it is hoped to continue this.

The prevalence of scarlet fever which was high in the previous year was less in 1928-29, and the disease appears to be in a phase of abatement. It affects Europeans almost exclusively.

The amount of enteric fever was rather less than in the previous two years. Its incidence was a little greater amongst non-Europeans than Europeans.

The periodical whooping cough epidemic which was severe in the previous year continued in 1928-29, but to a less extent. The deaths from measles were comparatively few.

\* Ward 15 (Wynberg) was not included in the Municipality until 1927-28, and rates for earlier years used in comparison refer to the Municipality exclusive of that ward.



*Tuberculosis.*

The European death rate from tuberculosis in 1928-29 was 15 per cent. less than the average of the previous five years. Amongst non-Europeans the corresponding change was an increase of 2 per cent. The deaths during the year from this disease numbered 613 (85 European and 528 non-European), and one death in every seven was caused by tuberculosis. The non-European tuberculosis death rate was 6.9 times as great as the European rate. Progress has been made with the plans of the City Hospital extension which is to increase by 84 the number of beds available for the treatment of this disease.

*Veneral Diseases.*

During the year under report the number of sessions held at the Venereal Disease clinics has been increased. The number of new cases treated was 32 per cent. greater than in the previous year and the total attendances 25 per cent.

*Plague.*

The position in regard to plague infection amongst rodents in the neighbouring parts of the Western Province remains unchanged, and the work of the anti-rodent staff has been continued. There is no plague infection in the City or the Cape Flats.

*Maternity and Child Welfare.*

The new premises for the Woodstock Centre were opened during the year, and a dental clinic for children and expectant and nursing mothers has been instituted there. Increased accommodation at the Wynberg Town Hall was obtained for the Wynberg Centre. The number both of new cases and total attendances at the Maternity and Child Welfare Centres increased by more than thirty per cent. as compared with the previous year.

*Flies and Mosquitoes.*

The work of closing or improving conditions in unsatisfactory horse and mule stables has been continued. One of the Sanitary Inspectors is now devoting a great part of his time to special work in connection with the prevention of mosquito breeding.

*Social Welfare and Housing.*

Reference is made in the body of the report to the unsatisfactory position in regard to these subjects.

I desire to acknowledge the assistance that I have received during the year from members of the staff of the City Health Department and the support which has been accorded me by the Chairman and Members of your Health and Building Regulations Committee and other members of the Council.

I am, Madam and Gentlemen,

Your obedient Servant,

T. SHADICK HIGGINS,

M.D., B.S., B.Sc., Lond.,

M.R.C.S., Eng., L.R.C.P., Lond.,

D.P.H., Cantab.,

Fellow of the Royal Sanitary Institute.

*Medical Officer of Health.*

City Health Department,

12, Keerom Street, Capetown.

January, 1930.

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# MUNICIPALITY OF THE CITY OF CAPETOWN.

## LEADING STATISTICS, YEAR ENDED 30th JUNE, 1929.

	European.	Non-European.	All Races.	European.
Area : 42,873 Acres.				
Total Population .. ..	131,800	125,195	256,995	—
Population (excluding the native locations of Langa and N'dabeni) .. ..	131,780	118,070	249,850	—
	<i>A</i>	<i>A</i>	<i>A</i>	<i>B</i>
Birth rate .. ..	21.40	50.50	35.15	22.29
Death rate .. ..	10.65	25.17	17.51	10.89
Infant Mortality rate .. ..	61.17	158.59	127.30	60.43
Tuberculosis death rate .. ..	0.65	4.48	2.46	0.68
Enteric Incidence rate .. ..	0.76	0.85	0.80	—
Enteric Death rate .. ..	0.10	0.21	0.15	0.10

All the above rates are annual and expressed as per 1,000 population of each class, except the infant mortality rate, which is expressed as per 1,000 births occurring during the year. The figures for the native locations of Langa and N'dabeni are excluded from these rates.

*A.* Corrected for outward transfers.

*B.* Corrected for outward and inward transfers.

# REPORT

OF THE

## MEDICAL OFFICER OF HEALTH

FOR THE YEAR ENDED 30th JUNE, 1929.

For the purposes of this Report, the year consists of the 52 weeks ended 28th June, 1929. All rates have been corrected to the basis of a year of 365 days.

### SECTION I.—NATURAL AND SOCIAL CONDITIONS.

#### PHYSICAL GEOGRAPHY.

Capetown is situated at the northern end of the Cape Peninsula. The Peninsula lies off the west coast of the mainland of South Africa, extending from north to south a distance of about 33 miles and attaining a maximum width of about ten miles, while its average east and west width may be estimated at five miles. The northern half of its eastern side is connected with the mainland by the low-lying sandy isthmus, known as the Cape Flats, which separates Table Bay to the north-west from False Bay to the south-east. The narrowest part of the isthmus measures from sea to sea about twelve miles.

The backbone of the Peninsula is a mountain range which extends from Table Mountain (3,495 ft.) at its north end to Cape Point at the south. The land slopes from the mountains to the sea or, where the isthmus joins the Peninsula, to the Cape Flats. While much of the Peninsula area lies at heights of over 1,000 ft., most of the isthmus does not reach 100 ft., and a rise of sea level to that amount would convert the Peninsula into two islands nearly equal in area.

There are three principal formations functioning in the simple geological\* structure of the Peninsula: viz., (1) the Table Mountain Sandstone series beneath which is found (2) the granite intruding into (3) a series of dark-coloured fine-grained sediments called the Malmesbury Slate Series.

The Malmesbury Series is found at the northern end of the Peninsula and constitutes the mountain mass known as Signal Hill and Lion's Head (except the summit of the latter) and also Devil's Peak. It forms the foundation of Green and Sea Point, Capetown proper, Woodstock and Salt River, and Mowbray. In some places the beds of clay resulting from the weathering of this rock extend to a depth of several yards and are used extensively for brick-making.

The Table Mountain Series constitutes the higher part of Table Mountain, and almost the whole southern two-thirds of the Peninsula, where its lowest beds descend below sea level.

The granite forms the basement of nine-tenths of the Peninsula area. It constitutes the lower slopes of Table Mountain south of Sea Point on the western side and south of Rondebosch on the eastern side.

Resting on the lower slopes of the mountains is a talus apron consisting of a mixture of sand, clay and boulders.

From the bottom of the slope below the face of Table Mountain there extends down to Table Bay a bed of alluvial deposit on which a good deal of old Capetown is built. At the shore of the Bay there is a considerable area of land that has been reclaimed from the sea by the deposit of town refuse.

The Cape Flats are covered with a layer of sand varying in depth and containing in places a few feet beneath the surface a layer of ferruginous rock sometimes called "Cape laterite" and known locally as "ironstone gravel." The laterite consists of a limonitic matrix which encloses sand, clay and rock fragments. It varies in thickness from a few inches up to say ten feet and

\* The geological particulars in this section are taken from "Chapman's Peak" Guide Book of International Geological Congress, XV Session, South Africa, 1929, by Prof. Andrew Young, D.Sc.



generally rests on a few feet of sandy clay which in turn lies upon the underlying hard rock which may be either granite or slate.

The greater part of the municipality is built upon the Malmesbury slate or granite, the sandy Cape Flats, and the alluvial deposit which lies between Table Bay and the slope at the foot of the face of Table Mountain. On the coast of False Bay the town from Muizenberg to Kalk Bay is built on the Table Mountain Sandstone or on the talus and sand dunes covering the sandstone slopes.

The City of Capetown consists of a central portion which before the City extension of 1913 constituted the whole municipality and is sometimes known as "Capetown Proper" (Wards 2-7) and a chain of suburbs on either hand. The central portion lies in the amphitheatre which, extending down to Table Bay towards the north-east, is backed on the other sides by the precipitous face of Table Mountain which forms the northern end of the Table Mountain range, and its outlying masses, Devil's Peak on the east and Lion's Head and Signal Hill on the west.

The suburbs extend beyond this amphitheatre on either hand. The marine suburbs, known as Green Point, Sea Point, Clifton, Camps Bay and Bakoven (Ward 1 and part of Ward 4) extend along the Atlantic seaboard to the west, curving with the coast in a southerly direction. They lie on the seaward slopes of Signal Hill and Lion's Head.

The "Southern Suburbs" (Wards 8-10 and 12-15) extend to the east around Devil's Peak from the other extremity of Capetown proper, and are stretched along the road and suburban railway line which after rounding Devil's Peak pass along the eastern side of Table Mountain in a southerly direction until they reach False Bay. Woodstock and Salt River (Wards 8 and 9), next to Capetown proper, run down to Table Bay, and at the other end Muizenberg, St. James and Kalk Bay (Ward 14) lie on the False Bay coast. The string of suburbs between, known successively as Observatory, Mowbray, Rosebank, Rondebosch, Newlands, Claremont, Kenilworth, Wynberg, Plumstead, Diep River, Heathfield and Retreat, lie on the eastern slopes of the mountain range, and, to a greater extent, on the Cape Flats below them. The municipality extends over the Flats to a varying depth up to  $4\frac{1}{2}$  miles, and the parts on the Flats contain a number of scattered townships and estates, some of which are served by the Cape Flats railway that forms a loop lying in a more easterly position than the suburban line.

There is an extension of the Municipality beyond Salt River in a north-easterly direction on the Flats bordering Table Bay. This, known as Ward 11, includes the suburbs of Maitland, Brooklyn, Rugby and Kensington.

#### CLIMATE.

Capetown is situated Lat.  $33^{\circ} 56'$  S., Long.  $18^{\circ} 30'$  E. Its climate is largely determined by the fact that during the summer season the prevailing winds are south-easterly and in the winter season north-westerly; and that the western shore of the Cape Peninsula is washed by a cold current from the Antarctic.

There is an average of nearly three thousand hours of bright sunshine per year, and the temperature is very equable. The rainy season is the winter, but occasional showers occur in the summer also.

The parts of the Municipality on the two sea boards are much frequented by holiday makers from other parts of the country. To the attractions of the climate are added the great natural beauties of the Peninsula and its neighbourhood.

The meteorological readings for the year under review and for previous years will be found in Tables K to O on pages 121 to 125.

From the point of view of public health Capetown belongs definitely to the temperate zone, and tropical diseases, except in imported cases, are entirely absent. The state of health and the mortality statistics of the European part of the population are much the same as in a healthy European town.

#### DRAINAGE, SEWERAGE AND SCAVENGING.

##### STORMWATER DRAINAGE.

A great part of the Municipality being built on the slopes at the foot of the mountain is well placed for drainage. This applies both to Capetown proper and the suburbs. But on parts of the Flats the natural drainage is bad, and in the



wet season the ground water level over a considerable area is very near the surface. In some portions there is standing water during much of the winter.

The town is sewered on the "separate" system, stormwater being taken by separate channels to the nearest natural outfall, whether the sea or the Liesbeek and Black Rivers and their tributaries, which drain the "southern suburbs" north of Kenilworth, and flow into Table Bay as the Salt River. South of Kenilworth the streams discharge into a series of vleis.

#### SEWERAGE.

There are several distinct sewerage systems in operation, viz.:—

(1) The Capetown system, which receives the sewage from the whole of Capetown proper (Wards 2-7), and discharges it without treatment into the sea at Green Point Lighthouse.

(2) The Sea Point system, which receives the sewage from Ward 1 and discharges it without treatment into the sea opposite Hall Road, Sea Point.

(3) The Wynberg system which receives the sewage from Wynberg proper and Plumstead and discharges it at a sewage farm near Zeekoe Vlei. There are a number of areas in Ward 15 which are not yet served by this system and at Plumstead there are a number of houses yet to be connected.

(4) The Muizenberg system, which receives the sewage from Kalk Bay, St. James and Muizenberg and discharges it amongst the sand dunes on the False Bay shore. Lakeside and Retreat are not yet served by this system.

(5) The Southern Suburbs system, which receives the sewage from Wards 8 to 13, and discharges its effluent into the Black River after the sewage has been treated biologically and by land irrigation on the Flats near Athlone Station. The construction was begun in 1916, prior to which date all these suburbs were served by pail closets; and the work is now nearly complete, there remaining in the sewered area only some 73 houses still to be connected (66 in Ward 11). This sewerage scheme is at present restricted to the developed parts of the six wards, the outer areas of Wards 12 to 13 being still served by pail closets.

(6) A sewerage system for Camps Bay and Bakoven has been completed by the City Engineer since the end of the year under report, but the drainage connections have only just been begun. These areas, and also Clifton, for which there is still no sewerage system, are at present served by pail closets. Some of the houses at Camps Bay have "septic tanks." The new sewers will discharge the sewage into the sea after preliminary treatment in septic tanks.

#### PAIL CLOSETS.

The Corporation undertakes the weekly collection of stercus in the unsewered areas of the Southern Suburbs. It is gradually extending the service to the whole extent of the Cape Flats included in the Municipality. In parts this work is carried out with great difficulty by the City Engineer's Department owing to the lack of roads. The men and wagons have to plough through heavy sand and bush, and, in winter, through water, to reach isolated places for the purpose of collection. In these circumstances oxen are employed for transport and the work is carried out in the daytime. Otherwise it is done by mules at night. A charge of 7s. 6d. is made for the first installation of a pail but no charge for removals and renewals.

The stercus collected in the various districts is deposited on municipal land at the Maitland Reserve, Vyge Kraal, the old Sewerage Farm at Wynberg Flats, and Raapkraal Farm, Retreat; and on private land between the Lansdowne and Ottery Roads.

The number of premises from which stercus was being removed at 30th June, 1929, is shown by the following figures:—

	Premises.		
Ward 11	..	..	832
Ward 12	..	..	1,197
Ward 13	..	..	407
Ward 14	..	..	310
Ward 15	..	..	737
			<hr/>
			3,483
			<hr/>



At Plumstead and Diep River the O'Brien dry earth closet is in use, the service, including removals, being undertaken by a private firm as contractors to the Corporation. Householders have to provide the closets, and the removals are paid for by the Corporation. Ordinary pail closets are not allowed in the district. There are 207 houses provided with this service.

At Clifton, Camps Bay and Bakoven the stercus is collected and discharged by a fixed pipe into the sea at Bakoven. The collections are made weekly and additional removals at any time on request. A charge is made of 7s. 6d. per installation, and 1s. per weekly removal and 6d. per additional removal.

Slop water removal services are undertaken by the Corporation at Camps Bay (including Bakoven and Clifton) and at Plumstead.

#### HOUSE REFUSE REMOVALS.

The removal of house refuse is carried out by the City Engineer's Department daily (including Sundays) in the congested parts of Wards 2, 6 and 7; daily (except Sundays) in the remainder of Capetown proper and parts of the Sea Point Ward; four times a week in the rest of Sea Point, throughout Woodstock, in Maitland, and in the central parts of the Mowbray, Rondebosch, Claremont and Wynberg Wards, except in places difficult of access; and three times a week in Kensington, Brooklyn, Rugby, in the outer parts of Mowbray, Rondebosch, Claremont and Wynberg, in Camps Bay and in the Kalk Bay Ward. A number of hotels and butchers' and fishmongers' shops in the suburbs are served every day except Sundays.

In the outlying parts of the Cape Flats there are no refuse removals; but there are two services a week in the Athlone and neighbouring districts, comprising 650 premises.

In all over 180,000 removals of house refuse are made every week by the City Engineer's Department, the quantity removed weekly averaging 4,100 cubic yards.

The house refuse is disposed of by "tipping" in various parts of the Municipality, especially where land is to be "reclaimed" and at Bellville, where the refuse is dealt with by the Union Forestry Department after having been transported by rail.

There are no regulations enforcing a uniform approved pattern of covered dust-bin, and open paraffin tins and other unsuitable receptacles are extensively used by householders.

#### ECONOMIC AND SOCIAL CONDITIONS.

In previous annual reports stress has been laid on the importance of social and economic influences on the public health. A table was published showing mortality statistics for the different wards of the Municipality based on the censuses of 1921 and 1926, and the death returns for the quinquennium 1921-22 to 1925-26. The death rates were compared of the Harbour (2), West Central (3), Castle (7) and Woodstock (8) wards on the one hand, and the Sea Point (1), Kloof (4), Park (5) and Kalk Bay (14) wards on the other. The European death rates were greater in the former group than in the latter by 71 per cent. as regards the general death rate, 95 per cent. as regards the infant mortality rate, and 106 per cent. as regards the tuberculosis death rate.

Another comparison that can be made is between the non-European population, which belongs almost entirely to the labouring classes, and the European population, which is largely, though not exclusively, "better class." The figures in this report for 1928-29 show that the general death rate amongst non-Europeans was 2.4 times, the infant mortality rate 2.6 times, and the tuberculosis death rate 6.9 times as great as the corresponding rates amongst Europeans. High amongst the causes of these striking differences must be placed the bad social conditions of the non-European population.

A considerable proportion of the Cape coloured population is below the poverty line. Wages of 30s. a week or even less are common, and it may be accepted that it is impossible for a normal family to live healthily on such an income. Amongst the poorer Europeans also there are many families which have not the means to maintain a healthy life. Unemployment produces a further aggravation of such conditions.



Included in the social and economic influences on public health are not only rates of wages, unemployment and the cost of living, but also housing, education, temperance, and the medical and nursing treatment of the poor; and closely associated are the problems of insurance against sickness, invalidity and unemployment, and of poor relief. Such factors as these play a primary rôle in determining the health of the labouring classes. The institution of old age pensions on 1st January, 1929, is a move in the right direction in the prevention of distress.

#### HOUSING.

The acute housing shortage, to which reference has been made in a series of reports extending over many years, remains unrelieved.

The census returns of 1926 showed that of non-Europeans occupying private dwellings in Capetown (including Wynberg) 8.7 per cent. lived in one-roomed dwellings, 27.6 in two-roomed dwellings and 33.0 per cent. in three-roomed dwellings; while 78.3 per cent. of them lived more than two persons per room, and 32.7 per cent. four or more persons per room. Of Europeans occupying private dwellings in "Capetown and Suburbs" 0.6 per cent. lived in one-roomed dwellings, 3.9 per cent. in two-roomed dwellings, and 19.1 per cent. in three-roomed dwellings; while 16.4 per cent. of them lived more than two persons per room, and 1.3 per cent. four or more persons per room.

To show the growth of population in relation to the number of new dwelling houses built, the following figures are abstracted from the City Engineer's returns:

Year.	Estimated increase in population.	Buildings for human habitation completed (dwellings).
1915	3,980	123
1916	4,110	103
1917	4,240	99
1918	4,380	69
1919	4,500	91
1920	4,680	139
1921	5,340	210
1922	4,950	308
1923	5,080	425
1924	5,220	561
1925	5,380	335
1926	5,510	444
1927	6,160*	675*
1928	6,330*	846*

\* Municipality including Wynberg Ward.

From the 1926 census returns it appears that the average number of persons per dwelling in the City of Capetown (exclusive of Wynberg) was 6.126\*. Accepting this figure it can readily be estimated how many houses are required to accommodate a given increase in population. It will be seen that for the fourteen years 1915-28 the following conditions obtained:—

Increase in population .. .. .	69,860
Number of new dwellings required to house this increase .. .. .	11,404
Number of new dwellings actually built .. .. .	4,428
Shortage of dwellings for the fourteen years .. .. .	6,976

To bring the housing conditions back to the 1915 standard not only are about 7,000 houses required, but also over 1,000 more per annum to cope with the continued increase in population. Although the number of new dwellings built has increased during the last four years, the number for 1928 (the greatest yet recorded) was still insufficient to accommodate even the increase in population for that year.

\* For the Municipalities of Capetown and Wynberg taken together the figure was 6.068.



The new houses shown in the foregoing table include those built under the Municipal housing schemes. It will be seen that much greater building schemes are necessary if the housing shortage is to be overcome. Up to the present, except as regards municipal employees, the Corporation schemes have not included the building of houses to let. The Council have recently accepted the principle of the erection of dwellings to let, if necessary at a subsidized rental.

#### UNEMPLOYMENT.

Mr. R. Beattie, Inspector of Labour, has kindly supplied the following figures of the work of the Labour Department for the year under review, in respect of the whole Cape Peninsula, showing month by month the number of unemployed persons applying to be put on the books, of vacancies referred by employers to the Department and of vacancies filled:—

Month.	Applications.		Demands by Employers.		Vacancies Filled.	
	Eur.	Non-E.	Eur.	Non-E.	Eur.	Non-E.
1928 :						
July .. ..	650	364	338	94	338	94
August .. ..	547	583	258	96	258	96
September ..	494	538	221	52	221	52
October .. ..	423	525	202	78	202	78
November ..	502	447	313	83	313	81
December ..	375	315	107	105	107	98
1929 :						
January .. ..	532	514	327	168	327	160
February .. ..	559	447	267	130	267	124
March .. ..	539	382	186	221	186	215
April .. ..	583	607	213	142	213	138
May .. ..	592	527	138	106	138	99
June .. ..	520	394	182	112	182	110
TOTALS .. ..	6,316	5,643	2,752	1,387	2,752	1,345

#### POOR RELIEF.

Poor relief in the City of Capetown is administered by the Capetown General Board of Aid, instituted under the Poor Relief and Charitable Institutions Ordinances of 1919 and 1924. The Board consists of nine members, including the Mayor of Capetown *ex officio* and three members of the City Council; together with co-opted members.

Its funds are derived from donations and subscriptions supplemented by the Provincial Administration and the City Council. From the Board's accounts for the calendar year 1928 it appears that the income from subscriptions, donations and street collections amounted to £1,426, refunds by the Provincial Administration £486, and subsidy from the Provincial Administration and Capetown Corporation £22,600 (£11,300 each). The actual subsidy of the City Council to the Board of Aid during the year ended 30th June, 1929, was £10,734.

The annual report of the Board for the calendar year 1928 indicates that in the eighteen months ended 31st December, 1928, 5,500 applicants for assistance were registered. In the year 1928 the Board's visitors reported on 9,400 cases, and nearly 40,000 food orders were issued (32,515 from the Keerom Street office and the remainder from the branch office at Wynberg). During 1928 also cheques to the number of 5,668 were issued, while from one to two hundred persons per day were dealt with at the Board's offices, apart from those to whom orders and cheques were sent by post.

The expenditure of the Board on relief during 1928 amounted to £20,328.



The Board of Aid gives out-relief only, and has no institution for accommodating such of the destitute, either sick or otherwise, as need dealing with on indoor lines. There is a limited amount of accommodation for the sick and aged at the Capetown Infirmary under the Provincial Administration.

Defective nutrition is one of the most important factors in the causation of tuberculosis and other forms of disease, and an adequate system of relief of distress is to be regarded as an important factor in the prevention of disease, and a true economy.

In connection with relief works instituted by the City Council, employment was given at Milner to 70 men (44 European and 26 non-European) from 1st July to 31st December, 1928. On 1st January this number was reduced to 40 men (20 European and 20 non-European) who were employed for the other half of the year under report. £5,185 13s. 0d. was spent by the City Council on these relief works, of which the Government's share was £2,167 10s. 0d., leaving a net cost to the Council of £3,018 3s. 0d.

Government Grants in respect of "committed children" are given at the discretion of the magistrate. The grants do not exceed £2 per month for European children and £1 per month for non-European. They are distributed by the Society for the Protection of Child Life, and during the year ended 30th June, 1929, the money paid out amounted to £7,148 6s. 10d. Maintenance Orders for 113 children were granted, and 313 Maintenance Orders were renewed, the total number of "committed children" under the care of the Society during the year being 707 (214 European and 493 non-European). One hundred and seventy-eight commitments were cancelled, and one "committed child" died. Maintenance money is administered partly as mothers' pensions, for women whose husbands have died or become permanently incapacitated, so that the home can be kept together by the natural guardian of the children; and partly as grants for orphaned children who have no relatives in a position to maintain them.

The Society for the Protection of Child Life also find that the Non-Support Office, established at the Capetown Magistrate's Court, is of great value in connection with children in regard to whom the fathers are ordered by the court to make regular payments in support. The fathers are required to make their payments through the Non-Support Office instead of to the mothers personally, and they are thereby less able to avoid their responsibilities. During the year ended 30th June, 1929, £17,084 5s. 8d. was received from the fathers by the offices at Capetown and Wynberg. The monthly sum received varied from £1,544 3s. 0d. in June, 1928, to £1,473 19s. 6d. in June, 1929.

#### HOSPITALS, CONVALESCENT HOMES, DISPENSARIES AND DISTRICT NURSING.

With the exception of the City Hospitals for Infectious Diseases, which are dealt with on page 26 and in the Medical Superintendent's report at page 83 these services in the Cape Peninsula are not administered by the City Council, although the Council contributes towards the funds of the Cape Hospital Board. The amount contributed by the Council in the calendar year 1929 was £12,620 including £400 towards maintenance of ambulances. The Cape Hospital Board serves the areas of the Capetown Municipality and the Cape Divisional Council with the municipalities included therein. The Board is composed of eighteen members, of whom three are appointed by the Administrator, three by the honorary medical staff, six by the local authorities and six by the registered contributors. The Capetown City Council has two representatives. The Board obtains its funds from voluntary sources and from contribution from local authorities concerned and Government subsidy. In the year ended 31st December, 1928, the expenditure of the Board amounted to £101,769 12s. 9d. The patients treated by the hospitals and other services controlled by the Board are drawn from districts without as well as within the City of Capetown, and the extent of the work is indicated in the following tables extracted from the Annual Report of the Board for the year 1928-29.



COMPARATIVE TABLE OF BEDS AVAILABLE AND IN-PATIENTS TREATED.

Institution.	Nominal Roll of Beds.		PATIENTS														Percentages.		
			Remaining in Hospital at 31st December, 1927.		Admitted during 1928.		Total under Treatment.		Discharged during 1928.		Died during 1928.		Remaining in Hospital at 31st Dec., 1928.						
			E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	E.	C.	Total.	Free.	Part paying.	Paying not less than 7/6 per day.	
Somerset Hos...	308	119	114	2,416	2,078	2,535	2,192	2,208	1,862	173	189	154	141	4,727	70.02	15.38	14.60		
Woodstock Hos.	64	35	26	704	403	739	429	658	362	43	46	38	21	1,168	47.18	16.78	36.04		
Rondebosch and Mowbray Cottage Hospital	50	19	10	516	202	535	212	478	184	31	19	26	9	747	45.38	24.10	30.52		
Wynberg (Victoria) Hospital	64	32	26	593	358	625	384	551	317	39	40	35	27	1,009	51.34	20.12	28.54		
Simonstown-Kalk Bay Hospital	26	4	9	133	205	137	214	125	179	8	23	4	12	351	51.57	27.92	20.51		
Peninsula Maternity Hospital	24	9	11	277	556	286	567	279	542	1	11	6	14	853	8.21	90.85	94		
Totals	536	218	196	4,639	3,802	4,857	3,998	4,299	3,446	295	328	263	224	8,855	56.11	24.61	19.28		
Eaton Convalescent Home...	44	27	9	271	127	298	136	282	133	..	..	16	3	434	87.33	12.21	46		
McGregor Convalescent Home...	26	38	..	242	..	280	..	243	..	..	..	37	..	280	83.57	16.43	..		
Totals	70	65	9	513	127	578	136	525	133	..	..	53	3	714	85.85	13.87	28		

E. signifies European.

C. signifies Coloured.

TABLE OF DAILY UNITS, DAILY AVERAGE OF PATIENTS, AND AVERAGE DAILY COST OF PATIENTS COMPARED WITH 1927.

Institution.	Total Number of Daily Units.				Daily Average Number of In-Patients.		Average Daily Cost per In-Patient.	
	In-Patients.		Out-Patients (Attendances).					
	1928	1927	1928	1927	1928	1927	1928	1927
							s. d.	s. d.
1. Somerset Hospital .. ..	100,472	93,854	37,639	31,403	274.51	257.12	9 8.09	9 1.58
2. Woodstock Hospital .. ..	22,304	22,561	13,300	13,108	60.94	61.81	6 4.20	6 4.86
3. Rondebosch and Mowbray Cottage Hospital .. ..	14,677	10,575	278	399	40.10	28.97	7 0.65	8 4.32
4. Wynberg (Victoria) Hospital	22,342	21,422	2,378	2,038	61.04	58.69	7 1.39	7 2.08
5. Simonstown — Kalk Bay Hospital .. ..	6,123	5,442	698	901	16.73	14.91	8 10.27	9 5.19
6. Peninsula Maternity Hospital	8,106	7,540	946	775	22.15	20.66	9 5.23	11 2.54
7. Eaton Convalescent Home ..	9,790	8,933	..	..	26.75	24.47	3 7.74	4 2.72
8. McGregor Convalescent Home	8,519	6,678	..	..	23.28	18.30	2 6.22	3 3.27
9. Cape Town Free Dispensary	..	..	37,406	36,737	..	..	..	..
10. C.H.B. District Nursing Or- ganisation .. ..	..	..	50,372	31,572	..	..	..	..

Attention is called to the work of the District Nursing Organisation. On December 31st, 1928, twenty-four District Nurses and a Superintendent were engaged in this service. The importance of district nursing is of the highest grade from the point of view of public health, and the increase in the service is most satisfactory. The majority of cases of illness have to be treated in their own homes, and amongst the poor there is a great deal of avoidable suffering and mortality due to the lack of proper facilities for home treatment. District Midwifery is now being undertaken by the District Nursing Organisation as well as District Nursing.

The work of the Free Dispensary also needs extending to parts of the Peninsula not at present adequately supplied with the facilities it affords.



In addition to the foregoing public hospitals there is the Capetown Infirmary, which is maintained by the Provincial Administration for sick and infirm poor persons in the Cape Province. There is accommodation in the hospital for 529 beds. On the 30th June, 1929, the number of patients in the hospital was 487 (European males 190, non-European males 130, European females 75, non-European females 92). The cases are, to a great extent, chronic in nature. In the year ended 30th June, 1929, the number of new cases admitted from the Capetown area was 122. Cases were also admitted from other parts of the Cape Province.

#### OTHER NON-MUNICIPAL HEALTH SERVICES.

The school medical service is maintained by the Provincial Administration. There are four school medical officers and seven nurses to serve the Cape Province. No treatment is undertaken by the school medical service. On pages 59 and 61 will be found details of a school clinic run on voluntary lines at the Council's Maternity and Child Welfare Centre at Claremont.

The Dental Clinic for children which was maintained by the Society for the Protection of Child Life at their offices, 29 Buitenkant Street, the work being done by honorary dentists who attended in rotation, was closed in September, 1928. During the period from 1st July, 1928, to the time of closing (September, 1928), 14 clinics were held at which there were 211 attendances and 54 treatments completed. A dental department has since been opened at the Free Dispensary.

The health administration of the Port of Capetown is controlled by the Union Health Department. So also is the administration of the Food and Drugs Act.

## SECTION II.—VITAL STATISTICS.

Unless the contrary is stated all statistics in this section are exclusive of the added districts of N'dabeni and Langa, which contain the native locations and have a selected native population with hardly any Europeans.

Births and deaths are allocated to the date of registration and not to the date of occurrence.

The birth and death statistics are stated variously as:

- (1) "Crude" or "uncorrected"; including all births and deaths registered during the year as having occurred in Capetown.
- (2) "Corrected for outward transfers"; which is the foregoing (1) after the deduction of deaths in Capetown of persons who were not Capetown residents and births in Capetown to mothers who were not Capetown residents.
- (3) "Corrected for outward and inward transfers"; which is the foregoing (2) after the addition of deaths of Capetown residents in parts of the Union outside of Capetown and births in parts of the Union outside of Capetown to mothers who were Capetown residents.

Information as to outward transfers is available from the local returns for both Europeans and non-Europeans; but in regard to inward transfers the information is supplied by the Director of Census and Statistics, Pretoria, and is available in respect of Europeans only.

The population for the year is estimated for the mid-point (31st December, 1928) on the assumption that the increase that occurred during the last intercensal period (1921-26) has since continued in the same geometrical progression.



## POPULATION.

The population of the extended municipality of Capetown, exclusive of the added areas of N'dabeni and Langa, estimated for the 31st December, 1928 (the middle of the year under review) is as follows:—

Race.	Males.	Females.	Persons.
European .. .. .	64,508	67,272	131,780
Non-European .. .. .	58,627	59,443	118,070
All Races .. .. .	123,135	126,715	249,850

In calculating the rates for the year 1928-29 in this report, these figures are used and births and deaths at the native locations of Langa and N'dabeni are excluded.

The population of the whole Municipality, including Langa and N'dabeni as enumerated on 31st December, 1928, is as follows:—

European.	Non-European.	All Races.
131,800	125,195	256,995

The estimated populations in the various wards of the City based on the censuses of 1921 and 1926, and calculated for the 31st December, 1928, are as follows:—

Wards.		European.	Non-European.	All Races.
No.	Name.			
1	Sea Point .. .. .	14,860	2,864	17,724
2	Harbour .. .. .	4,164	4,889	9,053
3	West Central .. .. .	1,850	5,308	7,158
4	Kloof .. .. .	10,352	7,337	17,689
5	Park .. .. .	9,740	2,023	11,763
6	East Central .. .. .	7,315	17,531	24,846
7	Castle .. .. .	2,866	13,955	16,821
8	Woodstock .. .. .	12,339	6,617	18,956
9	Salt River .. .. .	12,276	7,215	19,491
10	Mowbray .. .. .	12,390	3,332	15,722
11	† Maitland .. .. .	6,060	7,304	13,364
12	Rondebosch .. .. .	5,791	8,765	14,556
13	Claremont .. .. .	11,080	14,264	25,344
14	Kalk Bay .. .. .	5,568	4,177	9,745
15	Wynberg .. .. .	12,218	13,439	25,657
	City .. .. .	128,869	119,020	247,889

† Exclusive of N'dabeni.

The figures for the added areas of Langa and N'dabeni and those for the harbour and shipping have been excluded from the figures for Wards set out above.

The population of the added areas of Langa and N'dabeni (including the native locations) as enumerated on the 31st December, 1928, was as follows:—

Area.	European.	Coloured.	Native.	Total.
Langa .. .. .	10	—	960	970
N'dabeni .. .. .	10	9	6,156	6,175
Total .. .. .	20	9	7,116	7,145

## AREA.

The area of the extended municipality amounts to 42,873 acres (about 67 square miles) and the length of the main road passing through the Municipality from the boundary at Bakoven to that at Kalk Bay is about 25 miles.

## BIRTHS.

In the following table are shown the births and birth rates for the extended Municipality of Capetown for the year 1928-29:—

	Births.		Natural Increase.	
	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.
Europeans (uncorrected) .. ..	3,093	23·54	1,490	11·34
" (corrected for outward transfers) .. ..	2,812	21·40	1,412	10·75
" (corrected for outward and inward transfers)	2,929	22·29	1,498	11·40
Non-Europeans (uncorrected) ..	6,030	51·21	2,846	24·17
" (corrected for outward transfers) ..	5,946	50·50	2,982	25·33
All Races (uncorrected) .. ..	9,124*	36·62	4,337	17·41
" (corrected for outward transfers) .. ..	8,759*	35·15	4,395	17·64

\* There was one birth of unknown race, not allocated either as European or non-European.

The difference between the number of births and deaths in the year is the natural increase in the population; and this is shown in the foregoing table.

The yearly birth rates and rates of natural increase of the Municipality not including the Wynberg ward are set out for a series of years in Table C on page 113.

In Table D on page 114 the births, illegitimate births and natural increase, together with the corresponding rates, will be found classified for wards and rates.

In the following table the births for the year (extended municipality) are tabulated according to sex and legitimacy.

Race.	Legitimate.		Illegitimate.		Total.		
	Male.	Female.	Male.	Female.	Male.	Female.	Persons.
A. European .. ..	1,392	1,251	86	83	1,478	1,334	2,812
A. Non-European .. ..	2,314	2,285	670	677	2,984	2,962	5,946
A. All Races .. ..	3,706	3,536	756	760	4,462	4,297*	8,759*
B. European .. ..	..	..	..	..	1,533	1,396	2,929

\*Including 1 female birth of unknown race.

A. Corrected for outward transfers.

B. Corrected for outward and inward transfers.

The number of male births per 100 female births (corrected for outward transfers) was 110·8 amongst Europeans and 100·7 amongst non-Europeans. The corresponding figures for the previous year were 104·5 and 105·5.

The percentage of illegitimate to total births (corrected for outward transfers) was 6·01 amongst Europeans and 22·65 amongst non-Europeans. The figures for the previous year were 5·38 (Europeans) and 23·18 (non-Europeans). The corresponding figures for the Municipality without the Wynberg ward for 1928-29 and for former years will be found in Table C on page 113.

The number of still births registered as having taken place in Capetown (extended Municipality) during the year was 515, of which 110 were European, 404 non-European and one of unknown race. Of these, 14 (6 European and 8



non-European) though occurring in Capetown did not belong thereto, the number of still births corrected for outward transfers being therefore 501 (104 European, 396 non-European and one of unknown race).

In Table B on page 112 the births and stillbirths will be found classified for wards, race, sex and legitimacy.

1,688 births (985 European and 703 non-European) and 117 still births (43 European and 74 non-European) took place in maternity homes and other institutions within the extended municipality. The births in institutions corrected for outward transfers were 1,401 live births (764 European and 637 non-European), and 100 still births (35 European and 65 non-European). This is equivalent to a percentage of 16.0 of all live births (corrected for outward transfers), the percentage being 27.2 amongst Europeans and 10.7 amongst non-Europeans. The corresponding figures for the previous year were 15.1, 25.5 and 10.0.

Births in the Langa and N'dabeni locations are not included in the foregoing figures. Particulars regarding these will be found in Table J on page 120.

For purposes of comparison statistical particulars as to births in the Union of South Africa, in other towns and in England and Wales are set out in Table E on page 115.

### DEATHS.

In the following table are shown the deaths and death rates for the extended municipality of Capetown for the year 1928-29:—

	No. of deaths.	Death rate per 1,000 population.
Europeans (uncorrected) .. .. .	1,603	12.20
„ (corrected for outward transfers) ..	1,400	10.65
„ (corrected for outward and inward transfers) .. .. .	1,431	10.89
Non-Europeans (uncorrected) .. .. .	3,184	27.04
„ (corrected for outward transfers) ..	2,964	25.17
All Races (uncorrected) .. .. .	4,787	19.21
„ „ (corrected for outward transfers) ..	4,364	17.51

It will be seen that the non-European death rate (corrected for outward transfers) was 2.4 times as great as the European.

The yearly death rates of the Municipality not including the Wynberg ward are set out for a series of years in Table C on page 113. The death rate (all races) for 1928-29 was 3.6 per cent less than the mean of the rates for the previous five years. The European death rate was 1.5 per cent greater and the non-European rate 10.9 per cent less than the corresponding rates for 1927-28.

In Table E on page 115 the death rates for the Union of South Africa, in certain other towns and in England and Wales are set out for purposes of comparison.

In Table A on pages 94 to 111 the deaths for the year will be found fully classified for causes, race, sex, age and wards.

In the following table the leading causes of death are shown for a series of years:—

Disease.	Race.	1918. 1919.	1919. 1920.	1920. 1921.	1921. 1922.	1922. 1923.	1923. 1924.	1924. 1925.	1925. 1926.	1926. 1927.	Average for 10 years.	1928. 1929.	Average for 10 years.	1928. 1929.
Enteric Fever	Eur. Non-E.	18 33	21 42	37 46	21 42	22 27	12 20	8 20	8 18	15 27	9 17.1 23 29.8	13 23	0.16 0.34	0.11 0.22
Smallpox	Eur. Non-E.	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Chicken Pox	Eur. Non-E.	- -	- -	- -	- -	- -	- -	- 1	- 1	- -	- 2	- -	- 0.00	- -
Measles	Eur. Non-E.	3 2	9 12	2 27	- -	3 21	20 116	1 2	- 6	9 38	2 4.9 11 23.5	9 6	0.05 0.26	0.08 0.06
Scarlet Fever	Eur. Non-E.	- -	3 -	2 -	- -	- -	- -	- -	- 1	- -	3 0.8 - 0.1	- 1	0.01 0.00	- 0.01
Whooping Cough	Eur. Non-E.	7 22	10 29	16 41	- 5	8 25	21 69	4 10	5 20	7 19	9.7 30.7	11 22	0.09 0.35	0.09 0.21
Diphtheria and Croup	Eur. Non-E.	3 10	8 12	5 3	8 6	11 5	9 11	17 8	8 11	12 16	9.1 9.2	12 14	0.09 0.10	0.10 0.13
Influenza	Eur. Non-E.	864 2893	2 5	1 18	5 10	6 5	3 3	25 30	13 22	13 18	94.9 304.8	18 31	0.90 3.43	0.15 0.30
Erysipelas	Eur. Non-E.	1 -	2 -	1 1	1 -	- -	- 1	1 2	- -	- -	3 0.9 5 0.9	4 5	0.01 0.01	0.03 0.05
Acute Anterior Poliomyelitis.	Eur. Non-E.	2 -	- 1	- -	1 1	- 1	- -	1 1	- -	1 -	2 0.7 1 0.5	1 -	0.01 0.01	0.01 -
Encephalitis Lethargica.	Eur. Non-E.	- -	- -	- -	- -	- -	- -	3 4	6 7	4 5	3 1.6 2 1.8	3 3	0.02 0.02	0.03 0.03
Meningococcal Meningitis.	Eur. Non-E.	- 5	3 3	2 2	- -	4 2	4 2	5 11	5 19	6 29	4.2 15.2	14 57	0.04 0.17	0.12 0.55
Syphilis	Eur. Non-E.	6 30	3 41	4 57	8 46	4 28	3 55	3 61	7 61	4 67	7 52.3	10 76	0.05 0.59	0.08 0.73



CERTAIN LEADING CAUSES OF DEATH FOR THE YEAR UNDER REVIEW AND FOR PREVIOUS YEARS CORRECTED FOR OUTWARD TRANSFERS  
(EXCLUDING WYNBERG)—*continued*.

Diseases.	Race.	NUMBER OF DEATHS.										Death Rates per 1,000 population.	
		1918. 1919.	1919. 1920.	1920. 1921.	1921. 1922.	1922. 1923.	1923. 1924.	1924. 1925.	1925. 1926.	1926. 1927.	1927. 1928.	Average for 10 years, 1928. 1929.	Average for 10 years, 1928. 1929.
Tuberculosis— Pulmonary	Eur. Non-E.	52 252	58 261	55 288	87 237	61 303	72 336	82 372	57 313	83 399	83 383	65 389	0.65 3.54
Tuberculosis— Other Forms	Eur. Non-E.	23 50	22 43	18 46	14 49	18 52	7 63	13 50	13 54	14 50	17 70	13 78	0.15 0.59
Cancer, Malignant Disease.	Eur. Non-E.	76 42	77 29	106 39	91 43	94 43	113 49	107 54	112 65	114 62	119 62	130 72	0.95 0.69
Rheumatic Fever ..	Eur. Non-E.	2 7	5 3	3 5	1 7	2 6	2 4	7 5	5 13	7 18	11 15	7 17	0.04 0.16
Cerebral Haemorrhage, Embolism & Apoplexy	Eur. Non-E.	67 62	72 81	59 51	65 64	65 58	73 50	38 36	40 41	35 38	37 33	49 20	0.52 0.19
Heart Disease ..	Eur. Non-E.	125 124	133 125	182 130	159 145	159 142	139 172	191 193	180 205	146 202	208 203	218 201	1.53 1.93
Bronchitis, Pneumonia and Pleurisy ..	Eur. Non-E.	289 853	116 601	132 665	157 589	130 641	126 641	89 488	97 494	128 760	129 743	119 519	1.31 7.30
Diarrhoea and Enteritis	Eur. Non-E.	125 320	94 309	139 460	85 305	66 349	92 365	102 491	84 429	68 446	54 372	53 360	0.86 4.33
Nephritis and Bright's Disease	Eur. Non-E.	29 44	43 49	36 58	54 67	38 76	53 55	32 71	43 57	61 78	66 72	68 70	0.43 0.67
Puerperal Fever ..	Eur. Non-E.	- 4	6 6	4 4	2 7	4 5	5 3	- 6	- 13	4 7	4 9	5 6	0.03 0.07
Congenital Debility and Malformations, inclu- ding Premature Birth	Eur. Non-E.	50 119	50 142	67 144	45 134	49 124	35 142	52 159	40 159	46 170	44 149	46 170	0.45 1.61
External Causes ..	Eur. Non-E.	49 29	42 57	49 55	59 47	45 44	40 55	59 58	47 54	78 74	66 59	49 87	0.50 0.83

In Table D on page 114 will be found the death rates for the year for the several wards of the Municipality.

Deaths in the Langa and N'dabeni native locations are not included in the foregoing figures. Particulars regarding these will be found in Table J on page 120.

#### DEATHS IN INSTITUTIONS.

The following table shows the number of deaths which took place in institutions in Capetown, and also of the Capetown European deaths which occurred in institutions in other parts of the Union of South Africa (inward transfers).

Institutions.	Sex.	Total Deaths.		Deaths belonging to Capetown.		Deaths not belonging to Capetown (Outward Transfers).	
		Euro-pean.	Non-Euro-pean.	Euro-pean.	Non-Euro-pean.	Euro-pean.	Non-Euro-pean.
Somerset Hospital .. .. .	Male	119	126	86	96	33	30
	Female	45	70	36	59	9	11
City Infectious Diseases Hospital ..	Male	57	112	49	93	8	19
	Female	33	76	24	60	9	16
City Isolation Hospital, Rentzkie's Farm .. .. .	Male	—	12	—	10	—	2
	Female	—	21	—	17	—	4
Capetown Infirmary .. .. .	Male	42	24	28	12	14	12
	Female	22	26	18	19	4	7
Woodstock Cottage Hospital ..	Male	21	30	17	24	4	6
	Female	24	19	19	16	5	3
Mowbray and Rondebosch Cottage Hospital.	Male	18	12	16	9	2	3
	Female	5	4	5	4	—	—
Wynberg Cottage Hospital .. ..	Male	27	16	24	11	3	5
	Female	11	20	10	18	1	2
Peninsula Maternity Home .. ..	Male	4	11	3	11	1	—
	Female	4	16	2	15	2	1
St. Monica's Home .. .. .	Male	—	1	—	1	—	—
	Female	—	2	—	—	—	2
Monastery Nursing Home .. ..	Male	15	—	8	—	7	—
	Female	15	—	12	—	3	—
Diakones Hospital .. .. .	Male	5	—	2	—	3	—
	Female	7	—	3	—	4	—
Tamboers Kloof Nursing Home ..	Male	6	—	1	—	5	—
	Female	7	—	4	—	3	—
Monte Rosa Hospital .. .. .	Male	10	—	7	—	3	—
	Female	7	—	2	—	5	—
Hof Street Nursing Home .. ..	Male	16	—	6	—	10	—
	Female	10	—	8	—	2	—
Wetton Nursing Home .. .. .	Male	—	—	—	—	—	—
	Female	1	—	—	—	1	—
Wheatfield Nursing Home .. ..	Male	2	—	—	—	2	—
	Female	2	—	1	—	1	—
Gardens Nursing Home .. .. .	Male	2	—	1	—	1	—
	Female	2	—	2	—	—	—
Denniston Nursing Home .. ..	Male	5	—	5	—	—	—
	Female	2	—	2	—	—	—
Dunmore Nursing Home .. .. .	Male	—	—	—	—	—	—
	Female	3	—	2	—	1	—
Plumstead Nursing Home .. ..	Male	1	—	1	—	—	—
	Female	1	—	—	—	1	—
Hilldrop Nursing Home .. .. .	Male	1	—	—	—	1	—
	Female	1	—	—	—	1	—
King's House Nursing Home .. ..	Male	—	—	—	—	—	—
	Female	3	—	3	—	—	—
Dennis Buxton Hospital .. .. .	Male	—	—	—	—	—	—
	Female	—	1	—	1	—	—
Lady Michaelis Home .. .. .	Male	—	1	—	1	—	—
	Female	—	1	—	1	—	—
St. Andrew's Nursing Home .. ..	Male	—	—	—	—	—	—
	Female	1	—	—	—	1	—
Booth Memorial Home .. .. .	Male	2	—	2	—	—	—
	Female	4	—	2	—	2	—
Clairvaux Maternity Home .. ..	Male	4	—	2	—	2	—
	Female	1	—	—	—	1	—
Magdalena Huis .. .. .	Male	—	—	—	—	—	—
	Female	1	—	1	—	—	—
"Vrede Oord" .. .. .	Male	—	4	—	4	—	—
	Female	—	2	—	2	—	—
Nazareth House .. .. .	Male	3	—	3	—	—	—
	Female	3	—	3	—	—	—



Institutions.	Sex.	Total Deaths.		Deaths belonging to Capetown.		Deaths not belonging to Capetown (Outward Transfers).	
		Euro-pean.	Non-Euro-pean.	Euro-pean.	Non-Euro-pean.	Euro-pean.	Non Euro-pean.
Dorcas Homes .. .. .	Male	—	—	—	—	—	—
	Female	3	—	3	—	—	—
Ladies' Christian Home .. ..	Male	—	—	—	—	—	—
	Female	1	—	1	—	—	—
Old Men's Home .. .. .	Male	1	—	—	—	1	—
	Female	—	—	—	—	—	—
Princess Christian Home .. ..	Male	—	—	—	—	—	—
	Female	2	—	2	—	—	—
Lady Buxton Home .. .. .	Male	4	—	3	—	1	—
	Female	2	—	1	—	1	—
Jewish Aged Home .. .. .	Male	3	—	3	—	—	—
	Female	1	—	1	—	—	—
Wynberg Military Hospital .. ..	Male	4	5	3	1	1	4
	Female	—	—	—	—	—	—
Valkenberg Mental Hospital .. ..	Male	44	53	30	24	14	29
	Female	27	42	19	18	8	24
Alexandra Institution .. .. .	Male	4	—	4	—	—	—
	Female	5	—	5	—	—	—
Capetown Gaol .. .. .	Male	—	42	—	25	—	17
	Female	—	—	—	—	—	—
House of Correction .. .. .	Male	—	—	—	—	—	—
	Female	—	9	—	7	—	2
Totals .. .. .	Male	420	449	304	322	116	127
	Female	256	309	191	237	65	72
European Deaths belonging to Capetown which occurred in institutions outside the Municipality (inward transfers):							
General Hospitals .. .. .	Male	1	—	1	—	—	—
	Female	2	—	2	—	—	—
Nursing Homes .. .. .	Male	3	—	3	—	—	—
	Female	1	—	1	—	—	—
Mental Hospitals .. .. .	Male	3	—	3	—	—	—
	Female	1	—	1	—	—	—
Totals .. .. .	Male	7	—	7	—	—	—
	Female	4	—	4	—	—	—

Of the total Capetown deaths (uncorrected) 30.0 per cent took place in institutions, the percentage of European deaths being 42.2 and of non-European deaths 23.7. Of the deaths in Capetown institutions 380 (181 European and 199 non-European) did not belong to Capetown, and, on making the necessary deductions, the percentages (corrected for outward transfers) become 24.15, 35.35 and 18.85 respectively. In the previous year the corresponding figures were 21.0, 33.1 and 15.9. After including the deaths of Capetown European residents who died outside the municipality the percentage of deaths of Capetown Europeans which took place in institutions (corrected for outward and inward transfers) becomes 35.4.

Excluded from the above figures regarding deaths in institutions are the deaths which occurred in the hospital in the N'dabeni native location. The particulars containing these will be found in Table J on page 120.

#### SEASONAL VARIATION.

In the following table the deaths are arranged according to the month of registration and classified as to race and sex. The deaths in the native locations of Langa and N'dabeni are excluded.

Month.	No. of wks.	European. B.			European. A.			Non-European. A.		
		M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
July ..	5	62	56	118	62	56	118	151	131	282
August ..	4	63	51	114	61	48	109	125	114	239
September ..	4	50	52	102	46	52	98	144	97	241
October ..	5	95	75	170	94	72	166	163	137	300
November ..	4	57	50	117	64	50	114	120	116	236
December ..	4	53	65	118	52	62	114	131	114	245
January ..	5	64	58	122	61	56	117	145	151	296
February ..	4	68	43	111	68	43	111	124	121	245
March ..	4	55	39	94	55	39	94	130	91	221
April ..	5	81	62	143	79	62	141	133	120	253
May ..	4	45	53	98	44	52	96	117	83	200
June ..	4	67	57	124	66	56	122	113	93	206
Year ..	52	770	661	1,431	752	648	1,400	1,596	1,368	2,964

A. Corrected for outward transfers. B. Corrected for outward and inward transfers.

The following table shows the mortality from certain leading causes of death in each month of the year (European deaths corrected for outward and inward transfers; Non-European corrected for outward transfers only; deaths belonging to the native locations of Langa and N'dabeni excluded):—

Diseases.	Race.	July (5 Weeks).	August (4 Weeks).	September (4 Weeks).	October (5 Weeks).	November (4 Weeks).	December (4 Weeks).	January (5 Weeks).	February (4 Weeks).	March (4 Weeks).	April (5 Weeks).	May (4 Weeks).	June (4 Weeks).	Year (52 Weeks).
Enteric Fever ..	Eur.	3	—	—	1	—	1	2	3	1	—	1	1	13
	Non-E.	4	—	—	1	2	1	4	2	4	3	1	2	25
Smallpox ..	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—
Chicken Pox ..	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E.	1	—	—	—	—	—	—	—	—	—	—	—	1
Measles ..	Eur.	—	—	1	1	2	—	—	2	2	1	—	—	9
	Non-E.	—	—	—	—	1	2	1	—	—	—	3	2	9
Scarlet Fever ..	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E.	—	—	—	1	—	—	—	—	—	—	—	—	1
Whooping Cough ..	Eur.	2	—	—	2	1	—	2	2	—	—	2	—	11
	Non-E.	1	5	4	3	3	2	5	3	3	—	1	2	32
Diphtheria and Croup ..	Eur.	2	—	1	1	—	2	3	1	1	1	1	—	13
	Non-E.	1	1	1	1	—	—	1	1	2	2	2	3	15
Influenza ..	Eur.	3	5	4	4	—	2	—	—	1	—	2	2	23
	Non-E.	2	2	7	7	—	3	2	2	3	1	3	1	33
Erysipelas ..	Eur.	—	—	—	1	2	1	—	1	—	—	—	—	5
	Non-E.	—	1	—	1	—	2	—	1	—	—	—	—	5
Tuberculosis, Respiratory System ..	Eur.	5	3	3	9	3	2	10	13	3	9	9	6	75
	Non-E.	34	35	28	38	38	37	42	35	39	45	33	31	435
Tuberculosis, other Forms ..	Eur.	—	2	1	—	1	2	2	2	—	—	2	2	14
	Non-E.	6	6	7	7	7	13	9	7	9	9	6	7	93
Cancer, Malignant Disease ..	Eur.	9	13	11	17	11	5	11	13	14	14	12	17	147
	Non-E.	7	8	3	3	8	15	9	9	—	8	9	4	83
Rheumatic Fever ..	Eur.	1	1	—	—	1	1	1	—	—	—	—	2	7
	Non-E.	2	1	2	—	2	3	3	1	—	—	3	1	18
Cerebral Haemorrhage, Embolism and Apoplexy ..	Eur.	3	4	3	8	2	7	6	4	3	6	2	5	53
	Non-E.	4	4	3	2	—	1	2	—	3	3	2	1	25
Heart Disease ..	Eur.	26	20	14	28	24	26	18	16	11	24	14	22	243
	Non-E.	21	21	25	29	24	7	23	11	13	21	10	16	221
Bronchitis, Pneumonia and Pleurisy ..	Eur.	16	12	17	17	14	11	6	9	5	11	13	11	142
	Non-E.	76	63	71	97	51	39	39	33	32	46	35	37	619
Diarrhoea and Enteritis ..	Eur.	3	5	1	4	2	7	13	5	1	1	3	3	62
	Non-E.	7	14	15	10	26	66	85	66	54	28	20	18	409
Nephritis and Bright's Disease ..	Eur.	14	4	10	9	5	8	5	7	3	9	1	7	82
	Non-E.	9	7	5	12	3	4	4	5	5	10	6	6	76
Puerperal Fever ..	Eur.	—	2	—	1	—	1	—	—	—	—	—	1	5
	Non-E.	1	1	1	1	—	—	1	—	—	1	1	—	7
Congenital Debility and Malformations, including Premature Birth ..	Eur.	1	4	2	13	3	6	1	6	7	5	5	1	54
	Non-E.	23	14	13	19	15	11	12	23	13	21	11	15	190
External Causes ..	Eur.	1	5	2	8	10	5	4	7	4	2	5	4	57
	Non-E.	12	5	5	7	8	2	10	7	13	6	6	10	91



Reference to Tables K to O on pages 121 to 125 will enable the monthly mortality figures to be compared with meteorological conditions.

## SEX.

The deaths during the year under review are classified in the following table according to sex (figures for the native locations of Langa and N'dabeni being excluded); the corresponding rates are also shown:—

	Race.	Uncorrected.		Corrected for Outward Transfers.		Corrected for Outward and Inward Transfers.	
		Males.	Females.	Males.	Females.	Males.	Females.
Deaths ..	European ..	882	721	752	648	770	661
	Non-European ..	1,735	1,449	1,596	1,368		
	All Races ..	2,617	2,170	2,348	2,016		
Death Rates per 1,000 population concerned.	European ..	13·71	10·75	11·69	9·66	11·97	9·85
	Non-European ..	29·68	24·44	27·30	23·08		
	All Races ..	21·31	17·17	19·12	15·95		

It will be seen from the above figures that amongst Europeans the death rate (corrected for outward and inward transfers) amongst males was 21·5 per cent. greater than amongst females; and amongst non-Europeans the death rate (corrected for outward transfers) amongst males was 18·3 per cent. greater than amongst females.

## AGE AT DEATH.

The number of deaths at various ages are summarised in the following table:—

	No. of Deaths.			Percentage of all Deaths.		
	Male.	Female.	Total.	Male.	Female.	Total.
<i>A. Europeans :</i>						
Under 1 year .. ..	88	89	177	11·43	13·46	12·37
Over 1 and under 5 years ..	30	39	69	3·91	5·90	4·82
„ 5 „ 25 .. ..	61	54	115	7·92	8·17	8·04
„ 25 „ 65 .. ..	345	230	575	44·80	34·80	40·18
„ 65 years .. ..	246	249	495	31·95	37·67	34·59
Total European deaths ..	770	661	1,431	100·00	100·00	100·00
<i>B. Non-Europeans :</i>						
Under 1 year .. ..	524	419	943	32·83	30·63	31·82
Over 1 and under 5 years ..	270	241	514	16·92	7·84	17·34
„ 5 „ 25 .. ..	187	198	385	11·72	14·47	12·99
„ 25 „ 65 .. ..	494	386	880	30·95	28·22	29·69
„ 65 years .. ..	121	121	242	7·58	8·84	8·16
Total Non-European Deaths	1,596	1,368	2,964	100·00	100·00	100·00

A. Corrected for inward and outward transfers.

B. Corrected for outward transfers.

From the above figures it will be seen that for the year under review the deaths under five years of age constitute 17·2 per cent. of all deaths in the case of Europeans, as compared with 49·2 per cent. of all deaths in the case of non-Europeans; and that the deaths under 25 years of age constitute 25·2 per cent.

of all deaths in the case of Europeans, as compared with 62·2 per cent. of all deaths in the case of non-Europeans.

### INFANT MORTALITY.

In the following table are shown the deaths of infants under one year of age and the rates of infant mortality for the extended municipality of Capetown for the year 1928-29:—

	No. of deaths under one year of age.	Deaths under one year of age per 1,000 births.
Europeans (uncorrected .. .. .)	189	61·11
„ (corrected for outward transfers) ..	172	61·17
„ (corrected for outward and inward transfers) .. .. .	177	60·43
Non-Europeans (uncorrected) .. .. .	953	158·04
„ (corrected for outward transfers) ..	943	158·59
All Races (uncorrected) .. .. .	1,142	125·16
„ „ (corrected for outward transfers) ..	1,115	127·30

It will be seen that the non-European infant mortality rate (corrected for outward transfers) was 2·6 times as great as the European.

The figures for the infant mortality of the native locations of N'dabeni and Langa, which are not included in the foregoing statement, will be found in Table J on page 120.

The yearly infant mortality rates of the municipality not including the Wynberg ward are set out for a series of years in Table C on page 113, where it will be seen that the infant mortality rate, both European and non-European, for 1928-29 was the lowest yet recorded. The rate for all races was 11·5 per cent., for Europeans 8·7 per cent., and for non-Europeans 12·5 per cent., less than the mean of the corresponding rates for the previous five years.

In Table A on pages 94 to 111 the deaths of children under one year of age will be found fully classified as to causes, race and sex. The following two tables are added to show more clearly the principal causes of death and the age at death.

### INFANT MORTALITY FROM CERTAIN DISEASES PER 1,000 BIRTHS (1928-29).

Disease.	European.		Non-European.
	B.	A.	A.
Zymotic Diseases (Measles, Diphtheria, Scarlet Fever, Enteric Fever and Whooping Cough) ..	2·05	2·13	3·87
Tuberculosis .. .. .	0·68	0·71	5·21
Premature Birth, Atelectasis and Congenital Malformations .. .. .	17·07	17·07	27·92
Atrophy, Debility and Marasmus .. .. .	2·73	2·84	7·07
Convulsions and Meningitis .. .. .	1·71	1·78	5·73
Bronchitis and Pneumonia .. .. .	10·58	11·02	38·36
Diarrhoea and Enteritis .. .. .	15·36	15·29	44·23

A. Corrected for outward transfers.

B. Corrected for outward and inward transfers.

Births and deaths of infants in the Native Locations of Langa and N'dabeni have been excluded from the above table.



# DEATHS OF INFANTS UNDER 1 YEAR OF AGE, CLASSIFIED AS TO RACE, AGE AT AND CAUSE OF DEATH, CORRECTED FOR OUTWARD TRANSFERS.

(Figures for the Native Locations of N'dabeni and Langa excluded.)

Classification No.	DISEASE.	RACE.	AGE AT DEATH												TOTAL Under One Year.	EUROPEAN. Total Corrected for Outward and Inward Transfers.	
			Under 1 day.	Under 2 days.	Under 3 days.	Under 4 days.	Under 5 days.	Under 6 days.	Under 7 days.	Total under 1 week.	Under 10 weeks.	Under 13 weeks.	Under 16 weeks.	Under 19 weeks.	M	F	Persons
7	Measles .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
8	Scarlet Fever ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	Whooping Cough ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	Diphtheria and Croup	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21	Erysipelas .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
32	Tuberculosis, Meningeal	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
33	Tuberculosis, Abdominal	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31A to 37B	Tuberculosis, Other Forms.	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
38	Syphilis .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
56	Rickets .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
71	Simple Meningitis ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80	Convulsions .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
99A to 99C	Bronchitis .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
100	Pneumonia, All Forms	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
101A to 101B	Gastritis .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
112	Diarrhoea and Enteritis	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
159	Congenital Malformations.	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
160	Congenital Debility ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
161A	Premature Birth ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
161B	Injury at Birth ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Part 162	Atelectasis .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
163	Lack of Care .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Part 180	Suffocation (Overlying)	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Other Causes .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			21	10	7	3	2	2	3	47	13	13	13	13	288	80	177

\* Including the death of one non-European male infant of unknown age.



Amongst European infants 27·3 per cent. of the deaths under one year occurred in the first week, and 43·6 per cent. in the first month of life. Amongst non-European infants the percentages were 19·6 in the first week and 30·1 in the first month.

In the next table the infant deaths are arranged according to the month of registration. They are also classified for race and sex. The deaths in the native locations of Langa and N'dabeni are not included.

Month.	No. of Weeks.	European. B.			European. A.			Non-European. A.		
		M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
July ..	5	6	6	12	6	6	12	53	33	86
August ..	4	5	8	13	5	8	13	33	30	63
September ..	4	4	5	9	4	5	9	48	20	68
October ..	5	10	16	26	10	15	25	49	39	88
November ..	4	7	6	13	7	6	13	41	40	81
December ..	4	5	10	15	4	9	13	53	39	92
January ..	5	7	6	13	6	6	12	57	51	108
February ..	4	10	9	19	10	9	19	46	47	93
March ..	4	9	4	13	9	4	13	41	30	71
April ..	5	17	6	23	16	6	22	35	42	77
May ..	4	4	10	14	4	10	14	34	22	56
June ..	4	4	3	7	4	3	7	34	26	60
Year ..	52	88	89	177	85	87	172	524	419	943

A. Corrected for outward transfers.

B. Corrected for outward and inward transfers.

In the following table the quarterly figures (annual infant mortality rates corrected for outward transfers) are shown:—

Quarters.	European.	Non-European.
July, August and September, 1928 ..	48·85	144·47
October, November and December, 1928 ..	72·86	171·82
January, February and March, 1929 ..	63·40	185·92
April, May and June, 1929 .. ..	59·56	132·01

The next table is designed to show the infant mortality for the year under report (corrected for outward transfers) amongst legitimate and illegitimate infants respectively (the native locations of Langa and N'dabeni excluded).

	European.	Non-European.	All Races.
Number of Legitimate Births .. ..	2,643	4,599	7,242
Number of Legitimate Deaths under one year of age ..	152	682	834
Infant Mortality (Legitimate) per 1,000 Births ..	57·51	148·29	115·16
Number of Illegitimate Births .. ..	169	1,347	1,516
Number of Illegitimate Deaths under one year of age ..	20	261	281
Infant Mortality (Illegitimate) per 1,000 Births ..	118·34	193·76	185·36

In Table D on page 114 the infant mortality figures will be found classified for wards and race.



### SECTION III.—INFECTIOUS AND OTHER DISEASES.

The number of notifications of compulsorily notifiable diseases that were received during the year under review was as follows:—

Disease.	Uncorrected.	Corrected.	
		For errors of diagnosis.	For errors of diagnosis and by exclusion of imported cases.
Diphtheria .. .. .	313	244	232
Enteric Fever .. .. .	377	279	200
Scarlet Fever .. .. .	188	176	164
Ophthalmia Neonatorum* .. .. .	160	160	147
Cerebrospinal Fever .. .. .	278	170	131
Puerperal Fever .. .. .	97	93	83
Erysipelas .. .. .	76	74	69
Trachoma .. .. .	24	24	15
Infective Encephalitis .. .. .	15	13	12
Acute Anterior Poliomyelitis .. .. .	6	5	5
Leprosy .. .. .	5	5	4
Typhus Fever .. .. .	—	1	1
Anthrax .. .. .	2	1	1
Smallpox .. .. .	1	1	—
Influenza .. .. .	504	525	515
Influenzal Pneumonia .. .. .	149	143	140
Acute Primary Pneumonia .. .. .	499	504	477
Tuberculosis, Respiratory System .. .. .	1,097	1,090	1,026
Tuberculosis, other forms .. .. .	146	190	175
Totals ..	3,937	3,698	3,397

\* Including cases of Gonorrhoeal Ophthalmia not in the newly born.

The foregoing figures are exclusive of cases in residents at the native locations of Langa and N'dabeni. The cases in these locations are set out in Table J on page 120.

No cases were reported of the following notifiable diseases: Malta fever, Asiatic cholera, plague, glanders, rabies, human trypanosomiasis and yellow fever.

In Tables F, G and H on pages 116, 117, and 118 the notified cases (corrected) are classified:—

Table F:—In months according to the date of the notification certificate, and by race and sex.

Table G:—In wards and by race and sex.

Table H:—In age-groups and by race and sex.

The number of cases notified during a series of past years is set out in Table I on page 119 and corresponding information will be found in regard to the deaths from these and certain other infectious diseases in the table on pages 17 and 18.

Other statistical details as to deaths from infectious disease are contained in Table A at page 94 and in the table on page 21.

#### CITY INFECTIOUS DISEASES HOSPITALS.

The annual report of the Medical Superintendent of Hospitals will be found on pages 83 to 93.

At the City Hospital, Portswood Road, the total accommodation is 205 beds.

At the Smallpox Hospital, Rentzkie's Farm, there are 42 beds. Adjacent to this hospital is the Union Health Department's Isolation Hospital and quarantine

station for formidable infectious diseases, for use in connection with the Port Health administration and for other purposes of the Union Government, which have accommodation for 52 patients and 87 contacts, in addition to an emergency hospital block for 24 patients. The whole of the hospital is administered by the City Health Department. With a view to increasing the accommodation for cases of pulmonary tuberculosis the Union Health Department has agreed to one of the buildings at its quarantine station adjoining the Council's isolation hospital at Rentzkie's Farm being converted temporarily into wards for such cases. The necessary alterations were made and accommodation provided for 30 non-European patients, male and female, and the wards were opened on 20th January, 1928.

Preparations are being made for adding to the City Hospital, Portwood Road, new tuberculosis wards providing additional accommodation for 84 patients; a small series of isolation wards for 8 patients; nurses' quarters containing 32 bedrooms and other rooms; and other improvements.

#### AMBULANCE AND DISINFECTING STATION.

This is situated in the grounds of the City Hospital, Portwood Road. There is garage accommodation in which are housed (besides other departmental cars) four vans and ambulances which are used for the removal of cases of infectious disease and for the transport of infectious and disinfected bedding and supplies.

The disinfecting station comprises two Equifex Steam disinfectors and an incinerator.

The ambulance and disinfecting service is managed by two removal inspectors, three motor drivers and three labourers. This staff is also responsible for the disinfecting of houses and other premises for infectious disease and other conditions. An engineer, assisted by a labourer, is in charge of the disinfecting station, and supervises the machinery of the hospital laundry and of the hospital sewage chlorination plant. The disinfection of bedding, etc., for the City Hospital is also done at the disinfecting station.

There is another Equifex Steam disinfecter at Rentzkie's Farm Hospital, provided for the needs of that hospital but available also for the purposes of the City Health administration.

The work done during the year by the ambulance and disinfecting service is indicated by the following figures:—

Ambulance Journeys (return.)		Disinfections.				Articles destroyed.
To City Hospital.	To other Hospitals or Premises.	Premises.		Articles.		
		For Tuber- culosis.	For other Infectious Diseases.	For Tuber- culosis.	For other Infectious Diseases.	
1,282	140	634	1,465	824	7,751	380

The distance covered during the year by the vans and ambulances was 34,206 miles.

#### CLEANSING STATION.

A station is equipped for the cleansing of verminous persons at 116 Aspelung Street. It is a small three-roomed house fitted with two baths, steam disinfecter and drying closet. Cases of scabies are treated with sulphur baths or by hot baths and sulphur applications. The work done at the Cleansing Station during the year ended 30th June, 1929, is indicated in the following table:—



Persons.	First Attendances.				Total Attendances.			
	Scabies.	Body Lice.	Head Lice only.	Total.	Scabies.	Body Lice.	Head Lice only.	Total.
<i>Children under 16 years of age :</i>								
European boys .. ..	33	—	—	38	298	—	—	298
European girls .. ..	31	—	—	31	188	—	—	188
Non-European boys ..	77	—	3	80	548	—	9	557
Non-European girls ..	78	—	3	81	524	—	9	533
Total children... ..	224	—	6	230	1,558	—	18	1,576
<i>Adults :</i>								
European males .. ..	20	1	—	21	139	2	—	141
European females .. ..	18	—	1	19	122	—	3	125
Non-European males ..	23	—	1	24	84	—	3	87
Non-European females ..	46	—	2	48	247	—	6	253
Total adults .. ..	107	1	4	112	592	2	12	606
<i>Total Persons :</i>								
European .. ..	107	1	1	109	747	2	3	752
Non-European .. ..	242	—	9	233	1,403	—	27	1,430
All Races .. ..	349	1	10	342	2,150	2	30	2,182

*N.B.*—Many of the cases of scabies were infested also with head lice.

#### TUBERCULOSIS.

The new cases of tuberculosis notified during the year ended 30th June, 1929, numbered 1,225, including 1,083 of pulmonary (220 European and 863 non-European) and 142 of other forms (21 European and 121 non-European).

Of these cases 76 arrived in Capetown during the year already suffering from the disease (8 from overseas and 68 from other parts of South Africa).

Fifty-five other cases admitted to the City Hospital for other diseases proved to be suffering from tuberculosis; 7 of pulmonary tuberculosis, 42 of tubercular meningitis (2 imported cases), 3 of abdominal tuberculosis and 3 of disseminated tuberculosis (1 case imported from overseas).

After making the consequent correction the new Capetown cases (extended municipality) notified during the year were as follows:—

	European.			Non-European.			All Races.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Pulmonary .. ..	126	76	202	430	393	824*	556	469	1,026*
Other Forms .. ..	14	13	27	80	68	148	94	81	175
Total .. ..	140	89	229	510	461	972*	650	550	1,201*

\*Including one non-European infant of unknown sex, notified but not traced.

These figures are equivalent to incidence rates per 1,000 population concerned as set out below:—

	European.			Non-European.			All Races.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Pulmonary .. ..	1.95	1.13	1.53	7.33	6.61	6.98*	4.52	3.70	4.11*
Other forms .. ..	0.22	0.19	0.20	1.36	1.16	1.25	0.76	0.64	0.70
Total .. ..	2.17	1.32	1.74	8.70	7.76	8.23*	5.28	4.34	4.81*

\*Including one non-European infant of unknown sex, notified but not traced.

The deaths from tuberculosis during the year were as follows:—

	* European.			† Non-European.			† All Races.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Respiratory System..	49	26	75	224	211	435	271	235	506
Other forms ..	9	5	14	52	41	93	61	46	107
Total .. ..	58	31	89	276	252	528	332	281	613

These figures are equivalent to death rates per 1,000 population concerned as set out below:—

	* European.			† Non-European.			† All Races.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Respiratory System..	0.76	0.39	0.57	3.84	3.56	3.69	2.21	1.86	2.03
Other forms ..	0.14	0.07	0.11	0.89	0.69	0.79	0.50	0.36	0.43
Total .. ..	0.90	0.46	0.68	4.72	4.25	4.48	2.70	2.22	2.46

\* Corrected for outward and inward transfers.

† Corrected for outward transfers only.

There were 17 deaths from tuberculosis in the native locations of Langa and N'dabeni (excluded from the above figures) and of these, 5 males and 8 females died of phthisis and the remaining 4 cases (males) died of other forms of tuberculosis. The number of cases of tuberculosis notified from the locations will be found in Table J on page 120.

The death rate amongst non-Europeans was 6.9 times as great as that amongst Europeans (corrected for outward transfers). In Europeans the death rate amongst males was 2.0 times as great as amongst females and in non-Europeans 1.1 times as great.

The age distribution of the deaths is shown in Table A at pages 94 and 111 from which it will be seen that for tuberculosis of the respiratory system 79 per cent. of the European deaths and 79 per cent. of the non-European were in persons aged from 15 to 55 years, while in the case of other forms of tuberculosis 52 of the 93 deaths of non-Europeans were of children under 5 years of age and 8 of the 14 European deaths. There was one death from tuberculosis of the respiratory system amongst Europeans under 5 years of age and 41 (or 9 per cent. of the number at all ages) amongst non-Europeans under 5.\*

The notifications of cases of non-pulmonary tuberculosis during the year under review, corrected for imported cases and errors of diagnosis, are classified below according to the parts of the body affected:—

	European.		Non-European.		Total.
	Male.	Female.	Male.	Female.	
Meninges .. ..	7	6	36	25	74
Abdominal .. ..	—	—	9	7	16
Bones and joints .. ..	4	1	18	21	44
Glands .. ..	1	5	8	10	24
Other organs .. ..	2	—	3	2	7
Disseminated .. ..	—	1	6	3	10
Total .. ..	14	13	80	68	175

\* In this paragraph the figures for Europeans are corrected for inward and outward transfers and those for non-Europeans for outward transfers only. The deaths of residents at the native locations of Langa and N'dabeni are not included.



The deaths from non-pulmonary tuberculosis registered during the year (corrected for outward transfers) are similarly classified below according to the death certification.

	European.		Non-European.		Total.
	Male.	Female.	Male.	Female.	
Tuberculosis, meningeal .. ..	8	4	35	27	74
"    abdominal .. ..	—	—	5	6	11
"    of bones and joints ..	1	1	5	2	9
"    of the lymphatic system	—	—	—	2	2
"    of the genito-urinary	—	—	—	—	—
system .. ..	—	—	—	—	—
"    disseminated .. ..	—	—	7	4	11

These deaths are further classified in Table A on pages 98 and 99.

The following tables show the length of residence in Capetown of cases notified during the year 1928-29 and not fatal up to the end of the year, and of all cases which died during the year, respectively:—

SHOWING LENGTH OF RESIDENCE IN THE CITY OF CAPETOWN OF PERSONS NOTIFIED AS SUFFERING FROM TUBERCULOSIS AND NOT SINCE DEAD, FROM THE 1ST JULY, 1928, TO THE 30TH JUNE, 1929.

Age.	Race.	InCape- town, 6 months & under 1 year.	InCape- town, 6 months & under 1 year.	InCape- town, 1 year & under 2 years.	InCape- town, 2 years & under 3 years.	InCape- town, 3 years & under 4 years.	InCape- town, 4 years & under 5 years.	InCape- town, 5 years & over 5 years.	All Life in Cape- town.	No Record	Total.
0—1 year.	E. Non-E	— 1	— —	— —	— —	— —	— —	— —	— 4	— —	— 5
1—5 years.	E. Non-E	— —	— 1	— 1	— —	— —	— —	— —	4 30	1 4	5 36
5—15 years.	E. Non-E	— —	— 1	— 1	— 1	— 1	— —	1 4	11 51	— 9	12 68
15—25 years.	E. Non-E	1 5	2 3	4 4	2 3	2 2	3 2	11 59	31 92	3 12	59 182
25—45 years.	E. Non-E	4 9	4 7	4 2	3 5	2 5	3 5	29 91	10 87	5 22	64 233
45 years and over.	E. Non-E	1 1	— 2	1 —	— 2	1 —	— 1	12 28	8 12	2 2	25 48
Age unknown	E. Non-E	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Totals	E. Non-E	6 16	6 14	9 8	5 11	5 8	6 8	53 182	64 276	11 49	165 572

SHOWING LENGTH OF RESIDENCE IN CAPETOWN OF PERSONS DYING FROM TUBERCULOSIS DURING THE 52 WEEKS ENDED 28TH JUNE, 1929 (CORRECTED FOR OUTWARD TRANSFERS).

Age.	Race.	InCape-town, 6 months & under 1 year.	InCape-town, 1 year & under 2 years.	InCape-town, 2 years & under 3 years.	InCape-town, 3 years & under 4 years.	InCape-town, 4 years & under 5 years.	InCape-town, over 5 years.	All Life in Cape-town.	No Record.	Total.
0—1 year.	E.	—	—	—	—	—	—	2	—	2
	Non-E.	1	—	—	—	—	—	29	1	31
1—5 years.	E.	—	—	1	—	—	—	6	—	7
	Non-E.	2	—	—	1	—	—	57	2	62
5—15 years.	E.	—	—	—	—	—	—	3	—	3
	Non-E.	2	—	—	—	3	—	36	2	45
15—25 years.	E.	—	1	—	—	—	—	3	9	13
	Non-E.	4	1	3	1	4	4	27	9	144
25—45 years.	E.	1	1	1	—	—	—	16	7	27
	Non-E.	2	2	3	2	4	1	76	22	179
45 years and over.	E.	1	—	1	—	—	1	24	3	33
	Non-E.	—	—	1	1	—	1	42	4	67
Age unknown	E.	—	—	—	—	—	—	—	—	—
	Non-E.	—	—	—	—	—	—	—	—	—
Totals	E.	2	2	3	—	—	1	43	30	85
	Non-E.	11	3	7	5	11	6	147	40	528

In addition to the deaths recorded above, 4 European males, 8 non-European males and 9 non-European females, notified cases of tuberculosis, died during the year and were certified as dying of other causes of death than tuberculosis. With regard to the European males, 1 was certified as dying of cancer of lung, 1 of lobar pneumonia, 1 of general peritonitis and the other of cerebral haemorrhage. Concerning the non-European males, 2 were certified as dying of broncho-pneumonia, 2 of nephritis, 1 of lobar pneumonia, 1 of bronchitis, 1 of valvular heart disease and 1 of intestinal obstruction. Of the non-European females, 2 were certified as dying of valvular heart disease, 2 of empyaema, 1 of diabetes, 1 of cancer of breast, 1 of lobar pneumonia, 1 of whooping cough and 1 of broncho-pneumonia.

There were 75 deaths (14 European and 61 non-European) which took place without any previous notification having been received, and the general position in regard to the stage of the disease at the time of notification is unsatisfactory. There are far too few notifications of cases at the early stage when treatment is more hopeful, and this is of great importance in view of the fact that sanatorium treatment at Nelspoort is available.

In Table A on page 99 and Table D on page 114 deaths from tuberculosis will be found classified in wards.

The ward distribution of the notified cases of tuberculosis will be found in Table G on page 117 and the age distribution in Table H on page 118.

The annual deaths and death rates from tuberculosis for the past 13 years, corrected for outward transfers, are shown in the following table:—

Year.	Deaths.		Death-rate per 1,000 population.	
	European.	Non-European.	European.	Non-European.
1914-1915	89	384	1.11	5.09
1915-1916	74	323	0.89	4.21
1916-1917	95	430	1.10	5.55
1917-1918	78	353	0.87	4.50
1918-1919	75	302	0.81	3.80
1919-1920	80	304	0.83	3.77
1920-1921	73	334	0.73	4.10
1921-1922	101	286	0.98	3.43
1922-1923	79	355	0.75	4.12
1923-1924	79	399	0.73	4.47
1924-1925	95	422	0.85	4.51
1925-1926	70	367	0.63	3.87
1926-1927	97	449	0.85	4.59
1927-1928	*100 †107	*453 †522	*0.86 †0.83	*4.48 †4.57
1928-1929	*79 †85	*467 †528	*0.66 †0.65	*4.47 †4.48

\* Municipality not including Wynberg ward.

† Municipality including Wynberg ward.



The work done during the year under review in connection with tuberculosis is indicated by the following returns:—

Visits by Health Visitors to cases of tuberculosis .. .. .	8,026
Number of new cases attending at Tuberculosis Clinic .. .. .	661
Total attendances at Tuberculosis Clinic .. .. .	3,280
Number of Capetown cases of tuberculosis admitted to City Hospitals ..	259
Number of Capetown cases admitted to Nelspoort Sanatorium .. .. .	130
Number of new cases put on allowance of bread and milk .. .. .	294
Cost of bread and milk (year ended 30th June, 1929) .. .. .	£1,426 0 2

Visiting has been done mainly by three health visitors who devote the whole of their time to this work and also attend the tuberculosis clinic.

There is a serious shortage of local hospital accommodation for cases of tuberculosis from the point of view both of treatment and isolation. With a view to increasing the accommodation available the Union Health Department has agreed to one of the buildings at its quarantine station adjoining the Council's isolation hospital at Rentzkie's Farm being converted temporarily into wards for such cases. The necessary alterations were made and accommodation provided for 30 non-European patients, male and female, and the wards were opened on the 20th January, 1928.

Preparations are being made for the construction at the City Hospital, Portswood Road, of new tuberculosis wards to provide additional accommodation for 84 patients.

#### NELSPOORT SANATORIUM.

The Nelspoort Sanatorium was built from a capital fund composed of £25,000 given by Mr. John Garlick of Capetown, whose generous initiative made the scheme possible, £25,000 by various local authorities in the Cape Province (including £9,000 from the Capetown Corporation up to the end of the period under report), and £50,000 by the Union Government. With this fund the Salt River Farm of 8,358 morgen was purchased at Nelspoort, Cape Province. The site is on the Karoo at an elevation of about 3,260 feet above sea level, and is on the main railway line at a distance of 371 miles from Capetown. Buildings for the accommodation of 116 patients have been erected, together with administrative buildings and works sufficient for a considerable extension of the ward accommodation. The farm is worked in connection with the sanatorium.

The Union Government control the sanatorium under the terms of the Public Health Act, 1919, and there is an advisory committee which includes the Mayor, the Town Clerk, and the Medical Officer of Health of Capetown. The institution is primarily for the needs of the Cape Province and the patients from the other provinces are only admitted subject to the requirements of the Cape Province being met. Paying patients are received at a charge of 12s. 6d. a day, which fully covers the cost. In regard to part paying and free patients, these are received only on the application of local authorities and on the basis of one-half of the cost (less part payment) being paid by the local authority, the Union Government bearing the other half of the cost. For this purpose the cost has since the 1st January, 1929, been reckoned at 10s. 6d. per European patient and 8s. 6d. per non-European patient per day.

The numbers of all patients and Capetown patients in the Sanatorium on the last day of each month for the year ended 30th June, 1929, have been as follows:—

Date.	Total.			Capetown.		
	Eur.	Non-E.	Total.	Eur.	Non-E.	Total.
1928.						
31st July .. .. .	59	25	84	27	17	44
31st August .. .. .	58	27	85	28	16	44
30th September .. .. .	54	23	77	26	13	39
31st October .. .. .	60	25	85	30	11	41
30th November .. .. .	59	25	84	31	9	40
31st December .. .. .	50	21	71	22	6	28
1929.						
31st January .. .. .	54	17	71	22	7	29
28th February .. .. .	52	18	70	20	7	27
31st March .. .. .	56	19	75	19	9	28
30th April .. .. .	61	26	87	22	16	38
31st May .. .. .	58	25	83	27	17	44
30th June .. .. .	63	27	90	35	18	53



In regard to Capetown cases, application for admission is made by the Medical Officer of Health to the Medical Superintendent of the Sanatorium. The Medical Officer of Health decides as to the suitability of the case, and as to the payment, if any, to be made by the patient, upon the reports of the Medical Officer in charge of the tuberculosis clinic, who advises as to medical condition, and of the Health Visitor, who investigates social condition. The cost of transport to and from the sanatorium is shared by the Government and the Corporation. Special compartments are used for this purpose with precautions in regard to disinfection. All the patients have been seen off from Capetown Station by a representative of the City Health Department.

Expenditure of the City Council in connection with the treatment at Nelsport of patients from the area of the extended municipality from the 1st July, 1928, to 30th June, 1929, amounted to £3,574 5s. 2d. as follows:—

Treatment at Sanatorium .. .. .	£3,312 19 3
Railway fares .. .. .	226 18 5
Meals on train .. .. .	27 1 5
Sundries .. .. .	7 6 1
<b>Total .. .. .</b>	<b>£3,574 5 2</b>

During the year ended 30th June, 1929, there were 130 admissions to the Sanatorium from Capetown. Of these admissions, 11 were of patients who had had a previous period of treatment in the institution, so that the number of new cases from Capetown who were admitted during the year ended 30th June, 1929, was 119. The following is an analysis of the 130 admissions from Capetown during the year:—

Age.	European.		Non-European.		Total.
	Male.	Female.	Male.	Female.	
5 to 10 years .. .. .	—	—	—	—	—
10 to 15 " .. .. .	1	—	—	—	1
15 to 25 " .. .. .	18	15	6	8	47
25 to 35 " .. .. .	18	10	10	10	48
35 to 45 " .. .. .	8	11	5	2	26
45 to 55 " .. .. .	6	1	—	—	7
55 to 65 " .. .. .	—	1	—	—	1
<b>Total .. .. .</b>	<b>51</b>	<b>38</b>	<b>21</b>	<b>20</b>	<b>130</b>
Paying patients .. .. .	2	3	—	—	5
Part-paying patients .. .. .	3	2	—	—	5
Free patients .. .. .	46	33	21	20	120
<b>Total .. .. .</b>	<b>51</b>	<b>38</b>	<b>21</b>	<b>20</b>	<b>130</b>
<i>Period of treatment at Sanatorium—</i>					
Under 30 days .. .. .	1	—	—	1	2
From 30-39 days .. .. .	—	—	—	—	—
" 40-49 " .. .. .	3	—	1	1	5
" 50-59 " .. .. .	—	1	1	—	2
" 60-69 " .. .. .	3	2	2	—	7
" 70-79 " .. .. .	3	1	2	—	6
" 80-89 " .. .. .	7	1	3	1	12
" 90-99 " .. .. .	10	6	3	2	21
" 100-109 " .. .. .	3	2	—	2	7
" 110-119 " .. .. .	6	3	2	2	13
" 120-129 " .. .. .	7	5	3	4	19
" 130-139 " .. .. .	1	—	—	—	1
" 140-149 " .. .. .	1	2	1	1	5
" 150-159 " .. .. .	3	5	2	4	14
" 160-169 " .. .. .	1	3	—	1	5
" 170-244 " .. .. .	2	7	1	1	11
<b>Total .. .. .</b>	<b>51</b>	<b>38</b>	<b>21</b>	<b>20</b>	<b>130</b>



In the following tables is set out the condition year by year of the Capetown patients who were admitted to the Sanatorium prior to the year under report. The judgment of the condition is based chiefly upon the reports of the Tuberculosis Health Visitors:—

AFter-HISTORY OF 171 NEW CASES ADMITTED TO NELSPOORT  
SANATORIUM DURING THE PERIOD 5TH MAY, 1924, TO 30TH JUNE, 1925.

	(1) Condition in Dec., 1925.					(2) Condition in Nov., 1929.				
	European.		Non-European.		Total	European.		Non-European.		Total
	Male	Female	Male	Female		Male	Female	Male	Female	
Still in the Sanatorium .. ..	1	3	—	1	5	—	—	—	—	—
Died in the Sanatorium .. ..	1	1	—	—	2	2	1	—	—	3
Re-admitted to the Sanatorium after 30th June, 1925 (1) or 30th June, 1929 (2) .. ..	5	2	1	3	11	—	—	—	—	—
Improved .. ..	26	26	13	18	83	17	18	6	11	52
Not improved or worse .. ..	4	4	3	6	17	1	1	—	1	3
Died since discharge .. ..	7	4	11	8	30	23	18	23	21	85
Removed and lost sight of .. ..	5	11	4	3	23	6	13	3	6	28
Total .. ..	49	51	32	39	171	49	51	32	39	171

AFter-HISTORY OF 96 NEW CASES ADMITTED TO NELSPOORT  
SANATORIUM DURING THE YEAR ENDED 30TH JUNE, 1926.

	(1) Condition in Nov., 1926.					(2) Condition in Nov., 1929.				
	European.		Non-European.		Total	European.		Non-European.		Total
	Male	Female	Male	Female		Male	Female	Male	Female	
Still in the Sanatorium .. ..	1	—	1	—	2	—	—	—	—	—
Died in the Sanatorium .. ..	1	—	—	—	1	2	—	—	—	2
Re-admitted to the Sanatorium after 30th June, 1926 (1) or 30th June, 1929 (2) .. ..	2	1	—	—	3	—	1	—	—	1
Improved .. ..	16	26	8	7	57	9	17	6	2	34
Not improved or worse .. ..	3	11	1	1	16	1	—	1	2	4
Died since discharge .. ..	6	1	—	1	8	12	11	2	6	31
Removed and lost sight of .. ..	4	2	—	3	9	9	12	1	2	24
Total .. ..	33	41	10	12	96	33	41	10	12	96

AFter-HISTORY OF 109 NEW CASES ADMITTED TO NELSPOORT  
SANATORIUM DURING THE YEAR ENDED 30TH JUNE, 1927.

	(1) Condition in Aug., 1927.					(2) Condition in Nov., 1929.				
	European.		Non-European.		Total	European.		Non-European.		Total
	Male	Female	Male	Female		Male	Female	Male	Female	
Still in the Sanatorium .. ..	2	2	4	2	10	—	—	—	—	—
Died in the Sanatorium .. ..	1	1	2	—	4	1	1	2	—	4
Re-admitted to the Sanatorium after 30th June, 1927 (1) or 30th June, 1929 (2) .. ..	—	1	—	—	1	—	—	1	—	1
Improved .. ..	18	18	6	10	52	11	12	7	7	37
Not improved or worse .. ..	1	6	5	8	20	2	1	1	3	7
Died since discharge .. ..	5	2	—	1	8	9	7	7	8	31
Removed and lost sight of .. ..	7	5	1	1	14	11	14	—	4	29
Total .. ..	34	35	18	22	109	34	35	18	22	109

AFTER-HISTORY OF 89 NEW CASES ADMITTED TO NELSPORT  
SANATORIUM DURING THE YEAR ENDED 30TH JUNE, 1928.

	(1) Condition in Aug., 1928.					(2) Condition in Nov., 1929.				
	European.		Non-European.		Total.	European.		Non-European.		Total.
	Male	Female	Male	Female		Male	Female	Male	Female	
Still in the Sanatorium .. ..	5	7	6	3	21	—	1	—	—	1
Died in the Sanatorium .. ..	1	—	—	—	1	1	—	—	—	1
Re-admitted to the Sanatorium after 30th June, 1928 (1) or 30th June, 1929 (2) .. ..	—	—	—	—	—	—	—	—	1	1
Improved .. ..	17	15	9	8	49	14	14	10	8	46
Not improved or worse .. ..	1	2	—	—	3	3	7	2	2	14
Died since discharge .. ..	2	1	1	—	4	4	1	3	1	9
Removed and lost sight of .. ..	5	3	2	1	11	9	5	3	—	17
Total .. ..	31	28	18	12	89	31	28	18	12	89

The condition in November, 1929, of the 119 new cases admitted to the Sanatorium during the year ended 30th June, 1929, has been investigated with the following result:—

	Condition in November, 1929.				
	European.		Non-European.		Total.
	Male.	Female.	Male.	Female.	
Still in the Sanatorium .. ..	2	5	—	1	8
Died in the Sanatorium .. ..	—	—	—	—	—
Re-admitted to the Sanatorium after 30th June, 1929 .. ..	—	—	—	—	—
Improved .. ..	34	16	14	13	77
Not improved or worse .. ..	2	6	3	3	14
Died since discharge .. ..	3	3	1	—	7
Removed and lost sight of .. ..	9	4	—	—	13
Total .. ..	50	34	18	17	119

Amongst the chief factors in causing tuberculosis are bad nutrition, bad housing and overcrowding, bad industrial conditions and alcoholism and other vices; and while good results may be expected from the treatment and isolation of patients it cannot be too strongly emphasised that the most promising line of attack on tuberculosis is in the direction of the improvement of housing and of sanitary and social conditions generally.

#### ENTERIC OR TYPHOID FEVER.

The cases of this disease reported in the year 1928-29, corrected by the exclusion of imported cases and mis-diagnoses, numbered 200 (100 European and 100 non-European). This is equivalent to an incidence rate of 0·80 per 1,000 population (0·76 European and 0·85 non-European).

The original number of notifications was 377, of which 101 were in respect of cases brought into the municipality from outside. 104 of these (23 imported) were afterwards found in the City Hospital not to be suffering from enteric fever. 6 cases (one imported) admitted to the City Hospital for other diseases proved to have enteric fever.

The number of deaths amongst the 200 Capetown cases was 36 (12 European and 24 non-European), giving a case mortality rate of 18·0 per cent. (12·0 per cent. European and 24·0 per cent. non-European).



The total Capetown deaths from this disease registered during the year numbered 38 (13 European and 25 non-European), equivalent to a death rate of 0.15 per 1,000 population (0.10 European and 0.21 non-European).

From this disease there were also, amongst natives, 5 cases (2 imported) and one death at the N'dabeni Location and one case and one death at the Langa Location. These are excluded from the above figures.

In the following table are set out, for the municipality exclusive of the Wynberg Ward, the number of enteric cases and deaths, together with the corresponding rates, for a series of years:—

Year.	Cases.				Deaths.			
	European.		Non-European.		European.		Non-European.	
	Number	Rate per 1,000 population.	Number	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.
1914-15 .. ..	250	3.13	218	2.89	21	0.26	23	0.30
1915-16 .. ..	163	1.96	133	1.73	8	0.10	28	0.37
1916-17 .. ..	163	1.90	149	1.92	14	0.16	32	0.41
1917-18 .. ..	138	1.55	124	1.58	12	0.13	31	0.40
1918-19 .. ..	204	2.20	191	2.40	18	0.19	33	0.42
1919-20 .. ..	251	2.60	202	2.50	21	0.22	42	0.52
1920-21 .. ..	345	3.46	308	3.78	37	0.37	46	0.56
1921-22 .. ..	204	1.98	207	2.48	21	0.20	42	0.50
1922-23 .. ..	180	1.71	141	1.64	22	0.21	27	0.31
1923-24 .. ..	121	1.12	93	1.04	12	0.11	20	0.22
1924-25 .. ..	79	0.72	94	1.02	8	0.07	20	0.21
1925-26 .. ..	87	0.78	100	1.05	8	0.07	17	0.18
1926-27 .. ..	117	1.02	123	1.25	15	0.13	27	0.28
1927-28 .. ..	103	0.88	127	1.25	9	0.08	23	0.23
1928-29 .. ..	99	0.83	95	0.92	13	0.11	23	0.22

The cases in 1928-29 occurred in 181 houses, in 171 of which there was one case each, in 6 two cases each, in 1 three cases, in 2 four cases, in 1 five cases, while the remaining case was a vagrant.

Reference to Table F on page 116 will show that the seasonal variation of the disease was well marked. There was a definite increase in the number of notifications in December, January and February. The notifications were least in May and June.

The ward distribution of the cases will be found in Table G on page 117 and the age and sex distribution in Table H on page 118.

Of the 377 uncorrected cases, 298 were admitted to the City Hospital and 41 were treated in other hospitals.

### DIPHThERIA.

The cases of this disease reported in the year 1928-29, corrected by the exclusion of imported cases and misdiagnoses, numbered 232 (162 European and 70 non-European). This is equivalent to an incidence rate of 0.93 per 1,000 population (1.23 European and 0.59 non-European).

The original number of notifications was 313, of which 20 were in respect of cases brought into the municipality from outside. 70 of these (8 imported) were afterwards found in the City Hospital not to be suffering from diphtheria. One case admitted to the City Hospital for a different disease proved to have diphtheria.

The number of deaths amongst the 232 Capetown cases was 30 (14 European and 16 non-European), giving a case mortality rate of 12.9 per cent. (8.6 European and 22.9 non-European).

The total Capetown deaths from this disease registered during the year numbered 28 (13 European and 15 non-European), equivalent to a death rate of 0.11 per 1,000 population (0.10 European and 0.13 non-European).

From this disease there were also amongst natives two cases at the N'dabeni Location. These are excluded from the above figures.



In the following table are set out, for the municipality exclusive of the Wynberg ward, the number of diphtheria cases and deaths, together with the corresponding rate, for a series of years:—

Year.	Cases.				Deaths.			
	European.		Non-European.		European.		Non-European.	
	Number	Rate per 1,000 population.	Number	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.
1914-15 .. ..	155	1.94	62	0.82	16	0.20	22	0.29
1915-16 .. ..	189	2.27	51	0.67	17	0.20	19	0.25
1916-17 .. ..	164	1.91	41	0.53	10	0.12	13	0.17
1917-18 .. ..	107	1.20	32	0.41	7	0.08	11	0.14
1918-19 .. ..	113	1.22	25	0.31	3	0.03	10	0.13
1919-20 .. ..	125	1.30	36	0.45	8	0.08	12	0.15
1920-21 .. ..	75	0.75	24	0.29	5	0.05	3	0.04
1921-22 .. ..	89	0.86	18	0.22	8	0.08	6	0.07
1922-23 .. ..	121	1.15	24	0.28	11	0.10	5	0.06
1923-24 .. ..	163	1.51	49	0.55	9	0.08	11	0.12
1924-25 .. ..	209	1.90	41	0.45	17	0.15	8	0.09
1925-26 .. ..	180	1.60	46	0.48	8	0.07	11	0.12
1926-27 .. ..	186	1.62	87	0.89	12	0.10	16	0.16
1927-28 .. ..	134	1.14	53	0.52	10	0.09	10	0.10
1928-29 .. ..	142	1.19	67	0.64	12	0.10	14	0.13

The cases in 1928-29 occurred in 207 houses, in 188 of which there was one case each, in 15 two cases each, in 2 three cases each, and in 2 four cases each.

In Table F on page 116 is shown the monthly distribution of the cases throughout the year.

The age and sex distribution of the cases will be found in Table H on page 118.

Of the 313 uncorrected cases, 265 were admitted to the City Hospital and two were treated in another hospital.

The ward distribution of the cases will be found in Table G on page 117.

#### SCHICK-TESTING AND ANTI-DIPHTHERIA INOCULATION.

Experimental work in this direction has been done in connection with the school clinic and certain of the child welfare centres (see Section iv of this report). A report on the subject was presented to the Health Committee on 14th January, 1929, and is set out below:—

City Health Department,  
12, Keerom Street,  
Capetown.  
14th January, 1929.

The Chairman and Members,  
Health and Building Regulations Committee.

Madam and Gentlemen,

Experimental work in Schick-testing and protective inoculation against diphtheria has been done by Dr. Dowie Dunn at the Council's maternity and child welfare centres and school clinic, and I now have the honour to report on the present position in regard to this subject.

#### HISTORY AND SCIENTIFIC BASIS.

The disease diphtheria is caused by a microbe known as the bacillus diphtheriae, which usually attacks the patient in the throat or nose. It there produces a soluble poison (or toxin) which is absorbed into the blood and by its destructive action in the body gives rise to the symptoms of the disease and in a proportion of cases to the death of the patient. The body reacts by the formation of antitoxin which neutralizes the poisonous action of the toxin. The bacillus was discovered in 1884, and in 1890 it was found that by subjecting horses to the action of the toxin formed by the bacillus a serum containing antitoxin can be produced which is of immense value in the treatment of diphtheria. This preparation was brought into general use in 1895 onward, and had a remarkable effect in reducing the percentage mortality of diphtheria cases.

In spite, however, of the favourable effects of the use of the antitoxin in treatment, the results of the knowledge of the bacteriology of diphtheria have been disappointing so far as the prevention of the disease is concerned. In many parts of the world it has increased in recent years. For



example, in London the incidence rate of diphtheria (per unit of population) in the seven years 1918-24 was 75 per cent. greater than in the seven years 1904-10, and the death-rate from the disease (per unit population) increased by 35 per cent.

The recent history of diphtheria in Capetown is shown by the following figures:—

Year.	No. of Cases.		Incidence rate per 1,000 population.		No. of Deaths.		Death rate per 1,000 population.	
	Eur.	Non-E.	Eur.	Non-E.	Eur.	Non-E.	Eur.	Non-E.
1914-15	155	62	1.94	0.82	16	22	0.20	0.29
1915-16	189	51	2.27	0.67	17	19	0.20	0.25
1916-17	164	41	1.91	0.53	10	13	0.12	0.17
1917-18	107	32	1.20	0.41	7	11	0.08	0.14
1918-19	113	25	1.22	0.31	3	10	0.03	0.13
1919-20	125	36	1.30	0.45	8	12	0.08	0.15
1920-21	75	24	0.75	0.29	5	3	0.05	0.04
1921-22	89	18	0.86	0.22	8	6	0.08	0.07
1922-23	121	24	1.15	0.28	11	5	0.10	0.06
1923-24	163	49	1.51	0.55	9	11	0.08	0.12
1924-25	209	41	1.90	0.45	17	8	0.15	0.04
1925-26	180	46	1.60	0.48	8	11	0.07	0.12
1926-27	186	87	1.62	0.89	12	16	0.10	0.16
1927-28*	162	62	1.25	0.54	10	12	0.08	0.11

\* Including Wynberg.

In 1913 Schick (of Vienna) discovered a method of testing whether a person is susceptible or "immune" to diphtheria, depending upon the amount of antitoxin in the blood and the power of the body to produce antitoxin rapidly in response to infection. The test is usually known as the Schick test, and is performed by injecting a definite minute quantity of diphtheria toxin into the skin of the forearm. From the presence or absence of a characteristic reaction at the site of injection in the course of a few days it can be ascertained whether or not the person tested is susceptible to diphtheria.

In the same year (1913) Behring investigated the application to human beings of a method of producing immunity to diphtheria by the subcutaneous injection of a mixture of toxin and antitoxin that had ten years before been found by Wernecke and by Park to lead to the formation of antitoxin in animals. The action of the antitoxin in the mixture was to neutralize the poisonous quality of the toxin without removing its immunizing power.

Park and his collaborators took up the work in New York in 1913, elaborated the technique, and by 1916 were able to demonstrate the effective use of a method for the immunization of children of school and pre-school ages. The susceptibility of the subjects is ascertained by the Schick test, and those that are found to be susceptible are rendered immune by the injection of toxin-antitoxin. Three injections are usually required, at weekly intervals. Immunity is only gradually developed, and is usually complete in from three to six months after the injections. Such acquired immunity can be observed by repeating the Schick test. Only a small percentage of subjects fail to respond in this way and these can almost all be immunized by a second series of injections. The immunity produced by this procedure has been found to last in most cases for as many years (e.g. seven or ten) as the observations have covered, and probably is life-long. It is this fact that makes the immunizing of the whole community practicable.

The protective inoculation against diphtheria has been studied and practised in many countries of the world. Efforts have been made to eliminate from the mixture the toxin, which is a highly poisonous substance though neutralized by the antitoxin. Research has established methods of altering toxin to a substance known as anatoxin or toxoid, which has the immunizing power of toxin without its poisonous qualities, and this substance is used in Canada, France and Austria. In England, as the result of work by O'Brien and others at the Wellcome Research laboratories, it has been found that excellent results are obtained from a mixture of toxoid and antitoxin, which gives an additional guarantee of safety. It is this mixture, known as toxoid-antitoxin, which is now chiefly used in Great Britain, and it was selected for use by Dr. Dowie Dunn in Capetown.

There has now accumulated in various parts of the world a vast body of experience of this system of immunization against diphtheria. The usual procedure is as described above, viz., Schick testing and the protective inoculation of those found to be susceptible. In the case of infants, amongst whom after the first few months of life the percentage of non-susceptibles is very low, the preliminary Schick test is often omitted.

In New York City 750,000 children of school or pre-school age had been tested and immunized up to May, 1927.\* In New York State outside of New York City over 116,000 children received three doses of toxin-antitoxin in the year 1926.† In England 50,000 persons have been tested and the susceptibles immunized under the auspices of the Ministry of Health.‡ Many municipalities in Great Britain have taken up the work, and there are schemes for the immunization of children on a public scale in Edinburgh, Aberdeen, Dundee, Birmingham, Manchester, Hull, Cardiff, the boroughs and suburbs of London, and other towns. Much work has also been done in Great Britain in the prevention of diphtheria by these methods in residential and other institutions, and the immunization of nursing and other staff in hospitals for the treatment of diphtheria. Dr. J. Graham Forbes, in his work on the subject\*\* records that schemes of anti-diphtheric inoculation have been instituted in other parts of the United States, in Australia, France, Holland, and in other countries.

\* New York City Department of Health, Weekly Bulletin, Vol. XVI, No. 21 (May 21st, 1927).

† E. S. Godfrey, Jr., "Medical Officer," Vol. XXXIX, No. 12, (March 24th, 1928), p. 127.

‡ Monkton Copeman, "British Medical Journal," No. 3515 (May 19th, 1928), p. 833.

\*\* Forbes, "The Prevention of Diphtheria," Medical Research Council, Special Report Series No. 115, 1927. Dr. Higgins desires to acknowledge his indebtedness to this work from which he has drawn largely in preparing his present report.



## SCHICK TESTING AND PREVENTIVE INOCULATION IN CAPETOWN.

Dr. Dowie Dunn, who conducts certain weekly infant consultations at the municipal child welfare centres and is also an honorary medical officer of the school clinic, undertook the Schick testing of patients at these sessions. Most of the persons tested and immunized were children attending schools in Claremont, Wynberg and Maitland and these were in the main dealt with at special school clinic sessions held at the child welfare centres in these three districts. A smaller number of children of pre-school age and of adults were dealt with at these special sessions and at ordinary infant consultation sessions. A few clinics were also held at institutions in the neighbourhood, viz., the Lady Buxton Home, the Railway Hostel at Rondebosch and the Medical School.

Toxoid-antitoxin was used for the immunizing injections. The toxin and toxoid-antitoxin used were the "Welcome" brand product. Many of the sessions were conducted by Dr. Dunn without fee, but otherwise the cost of the experiment (including the purchase of materials, the services of the health visitors and the use of the centre premises) was borne by the City Health Department. Dr. Dunn has published\* an analysis of the first 1,614 cases.

Altogether from the beginning of December, 1927, to the end of November, 1928, Dr. Dunn performed the Schick test on 1,833 persons, of whom 1,816 afterwards attended for inspection. The following table shows the results of this work, classified for race and age:—

Age.	European.†				Non-European.‡			
	Total tested.	Positive.	Negative.	Percentage Positive.	Total tested.	Total Positive.	Negative.	Percentage Positive.
0-1 ..	2	2	—	+	6	4	2	+
1-2 ..	12	10	2	+	9	5	4	+
2-3 ..	12	8	4	+	7	4	3	+
3-4 ..	14	10	4	+	5	2	3	+
4-5 ..	16	12	4	+	6	3	3	+
5-6 ..	8	6	2	+	8	5	3	+
6-7 ..	90	62	28	69	6	5	1	+
7-8 ..	153	94	59	61	34	16	18	+
8-9 ..	184	107	77	58	18	4	14	+
9-10 ..	170	82	88	48	17	4	13	+
10-11 ..	160	69	91	43	16	3	13	+
11-12 ..	154	64	90	42	17	4	13	+
12-13 ..	132	49	83	37	19	3	16	+
13-14 ..	165	59	106	36	17	3	14	+
14-15 ..	98	26	72	27	14	3	11	+
15 and over	233	114	119	49	14	6	8	+
Total ..	1,603	774	829	48	213	74	139	35

† All children attending schools denominated as European are here counted as European but a number of these were in fact more or less Coloured.

‡ Numbers too small for percentage to be struck.

Protective inoculation was performed in about 400 of the positive (i.e. susceptible) cases. The figures were as follows:—

1st immunizing injections .. .. .	413
2nd .. .. .	401
3rd .. .. .	376

100 of the persons immunized have been re-Schick tested. Of these 81 proved to be negative (i.e. "immune") on the first re-test. Only 4 of the 19 "positives" have been subjected to a second re-test and all four proved to have become negative.

It will be understood that there has not yet been time to immunize and re-test all the positive cases.

The testing and inoculating of children has in every case been done with the consent of the parent or guardian. The school principals have been very interested in the work and have been of the greatest assistance in carrying it through, and a good deal of the success has been due to the keenness of the health visitors concerned, especially Mrs. Blatchford and Mrs. Schierhout. A fair proportion of the children in some of the schools have been tested: for example 63 per cent. of the 404 scholars of the Claremont Public School, and 55 per cent. of the 388 scholars of the York Road School, Wynberg.

## GENERAL CONSIDERATIONS.

In coming to a conclusion as to the advisability of a public scheme of Schick testing and protective inoculation an answer has to be given to the following questions, viz:—

- (1) Is the operation free from danger?
- (2) Does the test give a trustworthy indication of immunity and is the inoculation procedure an effective preventative?
- (3) Is it likely that the public will accept the test and inoculation?
- (4) Will the results justify the cost?

These points will now be considered.

\* "Preliminary Report on Schick Testing in Capetown." Journal of Medical Association of South Africa (B.M.A.), Vol. II, No. 21, (Nov. 10th 1928), p. 578.



(1) *Freedom from Danger.*

There have been fatal accidents\* in connection with protective inoculation against diphtheria, viz., in Texas (1919), Massachusetts (1924) and Vienna (1925). All of these were due to free toxin being present through errors in the preparation of the toxin-antitoxin mixture. These errors would not occur with proper care (e.g. over two million injections of toxin-antitoxin had been given in New York State up to April, 1926, without any disaster occurring\*), and furthermore this risk is not present when toxoid-antitoxin is used. In January, 1928, there were fatalities in Bundaberg, Queensland. Here also it was toxin-antitoxin that was used, and the accident was due to bacterial contamination of the mixture, which contained no antiseptic. This possibility is removed by the presence of a proper proportion of antiseptic in the immunizing material that is used in South Africa, England and other parts of the world.

Dr. Dunn reports that in the Capetown experiment no untoward results of any kind have been experienced. Reference is made above to the complete absence of serious ill-effects in the great amount of work that has been done in New York. In England and Wales such work has been done for several years without any accident having been recorded.

The leading public health authorities throughout the world are of opinion that the operation is to be regarded as free from danger. Inoculations on a huge scale are being given in all parts of the world, and the risks of anti-diphtheria inoculation are no greater than those attending the use of prophylactic vaccines against other diseases. In England the Ministry of Health "has completed its investigations, extending over several years, and is so fully satisfied in advocating this line of prevention that it does not consider it necessary to conduct any further detailed inquiries, but will continue to urge its adoption by local authorities, to watch developments with care, and to assist and advise all concerned."† In this connection I may add that the Secretary for Public Health for the Union, writing to me on August 8th, 1927, on this subject, used the following words: "In the view of this Department, the time has come when the question of systematically utilizing these methods for the prevention of the diseases mentioned, especially in schools, school hostels and other institutions in which children or young adults are accommodated, should be seriously considered."

(2) *Does the test give a reliable indication of immunity and does the inoculation procedure confer immunity?*

It is hardly feasible in such a report as this to set out all the available data bearing on this point. It must suffice to say that there is a consensus of opinion, which I find convincing, that the question is to be answered broadly in the affirmative. It has to be remembered that there may be considerable room for difference of opinion (a) in the reading of the reaction to a Schick test, and (b) in deciding whether a patient is or is not suffering from diphtheria. Bearing this in mind, and expecting approximate and not absolute results, the evidence goes to show that a community in which all "positive" reactors have received protective inoculation will be almost, if not entirely, free from diphtheria.

(3) *Is it likely that the public will accept the test and inoculation?*

Our experience with the Capetown schools recorded in this report leads one to be hopeful in this respect. There is always a tendency for a certain part of the community to resist protective inoculation, as for example in the case of vaccination against small-pox, and for protagonists amongst objectors to adopt propagandist methods in opposition. But the absence of the element of compulsion and, for the present, the object lesson of recurring cases and fatalities from diphtheria will lend a help to a campaign of protective inoculation which is wanting in the case of vaccination against small-pox. Propaganda will of course be necessary to secure success.

(4) *Will the results justify the cost and trouble?*

From the table on page 2 it will be seen that in Capetown municipality (without the Wynberg ward) there were during the thirteen years ended June, 1927, an average of 186 cases of diphtheria and 21 deaths from diphtheria every year. It is difficult to say what amount of money per annum it would be considered worth spending to abolish or substantially reduce this sickness and mortality. It will of course be realized that it is only a small fraction of the total of preventable deaths from all causes. In the year 1926-27 one-twentieth part of the deaths of children aged from 2 to 10 years, were caused by diphtheria. The complete abolition of diphtheria would not make a great difference to the death returns; yet I believe the community would be willing to devote expenditure to a scheme offering a reasonable prospect of reducing the disease to a minimum. During the last few years the cost of treating cases of diphtheria at the City Hospital has exceeded £2,000 per annum and from the point of view of municipal expenditure only it would "pay" to spend that amount on a successful scheme for abolishing the disease. But it should be made clear that complete abolition cannot be promised (it is uncertain what proportion of the population will accept inoculation); and the expenditure at the hospital will continue in addition to the cost of the scheme of inoculation until, after a few years, the results of the latter have so accumulated as to become effective. The cost of a scheme of preventive inoculation is discussed in the next section of this report.

## A SCHEME OF PREVENTIVE INOCULATION AGAINST DIPHTHERIA.

In considering such a scheme it is first necessary to observe at what age the population is attacked by diphtheria. This is shown in the following table, in which the cases and deaths in Capetown for the year ended 30th June, 1928, are classified for race and age:—

*Diphtheria Cases notified 1927-28.*

Race.	Age-Groups.						Total.
	0-1.	1-2.	2-5.	5-10.	10-15.	Over 15.	
Europeans .. ..	6	5	29	35	28	59	162
Non-Europeans ..	3	6	22	17	3	11	62
All Races .. ..	9	11	51	52	31	70	224

\* Forbes, loc. cit. p. 11.

† Forbes, loc. cit., p. 31.



*Deaths from Diphtheria 1927-28.*

Race.	Age-Groups.						Total.
	0-1.	1-2.	2-5.	5-10.	10-15.	Over 15.	
Europeans ..	2	1	4	2	—	1	10
Non-Europeans ..	2	3	3	3	—	1	12
All Races .. ..	4	4	7	5	—	2	22

Our experience is to the effect that it is at school that Schick testing and protective inoculation can most easily be brought to bear. The parents of a large proportion of school children would probably consent to its application, and the procedure would be much facilitated by the fact of the children being collected together in school. It will be seen from the foregoing tables, however, that a large proportion of the cases of diphtheria occur before school age, and that the great majority of the deaths occur before the children go to school. Inoculation of school children alone would not therefore give the desired results, and it is necessary to consider the application of the procedure at an earlier age. In a complete scheme there should be a permanent arrangement for the inoculation of all infants; and an arrangement for the inoculation of all school children, especially entrants to school, until the time arrived when all school entrants would have been inoculated in infancy.

The child welfare centres are the obvious place for carrying out the work amongst infants. Special sessions would need to be held for the purpose. The number of children born in Capetown in the year 1927-28 was 8,626, of whom about 7,400 would survive at the end of the first year of life. For various reasons the three inoculations may be given at this age without a preliminary Schick test, and it may be estimated that if every child were dealt with in this way by the end of the first year of life the number of inoculations (*i.e.* the number of attendances) would amount to 22,000. It is not to be anticipated that such complete results as this would be obtained, and moreover a considerable number of infants might be inoculated by their family doctors. Estimating the number of attendances at clinics for inoculations at half this figure (*viz.* 11,000), and the number of injections given by one medical officer at a clinic at 125, this would involve the holding of 88 clinics per annum. The toxoid-antitoxin for each clinic would cost £6 and the medical officer's honorarium £2. There would be other expenses for home visitation, nurses' services, instruments, etc., and an allowance should be made for the probability that it will not always be possible to get the infants to be brought to the clinics in such a way as to space them out in the economical manner suggested. An additional health visitor would be required, and a rough estimate of £1,000 may be made of the expense of a year's working on this basis. The work will, however, be of such an experimental character that this estimate may prove to be wide of the mark. In particular it is obviously impossible to forecast what number of children will in fact be brought to the clinics for inoculations.

It is essential that infants should be included in the scheme, but for the present it is also desirable that the work in the schools should be continued. In most cases the testing and inoculation of school children can be done far more conveniently in the school buildings than at a clinic. If this is to be done it will be necessary to obtain the sanction of the Provincial Education Department.

It is important to keep accurate and carefully filed records of all tests and inoculations, in order that the incidence of diphtheria amongst the inoculated and uninoculated may be estimated in the future in a reliable manner; and it is therefore most desirable that full information should be obtained in regard to patients inoculated by private doctors. If a scheme were instituted an appeal would be made to the doctors to supply this information and it would be desirable to pay for the returns on the basis of a small fee per case.

A total expenditure of £2,000 per annum, which is below the amount now spent on treating cases of diphtheria at the City Hospital, should enable a scheme on the lines set out above (*viz.* (i) inoculation of infants, (ii) testing and inoculation of school children, and (iii) payment to doctors for returns) to be carried through.

I am, Madam and Gentlemen,

Your obedient servant,

T. SHADICK HIGGINS,

Medical Officer of Health.

The consideration of the foregoing report was adjourned until the preparation of the estimates for 1930, and a sum of £500 was eventually voted for work in this connection in 1930.

The work done from 6th December, 1927, to 30th June, 1929, is shown by the following figures:—

Number of persons Schick-tested .. .. .	2,202
(Exclusive of re-tests after inoculation.)	
Number positive ( <i>i.e.</i> susceptible) .. .. .	1,092
Number negative ( <i>i.e.</i> immune) .. .. .	1,086
Number who did not present themselves for examination .. .. .	24
Number of persons subjected to protective inoculation .. .. .	614
(Exclusive of those re-inoculated after re-testing.)	
Number of protective injections given .. .. .	1,736
Number of inoculated persons re-tested .. .. .	114
Number positive ( <i>i.e.</i> , susceptible) .. .. .	17
Number negative ( <i>i.e.</i> , immune) .. .. .	95
Number who did not present themselves for examination .. .. .	2



## SCARLET FEVER.

The cases of this disease reported in the year 1928-29, corrected by the exclusion of imported cases and misdiagnoses, numbered 164 (154 European and 10 non-European). This is equivalent to an incidence rate of 0.66 per 1,000 population (1.17 European and 0.08 non-European).

The original number of notifications was 188, of which 14 were in respect of cases brought into the municipality from outside. 16 of these (2 imported) were afterwards found in the City Hospital not to be suffering from scarlet fever. 4 cases admitted to the City Hospital for other diseases proved to have scarlet fever.

There were two deaths (one European male and one non-European female) amongst the 164 Capetown cases, giving a case mortality rate of 0.7 per cent. (European) and 10.0 per cent. (non-European). There was one death from this disease registered during the year (a non-European female).

In the following table are set out, for the municipality exclusive of the Wynberg ward, the number of scarlatinal cases and deaths, together with the corresponding rates, for a series of years:—

Year.	Cases.				Deaths.			
	European.		Non-European.		European.		Non-European.	
	Number	Rate per 1,000 population.	Number	Rate per 1,000 population.	Number.	Rate per 1,000 population.	Number.	Rate per 1,000 population.
1914-15 .. ..	78	0.98	10	0.13	2	0.03	—	—
1915-16 .. ..	128	1.54	8	0.10	—	—	—	—
1916-17 .. ..	52	0.60	4	0.05	—	—	—	—
1917-18 .. ..	97	1.09	13	0.17	—	—	—	—
1918-19 .. ..	153	1.65	18	0.23	—	—	—	—
1919-20 .. ..	274	2.84	23	0.29	3	0.03	—	—
1920-21 .. ..	224	2.25	15	0.18	2	0.02	—	—
1921-22 .. ..	97	0.94	9	0.11	—	—	—	—
1922-23 .. ..	47	0.45	5	0.06	—	—	—	—
1923-24 .. ..	26	0.24	3	0.03	—	—	—	—
1924-25 .. ..	50	0.46	1	0.01	—	—	—	—
1925-26 .. ..	129	1.15	8	0.08	—	—	1	0.01
1926-27 .. ..	123	1.07	11	0.11	—	—	—	—
1927-28 .. ..	217	1.85	6	0.06	3	0.03	—	—
1928-29 .. ..	125	1.05	10	0.10	—	—	1	0.01

The cases occurred in 141 houses, in 122 of which there was one case each, in 16 two cases each, in 2 three cases each and in 1 four cases.

The monthly distribution of the cases will be found in Table F on page 116, the ward distribution in Table G on page 117 and the age and sex distribution in Table H on page 118.

Of the 184 uncorrected cases, 143 were admitted to the City Hospital and none were treated in other hospitals.

## ERYSIPELAS.

The cases of this disease reported in the year 1928-29, corrected by the exclusion of imported cases and misdiagnoses, numbered 69 (43 European and 26 non-European).

The original number of notifications was 76, of which 6 were in respect of cases brought into the municipality from outside. Five of these (1 imported) were afterwards found in the City Hospital not to be suffering from erysipelas. Three cases admitted to the City Hospital for other diseases proved to have erysipelas.

There were ten deaths from erysipelas (five European and five non-European) during the year.

Thirty-eight cases of the disease were treated at the City Hospital.

## CEREBROSPINAL FEVER.

The cases of this disease reported in the year 1928-29, corrected by the exclusion of imported cases and misdiagnoses, numbered 131 (30 European and 101 non-European). This is equivalent to an incidence rate of 0.52 per 1,000 population (0.23 European and 0.86 non-European).

The original number of notifications was 278, of which 48 were in respect of cases brought into the municipality from outside. 114 of these (12 imported) were afterwards found in the City Hospital not to be suffering from cerebrospinal fever. 6 cases (3 imported) admitted to the City Hospital for other diseases proved to have cerebrospinal fever.

The number of deaths amongst the 131 Capetown cases was 71 (16 European and 55 non-European), giving a case mortality of 54.2 per cent. (53.3 European and 54.5 non-European). The corresponding percentages for 1927-28 were 52.3 43.6 and 54.1.

The total Capetown deaths from the disease registered during the year numbered 75 (16 European and 59 non-European), equivalent to a death rate of 0.30 per 1,000 population (0.12 European and 0.50 non-European).

From this disease there were also two cases (males) and two deaths (males) amongst natives at the N'dabeni Location.

In the following table the number of cases of cerebrospinal fever notified and of deaths from the disease are shown for each year since it was made notifiable:—

Year.	Cases notified.		Deaths.	
	European.	Non-European.	European.	Non-European.
1915-16 .. ..	2	—	—	—
1916-17 .. ..	2	—	1	—
1917-18 .. ..	6	2	3	2
1918-19 .. ..	3	5	—	5
1919-20 .. ..	3	6	3	3
1920-21 .. ..	4	1	3	1
1921-22 .. ..	4	1	—	—
1922-23 .. ..	4	5	4	2
1923-24 .. ..	2	3	2	3
1924-25 .. ..	6	19	5	11
1925-26 .. ..	4	21	5	19
1926-27 .. ..	10	39	6	29
1927-28 .. ..	31* 39†	159* 183†	13* 18†	79* 92†
1928-29 .. ..	27* 30†	94* 101†	14* 16†	57* 59†

\* Municipality not including Wynberg ward.

† Municipality including Wynberg ward.

These figures reflect the abnormal incidence of cerebrospinal fever which has occurred in Capetown in recent years. The increase first showed itself in 1924-25, reached its maximum in 1927-28, and has continued to be prevalent in 1928-29. The disease has not been confined to Capetown. Thirty-nine cases from the districts around Capetown Municipality were brought into Capetown hospitals for treatment during the year under report, and there was considerable prevalence of the disease in other towns in the Union.

The age and sex distribution of the cases was as follows:—

Age.	European.		Non-European.	
	Male.	Female.	Male.	Female.
Under 1 year .. ..	1	1	9	4
1 and under 5 .. ..	4	1	16	12
5 and under 10 .. ..	2	3	10	5
10 and under 15 .. ..	3	2	8	4
15 and under 25 .. ..	3	3	13	6
25 and over .. ..	6	1	9	5
	19	11	65	36



The monthly incidence of the cases (by date of notification) was as follows:—

	1928.			1929.	
	European.	Non-Eur.		European.	Non-Eur.
July .. ..	1	17	January ..	—	3
August .. ..	2	17	February ..	4	9
September ..	3	6	March .. ..	1	3
October .. ..	9	10	April .. ..	1	10
November ..	4	6	May .. ..	2	5
December ..	1	10	June .. ..	2	5
				30	101

The ward distribution of the cases is shown in the following table:—

Ward.	European.		Non-European.	
	No. of Cases.	Cases per 1,000 population.	No. of Cases.	Cases per 1,000 population.
1	—	—	—	—
2	—	—	4	0.96
3	1	0.54	6	3.25
4	2	0.19	5	0.48
5	2	0.20	—	—
6	2	0.27	22	3.02
7	—	—	20	7.00
8	8	0.64	3	0.24
9	6	0.49	4	0.33
10	1	0.08	2	0.16
11	1	0.17	5	0.83
12	1	0.17	5	0.87
13	2	0.18	13	1.18
14	1	0.18	4	0.72
15	3	0.24	7	0.57
Vagrant	—	—	1	—
Total	30	0.23	101	0.09

The one factor that is known to favour the spread of cerebrospinal meningitis is the overcrowding of living and sleeping quarters. It has been found in barracks, camps and compounds that the most efficacious means of preventing the spread of this disease is to reduce overcrowding and to space out the men in the sleeping quarters. Unfortunately it is not possible to deal in this way with the overcrowding that exists in the districts and houses where the disease has been prevalent.

To investigate the influence of overcrowding the number of persons per room (exclusive of kitchens) has been ascertained in 114 of the 119 dwelling houses where cases occurred. The results are as follows:—

No. of persons per room.	Houses.	
	European.	Non-European.
Under 1 .. ..	2	—
1 and under 1.5 ..	8	1
1.5 and under 2 ..	6	6
2 and under 3 .. ..	9	26
3 and under 4 .. ..	1	27
4 and under 5 .. ..	1	14
5 and under 6 .. ..	—	8
6 and under 7 .. ..	—	2
7 and under 8 .. ..	—	3
	27	87

To draw any conclusion from these figures as to the relation of overcrowding to the incidence of the disease it is necessary to compare them with similar figures for the whole population. In the 1926 census the private dwellings were classified according to the number of persons per room (exclusive of kitchens), and the census returns show tables on this point for Capetown Municipality (exclusive of Wynberg) in the case of non-Europeans, and for "Capetown and Suburbs" in the case of Europeans. (Neither of these tables would differ substantially from tables for Capetown Municipality with Wynberg.) In the following table the classification according to the number of persons per room is shown for Europeans and non-Europeans separately, (a) for houses (114) where cases occurred and (b) for all houses as given in the 1926 census returns in the manner shown above:—

No. of persons per room exclusive of kitchens.	Percentage classification of dwellings.					
	European.			Non-European.		
	Where cases of C.S.F. occurred (a)	Municipality (b)	b — a	Where cases of C.S.F. occurred (a)	Municipality (b)	b — a
Under 1 .. ..	7.4	36.0	4.9	—	2.8	—
1 and under 1.5 ..	29.6	33.6	1.1	1.2	10.3	8.6
1.5 and under 2 ..	22.2	14.5	0.7	6.9	9.8	1.4
2 and under 3 ..	33.4	12.6	0.4	29.9	29.3	1.0
3 and under 4 ..	3.7	2.4	0.6	31.0	22.7	0.7
4 and over .. ..	3.7	0.9	0.2	31.0	25.1	0.8
	100.0	100.0		100.0	100.0	

The above figures show a higher percentage of overcrowding in the houses where cases occurred than in the municipality generally, especially amongst Europeans.

Overcrowding is generally associated with other evil conditions, such as poverty, ignorance, etc., and it is not possible by statistical treatment of this kind to distinguish the influence of such conditions from that of the overcrowding itself.

During the year under report (1928-29) 27 of the European cases each occurred in separate houses, one in an institution, and two cases in one house. Of the 101 non-European cases, there were 85 houses with one case in each, four houses with two cases each, one house with three cases, and one house with five cases.

In the house with two European cases there were 1.8 persons per room; in the four houses with two non-European cases each, 3.5, 4.0, 4.5 and 5.0 persons per room respectively; in the house with three non-European cases 2.25 persons per room; and in the house with five non-European cases 4.3 persons per room.

The severe nature of the disease is shown not only by the high case mortality (53.3 per cent. European and 54.5 non-European) but also by the rapidity of the fatal issue. Of the 55 non-European fatal cases 34 died within a week of the onset, and seven of the 16 European fatal cases. The figures were as follows:—

	European.	Non-European.
1 day .. ..	1	2
2 days .. ..	3	1
3 days .. ..	1	3
4 days .. ..	—	9
5 days .. ..	2	6
6 days .. ..	—	8
7 days .. ..	—	5
	—7	—34
1—2 weeks ..	3	15
2—3 weeks ..	4	4
Over 3 weeks ..	2	2
	16	55

Of the 131 (corrected) Capetown cases, 97 were treated at the City Hospital, three in other hospitals, and 31 at home. The cases that were not removed to the City Hospital either died before notification or were too ill to be moved.



## INFECTIVE ENCEPHALITIS.

For the extended municipality the cases of this disease reported in the year 1928-29, corrected by the exclusion of imported cases and misdiagnoses, numbered 12 (seven European and five non-European).

The original number of notifications was 15, of which two cases were brought into the municipality already suffering from the disease and 4 (one imported) were found, after admission to City Hospital, not to be suffering from infective encephalitis. Two cases admitted to the City Hospital for other diseases, proved to have infective encephalitis.

Of the 12 cases eight were fatal (five of the seven European cases and three of the five non-European cases).

The total deaths from the disease registered during the year as belonging to the extended municipality numbered eight (five European and three non-European), equivalent to a death rate of 0.03 per 1,000 population (0.04 for Europeans and 0.03 for non-Europeans).

In the following table the number of cases of infective encephalitis notified and of deaths from the disease are shown for each year since it was made notifiable:—

Year.	Cases notified.		Deaths.	
	European.	Non-European.	European.	Non-European.
1920-21 .. ..	3	1	2	1
1921-22 .. ..	5	—	5	—
1922-23 .. ..	3	1	2	1
1923-24 .. ..	5	4	3	4
1924-25 .. ..	6	5	3	4
1925-26 .. ..	6	10	6	7
1926-27 .. ..	6	5	4	5
1927-28 .. ..	7* 8†	2* 3†	3* 3†	2* 3†
1928-29 .. ..	5* 7†	5* 5†	3* 5†	3* 3†

\* Municipality not including Wynberg ward.

† Municipality including Wynberg ward.

Reference to Table G on page 117 will show the ward distribution. There were cases in nine of the 15 wards. In Wards 11, 14 and 15 there were two cases each and in Wards 2, 4, 7, 8, 9 and 12 one case each.

Every case was in a different house, there being no secondary cases.

The monthly distribution will be found in Table F on page 116, from which it will be seen that ten of the 12 cases occurred in the first half of the year under report (viz., July-December, 1928).

The age and sex of the cases were as follows:—

Age.	European.		Non-European.		Total.
	Male.	Female.	Male.	Female.	
Under 15 years .. ..	1	1	2	1	5
15-25 years .. ..	—	1	—	—	1
Over 25 years .. ..	3	1	2	—	6
Total .. ..	4	3	4	1	12

Of the 12 cases four were treated at the City Hospital, three in other hospitals and five at home.

## ACUTE ANTERIOR POLIOMYELITIS.

For the extended municipality the cases of this disease recorded in the year 1928-29, corrected by the exclusion of imported cases and misdiagnoses, numbered five (four European and one non-European).

The original number of notifications was 6, of which one (an imported case) was found after admission not to be suffering from the disease.

Of the five cases one was fatal (one of the four European cases).

There was one death from the disease registered during the year as belonging to the extended municipality (a European male).

In the following table the number of cases of acute anterior poliomyelitis notified and of deaths from the disease are shown for each year since it was made notifiable:—

Year.	Cases notified.		Deaths.	
	European.	Non-European.	European.	Non-European.
1915-16 .. ..	4	5	Not separately classified.	
1916-17 .. ..	3	1	1	2
1917-18 .. ..	3	2	1	1
1918-19 .. ..	2	2	2	—
1919-20 .. ..	1	1	—	1
1920-21 .. ..	3	1	—	—
1921-22 .. ..	1	1	1	1
1922-23 .. ..	—	1	—	1
1923-24 .. ..	1	—	—	—
1924-25 .. ..	1	1	1	1
1925-26 .. ..	—	—	—	—
1926-27 .. ..	2	—	1	—
1927-28 .. ..	7* 8†	4* 4†	2* 2†	1* 1†
1928-29 .. ..	4* 4†	1* 1†	1* 1†	—* —†

\* Municipality not including Wynberg ward.

† Municipality including Wynberg ward.

Reference to Table G on page 117 will show the ward distribution. There was one case in each of five wards, viz., Wards 1, 4, 11, 12 and 13.

Every case was in a different house, there being no secondary cases.

The monthly distribution will be found in Table F on page 116.

The age and sex were as follows:—

Age.	European.		Non-European.		Total.
	Male.	Female.	Male.	Female.	
Under 1 year .. ..	—	—	—	—	—
1 and under 5 .. ..	—	—	—	1	1
5 and under 10 .. ..	2	1	—	—	3
10 and under 15 .. ..	—	—	—	—	—
15 and under 25 .. ..	1	—	—	—	1
25 and over .. ..	—	—	—	—	—
Total .. ..	3	1	—	1	5

Of the five cases one was treated at the City Hospital, two in other hospitals and two at home.

### INFLUENZA AND PNEUMONIA.

The notification of these diseases is very incomplete, and in regard to influenza only the first case in an outbreak in a house or institution is notifiable. In the year 1928-29 the corrected number of notified cases was as follows:—

Influenza .. ..	515
Influenzal pneumonia .. ..	140
Acute primary pneumonia .. ..	477

A more reliable index to the conditions is to be found in the death returns. In the following table is set out for each year from the great epidemic onwards the number of deaths (corrected for outward transfers) certified as due to influenza and certain other causes of death, including pneumonia, which sometimes increase



in the presence of influenzal infection (deaths in the native locations of Langa and N'dabeni excluded).

Year-	Influenza		Diseases of the heart.		Bronchitis.		Pneumonia.		Pulmonary Tuberculosis.	
	Eur.	Non-E.	Eur.	Non-E.	Eur.	Non-E.	Eur.	Non-E.	Eur.	Non-E.
1918-1919 ..	864	2,893	120	118	47	216	239	229	52	252
1919-1920 ..	2	5	130	116	39	203	71	385	58	261
1920-1921 ..	1	18	176	126	42	237	89	418	55	288
1921-1922 ..	5	10	153	137	43	197	112	379	87	237
1922-1923 ..	6	5	147	137	39	222	91	407	61	303
1923-1924 ..	3	3	135	164	32	185	92	445	72	336
1924-1925* ..	25	30	200	193	29	148	58	323	89	372
1925-1926 <sup>1</sup> ..	13	22	191	205	26	213	70	269	63	313
1926-1927* ..	13	18	151	202	40	255	84	387	91	399
1927-1928 <sup>1</sup> *	17	44	212	203	37	270	90	457	91	383
1927-1928 <sup>2</sup> *	20	52	230	227	39	335	96	509	97	441
1928-1929 <sup>1</sup> *	18	31	225	201	33	186	85	352	70	389
1928-1929 <sup>2</sup> *	23	33	243	221	40	217	93	390	75	435

\*Corrected for European inward transfers.

<sup>1</sup> Capetown not including Wynberg ward.

<sup>2</sup> Capetown including Wynberg ward.

Other statistical details will be found in Tables A, F, G, H and I on pages 94, 116, 117, 118 and 119.

43 cases of influenza (21 European and 22 non-European), 60 cases of influenzal pneumonia (23 European and 37 non-European) and 14 cases of acute primary pneumonia (3 European and 11 non-European) were treated in the City Hospital during the year.

#### PUERPERAL FEVER.

The cases of this disease reported in the year 1928-29, corrected by the exclusion of imported cases and misdiagnoses, numbered 83 (29 European and 54 non-European).

The original number of notifications was 97, of which 11 were in respect of cases brought into the municipality from outside. 4 of the cases (1 imported) were found (in the City Hospital) not to be suffering from puerperal fever.

The number of deaths amongst the 83 Capetown cases was 14 (7 of the 29 European cases, and 7 of the 54 non-European). The total Capetown deaths from the disease registered during the year numbered 12 (5 European and 7 non-European).

Of the 97 cases notified, 71 were admitted to the City Hospital (27 European and 44 non-European).

*Attendance at Confinement.*—69 of the cases were confined at home and 14 in hospital. Of the 69 at home, 39 were attended by midwives only, 6 by doctors only, and 13 by doctors and midwives; 8 were unattended in labour, and in 3 cases information on this point was not obtained.

*Condition of child.*—46 of the cases supervened upon the birth of a living child and 36 of a dead foetus; and in one case no information on this point was obtained. Of the 36 cases following delivery of a dead foetus, 8 were of a dead viable foetus, and 28 of a non-viable foetus.

*Primiparae.*—25 of the cases were reported as primiparae (*i.e.*, women in their first confinement) and 48 as multiparae. In 10 cases there was no information on this point.

*Treatment.*—58 of the cases (net) were removed to the City Hospital, 4 to Wynberg Cottage Hospital, 1 to the Monastery Nursing Home, 3 to the Peninsula Maternity Home and 2 to St. Monica's Home; the remaining 15 were treated at home.



## OPHTHALMIA NEONATORUM AND GONORRHOEAL OPHTHALMIA.

For the purposes of notification ophthalmia neonatorum is taken to mean a purulent inflammation of the eyes of an infant beginning within 21 days after birth, whether it is due to infection with the gonococcus or not. Cases of inflammation of the eyes beginning after the 21st day of life are not regarded as ophthalmia neonatorum, but if due to gonococcal infection are notifiable as gonorrhoeal ophthalmia.

For the extended municipality the cases of this disease reported in the year 1928-29, corrected by the exclusion of imported cases, was 147 (25 European and 122 non-European).

The original number of notifications was 160, of which 12 were cases brought into the Somerset Hospital for treatment from outside of the municipality, and another arrived from up-country, where the disease had been contracted.

Of these 147, 19 were cases not in the newly born (3 European and 16 non-European), being at the time of onset aged 23, 27, 27 and 28 days, 1, 1,  $1\frac{1}{4}$ ,  $1\frac{1}{4}$ ,  $1\frac{1}{2}$ ,  $1\frac{3}{4}$ ,  $2\frac{1}{2}$ ,  $3\frac{1}{2}$  and 5 months, and 4, 4, 19, 32, 34 and 35 years, respectively.

The number of Capetown cases of true ophthalmia neonatorum notified during the year was therefore 128, comprising 22 Europeans (10 males and 12 females) and 106 non-Europeans (51 males and 55 females).

Of these 128 cases, 12 were born in institutions and 116 at home. Of the 116 home confinements, 6 were recorded as having been attended by doctors, 107 by midwives only, and 1 was unattended, there being no information on the point in 2 cases.

The object of ophthalmia neonatorum being a notifiable disease is that the Medical Officer of Health may ensure so far as possible that the cases shall receive efficient treatment. The disease is recognised as being an important cause of blindness or injury to sight if proper treatment is not undertaken, while on the other hand the cases respond well to efficient treatment. Every case has therefore been visited by the Health Visitors at the earliest possible moment after being reported, and many of them have been seen by the lady medical officer. The in-patient treatment has been supplied by the Somerset Hospital and efforts have been made to ensure that the patients should be admitted to hospital in every case where it has been advisable. In 55 cases in-patient treatment has been secured, 51 at the Somerset Hospital and 4 at other hospitals. In the other 73 cases the patient has been treated at home. In 40 of the latter cases out-patient treatment has been given at the hospitals, child welfare centres or free dispensaries.

Efforts were made to see all the children after the completion of treatment, and the results were as follows:—

Eyes completely recovered .. ..	109
Cases of blindness .. ..	1
Sight damaged .. ..	3
Died before recovery .. ..	10
Lost trace of .. ..	5
	<hr/>
	128
	<hr/>

It is to be recorded that the Health Visitors reported 32 of the cases as "slight", and 85 as "moderate" or "grave"; while there was no information on this point in 11 cases.

## TYPHUS FEVER.

One case of this disease was reported in the person of a European male aged 40, living in Ward 5. The patient was notified as a case of enteric fever and admitted to the City Hospital in July, 1928, where he was found to be a case of typhus (Weil-Felix reaction strongly positive, 1 in 500). No source of infection was traced.

## SMALLPOX.

There was one European female case of smallpox and 7 contacts (4 European males and 3 European females) removed to the Smallpox Hospital at Rentzkie's



Farm, in November, 1928, from a steamer in the port of Capetown. The diagnosis of smallpox was probably incorrect. Illness began ten days before the arrival of the vessel in port.

### ANTHRAX.

There were 2 cases of anthrax notified during the year. One was a European female aged 27 years, a resident of Ward 1 (Sea Point) whose husband was a dealer in skins. The pustule was on the left side of the chin. The case was nursed at home and recovered. The other case was that of a native male aged 45 years, a resident of the N'dabeni Native Location, Maitland. The pustule was situated on the right lower jaw. This patient was employed by a firm of skin merchants and was admitted to the City Hospital where he died. In addition there was one European male who was notified as a suspected case of anthrax but after admission to the City Hospital proved to be a case of pyogenic infection.

### TRACHOMA.

24 cases were notified during the year. 15 of these belonged to Capetown, 8 were cases admitted to the Somerset Hospital for treatment from places outside of the municipality, whilst the remaining case had recently arrived from up-country where the disease had been contracted.

The 15 Capetown cases included 1 European male, 2 European females, 1 non-European male, and 11 non-European females.

Five cases were treated as in-patients at the Somerset Hospital and the other 10 at home. Nearly all the cases notified were reported by ophthalmic specialists or by resident doctors at the hospitals. The notifications are evidently incomplete.

### LEPROSY.

Five cases of leprosy were notified during the year. The particulars are as follows:—

#### *Imported Infection.*

- (1) A Coloured male, adult, age unknown, admitted in March, 1929, to Capetown Infirmary from a distant part of the Cape Province and died the next day. This man was also suffering from tuberculosis of the lungs.

#### *Local Infection.*

- (2) A Coloured male, aged 13 years, admitted in September, 1928, to Capetown Infirmary from the Wynberg district in Ward 15. This case had resided seven years in the house from which he was removed. The illness began at least two years before the case was reported.
- (3) A Coloured male, aged 22 years, admitted in June, 1929, direct to Robben Island from the Diep River district in Ward 15. This case had resided two months in the house from which he was removed. He had lived previously at four other addresses in the present municipality since coming to Capetown when he was about 16 years old.
- (4) A Coloured female, aged 14 years, admitted in May, 1929, to Capetown Infirmary from the Diep River district in Ward 15. This case resided nine years in the house from which she was removed.
- (5) A Coloured female, aged 19 years, admitted in June, 1929, direct to Robben Island from the Diep River district in Ward 15. This case was a sister of the above Coloured male case (3).

Nos. (2) and (4) were transferred from the Capetown Infirmary to the Robben Island Leper Hospital.

### MEASLES.

There were 18 deaths from measles in the year 1928-29, 9 European and 9 non-European.

In the following table measles mortality figures for the whole City and its constituent wards are shown for each year since Unification, beginning with the first complete year (corrected for outward transfers):—

Years (1st July to 30th June).	Race.	WARDS.															City.
		Sea Point.	Harbour.	West Central.	Kloof.	Park.	East Central.	Castle.	Woodstock.	Salt River.	Mowbray.	Maitland.	Rondebosch.	Claremont.	Kalk Bay.	Wynberg.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1914-1915 ..	Eur.	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
	Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
1915-1916 ..	Eur.	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—	2
	Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1916-1917 ..	Eur.	—	—	—	1	1	2	4	3	3	—	3	1	2	—	—	20
	Non-E.	—	2	8	16	7	28	22	9	9	5	22	14	3	2	—	147
1917-1918 ..	Eur.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
	Non-E.	—	—	—	—	—	2	2	—	—	—	1	2	—	—	—	7
1918-1919 ..	Eur.	—	1	—	—	—	—	1	1	—	—	—	—	—	—	—	3
	Non-E.	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	2
1919-1920 ..	Eur.	1	—	—	1	—	—	1	2	3	—	1	—	—	—	—	9
	Non-E.	—	1	1	1	—	2	2	1	3	—	1	—	—	—	—	12
1920-1921 ..	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	2
	Non-E.	1	3	2	—	—	1	—	2	5	—	2	8	3	—	—	27
1921-1922 ..	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1922-1923 ..	Eur.	—	—	—	—	—	—	—	—	—	1	2	—	—	—	—	3
	Non-E.	—	—	—	1	—	2	2	2	—	6	7	1	—	—	—	21
1923-1924 ..	Eur.	—	1	2	1	2	2	—	4	4	—	2	1	1	—	—	20
	Non-E.	—	5	7	8	1	45	23	7	8	2	3	3	2	2	—	116
1924-1925 ..	Eur.	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
	Non-E.	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	2
1925-1926 ..	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E.	—	2	—	—	—	1	—	—	—	—	1	2	—	—	—	6
1926-1927 ..	Eur.	—	1	2	—	—	2	1	1	—	1	—	1	—	—	—	9
	Non-E.	—	—	—	1	—	4	6	1	2	1	7	9	5	2	—	38
1927-1928 ..	Eur.	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1	3
	Non-E.	—	—	2	—	—	3	—	2	3	—	1	—	—	—	1	12
1928-1929 ..	Eur.	—	—	—	—	—	1	—	2	1	1	2	—	1	—	—	9
	Non-E.	—	—	—	—	—	1	1	—	—	—	1	1	2	3	—	9

N.A. = Not allocated (address unascertainable).

Up to and including 1923-24 the figures are corrected for outward transfers. For 1924-25 and subsequent years they are corrected for outward and inward transfers in the case of the Europeans and outward transfers only in the case of the non-European.

Other statistical information for 1928-29 will be found in Table A on pages 96 and 97, from which it will be seen that all the deaths were of children under 5 years of age with the exception of one (European female) which was in the age-group 5-10 years.



## WHOOPIING COUGH.

There were 43 deaths from this disease for the year 1928-29, 11 European and 32 non-European.

In the following table the whooping cough mortality is shown for the whole City and its constituent wards for each year since Unification, commencing with the first complete year (corrected for outward transfers):—

Years (1st July to 30th June).	Race.	WARDS.															City.
		Sea Point.	Harbour.	West Central.	Kloof.	Park.	East Central.	Castle.	Woodstock.	Salt River.	Mowbray.	Maitland.	Rondebosch.	Claremont.	Kalk Bay.	Wynberg.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1914-1915 ..	Eur.	—	—	—	1	2	1	1	1	5	1	1	3	—	—	—	16
	Non-E.	—	—	—	7	—	8	2	1	7	5	3	20	16	3	—	72
1915-1916 ..	Eur.	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	2
	Non-E.	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	2
1916-1917 ..	Eur.	—	—	2	—	—	—	2	3	2	—	—	2	1	—	—	12
	Non-E.	—	—	—	1	—	1	7	1	6	—	—	2	2	—	—	20
1917-1918 ..	Eur.	—	—	1	—	—	—	—	1	2	1	1	1	1	2	—	10
	Non-E.	—	1	3	1	—	8	4	—	6	—	1	9	4	3	—	40
1918-1919 ..	Eur.	—	2	—	1	—	—	1	2	—	—	—	—	1	—	—	7
	Non-E.	—	—	1	3	—	4	5	2	3	—	—	—	3	1	—	22
1919-1920 ..	Eur.	1	—	—	—	—	—	—	2	6	—	1	—	—	—	—	10
	Non-E.	—	3	1	1	2	6	2	2	5	2	1	4	—	—	—	29
1920-1921 ..	Eur.	1	—	—	2	—	—	2	2	5	1	—	1	—	2	—	16
	Non-E.	—	1	2	3	—	1	5	5	3	1	11	4	3	2	—	41
1921-1922 ..	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E.	—	—	—	1	—	—	1	2	1	—	—	—	—	—	—	5
1922-1923 ..	Eur.	—	—	1	—	—	1	—	4	1	—	—	1	—	—	—	8
	Non-E.	—	—	—	—	—	2	2	4	6	—	3	7	—	1	—	25
1923-1924 ..	Eur.	—	4	—	—	—	1	—	3	8	—	3	2	—	—	—	21
	Non-E.	1	4	4	1	1	7	6	6	10	2	11	13	1	2	—	69
1924-1925 ..	Eur.	1	—	—	—	—	—	—	—	3	—	—	—	—	—	—	4
	Non-E.	—	—	—	—	—	2	—	—	1	—	—	3	1	3	—	10
1925-1926 ..	Eur.	—	—	—	1	—	1	—	2	1	—	—	—	—	—	—	5
	Non-E.	—	—	2	—	—	3	3	—	1	1	3	6	—	1	—	20
1926-1927 ..	Eur.	—	—	—	—	—	—	—	1	3	1	1	—	1	—	—	7
	Non-E.	—	1	—	—	—	4	1	1	—	—	—	3	9	—	—	19
1927-1928 ..	Eur.	1	—	1	—	1	—	—	7	2	—	2	—	3	2	2	21
	Non-E.	—	1	4	1	—	5	7	7	3	4	12	11	8	4	7	74
1928-1929 ..	Eur.	1	—	—	1	—	1	—	2	3	—	—	—	2	1	—	11
	Non-E.	—	1	1	1	—	2	3	2	1	1	1	3	2	4	10	32

Up to and including 1923-24 the figures are corrected for outward transfers. For 1924-25 and subsequent years they are corrected for outward and inward transfers in the case of the Europeans and outward transfers only in the case of the non-Europeans.

Other statistical information for 1928-29 will be found in Table A on pages 96 and 97, from which it will be seen that all the deaths were of children under 10 years of age, and all but 3 under 5.



## DIARRHOEA.

The number of deaths certified in 1928-29 as being due to diarrhoea and enteritis, and dysentery, after correction for outward transfers, amounted to 473 (61 European and 412 non-European), equivalent to a death rate of 1.90 per 1,000 population (0.46 European and 3.51 non-European).

There were also 3 inward transfers in the case of Europeans (2 males and 1 female), which brings the number of European deaths corrected for outward and inward transfers to 64, equivalent to a death rate of 0.49 per 1,000 European population.

The deaths from these diseases are shown in the next table for each month of the year and for each ward of the Municipality. Certain monthly meteorological data are also shown.

In addition to the above figures there were 29 deaths from these diseases (14 males and 15 females—natives) in the Native Locations of Langa and N'dabeni. These are included in the following table:—

Months.	Race.	Sea Point.	Harbour.	West Central.	Kloof.	Park.	East Central.	Castle.	Woodstock.	Salt River.	Mowbray.	Maitland.	Rondebosch.	Claremont.	Kalk Bay.	Wynberg.	Langa Native Location.	N'dabeni Native Location.	Not Allocated.	Totals: A.	Totals: B.	Temperature of Air in the Shade (Mean at 8 a.m.).	Earth temperature, Range at 4 ft.	Rainfall in inches.	Total Hours of Bright Sunshine.
Jan., 1928 (Weeks)	Eur.	—	—	—	—	—	—	—	2	1	—	—	—	—	—	—	—	—	—	3	3	59.0 to 54.01	62.2	2.01	hrs. mins. 185 28
Feb., 1928 (Weeks)	Eur.	—	—	—	—	—	1	—	2	1	—	1	—	—	—	—	—	—	—	5	5	59.0 to 55.06	60.2	2.79	209 21
Mar., 1928 (Weeks)	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	1	58.9 to 54.09	60.3	3.75	202 29
Apr., 1928 (Weeks)	Eur.	1	—	—	—	—	1	—	2	—	—	—	—	—	—	—	—	—	—	4	4	60.3 to 59.03	64.0	0.92	280 39
May, 1928 (Weeks)	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	2	2	64.0 to 61.09	66.0	1.18	292 53
June, 1928 (Weeks)	Eur.	—	1	—	—	—	1	2	2	1	—	1	—	—	2	11	4	7	—	8	8	66.2 to 65.79	69.4	0.57	341 1
July, 1929 (Weeks)	Eur.	1	—	2	—	—	13	6	1	1	2	5	17	7	4	14	1	3	—	12	13	69.5 to 69.72	72.1	0.05	377 17
Aug., 1929 (Weeks)	Eur.	—	—	—	1	—	—	—	—	1	1	1	1	—	—	—	—	—	—	5	5	70.8 to 63.08	78.8	0.56	302 48
Sept., 1929 (Weeks)	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	71.0 to 64.37	72.5	0.55	260 8
Oct., 1929 (Weeks)	Eur.	—	—	—	—	—	1	3	—	1	3	—	2	2	1	—	—	—	1	14	15	66.8 to 57.56	71.0	3.40	164 36
Nov., 1929 (Weeks)	Eur.	—	1	—	—	1	—	—	2	—	—	—	—	—	—	—	—	—	—	4	4	62.2 to 55.62	66.7	1.96	138 53
Dec., 1929 (Weeks)	Eur.	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	2	3	60.1 to 53.16	62.1	2.66	188 12
Year .. (Weeks)	Eur.	2	3	—	3	1	2	4	12	7	2	8	1	6	2	6	—	—	2	61	64	58.9 to 59.38	78.8	20.40	2943 45
	Non-E.	1	12	12	27	3	48	41	20	22	11	41	60	43	21	49	6	23	1	441	—	—	—	—	—

A. Corrected for outward transfers.

B. Corrected for outward and inward transfers.

It will be seen that the mortality was comparatively low in July, August, September and October, was at its greatest in December, January and February, and gradually declined during March, April, May and June.

Of the European deaths from these causes (corrected for outward transfers), 43, or 70 per cent., were in children under 1 year of age, and 54, or 89 per cent.,



in children under 5 years of age. The corresponding percentages of the non-European deaths, including deaths in the Native locations, were 283, or 64 per cent., under 1 and 427, or 97 per cent., under 5.

### VENEREAL DISEASES.

The number of deaths (corrected for outward transfers) certified during the year 1928-29 as being due to syphilis was 99, 89 of non-Europeans and 10 Europeans.

Of the 89 deaths of non-Europeans, 74 were of children under 1 year of age, 79 under 5 years of age and 79 of persons under 15 years of age. Of the 10 European deaths, 7 were of children under 1 year of age, and the remainder of adults.

These figures represent only a portion of the mortality due to this disease. This is because of two reasons. In the first place there is often an indisposition to state on a death certificate that the cause of death is a venereal disease, and consequently the cause is certified in a form less painful to the friends of the deceased. In the second place there are a large number of fatal affections of the different organs of the body, especially certain diseases of the circulatory and nervous system, which are the result of past syphilitic infection and these are usually so certified that the venereal aetiology of the condition does not manifest itself in the death statistics. They do not reflect, also, the ante-natal deaths that result from syphilitic infection.

There were two deaths (non-European) certified as due to gonorrhoea; one under 1 year of age and one in the age group 35-45 years.

The Council's scheme for the treatment of venereal disease includes (a) municipal treatment centres, and (b) in-patient treatment at the City Hospital. Two-thirds of the approved expenditure on these services is repaid to the Council by the Union Government.

*Municipal Treatment Centres.*—There are two such centres, one at the City Hospital, Portswood Road, and one at Salt River Road, Woodstock. During the year there have been held 165 weekly clinics for males and 161 for females at the former, and 164 for males and 113 for females at the latter.

The particulars of the work done at the Treatment Centres will be found at page 81.

*In-patient Treatment.*—There are wards at the City Hospital, Portswood Road, with beds for 24 venereal disease patients, giving separate accommodation for males and females, European and non-European. During the year ended 30th June, 1929, the cases of venereal disease that were admitted numbered 235 (95 European and 140 non-European).

Particulars in regard to cases at the City Hospital will be found in the report of the Medical Superintendent at page 83.

Cards in both official languages containing warning notices in regard to these diseases and the times of the clinics at the Treatment Centres are hung up in all the public conveniences for both sexes, and they have been supplied for similar use in the conveniences controlled by the City Council and Railway Administration and at factories, etc., throughout the City. They have also been supplied for display in chemists' shops.

### CANCER.

The number of deaths (corrected for outward transfers) certified during the year 1928-29 as being due to cancer or malignant disease was 227 (117 males and 110 females), of which 144 (79 males and 65 females) were of Europeans and 83 (38 males and 45 females) were of non-Europeans. There were three inward transfers of European deaths (2 males and 1 female).

The death rates from cancer per 1,000 population concerned (corrected for outward and inward transfers for Europeans and for outward transfers for the whole population and for non-Europeans) were therefore:—

For the whole population	.. ..	0.91	(males, 0.95; females, 0.87).
For Europeans	.. ..	1.12	(males, 1.26; females, 0.98).
For non-Europeans	.. ..	0.71	(males, 0.65; females, 0.76).



From the foregoing figures it will be observed that the recorded rate of mortality from this disease amongst Europeans was greater by 58 per cent. than amongst non-Europeans.

The variation in the mortality from this disease during the past 10 years is shown in the table at page 18, where it will be seen that for both Europeans and non-Europeans the rate for the year under report is considerably above that of the previous decennium.

The parts of the body affected in the deaths from cancer, and other facts, are shown in Table A on pages 98 to 101.

#### SECTION IV.—MATERNITY AND CHILD WELFARE AND THE WORK OF THE HEALTH VISITORS.

Dr. Mary van Ingen, who for eight years had been in charge of this branch of the work of the City Health Department retired on 31st October, 1928, by reason of her marriage and departure from the country. Dr. van Ingen had carried out the duties of her office with ability and zeal, and her period of service had been marked by a great expansion in the Council's Maternity and child welfare work. Her leaving was greatly regretted by those amongst whom she had worked.

Dr. Marguerite Douglas-Drummond, L.R.C.P. & S., Edin., was appointed in place of Dr. van Ingen as Lady Medical Assistant to the Medical Officer of Health and took up her duties on 1st November, 1928.

On 2nd April, 1929, Dr. Mary Broome, M.B., Ch.B., Capetown, was appointed as Junior Lady Medical Officer to take charge of consultations and clinics previously undertaken by part-time medical officers and to assist in the administration of this branch of the Department.

The new premises which had been built by the Council at St. James Street, Woodstock, to take the place of the unsuitable premises at 3 Milner Road, Woodstock, which had been rented for the purpose for several years, were brought into use on the 27th August, 1928. The new premises comprise assembly room, weighing room, and consultation room; clinical room and dental room served by a common preparation room; and kitchen, caretaker's room and domestic offices. Two dental clinics were opened for necessitous children and nursing and expectant mothers found at the various centres to be in need of dental treatment. The first dental clinic took place on 20th November, 1928.

The Wynberg centre, which was held in rooms in the Wynberg Town Hall, outgrew that accommodation, and on 1st April, 1929, it was transferred to a larger suite of rooms in the Town Hall.

The Council's maternity and child welfare centres in June, 1929, were seven in number. They are enumerated in the table at page 58, and the consultations and clinics are set out in the table at page 59.

The staff of health visitors at the end of June, 1929 (exclusive of the three who devote their time solely to work in connection with tuberculosis), numbered eighteen in addition to the Chief Lady Inspector and the Social Welfare Investigator.

#### NOTIFICATION OF BIRTHS.

The Regulations *re* Early Notification of Births (made by the Minister of Public Health under Section 133 (1) of the Public Health Act, No. 36 of 1919, and promulgated in Government Notice No. 1058 of the 18th June, 1920), applicable to Capetown and certain other towns, have been in operation since the latter date, and form the basis of the work of the Department amongst mothers and young children. The Regulations provide:—

(1) In respect of every child born after the completion of the sixth month of pregnancy, whether alive or dead, within the municipality, it shall be the duty of the father of the child if he is residing with the mother when the child is born, or, in his absence, the person attending on the mother at the time of or within six hours after the birth to furnish forthwith either verbally or in writing to the Medical Officer of Health the following particulars:—

- (a) Name, age and race of mother.
- (b) Name of father.



- (c) Date and time of birth.
- (d) Place where the birth occurred and present address of mother.
- (e) Permanent address of mother.
- (f) Number of confinement (first, second, etc.).
- (g) Whether the child was born alive and was alive at time of reporting.
- (h) Name of medical practitioner, midwife or other person who was in attendance.
- (i) Name and address of informant.

(2) The foregoing particulars shall, if reported verbally, be furnished to the Medical Officer of Health at his office or otherwise at such place as may be notified by advertisement, within 24 hours of the birth, or where a Sunday or public holiday intervenes, on the next succeeding day.

(3) If furnished through the post, the notification must be posted within 24 hours of the birth. The Council shall supply, on application, and free of charge, to any medical practitioner or midwife residing or practising in the municipality, stamped and addressed letter cards containing the form of notification.

(4) The notification required to be made under these regulations shall be in addition to and not in substitution for the requirements of any law relating to the registration of birth, and any registrar of births and deaths, or any person duly authorised thereto by such registrar shall, at all reasonable times, have access to notices of births received by a medical officer of health under these regulations, or to any book in which those notices may be recorded.

(5) Any person failing to comply with any provision of these regulations shall be liable on conviction to a fine not exceeding twenty-five pounds (£25).

Printed and stamped notification forms are supplied to midwives practising in the City.

During the year 1928-29 the number of births notified was 9,913.

Notified by midwives and nurses (other than extern or intern institutional cases) .....	6,928
Notified by doctors .....	39
Notified by institutions (extern and intern) .....	2,412
Notified by parents and others .....	534

#### WORK OF HEALTH VISITORS.

The duties of the district health visitors include the following:—

*Visits to houses where births have occurred.*—The information in regard to births is obtained chiefly from information received in terms of the Regulations *re* Early Notification of Births. The visits are made to the mothers with the object of giving such advice and assistance as will ensure as far as possible that the infants are properly nurtured. The mothers are encouraged to bring the babies to the Council's Welfare Centres. The health visitors continue to visit until the children reach five years of age.

*Visits to expectant mothers.*—This is carried out on a small scale only, information as to pregnancy ordinarily not being available.

*Visits to protected infants under the Children's Protection Act No. 25 of 1913.*—Until 23rd August, 1928, this was done only within the Magisterial District of Capetown, but after that date it was extended to the Magisterial District of Wynberg. "Protected infants" are those children under seven years of age who not being in the care of their own parents or near relatives are under the supervision of the Resident Magistrate. Foster mothers (or others) having charge of such children are required by the Act to report the fact to the Magistrate, whose duty it is to cause them to be visited by visitors authorised by him for that purpose. In the Magisterial Districts of Capetown and Wynberg the magistrates have authorised the Medical Officer of Health of Capetown so far as concerns the area of the Municipality, and the visiting work is done by the Health Visitors. Reports are sent to the magistrate concerning each protected infant every three months. Foster mothers are required in most cases to bring the children from time to time to the Welfare Centres. The areas of the two magistracies cover the whole municipality except the greater part of Ward 14.

*Investigations into indigent cases of confinement where fees are payable to medical practitioners called in by midwives according to the Council's scheme for dealing with such cases.*—This work is on a small scale.



*Visits in connection with the supervision of the practice of midwives.*—The early notification of births enables such a supervision to be exercised, but the legal basis for this is at present insufficient and unsatisfactory. Certain municipal regulations (framed under Section 194 of the Cape Municipal Ordinance No. 10 of 1912, promulgated under Provincial Administration Notice, No. 367 of 25th November, 1914, and subsequently amended) are in operation which require all midwives practising in the municipality to notify the Medical Officer of Health to that effect, and provide for a measure of control over midwives and their practice. The regulations, however, are not satisfactory, and it is hoped that in the near future regulations for Capetown will be made by the Minister of Public Health under Section 18, Sub-section 3, of the Public Health (Amendment) Act, No. 15 of 1928, which will enable an adequate system to be operated for the licensing of midwives and the control of their practice.

*Visits and other investigations in regard to cases of certain infectious diseases* such as ophthalmia neonatorum, puerperal fever, influenza, pneumonia, measles and whooping cough.

*Attendance during Sessions at the Maternity and Child Welfare Centres.*—Cases of illness or poverty discovered in their districts by Health Visitors are reported to the Lady Medical Officer and referred to hospitals, convalescent homes, the Free Dispensary, the Board of Aid, etc. Sanitary defects are referred to the Chief Sanitary Inspector. As mentioned elsewhere, special duties are assigned to the Tuberculosis Health Visitors and the Social Welfare Investigator.

The following table shows the number of visits made by the Health Visitors (excluding the Social Welfare Investigator) during the period under review and in previous years:—

Description of Visits Classified.	Number of Visits.						
	1928-29.	1927-28.	1926-27.	1925-26.	1924-25.	1923-24.	1922-23.
Visits to Houses where Births have occurred .. .. .	9,504	8,657	7,933	7,270	7,496	7,058	6,938
Visits to Houses where Deaths under 5 years of age have occurred ..	327	293	278	163	145	1,637	1,296
Subsequent Visits to Houses where Births have occurred .. .. .	29,473	27,706	27,498	21,863	22,855	22,365	17,178
Visits to Expectant Mothers .. .. .	980	195	—	—	—	—	—
Visits re Protected Infants .. .. .	2,479	2,102	1,966	1,638	1,791	337	—
Visits to cases of Tuberculosis .. .. .	8,026	5,741	4,003	1,793	2,193	1,778	2,035
Visits re cases of Puerperal Fever .. ..	93	84	84	69	46	31	41
Visits re Measles .. .. .	75	72	202	24	22	236	75
Visits re Mumps .. .. .	—	—	5	41	—	3	—
Visits re Whooping Cough .. .. .	4	28	40	13	19	70	41
Visits re Diarrhoea .. .. .	27	37	80	69	27	8	—
Visits re Chicken Pox .. .. .	29	51	18	10	13	9	2
Visits re Ophthalmia Neonatorum .. ..	510	476	397	343	200	76	64
Visits re Pneumonia .. .. .	445	477	380	266	228	—	7
Visits re Trachoma .. .. .	22	16	8	8	—	—	—
Visits re Influenza .. .. .	555	488	262	269	406	3	4,853
Visits re Midwives .. .. .	1,186	1,333	947	1,158	602	439	429
Visits to Schools .. .. .	106	58	63	13	3	2	7
Visits to Shops and Factories .. .. .	—	140	81	27	58	86	1
Visits to Nursing Homes .. .. .	33	24	27	—	2	23	—
Visits re Vermineous Persons .. .. .	63	19	15	11	23	—	—
Visits re Dental Treatment .. .. .	75	—	—	—	—	—	—
Other Visits .. .. .	1,762	3,241	2,618	1,179	630	427	856
Investigation of Cases for Board of Aid ..	—	270	396	—	—	—	—
<b>Total Visits .. .. .</b>	<b>57,044</b>	<b>51,508</b>	<b>47,301</b>	<b>36,227</b>	<b>36,759</b>	<b>34,588</b>	<b>33,823</b>
Complaints referred to Chief Sanitary Inspector .. .. .	29	81	83	113	121	73	67

#### SOCIAL WELFARE INVESTIGATOR.

The work of this official began in April, 1927, when the present holder of the office was appointed. It consists largely in the investigation of cases needing advice and disposal from the social and moral standpoint. The maternity and



child welfare branch of the department comes in contact with many unmarried mothers and their infants, and there is great scope for a worker having the time and ability to investigate difficult cases in detail and to keep in touch with the various social agencies dealing with such cases.

The work done by the Social Welfare Investigator during the year ended 30th June, 1929, is shown in the following table:—

New cases investigated .. .. .	591
Visits to cases .. .. .	1183
Visits to institutions .. .. .	364
Visits to Government Offices .. .. .	144
Other visits .. .. .	826
Total visits .. .. .	2,517
Office consultations .. .. .	788

#### MATERNITY AND CHILD WELFARE CENTRES.

The sessions that were being held at the end of June, 1929, at the seven Municipal Maternity and Child Welfare Centres (exclusive of the school clinic—see page 59) are shown in the following tables:

##### INFANT CONSULTATIONS.

Mondays ..	9 a.m.	Retreat .. .. .	Non-European.
	2 p.m.	Station Road, Claremont .. .. .	Non-European.
	2 p.m.	Health Department, Keerom Street, Cape-town. .. .. .	Non-European.
Tuesdays ..	2 p.m.	St. James Street, Woodstock .. .. .	European.
	9 a.m.	St. James Street, Woodstock .. .. .	Non-European.
	9 a.m.	Lawrence Road, Athlone .. .. .	European and Non-European.
Wednesdays	2 p.m.	Town Hall, Wynberg .. .. .	Non-European.
	2 p.m.	Health Department, Keerom Street, Cape-town .. .. .	Non-European.
	2 p.m.	Norfolk Street, Maitland. .. .. .	Non-European.
	9 a.m.	St. James Street, Woodstock .. .. .	Non-European.
	2 p.m.	Health Department, Keerom Street, Cape-town .. .. .	Non-European.
Thursdays ..	2 p.m.	St. James Street, Woodstock .. .. .	European.
	9 a.m.	Norfolk Street, Maitland .. .. .	European.
	9 a.m.	Lawrence Road, Athlone .. .. .	European and Non-European.
Fridays ..	2 p.m.	Town Hall, Wynberg .. .. .	Non-European.
	2 p.m.	St. James Street, Woodstock .. .. .	European.
	2 p.m.	Retreat .. .. .	European.
	9 a.m.	Station Road, Claremont .. .. .	European.
	2 p.m.	Health Department, Keerom Street, Cape-town .. .. .	European.
	2 p.m.	Town Hall, Wynberg .. .. .	European.

##### PRE-NATAL CLINICS.

4th Tuesday	2 p.m.	Lawrence Road, Athlone ..	European and Non-European.
Wednesdays	2 p.m.	Norfolk Street, Maitland ..	European and Non-European.
1st and 3rd Thursdays.	2 p.m.	Health Department, Keerom Street, Capetown ..	European and Non-European.
Fridays ..	9 a.m.	Retreat .. .. .	European and Non-European.
	2 p.m.	St. James Street, Woodstock ..	European and Non-European.
	2 p.m.	Station Road, Claremont ..	European and Non-European.

##### DENTAL CLINIC.

Tuesdays ..	2 p.m.	St. James Street, Woodstock .. .. .	Non-European.
Thursdays ..	2 p.m.	St. James Street, Woodstock .. .. .	European.

The next table shows the attendances made at the infant consultations, pre-natal clinics, school clinic, and dinners for expectant and nursing mothers, held at the seven Maternity and Child Welfare Centres, classified for race:—

Centre.	Race.	Infant Consultations.		Pre-natal Clinics.		Dinners for nursing and expectant mothers. Attendances.	School Clinic.	
		Attendances.		Attendances.			Attendances.	
		First.	Total.	First.	Total.		First.	Total.
12 Keerom Street, Capetown.	E. . .	199	2,484	18	27	43		
	Non-E.	969	8,118	77	165	4,061		
	Tot.	1,168	10,602	95	192	4,104		
Salt River.. ..	E.	674	5,414	61	204	106		
	Non-E.	595	4,653	138	493	546		
	Tot.	1,269	10,067	199	697	652		
Maitland .. ..	E.	197	1,969	30	97	30		
	Non-E.	431	2,792	120	315	1,465		
	Tot.	628	4,761	150	412	1,495		
Athlone .. ..	E.	26	104	2	6			
	Non-E.	380	2,845	34	71			
	Tot.	406	2,949	36	77			
Claremont ..	E.	147	1,974	33	98	18	552	1,562
	Non-E.	260	2,365	195	600	213	274	848
	Tot.	407	4,339	228	698	231	826	2,410
Wynberg .. ..	E.	211	1,332					
	Non-E.	659	3,438					
	Tot.	870	4,770					
Retreat .. ..	E.	143	1,134	3	5	43		
	Non-E.	438	2,887	75	185	1,580		
	Tot.	581	4,021	78	190	1,623		
Totals .. ..	E.	1,597	14,411	147	437	240	552	1,562
	Non-E.	3,732	27,098	639	1,829	7,865	274	848
	Tot.	5,329	41,509	786	2,266	8,105	826	2,410

#### INFANT CONSULTATIONS.

Mothers of all classes are encouraged to bring their infants regularly to the infant consultations, all of which are weekly fixtures. The consultations are intended to be mainly educational in nature and not out-patient departments for the treatment of disease. They are meant for infants that are well, or showing only minor deviations from the normal, or suffering from nutritive disturbances or the results of faulty nurture. Definite cases of disease are referred from the consultations to their private doctors or, in indigent cases, to the hospitals. Certain minor ailments are treated, though it is not desired that that side of the work should take a prominent place; and the aim of the administration is to make the infant consultations of such a nature that private medical practitioners can without misgiving know that children belonging to families in their practice are in attendance.

The object of the consultations and the visiting work of the health visitors is to produce and maintain healthy babies, and keep them under observation until they attain school age.

At each session a medical officer is in attendance, assisted by health visitors working in the district served by the Centre and by voluntary workers. The baby is weighed at each attendance, and a record of the weight entered on a



card kept by the mother. The mothers are instructed in the nurture of their children, who are from time to time examined by the medical officer.

In certain cases of young infants who cannot be breast-fed, dried milk is supplied at cost price under the medical officer's directions. In cases of poverty it is supplied free. In the year ended 30th June, 1929, 1,533 babies have been supplied with dried milk, and 11,194 lbs. have been used for the purpose. The cost of the dried milk was £1,051 6s. 5d., and of this £292 14s. 7d. was contributed by the mothers.

Where fresh milk is ordered by the medical officer it has been supplied out of a voluntary fund provided by the Capetown Society for the Protection of Child Life. During the year 1928-29 19,907 pints were supplied. The cost of the milk was £295 10s. 4d. and £48 9s. 4d. was contributed by the mothers. Since the end of the year under report the cost of the supply of fresh milk has been undertaken by the City Council.

The services of the voluntary workers who attend the centres on consultation days have been of great value, and thanks are due to these ladies for their faithful attendance and assistance.

The number of attendances at the infant consultations is shown below for a series of years:—

Centre.	1928-1929.	1927-1928.	1926-1927.	1925-1926.	1924-1925.
Capetown .. ..	10,602	10,026	8,307	7,510	5,962
Maitland .. ..	4,761	4,145	4,285	2,575	2,136
Salt River .. ..	10,067	8,801	8,072	6,367	5,147
Athlone .. ..	2,949	2,502	1,983	2,050	1,757
Claremont .. ..	4,339	3,990	3,996	4,520	3,284
Wynberg .. ..	4,770	1,433			
Retreat .. ..	4,021	716			
Totals .. ..	41,509	31,613	26,643	23,022	18,286

The number of new cases and total attendances at the infant consultations at each centre during the year under review, classified for race, is shown in the table on page 59. It will be seen that the number of new attendances (of all ages) during the year (5,339) amounted to 61 per cent. of the number of registered births. For Europeans the figure (1,597) was 57 per cent. of the number of births and for non-Europeans (3,732) 63 per cent.

#### PRE-NATAL CLINICS.

At the end of June, 1929, pre-natal clinics were held at six of the Welfare Centres, one by the Lady Medical Officer, four by part-time obstetrics specialists and one by a general practitioner. These clinics were held weekly at Woodstock, Maitland, Claremont and Retreat, twice a month at Keerom Street, and once a month at Athlone.

Expectant Mothers are encouraged to attend these centres, and are suitably treated with a view to ensuring as far as possible a normal delivery in regard both to the mother and infant. The mothers are guided in arranging for the approaching confinement, and are suitably instructed as to the care of the expected baby. Anti-venereal treatment is provided at certain of these clinics, especially for the prevention and cure of congenital syphilis.

The number of new cases and total attendances at the pre-natal clinics at each centre during the year under review, classified for race, is shown in the table on page 59.

#### DENTAL CLINIC.

As mentioned above, the dental clinic at the Woodstock Centre was opened on 20th November, 1928. Two sessions per week have been held, one for Europeans and one for non-Europeans. The patients are children and nursing and expectant mothers attending at one or other of the Council's welfare centres who are considered by the medical officers to be in need of dental treatment.



The weekly sessions have been conducted by two part-time dentists appointed for the purpose, and an anaesthetist attends the sessions as required.

The work done at the clinic during the year ended 30th June, 1929, is shown in the following table:—

			European.			Non-European.			Total.			
			Adults	Children	Total	Adults	Children	Total	Adults	Children	Total	
ATTENDANCES.			First .. ..	48	145	193	102	87	189	150	232	382
			Other .. ..	67	112	179	99	53	152	166	165	331
			Total .. ..	115	257	372	201	140	341	316	397	713
For Extractions only	Under General Anaesthetic ..	Attendances ..	61	110	171	125	74	199	186	184	370	
		Teeth extracted	252	763	1,015	664	677	1,341	916	1,440	2,356	
	Without General Anaesthetic	Attendances ..	3	17	20	7	9	16	10	26	36	
		Teeth extracted	9	32	41	16	27	43	25	59	84	
For Fillings only .. ..			Attendances ..	5	30	35	8	6	14	13	36	49
			Teeth filled ..	12	45	57	11	7	18	23	52	75
For Scalings only .. ..			Attendances ..	2	—	2	1	—	1	3	—	3
For Extractions Fillings Combined	Teeth extracted under General Anaesthetic ..	Attendances ..	—	—	—	—	—	—	—	—	—	
		Teeth .. ..	—	—	—	—	—	—	—	—	—	
	Teeth extracted without General Anaesthetic	Attendances ..	—	4	4	—	—	—	—	4	4	
		Teeth .. ..	—	8	8	—	—	—	—	8	8	
	Teeth Filled	.. ..	—	6	6	—	—	—	—	6	6	
For Examination only .. ..			41	93	134	60	50	110	101	143	244	
For Interview only .. ..			3	3	6	—	1	1	3	4	7	

#### PROVISION OF DINNERS.

Free dinners for nursing and expectant mothers in indigent circumstances have been continued through the year at the centres at Keerom Street (City), Woodstock, Maitland and Claremont, and were started at Retreat on the 23rd April, 1928. The number of dinners provided at each centre, classified by race, is shown in the table on page 59.

#### SCHOOL CLINIC.

At the Claremont welfare centre a weekly school clinic is held by Dr. C. Louis Leipoldt, Dr. D. Dowie Dunn, and Dr. Adele Impey, who give their services without payment. The Council provide the premises, drugs, etc., and the service of health visitors. Assistance is also rendered by voluntary helpers. Usually two of the doctors are present at each weekly session held on Thursday mornings. A part of the morning is devoted to European children and a part to non-European.

The classes of cases that have been dealt with at the clinic have been chiefly the following:—

- Children with defects that have been found by the School Medical Officers but not dealt with.
- Children considered by the school principals to be in urgent need of medical examination where there would not be a visit from the School Medical Officer in the near future.
- Children at schools, such as mission schools, where the School Medical Officers do not visit.



A detailed statement as to the objects of the school clinic and the work done there will be found in last year's annual report. The Council did not consider that it was directly responsible for such work as that of the school clinic, but in view of the offer of the doctors to serve without payment, it was prepared as an experiment to provide the premises, staff, etc., in the hope that a permanent scheme of school clinics at the child welfare centres might be evolved in co-operation with the Provincial Education Department, together with a system of co-operation between the School Medical service and the City Health Department. A deputation from the Council's Health Committee waited upon the Director-General of Education on 19th March, 1929, and upon the Administrator of the Cape Province on 21st June, 1929, to urge the need for the Provincial Education Department to assume financial responsibility for school clinics. A scheme was put forward for two school clinic sessions per week to be held at three of the Council's maternity and child welfare centres, viz., Keerom Street (City), at Woodstock and at Claremont or Wynberg. There could be one medical officer in attendance at each clinic, and the estimated cost, including payment of the medical officers and the salary of two health visitors to be appointed for the purpose, was estimated at £1,260 to £1,300 per annum. It was intimated that if the Provincial Administration would undertake this financial responsibility the City Council would make no charge for the use of the premises and that the full co-operation of the City Health Department would be available in connection with the school clinic. The Administrator, while prepared to subsidize to the extent of 50 per cent. any voluntary organisation undertaking the maintenance of school clinics did not accept the Council's proposal, and nothing further has been done in that connection. It is now proposed to approach the Provincial authorities again.

The work done at the school clinic during the year ended 30th June, 1929, is shown by the following figures:—

	Eur.	Non-E.	Total.
Number of new cases .. .. .	562	294	856
Total attendances .. .. .	1,562	848	2,410
Number of clinics held.. .. .	51		

Cases needing specialist attention, such as those with defects of the eyes, of the throat, nose or ear, and of the teeth, have been referred to their family doctors, or to out-patient departments, a definite appointment being made by telephone or otherwise in each case as far as possible. Cases of minor ailments, malnutrition, etc., have been treated at the clinic. A number of cases have been referred to the district nurses. A point has been made of getting the parents to attend with the children where possible.

Sessions for Schick-testing and anti-diphtheria immunization have been held in connection with the school clinic (see page 39). The attendances for this purpose are not included in the figures given above.

## SECTION V.—GENERAL ADMINISTRATION.

### STAFF.

*Medical Staff.*—Dr. Mary van Ingen resigned and left the service on 31st October, 1928. Dr. Marguerite Douglas-Drummond was appointed in her place as Lady Medical Assistant to the Medical Officer of Health, commencing duty on 1st November, 1928.

Dr. Mary Broome was appointed as Junior Lady Medical Officer on 2nd April, 1929.

Reference to Dr. van Ingen's resignation and the appointment of Dr. Douglas-Drummond and Dr. Broome is made on page 55.

As from 1st August, 1928, the medical work at the Native Locations, including the control of the native hospital at N'dabeni, was transferred from Dr. C. K. O'Malley to Dr. J. F. Wicht, Medical Superintendent of Hospitals, who was given the assistance of a house physician and surgeon resident at the City Hospital, Portsworld Road. The resident appointment was made on a six-monthly basis to correspond with the system in operation in connection with the hospitals of the Cape Hospital Board. Quarters for the house physician and surgeon are to be built at the City Hospital, and in the meantime apartments have been rented in a house near the hospital. Dr. J. Wakeford was appointed as a house physician



and surgeon from 1st August, 1928, to 31st January, 1929, and Dr. C. J. J. van Heerden from 1st February to 31st July, 1929.

Following upon this arrangement Dr. C. K. O'Malley since 1st August, 1928, has devoted the whole of his time to his work as Venereologist, including in addition to the control of the venereal disease clinics medical attendance on the patients in the venereal disease wards at the City Hospital, Portswood Road.

*Sanitary Inspectors.*—Mr. D. J. Hanafin retired on pension on attaining the age of 60 on the 21st January, 1929, after 27 years and 9 months service.

Mr. C. W. Ravenscroft, previously learner sanitary inspector, was appointed to the fixed establishment as Sanitary Inspector as from the 30th January, 1929.

Mr. R. L. P. Hendry left the service on the 23rd March, 1929.

*Health Visitors.*—Miss D. E. G. Philpott left the service on the 28th August, 1928.

Miss D. F. W. Leggatt was appointed as a temporary health visitor on the 1st September, 1928, and left the service on the 30th April, 1929. Miss Phyllis Store was appointed as health visitor in a temporary capacity on the 1st May, 1929.

*City Hospital, Portswood Road.*—Miss E. Everatt was appointed as Matron, in place of Miss M. M. Blair, retired, commencing duty on 9th July, 1928.

Miss M. Davies, Assistant Matron, left the service on 31st August, 1928.

*City Isolation Hospital, Rentskie's Farm.*—Mr. F. J. Enstrom, who joined the service as a Sanitary Inspector on the 16th July, 1898, and was transferred to the Smallpox Hospital, Rentskie's Farm, as Superintendent on the 1st August, 1900, retired on reaching the age of superannuation on the 1st January, 1929, having completed 29 years and 6 months service.

#### SANITARY INSPECTORS AND OTHER SANITARY STAFF.

At 30th June, 1929, the staff of sanitary inspectors included the Chief Sanitary Inspector, two assistants to the Chief Sanitary Inspector, one Relief Sanitary Inspector, 17 district Sanitary Inspectors, 4 Sanitary Inspectors for food premises, 2 Sanitary Inspectors for dairy stables, 1 Sanitary Inspector for industrial premises, 2 Rodent Inspectors, and 3 Learner or Assistant Sanitary Inspectors.

Since the end of the year the staff has been reorganised by dividing the Inspectors into five divisional staffs each dealing with a division of the Municipality. The five divisions are respectively Wards 1-4, Wards 5-7, Wards 8, 9 and 11, Wards 10, 12 and 13, and Wards 14 and 15. Each division is in charge of a Divisional Sanitary Inspector, who has under his control four (in one division, five) district Sanitary Inspectors each of whom is in charge of one of the districts into which the division is split. The Divisional Inspector has no district of his own. The headquarters of the divisions are at 12, Keerom Street (two), and the Town Halls at Woodstock, Rondebosch and Wynberg. The positions of Relief Inspector, and Inspectors for food premises and industrial premises have been abolished, the duties being done by the divisional staffs. The District Inspectors include the three learner or assistant inspectors. The Dairy and Rodent Inspectors remain, and the total staff of sanitary inspectors has been reduced by one.

In addition to the foregoing inspectorial staff there is a staff of ratcatchers which on the 30th June, 1929, consisted of twelve men and four youths; two labourers who assist the Sanitary Inspectors in drain testing; and a staff of attendants of both sexes at the public sanitary conveniences or "chalets" who are referred to on page 78.

A Meat Inspector who is responsible for the inspection of meat imported into the municipality and holds the certificates of the Royal Sanitary Institute for Sanitary Inspectors and for Meat and Food Inspectors, is also attached to the Department.

In addition to the staff set out above there are two removal Inspectors, two chauffeurs, and one labourer, whose duty it is to remove cases of infectious disease to hospital and carry out the subsequent disinfection of premises and articles, and one engineer and two labourers in charge of the disinfection plant. The work done by this staff is referred to on page 27.

There are also four chauffeurs for the three departmental cars and the departmental delivery van.



The inspections made by the male sanitary inspectors (other than the meat inspector and rodent inspectors) during the year under review are indicated by the following figures:—

*Inspections made :*

Public Markets .. .. .	1,243
Butchers' Shops .. .. .	4,232
Dealers' and General Dealers' Shops (Food) .. ..	9,814
Dealers' and General Dealers' Shops (no Food) ..	3,191
Fish and Poultry Shops .. .. .	799
Bakers' Shops (without Bakehouses) .. .. .	299
Bakehouses .. .. .	603
Milk Shops (Purveyors of Milk) .. .. .	929
Ice Cream Purveyors and Manufacturers .. ..	385
Tea Shops .. .. .	1,963
Cafes .. .. .	477
Restaurants .. .. .	776
Eating Houses .. .. .	280
Residential Hotels and Boarding Houses .. ..	675
Aerated Water Manufacturers .. .. .	104
Other Places where Food is Manufactured .. ..	368
Hawkers' Premises .. .. .	3,058
Hawkers' Carts .. .. .	1,092
Butchers' Carts and Carriers .. .. .	639
Milk Delivery Carts .. .. .	5,433
Fish Carts .. .. .	349
Bakers' Carts .. .. .	136
Ice Cream Carts .. .. .	74
Tents .. .. .	196
Side Shows .. .. .	122
Theatres and Bioscopes .. .. .	244
Billiard Saloons .. .. .	60
Common Lodging Houses .. .. .	62
Tenement Houses .. .. .	2,146
Other House Inspections .. .. .	60,727
Hairdressers .. .. .	1,576
Laundries .. .. .	487
Mattressmakers and Upholsterers .. .. .	137
Other Factories and Work Places .. .. .	2,514
Courts, Lanes and Alleys .. .. .	6,757
Open Land .. .. .	2,523
Piggeries .. .. .	668
Horse Stables .. .. .	12,296
Dairy Stables .. .. .	5,390
Cattle Dealers' Premises .. .. .	147
Visits made in connection with Infectious Diseases ..	2,030
Hackney Carriages .. .. .	25
Standing Water, Catchpits, etc., <i>re</i> Mosquitoes ..	1,110
Sites or Premises, <i>re</i> Deposited Plans .. .. .	254
Public Sanitary Conveniences .. .. .	6,361
Refuse Tips .. .. .	884
Other Visits .. .. .	1,003

*Particulars in connection with Visits recorded in the above Inspections :*

Visits to premises where action was taken in connection with Rodent Infestation .. .. .	618
Visits at which premises were disinfected .. .. .	68
Drain Tests carried out .. .. .	1,165
Visits where enquiries were made <i>re</i> Outworkers ..	345

The notices served by the Sanitary Inspectors during the year under review are enumerated below:—

*Proceedings begun by :*

Verbal notices .. .. .	3,452
Written request notices .. .. .	123
Formal written notices .. .. .	5,776

Total proceedings begun .. .. . 9,351

Verbal notices which had to be followed by written notice 940

*Total notices served :*

Verbal notices .. .. .	3,452
Request notices .. .. .	125
Formal notices .. .. .	6,615
Final Notices .. .. .	1,474

Total .. .. . 11,666

The items dealt with in the cases in which proceedings were begun by notice are as follows:—

Number of Items.	Drainage and Water Supply.	WARDS OF THE CITY.															City of Cape-town.
		1. Sea Point.	2. Harbour.	3. West Central.	4. Kloof.	5. Park.	6. East Central.	7. Castle.	8. Woodstock.	9. Salt River.	10. Mowbray.	11. Maitland.	12. Rondebosch.	13. Claremont.	14. Kalk Bay.	15. Wynberg.	
1.	Drains, Defective (re Rats) .. ..	—	—	1	—	2	2	—	—	2	1	—	1	—	—	—	9
2.	" Defective .. ..	59	20	21	54	52	21	40	15	20	16	4	5	15	2	8	352
3.	" Choked .. ..	81	4	16	12	6	40	7	37	19	9	10	14	17	5	19	296
4.	" Provide .. ..	1	—	1	2	—	1	1	2	2	3	3	3	3	1	8	31
5.	Inspection Chambers and Covers, Defective	13	—	1	6	4	—	—	3	2	1	4	—	1	—	—	37
6.	" Provide .. ..	4	7	8	15	7	16	26	40	22	6	8	2	15	3	6	185
7.	Traps—Drainage, Defective .. ..	63	2	9	15	2	11	26	3	8	4	3	1	5	3	10	165
8.	" Choked .. ..	40	2	4	2	—	2	5	1	—	5	3	3	2	3	7	79
9.	" Provide .. ..	1	—	1	1	—	3	1	1	—	—	2	1	—	—	—	11
10.	Soil and Vent Pipes, Defective .. ..	4	—	3	2	2	11	1	6	3	2	1	1	2	1	5	44
11.	" Provide .. ..	—	—	—	2	—	—	—	—	—	—	—	—	—	1	—	3
12.	" Remove .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
13.	Air Inlets to Drain, Defective .. ..	20	—	1	2	3	1	6	—	—	—	—	1	2	—	12	48
14.	" Provide .. ..	—	1	2	3	—	—	—	—	—	—	—	—	—	—	—	6
15.	" Remove .. ..	—	—	1	—	—	—	—	—	—	1	—	1	—	—	—	3
16.	Water Closets and Privies, Defective	6	4	1	11	2	15	3	1	1	2	3	49	18	2	39	157
17.	" Cleanse .. ..	8	10	1	1	2	13	3	3	2	23	5	6	12	1	6	96
18.	" Provide .. ..	9	2	2	2	1	5	12	2	1	5	12	97	41	6	142	339
19.	Urinals, Defective .. ..	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
20.	" Cleanse .. ..	1	2	—	—	1	—	—	1	—	—	—	—	—	—	1	6
21.	" Provide .. ..	—	1	—	—	—	—	—	—	2	—	1	—	—	—	1	5
22.	Slop-Closets, Defective .. ..	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	2
23.	" Cleanse .. ..	2	—	—	—	—	—	—	—	—	1	—	2	—	—	3	8
24.	" Provide .. ..	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
25.	Water Closet Pans, Defective .. ..	5	—	—	2	1	6	2	5	2	5	—	—	10	—	5	43
26.	" Cleanse .. ..	11	—	—	—	—	4	—	3	—	4	1	2	—	—	9	34
27.	" Provide .. ..	17	5	4	5	3	26	23	11	18	3	4	4	11	2	15	151
28.	Closet Seats, Provide or Repair .. ..	14	4	—	1	—	13	14	9	21	8	13	23	28	4	75	237
29.	" Cleanse .. ..	1	—	—	—	—	—	—	—	—	1	—	—	1	—	—	3
30.	Closet Floors, Defective .. ..	—	—	—	—	—	5	5	2	3	3	—	7	21	—	5	51
31.	" Cleanse .. ..	2	—	—	—	—	—	—	1	—	4	—	—	2	—	—	9
32.	" Provide or Pave .. ..	—	1	2	—	—	—	—	—	1	—	1	3	2	—	—	10
33.	Closet Pails, Provide .. ..	2	—	—	1	—	—	—	—	2	11	44	42	1	92	—	195
34.	Flushing Cisterns and Pipes, Defective	101	17	4	9	8	71	45	72	34	22	9	13	35	1	37	478
35.	" Provide .. ..	1	2	2	1	—	2	6	—	1	—	—	—	—	—	1	16
36.	Sinks or Washhand Basins, Defective	3	1	—	—	1	2	2	10	10	1	3	1	2	—	1	37
37.	" Cleanse .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
38.	" Provide .. ..	2	1	—	—	—	—	4	—	1	2	—	1	2	2	2	17
39.	Baths, Defective .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
40.	" Cleanse .. ..	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
41.	Sink or Bath Wastes, Defective .. ..	20	3	1	5	4	22	12	22	22	6	11	—	8	9	16	161
42.	" Choked .. ..	6	—	—	1	—	2	—	2	1	2	1	—	1	1	—	17
43.	" Provide .. ..	2	5	1	5	1	1	5	2	—	17	—	—	1	1	9	50
44.	Washing Areas, Defective .. ..	1	—	—	—	—	1	—	2	13	9	4	7	33	—	26	96
45.	" Provide .. ..	7	—	1	—	—	1	1	—	1	3	1	1	1	—	7	24
46.	Open Channels, Defective .. ..	6	—	—	1	—	4	1	8	21	15	10	7	2	5	5	85
47.	" Provide .. ..	5	—	1	1	3	6	1	19	11	7	14	7	7	—	7	89
48.	Catchpits, Defective .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
49.	" Empty .. ..	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
50.	" Provide .. ..	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	2
51.	" Remove .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
52.	Water Supply, Provide .. ..	3	3	1	—	—	6	4	1	3	8	3	8	24	1	28	93
53.	" Inadequate .. ..	8	3	2	—	2	21	3	9	11	6	1	5	18	—	11	100
54.	Water Tanks and Covers, Defective	8	—	—	1	—	5	1	—	—	—	1	—	—	—	—	16
55.	" Cleanse .. ..	3	—	—	—	—	6	—	—	—	—	—	—	—	—	—	9
56.	" Provide .. ..	1	—	—	—	—	1	1	—	—	—	—	2	—	—	—	5
57.	" Remove .. ..	2	7	1	1	—	6	1	1	2	—	1	8	—	—	—	30
58.	Water Pipes and Fittings, Defective or	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
59.	" Choked .. ..	19	6	1	2	1	17	11	22	17	6	8	7	14	—	3	134
60.	" Provide .. ..	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
61.	Stercus Removals, Provide .. ..	—	—	—	—	—	1	—	—	—	—	7	43	8	—	—	59
62.	" Provide Extra .. ..	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
Total Items .. ..		562	114	94	166	108	371	274	316	279	214	165	381	407	53	623	4,130



Number of Items.	Domestic Dwellings.	WARDS OF THE CITY.															City of Cape Town
		1. Sea Point.	2. Harbour.	3. West Central.	4. Kloof.	5. Park.	6. East Central.	7. Castle.	8. Woodstock.	9. Salt River.	10. Mowbray.	11. Maitland.	12. Rondebosch.	13. Claremont.	14. Kalk Bay.	15. Wynberg.	
1. Rat Proofing, Provide .. .. .		5	8	19	7	7	25	38	11	10	7	-	9	12	4	6	165
2. Rats, Destroy .. .. .		2	-	3	-	-	1	-	-	-	-	-	7	4	1	2	28
2. " Remedy Against (other than rat proofing) .. .. .		12	4	16	15	2	35	35	39	14	34	6	12	40	14	23	301
4. Roofs, Defective .. .. .		27	46	19	15	12	150	129	148	76	23	55	130	86	-	189	1100
5. Roofs, Guttering & Downpipes, Defective ..		4	17	5	11	10	77	63	59	28	24	10	44	57	1	154	560
6. " " " Provide .. .. .		1	-	1	1	-	-	3	1	-	-	2	2	-	-	1	12
7. Balconies and Stoops, Defective .. .. .		5	1	4	3	-	21	4	7	1	3	5	6	45	-	9	115
8. " " " Cleanse .. .. .		-	1	-	3	-	-	1	-	-	-	-	-	-	-	-	7
9. Walls, Defective .. .. .		27	38	47	40	23	150	129	107	86	60	30	88	89	-	159	1077
10. " Damp .. .. .		7	3	2	1	2	16	2	8	12	1	11	8	12	1	8	95
11. " Cleanse .. .. .		1	10	16	11	1	20	21	13	10	6	8	1	8	1	11	130
12. " Colourwash .. .. .		5	24	13	8	3	21	22	24	8	4	11	3	22	2	6	170
13. Floors, Defective .. .. .		24	27	28	26	6	132	95	93	104	19	36	124	107	7	161	980
14. " " " Cleanse .. .. .		1	1	3	-	-	-	1	1	-	-	-	-	-	1	1	8
15. " " " Provide .. .. .		1	-	-	-	-	-	1	-	-	-	6	6	1	1	3	11
16. Doors, Defective .. .. .		16	7	16	7	5	93	43	44	31	9	21	73	44	-	75	485
17. " " " Provide .. .. .		1	1	-	-	-	-	1	-	2	-	4	1	1	-	1	12
18. Doorway, to be bricked up .. .. .		-	-	-	-	-	-	2	-	-	-	2	1	-	-	-	4
19. Windows, Defective .. .. .		5	4	20	30	19	123	61	73	60	12	55	136	73	14	162	847
20. " " " Provide .. .. .		4	4	-	1	3	1	7	-	5	-	7	2	2	1	14	55
21. Ventilating Inlets, Defective .. .. .		5	3	1	6	1	14	19	11	12	11	9	13	24	1	39	160
22. " " " Provide .. .. .		7	4	3	2	3	5	1	4	6	1	12	8	2	5	17	85
23. Rooms, Cleanse or Disinfect .. .. .		15	14	7	2	9	22	12	15	3	2	6	7	36	-	31	185
24. " " " Not to be used as living ..		4	-	2	4	-	9	4	1	5	1	11	6	9	4	11	77
25. Overcrowding, to abate .. .. .		3	2	6	3	4	7	6	3	2	2	12	2	4	-	14	70
26. Yard, Cleanse .. .. .		57	35	8	7	1	23	6	8	4	23	6	2	64	30	258	532
27. Yard Paving, Defective .. .. .		69	41	19	36	5	199	164	96	105	60	15	24	39	5	22	890
28. " " " Provide .. .. .		5	9	3	5	6	1	8	3	3	4	9	1	8	2	11	78
29. Refuse, Remove .. .. .		89	104	33	28	8	57	30	30	17	45	25	58	54	23	94	690
30. Shed or outhouses, Defective .. .. .		-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	3
31. " " " Cleanse .. .. .		-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
32. " " " Remove .. .. .		-	-	1	-	-	1	1	-	1	2	2	21	3	4	26	62
33. Receptacles (Refuse), Defective .. .. .		2	2	-	-	-	2	-	-	-	-	-	1	-	-	10	17
34. " " " Provide .. .. .		11	7	1	-	1	49	2	1	2	-	2	20	6	8	335	440
35. " " " Improper position .. .. .		2	8	6	3	11	3	1	3	-	6	-	-	-	2	3	48
36. Premises or Rooms, Unfit for human habitation .. .. .		2	1	2	2	3	32	6	5	12	-	45	27	28	1	22	188
37. Stairs and Steps, Defective .. .. .		5	4	2	6	-	12	5	2	3	-	3	6	4	-	12	65
38. " " " Cleanse .. .. .		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
39. " " " Provide .. .. .		-	2	-	-	-	-	-	-	-	-	-	1	-	-	-	3
40. Animals, Kept in dirty state .. .. .		-	-	-	-	1	1	-	-	-	-	-	-	-	-	3	4
41. " " " A Nuisance .. .. .		4	2	3	3	-	3	1	3	-	1	2	12	9	-	28	71
42. Poultry, A nuisance .. .. .		18	8	5	10	3	12	12	13	10	11	5	7	9	19	108	250
43. Poultry Houses, Cleanse .. .. .		23	1	3	8	2	3	-	1	1	5	2	2	4	8	47	110
44. " " " Provide .. .. .		-	-	-	1	-	-	-	-	-	-	-	1	-	3	9	14
45. " " " Remove .. .. .		5	5	1	-	3	5	2	4	2	5	18	57	1	3	142	250
46. Fly nuisance, Abate .. .. .		3	-	1	-	-	1	-	1	-	-	-	-	-	-	8	14
47. Mosquito Nuisance, Abate .. .. .		15	-	-	-	-	-	2	2	-	-	4	1	-	-	2	28
Total Items .. .. .		492	448	319	305	154	1326	940	834	637	381	457	930	909	167	2238	10537

Shops, Factories and Business Premises.	WARDS OF THE CITY.															City of Cape-town.
	1. Sea Point.	2. Harbour.	3. West Central.	4. Kloof.	5. Park.	6. East Central.	7. Castle.	8. Woodstock.	9. Salt River.	10. Mowbray.	11. Maitland.	12. Rondebosch.	13. Claremont.	14. Kalk Bay.	15. Wynberg.	
Rat Proofing, Provide .. .. .	1	7	13	1	1	12	15	12	6	2	-	1	4	4	4	83
Rats, Destroy .. .. .	-	2	-	1	-	1	-	2	-	7	-	-	-	-	-	13
" Remedy against (other than Rat proofing) .. .. .	5	4	13	1	-	6	7	7	7	8	-	1	4	7	7	77
Roofs, Defective .. .. .	-	2	-	1	-	3	4	-	1	1	4	-	2	-	-	18
" Guttering and Downpipes, Defective Provide .. .. .	-	-	1	2	1	1	4	3	-	2	-	-	-	-	-	14
Balconies and Stoeps, Defective .. .. .	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
" " Cleanse .. .. .	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Walls, Defective .. .. .	2	2	9	4	-	9	10	5	3	4	-	1	1	2	-	52
" To Tile .. .. .	-	1	-	1	1	1	2	-	-	1	-	1	-	1	2	11
" Cleanse .. .. .	2	6	1	2	1	5	6	5	6	2	1	-	1	-	1	39
" Colourwash .. .. .	-	3	2	1	2	5	5	6	5	1	1	-	4	-	-	37
Floors, Defective .. .. .	1	-	3	-	1	5	7	4	2	3	2	-	1	2	3	34
" Cleanse .. .. .	2	1	-	1	-	1	1	1	1	1	-	-	1	-	1	11
" Provide or Pave .. .. .	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	2
Doors, Defective .. .. .	-	-	3	-	-	-	5	-	1	1	2	1	1	1	2	17
" Provide .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Doorways, to be bricked up .. .. .	-	-	2	2	1	-	2	-	-	-	1	-	-	-	1	9
Windows, Defective .. .. .	-	1	3	1	-	1	7	1	-	1	3	-	-	-	-	18
" Provide .. .. .	-	-	-	-	1	2	1	-	-	1	-	-	-	-	-	5
Ventilating Inlets, Defective .. .. .	-	-	1	-	-	2	5	2	-	1	-	-	-	-	-	11
" " Provide .. .. .	-	-	1	-	-	2	-	-	-	1	1	-	-	-	-	5
Rooms, Cleanse .. .. .	-	6	-	-	2	15	13	4	2	1	2	1	4	-	6	56
" not to be used as living .. .. .	4	-	1	1	-	3	-	1	1	-	2	-	1	-	-	14
Overcrowding, to abate .. .. .	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	2
Yard, Cleanse .. .. .	11	3	-	1	-	4	4	-	1	3	1	1	4	7	7	47
Yard Paving, Defective .. .. .	5	1	2	1	-	5	7	-	-	1	-	1	1	-	2	26
" Provide .. .. .	-	-	-	-	-	1	1	-	-	-	-	-	-	-	1	3
Refuse, Remove .. .. .	37	29	11	12	7	19	25	2	10	12	4	3	10	6	10	197
Shed or Outhouses, Defective .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
" " Cleanse .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	3
" " Remove .. .. .	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	2
Refuse Receptacles, Defective .. .. .	2	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3
" " Provide .. .. .	1	1	-	3	1	1	-	1	2	1	-	-	2	-	9	22
" " Improper Position .. .. .	1	1	1	1	-	-	-	-	-	-	-	-	-	1	-	5
Premises or Rooms, Unfit for human habitation .. .. .	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	4
Stairs and Steps, Defective .. .. .	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
" " Cleanse .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
" " Provide .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fittings, Defective .. .. .	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	2
" Cleanse .. .. .	-	-	-	1	-	3	-	1	1	-	-	-	-	-	-	6
Utensils, Defective .. .. .	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
" Cleanse .. .. .	3	2	-	-	-	2	-	-	-	1	-	-	-	-	-	8
" Provide .. .. .	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	4
Clothing, Provide .. .. .	1	-	1	1	-	5	-	-	1	-	-	-	1	-	-	10
" Cleanse .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
Flies and Dirt, protect food against .. .. .	-	1	3	8	3	11	15	1	1	2	-	2	4	4	3	58
Food, Stored improperly .. .. .	2	-	3	2	-	8	19	1	3	-	1	4	3	1	3	50
" Refrain from handling while ill or suffering with sores .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wrapping Meat in Newspaper, to refrain from .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fish Curing, Refrain from .. .. .	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Premises, Refrain from using .. .. .	-	1	3	-	-	-	-	-	-	-	1	-	-	-	-	5
Total Items .. .. .	82	74	79	53	23	136	171	59	55	59	26	18	52	36	66	989



Stable Premises.	WARDS OF THE CITY.															City of Cape-town.
	1. Sea Point.	2. Harbour.	3. West Central.	4. Kloof.	5. Park.	6. East Central.	7. Castle.	8. Woodstock.	9. Salt River.	10. Mowbray.	11. Maitland.	12. Rondebosch.	13. Claremont.	14. Kalk Bay.	15. Wynberg.	
1. Rat Proofing, Provide .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
2. Rats, Destroy .. .. .	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
3. " Remedy against (other than rat proofing) .. .. .	1	-	-	-	-	-	-	-	-	-	-	1	-	-	1	3
4. Roofs, Defective .. .. .	-	-	-	-	-	-	-	-	1	-	-	1	-	-	1	3
5. Guttering and Downpipes, Defective .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
6. " " Provide .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7. Stable Premises, Defective .. .. .	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	3
8. " " Cleanse .. .. .	-	2	2	1	1	6	7	3	-	3	1	6	46	1	28	107
9. Walls, Defective .. .. .	-	-	1	1	-	8	3	5	1	-	2	4	-	-	7	32
10. " to be made higher .. .. .	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2
11. " Cleanse .. .. .	-	1	4	4	-	16	3	11	1	7	2	-	4	3	6	62
12. " Colourwash .. .. .	-	1	4	4	-	16	13	13	1	11	4	2	25	3	15	112
13. Floors, Defective .. .. .	1	2	-	-	-	7	9	1	-	2	1	4	1	-	8	36
14. " Cleanse .. .. .	-	-	-	-	-	2	-	1	-	1	1	-	-	-	4	9
15. " Pave .. .. .	-	-	-	-	-	-	-	-	-	-	1	2	1	-	1	5
16. Lighting, Inadequate .. .. .	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2	5
17. Ventilation, Inadequate .. .. .	-	-	-	-	-	1	-	-	1	-	1	1	-	-	2	9
18. Manure Receptacle, Defective .. .. .	-	-	-	-	1	1	2	-	1	1	1	3	2	-	2	14
19. " " Provide .. .. .	-	-	-	-	-	15	-	2	1	-	1	11	5	5	42	82
20. " " Remove .. .. .	-	-	-	-	-	-	-	-	1	-	4	1	-	-	1	7
21. " " Cleanse .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	1	-	3	4
22. Manure, Remove .. .. .	63	3	10	4	2	61	8	19	3	60	8	52	88	18	119	528
23. Premises, not to be used as stables .. .. .	-	-	-	-	1	25	6	2	8	-	10	38	32	10	111	243
24. " not to be used for human habitation .. .. .	-	-	-	2	-	7	7	6	1	-	4	8	-	3	10	48
25. Glanders, etc., Cleanse and Disinfect .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
26. Yard, Cleanse .. .. .	-	-	-	-	-	2	1	2	-	5	-	2	6	2	30	50
27. Yard Paving, Defective .. .. .	-	-	-	-	-	8	5	2	-	-	1	3	1	-	3	23
28. " " Provide .. .. .	-	-	-	-	-	-	-	-	2	-	-	4	-	-	7	13
29. Refuse, Remove .. .. .	2	-	-	1	1	8	1	2	4	3	2	6	3	1	11	45
30. Shed or Outhouses, Defective .. .. .	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
31. " " Cleanse .. .. .	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
32. " " Remove .. .. .	-	-	-	-	-	-	-	-	-	-	-	12	1	3	2	18
33. Kraal, Cleanse .. .. .	-	-	1	-	-	-	-	-	-	-	2	-	1	-	2	6
34. " Pave .. .. .	-	-	-	-	-	-	-	-	-	-	5	-	1	-	1	7
35. " Refrain from using .. .. .	-	-	-	-	-	-	-	-	-	-	4	1	-	-	25	30
36. Water Troughs, Defective or provide .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
37. " " Cleanse .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38. Milk Room, Defective .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39. " " Cleanse .. .. .	-	-	-	-	-	-	-	-	-	-	1	2	1	-	-	4
40. " " Provide .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41. " " Fly Proof .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42. Milk Utensils, Defective .. .. .	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
43. " " Cleanse .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
44. " " Provide .. .. .	-	-	-	-	-	-	-	-	1	-	-	2	-	1	-	4
45. Aprons and Overalls, Provide .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46. " " Cleanse .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47. Flies and Dirt, Protect against .. .. .	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48. Boiler Room, Defective .. .. .	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	2
49. " " Cleanse .. .. .	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
50. " " Provide .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51. Boiler, Instal .. .. .	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	2
52. Milk, Refrain from selling .. .. .	-	-	-	-	-	-	1	-	-	-	-	-	-	1	1	2
53. Persons ill or suffering with sores, to refrain from taking part in business .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
54. Pig Styes, Defective .. .. .	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
55. " " Cleanse .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
56. " " Pave .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	3
57. " " Remove .. .. .	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
58. " " Provide .. .. .	-	-	-	-	-	-	-	-	-	9	3	3	-	-	-	15
Total Items .. .. .	68	9	22	18	6	185	66	69	27	93	68	187	227	53	460	1,558

General.	WARDS OF THE CITY.															City of Cape-town.
	1. Sea Point.	2. Harbour.	3. West Central.	4. Kloof.	5. Park.	6. East Central.	7. Castle.	8. Woodstock.	9. Salt River.	10. Mowbray.	11. Maitland.	12. Rondebosch.	13. Claremont.	14. Kalk Bay.	15. Wynberg.	
1. Rats, Remedy against .. ..	-	-	1	-	1	-	1	-	-	-	-	-	-	-	-	3
2. Sluits and Ditches, Cleanse .. ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. " " Fill in .. ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4. Lanes, Cleanse .. ..	3	32	19	12	-	14	1	5	4	5	7	1	2	2	3	100
5. " Pave .. ..	16	4	2	3	-	45	61	74	82	6	5	-	4	2	11	319
6. Wells, Protect .. ..	-	-	-	-	-	-	1	-	-	-	1	1	-	-	-	3
7. " Cleanse .. ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8. " Fill in .. ..	-	-	-	-	1	-	-	-	-	-	2	5	2	-	-	10
9. Obstructions, Remove .. ..	2	4	2	3	-	2	1	-	-	1	-	-	1	-	1	17
10. Unauthorized structures, Remove .. ..	5	6	1	1	-	4	6	1	10	5	28	90	15	-	110	282
1. Chimneys, Defective .. ..	1	1	2	-	-	10	5	4	1	-	4	5	3	1	3	40
2. " Provide .. ..	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
3. Smoke Nuisance, to abate .. ..	6	-	3	2	-	4	2	-	3	-	3	1	-	1	-	25
4. Offensive Smells, to abate .. ..	1	1	-	-	-	-	-	-	-	1	-	1	-	-	-	4
5. Dirty Water, throwing out wrongfully .. ..	73	28	5	8	3	7	9	5	2	19	19	9	33	2	13	235
6. Trees Overhanging Streets, Remove .. ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7. Burning Refuse, a nuisance .. ..	2	-	-	1	1	-	-	1	-	1	-	-	-	-	-	6
8. Refuse, Throwing out into public places .. ..	3	7	5	10	1	49	1	7	-	16	4	7	5	4	7	126
9. Dead Animals, Remove .. ..	3	1	-	-	1	1	-	-	-	5	-	3	3	1	1	19
10. Pigs, Refrain from keeping .. ..	1	-	-	-	-	-	-	1	-	-	15	11	8	20	11	67
11. Goats, Refrain from keeping .. ..	-	-	-	4	-	12	2	2	2	2	3	1	2	-	6	36
12. Cows, Refrain from keeping .. ..	-	-	-	-	-	1	-	1	-	-	5	-	1	-	1	9
13. Horses or Donkeys, Refrain from keeping .. ..	-	-	-	1	-	1	-	-	-	-	3	31	4	-	11	51
14. Poultry, Refrain from keeping .. ..	3	4	1	4	1	26	8	6	9	3	4	15	7	5	32	128
15. Licences, Refrain from trading without .. ..	3	2	1	2	5	4	5	1	1	-	5	2	6	-	8	45
16. Waste Water Nuisance, To abate .. ..	16	5	2	1	1	3	-	-	4	9	3	3	2	2	36	87
17. Storing Material, A nuisance .. ..	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
18. Fences and Gates, Repair .. ..	6	3	1	2	-	-	1	8	17	3	8	8	17	-	3	77
19. Vacant Ground, Cleanse .. ..	10	4	1	2	2	3	2	-	1	5	1	6	6	6	12	61
20. Noxious Matters, A nuisance, Refrain from causing .. ..	8	5	4	6	2	-	1	5	3	2	18	32	-	2	8	96
21. Washing of Clothes, A nuisance .. ..	1	5	4	3	1	28	1	2	21	27	-	8	14	-	1	116
22. Slaughtering of Animals, Refrain from .. ..	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
23. Permits for Natives, To make application for .. ..	1	2	2	1	1	-	-	2	-	1	4	5	5	2	6	32
Total Items .. ..	164	114	56	60	21	214	108	125	161	111	143	245	140	51	284	1,997

In addition to the service of these notices other defects were dealt with by the Inspectors by reports for transmission to the City Engineer or other departments of the Corporation as follows:—

Stopped drains .. ..	1,337
Defective water fittings .. ..	604
Unauthorised structures .. ..	131
Undrained premises .. ..	41
Structural defects to premises .. ..	81
Other defects .. ..	358

#### HEALTH VISITORS.

On 30th June, 1929, in addition to the Chief Sanitary Inspectress, there were 21 Health Visitors in the Department and one Social Welfare Investigator. The work done by the Health Visitors is set out in Section IV of this report (page 55). There were also employed an attendant at the Cleansing Station, three caretakers of Maternity and Child Welfare Centres and domestic staff.

#### CLERICAL STAFF.

At the end of the year the clerical staff consisted of the Chief Clerk, one senior clerk, 11 clerks, five junior clerks and one messenger, all males, in addition to five lady clerks, of whom two were employed in connection with the work of the Health Visitors and one at the City Hospital, Portsworld Road.



## SALE OF MILK AND ICE CREAM.

Applications for annual licences made by cowkeepers, purveyors of milk and ice-cream vendors have been dealt with as follows during the year under review:—

	Cow-keepers.	Purveyors of Milk.	Vendors of Ice Cream.
Applications for licences received .. .. .	161	136	162
Licences issued .. .. .	127 <sup>A</sup>	113 <sup>B</sup>	134
Applications cancelled .. .. .	6	5 <sup>C</sup>	7 <sup>D</sup>
Licences refused .. .. .	14	6	8
Applications in abeyance .. .. .	15	20	18
Applications made in error (licences not necessary)	—	2	—

A.—Including 1 licence issued in respect of application made prior to 1st July, 1928.

B.—Including 7 licences issued in respect of applications made prior to 1st July, 1928.

C.—Including 3 applications made prior to 1st July, 1928.

D.—Including 5 applications made prior to 1st July, 1928.

Following upon the decision of the Council to refuse to renew the registration as a cowkeeper, dairyman or purveyor of milk of a particular cowkeeper whose premises were considered to be unsuitable for the purpose, by reason of the character of the neighbourhood and the proximity of dwelling house premises adjoining the kraal, proceedings were instituted against the dairyman for carrying on the business without being registered in contravention of the Dairy Regulations. A conviction was obtained in the Magistrate's Court, but an appeal was allowed by the Supreme Court on the ground that by reason of the fact that the enabling sub-section (No. 7 of Section 191) of Ordinance No. 10 of 1912 under which the Dairy Regulations were made was repealed by Section 5 of Ordinance No. 7 of 1926 the regulations were of no effect. The dairyman continues to carry on the business.

New Dairy Regulations have since been framed under Section 5 of Ordinance No. 7 of 1926 and are now before the Administrator awaiting approval. Section 10 of Ordinance No. 26 of 1929 has since been passed bringing into operation again in municipalities throughout the Cape Province any local dairy regulations made under Ordinance No. 10 of 1912 which would otherwise be of no effect by reason of Ordinance No. 7 of 1926.

The Special Dairies Committee has considered the 146 premises of registered cowkeepers in the municipal area, and on its recommendation the Council has decided as follows:—

Re-registration to be refused at once .. .. .	9
Registration not to be renewed after 1929 .. .. .	16
Registration not to be renewed after 1930 .. .. .	20
Registration to be renewed subject to reconsideration from year to year	8
Premises closed voluntarily .. .. .	5
Registrations to be renewed .. .. .	78
For further consideration in <i>re</i> compensation .. .. .	10

## TEA SHOPS, CAFES, RESTAURANTS AND EATING HOUSES.

Regulations providing for the annual licensing of these premises and controlling their equipment and management, dated 7th February, 1924, were first brought into operation during the year ended 30th June, 1925. All applications for licences have been considered by the Trade Licences Committee after report by the Medical Officer of Health. The inspections of premises have been made by the Food Inspectors. The following is an analysis of the applications dealt with during the year ended 30th June, 1929:—



	Restaurants	Eating-Houses.	Tea Shops.	Cafés.
1. Applications received .. ..	108	58	208	109
2. Granting of licences recommended (without conditions) .. ..	60	33	120	70
3. Granting of licences recommended (subject to conditions) .. ..	47	25	87	38
4. Number under item 3 later reported as having complied with conditions	38	18	69	35
5. Refusal of licences recommended ..	1	—	1	1
6. Applications withdrawn .. ..	—	—	—	—

## TRADE LICENCES.

Under the Ordinance it is laid down that no application to trade as a general dealer, dealer, baker or butcher, shall be considered unless the Medical Officer of Health shall have reported that the premises are fit and suitable for the purpose and that he knows of no reason why the licence should be refused on the ground of public health. All applications for such licences have been referred by the Trade Licences Committee to the Medical Officer of Health for report. The Council's consideration of the licences is not annual and their decisions remain in force so long as the businesses do not change hands. All new applications for licences to trade as hawkers in connection with which foodstuffs are to be stored are also referred to the Medical Officer of Health for report. Inspections of the premises have been made by the Food Inspectors, except in the case of dealers' and general dealers' shops where no foodstuffs are sold and the inspections have been made by the District Inspectors. The following is an analysis of the applications:—

	General Dealers.	Dealers.	Butchers.	Bakers.	Hawkers.
1. Applications received .. ..	1,087	238	110	10	820
2. Granting of Licences recommended (without conditions) .. ..	560	76	19	3	246
3. Granting of Licences recommended (subject to conditions) .. ..	507	161	88	6	254
4. Number under item 3 later reported as having complied with conditions	389	111	66	3	102*
5. Refusal of Licences recommended	10	—	3	1	320
6. Applications withdrawn .. ..	10	1	—	—	—

\* When referring to hawkers, item 4 to read "number under items 3 and 5 later reported suitable."

## ANTI-RODENT CAMPAIGN.

The plague position in the country during the year under review has continued to call for energetic measures against rodents.

It is since October, 1923, that the present prevalence of human plague in South Africa has existed. In the year 1923-24 there were in the Union some 372 cases, chiefly in the Orange Free State, but including a few in the Transvaal and 34 in the Albert and Colesberg districts of the Cape Province. Since that year the annual number of human cases has progressively declined. In 1924-25 there were about 112 cases, in 1925-26 71 cases of which 26 were in the Cape



Province, in 1926-27 75 cases of which 46 were in the Cape Province, and in 1927-28 39 cases of which five were in the Cape Province. The Union Health Department reports that in the year ended 30th June, 1929, the cases in the Union numbered 65, 45 in the Orange Free State, 11 in the Transvaal and nine in the Cape Province. Forty-two of the 65 cases were fatal. All the cases were in rural areas, and all but six of the patients were natives.

The cause of the human cases in this country is the existence of the disease in the veld rodents and other wild animals, especially the gerbilles. Infection of the veld rodent has been found to exist over a vast area in the Union. Fortunately the infection has not extended to rats in towns, and in recent years no town has been involved in a serious outbreak of the disease. There have been no human or rodent cases of plague in Capetown or the neighbouring part of the country. The disquieting feature of the situation is that each year the area of plague infection has come nearer to Capetown. In 1923-24 it was still at a great distance. In 1924-25 there were human cases at De Aar, 500 miles from Capetown. In 1926-27 there was an extensive outbreak amongst rodents with human cases in an area in the Cape Province including Kenhardt, Williston and Calvinia, and extending to within 200 miles of Capetown. In 1927-28 the infection spread amongst rodents in the north-western Cape districts over an area involving part of the Ceres basin. Hares, which are numerous in these parts, were regarded as playing a part in the carriage of infection. The Ceres valley is only 70 miles from Capetown, and this approach was regarded as a grave danger to the Cape Peninsula and the grain districts to the east and north of Capetown. The Piquetberg and Malmesbury districts were stated to be very badly infested with rodents, and plague if introduced there would probably spread rapidly. With a view to preventing spread over the mountain range the Union Health Department sent anti-rodent gangs to work in the mountain passes between Ceres, where infection existed, and Worcester, Tulbagh and Piquetberg, which were as yet uninfected; and the Municipal and Divisional Councils of Worcester co-operated by a campaign against rodents in their area.

In June, 1929, the City Council's anti-rodent staff consisted of two rodent inspectors and a rat-catching staff of twelve men and four youths. The activities of this staff are divided between the suppression of veld rodents in a belt of country within the municipality extending from Table Bay at Salt River mouth to False Bay between Sandvlei and Zeekoe Vlei, and the campaign against rats in town. Against the veld rodents (gerbilles) reliance has been placed chiefly on the use of wheat poisoned with strychnine, which has given satisfactory results. The Cape Divisional Council in co-operation with the Government maintains a second rodent-free belt stretching from Table Bay to the Divisional Council boundary beyond Bellville and thence southward to False Bay.

In town attention has been given chiefly to the rat-proofing of premises such as forage stores, food shops and other places which attract, harbour and nourish rats, and to the destruction of rats in infested premises. In the granting of trading licences for grocers' shops and the like rat-proofing measures have been insisted on. Many wooden floors in such premises have been replaced by concrete.

The work done by the anti-rodent staff during the year under review is indicated by the following figures:—

Inspections by Rodent Inspectors .. .. .	6,817
Inspections re rodents by other Inspectors .. .. .	569
Visits made to premises by ratcatchers .. .. .	31,732
Number of notices served:	
Verbal notices .. .. .	175
Written notices .. .. .	576
	<hr/>
	751
Number of items on written notices re rat-proofing .. .. .	252
Number of rodents caught and destroyed:	
Brown rats .. .. .	6,803
Black rats .. .. .	1,388
Gerbilles .. .. .	414
	<hr/>
	8,605

The figures given above as to rodents destroyed include only the number of animals whose dead bodies were actually recovered. There is no reason to doubt that many more were destroyed by the methods employed.



The above figures do not include certain inspections made and notices served by the district Sanitary Inspectors in connection with rodents.

### CAMPING.

The camping at Clifton, Camps Bay, Bakoven and Muizenberg has been kept under observation by the Sanitary Inspectors.

During the year 1928-29, 42 applications for the erection of tents, etc., were received. Of these, 38 were approved and 4 refused.

### INSPECTION OF MEAT AND OTHER FOODSTUFFS.

The inspection of meat from animals killed at the Municipal abattoir is in the hands of the veterinary officer. No animals may be slaughtered elsewhere in the municipality, and all meat from animals slaughtered outside the city and brought in for consumption must be deposited at one of the depôts appointed by the Council. There it is inspected and stamped by the Meat Inspector appointed for that purpose.

The following is a return of meat from animals slaughtered outside the City and brought in for consumption, which was inspected at the depôts appointed by the Council, and of meat brought in by rail and inspected at the premises of the consignees under agreement with the Council, during the period 1st July, 1928, to 30th June, 1929:—

Description.	Inspected.	Passed.	Condemned partly.	Condemned entirely.	
				Amount.	Percentage.
Carcases of Beef .. ..	3,738	3,738	—	—	—
Carcases of Mutton .. ..	27,567	27,565	—	2	.01
Carcases of Goat .. ..	245	245	—	—	—
Carcases of Veal .. ..	177	177	—	—	—
Carcases of Pork .. ..	15,213	15,070	—	143	.94
Parts of Beef .. ..	225	115	—	110	48.89
Parts of Mutton .. ..	1,783	1,779	—	4	.22
Parts of Veal .. ..	14	13	—	1	7.14
Parts of Pork .. ..	160	—	—	160	100.00
Ox Heads .. ..	4,024	3,940	—	84	2.09
Ox Hearts .. ..	4,744	4,684	—	60	1.26
Ox Tongues .. ..	5,779	5,665	—	114	1.97
Ox Livers .. ..	5,510	5,042	—	468	8.49
Ox Lungs .. ..	3	3	—	—	—
Ox Kidneys .. ..	9,093	9,071	—	22	.24
Ox Spleens .. ..	1	1	—	—	—
Ox Skirts .. ..	2,933	2,884	—	49	1.67
Ox Tails .. ..	5,335	5,095	—	240	4.50
Ox Tripes .. ..	2,430	2,410	—	20	.82
Sheep and Goats' Heads ..	27,691	27,662	—	29	.10
Sheep and Goats' Tripes ..	27,180	27,170	—	10	.04
Sheep and Goats' Plucks ..	26,400	24,075	2,305*	20	.08
Sheep and Goats' Livers ..	2,305	—	—	2,305	100.00
Sheep and Goats' Lungs ..	1,057	—	—	1,057	100.00
Sheep and Goats' Hearts ..	4	—	—	4	100.00
Pigs' Kidneys .. ..	507	—	—	507	100.00
Pigs' Plucks .. ..	17,949	14,790	2,287*	872	4.86
Pigs' Livers .. ..	2,287	—	—	2,287	100.00
Pigs' Lungs .. ..	2,736	—	—	2,736	100.00
Pigs' Hearts .. ..	22	—	—	22	100.00
Calves' Kidneys .. ..	1	1	—	—	—
Calves' Plucks .. ..	39	39	—	—	—
Calves' Livers .. ..	5	5	—	—	—
Fowls .. ..	44	44	—	—	—

\* These items are included below in the columns concerned (Livers, Lungs, Hearts).

The following return shows the number and portions of carcasses of meat which were condemned at the depôts appointed by the Council and at the premises of the consignees under agreement with the Council, classified under the various





The following carcasses with slight infections with cysticercus were discovered and interned in cold storage for the prescribed time:—

Removed from	Measly Beef.		Measly Pork.	
	Carcases.	Weight.	Carcases.	Weight.
Municipal Abattoirs .. .. .	130	72,018 lbs.	9	1,190 lbs.
Capetown depôts .. .. .	111½	66,218 lbs.	154	11,425 lbs.
Total .. .. .	241½	138,236 lbs.	163	12,615 lbs.

LIST OF MEAT AND FOODSTUFFS WHICH HAVE BEEN CONDEMNED AS UNFIT FOR HUMAN CONSUMPTION AS THE RESULT OF ORDINARY INSPECTIONS BY THE SANITARY INSPECTORS OR THE FOOD INSPECTORS (OTHER THAN INSPECTIONS OF IMPORTED MEAT) DURING THE PERIOD 1ST JULY, 1928, TO 30TH JUNE, 1929.

<i>Meat</i>	<i>Weight.</i>
Beef .. .. .	5,708 lbs.
Mutton .. .. .	965 "
Veal .. .. .	419 "
Pork .. .. .	667 "
Pig's Feet .. .. .	40 "
Ox Tongues .. .. .	56 "
Ox Hearts .. .. .	14 "
Ox Tails .. .. .	15 "
Ox Tripes .. .. .	12 "
Corned Beef .. .. .	71 "
Corned Pork .. .. .	9 "
Tinned Meat .. .. .	4 "
<i>Poultry.</i>	
Turkeys (36) .. .. .	360 lbs.*
Geese (15) .. .. .	105 " *
Ducks (130) .. .. .	390 " *
Fowls (1,193) .. .. .	2,386 " *
Pigeons (12) .. .. .	6 " *
<i>Fish</i>	
Tinned Fish .. .. .	832 lbs.
Sardines .. .. .	665½ "
Fish (Fillets) .. .. .	16,954 "
Fresh Fish .. .. .	1,411½ "
Preserved Fish .. .. .	1,924 " *
<i>Provisions.</i>	
Coffee .. .. .	163½ "
Cocoa .. .. .	8½ "
Tea .. .. .	50 "
Sugar .. .. .	1,997½ "
Jam .. .. .	795 "
Syrup .. .. .	50 "
Cheese .. .. .	877½ "
Butter .. .. .	13 "
Eggs .. .. .	845½ " *
Tinned Milk .. .. .	69½ "
Hams and Bacon .. .. .	294 "
Bread .. .. .	5 "
Milk .. .. .	12 gals.
Biscuits .. .. .	192 lbs.
Dried Milk .. .. .	7 "
Lard .. .. .	25 "
<i>Fruit and Vegetables.</i>	
Canned Fruit .. .. .	180 lbs.
Canned Vegetables .. .. .	92½ "
Preserved Fruit .. .. .	230½ "
Watermelons (28) .. .. .	112 " *
Beans .. .. .	2,187 "
Dates .. .. .	354 "
Potatoes .. .. .	1,950 "
Tomatoes .. .. .	870 "
Peas .. .. .	241 "
Pea Nuts .. .. .	94 "
Pawpaws .. .. .	2,660 " *
Cucumbers .. .. .	324 "
Peaches .. .. .	3,610 "





*Grain, Meal, etc.*

Grain (Oats, Grain, Barley) .. .. .	211 lbs.
Mealie Meal .. .. .	183 "
Samp .. .. .	31 "
Rice .. .. .	348 "
Cornflour .. .. .	2 "
Flour .. .. .	610 "
Groats .. .. .	64 "
Tapioca .. .. .	3 "
Baking Powder .. .. .	6½ "
Egg Powder .. .. .	4½ "
Custard Powder .. .. .	13 "
Pudding Powder .. .. .	8 "

*Miscellaneous.*

Pickles and Delicacies .. .. .	365 lbs.
Jellies .. .. .	25½ "
Cream of Tartar .. .. .	11 "
Tartaric Acid .. .. .	4 "
Carbonate of Soda .. .. .	7 "
Epsom Salts .. .. .	3 "
Borax .. .. .	6½ "
Saltpetre .. .. .	4 "
Table Salt .. .. .	18 "
Caraway Seeds .. .. .	50 "
Ground Ginger .. .. .	11 "
Black Pepper .. .. .	4 "
Mixed Spice .. .. .	4 "
Nutmeg .. .. .	4 "
Allspice .. .. .	3 "
Curry Powder .. .. .	8 "
Tamarind .. .. .	10 "
Sweets .. .. .	242 "
<i>Quantity.</i>	
Dutch Medicine .. .. .	264 bottles.
Cod Liver Oil and Malt .. .. .	1 "
Cordial .. .. .	6 "
Flavouring Essence .. .. .	4 "

\* These weights are approximate.

## CASES BEFORE THE MAGISTRATE.

LEGAL PROCEEDINGS: YEAR ENDED 30TH JUNE, 1929.

Item No.	No. of Cases.	No. of Defend-ants.	Nature of Offence.	Result.
1	9	9	Allowing premises to be kept in a dilapidated state.	6 fined, 2 discharged and 1 sentence suspended.
2	3	3	Failing to provide suitable w.c. accommodation	1 fined, 1 discharged and 1 sentence suspended.
3	1	1	Allowing to be kept on premises a sanitary convenience so as to be a nuisance or injurious to health.	Sentence suspended.
4	3	7	Failing to have leaky and defective w.c. drain repaired.	2 fined and 5 reprimanded.
5	1	1	Allowing a lane to be kept in an insanitary state	Reprimanded.
6	2	2	Allowing unsuitable premises to be used for human habitation.	1 fined and 1 reprimanded.
7	18	19	Keeping an accumulation of manure or other filth on premises.	16 fined, 1 discharged, 1 withdrawn and 1 untraceable.
8	1	1	Failing to provide a sound inspection chamber cover.	Fined.
9	1	1	Keeping a drain in an unclean state .. .. .	Fined.
10	1	1	Keeping yard in an unclean state .. .. .	Fined.
11	1	1	Allowing a pool of water to become a nuisance and injurious to health.	Fined.
12	1	1	Allowing offensive liquid or other matter to flow from premises.	Fined.
13	2	2	Failing to provide a proper and efficient drainage system for the removal of waste water.	1 fined and 1 discharged but fined under 2 other counts (see items Nos. 2 and 3).

## CASES BEFORE THE MAGISTRATE.

LEGAL PROCEEDINGS: YEAR ENDED 30TH JUNE, 1929 (*Continued*).

Item. No.	No. of Cases.	No. of Defendants.	Nature of Offence.	Result.
14	1	1	Failing to take all reasonable measures to keep premises free from rats.	Discharged but fined under 3 other counts (see items Nos. 5, 6, and 7.).
15	6	8	Allowing meat intended for sale to come into contact with body and clothing.	11 fined, 2 discharged and 5 reprimanded.
16	3	8	Allowing persons with dirty clothing to handle meat.	3 fined, 3 reprimanded, 1 discharged and 1 untraceable.
17	2	8	Allowing meat intended for human consumption to be conveyed in a vehicle not sanctioned by the Corporation.	2 fined, 4 reprimanded, 1 discharged and 1 untraceable.
18	1	3	Allowing vehicle used for conveying meat to be in an unclean state.	1 fined, 1 discharged and 1 untraceable.
19	1	3	Failing to take precautions to protect meat from contamination by flies, etc.	1 fined, 1 discharged and 1 untraceable.
20	1	2	Slaughtering, or allowing to be slaughtered, a cow within the municipality without the consent of the Corporation.	1 fined and 1 discharged.
21	1	1	Failing to protect foodstuffs from contamination by flies, dust, etc.	Fined.
22	3	3	Failing to cause employees to wear clean and suitable clothing whilst delivering milk.	All fined.
23	3	5	Failing to wear clean and suitable clothing whilst delivering milk.	2 fined, 2 reprimanded and 1 absconded.
24	1	3	Failing to keep milk vessels clean . . . .	2 fined and 1 absconded.
25	4	8	Failing to take precautions to protect milk from contamination by flies, dust, etc.	6 fined, 1 discharged and 1 absconded.
26	3	3	Failing to maintain a milk delivery cart at all times in a thoroughly clean state.	All fined.
27	1	1	Failing to cause name and address to be legibly and conspicuously painted on milk delivery lorry.	Fined.
28	1	1	Carrying on a noxious trade within the municipality without having permission from the Corporation and depositing crayfish, bones and offal on the land.	Fined.
29	1	1	Erecting a tent, and allowing it to be occupied without permission from the Corporation.	Reprimanded, but fined under another count (see item No. 28).
30	1	1	Failing to keep a hand fish cart in a clean state	Reprimanded.
31	1	1	Failing to protect crayfish from contamination by flies, dust, etc.	Reprimanded.
32	1	1	Allowing a brick kiln to be occupied so as to be injurious to health.	Discharged.
33	1	1	Using, or allowing to be used, part of a stable as a living room.	Fined.
34	1	1	Keeping structures, in which animals were kept, in an unclean and dilapidated state.	Fined.
35	1	1	Keeping animals on enclosed ground after the Corporation had prohibited the use of the ground as a kraal.	Fined.
36	1	1	Keeping cows in yard and enclosure of premises	Reprimanded.
37	1	1	Keeping poultry so as to be a nuisance . .	Reprimanded.
38	1	1	Keeping horses in a structure after same was prohibited by the Corporation.	Discharged.
39	4	4	Keeping animals (horses, cows, pigs) in such a state as to be a nuisance or injurious to health.	2 fined, 1 reprimanded and 1 discharged.
40	6	6	Keeping stable in an unclean state . . . .	All fined.
41	1	1	Carrying on business as a barber without being registered by the Corporation.	Fined.
42	1	1	Storing vegetables on premises which had not been approved for the purpose by the Corporation.	Fined.
43	1	1	Depositing vegetables for sale in a bedroom and kitchen, thereby rendering the foodstuffs liable to contamination.	Fined.
44	1	1	Keeping enclosed ground in an unclean state . .	Reprimanded.
45	1	1	Failing to provide a proper receptacle for the reception of all waste and refuse.	Discharged.
46	13	14	For contravening the Natives' (Urban Areas) Act by harbouring natives on premises situated outside a native location.	8 fined, 4 discharged and 2 summonses cancelled.
47	2	2	Obstructing, and using abusive language to a Sanitary Inspector whilst carrying out his duties.	Both fined.
Total amount in fines . . .				£134 10s. 0d.



## PUBLIC SANITARY CONVENIENCES.

The following is a list of the public sanitary conveniences open at 30th June, 1929, together with the number of chalet attendants employed in connection with them:—

Chalet.	Attendants.	
	Male.	Female.
Camps Bay .. .. .	2	—
Castle Bridge .. .. .	2	—
Castle Street .. .. .	2	—
Claremont .. .. .	2	—
De Waal Park .. .. .	2	1
Dock Road .. .. .	2	—
Early Morning Market .. .. .	3	2
Fishmarket (Retail) .. .. .	—	1
Gardens .. .. .	2	1
Green Point Common .. .. .	1	—
Greenmarket Square .. .. .	2	2
Jurgen's Park .. .. .	2	—
Kalk Bay .. .. .	2	1
Ladies' Rest Room, Parade .. .. .	—	2
McGregor Street .. .. .	2	—
Maitland .. .. .	1	—
Mowbray .. .. .	2	1
Muizenberg .. .. .	2	1
Museum .. .. .	2	1
New Fishmarket (Wholesale) .. .. .	1	2
Riebeek Square .. .. .	2	1
St. Andrew's Square .. .. .	2	—
Salt River .. .. .	3	2
Sea Point .. .. .	2	2
Searle Street .. .. .	2	1
Theatre .. .. .	2	—
Three Anchor Bay .. .. .	—	1
Woodstock .. .. .	2	—
28 chalets .. .. .	49	22

## MUNICIPAL WASHHOUSES.

The control of the municipal washhouses was transferred from the City Engineer's Department to the City Health Department on 1st January, 1927.

Four of the washhouses are supplied with cold water only, and the drying and bleaching are done in the open air. They have no ironing facilities. But at the Washhouse at Hanover Street the washing troughs are supplied with steam, and "hydro-extractors," drying chambers, ironing machines, and electric irons are provided.

On 23rd November, 1928, new public washhouses and slipper baths that had been built at Hout Street, Capetown, were opened. These washhouses are supplied with cold water, and electric irons are provided. The six slipper baths are supplied with hot and cold water.

The charges made at the washhouses are as follows:—

Platteklip .. .. .	3d. per day.
Mowbray .. .. .	3d. per day.
Claremont .. .. .	3d. per day.
Kalk Bay .. .. .	6d. per day.
Hanover Street :	
For 2 hours .. .. .	3d.
For 3 hours .. .. .	6d.
For 4 hours .. .. .	9d.
For 5 hours .. .. .	1/-
For 6 hours .. .. .	1/3
For 7 hours and over .. .. .	1/6

## Hout Street :

## Washhouses :

Washing	..	..	..	..	..	4d. per day.
Ironing	..	..	..	..	..	1d. per hour.

## Baths :

## Hot Water

Adults	..	..	..	..	..	6d.
Children	..	..	..	..	..	4d.

## Cold Water

Adults	..	..	..	..	..	4d.
Children	..	..	..	..	..	3d.

The attendance and takings at the washhouses during the year ended 30th June, 1929, were as follows:—

						Attendances.	Money Taken.		
							£	s.	d.
Hanover Street	..	..	..	..	..	18,944	469	12	0
Platteklip	..	..	..	..	..	12,323	154	0	9
Mowbray	..	..	..	..	..	4,451	55	12	9
Claremont	..	..	..	..	..	3,148	39	7	0
Kalk Bay	..	..	..	..	..	2,394	59	17	0
Hout Street (7 months)	..	..	..	..	..	5,273	90	4	11
Total	..	..	..	..	..	46,533	£868	14	5

## METEOROLOGY.

The collection of certain meteorological data is undertaken by the department. A Stevenson's screen, with dry and wet bulb and maximum and minimum thermometers, sunshine recorder, wind recorder, barometer and earth thermometers (4 ft., 2 ft. and 1 ft.) are kept in the grounds of the City Hospital, Portwood Road.

The results of the observations are given in Tables K to O on pages 121 to 125.

## SECTION VI—TUBERCULOSIS AND VENEREAL DISEASE CLINICS.

## TUBERCULOSIS CLINIC.

(Prepared by Dr. J. F. Wicht, Medical Superintendent of Hospitals.)

During the year under review the Tuberculosis Clinic was removed to more suitable premises at 50 Newmarket Street, Capetown. The new clinic is more central, and the attendances have increased considerably. Separate days have been appointed for European and coloured patients, and there are three sessions each week—one for Europeans of both sexes, one for coloured females and one for coloured males.

The building in which the clinic is conducted is an adaptation of two semi-detached cottages. There are five rooms, one of which by reason of its shape—long and narrow—has been converted into a waiting room. One room is set aside for the use of the resident caretaker, another has been divided up into dressing cubicles, while of the two remaining rooms one is furnished as a registration room with dispensary and the other, into which the dressing cubicles open, as a consulting room.

The work of the Clinic is mainly as follows:—

- (1) Selecting cases suitable for Nelspoort Sanatorium.
- (2) Recommending hospital treatment for patients whose disease is in too active a condition for sanatorium treatment. In many cases, after a period of treatment in the City Hospital the disease becomes less active and the patient is sent to Nelspoort for further treatment.



- (3) Recommending the more advanced cases for admission either to the City Hospital or to Rentzkie's Farm. It is often necessary to admit cases who are dying and perhaps destitute.
- (4) Palliative treatment to those unable or unwilling to be admitted to hospital.

In addition to this, doubtful cases are investigated and, if necessary, admitted to hospital for observation.

The Clinic helps also in educating patients as to how they should conduct their lives on hygienic principles, so as to avoid infecting others.

The Medical Officer is always willing to examine contacts and suspects, but these do not usually take advantage of the opportunity, and the majority of patients have fairly advanced disease.

Many patients whose disease is in a more early stage refuse institutional treatment, as they do not feel sufficiently ill; later, when their disease has progressed considerably they demand admission to Nelspoort, and have to be informed that they are not suitable for sanatorium treatment.

To obtain the best results from sanatorium treatment the disease should not be in too active a condition. While the disease is progressive the patient should be kept at rest in bed, and when the disease becomes quiescent sanatorium treatment is indicated. In other words, the sanatorium is to be regarded in the light of a convalescent home, and this is the principle on which the Clinic is conducted. Where possible patients are admitted to hospital for rest treatment and in some cases patients are advised to rest at home under the supervision of the health visitors.

The three health visitors render invaluable assistance to the Medical Officer by marshalling facts concerning patients whom they visit in their homes, and by rounding up notified patients and persuading them to apply for treatment.

During the year there were 3,280 attendances at the Clinic as compared with 1,820 in the previous year. The following are the details:—

Race.	1928-1929.				1927-1928.			
	Attendances.		New Cases.		Attendances.		New Cases.	
	Males.	Fe-males.	Males.	Fe-males.	Males.	Fe-males.	Males.	Fe-males.
European .. ..	447	398	108	76	195	143	57	49
Other .. ..	1,250	1,185	244	233	740	742	168	158
Persons .. ..	1,697	1,583	352	309	935	885	225	207
Total .. ..	3,280		661		1,820		432	

The following table shows the admissions to Nelspoort Sanatorium during the year 1928-29:—

Race.	Males.	Females.
European .. ..	51	78
Other .. ..	21	20
Persons .. ..	72	58
Total .. ..	130	

It will probably be necessary in the near future to open clinics in the southern suburbs for the benefit of patients dwelling in that part of the Corporation area, as the Newmarket Street Clinic, though admirably situated for inhabitants of the more congested Capetown areas, is too far from the Cape Flats and other neighbouring districts where there is much tuberculosis especially amongst the coloured population.



## MUNICIPAL TREATMENT CENTRES.

(MALE AND FEMALE.)

(Prepared by Dr. C. Kevin O'Malley, M.C.)

During the year ending 30th June, 1929, there was a marked increase in the attendances at the Venereal Disease Clinics. The number of new cases, that is cases presenting themselves for the first time, exceeded that of the previous year in the proportion 2,987 : 2,268. Of these new cases, 1,111 were suffering from syphilis, 769 from gonorrhoea (38 of which also suffered from syphilis and are included in the 1,111 cases of that disease) and 181 from other venereal diseases, presumably soft chancre; moreover of the new cases, 205 were found to be free from any venereal disease and 759 were undiagnosed. The large number of undiagnosed cases is explained by the fact that all these cases ceased attending before a diagnosis of venereal disease could be established by laboratory methods. The figures show then that actually 2,023 new cases were definitely diagnosed as V.D. and no doubt a certain proportion of the 759 undiagnosed cases were in fact suffering from V.D. in some form.

The apparent incidence rate of Venereal Disease as revealed by cases attending the public clinics is 8.1 per 1,000 of the population. It is extremely difficult to gauge the *real* incidence rate which would include *all* cases, *i.e.*, those attending private doctors and those who neglect to have treatment.

The figures for congenital syphilis are double those of the preceding year, *i.e.*, 228 compared to 111. From the point of view of race incidence the figures show that of the new cases 1,019 were European and 1,968 were of the coloured races. Nothing, however, can be argued from these figures for presumably more Europeans undergo private treatment while failure to undergo treatment is more likely amongst the non-European element.

The earlier the stage in which syphilis is first treated the greater is the likelihood of a permanent cure. This is a universally accepted maxim. Yet we find that of 579 new cases of syphilis in the early stages of development 469 were males. Thus prominence is given to the contention that syphilis is frequently overlooked by female sufferers though they form the greater proportion of tertiary cases, when the chances of complete cure have considerably diminished.

Each consultation involves a gross cost of 2s. 1 $\frac{3}{4}$ d.; the net cost to the Municipality of Capetown is 8 $\frac{1}{2}$ d.

No increase was made in the facilities for the treatment of venereal diseases throughout the City in the year under review. There are no facilities at all for the intermediate treatment of female patients suffering from gonorrhoea, and no clinic has been opened in the suburbs. Unfortunately the physical configuration of the City of Capetown makes a visit to the clinics at the City Hospital or Salt River an expensive pilgrimage for the poor resident in the southern suburbs. All the facts at my disposal indicate that there is a real need for the establishment of a clinic in this part of the Municipality and that if facilities were afforded numerous cases of contagious venereal disease would receive the treatment they require.

Advantage is again taken of this occasion to draw attention to the necessity for enlarging or altering the actual structure of the Venereal Disease Clinics. The clinics not only serve as consulting and treatment rooms when medical officers are in attendance but intermediate treatment is carried out in these buildings. The present construction of the premises does not allow of the smooth and rapid handling of the large number of patients who attend both for consultations and injections.







## SECTION VII.—CITY HOSPITALS FOR INFECTIOUS DISEASES.

(By Dr. J. F. Wicht, Medical Superintendent of Hospitals.)

The hospitals for Infectious Diseases controlled by the City Council are two in number, the City Hospital, Portswood Road, and Rentzkie's Farm Isolation Hospital.

### STAFF.

Medical Superintendent of Hospitals (J. F. Wicht, M.D., Dublin, D.P.H., Capetown, Tuberculous Diseases Diploma, Cardiff).

House Physician (appointed for a period of 6 months).

### CITY HOSPITAL.

Matron (Miss E. Everatt).

Assistant Matron (Miss O. B. Beuthin).

3 Ward Sisters.

1 Ward Sister for Venereal Disease Wards and female clinics.

Staff nurses.

Temporary nurses as required.

Dispenser.

Porter.

Domestic staff.

### ISOLATION HOSPITAL.

Caretaker (W. J. Etherton).

1 Sister in charge of Tuberculosis Wards.

2 Staff Nurses.

### CITY HOSPITAL, PORTSWOOD ROAD.

This hospital is situated near the North Gates of the Docks and is bounded on the south-western side by the Green Point Sports Ground from which it is separated by an iron fence. The New Somerset Hospital is adjacent, and between the two hospitals there is a narrow road. The north-western boundary of the City Hospital is a piece of ground laid out in tennis courts by a sports club, while Portswood Road forms the south-eastern boundary. Except for the portion between the hospital and the Green Point Sports Ground the site is surrounded by a wall. The total area of the hospital grounds is  $7\frac{3}{4}$  acres, and the buildings comprise the Medical Superintendent's residence, the administrative block and nurses' home, five infectious diseases wards, and discharging block, venereal disease block and clinic, laundry, disinfecting station, garages, stores, and ambulance driver's cottage. In addition to these brick buildings there are five Nissen huts, four of which are used to accommodate patients, and a disused wood and iron tuberculosis chalet.

The first buildings were erected in 1899 and were occupied by the military authorities during the Boer War until 1902 when the hospital was opened for the isolation and treatment of infectious diseases.

For many years the hospital consisted only of the Medical Superintendent's residence, a portion of the administrative block, and two wards (Isolation and Scarlet Fever). Additions were made in the following order: Enteric Ward, Tuberculosis Chalets, Diphtheria Ward, Tuberculosis Ward, Venereal Disease block, and the administrative block was enlarged to accommodate the increased nursing staff.

Until 1923 the Medical Officer of Health, Dr. A. Jasper Anderson, lived in the residency and was in sole medical charge of the hospital in addition to his other administrative and sanitary duties. When Dr. Anderson retired it was decided to create a new post, that of Medical Superintendent of Hospitals. The Medical Superintendent, Dr. W. P. Cooney, lived in the residency and in addition to his hospital duties was in charge of the Venereal Disease and Tuberculosis clinics.



The hospital had by this time grown to its present size of over 200 beds, and the average number of patients in hospital per diem was increasing owing to the increase in the population. Dr. Cooney resigned in 1927 and was succeeded by the present Medical Superintendent (Dr. J. F. Wicht). Owing to the steady growth of the hospital it was decided to make certain changes, and in August, 1928, a House Physician was appointed to assist at the City Hospital. At the same time the control of the native hospital was transferred from Dr. O'Malley to the Medical Superintendent of Hospitals.

During 1928 an increase was made in the nursing staff, which had hitherto been inadequate for the needs of the hospital.

A course for a certificate in Infectious Diseases Nursing for nurses who hold the certificate of general training was instituted and lectures were given at weekly intervals by the Medical Superintendent. In addition to this a scheme was organised by which nurses who were undergoing their general training were taken on for periods of three months during which time they received instruction in the principles of fever nursing.

The proximity to the Somerset Hospital allows of a certain amount of team work which would otherwise be impossible in a hospital with a medical staff of three (Superintendent, Venereologist and House Physician). Radiographic work is carried out by arrangement with the Cape Hospital Board authorities and owing to the courtesy of the honorary visiting staff of the Somerset Hospital aid is always forthcoming for patients who need advice or treatment in the special branches of medicine such as laryngology, ophthalmology, etc. Routine bacteriological and pathological work is carried out by the Government Laboratory. By arrangement with Professor Ryrie of the University of Capetown autopsies and special pathological investigations are conducted by the University staff. Professor Ryrie, and Dr. Vadas, his assistant, render valuable aid to the hospital in this branch of medical science. The hospital provides facilities for the study of infectious diseases and is attended by medical students and also by graduates in medicine who are taking the Diploma in Public Health. The Medical Superintendent is University Lecturer in Infectious Diseases, while Dr. O'Malley holds the lectureship in Venereal Diseases.

The hospital possesses a small operating theatre and major operations are performed by the Consulting Surgeon, Mr. T. L. Sandes, M.D., F.R.C.S. These operations are mainly emergencies, such as laparotomy for perforated intestinal ulcers in enteric fever.

Reference to the tables included in this section shows the diseases most commonly seen in the hospital practice, and in the following portion of the report a resumé of interesting clinical facts will be given.

*Scarlet Fever.*—This disease is mild in South Africa, though occasionally severe cases are encountered. The disease is not commonly seen amongst the Cape Coloured or native population. Treatment with scarlet fever antitoxin has been found to shorten the duration of the disease.

*Measles* is not particularly severe and there are usually no complications.

*Diphtheria.*—Severe cases are seen from time to time and occur in batches. It is an interesting fact that severe toxic faucial diphtheria is more common in European children than in the Coloured. Fatal diphtheria in Coloured children is almost invariably due to laryngeal obstruction. No cases of fatal cardiac failure were seen in Coloured children whereas this caused the death of several European children. A South African antitoxin is used and is found to give good results. Laryngeal diphtheria is treated by tracheotomy when this is necessary, intubation being seldom used. The mortality after tracheotomy is high as many patients are admitted in the late stages of the disease.

Amongst adult patients it is not unusual to find a pseudo membranous tonsillitis not due to the *Corynebacterium Diphtheriae* amongst those sent in with the diagnosis of diphtheria.

*Puerperal Fever.*—Admissions under this heading include widely differing conditions from mild sapraemia to fatal septicaemia. Parametritis and pelvic cellulitis are not uncommon. The patients are treated on conservative lines, and operative interference is avoided where possible.



Intramuscular injections of quinine and intravenous Electrargol have been found useful in many cases, but patients with septicaemia were not found to react to any drug therapy.

Fatal cases of criminal abortion are met with from time to time, but although these are reported to the Police authorities there is difficulty in obtaining the evidence which leads to conviction of the guilty party.

*Enteric Fever.*—The type of case seen in the City Hospital varies from very mild to extremely severe. In the former class many of the patients are young children in whom the disease runs an atypical course. In most cases of severe enteric fever the disease has not come under treatment until the second or third week, and it is not unusual to find that the patient has continued to work until a few days before his admission to hospital. Cases are on record of patients keeping to their feet until the day of their death or until perforation or severe hæmorrhage occurred. One of our own patients at the native hospital who was admitted in a state of sudden collapse died a few hours later and it was only at autopsy that the diagnosis of enteric fever was made.

Enteric patients are given a fairly liberal dietary but are otherwise treated on expectant lines. During the year under consideration a trial was made of Electrargol intravenously but the drug was not found to alter the course of the disease as it appears to do in erysipelas and puerperal infections.

Perforation occurred in a small number of cases and some of these were saved by operative measures. The early and timely diagnosis of perforation is difficult in many cases and it has been noticed that slight rigidity without acute pain and in the absence of a change in the temperature and pulse, may be an early sign. In the case of patients who were in the typhoid state it was impossible to diagnose perforation until the onset of the signs of advanced peritonitis. The best operative results were obtained when the onset of perforation was clearly defined and laparotomy was performed within two hours of the occurrence of symptoms.

Table 3 shows the diseases which were diagnosed wrongly as enteric fever. Enteric is diagnosed with frequency by the general practitioners who send their patients to the hospital, but their diagnosis is not always confirmed by clinical observation and laboratory tests. Routine blood cultures are done on all patients sent in as cases of enteric fever and the Widal reaction is performed at intervals, attention being paid to any increase in the agglutinative powers of the serum.

It will be seen that conditions such as influenza, pneumonia, cerebrospinal fever, enteritis, malaria, etc., are amongst those diagnosed erroneously as enteric fever. The difficulties encountered by practitioners are often not appreciated by hospital physicians, and the insidious onset and frequently atypical course of enteric fever make it a difficult disease to recognise in its early stage. It is our experience that the disease is seldom diagnosed during the first week, and that there is a considerable margin of error when patients are sent into hospital as cases of enteric fever with a history of only a few days' illness. A group in Table 3 has been labelled "Pyrexia of unknown origin" as it has been thought better to profess ignorance rather than make a diagnosis of enteric on insufficient grounds. Many of these cases might have been labelled "influenza" or febricula and they were almost certainly not enteric fever. Blood cultures and agglutination tests show that infection by the *B. Typhosus* is far commoner than infection by the para-typhoid bacilli.

*Cerebrospinal Fever.*—133 cases of this disease were admitted during the year under consideration as compared with 245 in the previous year. As the disease is prevalent its diagnosis is not a matter of difficulty in the majority of cases, but a small proportion of the cases sent in as cerebrospinal fever turn out to be due to organisms other than the meningococcus, tuberculous meningitis being the commonest of these. Occasional cases of pneumococcal meningitis, which are invariably fatal, and of influenzal meningitis which frequently recover, are seen in the wards. In some cases, as reference to Table 3 shows, the patient is found on admission not to be suffering from meningitis. The faulty diagnosis is usually due to the fact that the patient is ill with some other acute disease and shows signs of meningism. In view of the fact that mild and abortive cases occur lumbar puncture is very seldom omitted when a practitioner sends a patient in with a diagnosis of meningitis even when there are no definite signs or symptoms of meningeal involvement. A fisherman admitted as a case of cerebrospinal fever was found



to have no neck rigidity or Kernig's sign and was not considered to have the disease. He showed slight pyrexia ( $101^{\circ}$ ) and complained of a slight headache but gave a history of having had intense headache on the previous day. He stated that the pain was so severe that a doctor was summoned from the nearest town some six miles away. On getting into touch with the doctor I was informed that the man had showed no signs of meningitis, but that because there had been cerebrospinal fever in the village (Hout Bay) a lumbar puncture was decided on as an afterthought. The fluid was turbid and contained meningococci. This man made a good recovery without intrathecal serum, only 25 c.c. being given intramuscularly.

In some cases the bacteriological cause of the meningitis was obscure and although the cerebrospinal fluid contained polymorphs no organisms were found. These patients tended to recover, and the probability is that they suffered from cerebrospinal fever.

Our patients, when treated early in the disease, responded fairly well to intrathecal injections of antimeningococcal serum, but the death rate has been rendered high by the fact that a fair proportion were infants with but feeble powers of resistance, and also that some of the patients were admitted at a late stage of the disease, though it must be acknowledged that in some cases the disease proved refractory in spite of early and vigorous serum treatment.

A particularly virulent infection was seen in the case of a coloured family residing in one of the suburbs. Of thirteen members of the family, five showed signs of meningitis within a period of two days. The youngest, an infant, died at home after an illness of a few hours, while the remaining four patients were admitted to the City Hospital soon after the onset of symptoms. In spite of intensive treatment three whose ages were respectively 7 years, 12 years and 14 years, died, while the fourth, a girl of 20 years, recovered after a prolonged illness. Four other members of the family were found to be carriers.

The serum used is prepared by the South African Institute for Medical Research. It is polyvalent and incorporates strains obtained from Capetown as well as the Transvaal strains of meningococci. When the patient does not appear to be favourably influenced by this serum other brands are tried, such as those of Burroughs Wellcome or Mulford. During convalescence simple lumbar puncture without the use of serum is practised when necessary.

The operation of cisterna magna puncture has been found useful in certain cases. Cisterna (or suboccipital) puncture is performed when the formation of adhesions give rise to a dry lumbar puncture. It is also resorted to in children, especially infants, when a specimen of cerebrospinal fluid free from traces of blood is desired. Infants do not resent cisterna puncture even when performed without an anaesthetic, and a child has been known to go on sucking a "dummy" while fluid was draining away through a needle in the cisterna. Our experience at the City Hospital with this operation has given rise to the following opinions, (a) Cisterna puncture when performed by a skilled operator is a safe and efficient method of obtaining cerebrospinal fluid and of giving serum, especially in the case of infants, (b) Skill in performing cisterna puncture is not difficult to acquire and the cadaver should be used for purposes of practising. Needless to say before attempting cisterna puncture the operator should be perfectly skilled in performing lumbar puncture. (c) There is a slight risk in the procedure as hæmorrhage may follow the accidental and unavoidable puncture of a vessel in the region of the cisterna. For this reason cisterna puncture is not adopted as a routine in all cases, although it is practised extensively when occasion requires, *i.e.*, when lumbar puncture is difficult or, in infants, when lumbar puncture gives rise to blood stained fluid. Lateral ventricular puncture is occasionally performed in infants in whom the fontanelle is open, but these patients are so gravely ill that the results have not been encouraging. On two occasions the skulls of older children with internal hydrocephalus were bored with a small burr to allow the passage of a needle into the lateral ventricles, but this measure did not prevent a fatal result in each case.

Skin eruptions were not common in our cases, but occasionally profuse hæmorrhagic rashes were seen. In early cases with or without a rash good results were obtained by giving 50 to 100 c.c. of antimeningococcal serum intravenously in addition to the intrathecal dose. In some apparently fulminating cases so treated the return to normal occurred with dramatic suddenness.



The complications observed were mainly arthritis, iritis, and nerve deafness. Arthritis of the larger joints, such as the knee, reacted rapidly to aspiration and serum injection. It seemed to be a complication which pointed to a favourable prognosis, deaths amongst patients with arthritis of the larger joints being extremely rare.

Iritis was frequently unilateral and always resulted in a grave loss of sight. It was most frequently seen in the severe cases and all patients with bilateral iritis died, with the exception of one boy whose sight on his recovery was reduced to perception of light. Nerve deafness was a distressing complication as it not infrequently occurred in young children who probably became deaf mutes. In no case was any mental defect seen to follow the disease; on the contrary many of the children were remarkably bright quite early in convalescence.

From a practical standpoint the giving of serum was conducted as follows. A general anæsthetic (pure chloroform) was administered in most cases as the patients even if not delirious and resisting were not easily put in the arched back position on account of muscular spasm. Fluid was allowed to run out slowly and the amount was never exceeded by the amount of serum which was replaced. The serum was run in slowly by gravity, being warmed to blood heat, and 25 c.c. was the maximum amount used for adults, the dose being correspondingly less for children and infants (15 c.c. to 10 c.c.). Larger doses were found to have no advantage, and in fact seemed to be dangerous. It seems rational to assume that the intrathecal space can only comfortably accommodate a certain amount of fluid, and that any excess is under pressure. If 70 c.c. of fluid be removed it does not follow that (say) 50 c.c. of serum will be the correct amount with which to replace it, as the patient will feel much more normal with about 20 or 25 c.c. Lumbar or cisterna puncture was performed daily for the first four days and then continued or discontinued as the condition of the patient demanded. The return to recovery was heralded first by a loss of the hyperalgesia and pain in the neck followed by a disappearance of the neck rigidity. The temperature chart, except in a few cases where the serum treatment produced a crisis-like fall or where hyperpyrexia presaged death, was not a reliable index of progress.

*Tuberculous Meningitis.*—This manifestation of infection by the B. Tuberculosis is not infrequent especially amongst coloured children. The patients are usually sent in with the diagnosis of cerebrospinal fever, as when this latter disease is prevalent it is practically impossible to make a differential diagnosis without the aid of lumbar puncture. It is scarcely necessary to state that all the cases were fatal. A consumptive coloured girl aged 18 who had attended the clinic was sent in as a case of cerebrospinal fever. She was semi-comatose and showed definite signs of neck rigidity with a positive Kernig's sign. Lumbar puncture showed clear fluid under definite pressure in which tubercle bacilli were not found. After the lumbar puncture the patient became more deeply comatose with persistence of the signs of meningitis and it was considered, in view of her pulmonary condition, that she was suffering from tuberculous meningitis. To our surprise she began to improve a few days later, and in a week had lost all symptoms of meningeal involvement. She was transferred to the tuberculosis block and was found to have an acute exacerbation of her pulmonary condition to which she succumbed in two months.

When tubercle bacilli were absent from the cerebrospinal fluid the cause of death was usually verified by autopsy. Professor Rylie who performed the *post mortem* examinations made careful observations with a view to tracing the primary focus and the route of infection. It is interesting to notice that at the time of death some of the coloured infants were quite well nourished and at autopsy were found to have a normal layer of fat in spite of the fact that tuberculosis was present in miliary form.

*Pneumonia.*—Typical lobar pneumonia with defervescence by crisis was not frequently seen. Even in cases with massive consolidation, defervescence was usually by lysis.

*Anthrax.*—An unusual case of anthrax was admitted from N'dabeni Location, the patient being a native who was employed by a firm of hide exporters. The patient left his work at midday as he felt unwell and by 8 p.m. he was violently delirious with well marked signs of meningitis. Some of his friends



who worked at the same factory suggested that it might be anthrax and drew attention to a small pustule on the chin. This lesion in no way resembled a malignant pustule, but it was decided to remove the patient to the City Hospital for further investigation. Lumbar puncture was performed and blood stained cerebrospinal fluid ran out under great pressure. The general condition of the patient became rapidly worse and he died a few hours later. Autopsy and bacteriological investigation, including animal inoculation, showed that there was meningitis due to the bacillus anthracis, while examination of the skin lesion showed no trace of anthrax. Had one not been told the patient's occupation there would have been no reason for suspecting anthrax before the autopsy was made.

*Pulmonary Tuberculosis.*—The tuberculosis wards were always full, and there was always a waiting list of patients to be admitted. An attempt was made to admit, where possible, patients who would derive benefit from hospital treatment. Thorough rest on the lines used in all modern institutions for the treatment of tuberculosis was prescribed where possible, and an attempt was made to render the patients fit for ambulant treatment at Nelspoort Sanatorium, and to avoid sending febrile patients to Nelspoort before they were ready for Sanatorium treatment.

The lack of beds made this aim difficult to accomplish. Advanced cases of the disease in destitute patients had often to be admitted, with the result that other patients had to proceed directly to Nelspoort without a preliminary period of hospital treatment. There is no other hospital in Capetown for the reception of patients suffering from pulmonary tuberculosis (except the Rentzkies Farm Hospital which is a branch establishment) and there is a constant demand for the admission of hopelessly advanced patients or of chronic consumptives who are not suited for any form of treatment and who are sent to hospital for purposes of isolation.

The Wards at Rentzkie's Farm are useful in that they serve as a "home for advanced cases" and relieve the congestion at the City Hospital, but unfortunately there is accommodation for coloured patients only.

Where necessary artificial pneumothorax treatment is carried out. The results have been disappointing amongst coloured patients in whom the disease proceeds inexorably to a fatal termination. Life is prolonged but rarely saved in this class of patient. Sanocrysin is used at the City Hospital and there were gratifying results in some cases. Small doses 0.1 gmme. were used with a cautious increase to 0.75 gmme. where there was tolerance. In some cases repeated doses of 0.1 gmme. appeared to exert a beneficial influence on the course of the disease. A severe cutaneous reaction with desquamation was observed in a coloured male. Intravenous Ametox was used with good effect, and although there was a condition resembling exfoliative dermatitis the patient recovered from the attack and his pulmonary disease was found to have become less active.

It is hoped that the building of new tuberculosis wards at the City Hospital will give greater scope for the admission and treatment of more suitable cases.

There were 1,611 admissions during the year (810 European and 801 non-European). Seventeen cases were admitted twice during the year and 14 other cases admitted in previous years were again admitted in the year under review.

The average number of patients in the hospital per diem for a series of years is as follows:—

1923-24	1924-25	1925-26	1926-27	1927-28	1928-29
62.9	69.6	107.7	125.5	151.7	156.2



TABLE 1.—NUMBER OF CASES TREATED IN THE CITY HOSPITAL FOR THE PERIOD JULY 1ST, 1928, TO JUNE 30TH, 1929, CLASSIFIED ACCORDING TO RACE AND DISEASE.

Disease.	Under Treatment, July 1st, 1928.			Admitted.			Discharged.			Died.			Under Treatment, June 30th, 1929.			Total Admitted, Persons.	Day Units.			
	E.		O.	E.		O.	E.		O.	E.		O.	E.		O.		E.		O.	Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<i>Contagious Diseases.</i>																				
Enteric Fever .. ..	3	6	4	9	42	47	69	47	34	45	53	48	5	8	15	7	6	5	1	205
Typhus Fever .. ..	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
Scarlet Fever .. ..	16	24	—	—	48	72	2	7	59	89	2	7	—	—	—	5	7	—	—	129
Diphtheria .. ..	8	5	1	3	50	79	35	29	49	70	21	26	4	6	9	4	5	8	6	193
Puerperal Fever .. ..	—	1	—	3	—	26	—	39	—	22	—	34	—	5	—	5	—	—	—	65
Influenza .. ..	—	—	—	—	12	6	8	5	12	6	8	5	—	—	—	—	—	—	—	31
Influenza Pneumonia ..	—	1	—	12	11	19	18	8	9	17	10	4	1	3	6	—	1	—	—	60
Influenza Meningitis ..	—	—	—	—	3	—	6	3	2	—	3	1	—	3	2	—	—	—	—	12
Acute Primary Pneumonia ..	—	1	—	2	1	7	4	2	1	5	3	—	—	3	1	—	—	—	—	14
Erysipelas .. ..	—	1	—	8	16	6	8	4	14	5	7	3	1	—	—	1	1	2	1	38
Acute Anterior Poliomyelitis ..	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Infective Encephalitis ..	—	—	—	—	2	1	2	—	2	1	2	—	—	—	—	—	—	—	—	5
Neurospinal Fever .. ..	1	1	5	1	21	11	60	41	13	5	32	21	7	31	18	2	2	3	—	133
Pulmonary Tuberculosis ..	19	10	7	9	49	20	24	31	32	18	20	24	20	1	4	7	16	11	7	124
Tubercular Meningitis ..	—	—	—	—	5	6	18	16	1	—	2	1	4	4	16	15	—	—	—	45
Abdominal Tuberculosis ..	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	1
Tubercular Knee .. ..	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—
Tubercular Hip .. ..	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Tubercular Glands .. ..	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Hilar Tuberculosis .. ..	—	—	—	1	—	—	1	—	—	—	1	—	—	1	—	—	—	—	—	2
Generalized Tuberculosis ..	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Anthrax .. ..	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Delta Fever .. ..	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	35
<i>Other Cases (excluded from above).</i>																				
Diphtheria and Scarlet Fever ..	—	—	—	—	2	—	1	—	2	—	—	—	—	1	—	—	—	—	—	3
Diphtheria and Measles .. ..	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Diphtheria and Chickenpox ..	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Scarlet Fever and Erysipelas ..	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Scarlet Fever and Nephritis ..	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1
Puerperal Fever and Syphilis ..	—	—	—	1	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	1
Pulmonary Tuberculosis and Enteric Fever .. ..	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Pulmonary Tuberculosis and Pneumonia .. ..	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Pulmonary Tuberculosis and Ringworm .. ..	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Pulmonary Tuberculosis and Laryngitis .. ..	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Pulmonary Tuberculosis and Syphilis .. ..	—	—	—	—	1	1	—	—	—	—	—	1	1	—	—	—	—	—	—	2
Tubercular Spine and Syphilis ..	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1
Tubercular Enteritis and Syphilis .. ..	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Scarlet Fever and Chickenpox ..	1	1	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	37
Puerperal Fever and Lobar Pneumonia .. ..	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
<i>Veneral Diseases.</i>																				
Syphilis .. ..	4	2	3	19	7	30	46	22	7	26	44	—	3	2	1	3	3	—	—	103
Gonorrhoea .. ..	2	5	1	2	21	27	11	13	21	27	12	14	1	—	—	1	5	—	—	72
Soft Chancre .. ..	—	—	—	8	—	18	2	7	—	16	1	—	—	—	1	2	1	—	—	27
<i>Other Cases (excluded from above).</i>																				
Syphilis and Gonorrhoea .. ..	—	—	—	5	3	5	5	5	3	5	5	—	—	—	—	—	—	—	—	18
Syphilis, Gonorrhoea and Soft Chancre .. ..	—	—	—	—	—	4	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Syphilis and Soft Chancre .. ..	—	—	—	2	—	—	—	2	—	4	—	—	—	—	—	—	—	—	—	6
Gonorrhoea and Soft Chancre ..	—	—	—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	—	—	2
Gonorrhoea and Mumps .. ..	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
Other Diseases (see Table No. 2)	1	1	2	1	78	79	74	70	68	72	52	53	6	3	17	9	5	5	7	301
<b>Totals .. ..</b>	<b>56</b>	<b>55</b>	<b>27</b>	<b>32</b>	<b>394</b>	<b>416</b>	<b>409</b>	<b>392</b>	<b>349</b>	<b>395</b>	<b>289</b>	<b>308</b>	<b>56</b>	<b>36</b>	<b>112</b>	<b>81</b>	<b>45</b>	<b>40</b>	<b>35</b>	<b>1,611</b>
E—Europeans. O—Others or Non-Europeans.																				

\* One non-European female remaining over in the hospital from the previous year as a case of pulmonary tuberculosis was subsequently found to be case of rheumatic carditis. Transferred where indicated—see next table, No. 2.

† These dual cases with a venereal disease are not included in the cases under "Venereal Diseases" in this table.



TABLE 2.—OTHER ADMISSIONS (SEE OTHER DISEASES, TABLE No. 1). MOSTLY CASES ADMITTED WRONGLY DIAGNOSED AS CASES OF INFECTIOUS DISEASES.

Disease.	Under Treatment, July 1st, 1928.				Admitted.				Discharged.				Died.				Under Treatment, June 30th, 1929.				Total Admitted, Persons.	Day Units.				
	E.		O.		E.		O.		E.		O.		E.		O.		E.		O.			E.		O.		Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		M.	F.			
Measles .. .. .	1				7	9	2	4	7	10	2	3							1	22	73	131	31	53	288	
Tonsillitis .. .. .					11	18	8	11	9	15	7	9							2	48	245	405	161	305	1,116	
Scabies .. .. .							1													1			11		11	
Acute Rheumatism .. .. .							1				1									1				1	1	
Bronchitis .. .. .						13	5	3		2	5	1								2	10		14	132	252	
Broncho-Pneumonia .. .. .					7	23	8	4	5	1	4	2	2							21	110	10	174	58	332	
Pyrexia of Unknown Origin .. .. .					5	6	6	4	5	6	6	4								21	105	117	110	124	456	
Rubella .. .. .	1				3	3	2	3	4	3	3	2	3							11	25	23	25	42	115	
Pleurisy .. .. .					5	3	3	5	4	3	3	5							1	15	183	32	205	204	624	
Meningismus .. .. .					1	1	2	1	2	2	2	2								6	16	14	28	29	87	
Enteritis .. .. .					2	1	4	1	2	1	1	1								7	46		31	13	90	
Malaria .. .. .					1	1			1	1										2	61	6			67	
Quincy .. .. .						3		2		2	2	2								5		58		35	90	
Chickenpox .. .. .					1	4		1	1	4		1								6	15	90		19	124	
Pneumococcal Meningitis .. .. .					1	1	1	1				1	1	1						3	2		1	4	7	
Septic Meningitis .. .. .							3						2						1	3			40		40	
Meningitis of Unknown Aetiology .. .. .					1		12	2	1		12									3	29				61	
Pyelitis .. .. .						12		2			12		1						1	4		53		22	75	
Laryngitis .. .. .					1	1	12	1	1	1	1	1								5	5	3	14	42	64	
Abortion .. .. .						12		1		12		1								3		24		10	34	
Pemphigus .. .. .							1					1								1			28		28	
Rheumatic Arthritis .. .. .						1		1		1		1								2		32		36	68	
Phlebitis .. .. .					1	1			1	1										2	72	115			187	
Salpingitis .. .. .						1				1										1		13			13	
Purpura Haemorrhagica .. .. .						1							1							1			1		1	
Stricture of the Urethra .. .. .					1	1		1	1		1									2	7		5		12	
Tetanus .. .. .						1													1	1			15		15	
Toxic Eruption .. .. .						1				1										1		10			10	
Ulceration of Fauces .. .. .						1				1										1		21			21	
Unresolving Pneumonia .. .. .						1		1			1									1			45		45	
Cancer of Tongue .. .. .					1				1											1	81				81	
Food Poisoning .. .. .					1				1											1	29				29	
Otitis .. .. .						1				1										1		13			13	
Fissure in Ano .. .. .						1				1										1		16			16	
Frontal Sinusitis .. .. .						1		1						1	1					2		1		1	2	
Myelitis .. .. .						12	1						1							1			1		1	
Pyæmia .. .. .						2	1					2	1							3		9	29		38	
Fibrosis of Lung .. .. .					2			2												2	147				147	
Cerebral Haemorrhage .. .. .						1							1							1		15			15	
Cellulitis .. .. .					1			1	1					1						2	47			1	48	
Peritonitis .. .. .						1	1	1					1	1						2			4	3	7	
Herpes .. .. .					1			1	1			1								2				4	6	
Croup .. .. .						1	1	1		1	1									2			41	21	62	
Appendicitis .. .. .					1			1	1						1					2	14				16	
Burns .. .. .					1			1			1				1					2	6			5	11	
Nephritis .. .. .						2					1				1					2			20		20	
Hysteria .. .. .							1			1			1							1			4		4	
Oedema of Glottis .. .. .					1						1			1						1	1				1	
Mastitis .. .. .								1				1								1				7	7	
Alcoholism .. .. .					1				1											1	5				5	
Mitral Stenosis .. .. .											1									1	46				46	
Mumps .. .. .						1				1										1		21			21	
Miners Phthisis .. .. .					1				1											1	130				130	
Dermatitis .. .. .					1				1											1	22				22	
Septicæmia .. .. .					2	1			1	1			1							3	26	25			51	
Pericarditis .. .. .						1						1								1			1		1	
Endocarditis .. .. .						1	1					1	1							2			2	22	24	
Abscess .. .. .					2			2	1			2	1							4	48				43	91
Pulmonary Embolism .. .. .							1							1						1				10	10	
Rheumatic Carditis .. .. .					1														1					365	365	
Whooping Cough .. .. .						1				1										1			7		7	
Non-Venereal Diseases .. .. .					5	4	4	5	5	4	4	3							2	18	70	66	76	35	247	
Diphtheria Carrier .. .. .						1				1										1		81			81	
Observation .. .. .					1			1											1	1		210			210	
No Apparent Disease .. .. .						8	4	7	5	8	4	7	5							24	48	59	90	63	260	
Totals .. .. .	1	1	2	1	78	79	74	70	68	72	52	53	6	3	17	9	5	5	7	9	301	1,698	1,477	1,579	1,835	6,589

E—Europeans.

O—Others or Non-Europeans.

\* See footnote to Table No. 1.



TABLE 3.—CASES ADMITTED WITH INCORRECT DIAGNOSES.

[illegible]

Disease.	SHOWING ULTIMATE DIAGNOSIS.																																		
	Quinsy.	Pneumococcal Meningitis.	Septic Meningitis, Meningitis of Unknown Aetiology.	Pyelitis.	Laryngitis.	Abortion.	Rheumatoid Arthritis.	Phlebitis.	Salpingitis.	Purpura	Haemorrhagica.	Stricture of Urethra.	Toxic Eruption.	Ulceration of Fauces.	Unresolving Pneumonia.	Cancer of Tongue.	Food Poisoning.	Otitis.	Fissure in Ano.	Frontal Sinusitis.	Myelitis.	Pyæmia.	Fibrosis of Lung.	Cerebral Haemorrhage.	Cellulitis.	Peritonitis.	Herpes.	Croup.	Appendicitis.	Burns.	Nephritis.	Hysteria.	Oedema of Iottis.		
Admitted for—																																			
Enteric Fever .. .. .																																			
Diphtheria .. .. .																																			
Scarlet Fever .. .. .																																			
Puerperal Fever .. .. .																																			
Erysipelas .. .. .																																			
Cerebrospinal Fever .. .. .																																			
Infective Encephalitis .. .. .																																			
Acute Anterior Poliomyelitis .. .. .																																			
Anthrax .. .. .																																			
Influenza .. .. .																																			
Influenza Pneumonia .. .. .																																			
Acute Primary Pneumonia .. .. .																																			
Pulmonary Tuberculosis .. .. .																																			
Tubercular Meningitis .. .. .																																			
Syphilis .. .. .																																			
Gonorrhoea .. .. .																																			
Soft Chancre .. .. .																																			
Veneral Diseases? .. .. .																																			
Measles .. .. .																																			
Tetanus .. .. .																																			
Nephritis .. .. .																																			
Dual Cases (excluded from above)—																																			
Pulmonary Tuberculosis and Pneumonia .. .. .																																			
Pneumonia and Pleurisy .. .. .																																			
Cerebrospinal Fever and Pneumonia .. .. .																																			
Totals .. .. .	3	3	12	3	4	5	3	1	12	1	1	1	1	1	1	1	1	1	1	12	1	3	12	1	12	12	12	12	1	1	1	12	12	1	

Disease.	SHOWING ULTIMATE DIAGNOSIS.																	TOTAL.		
	Mastitis.	Alcoholism.	Mitral Stenosis.	Dermatitis.	Septicæmia.	Pericarditis.	Endocarditis.	Abscess.	Pulmonary Embolism.	Non-Veneral Disease.	No Apparent Disease.	Dual Cases.								
												Syphilis and Gonorrhœa.	Enteric Fever and Pulmonary Tuberculosis.	Scarlet Fever and Diphtheria.	Diphtheria and Measles.	Scarlet Fever and Erysipelas.	Puerperal Fever and Syphilis.		Pul. Tuberculosis and Laryngitis and Syphilis.	Pul. Tuberculosis and Syphilis.
Admitted for—																				
Enteric Fever .. .. .	1										8								105	
Diphtheria .. .. .											1								74	
Scarlet Fever .. .. .											1								18	
Puerperal Fever .. .. .																			5	
Erysipelas .. .. .																			114	
Cerebrospinal Fever .. .. .	1					1	1				11								4	
Infective Encephalitis .. .. .		1																	1	
Acute Anterior Poliomyelitis .. .. .																			1	
Anthrax .. .. .						1													6	
Influenza .. .. .																			16	
Influenzal Pneumonia .. .. .									1										6	
Acute Primary Pneumonia .. .. .											1								16	
Pulmonary Tuberculosis .. .. .				1												1			3	
Tubercular Meningitis .. .. .											1								7	
Syphilis .. .. .																12		1	4	
Gonorrhœa .. .. .						1													1	
Soft Chancre .. .. .										1									18	
Veneral Diseases? .. .. .										15									3	
Measles .. .. .																			1	
Tetanus .. .. .																			1	
Nephritis .. .. .																			1	
Dual Cases (excluded from above)—																				
Pulmonary Tuberculosis and Pneumonia .. .. .																			1	
Pneumonia and Pleurisy .. .. .																			1	
Cerebrospinal Fever and Pneumonia .. .. .																			1	
Totals .. .. .	1	1	1	1	3	1	2	4	1	16	24	2	1	3	1	1	1	1	414	



TABLE 4.—NUMBER OF CASES TREATED IN THE CITY HOSPITAL, FOR THE PERIOD OF JULY 1ST, 1928, TO JUNE 30TH, 1929, CLASSIFIED ACCORDING TO THE WARDS OF THE CITY, ETC., TO WHICH THEY BELONGED.

Wards, etc.	Under Treatment July 1st, 1928.		Admitted.		Discharged.		Died.		Under Treatment June 30th, 1929.		Total Ad- mitted.										
	Eur.	Non-E.	Eur.	Non-E.	Eur.	Non-E.	Eur.	Non-E.	Eur.	Non-E.	Per- sons.										
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.											
1 Sea Point ..	7	2	—	1	34	28	7	20	26	29	6	17	10	1	1	3	5	—	—	1	89
2 Harbour ..	3	3	—	1	27	28	18	19	23	24	15	15	5	3	—	3	2	4	3	2	92
3 West Central ..	2	—	1	1	7	1	15	12	7	1	12	11	2	—	2	1	—	—	2	1	35
4 Kloof ..	3	3	1	—	16	29	21	15	14	26	15	10	3	1	7	2	2	5	—	3	81
5 Park) ..	6	6	—	2	38	19	5	9	36	24	4	10	3	—	—	5	1	1	1	1	71
6 East Central ..	8	4	—	6	21	42	62	65	23	40	33	50	4	2	25	15	2	4	4	6	190
7 Castle ..	3	3	6	4	7	9	51	42	7	9	39	33	1	2	13	10	2	1	5	3	109
8 Woodstock ..	6	8	2	2	45	50	10	11	40	47	7	11	5	5	4	—	6	6	1	2	116
9 Salt River ..	3	3	1	—	28	37	16	13	22	31	11	7	4	3	5	4	5	6	1	2	94
10 Mowbray ..	3	9	2	1	20	25	12	9	18	31	12	8	2	2	2	—	3	1	—	2	66
11 Maitland ..	4	—	2	3	13	13	25	24	12	11	22	17	3	2	4	9	2	—	1	1	75
12 Rondebosch ..	1	—	1	3	12	15	42	33	10	13	24	28	2	1	11	5	1	1	8	3	102
13 Claremont ..	2	3	2	4	22	15	14	17	20	12	10	17	1	3	4	4	3	3	2	—	68
14 Kalk Bay ..	—	2	—	—	9	14	10	10	8	13	8	7	—	—	2	2	1	3	—	1	43
15 Wynberg ..	3	6	4	3	30	46	22	39	25	47	20	27	5	2	4	8	3	3	2	7	137
Not Allocated ..	—	—	1	—	1	—	6	2	1	—	5	2	—	—	—	—	—	—	2	—	9
From Ships ..	1	—	—	—	32	6	2	—	28	6	2	—	4	—	—	—	1	—	—	—	40
From Outside the Municipality ..	1	3	3	1	32	39	59	44	29	31	40	30	2	9	20	15	2	2	2	—	17
Langa Location ..	—	—	—	—	—	—	3	—	—	—	—	—	—	—	3	—	—	—	—	—	3
N'dabeni Location ..	—	—	1	—	—	—	9	8	—	—	4	8	—	—	5	—	—	—	1	—	17
Totals ..	56	55	27	32	394	416	409	392	349	395	289	308	56	36	112	81	45	40	35	35	1,611

E.—Europeans.

O.—Others or Non-Europeans.

#### CITY ISOLATION HOSPITAL, RENTZKIE'S FARM.

This hospital is situated at Rentzkie's Farm in the Maitland ward about six miles from the centre of the City, and has 42 beds. It is primarily intended for smallpox, plague and typhus fever, and in recent years until the end of 1927 there was no resident staff except the caretaker, with labourers.

The hospital has accommodation available should an epidemic of any infectious disease assume large proportions, and serves as an overflow when the City Hospital wards are unable to take in cases of the more common infectious diseases. In addition, the Union Government own buildings containing 163 beds at Rentzkie's Farm for use in quarantining passengers and crews of ships entering the Port of Capetown with formidable epidemic diseases on board.

With a view to increasing the accommodation available for cases of pulmonary tuberculosis the Union Health Department has agreed to one of the quarantine buildings being converted temporarily into wards for such cases. The necessary alterations were made and accommodation provided for 30 non-European patients, male and female. The wards which were opened on 20th January, 1928, were put in charge of a sister with two nurses (later increased to three) and domestic staff. In the following statement the cases treated in this ward are included with those of the old Corporation Hospital of 42 beds.

There were 90 admissions during the past year. One of the non-European males was admitted twice. These 90 admissions comprise five for males and four for females—European and 42 for males and 39 for females—non-European. Eleven non-European males and 23 non-European females died, and 29 non-Europeans (19 males and 10 females) remained in the hospital at the close of the year.

The following table gives the enumeration of the cases, classified as to race and sex, and also under the headings: admissions, discharges, deaths, in hospital at the end of previous year, and in hospital at end of present year. They are further classified as to disease (ultimate diagnosis) in the first section, and as to



the wards, etc., to which they belonged in the second section. Eight cases were admitted during the year from ships calling at the Port of Capetown.

Disease. (Ultimate diagnosis).	Under treatment, July 1st, 1928.				Admitted.				Discharged.				Died.				Under treatment, June 30th, 1929.				Total ad- mit- ted. Per- sons.	Day Units.				
	Eur.		Non-E.		Eur.		Non-E.		Eur.		Non-E.		Eur.		Non-E.		Eur.		Non-E.			Eur.		Non-E.		Total per- sons.
	M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.		M. F.			M. F.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		M.	F.			
Pulmonary Tuberculosis	-	-	16	13	1	-	36	38	1	-	22	18	-	-	11	23	-	-	19	10	75	283	-	6,020	4,127	10,430
Pleural Effusion	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	15	-
Smallpox*	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	21	-	21
Smallpox Contacts*	-	-	-	-	4	3	-	-	4	3	-	-	-	-	-	-	-	-	-	-	-	7	85	63	-	148
Chickenpox	1	1	-	-	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	8	14	19	41
Cerebrospinal Fever— Contacts	-	-	-	-	-	-	2	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2	-	-	16	-
Cerebrospinal Fever— Carriers	-	-	-	-	-	-	2	1	-	-	2	1	-	-	-	-	-	-	-	-	-	3	-	-	16	8
Total	1	1	16	13	5	4	42	39	6	5	28	19	-	-	11	23	-	-	19	10	90	376	98	6,086	4,135	10,695

\* Diagnosis of Smallpox not confirmed.

Ward, etc.	Under Treatment, July 1st, 1928.		Admitted.		Discharged.		Died.		Under Treatment, June 30th, 1929		Total Ad- mit- ted.	
	Eur.		Non-E.		Eur.		Non-E.		Eur.		Non-E.	
	M. F.		M. F.		M. F.		M. F.		M. F.		M. F.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Sea Point..	-	-	-	-	-	-	2	2	-	-	1	1
2. Harbour ..	-	-	2	2	-	-	2	1	-	-	1	2
3. West Central	-	-	1	-	-	-	1	-	-	-	1	1
4. Kloof ..	-	-	2	-	-	-	1	-	-	-	2	-
5. Park ..	-	-	-	-	-	-	-	-	-	-	-	-
6. East Central	-	-	2	1	-	-	3	7	-	-	2	1
7. Castle ..	-	-	2	-	-	-	4	2	-	-	2	1
8. Woodstock	1	-	-	-	-	-	1	3	1	-	-	-
9. Salt River	-	-	-	2	-	-	1	4	-	-	1	-
10. Mowbray	-	-	1	-	-	-	-	-	1	-	-	-
11. Maitland ..	-	-	2	-	-	-	2	1	-	-	2	-
12. Rondebosch	-	-	1	1	-	-	8	-	-	-	5	-
13. Claremont	-	-	-	1	1	-	5	5	1	-	5	2
14. Kalk Bay	-	1	-	1	-	-	2	1	-	1	-	2
15. Wynberg	-	-	1	-	-	-	4	3	-	-	4	3
Not allocated	-	-	-	-	-	-	1	2	-	-	-	-
From outside the Muni- cipality	-	-	2	5	-	-	6	7	-	-	2	7
From Ships ..	-	-	-	-	4	4	-	-	4	4	-	-
Total	1	1	16	13	5	4	42	39	6	5	28	19

The average number of patients in the hospital per diem for the year under report was 29.3.

The non-European male case of pleural effusion was admitted wrongly diagnosed as a case of pulmonary tuberculosis. This case was transferred to the City Hospital, Portwood Road, where the change of diagnosis was made.

One of the non-European male smallpox contacts was also suffering from appendicitis and was transferred to the City Hospital, Portwood Road.

In addition to the above-mentioned two cases, five cases of pulmonary tuberculosis were transferred to the City Hospital, Portwood Road. Of these, one was a European male, two were non-European males and two were non-European females. One of these non-European males was admitted twice to the City Isolation Hospital, Rentzkie's Farm during the year.







## SUMMARY.

WARDS: CORRECTED FOR OUTWARD TRANSFERS BUT NOT FOR INWARD TRANSFERS.

CAUSE OF DEATH.	Race	Sea Point 1	Har- bour 2		West Central 3		Kloof 4		Park 5		East Central 6		Castle 7		Wood- stock 8		Salt River 9		Mow- bray 10		Mait- land 11		Ronde- bosch 12		Clare- mont 13		Kalk Bay 14		Wyn- berg 15		Not Allocated. Residential Addresses Un- as- cer- tained.		TOTALS.				
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Per- sons.		
I.—Epidemic, Endemic and Infectious Diseases ..	{O. 16 E. 1}	16	8	13	3	3	21	10	3	8	4	7	2	56	3	20	13	8	16	3	2	5	7	3	4	8	2	11	9	2	125	87	212				
II.—General Diseases not in- cluded in Class I. ..	{O. 9 E. 20}	9	20	3	4	3	1	2	1	6	1	7	17	8	1	12	5	3	4	2	3	8	7	6	12	6	3	15	4	6	3	100	103	203			
III.—Diseases of the Nervous System and Sense Organs ..	{O. 7 E. 7}	7	8	2	2	—	2	2	3	1	3	3	1	2	3	5	3	2	2	1	2	4	6	1	2	1	4	5	4	11	7	54	61	115			
IV.—Diseases of the Circulatory System ..	{O. 21 E. 4}	21	29	10	3	3	20	5	13	12	13	5	7	1	16	16	14	11	7	16	3	4	10	9	10	13	7	11	12	19	3	7	169	163	332		
V.—Diseases of the Respiratory System ..	{O. 3 E. 4}	3	4	5	3	2	1	5	6	6	3	4	3	1	13	7	17	11	6	3	5	2	1	2	4	10	1	3	11	8	5	86	67	153			
VI.—Diseases of the Digestive System ..	{O. 4 E. 1}	4	5	2	3	1	4	3	2	3	1	3	6	1	4	10	5	13	7	3	5	4	2	—	2	4	2	1	4	3	2	1	53	58	111		
VII.—Non-Veneral Diseases of the Genito-Urinary Sys- tem and Anæmia ..	{O. 6 E. 6}	6	4	3	2	2	—	3	2	2	3	3	1	3	1	1	7	7	2	12	5	1	1	1	—	3	3	1	3	11	2	1	2	60	38	98	
VIII.—The Puerperal State ..	{O. 1 E. 1}	1	—	—	1	—	—	—	—	—	—	4	—	—	—	—	3	1	3	—	4	3	10	4	4	5	1	1	7	4	4	1	59	34	93		
IX.—Diseases of the Skin and Cellular Tissue ..	{O. 1 E. 1}	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	9		
X.—Diseases of the Bones and Organs of Locomotion..	{O. 1 E. 1}	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	28		
XI.—Malformations ..	{O. 1 E. 1}	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	4	8	
XII.—Diseases of Early Infancy ..	{O. 2 E. 2}	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3	1
XIII.—Old Age ..	{O. 3 E. 3}	3	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	8	14
XIV.—External Causes ..	{O. 2 E. 2}	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	11	21
XV.—Ill-defined Diseases ..	{O. 1 E. 1}	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27	22	49
Totals ..	{O. 72 E. 10}	72	78	46	22	14	10	58	29	48	44	38	26	28	10	82	69	73	86	47	47	34	32	38	29	46	50	18	31	80	56	30	752	648	1,400		
Totals, all Classes ..		82	84	92	63	82	67	129	92	63	63	280	230	219	199	178	154	149	163	78	68	175	133	229	173	170	166	86	83	250	226	68	52	2,348	2,016	4,364	





CAUSE OF DEATH.	Page.	WARDS: CORRECTED FOR OUTWARD TRANSFERS BUT NOT FOR INWARD TRANSFERS.															Not Allocated. Residential Addresses Unascertained.	TOTALS.																		
		Sea Point 1		Harbour 2		West Central 3		Kloof 4		Park 5		East Central 6		Castle 7		Woodstock 8		Salt River 9		Mowbray 10		Maitland 11		Rondebosch 12		Claremont 13		Kalk Bay 14		Wynberg 15		M.	F.	Persons.		
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.		F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.						
		EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.																																		
a) Fever, Typhoid ..	{E. O.	1	1	-	2	-	-	4	1	1	-	1	-	2	1	1	2	-	2	-	-	-	3	1	1	1	-	-	-	-	2	-	-	7	6	13
b) Fever, Paratyphoid..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	8	25	
Fever, Typhus ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Fever, Relapsing ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Fever, Malta ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
c) Fever, Malaria ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
d) Fever, Malarial Cachexia ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Smallpox ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Measles ..	{E. O.	-	-	-	-	-	-	-	-	1	-	-	2	-	-	1	1	-	1	1	-	2	-	1	-	1	1	-	1	2	-	1	5	4	9	
Scarlet Fever ..	{E. O.	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1		
Whooping Cough ..	{E. O.	1	-	-	-	-	1	-	-	1	-	-	3	1	1	1	2	-	1	1	-	1	-	3	-	2	2	2	2	4	6	-	4	7	11	
Diphtheria and Croup	{E. O.	2	-	-	1	-	-	-	1	1	2	-	1	1	1	1	2	-	-	1	-	-	1	-	3	-	-	-	-	1	-	-	5	8	13	
e) Influenza (with Pul. Comp. specified) ..	{E. O.	4	1	-	-	1	2	-	1	-	3	2	1	-	-	1	-	2	-	1	-	6	2	1	1	1	-	3	1	1	-	11	5	16		
f) Influenza (without Pul. Comp. specified)	{E. O.	2	-	1	-	-	2	-	1	-	1	2	-	-	1	1	-	-	1	-	1	-	1	1	-	1	-	-	1	-	-	4	3	7		
Miliary Fever ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Mumps ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-		
Asiatic Cholera ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Cholera Nostras ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
g) Dysentery, Amoebic	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
h) Dysentery Bacillary	{E. O.	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2		
i) Dysentery, Other causes ..	{E. O.	-	-	-	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2		
j) Plague, Bubonic ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
k) Plague, Pneumonic..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
l) Plague, Septicaemic	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
m) Plague, not otherwise defined ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Yellow Fever ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Spirochaetosis Ictero-Haemorrhagica ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
n) Leprosy ..	{E. O.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1		
o) Erysipelas (non-puerperal) ..	{E. O.	-	-	-	2	-	-	-	1	-	-	-	1	1	1	-	-	1	-	-	1	-	-	-	-	-	-	1	-	-	-	3	2	5		
Acute Poliomyelitis	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-		
p) Encephalitis Lethargica ..	{E. O.	-	-	1	-	-	1	-	-	-	-	-	1	-	-	-	-	1	-	-	-	1	-	-	-	-	1	1	-	-	-	2	2	5		
q) Meningococcal Meningitis ..	{E. O.	-	-	-	2	3	1	2	-	-	11	2	11	3	3	1	2	3	-	1	-	2	1	2	6	3	-	1	1	1	-	10	6	16		
r) Chicken Pox ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-		







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OF DEATH.	Race.	WARDS: CORRECTED FOR OUTWARD TRANSFERS BUT NOT FOR INWARD TRANSFERS.															Not Allocated. Residential Addresses Unascertained.	TOTALS		
		Sea Point 1	Harbour 2	West Central 3	Kloof 4	Park 5	East Central 6	Castle 7	Woodstock 8	Salt River 9	Mowbray 10	Maitland 11	Rondebosch 12	Claremont 13	Kalk Bay 14	Wynberg 15		Persons	M.	F.
		M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.				
DISEASES OF THE NERVOUS SYSTEM AND SENSES (cont.).																				
Motor Ataxia ..	{E. O.	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1	-
Other Diseases of the Spinal Cord ..	{E. O.	- -	- 1	- -	- -	- -	- -	- -	- -	- -	- 1	- -	- 1	- -	- -	- 1	- -	- -	2	2
Cerebral Haemorrhage (apoplexy) ..	{E. O.	2 5	1 1	- -	1 2	1 1	- 4	1 2	2 2	- 5	1 4	1 1	1 4	- 3	1 2	1 2	1 2	15	31	46
Cerebral Thrombosis and Embolism ..	{E. O.	1 1	- -	- -	- 1	- 1	- -	- -	- -	- -	- 1	- -	- 1	- -	- -	- -	- 1	- -	2	4
Paraplegia ..	{E. O.	- -	1 -	- -	- -	- 1	2 -	2 1	- -	- 1	- -	- 1	- 1	- -	- 1	- -	- -	6	3	9
Myelitis (no cause specified) ..	{E. O.	- -	- -	- -	1 -	- -	- 1	- -	- -	- -	- -	- -	- -	- -	- -	- -	- 2	- 3	1	1
General Paralysis of the Insane ..	{E. O.	1 -	1 -	- -	1 -	- -	2 -	1 1	1 1	2 -	- -	- 1	- -	- -	- -	- -	1 2	10	2	12
Paralysis of Mental Function ..	{E. O.	1 -	- -	- -	- -	- -	- -	- -	- -	- -	- 1	- -	- -	- -	- -	- -	- 1	- 2	1	3
Epilepsy ..	{E. O.	- -	- -	- -	1 -	- -	1 2	1 -	- -	- 1	1 1	1 1	- -	- 1	- -	1 1	- 2	5	3	8
Convulsions (non-febrile) ..	{E. O.	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- 2	- -	- -	- -	2
Convulsions (Infants under 5 years) ..	{E. O.	- -	1 -	- -	- -	- -	- -	- 1	- -	- -	- -	1 3	6 3	2 3	4 2	5 3	1 -	20	14	34
Chorea ..	{E. O.	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	-
Strabismus ..	{E. O.	- -	- -	- -	- -	- -	- -	- 1	- -	- -	- -	- -	- -	- -	- 1	- 1	- -	1	2	3
Stiffening of the Brain ..	{E. O.	- -	- -	- -	- -	- -	- -	- 1	- -	- -	- -	- -	- -	- -	- -	- 1	- -	1	-	1
Other Diseases of the Nervous System ..	{E. O.	- 2	1 -	- -	- -	- -	- 1	1 -	- 1	- 2	- 1	- -	- 1	- -	- -	- 2	- 1	5	5	10
Diseases of the Eye and Annexa ..	{E. O.	- -	- -	- -	- -	- -	- -	- -	- -	1 -	- -	- -	- -	- -	- -	- -	- -	- -	1	1
Diseases of the Ear and Mastoid Bone ..	{E. O.	1 -	- -	- -	- -	- -	- -	- -	- -	- 1	- -	- -	1 2	- 1	- -	- -	- -	1	1	2
Totals for III. ..	{E. O.	7 8	3 3	2 2	3 2	3 2	1 3	3 2	5 3	7 3	9 3	3 3	1 4	6 8	1 4	2 5	4 5	54	61	115
DISEASES OF THE CIRCULATORY SYSTEM.																				
Pericarditis ..	{E. O.	1 -	- -	- -	- -	- -	- 1	1 2	- 1	- 1	- -	- -	- -	- 2	- -	- -	- -	- -	2	3
Acute Endocarditis and Myocarditis ..	{E. O.	- 5	1 -	- -	2 -	1 -	1 2	- -	1 1	2 -	- -	- -	- 1	- -	1 1	- -	1 1	11	10	21
Angina Pectoris ..	{E. O.	4 -	- -	- -	1 1	1 -	- -	- 2	- 1	- 2	- -	- 2	- 1	- -	- 1	- -	1 2	11	9	20
Other Diseases of the Heart ..	{E. O.	12 16	6 2	2 6	1 2	4 7	8 8	10 12	3 5	11 15	8 6	4 4	1 3	2 8	7 12	6 11	5 5	3	106	86
Arteriosclerosis ..	{E. O.	1 -	- 1	- -	- -	1 -	- -	- 1	- 2	- 1	1 1	- -	- -	- 1	- -	- 1	- 3	- -	8	2
Arterial Sclerosis ..	{E. O.	3 8	3 1	1 1	2 2	5 1	2 1	3 8	2 5	4 4	2 1	1 6	- 1	1 3	2 3	5 3	1 1	29	50	79
Other Diseases of the Arteries ..	{E. O.	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	-
Embolism and Thrombosis (not cerebral) ..	{E. O.	- -	- -	- -	- -	- 1	- -	- -	- 1	- -	- 1	- -	- 1	- -	- -	- -	- -	- -	1	4
Diseases of the Veins ..	{E. O.	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	-
Diseases of the Lymphatic System ..	{E. O.	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	-
Haemorrhage (unqualified) ..	{E. O.	- -	- -	- -	- -	- 1	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1	1
Other Diseases of the Circulatory System ..	{E. O.	- -	- -	- -	- -	- -	- -	- -	- -	1 1	- -	- -	- -	- -	- 1	- -	- -	2	1	3
Totals for IV. ..	{E. O.	21 29	10 4	3 3	3 6	5 8	12 13	13 16	5 7	16 23	14 11	7 8	10 9	9 13	10 16	13 16	7 6	169	163	332







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USE OF DEATH.	Race.	WARDS: CORRECTED FOR OUTWARD TRANSFERS BUT NOT FOR INWARD TRANSFERS.															Not Allocated. Residential Addresses Unascertained.	TOTALS.	
		Sea Point 1	Harbour 2	West Central 3	Kloof 4	Park 5	East Central 6	Castle 7	Woodstock 8	Salt River 9	Mowbray 10	Maitland 11	Rondebosch 12	Claremont 13	Kalk Bay 14	Wynberg 15		M.	F.
		M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.			
NON-VENEREAL DISEASES OF THE GENITORY SYSTEM AND EXA (cont.).																			
Uterine Tumour ..	{ E. -	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	{ O. -	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Uterine Haemorrhage (non-Puerperal)	{ E. -	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Diseases of the Uterus	{ E. -	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
	{ O. -	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Other Diseases of the Female Genital Organs ..	{ E. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Puerperal Diseases of the Breast (Cancer excepted)	{ E. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals for VII. ..	{ E. -	6	4	3	2	2	3	3	1	3	1	1	7	7	2	12	5	1	1
	{ O. -	-	-	-	4	2	2	3	5	6	5	5	1	1	3	10	4	4	5
THE PUERPERAL STATE																			
Abortion (Death of Mother) ..	{ E. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	{ O. -	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Ectopic Gestation ..	{ E. -	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Other Accidents of Pregnancy ..	{ E. -	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	3
Puerperal Haemorrhage ..	{ E. -	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
	{ O. -	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	3
Other Accidents of Labour ..	{ E. -	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	1
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
Puerperal Septicæmia ..	{ E. -	-	-	1	-	-	-	-	1	-	1	-	-	1	-	-	-	-	5
	{ O. -	-	-	-	-	-	-	1	-	1	-	-	1	-	-	1	-	-	7
Puerperal Phlegmasia, etc. ..	{ E. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerperal Albuminuria and Convulsions	{ E. -	-	-	-	1	-	1	-	-	2	-	2	-	-	3	-	-	1	2
	{ O. -	-	-	-	-	-	-	-	2	-	2	-	-	-	-	-	1	-	11
Following childbirth, not otherwise defined ..	{ E. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerperal Diseases of the Breast ..	{ E. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals for VIII. ..	{ E. -	-	1	-	-	-	-	-	-	2	-	2	-	1	-	2	2	-	9
	{ O. -	-	-	-	1	-	2	-	1	4	-	5	-	1	-	3	2	-	28
DISEASES OF THE SKIN AND CELLULAR TISSUE.																			
Gangrene ..	{ E. -	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	3
	{ O. -	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	1	3
Furuncle ..	{ E. -	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Abscess ..	{ E. -	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2
	{ O. -	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	-	4
Other Diseases of the Skin and Annexa ..	{ E. -	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	1
	{ O. -	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Totals for IX. ..	{ E. -	-	1	-	-	-	-	-	-	2	-	-	-	-	-	-	1	-	7
	{ O. -	1	-	-	-	-	-	-	1	-	1	-	-	-	-	-	2	-	8
DISEASES OF THE BONES AND ORGANS OF LOCOMOTION.																			
Diseases of the Bones (Tuberculosis and Rickets excepted)	{ E. -	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	2
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Diseases of the Joints (Tuberculosis and Rickets excepted)	{ E. -	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amputation ..	{ E. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Diseases of the Organs of Locomotion ..	{ E. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals for X. ..	{ E. -	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	3
	{ O. -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1



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(EXCLUDING WYBERG WARD AND THE ADDED AREAS OF N. GARDEN AND LANGA).

Year (1st July to 30th June).	Estimated Populations.		Birth Rates.		Illegitimate Births, Percentage of Total Births.		Death Rates (uncorrected).		Death Rates corrected for Outward Transfers.		Natural Increase Rates.		Infant Mortality.		Enteric Fever Death Rates, corrected for Outward Transfers.		Tuberculosis Deaths (all forms), Rates, corrected for Outward Transfers.										
	Eur.	Non- Eur.	Eur.	Non- Eur.	Eur.	Non- Eur.	Eur.	Non- Eur.	Eur.	Non- Eur.	Eur.	Non- Eur.	Eur.	Non- Eur.	Eur.	Non- Eur.	Eur.	Non- Eur.									
1913-1914*	76,940	74,560	151,500	29,394	45,484	37,314	6,494	25,754	18,044	13,77	28,25	20,89	12,10	27,02	10,44	15,624	17,234	16,424	107,964	250,554	193,504	0,21	0,20	0,25	1,03	4,85	2,91
1914-1915 ..	79,840	75,510	155,350	29,954	47,524	38,494	6,904	26,484	18,664	14,28	29,73	21,80	12,73	28,39	20,35	15,674	17,794	16,694	100,384	224,364	174,924	0,26	0,20	0,28	1,11	5,09	3,04
1915-1916 ..	82,860	76,470	159,330	27,534	48,234	37,474	7,484	25,264	18,494	12,81	27,58	19,91	11,25	26,00	18,33	14,724	20,654	17,564	79,144	189,294	147,494	0,10	0,37	0,23	0,89	4,21	2,48
1916-1917 ..	85,990	77,450	163,440	28,174	45,854	36,564	6,814	25,064	17,674	16,04	34,42	24,76	13,34	32,70	22,52	12,134	11,434	11,804	96,164	226,704	173,894	0,16	0,41	0,28	1,10	5,55	3,21
1917-1918 ..	89,240	78,440	167,680	27,614	46,324	36,384	7,024	25,354	17,984	13,47	30,53	21,47	11,47	27,89	19,17	14,144	15,794	14,914	79,144	200,944	152,134	0,13	0,40	0,26	0,87	4,50	2,57
1918-1919 ..	92,610	79,450	172,060	23,844	41,214	31,874	8,384	24,774	18,204	25,19†	69,07†	45,88†	22,08†	66,09†	42,42†	1,354	38,764	14,974	114,584	297,804	224,294	0,19	0,42	0,30	0,81	3,80	2,19
1919-1920 ..	96,110	80,450	176,560	26,124	51,744	37,794	6,444	24,754	17,864	12,89	58,07	20,03	11,05	26,99	18,31	13,234	23,174	17,764	81,454	183,764	145,274	0,22	0,52	0,36	0,83	3,77	2,17
1920-1921 ..	99,760	81,490	181,240	24,304	45,864	34,004	5,074	24,864	17,104	13,68	32,56	22,18	12,03	30,64	20,41	12,274	15,224	13,594	101,496	231,740	180,760	0,37	0,56	0,46	0,73	4,10	2,25
1921-1922 ..	103,130	83,450	186,580	23,024	50,694	35,414	5,314	25,864	18,504	11,93	27,15	18,75	10,68	25,90	17,49	12,344	24,794	17,924	69,504	173,290	136,240	0,2	0,50	0,34	0,98	3,43	2,07
1922-1923 ..	105,330	86,200	191,530	21,360	49,444	34,004	5,824	25,254	18,544	11,37	28,31	18,99	10,00	26,95	17,63	11,394	22,494	16,374	89,440	196,390	156,330	0,21	0,31	0,29	0,75	4,12	2,27
1923-1924 ..	107,580	89,030	196,610	21,390	49,474	34,124	5,114	24,214	17,704	11,59	30,05	19,07	10,20	28,66	18,58	11,194	20,814	15,544	72,390	187,270	148,360	0,11	0,22	0,16	0,73	4,47	2,42
1924-1925 ..	109,870	91,960	201,830	21,160	51,554	35,024	5,844	24,124	18,134	11,62	28,31	19,23	10,09	26,86	17,74	11,074	24,694	17,284	71,940	173,930	140,430	0,07	0,21	0,14	0,85	4,51	2,32
1925-1926 ..	112,220	94,990	207,210	20,844	47,464	33,054	4,674	24,204	17,554	11,46	26,51	18,28	9,61	24,94	16,66	11,234	22,524	16,394	65,180	175,490	138,210	0,07	0,18	0,12	0,63	3,87	2,11
1926-1927 ..	114,610	98,110	212,720	20,520	50,224	34,254	5,544	23,034	17,404	12,05	29,70	20,19	10,37	27,96	18,48	10,134	22,334	15,774	67,980	186,590	148,090	0,13	0,28	0,20	0,85	4,59	2,57
1927-1928 ..	117,060	101,340	218,400	21,390	47,964	33,724	5,914	23,384	17,334	12,07	29,73	20,27	10,54	27,75	18,52	10,834	20,214	15,204	62,970	186,710	144,470	0,08	0,23	0,15	0,86	4,48	2,54
1928-1929 ..	119,560	104,670	224,230	21,150	49,664	34,474	6,384	23,034	17,614	12,30	27,16	19,24	10,60	25,05	17,35	10,534	24,614	17,124	61,860	159,140	127,290	0,11	0,22	0,16	0,66	4,45	2,43

\*This period represents 296 days: Unification took place on the 8th September, 1913.

†Including deaths caused by the Epidemic of Influenza in October, 1918.

a. These figures are uncorrected.

b. These figures are corrected for outward transfers.

c. These figures (which are uncorrected) represent a Natural Decrease, which was due to the excessive number of deaths caused by the Epidemic of Influenza in October, 1918.



Table D.

Shewing the Calculated Populations and the Principal Vital Statistic Rates for the separate Wards of the City, classified as to Race and corrected for Outward Transfers for the 52 Weeks ended 28th June, 1929, corrected to a basis of 365 days.

WARDS.	Calculated Populations on the 31st December, 1928.				Births.		Birth rates per 1,000 Persons.		Illegitimate Births.		Illegitimate Births, Percentage of Total Births.		Deaths.		Death rates per 1,000 Persons.		Natural Increase (Excess of Births over Deaths).		Natural Increase rates per 1,000 Persons.		Deaths under 1 year of Age.		Infant Mortality (per 1,000 Births).		Deaths from Tuberculosis (All Forms).		Death rates from Tuberculosis (All Forms) per 1,000 Persons.		
	Eur.	Non-Eur.	Total.		Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	
1. Sea Point ..	14,860	2,864	17,724	187	25	12.62	8.75	2	12	1.07	48.00	150	16	10.12	5.40	37	9	2.50	3.15	1	8	5.35	329.00	9	3	0.61	1.05		
2. Harbour .. ..	4,164	4,889	9,053	72	163	17.34	33.43	7	43	9.72	29.38	68	87	16.38	17.84	4	76	0.96	15.59	4	24	55.56	147.24	8	25	1.93	5.13		
3. Central (West) ..	1,850	5,308	7,158	37	263	20.05	40.68	3	69	8.11	22.81	24	125	13.01	23.61	13	138	7.04	26.07	3	33	81.08	125.48	5	23	2.71	4.34		
4. Kloof .. ..	1,032	7,337	17,689	152	325	14.72	44.42	11	68	7.24	29.02	87	134	8.43	18.31	65	191	6.29	26.11	7	40	46.05	123.08	6	25	0.58	3.42		
5. Park .. ..	9,740	2,023	11,763	151	75	15.55	37.18	10	26	6.62	34.67	92	34	9.47	16.85	59	41	6.08	29.33	7	7	46.36	93.33	7	5	0.72	2.48		
6. Central (East) ..	7,315	17,531	24,846	148	891	20.29	50.96	8	196	5.41	22.00	64	446	8.77	25.51	84	445	11.52	25.45	12	142	81.08	159.37	5	94	0.60	5.38		
7. Castle .. ..	2,866	13,955	16,821	105	718	36.74	51.59	16	150	15.24	20.89	38	380	13.30	27.31	67	338	23.44	24.28	7	133	66.67	185.24	2	72	0.70	5.17		
8. Woodstock ..	12,339	6,017	18,356	364	339	29.58	51.37	25	86	6.87	25.37	151	181	12.27	27.43	213	158	17.31	23.94	29	63	79.67	185.84	16	24	1.30	3.64		
9. Salt River ..	12,276	7,215	19,491	409	341	33.41	47.39	22	58	5.38	17.01	159	153	12.69	21.26	250	188	20.42	26.13	32	49	78.24	143.79	7	32	0.57	4.45		
10. Mowbray ..	12,590	3,332	15,922	229	146	18.53	43.94	18	42	7.86	28.77	94	52	7.61	15.65	135	94	10.92	28.29	8	15	34.93	102.74	3	13	0.24	3.91		
11. Maitland ..	6,060	7,304	13,364	182	488	30.12	67.00	8	140	4.40	28.69	66	242	10.92	33.22	116	246	19.20	33.78	13	84	71.43	172.13	1	32	0.17	4.39		
12. Rondebosch ..	5,791	8,765	14,556	141	623	24.42	71.27	8	133	5.67	21.35	67	335	11.60	38.33	74	288	12.82	32.04	9	111	63.83	178.17	5	44	0.87	5.03		
13. Claremont ..	11,080	14,294	25,374	238	539	21.54	37.89	10	95	4.20	17.63	96	249	8.69	17.50	142	290	12.85	29.39	16	73	67.23	135.44	3	45	0.27	3.16		
14. Kalk Bay ..	5,568	4,177	9,745	96	237	17.29	56.90	3	76	3.13	32.07	49	120	8.82	28.81	47	117	8.47	28.09	4	31	41.67	130.80	2	22	0.36	5.28		
15. Wynberg ..	12,218	13,439	25,657	290	762	23.80	56.86	8	152	2.76	19.95	136	349	11.16	26.04	154	413	12.64	30.82	16	118	55.17	154.86	6	61	0.49	4.55		
Not allocated ..	—	—	—	11	11	—	—	10	10	—	—	59	61	—	—	—	—	—	—	4	12	—	—	—	8	—	—		
A. Inward Transfers ..	—	—	—	117	—	—	—	—	—	—	—	31	—	—	—	86	—	—	—	5	—	—	—	4	—	—	—		
B. City of Capetown ..	131,780	118,070	249,850	2,929	5,946	22.29	50.50	169	1,347	12.07	22.65	1,431	2,964	10.89	25.17	1,516	2,982	11.40	25.33	177	943	60.43	158.59	89	528	0.68	4.48		

A. These figures refer to European births and deaths belonging to Capetown, but which occurred outside the municipality.

B. Exclusive of all figures relating to the native locations of Langa and Ntshabeni (which are shown separately in Table J on page 129), but inclusive, so far as the European population is concerned, of population in the Harbour and shipping and immigrants enumerated on trains.

C. Exclusive of the 117 European births (inward transfers), in regard to which information as to the legitimacy is not available.

Table E.

Comparative Table of Principal Vital Statistic Rates for Various Centres.

Centre.	Year.	Birth Rates (Corrected for Outward Transfers).			Illegitimate Births, Percentage of Total Births (Corrected for Outward Transfers).			Death Rates, (Uncorrected).			Death Rates (Corrected for Outward Transfers).			Infant Mortality Rates (Corrected for Outward Transfers).			All Forms of Tuberculosis; Death Rates (Corrected for Outward Transfers).		
		Euro- pean.	Non- Euro- pean.	All Races.	Euro- pean.	Non- Euro- pean.	All Races.	Euro- pean.	Non- Euro- pean.	All Races.	Euro- pean.	Non- Euro- pean.	All Races.	Euro- pean.	Non- Euro- pean.	All Races.	Euro- pean.	Non- Euro- pean.	All Races.
Union of S.A.	1928	25.77 <sup>1</sup>	..	..	2.71 <sup>1</sup>	..	..	10.15	..	..	10.09 <sup>1,2</sup>	..	..	70.49 <sup>1</sup>	..	..	0.42 <sup>1</sup>	..	..
Capetown	1928-1929	21.40	10.59	35.15	6.01	22.65	17.31	12.20	27.04	19.21	10.65	25.17	17.51	61.17	158.59	127.30	0.65	4.48	2.46
Johannesburg	1928-1929	25.95	..	..	3.12	..	..	..	..	..	11.05	17.88 <sup>1</sup>	14.92	72.77	175.12 <sup>2</sup>	..	0.30	1.70 <sup>2</sup>	1.07
Durban	1928-1929	16.51	31.0 <sup>1</sup>	15.83	3.5	22.05 <sup>2</sup>	..	11.5	16.03 <sup>1</sup>	13.62	8.42	11.96 <sup>1</sup>	8.82	46.75	78.74 <sup>2</sup>	..	0.36	0.97 <sup>2</sup>	0.93
Pretoria	1928-1929	22.25	19.56	21.32	3.72	32.44	12.83	12.25	23.08	16.00	7.52	16.26	10.55	57.85	328.88	143.86	0.44	1.44	0.79
Port Elizabeth	1928-1929	23.61	43.86	30.86	4.32	29.87	16.12	..	..	..	10.72	13.61	14.79	87.69	176.83	128.87	0.61	4.35	1.83
Bloemfontein	1928-1929	22.4	20.89	..	1.47	23.26	..	13.4	43.5	..	8.9	40.06	..	56.5	806.8	..	0.7	1.33	..
Pietermaritzburg	1928-1929	19.77	38.34 <sup>2</sup>	19.46	..	..	..	12.39	29.5 <sup>2</sup>	21.13	8.27	24.28 <sup>2</sup>	12.65	55.83	250.76 <sup>3</sup>	..	0.15	2.36 <sup>2</sup>	0.99
East London	1928-1929	22.39	41.09	..	4.07	13.4	..	..	..	..	9.2	31.5	..	66.0	332.0	..	0.9	3.4	..
Kimberley (Urban Area only).	1928-1929	22.8	45.3 <sup>1,2</sup>	..	..	..	..	13.8	17.9 <sup>1</sup>	19.5	12.3	17.1 <sup>2</sup>	..	81.4	148.9 <sup>1</sup>	192.3 <sup>1</sup>	0.7	0.8 <sup>1,2</sup>	..
England and Wales	1928	..	..	16.7 <sup>1</sup>	..	..	4.50 <sup>1</sup>	..	..	11.7	..	..	9.9 <sup>2</sup>	..	..	65.06 <sup>1</sup>	..	..	0.93 <sup>1</sup>
County of London	1928	..	..	16.2 <sup>1</sup>	..	..	4.97 <sup>1</sup>	..	..	12.1	..	..	..	..	..	67.43 <sup>1</sup>	..	..	1.04 <sup>1</sup>

<sup>1</sup> Crude or Uncorrected.<sup>2</sup> Europeans only.<sup>3</sup> Standardized to Standard Million of England and Wales for 1901.



TABLE F.—Notification of Infectious Disease (corrected for Imported Infection and Misdiagnoses) classified as to Race, Sex and Calendar Months, according to date of Notification Certificates, for the period, July 1st, 1928 to June 30th, 1929

PERIOD 1928-1929	Tuberculosis, Respiratory System			Tuberculosis, Other Forms			Enteric Fever			Diphtheria			Scarlet Fever			Erysipelas			Cerebrospinal Fever			Infective Encephalitis			Acute Anterior Polyomyelitis			Anthrax		
	E.			E.			E.			E.			E.			E.			E.			E.			E.			E.		
	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
1928	8	5	13	30	76	106	5	4	9	5	4	9	5	4	9	5	4	9	5	4	9	5	4	9	5	4	9	5	4	9
July ..	8	5	13	30	76	106	5	4	9	5	4	9	5	4	9	5	4	9	5	4	9	5	4	9	5	4	9	5	4	9
August ..	11	3	14	27	78	105	6	14	20	6	14	20	6	14	20	6	14	20	6	14	20	6	14	20	6	14	20	6	14	20
September ..	12	5	17	27	79	106	7	13	20	7	13	20	7	13	20	7	13	20	7	13	20	7	13	20	7	13	20	7	13	20
October ..	12	11	23	25	88	113	7	13	20	7	13	20	7	13	20	7	13	20	7	13	20	7	13	20	7	13	20	7	13	20
November ..	12	3	15	33	93	126	7	13	20	7	13	20	7	13	20	7	13	20	7	13	20	7	13	20	7	13	20	7	13	20
December ..	9	6	15	47	92	139	5	11	16	6	12	18	5	11	16	6	12	18	5	11	16	6	12	18	5	11	16	6	12	18
1929	14	3	17	56	112	168	6	16	22	6	16	22	6	16	22	6	16	22	6	16	22	6	16	22	6	16	22	6	16	22
January ..	17	7	24	39	98	137	6	15	21	6	15	21	6	15	21	6	15	21	6	15	21	6	15	21	6	15	21	6	15	21
February ..	11	8	19	29	89	118	5	18	23	5	18	23	5	18	23	5	18	23	5	18	23	5	18	23	5	18	23	5	18	23
March ..	13	9	22	26	62	88	3	9	12	3	9	12	3	9	12	3	9	12	3	9	12	3	9	12	3	9	12	3	9	12
April ..	6	3	9	24	91	115	2	8	10	2	8	10	2	8	10	2	8	10	2	8	10	2	8	10	2	8	10	2	8	10
May ..	4	5	9	29	68	97	1	4	5	1	4	5	1	4	5	1	4	5	1	4	5	1	4	5	1	4	5	1	4	5
June ..	126	76	202	392	1026	1418	48	125	173	48	125	173	48	125	173	48	125	173	48	125	173	48	125	173	48	125	173	48	125	173
Totals	126	76	202	392	1026	1418	48	125	173	48	125	173	48	125	173	48	125	173	48	125	173	48	125	173	48	125	173	48	125	173
PERIOD 1928-1929	Typhus Fever			Leptosy			Influenza			Influenza Pneumonia			Acute Primary Pneumonia			Ophthalmia			Trachoma			Totals								
1928	E.	O.	To- tal	E.	O.	To- tal	E.	O.	To- total	E.	O.	To- total	E.	O.	To- total	E.	O.	To- total	E.	O.	To- total	E.	O.	To- total						
July ..	1	..	1	..	..	..	2	9	11	2	9	11	2	9	11	2	9	11	2	9	11	2	9	11						
August ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
September ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
October ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
November ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
December ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
1929	E.	O.	To- total	E.	O.	To- total	E.	O.	To- total	E.	O.	To- total	E.	O.	To- total	E.	O.	To- total	E.	O.	To- total	E.	O.	To- total						
January ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..								
February ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..								
March ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..								
April ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..								
May ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..								
June ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..								
Year	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..								

\* Including 1 non European infant of unknown sex, notified but not traced.



TABLE G.—Notification of Infectious Disease (corrected for Imported Infection and Misdiagnoses) classified as to Race, Sex and Municipal Wards together with the cases of Imported Infection (corrected for Misdiagnoses) classified as to Race and Sex. Period July 1st, 1928 to June 30th, 1929. E. = Europeans. O. = Non-Europeans.

Wards of the City.	Tuberculosis, Respiratory System.			Tuberculosis, Other Forms.			Enteric Fever.			Diphtheria.			Scarlet Fever.			Erysipelas.			Cerebrospinal Fever.			Infective Erythematitis.			Acute Anterior Poliomyelitis.			Anthrax.			
	E.		Total.	E.		Total.	E.		Total.	E.		Total.	E.		Total.	E.		Total.	E.		Total.	E.		Total.	E.		Total.	E.		Total.	
	M.	F.		M.	F.		M.	F.		M.	F.		M.	F.		M.	F.		M.	F.		M.	F.		M.	F.		M.	F.		M.
1. Sea Point.	9	6	15	2	1	3	11	11	23	9	11	20	5	7	12	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
2. Harbour.	10	6	16	2	1	3	11	11	23	9	11	20	5	7	12	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
3. West Central.	4	1	5	1	1	2	6	5	11	4	5	9	2	2	4	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
4. Kloof.	11	8	19	1	1	2	16	6	22	6	7	13	3	4	7	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
5. Park.	8	6	14	1	1	2	4	4	8	1	1	2	1	1	2	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
6. East Central.	12	5	17	1	1	2	14	3	17	9	6	15	3	4	7	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
7. Castle.	24	18	42	1	1	2	19	2	21	11	6	17	3	4	7	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
8. Woodstock.	12	12	24	1	1	2	12	3	15	11	3	14	3	4	7	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
9. Salt River.	18	18	36	1	1	2	15	3	18	12	6	18	3	4	7	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
10. Mowbray.	2	1	3	1	1	2	7	3	10	4	2	6	1	1	2	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
11. Matland.	1	1	2	1	1	2	10	19	29	7	4	11	1	1	2	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
12. Rondebosch.	1	1	2	1	1	2	11	3	14	3	1	4	1	1	2	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
13. Claremont.	10	4	14	1	1	2	3	5	8	1	1	2	1	1	2	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
14. Kalk Bay.	1	1	2	1	1	2	11	21	32	5	1	6	1	1	2	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
15. Wynberg.	1	1	2	1	1	2	6	23	29	1	1	2	1	1	2	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
Not Allocated.	12	6	18	1	1	2	13	6	19	1	1	2	1	1	2	1	1	2	1	1	2	1	1	1	1	1	1	1	1		
Totals, Local Infection.	126	76	202	14	12	26	175	48	223	42	20	62	97	33	130	3	7	10	13	26	11	69	19	11	65	36	101	4	12	3	
Imported Infection.																															
Contracted outside Cape-town Municipal boundaries.	5	7	12	56	3	59	14	18	32	13	76	3	4	7	12	4	4	8	1	9	3	1	5	5	1	20	13	39	1	1	1
Introduced from Overseas.	6	2	8	8	1	9	1	2	3	1	3	1	1	2	3	1	1	2	1	3	1	1	1	1	1	20	13	39	1	1	1
Totals, Imported Infection.	11	9	20	64	4	68	15	20	35	14	79	3	4	7	12	4	7	12	5	12	4	6	6	2	1	20	13	39	1	1	1
Wards of the City.																															
1. Sea Point.	1	1	2	1	1	2	7	1	8	2	17	9	4	1	15	2	1	3	12	4	2	3	3	3	3	3	3	3	3	3	
2. Harbour.	1	1	2	1	1	2	16	1	17	4	14	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
3. West Central.	1	1	2	1	1	2	5	3	8	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
4. Kloof.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
5. Park.	1	1	2	1	1	2	6	4	10	1	2	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
6. East Central.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
7. Castle.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
8. Woodstock.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
9. Salt River.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
10. Mowbray.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
11. Matland.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
12. Rondebosch.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
13. Claremont.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
14. Kalk Bay.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
15. Wynberg.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
Not Allocated.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
Totals, Local Infection.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
Imported Infection.																															
Contracted outside Cape-town Municipal boundaries.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
Introduced from Overseas.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	
Totals, Imported Infection.	1	1	2	1	1	2	10	7	17	1	3	1	1	2	3	1	1	3	12	5	19	2	1	1	1	1	1	1	1	1	

\* Including 1 non-European infant of unknown sex, method not traced.



TABLE H.—Notification of Infectious Disease (corrected for Imported Infection and Misdiagnoses) classified as to Race, Sex and Age-groups. Period, July 1st, 1928, to June 30th, 1929.

E. = Europeans. O. = Non-Europeans.

Age-Groups.	Tuberculosis, Respiratory System.			Tuberculosis, Other Forms.			Enteric Fever.			Diphtheria.			Scarlet Fever.			Erysipelas.			Cerebrospinal Fever.			Infective Erythematitis.			Acute Anterior Poliomyelitis.			Anthrax.		
	E.			E.			E.			E.			E.			E.			E.			E.			E.			E.		
	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.
0-1 year	7	6	13	112	11	123	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1-2 years	—	—	—	112	10	122	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2-5 years	2	17	19	420	12	432	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5-10 years	—	—	—	112	10	122	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10-15 years	4	3	7	37	9	46	10	9	19	37	8	45	22	36	58	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
15-25 years	28	30	58	128	28	156	14	20	34	60	9	69	17	5	22	2	2	4	3	7	12	1	1	2	1	1	2	1	1	2
25-35 years	29	33	62	129	108	237	8	6	14	8	40	48	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
35-45 years	18	8	26	41	14	55	3	4	7	3	9	12	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
45-55 years	14	13	27	42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
55-65 years	9	2	11	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65-75 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
75-85 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85 years and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Age unknown	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	126	76	202	1389	68	1457	48	52	100	37	33	70	61	93	154	13	39	52	65	36	131	4	3	7	12	3	1	5	1	1

Age-Groups.	Typhus Fever.			Leptosy.			Influenza.			Acute Primary Pneumonia.			Puerperal Fever.			Ophthalmia.			Trachoma.			Totals.											
	E.			E.			E.			E.			E.			E.			E.			E.											
	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.	M.	F.	To- tal.			
0-1 year	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
1-2 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
2-5 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
5-10 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
10-15 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
15-25 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
25-35 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
35-45 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
45-55 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
55-65 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
65-75 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
75-85 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
85 years and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Age unknown	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Totals	1	—	1	4	104	108	159	515	35	27	46	32	140	43	28	71	47	2	54	83	11	14	62	60	147	1	2	11	15	565	542	1,021	3,397

\* Including 1 non-European infant of unknown sex, notified but not traced.



**Table 1.**

NOTIFICATIONS OF INFECTIOUS DISEASE FOR A SERIES OF YEARS, CLASSIFIED AS TO RACE

Diseases.	Race.	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
		1916. A.	1917. A.	1918. A.	1919. A.	1920. B.	1921. B.	1922. B.	1923. B.	1924. B.	1925. B.	1926. B.	1927. B.	1928. B.C.	1929 D.
Scarlatina or Scarlet Fever .. ..	Eur. Non-E.	128 8	52 4	97 13	153 18	274 23	224 15	97 9	47 5	26 3	50 1	129 8	123 11	228 6	154 10
Diphtheria or Mem- branous Croup ..	Eur. Non-E.	189 51	164 41	107 32	113 25	125 36	75 24	89 18	121 24	163 49	209 41	180 46	186 87	162 62	162 70
Enteric or Typhoid Fever .. ..	Eur. Non-E.	163 133	163 149	138 124	204 191	251 202	345 308	204 207	180 141	121 93	79 94	87 100	117 123	109 135	100 100
Erysipelas .. ..	Eur. Non-E.	40 13	30 19	27 13	22 7	34 10	27 5	25 6	31 6	16 10	20 12	15 14	45 24	35 34	43 26
Puerperal Fever ..	Eur. Non-E.	7 20	2 4	9 12	9 8	10 20	10 18	7 17	11 15	8 15	9 24	9 36	10 35	20 38	29 54
Ophthalmia .. ..	Eur. Non-E.					— 1	7 28	11 29	9 22	15 28	18 59	27 101	22 113	27 135	25 122
Cerebrospinal Fever ..	Eur. Non-E.	2 —	2 —	5 3	5 5	4 5	3 —	5 1	4 3	3 2	6 19	4 21	10 39	39 183	3 101
Acute Poliomyelitis ..	Eur. Non-E.	4 5	3 1	3 2	2 2	1 1	3 1	1 1	— 1	1 —	1 1	— —	2 —	8 4	4 1
Infective Encephalitis	Eur. Non-E.						3 2	5 1	2 1	5 4	6 5	6 10	6 5	8 3	7 5
Leprosy .. ..	Eur. Non-E.	1 3	— 6	— 1	1 —	— 3	1 2	2 3	— 6	— 4	— —	1 2	— 1	— 1	— 4
Typhus Fever .. ..	Eur. Non-E.	— —	— —	— —	— —	— —	— —	— —	1 —	— —	— —	3 —	1 —	— —	1 —
Small Pox .. ..	Eur. Non-E.	— 3	— —	— —	1 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Influenza .. ..	Eur. Non-E.					78 55			18 2	22 24	189 284	67 161	61 133	132 327	166 349
Pneumonia, all forms*	Eur. Non-E.						18 40	63 97	72 111						
Acute Influenzal Pneu- monia .. ..	Eur. Non-E.									6 13	28 52	25 61	41 63	45 121	62 78
Acute Primary Pneu- monia .. ..	Eur. Non-E.									23 68	76 203	83 186	89 285	84 396	91 36
Cholera .. ..	Eur. Non-E.	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Plague .. ..	Eur. Non-E.	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Anthrax .. ..	Eur. Non-E.	— —	— —	— —	— —	— —	1 —	— —	1 —	— —	— —	— —	— —	— —	1 —
Glanders .. ..	Eur. Non-E.	— —	— —	— —	— —	1 —	— —	— —	— —	— —	1 —	— —	— —	— —	— —
Rabies .. ..	Eur. Non-E.	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Malta Fever .. ..	Eur. Non-E.	— 1	— —	— —	— —	1 —	— —	2 —	— 1	— —	— —	— 1	— —	2 —	— —
Yellow Fever .. ..	Eur. Non-E.	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Trachoma .. ..	Eur. Non-E.											2 4	3 3	2 12	3 12
Tuberculosis, all forms*	Eur. Non-E.	136 456	139 575	103 553	104 502	103 526	114 495	138 447	132 531						
Tuberculosis, Respira- tory System ..	Eur. Non-E.									132 568	194 572	146 533	174 689	175 794	202 823
Other Forms of Tuber- culosis .. ..	Eur. Non-E.									10 75	16 71	28 116	28 102	28 143	27 148

A.=corrected for imported cases.

B.=corrected for imported cases and misdiagnoses.

C.=including area of the old Municipality of Wynberg for whole year.

D.=for the extended municipality (i.e., including the old municipality of Wynberg) corrected for imported cases and misdiagnoses.

\* Not separately classified until 1923-1924.





Table K.

**BAROMETRICAL READINGS, 1928-1929.**

CORRECTED FOR ALTITUDE, TEMPERATURE, INDEX ERROR, CAPACITY AND CAPILLARITY.

Month.	Mean.	Average for twenty-two years, 1st July, 1906, to 30th June, 1928.	Highest.	Date.	Lowest.	Date.	Highest and Date for twenty-two years, 1st July, 1906, to 30th June, 1928.	Lowest and Date for twenty-two years, 1st July, 1906, to 30th June, 1928.
1928.								
July	30.319	30.211	30.496	22nd	29.862	13th	30.709	28.924
August	30.345	30.264	30.563	11th	30.077	28th	30.981	29.753
September	30.266	30.246	30.586	2nd	30.022	6th	30.691	29.694
October	30.237	30.208	30.402	3rd	30.072	13th	30.563	29.727
November	30.238	30.181	30.456	16th	29.984	6th	30.841	29.831
December	30.149	30.130	30.313	8th	30.000	2nd	30.569	29.754
1929.								
January	30.136	30.108	30.303	6th	29.970	18th	30.500	29.757
February	30.176	30.103	30.609	22nd	29.996	7th	30.945	29.775
March	30.473	30.147	30.305	28th	29.974	6th	30.608	29.002
April	30.167	30.168	30.390	15th	29.892	28th	30.508	29.098
May	30.217	30.227	30.440	29th	29.914	5th	30.641	29.078
June	30.288	30.274	30.478	7th	29.984	23rd	30.663	29.089
Year ...	30.251	30.189	30.609	22.2.1929	29.862	13.7.1928	30.984	28.924
							26.8.1921	13.7.1917.





**Table M.**  
**RAINFALL AND HUMIDITY, 1928-1929.**

Month.	RAINFALL.							HUMIDITY.	
	Amount in Inches.	Average for 22 years, 1st July, 1906 to 30th June, 1928.	No. of Rainy Days.	Average rainy days for 22 years, 1st July, 1906 to 30th June, 1928.	Greatest Fall in one day.		Greatest Fall in one day for 22 years, 1st July, 1906 to 30th June, 1928.	Mean Saturation 100.	Average for 22 years, 1st July, 1906 to 30th June, 1928.
					Amount in Inches.	Date.	Inches.		
1928.									
July	2.01	3.62	10	14.59	0.66	13th	2.67	78.97	85.02
August	2.79	3.09	11	14.82	0.66	18th	1.90	73.64	85.20
September	3.75	2.07	18	11.09	0.77	7th	1.45	80.36	81.06
October	0.92	1.37	8	9.05	0.26	23rd	1.10	75.00	74.88
November	1.18	1.21	10	7.73	0.23	3rd	2.35	69.80	72.39
December	0.57	0.90	3	5.95	0.26	13th	1.61	65.58	68.79
1929.									
January	0.05	0.50	1	3.73	0.05	29th	0.90	58.71	69.81
February	0.56	0.45	3	3.95	0.49	20th	0.60	71.46	72.54
March	0.55	0.70	7	5.64	0.21	16th	1.08	68.61	76.13
April	3.40	1.67	14	9.45	0.66	28th	1.61	84.70	81.34
May	1.96	2.73	13	12.27	0.56	5th	2.76	83.80	83.06
June	2.66	4.11	9	14.73	0.50	23rd	2.35	81.73	85.39
Year	20.40	22.42	107	113.00	0.77	7.9.28	2.76	74.36	77.97



Table N.

**EARTH TEMPERATURE, 1928-1929.**

Month.		Range at one foot. °F.	Range for one foot, 22 years, 1st July, 1906, to 30th June, 1928. °F.		Range at two feet. °F.	Range for two feet, 22 years, 1st July, 1906, to 30th June, 1928. °F.		Range at four feet. °F.	Range for four feet, 22 years, 1st July, 1906, to 30th June, 1928. °F.		
1928.											
July	...	...	...	49.2 to 58.1	56.0 to 60.8	...	54.0 to 59.8	59.0 to 62.2	...	57.3 to 62.5	
August	...	...	...	50.9 to 59.9	56.8 to 59.5	...	53.8 to 59.8	59.0 to 60.2	...	56.8 to 59.7	
September	...	...	...	50.9 to 67.2	55.0 to 60.2	...	55.0 to 65.5	58.9 to 60.3	...	57.0 to 63.0	
October	...	...	...	57.2 to 75.9	60.0 to 65.8	...	58.0 to 72.5	60.3 to 64.0	...	56.8 to 66.1	
November	...	...	...	59.3 to 78.0	66.1 to 68.5	...	60.5 to 74.9	64.0 to 66.0	...	60.8 to 70.3	
December	...	...	...	63.0 to 79.8	69.0 to 73.0	...	60.5 to 74.9	66.2 to 69.4	...	63.8 to 81.4	
1929.											
January	...	...	...	66.7 to 81.9	72.8 to 76.9	...	66.8 to 79.9	69.5 to 72.1	...	66.1 to 76.7	
February	...	...	...	66.9 to 82.2	72.7 to 76.0	...	68.9 to 80.0	70.8 to 78.8	...	68.0 to 77.0	
March	...	...	...	63.7 to 79.2	69.2 to 74.0	...	65.2 to 78.6	71.0 to 72.5	...	67.9 to 76.9	
April	...	...	...	58.9 to 74.5	63.9 to 71.9	...	63.0 to 76.1	66.8 to 71.0	...	66.2 to 75.8	
May	...	...	...	53.0 to 67.6	60.0 to 63.0	...	58.0 to 69.5	62.2 to 66.7	...	61.0 to 71.5	
June	...	...	...	51.3 to 64.1	56.9 to 60.1	...	56.0 to 66.0	60.1 to 62.1	...	59.1 to 66.5	
Year	...	...	...	49.2 to 82.2	55.0 to 76.9	...	53.8 to 80.0	58.9 to 78.8	...	56.8 to 81.4	











