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**The Corporation**

OF

**The City of Cape Town**



**ANNUAL REPORT**

OF THE

**Medical Officer of Health**

**For the year ended 30th June, 1949.**

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**The Corporation**  
**OF**  
**The City of Cape Town**



**ANNUAL REPORT**  
**OF THE**  
**Medical Officer of Health**

**For the year ended 30th June, 1949.**



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# THE CORPORATION OF THE CITY OF CAPE TOWN.

## Report of the Medical Officer of Health

FOR THE YEAR ENDED 30TH JUNE, 1949

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

Ladies and Gentlemen,

I have the honour to present a report on the health conditions of the City of Cape Town for the year ended 30th June, 1949, together with an account of the work of the City Health Department during the year.

### *Vital Statistics.*

The birth rate for Europeans is still declining. The birth rate of 19.23 for the year 1948-49 was 3.9 per cent less than the previous year, and 4.9 per cent less than the preceding quinquennium. The birth rate of 46.13 for non-Europeans in the present year remains at a high level. It was 5.9 per cent greater than in the year 1947-48 and 3.0 per cent greater than in the preceding quinquennium. The non-European birth rate was 2.4 times as great as that of the European.

Births in maternity homes and other institutions within the Municipality of Cape Town are still on the increase. Of the 13,330 total live births registered during the year 1948-49 as belonging to Cape Town, 42.2 per cent occurred in institutions; Europeans 66.1 per cent and non-Europeans 33.0 per cent. In the year 1929-30, the percentages were 17.2, 29.6 and 11.0 respectively.

With regard to the general death rate, it is satisfactory to be able to state that for the year 1948-49 the death rates for Europeans (9.10), non-Europeans (18.13) and all races (13.79) were the lowest recorded since unification of the municipalities in 1913. In comparison with the death rates for last year, the mortality rate decreased by 10.6 per cent for Europeans, 7.3 per cent for non-Europeans and 8.4 per cent for all races. The non-European death rate in the year under review was 2.0 times as great as that of the European.

The decrease in the mortality rates was due to a large extent to fewer deaths amongst Europeans from tuberculosis (all forms), cancer (all forms), arterial diseases and cardiac diseases, and by a marked decline in the number of deaths amongst non-Europeans from whooping cough, tuberculosis (all forms), cardiac diseases and bronchitis and pneumonia. In the year under review the non-European death rate from bronchitis and pneumonia was the lowest on record for the City.

The infant mortality rate for Europeans, non-Europeans and all races for the year 1948-49 also showed decreases compared with last year. The decrease was 20.9 per cent for Europeans and 9.3 per cent for non-Europeans. Amongst the diseases from which the reduction in mortality was greater, were developmental diseases in Europeans, and whooping cough and bronchitis and pneumonia in non-Europeans.

The non-European infant mortality rate from bronchitis and pneumonia in the period under review is the lowest on record for the City. The rate of 20.0 was 36.3 per cent less than last year, and 22.4 per cent less than the preceding quinquennium. On the other hand, the infant mortality rate of 31.6 for diarrhoeal diseases amongst non-Europeans in the current year was 8.2 per cent greater than in the year 1947-48 and 5.0 per cent greater than in the preceding quinquennium.

The neo-natal (under 4 weeks) mortality rate per 1,000 live births for the year 1948-49 was 18.00 for Europeans and 37.27 for non-Europeans; and the post neo-natal (over one month but under one year) mortality rate was 11.29 and 73.61 respectively. Compared with the corresponding rates for last year the neo-natal death rate decreased by 25.8 per cent for Europeans and 7.7 per cent for non-Europeans. The post neo-natal death rate decreased by 11.7 per cent for Europeans and 10.1 per cent for non-Europeans.

### *Infectious Diseases.*

The year 1948-49 was on the whole favourable in regard to the incidence of infectious disease. Diphtheria and enteric fever were both comparatively quiescent, and the number of cases notified was the lowest for many years. The incidence of scarlet fever amongst Europeans shows a slight increase, but it is nevertheless below the average of the last ten years.

Whooping cough, which was very prevalent amongst non-Europeans in the previous year, was in a stage of quiescence.

A note on tetanus by Dr. J. F. Wicht, Medical Superintendent of Hospitals, is given in this report at page 54.

### *Formidable Epidemic Disease.*

There was one case of smallpox notified during the period under review in the person of a Native male who became ill a few days after his arrival in Cape Town from Rhodesia. He was admitted in the first instance to the Somerset Hospital for observation, and was later found to be suffering from smallpox. He was transferred to the isolation and quarantine station at the Brooklyn Hospital where he recovered. Three smallpox contacts (1 Native male, 2 Coloured males) were also removed to the Brooklyn Hospital and were discharged a fortnight later not having contracted the disease.

*Veneral Diseases.*

The number of new cases registered at the various clinics during the year 1948-49, was 5,852 (731 European and 5,121 non-European). Amongst the new cases there were 3,386 cases of syphilis, of which 607 were congenital, and 1,385 cases of gonorrhoea.

The number of deaths certified during the year under review as being due to syphilis numbered 40 (non-Europeans); general paralysis of the insane, aneurysm of the aorta, 27 (5 European and 22 non-European). The sum of these figures is equivalent to a mortality rate of 0.17 per 1,000 population (0.03 European and 0.30 non-European).

*Tuberculosis.*

Fewer people died of tuberculosis in the Municipality of Cape Town in the year ending 30th June, 1949, than in the previous year. The mortality from all forms of tuberculosis amongst Europeans during the present year was 82 and amongst non-Europeans 1,019, compared with 123 and 1,147 respectively, in the previous year.

Although there was a reduction in the number of deaths amongst non-Europeans, the number is still high and remains a challenge to civic effort and goodwill, particularly when results justify the claim that the present methods are only deprived of real success by inadequate hospital accommodation.

I have again to draw attention to the very high incidence of all forms of tuberculosis, which has been aggravated largely by overcrowding, particularly amongst the poorer sections of the non-European group. In recent years the overcrowded conditions amongst the latter have been further aggravated by the influx of Natives to the City. The incidence of non-pulmonary forms of tuberculosis for the year under review was 289 (33 Europeans and 256 non-Europeans). These cases are almost entirely due to the exposure of infants and young children to the open pulmonary case in badly ventilated, overcrowded and insanitary dwellings. The department is also much concerned with the problem of vagrants who continue to occupy pondoks and rude shelters on the slopes of the mountain extending from Devil's Peak to Camps Bay. These primitive habitations are without any water supply or even the rudiments of environmental hygiene. Apart from the danger to public health these habitations interfere with the amenities of the owners of nearby properties.

The high cost of living has also increased the incidence of tuberculosis. On account of their high cost protective foods are practically unavailable to the very poor, who are compelled to rely on the cheaper types of foodstuffs, mainly of the farinaceous variety.

*Acknowledgments.*

I desire to acknowledge the assistance I have received from the staff of the City Health Department, and the support accorded me by the Chairman and members of your Public Health Committee and other members of the Council.

I am, Ladies and Gentlemen,

Your obedient servant,

F. O. FEHRSEN.

M.R.C.S., L.R.C.P. (London), D.P.H., F.R.San.I.,  
Professor of Public Health, University of Cape Town.  
Medical Officer of Health.

CITY HEALTH DEPARTMENT,  
12, KEEKROM STREET,  
CAPE TOWN.

October, 1950.



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# REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1949

## MUNICIPALITY OF THE CITY OF CAPE TOWN.

LEADING STATISTICS, YEAR ENDED 30TH JUNE, 1949.

	<i>European.</i>	<i>Non-European.</i>	<i>All races.</i>
Area: 50,643 acres.			
Total population .. .. .	194,085	219,644	413,729
Population (excluding the Native Township of Langa) .. .. .	194,050	208,800	402,850
Birth rate .. .. .	19·23	46·13	33·18
Death rate .. .. .	9·10	18·13	13·79
Infant mortality rate .. .. .	29·29	110·88	88·37
Tuberculosis death rate .. .. .	0·42	4·89	2·74
Enteric incidence rate .. .. .	0·07	0·20	0·14
Enteric death rate .. .. .	0·01	0·04	0·02

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 (corrected for outward transfers). The figures for the Langa Native Township are excluded from these rates.



STATE OF NEW YORK

IN SENATE,  
January 10, 1894.  
REPORT  
OF THE  
COMMISSIONER OF THE  
LAND OFFICE,  
FOR THE YEAR  
1893.

MUNICIPALITY OF THE CITY OF NEW YORK

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# REPORT

OF THE

## MEDICAL OFFICER OF HEALTH

FOR THE YEAR ENDED 30TH JUNE, 1949

### SECTION 1.—NATURAL AND SOCIAL CONDITIONS.

#### PHYSICAL GEOGRAPHY

Cape Town 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. Its average width east and west may be estimated at five miles. The northern half of its eastern side is connected with the mainland by a wide 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 about twelve miles from sea to sea.

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 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 summits) and also Devil's Peak. It forms the foundation of Green and Sea Point, Cape Town 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 they 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 deposits, on which a good deal of old Cape Town 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 limonitic matrix which encloses sand, clay and rock fragments. It varies in thickness from a few inches up to say ten feet and 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 alluvial deposits. 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 Cape Town consists of a central portion, which before the City extension of 1913 constituted the whole Municipality and is sometimes known as Cape Town proper or central Cape Town (Wards 2-6), 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 and its outlying masses, Devil's Peak on the east and Lion's Head and Signal Hill on the west. It therefore lies between the mountain and the sea, and, unlike the centre of most cities, is not surrounded by its suburbs.

The suburbs extend beyond this amphitheatre on either hand. To the west, the marine suburbs, known as Green Point, Sea Point, Clifton, Camps Bay and Bakoven (Ward 1 and part of Wards 2 and 3) lie along the Atlantic sea board for a distance of about six miles curving with the coast in a southerly direction. They are on the seaward slopes of Signal Hill and Lion's Head.

To the east the "Southern Suburbs" (Wards 7-9 and 11-15) extend around Devil's Peak and are stretched for about sixteen miles 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 to the shore of False Bay. Woodstock and Salt River (Wards 6 and 7), next to Cape Town proper, slope down to Table Bay, and at the other end Muizenberg, St. James and Kalk Bay (Ward 15) 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, Retreat and Lakeside, 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 4½ 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, which forms a loop lying in a more easterly position than the suburban line.

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



There is an extension of the Municipality beyond Salt River in a north-easterly direction on the Flats bordering Table Bay. This (Ward 8) includes the suburbs of Maitland, Brooklyn, Rugby, Kensington and Windermere which, together with other townships lying outside the municipal area of the City and following the main road to the north, are known as the "Northern Suburbs".

#### AREA

The area of the Municipality on 30th June, 1949, amounted to approximately 50,643 acres or 79 square miles. On the 18th December, 1948, an area of 1,953 acres was added to the municipality at Uitvlugt Forest Reserve. The length of the main road passing through the Municipality from the boundary at Bakoven to that of Clovelly is about 26 miles.

#### CLIMATE

Cape Town is situated Lat. 33° 56' S., Long. 18° 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 in the winter, but occasional showers occur in the summer also.

The parts of the Municipality on the two seaboard 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 taken by the City Health Department at the City Hospital, Portwood Road, for the year under review and for previous years will be found in Tables W to Z, on pages 134 to 137.

From the point of view of public health Cape Town 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.

#### SOCIAL AND ECONOMIC CONDITIONS

Forty-eight per cent of the Cape Town population of over four hundred thousand consists of whites, or "Europeans". The other fifty-two per cent is commonly designated as "non-European". Eighty-four per cent of these non-Europeans are of the mixed race known as Cape Coloured, and the remainder consists of Natives and Indians, who are both comparatively newcomers.

The Cape Coloured are largely the descendants of the slaves of earlier days, whose emancipation was completed in 1835. Their ancestors of the eighteenth century and earlier were mainly Europeans, Hottentots, blacks from Mozambique, Madagascar and other parts of Africa, and East Indians from the Dutch East Indies. In more recent years they have received additions from European, Bantu and other stocks.

There is one section of the Cape Coloured, Moslem in religion, known as "Malays," who are more immediately descended from the Dutch East Indians. Though they possess a larger infusion of this strain, they are much mixed with the other elements present in the Cape Coloured generally.

The social and economic conditions of the Cape Coloured are on the whole unsatisfactory. A part of them have skilled trades and earn good wages but the majority are unskilled labourers and many of the men earn less than 70s. a week when in full work. The position is aggravated by the large size of the families, but the family income is eked out when possible by earnings brought in by the wife and children. The measures taken for the prevention and relief of distress are inadequate, and there is no compulsory insurance against sickness. There is much undernourishment, and housing accommodation is expensive and bad. The social and cultural level is low. The principle of compulsory education does not apply to non-Europeans, and, though there are some good Coloured schools, the general level of schooling is low, and there is a lack of discipline in adolescents and a serious problem caused by Coloured delinquency. The illegitimacy rate is high and venereal disease is rife. The social contrast between the Europeans and Cape Coloured can be expressed by the statement that whereas in the whites it is only a small minority that belong to the depressed classes, in the Coloured it is the majority. The same contrast is seen in housing conditions; it is a small minority of Europeans who live in slum conditions, but a majority of the Coloured.

The natives constitute only 16 per cent of the non-Europeans. They live in the Council's native township, or as ordinary non-European residents in the City (where they are mostly slum dwellers), or in unsanitary shacks on the Cape Flats, or on their employers' premises. The segregation prescribed by the Natives (Urban Areas) Act is by no means completely enforced, for the reason that the houses in the township are too few to accommodate the population to be housed. Many of the natives are men from the native territories who still retain their link with the territories and commonly return there eventually; but there is an increasing population of detribalized natives who are permanently resident in Cape Town and live here with their families. Their social and economic conditions are on the whole worse than those of the Coloured people.

The Indians are less than 7,500 in number. They are nearly all traders, and they are better off than the Cape Coloured. Some of them are making good progress in business and becoming well-to-do.

There are parts of the City where the inhabitants are mainly non-European, and other parts that are exclusively occupied by Europeans and their non-European servants. The various sections of the community, however, are to a great extent intermingled, and there is nothing approaching complete segregation of the races. The geographical disposition of white and coloured is very much the same as that of well-to-do and poor in a European town. In the operations under the Housing Act the estates for Europeans are separate from those for non-Europeans, and this will contribute to progressive residential separation. The provision of a native township has the same effect.

Striking contrasts are presented by the vital statistics of the different races, which will be found in the next section of this report.



## SECTION II.—VITAL STATISTICS.

The vital statistics in this report refer to the Municipality of Cape Town and are for the period 52 weeks ended 1st July, 1949. The vital statistic rates are corrected to the basis of a year of 365 days. Births and deaths are attributed to the date of registration.

Unless the contrary is stated all statistics in this report are exclusive of the Langa Native Township, which has a rapidly changing population.

The births and deaths statistics are stated variously as:—

- (1) "Crude or uncorrected", including all births and deaths registered during the year as having occurred in the Municipality of Cape Town.
- (2) "Corrected for outward transfers", which is the foregoing (1) after the deduction of deaths in Cape Town of persons who were not Cape Town residents, and births in Cape Town to mothers who were not Cape Town residents.

Information as to outward transfers is available locally, for both European and non-European, 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.

In the previous report (1947-48) reference was made to the fact that owing to the information of inward transfer figures (births and deaths belonging to the Municipality of Cape Town) not being available in time for the publication of the report it was decided to exclude these figures from all statistics for the year concerned. The European vital statistic rates, corrected for inward and outward transfers, for the year under review and for subsequent years will, however, be recorded whenever circumstances permit. A record of these rates for a series of past years is set out in Table N on page 125.

## POPULATION

The estimated population of the Municipality of Cape Town, exclusive of the Langa Native Township, for the year under report and for the previous year is shown in the following table. It is calculated for the middle of the year (31st December), as to Europeans from the 1941 and 1946 censuses, and, as to non-Europeans, the 1936 and 1946 censuses:—

Race.	1948-49			1947-48			Estimated increase.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
European .. .. .	93,190	100,860	194,050	90,669	98,131	188,800	5,250
Coloured .. .. .	81,783	94,227	176,010	79,939	92,101	172,040	3,970
Native .. .. .	16,910	8,760	25,670	15,638	8,102	23,740	1,930
Asiatic .. .. .	4,170	2,950	7,120	3,941	2,789	6,730	390
Non-European .. .. .	102,863	105,937	208,800	99,518	102,992	202,510	6,290
All races .. .. .	196,053	206,797	402,850	190,187	201,123	391,310	11,540

The estimated increase in the total population as shown in the above table, is 1.5 times greater than the natural increase of births over deaths in the year under review. The difference is due to the fact that the generally accepted method of estimating the population is based upon the assumption that the rate of increase which had obtained during the preceding intercensal period would continue. It is also evident that the disparity between the estimated increase in the population and the natural increase, is accounted for by a high factor of increase resulting from the abnormal population movement during the war period which affected the census in 1941 (European) and the census in 1946 (all races) when troops, etc., had returned home.

Except where otherwise stated, the rates in this report are based on the above figures, the events in the Langa Native Township being excluded.

The population as enumerated at the 1946 census for the separate wards of the City, and the vital statistics for the wards for the year under review, are shown in Table K on page 122. It will be seen from this table that the estimated population for the middle of the year (31st December) and the vital statistic rates are not stated as has been done in previous years. This is because the annual factor of increase for estimating the ward population will not be available until after the next census.

The estimated population of Langa Native Township based on the annual average of an enumeration made at the end of each month, is as follows:—

Europeans		Natives		All races		Total
Males	Females	Males	Females	Males	Females	
17	17	7,873	2,972	7,890	2,989	10,879

## BIRTH STATISTICS

The births and birth rates for the Municipality of Cape Town in the year under review are shown in Table L, on page 123.

The births, birth rates and rates of natural increase per 1,000 population for the year 1948-49 and for the previous year, were as follows:—

Race.	1948-49					1947-48				
	Uncorrected.		Corrected for Outward Transfers.			Uncorrected.		Corrected for Outward Transfers.		
	Live births.	Birth rate.	Live births.	Birth rate.	Rate of natural increase.	Live births.	Birth rate.	Live births.	Birth rate.	Rate of natural increase.
European ..	4,602	23.78	3,721	19.23	10.13	4,633	24.21	3,832	20.02	9.84
Coloured ..	9,077	51.71	8,517	48.52	30.48	8,272	47.43	7,858	45.06	25.98
Native ..	929	36.20	823	32.15	10.90	856	35.57	785	32.62	7.23
Asiatic ..	268	37.74	265	37.32	28.17	302	44.27	301	44.12	32.98
Non-European	10,274	49.34	9,605	46.13	28.00	9,430	45.94	8,944	43.57	24.02
All races* ..	14,880	37.04	13,330	33.18	19.39	14,075	35.48	12,788	32.24	17.18

\*Including 4 in 1948-49 and 12 in 1947-48 of newly-born infants of unknown race, found dead in different parts of the City during the year.

The variation in the number of births and the birth rates per 1,000 population (corrected for outward transfers) for the Municipality over a period of five years, are shown in the following table:—

Race.	1948-49		1947-48		1946-47		1945-46		1944-45	
	Live births.	Birth rate.	Live births.	Birth rate.	Live births.	Birth rate.	Live births.	Birth rate.	Live births.	Birth rate.
European ..	3,721	19.23	3,832	20.02	3,970	21.67	3,510	19.69	3,568	20.58
Coloured ..	8,517	48.52	7,858	45.06	8,140	48.54	7,304	44.56	7,205	44.97
Native ..	823	32.15	785	32.62	720	32.88	777	38.36	726	38.76
Asiatic ..	265	37.32	301	44.12	189	29.80	246	41.04	238	42.02
Non-European	9,605	46.13	8,944	43.57	9,049	46.18	8,327	43.79	8,169	44.25
All races* ..	13,330	33.18	12,788	32.24	13,028	34.36	11,845	32.15	11,747	32.81

\*See footnote to previous table.

The European birth rates (corrected for inward and outward transfers) for a series of past years will be found in Table N, on page 125.

The non-European birth rate for the year 1948-49, was 2.4 times as great as the European (corrected for outward transfers). The ratio was 2.5 for Coloured, 1.7 for Natives and 1.9 for Asiatics.

As compared with the previous year the European birth rate (corrected for outward transfers) showed a decrease of 3.9 per cent and the non-European an increase of 5.9 per cent.

The birth rates for the year 1948-49, compared with the preceding quinquennium, show a decrease of 4.9 per cent for Europeans, an increase of 3.0 per cent for non-Europeans, and an increase of 0.7 per cent for all races.

The natural increase of the non-European population (i.e., the excess of births over deaths) was 3.0 times as great as that of the European population (corrected for outward transfers); expressed as per 1,000 population it was 2.8 times as great.

The number of male births per 100 female births (corrected for outward transfers) was 100.3 amongst Europeans and 103.8 amongst non-Europeans.

The percentage of illegitimate to total live births (corrected for outward transfers) was 3.0 amongst Europeans and 23.9 amongst non-Europeans. The corresponding figures for former years will be found in Table N, on page 125.

The number of live births and still births registered as having taken place at home, and the percentage of total births delivered in institutions within the Municipality, are shown in the following table for the year under review:—



Race.	Live births.				Still births.			
	Un-corrected.	Corrected for Outward Transfers.			Un-corrected.	Corrected for Outward Transfers.		
	Percentage of total births delivered in institutions.	Births.	Home deliveries.	Percentage of total births delivered in institutions.	Percentage of total births delivered in institutions.	Births.	Home deliveries.	Percentage of total births delivered in institutions.
European ..	71.97	3,721	1,261	66.11	71.01	53	20	62.26
Coloured ..	32.91	8,517	6,048	28.99	48.14	267	154	42.32
Native ..	86.76	823	143	82.62	54.10	53	26	50.94
Asiatic ..	6.72	265	248	6.42	12.50	16	14	12.50
Non-European	37.09	9,605	6,439	32.96	47.58	336	194	42.26
All races ..	47.87	13,330*	7,704*	42.21	51.25	389	214	44.99

\*Including 4 of unknown race.

In Table J, on page 121, is shown the number of births which took place in the various institutions in the Municipality of Cape Town during the year 1948-49.

Table H, on page 119, will show the registered births and still births for the year 1948-49, classified as to race, sex, legitimacy and the percentage of total births occurring in institutions.

Statistics based on birth notifications will be found in Table I, on page 120.

Births registered as belonging to Langa Native Township are not included in the foregoing figures. Particulars regarding these will be found in Table U, on page 132.

Reference to Table V, on page 133, will show the births for the district of Windermere.

In Table O, on page 126, the birth rates of certain other towns, the Union of South Africa, and England and Wales, are set out for the purposes of comparison.

## GENERAL MORTALITY

The deaths and death rates for the Municipality of Cape Town for the year 1948-49, are shown in Table L, on page 123.

The following table shows at a glance the relationship of deaths and death rates per 1,000 population of the Municipality for the year 1948-49, compared with the figures for the previous year:—

Race.	1948-49				1947-48			
	Uncorrected.		Corrected for Outward Transfers.		Uncorrected.		Corrected for Outward Transfers.	
	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.
European ..	2,134	11.03	1,761	9.10	2,329	12.17	1,949	10.18
Coloured ..	3,556	20.26	3,167	18.04	3,719	21.33	3,327	19.08
Native ..	629	24.57	544	21.25	679	28.22	611	25.39
Asiatic ..	72	10.14	65	9.15	77	11.29	76	11.14
Non-European ..	4,257	20.44	3,776	18.13	4,475	21.80	4,014	19.55
All races* ..	6,395 <sup>1</sup>	15.92	5,541 <sup>1</sup>	13.79	6,816 <sup>2</sup>	17.18	5,975 <sup>2</sup>	15.06

\*Including <sup>1</sup> 4, <sup>2</sup> 12, of unknown race.

The number of deaths and death rates per 1,000 population (corrected for outward transfers) for the Municipality, are shown in the following table for a period of five years:—

Race.	1948-49		1947-48		1946-47		1945-46		1944-45	
	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.
European ..	1,761	9.10	1,949	10.18	1,709	9.33	1,714	9.62	1,762	10.16
Coloured ..	3,167	18.04	3,327	19.08	3,048	18.18	3,154	19.24	3,413	21.30
Native ..	544	21.25	611	25.39	587	26.80	586	28.96	607	32.41
Asiatic ..	65	9.15	76	11.14	56	8.83	62	10.34	75	13.24
Non-European	3,776	18.13	4,014	19.55	3,691	18.84	3,802	19.99	4,095	22.18
All races* ..	5,541 <sup>1</sup>	13.79	5,975 <sup>2</sup>	15.06	5,409 <sup>3</sup>	14.27	5,525 <sup>4</sup>	15.00	5,867 <sup>5</sup>	16.39

\*Including <sup>1</sup> 4, <sup>2</sup> 12, <sup>3</sup> 9, <sup>4</sup> 9, <sup>5</sup> 10, of unknown race.



The European death rate (corrected for inward and outward transfers) for a series of past years will be found in Table N, on page 125.

The death rate for Europeans, non-Europeans and all races (corrected for outward transfers) for the year 1948-49, was the lowest on record for the Municipality of Cape Town.

The death rates for the year 1948-49, compared with the previous year, show decreases of 10.6 per cent for Europeans, 7.3 per cent for non-Europeans, and 8.4 per cent for all races.

Compared with the preceding quinquennium the European death rate showed a decrease of 5.9 per cent, and the non-European a decrease of 7.9 per cent. The rate for all races showed a decrease of 7.3 per cent.

The non-European death rate for the year 1948-49, was 2.0 times as great as the European (corrected for outward transfers). The ratio was 2.0 for Coloured, 2.3 for Natives and 1.0 for Asiatics.

In Table N, on page 125, the annual death rate for the Municipality of Cape Town since unification (1913) is set out in years and quinquennia.

Deaths registered as belonging to the Langa Native Township are not included in the foregoing figures. Particulars regarding these will be found in Table U, on page 132.

Reference to Table V, on page 133, will show the deaths for the district of Windermere.

For the purposes of comparison, the death rates of certain other towns in the Union of South Africa and in England and Wales are set out in Table O on page 126.

#### PRINCIPAL CAUSES OF MORTALITY

The decrease in the European mortality rate in the year 1948-49, was due to a decline in the number of deaths from tuberculosis (all forms), cancer (all forms), arterial diseases and cardiac diseases; in the non-European mortality rate by a marked decline in the number of deaths from whooping cough, tuberculosis (all forms), cardiac diseases, bronchitis and pneumonia (all forms).

In Tables A1, A2, A3, A4 and A5 on pages 80 to 110 the deaths for the year under review will be found fully classified for cause, race, sex, age and ward. A shorter classification by cause and race is set out in Table B on page 111, and in Table E on pages 114 and 115, the rates of mortality from a short list of causes are shown by race with the corresponding figures for the preceding ten years. Table D on page 113 shows the trends in mortality from certain causes over a period of years.

The following table shows which are the greater recorded causes of deaths in the year 1948-49 for Europeans and non-Europeans respectively:—

European				Non-European			
Cause of death	Deaths	Percentage of total deaths	Death rate	Cause of death	Deaths	Percentage of total deaths	Death rate
Cardiac diseases ..	493	28.0	2.2	Tuberculosis (all forms) ..	1,019	27.0	4.9
Cancer (all forms) ..	256	14.5	1.3	Diarrhoea and enteritis ..	482	12.8	2.3
Arterial diseases* ..	241	13.7	1.2	Bronchitis and pneumonia ..	391	10.4	1.9
Tuberculosis (all forms) ..	82	4.7	0.4	Cardiac diseases ..	356	9.4	1.7
Violence ..	82	4.7	0.4	Congenital malformations and diseases of early infancy ..	329	8.7	1.6
Bronchitis and pneumonia ..	74	4.2	0.4	Arterial diseases* ..	222	5.9	1.1
Nephritis ..	71	4.0	0.4	Cancer (all forms) ..	147	3.9	0.7
Congenital malformations and diseases of early infancy ..	66	3.7	0.3	Violence ..	135	3.6	0.6
Diabetes ..	32	1.8	0.2	Nephritis ..	89	2.4	0.4
Diarrhoea and enteritis ..	18	1.0	0.1	Syphilis, G.P.I., tabes and aneurysm of aorta ..	62	1.6	0.3

\*Including intracranial lesions of vascular origin.

The contrast between the races is largely due to two factors, viz. (1) the prominence in non-Europeans of deaths from causes associated with bad social and economic conditions; and (2) the difference in the age constitution of the two populations. Thus tuberculosis, and bronchitis and pneumonia, which are fostered by bad conditions of life, cause more mortality in non-Europeans than in Europeans, where they are far exceeded by circulatory diseases and cancer. The same influence operates in diarrhoeal diseases, measles and whooping cough. As regards the age factor, bronchitis and pneumonia, diarrhoea and enteritis, measles, whooping cough and the conditions in the "congenital" category, chiefly affect young children; and the large corresponding death-rates in the non-Europeans are in part due to the mere fact that there is a greater proportion of young children in the non-European population than in the European. (The figures for infant mortality in Table M, on page 124, afford a comparison between the races free from the distortion caused by difference in age constitution.) Similarly cancer, circulatory diseases and diabetes occur especially in middle and old age, and the prominence of the mortality rates from these diseases in Europeans is mainly due to the larger proportion of people of such age in the European population. In other words a larger proportion of non-Europeans die before reaching the age when they are most liable to develop such diseases (see table below, Age at Death).

In Table K, on page 122, the deaths by race are classified according to place of residence (wards).

Deaths in the Langa Native Township are not included in the foregoing figures. Particulars regarding these will be found in Table A5, on page 110, and in Table U, on page 132.

Information regarding deaths for the district of Windermere will be found in Tables A4 and V, on pages 108 and 133.

For the purpose of comparison the death rates of certain other towns, the Union of South Africa and England and Wales are set out in Table O, on page 126.

## SEASONAL VARIATION

The seasonal variation in mortality is shown in Table C, on page 112, where the deaths for the year 1948-49 classified for certain causes and by race, are set out according to the months of registration.

## AGE AT DEATH

The number of deaths at various ages with the percentage of total deaths are summarized in the following table:—

Race.		Age groups.											
		0—1		1—5		5—25		25—65		65 and over.		Total.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Deaths..	European ..	71	38	9	13	38	26	371	269	468	458	957	804
	Coloured ..	502	364	246	227	137	191	610	438	213	239	1,708	1,459
	Native ..	88	92	67	42	25	17	149	48	12	4	341	203
	Asiatic ..	14	5	4	2	4	3	20	2	10	1	52	13
	Non-European	604	461	317	271	166	211	779	488	235	244	2,101	1,675
	All races ..	675	499	326	284	204	237	1,150	757	703	702	3,058	2,479
Percentage of total deaths	European ..	7.4	4.7	0.9	1.6	4.0	3.2	38.8	33.5	48.9	57.0	100.0	100.0
	Coloured ..	29.4	24.9	14.4	15.6	8.0	13.1	35.7	30.0	12.5	16.4	100.0	100.0
	Native ..	25.8	45.3	19.7	20.7	7.3	8.4	43.7	23.6	3.5	2.0	100.0	100.0
	Asiatic ..	26.9	38.5	7.7	15.4	7.7	23.1	38.5	15.3	19.2	7.7	100.0	100.0
	Non-European	28.7	27.5	15.1	16.2	7.9	12.6	37.1	29.13	11.2	14.6	100.0	100.0
	All races ..	22.1	20.1	10.6	11.5	6.7	9.6	37.6	30.5	23.0	28.3	100.0	100.0

From the foregoing figures it will be seen that the deaths under five years of age constitute 7.4 per cent of all deaths in Europeans, as compared with 43.8 per cent in non-Europeans (Coloured 42.3, Natives 53.1, Asiatic 38.5); and that the deaths under 25 years of age constitute 11.1 per cent of all deaths in Europeans as compared with 53.8 per cent in non-Europeans (Coloured 52.6, Native 60.8, Asiatic 49.2).

## SEX

The deaths and death rates per 1,000 population during the year under review are shown in the accompanying table according to sex:—

Race.	Uncorrected.				Corrected for Outward Transfers.			
	Deaths.		Death rate.		Deaths.		Death rate.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
European ..	1,193	941	12.84	9.36	957	804	10.30	7.99
Coloured ..	1,945	1,611	23.85	17.14	1,708	1,459	20.94	15.53
Native ..	400	229	23.72	26.21	341	203	20.22	23.24
Asiatic ..	59	13	14.19	4.42	52	13	12.50	4.42
Non-European ..	2,404	1,853	23.44	17.54	2,101	1,675	20.48	15.85
All races ..	3,597	2,794	18.40	13.55	3,058	2,479	15.64	12.02

It will be seen from the above figures that in Europeans the male death rate (corrected for outward transfers) was 28.9 per cent greater than the female; and in non-Europeans the male death rate was 29.2 per cent greater than the female (Coloured 34.8, Asiatic 182.8; in Natives the male death rate was 13 per cent less than the female).

## DEATHS IN INSTITUTIONS

In Table G, on page 118, is shown the number of deaths which took place in the various institutions. The total number of deaths in Cape Town and the percentage of total deaths occurring in institutions for the year under review, are indicated in the following table:—



Race.	Uncorrected.		Corrected for Outward Transfers.	
	Total deaths.	Percentage of total deaths occurring in institutions.	Total deaths.	Percentage of total deaths occurring in institutions.
European .. .. .	2,134	48.8	1,761	39.9
Coloured .. .. .	3,556	30.9	3,167	23.4
Native .. .. .	629	38.0	544	30.1
Asiatic .. .. .	72	18.1	65	10.8
Non-European .. .. .	4,257	31.8	3,776	24.2
All races .. .. .	6,395*	37.4	5,541*	29.1

\* Including 4 of unknown race.

## INFANT MORTALITY

The deaths of infants under one year of age for the Municipality of Cape Town in the year 1948-49 and the corresponding rates are shown in Table L, on page 123.

A comparative view of the deaths of infants under one year of age and the corresponding mortality rates expressed per 1,000 live births for the year 1948-49 and for the previous year, are shown in the following table:—

Race.	1948-49				1947-48			
	Uncorrected.		Corrected for Outward Transfers.		Uncorrected.		Corrected for Outward Transfers.	
	Deaths under 1 year.	Infant mortality rate.	Deaths under 1 year.	Infant mortality rate.	Deaths under 1 year.	Infant mortality rate.	Deaths under 1 year.	Infant mortality rate.
European .. .. .	158	34.33	109	29.29	186	40.15	142	37.06
Coloured .. .. .	958	105.54	866	101.68	941	113.76	859	109.32
Native .. .. .	198	213.13	180	218.71	235	274.53	214	272.61
Asiatic .. .. .	20	74.61	19	71.70	21	69.54	20	66.45
Non-European .. .. .	1,176	114.46	1,065	110.88	1,197	126.94	1,093	122.20
All races* .. .. .	1,338 <sup>1</sup>	89.92	1,178 <sup>1</sup>	88.37	1,395 <sup>2</sup>	99.11	1,247 <sup>2</sup>	97.51

\* Including <sup>1</sup> 4, <sup>2</sup> 12, of unknown race.

The deaths of infants under one year of age for the Municipality of Cape Town, and the infant mortality rates per 1,000 live births for the last five years, are indicated in the following table (corrected for outward transfers):—

Race	1948-49		1947-48		1946-47		1945-46		1944-45	
	Deaths under 1 year.	Infant mortality rate.	Deaths under 1 year.	Infant mortality rate.	Deaths under 1 year.	Infant mortality rate.	Deaths under 1 year.	Infant mortality rate.	Deaths under 1 year.	Infant mortality rate.
European .. .. .	109	29.29	142	37.06	109	27.46	132	37.61	121	33.91
Coloured .. .. .	866	101.68	859	109.32	759	93.24	716	98.03	840	116.59
Native .. .. .	180	218.71	214	272.61	204	283.33	181	232.95	187	257.58
Asiatic .. .. .	19	71.70	20	66.45	14	74.07	14	56.91	12	50.42
Non-European .. .. .	1,065	110.88	1,093	122.20	977	107.97	911	109.40	1,039	127.19
All races* .. .. .	1,178 <sup>1</sup>	88.37	1,247 <sup>2</sup>	97.51	1,095 <sup>3</sup>	84.05	1,051 <sup>4</sup>	88.73	1,170 <sup>5</sup>	99.60

\* Including <sup>1</sup> 4, <sup>2</sup> 12, <sup>3</sup> 9, <sup>4</sup> 8, <sup>5</sup> 10, of unknown race.

The European infant mortality rate (corrected for inward and outward transfers) will be found in Table N, on page 125, for a series of past years.

The non-European infant mortality rate for the year 1948-49 was 3.8 times as great as the European (corrected for outward transfers), against the European rate, the ratio was 3.5 for Coloured, 7.5 for Natives and 2.4 for Asiatics.

The infant mortality rate for Europeans, non-Europeans and all races in the year 1948-49, compared with that in the previous year, show decreases of 21.0 per cent for Europeans, 9.3 per cent for non-Europeans and 9.4 per cent for all races.



Compared with the preceding quinquennium, the European infant mortality rate showed a decrease of 11.1 per cent and the non-European a decrease of 3.9 per cent. The infant mortality rate for all races showed a decrease of 3.4 per cent.

The death rate for the year 1948-49 of children between one and two years of age per 1,000 survivors of those born in the previous year was 2.1 for Europeans and for non-Europeans 47.5 or 22.6 times as great. The causes of infant mortality, both for children under one year of age and children between one and two years of age, are set out in Table M, on page 124.

In the year under report 52.3 per cent of the deaths amongst European infants occurred in the first week of life and 61.5 per cent in the first month (4 weeks). Amongst non-European infants the percentages were 24.8 in the first week and 33.6 in the first month.

The neo-natal (under 4 weeks) and post neo-natal (over 4 weeks) mortality rates per 1,000 live births for the year under review are shown in the accompanying table classified for certain causes and by race:—

Cause of death.	Neo-natal mortality rate.		Post neo-natal* mortality rate.		Infant mortality rate.	
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.
Whooping cough .. .. .	—	—	0.27	0.94	0.27	0.94
Scarlet fever .. .. .	—	—	—	—	—	—
Measles .. .. .	—	—	—	0.52	—	0.52
Diphtheria .. .. .	—	—	—	0.21	—	0.21
Tuberculosis (all forms) .. .. .	—	—	0.81	9.58	0.81	9.58
Syphilis .. .. .	—	0.83	—	1.77	—	2.60
Bronchitis and pneumonia .. .. .	—	1.67	2.96	18.32	2.96	19.99
Diarrhoea and enteritis .. .. .	0.27	0.42	3.22	31.23	3.49	31.65
Premature birth .. .. .	9.94	21.55	—	1.56	9.94	23.11
Injury at birth .. .. .	3.76	3.85	—	—	3.76	3.85
Congenital malformations and debility	1.34	1.56	0.54	1.15	1.88	2.71
Other diseases peculiar to early infancy	1.88	4.06	—	0.21	1.88	4.27
Other causes .. .. .	0.81	3.33	3.49	8.12	4.30	11.45
Total .. .. .	18.00	37.27	11.29	73.61	29.29	110.88

\* Over one month, but under one year.

In Table F1, on page 116, the deaths of infants under one year of age are classified by race according to age at death and cause of death.

The next table shows the variation in the neo-natal (under four weeks) and post neo-natal (over four weeks) mortality rates for both Europeans and non-Europeans over a period of five years (corrected for outward transfers).

Period.	European		Non-European	
	Neo-natal	Post neo-natal	Neo-natal	Post neo-natal
Year ended 30th June, 1945 .. .. .	20.74	13.17	39.17	88.02
" " " 1946 .. .. .	23.65	13.96	38.91	70.49
" " " 1947 .. .. .	18.89	8.57	41.44	66.53
" " " 1948 .. .. .	24.27	12.79	40.36	81.84
" " " 1949 .. .. .	18.00	11.29	37.27	73.61
Quinquennium (1945-1949) .. .. .	21.07	11.88	39.42	75.91

Reference to Table F2, on page 117, will show the deaths of infants under one year of age arranged according to cause and race for a period of years.

The difference in the infant mortality for the year under review as between legitimate and illegitimate infants are indicated in the following table:—

	European.	Non-European.	All races.
Number of legitimate births .. .. .	3,611	7,310	10,921
Number of legitimate deaths under one year of age	104	723	827
Infant mortality (legitimate) per 1,000 livebirths ..	28.80	9.89	75.73
Number of illegitimate births .. .. .	110	2,295	2,405*
Number of illegitimate deaths under one year of age	5	342	351*
Infant mortality (illegitimate) per 1,000 livebirths ..	45.45	149.02	145.70

\* including 4 of unknown race.

In Table K, on page 122, the infant mortality by race will be found classified according to place of residence (wards).

Infant deaths in the Langa Native Township are not included in the foregoing figures. Particulars regarding these will be found in Table A5, page 110, and Table U, page 132.

In Table V, on page 133, will be found the infant mortality rate for the district of Windermere.

Infant mortality rates of certain other towns in the Union of South Africa and in England and Wales are set out in Table O, on page 126, for the purposes of comparison.

## MATERNAL MORTALITY

The following table shows the number of deaths of women which occurred in the year under report from causes associated with pregnancy and the puerperium, classified for causes and race and the corresponding mortality rates per 1,000 live births (corrected for outward transfers):—

	Deaths.			Maternal mortality rates per 1,000 live births.		
	Eur.	Non-E.	All races.	Eur.	Non-E.	All races.
Puerperal septicaemia (including post-abortion infection) ..	2	—	2	0.54	—	0.15
Abortion, ectopic gestation, and haemorrhages of pregnancy ..	1	9	10	0.27	0.94	0.75
Toxaemias and other diseases and accidents of pregnancy ..	2	9	11	0.53	0.94	0.83
Puerperal haemorrhage ..	1	2	3	0.27	0.21	0.22
Other puerperal accidents and diseases ..	—	1	1	—	0.10	0.08
All causes, other than puerperal septicaemia (including post-abortion infection) ..	4	21	25	1.07	2.19	1.88
Total ..	6	21	27	1.61	2.19	2.03

The maternal mortality rates (per 1,000 births) based on the total deliveries (live births and still births) registered during the year 1948-49 were as follows:—

	Puerperal septicaemia.			Other causes.			All causes.		
	Eur.	Non-E.	All races.	Eur.	Non-E.	All races.	Eur.	Non-E.	All races.
1948-49 ..	0.53	—	0.15	1.06	2.01	1.75	1.59	2.01	1.90

In the next table the annual maternal mortality rates (per 1,000 live births) for the Municipality are shown for a series of years (corrected for outward transfers):—

	Puerperal septicaemia.			Other causes.			All causes.		
	Eur.	Non-E.	All races.	Eur.	Non-E.	All races.	Eur.	Non-E.	All races.
1914-15 to 1918-19	0.59	1.30	1.02	2.13	3.55	2.98	2.72	4.85	4.00
1919-20 to 1923-24	1.76	1.20	1.40	2.84	2.16	2.41	4.60	3.36	3.81
1924-25 to 1928-29	1.03	1.71	1.48	1.74	3.73	3.07	2.77	5.43	4.56
1929-30 to 1933-34	0.94	1.27	1.17	3.04	3.12	3.10	3.98	4.40	4.27
1934-35 to 1938-39	0.96	1.39	1.26	2.43	3.30	3.05	3.38	4.49	4.32
1939-40 to 1943-44	0.85	1.79	1.49	1.09	2.50	2.06	1.93	4.29	3.55
1944-45 to 1948-49	0.14	0.52	0.41	0.79	1.70	1.47	0.93	2.22	1.88
1940-41 ..	1.00	1.80	1.57	1.00	1.94	1.67	2.00	3.74	3.24
1941-42 ..	1.23	1.43	1.37	1.55	2.58	2.24	2.78	4.01	3.61
1942-43 ..	0.29	1.58	1.15	0.58	3.72	2.68	0.87	5.30	3.83
1943-44 ..	1.04	2.11	1.77	1.30	2.61	2.19	2.34	4.72	3.95
1944-45 ..	—	0.49	0.34	0.56	2.20	1.70	0.56	2.69	2.04
1945-46 ..	0.28	0.96	0.76	1.71	1.68	1.69	1.99	2.64	2.45
1946-47 ..	—	0.44	0.31	0.25	1.22	0.92	0.25	1.66	1.23
1947-48 ..	—	0.78	0.55	1.04	1.23	1.17	1.04	2.01	1.72
1948-49 ..	0.54	—	0.15	1.07	2.08	1.80	1.61	2.19	2.03

## SECTION III.—MATERNAL AND CHILD WELFARE.

(Prepared by Dr. E. Mary Broome, Maternal and Child Welfare Officer.)

The work of this branch of the department aims at providing a promotive health service for mothers and children of all races in the community. By means of specially qualified medical officers and health visitors a wide range of activity is undertaken.

The branch is administered from the head office, Keerom Street, Cape Town, and carries out its work at 24 branch centres in Cape Town and the suburbs. Of these centres, 16 are devoted entirely to this service, five being in housing schemes; in addition, fortnightly sessions for Europeans are held in five halls rented for the purpose, and at the Municipal buildings at Muizenberg. For Natives living in the Langa Native Township, there is a weekly pre-natal clinic and a child welfare session, held at the Langa hospital.

At the end of April, 1949, the house rented for the Welfare Centre at 93 Keerom Street was no longer available as the owner had given notice that he required the premises for use as a warehouse.



As no suitable accommodation could be found in the neighbourhood, arrangements were made to make use of the time being of a reconditioned house in the Malay quarter, 95 Shortmarket Street, for non-European sessions; additional sessions for European infants were started in Church halls at Kloof Street in central Cape Town, and at Cheviot Place, Green Point.

Although the use of Church halls as Welfare Centres is in many ways inconvenient administratively, these sessions have the advantage of bringing the Child Welfare services nearer to the European mothers in the area concerned.

It is hoped, however, that suitable land may be found in central Cape Town on which a Maternity and Child Welfare Centre could be built. This should serve as the administrative headquarters for the Maternal and Child Welfare branch which has worked for many years under overcrowded and difficult conditions.

There are four full-time women medical officers, and in addition part-time paediatricians, obstetricians, and general practitioners undertake one or more weekly sessions.

Trained nurses with additional qualifications are employed as health visitors; they visit homes and advise the expectant mothers and those with young children on all points of child welfare and nutrition, in order to ensure as far as possible that children should have a healthy start in life.

Other health visitors carry out more specialised work in the fields of supervision of midwives, diphtheria immunization, orthopaedic after-care and school clinics. Social problems referred by the medical officers, especially in relation to the unmarried mother are investigated by a senior health visitor assisted by a qualified social worker.

#### MATERNAL AND CHILD WELFARE CENTRES

The table on page 20 shows the attendances (classified for race) at the infant consultations (including pre-school children), pre-natal clinics, school clinics and dinners held at the centres during the year 1948-49.

##### INFANT CONSULTATIONS

All newly born infants are visited by the health visitors and the mothers are invited to bring the infants and older children to the welfare centres for advice as to feeding and for medical supervision. Periodic attendance is encouraged for children up to school age.

The infant consultations are primarily for preventive and educational purposes. Cases of illness, especially those of a dietetic nature, and any children suffering from minor ailments who can be dealt with as out-patients, are treated at the centres, while more serious cases are referred to private doctors where the parents can afford to pay fees, or to one of the hospitals or dispensaries. When necessary, arrangements are made for free medical and nursing attendance at home.

A medical officer is in attendance at most of the sessions and certain of the health visitors of the district are always present.

As in previous years valuable assistance has been given by voluntary workers at the welfare centres, who attend regularly at one or more sessions a week and assist with the clerical work at the centres; but it is to be regretted that there has been a falling off of such voluntary service in recent years.

Nurses taking the health visitors' course at the Technical College and the mothercraft course at the Buxton Home carry out practical work at the centres during their training. In addition, doctors taking the course for the Diploma of Public Health and Social Science students have attended for observation at the centres.

At the end of the year under review, 49 infant consultations were being held weekly. During the year 10,877 children were registered as new cases, and the total attendances of children at the infant consultations numbered 145,547. Details are shown in the table on page 20.

Of the 10,877 children registered as new cases, 9,217 (1,696 European and 7,521 non-European) were under one year of age at the time of their first attendance, and 1,660 (337 European and 1,323 non-European) were over one year of age at that time.

Of the new cases registered, 41 were of children resident outside the municipal area, viz. under one year of age, Europeans 9, non-Europeans 20, over one year of age, Europeans 6, non-Europeans 6. The new cases registered within the City (excluding attendance at the Langa centre) were as follows:—

	European	Non-European
Under one year of age ..	1,687	7,194
Over one year of age ..	331	1,285

These first attendances under one year of age amounted to 67 per cent, of the registered births (45 per cent, in the case of Europeans and 75 per cent in the case of non-Europeans).

These figures do not include infants who attended the consultations of the South African Mothercraft Training Centre which, if included, would increase the percentage of European babies taken for advice to infant consultations. The work done at these sessions during the year ended 30th June, 1949, is shown on page 21.

##### Toddlers' Sessions.

These sessions are for European children between 2 and five years. Attendances are by appointment and the doctor and nurse are able to give constructive advice more adequately than at the ordinary welfare sessions, at which it is impossible to regulate the number of cases attending. A session is held weekly at the Salt River centre. The first attendances during the year numbered 40 and the total attendances 728.

##### Instructional Test Feeds.

Medical officers frequently recommend nursing mothers to attend for special instruction in feeding their infants, and for this purpose a special hour is set aside weekly at each centre, apart from the ordinary medical session, so that there are no distractions for mother or nurse. During the year 3,275



Centre	Race	Infant consultations				Pre-natal clinics			School clinics			Dinners	
		Sessions	First attendances		Total attendances	Sessions	Attendances		Sessions	Attendances		Attendances	
			Under 1 year	Over 1 year			First	Total		First	Total	Adults	Children
93, Keerom St., Cape Town	Eur. . .		179	28	2,083		28	115		7	18	—	—
	Non-Eur. . .		522	68	7,491		286	1,404		130	601	3,114	2,823
	Total . .	171	701	96	9,574	43	314	1,519	16	137	619	3,114	2,823
Shortmarket St., Cape Town	Eur. . .		—	—	—		—	—		16	52	—	—
	Non-Eur. . .		96	22	1,559		44	255		104	349	280	465
	Total . .	24	96	22	1,559	9	44	255	6	120	401	280	465
Kloof St., Cape Town	Eur. . .		34	6	308		—	—		—	—	—	—
	Non-Eur. . .		—	—	—		—	—		—	—	—	—
	Total . .	9	34	6	308		—	—		—	—	—	—
Aspeling St., Cape Town	Eur. . .		—	—	8		—	—		1	1	—	—
	Non-Eur. . .		1,018	183	18,925		890	3,303		869	2,827	4,315	15,692
	Total . .	246	1,018	183	18,933	102	890	3,303	40	870	2,828	4,315	15,692
Bloemhof, Cape Town	Eur. . .		—	—	—		—	—		—	—	—	—
	Non-Eur. . .		191	35	5,021		—	—		—	—	—	—
	Total . .	51	191	35	5,021		—	—		—	—	—	—
Devil's Peak	Eur. . .		56	11	632		—	—		—	—	—	—
	Non-Eur. . .		—	—	—		—	—		—	—	—	—
	Total . .	23	56	11	632		—	—		—	—	—	—
Green Point . .	Eur. . .		14	2	96		—	—		—	—	—	—
	Non-Eur. . .		—	—	—		—	—		—	—	—	—
	Total . .	4	14	2	96		—	—		—	—	—	—
Camps Bay . .	Eur. . .		37	1	332		—	—		—	—	—	—
	Non-Eur. . .		—	—	—		—	—		—	—	—	—
	Total . .	23	37	1	332		—	—		—	—	—	—
Woodstock . .	Eur. . .		348	44	4,517		156	711		329	1,024	12	19
	Non-Eur. . .		521	101	9,091		391	1,994		883	2,853	1,764	3,088
	Total . .	252	869	145	13,608	103	547	2,705	119	1,212	3,877	1,776	3,107
Mowbray . .	Eur. . .		92	16	708		—	—		—	—	—	—
	Non-Eur. . .		—	—	—		—	—		—	—	—	—
	Total . .	23	92	16	708		—	—		—	—	—	—
Maitland . .	Eur. . .		112	35	1,466		17	66		47	105	—	—
	Non-Eur. . .		518	91	7,565		433	1,748		199	600	1,853	4,524
	Total . .	150	630	126	9,031	54	450	1,814	23	246	705	1,853	4,524
Brooklyn . .	Eur. . .		145	45	2,021		31	157		—	—	—	—
	Non-Eur. . .		—	—	—		—	—		—	—	—	—
	Total . .	50	145	45	2,021	25	31	157		—	—	—	—
Windermere . .	Eur. . .		—	—	—		—	—		23	120	—	—
	Non-Eur. . .		893	145	13,268		708	3,096		195	752	3,094	7,500
	Total . .	198	893	145	13,268	101	708	3,096	17	218	872	3,094	7,500
Langa . . . .	Native . .	49	307	32	3,947	52	262	1,360		—	—	—	—
Athlone . . . .	Eur. . .		14	1	377		—	—		—	—	—	—
	Non-Eur. . .		945	164	13,428		668	3,323		288	751	3,188	14,094
	Total . .	249	959	165	13,805	103	668	3,323	16	288	751	3,188	14,094
Bokmakirie . .	Eur. . .		—	—	—		—	—		—	—	—	—
	Non-Eur. . .		428	72	11,885		335	1,578		—	—	3,408	8,294
	Total . .	149	428	72	11,885	53	335	1,578		—	—	3,408	8,294
Station Rd., Claremont	Eur. . .		178	49	2,662		68	388		23	49	82	153
	Non-Eur. . .		236	56	4,262		248	1,158		163	537	1,277	2,421
	Total . .	101	414	105	6,924	52	316	1,546	21	186	586	1,359	2,574
Wesley St., Claremont	Eur. . .		—	—	—		—	—		—	—	—	—
	Non-Eur. . .		175	39	4,822		96	455		—	—	405	6,490
	Total . .	99	175	39	4,822	51	96	455		—	—	405	6,490
Lansdowne . .	Eur. . .		139	25	1,656		34	176		36	42	—	—
	Non-Eur. . .		389	90	4,169		289	1,073		—	—	1,864	3,766
	Total . .	148	528	115	5,825	76	323	1,249	3	36	42	1,864	3,766
Wynberg . . .	Eur. . .		172	42	2,494		34	144		30	157	102	102
	Non-Eur. . .		385	75	6,237		360	1,369		200	491	2,335	3,955
	Total . .	153	557	117	8,731	52	394	1,513	15	230	648	2,437	4,057
Parkwood and Southfield	Eur. . .		52	11	995		9	37		—	—	5	5
	Non-Eur. . .		102	16	1,952		58	256		—	—	1,375	3,602
	Total . .	96	154	27	2,947	47	67	293		—	—	1,380	3,607
Retreat . . . .	Eur. . .		88	17	925		16	97		—	—	—	—
	Non-Eur. . .		768	131	9,736		714	3,245		—	—	2,532	4,173
	Total . .	227	856	148	10,661	108	730	3,342		—	—	2,532	4,173
Muizenberg . .	Eur. . .		35	4	417		—	—		—	—	—	—
	Non-Eur. . .		—	—	—		—	—		—	—	—	—
	Total . .	23	35	4	417		—	—		—	—	—	—
Kalk Bay . . .	Eur. . .		1	—	15		—	—		—	—	—	—
	Non-Eur. . .		27	3	477		13	54		—	—	—	—
	Total . .	27	28	3	492	13	13	54		—	—	—	—
TOTAL . . . .	Eur. . .		1,696	337	21,712		393	1,891		512	1,568	201	279
	Non-Eur. . .		7,521	1,323	123,835		5,795	25,671		3,031	9,761	30,804	80,887
	Total . .	2,545	9,217	1,660	145,547	1,044	6,188	27,562	276	3,543	11,329	31,005	81,166



mothers attended with their infants for instructional test feeding (802 European and 2,473 non-European). These were made up from the different centres as follows:—

	European	Non-European
Keerom Street .. .. .	91	174
Shortmarket Street .. .. .	3	33
Kloof Street .. .. .	11	—
Aspeling Street .. .. .	—	391
Bloemhof .. .. .	—	101
Devil's Peak .. .. .	24	—
Green Point .. .. .	3	—
Woodstock .. .. .	196	174
Mowbray .. .. .	33	—
Maitland .. .. .	45	108
Brooklyn .. .. .	60	—
Windermere .. .. .	—	181
Langa .. .. .	—	82
Athlone .. .. .	8	303
Bokmakirie .. .. .	—	188
Claremont (Station Road) .. .. .	70	116
Claremont (Wesley Street) .. .. .	1	113
Lansdowne .. .. .	62	100
Wynberg .. .. .	88	153
Parkwood and Southfield .. .. .	38	49
Retreat .. .. .	59	197
Muizenberg .. .. .	10	—
Kalk Bay .. .. .	—	10
Totals .. .. .	802	2,473

Dried milk for children who cannot be fed by their mothers is supplied at the centres under the direction of the medical officers and cost prices are charged, but in cases of poverty, it is supplied at part-cost or free. Such medicines as may be ordered are supplied on similar terms.

In the year ended 30th June, 1949, 1,711 new cases were supplied with dried milk and 48,680 pounds were issued. The cost of the dried milk was £5,273 13s. 4d.

At page 23 reference is made to the provision of meals and of free milk for children under school age.

The attendances at the infant consultations in the welfare centres are shown in the following table over a period of years:—

Centre	1948-49	1947-48	1946-47	1945-46	1944-45
Keerom Street .. .. .	9,574	12,270	12,008	10,875	11,905
Shortmarket Street .. .. .	1,559	—	—	—	—
Kloof Street .. .. .	308	—	—	—	—
Aspeling Street .. .. .	18,933	19,413	16,192	17,199	19,624
Bloemhof .. .. .	5,021	4,050	4,826	3,919	4,493
Devil's Peak .. .. .	632	687	560	—	—
Green Point .. .. .	96	—	—	—	—
Camps Bay .. .. .	332	253	209	—	—
Woodstock .. .. .	13,608	12,853	13,656	13,495	14,220
Mowbray .. .. .	708	153	—	—	—
Maitland .. .. .	9,031	8,894	7,812	7,691	8,183
Brooklyn .. .. .	2,021	2,517	2,209	1,751	1,701
Windermere .. .. .	13,268	13,659	13,881	15,272	12,564
Langa .. .. .	3,947	3,552	3,751	4,219	4,092
Athlone .. .. .	13,805	14,111	12,984	12,800	18,410
Bokmakirie .. .. .	11,885	11,100	9,232	8,826	3,959
Claremont (Station Road) .. .. .	6,924	6,014	5,252	5,108	5,477
Claremont (Wesley Street) .. .. .	4,822	5,112	4,462	4,215	4,874
Lansdowne .. .. .	5,825	5,460	4,112	4,980	5,106
Wynberg .. .. .	8,731	7,835	7,464	7,166	7,780
Parkwood and Southfield .. .. .	2,947	2,266	1,634	1,873	1,907
Retreat .. .. .	10,661	9,466	8,386	7,639	7,260
Muizenberg .. .. .	417	635	569	541	203
Kalk Bay .. .. .	492	581	464	489	996
Totals .. .. .	145,547	140,881	129,663	128,098	132,754

## SOUTH AFRICAN MOTHERCRAFT TRAINING CENTRE

(LADY BUXTON HOME)

The following table shows the number of infants who attended the consultations of the South African Mothercraft Training Centre during the year ended 30th June, 1949:—

Voluntary Centre.	No. of sessions in the year.	No. of new cases (Infants).	Total attendances (Infants).	Total attendances (Toddlers).
Bowwood Road, Claremont .. .. .	170	570	3,346	203
Sea Point .. .. .	54	212	2,211	192

## PRE-NATAL CLINICS

Attendances at the pre-natal clinics show a slight decrease from those recorded for 1947-48 due in great measure to the numbers of patients now attending the newly established pre-natal clinic run in connection with the maternity wards at Groote Schuur Hospital.

The pre-natal clinics work in close co-operation with the maternity homes, especially the Peninsula Maternity Hospital, the Mowbray Nursing Home, the Somerset Hospital, St. Monica's Home, Salvation Army Maternity Hospitals and the maternity section at the Groote Schuur Hospital. To all these hospitals cases are referred when necessary for in-patient treatment during pregnancy, or for their confinements in cases of first pregnancies, abnormal cases, or women whose housing difficulties make confinement at home impossible.

Routine Wasserman tests are carried out for every expectant mother and treatment is given in cases found to be suffering from syphilis or gonorrhoea. Pregnant women with primary or secondary syphilis are admitted to the City Hospital under the venereal disease officer for intensive treatment.

During the past year routine blood Rh factor examinations have been carried out at only one centre, Langa. This investigation is so far only on an experimental basis.

In the year under review, 9,944 blood specimens (1,072 from European and 8,872 from non-European women) were submitted for examination by the Wasserman Test. Of these 1,469 were positive or doubtful (56 in European and 1,413 in non-European women).

During the year 20 weekly pre-natal clinics were held at which 6,188 expectant mothers were registered as new cases and the total attendances numbered 27,562. Details are shown in the table on page 20.

Of the new cases registered 36 were of expectant mothers resident outside the Cape Town municipal area (3 European and 33 non-European). The new cases registered within the city, exclusive of the clinic at Langa, numbered 5,890 (390 European and 5,500 non-European) which amounted to 44 per cent of the number of registered live births (10 per cent for European and 57 per cent non-European).

It is to be noted that pre-natal clinics are also held at the maternity homes and the Somerset and Groote Schuur Hospitals.

The majority of midwives working within the municipal area are co-operating with the pre-natal clinics.

The attendances at the pre-natal clinics in the welfare centres are shown in the following table over a period of years:—

Centre	1948-49	1947-48	1946-47	1945-46	1944-45
Keerom Street .. .. .	1,519	1,662	1,809	1,427	1,212
Shortmarket Street .. .. .	255				
Aspeling Street .. .. .	3,303	3,714	4,294	4,054	4,121
Woodstock .. .. .	2,705	2,843	2,824	2,188	2,613
Maitland .. .. .	1,814	1,721	2,423	2,484	1,915
Brooklyn .. .. .	157	165	206	205	167
Windermere .. .. .	3,096	3,300	2,804	2,666	2,054
Langa .. .. .	1,360	1,524	1,450	1,721	1,787
Athlone .. .. .	3,323	3,415	3,344	3,078	3,065
Bokmakirie .. .. .	1,578	1,650	1,594	892	476
Claremont (Station Road) .. .. .	1,546	1,684	1,301	1,554	1,561
Claremont (Wesley Street) .. .. .	455	374	378	84	
Lansdowne .. .. .	1,249	1,326	1,306	1,260	1,212
Wynberg .. .. .	1,513	1,902	2,375	2,145	2,013
Parkwood and Southfield .. .. .	293	261	251	75	16
Retreat .. .. .	3,342	3,236	3,403	3,066	2,870
Kalk Bay .. .. .	54	110	135	87	31
Totals .. .. .	27,562	28,887	29,897	26,986	25,113

## POST-NATAL CLINICS

Fortnightly sessions were held at five of the child welfare centres in co-operation with the South African Council for Maternal and Family Welfare.

During the year under review there were 955 new cases (263 European and 692 non-European) and a total attendance of 4,017 (1,004 European and 3,013 non-European).

At these clinics each woman receives a routine post-natal examination and any case requiring further treatment is referred to a gynaecological department of a hospital.

Instruction in family spacing and limitation is also given when this is deemed advisable for socio-medical reasons.

## SCHOOL CLINICS

By arrangement with the Provincial Administration school clinics are held during the school term at certain of the City Council's Welfare Centres.

General sessions with a medical officer in attendance are held weekly at the Welfare Centres at Salt River and Aspeling Street, and fortnightly at the Athlone, Claremont, Keerom Street, Wynberg, Maitland and Windermere Centres. A special session for European children was started at Lansdowne Welfare Centre in June, 1949.

Two weekly ophthalmic clinics are held at Salt River. To minimise travelling, many preliminary eye tests are done at the general sessions and only cases for correction of refraction error or other eye troubles are referred to the ophthalmologist. Spectacles are supplied by local firms of opticians at reduced rates. The charge is often further reduced or remitted in cases of indigency.



Children requiring dental attention are referred to the municipal dental officer.

Children who require other specialist attention are referred to the out-patient department of the general hospitals, chiefly to paediatric and ear, nose and throat sessions or to child guidance or mental health clinics.

In certain areas it is gratifying to note the keen interest shown by the non-European teachers who accompany the children to the centres and discuss the cases with the paediatricians, thus bringing about greater co-operation between the schools, parents and clinic attendants.

A large number of children is found to be suffering from the effects of undernourishment and many of these are sent to Convalescent Homes.

The work done during the year ended 30th June, 1949, is shown in the table on page 20, and is further analysed in the following figures:—

	Ophthalmic school clinic.			General school clinic.		
	Eur.	Non-Eur.	Total.	Eur.	Non-Eur.	Total.
Number of new cases:						
Cape Town residents .. .. .	123	371	494	388	2,588	2,976
Residents outside Cape Town ..	1	61	62	—	11	11
Total attendances .. .. .	441	1,235	1,676	1,127	8,526	9,653
Number of sessions held .. .. .			73			198
Children fitted with spectacles:						
Full-paying .. .. .	59	94	153			
Part-paying .. .. .	45	107	152			
Free .. .. .	8	20	28			

#### PROVISION OF DINNERS AND MILK MEALS

At 14 of the centres (see table on page 20) dinners for indigent expectant mothers and pre-school children are served daily except Saturdays and Sundays. The value of these dinners in combating malnutrition is shown by the improvement seen in the health of mothers and children receiving a course of these meals.

In the year under review the number of dinners given amounted to 112,171. Details are shown in the table on page 20.

In the calendar year 1949 the cost amounted to 5·9d. per dinner. This figure includes the cost of food and fuel at two centres where coal fires were used. It does not include current for the electric stoves at the other centres, nor the wages of the ordinary members of the staff who may assist in connection with the dinners. The services of the mothers themselves are utilized as much as possible.

In accordance with arrangements made with the School Board, who are responsible for the distribution of free milk to school children under the scheme of the Dairy Industry Control Board, free milk is distributed to poor children under school age at the infant welfare centres. The distribution is made every week-day, and the children consume the milk at the centres. During the year under review, the attendances of children for milk numbered 159,763 and the milk consumed amounted to 9,562 gallons (not including the municipal nursery school).

#### HEALTH VISITING IN THE HOME

The health visitors undertake home visiting for children under school age, visiting of expectant mothers, and also the visiting required for certain infectious diseases—ophthalmia neonatorum, puerperal fever, pneumonia, influenza, and some of the infectious diseases of childhood. In addition each health visitor assists at sessions in the welfare centre in her district.

Home visiting forms a very important part of the work of a health visitor, since it aims at teaching the mothers the care of her child in relation to the home. Visits are made soon after the infant's birth, and thereafter subsequent visits are paid as frequently as the health visitors' time permits, if possible at intervals of three months during the first year of life.

The health visiting staff is made up as follows:—

Chief Health Visitor .. .. .	1
Deputy Chief Health Visitor .. .. .	1
Supervisor of Midwives .. .. .	1
Supervisor of Nursing Homes .. .. .	1
Social Welfare Visitor .. .. .	1
Assistant Social Welfare Visitor .. .. .	1
Diphtheria Immunization Nurses .. .. .	2
Orthopaedic Nurse .. .. .	1
European Health Visitors .. .. .	35
Coloured Health Visitors .. .. .	4
Native Health Visitors .. .. .	2
Total .. .. .	50

The following table shows the number of visits made during 1948-49 and previous years by the health visitors and the social welfare investigators (including the visits made by the tuberculosis health visitors and the nurse visitors from the Venereal Diseases Branch).

Classification of visits.	Number of visits.									
	1948-49	1947-48	1946-47	1945-46	1944-45	1943-44	1942-43	1941-42	1940-41	1939-40
Visits to houses where births have occurred..	14,758	14,667	14,622	13,339	13,168	13,273	11,495	10,841	10,582	10,731
Subsequent visits to houses where births have occurred ..	54,503	50,989	43,812	47,252	45,732	45,517	38,391	41,136	39,469	38,914
Visits to houses where deaths under 5 years of age have occurred	1,369	1,620	1,303	1,592	1,754	2,069	1,496	1,740	1,483	1,326
Visits to expectant mothers .. ..	2,795	2,912	2,890	2,820	2,773	3,526	3,219	3,570	3,439	3,190
Visits re protected infants .. ..	2,097	2,778	3,029	3,486	3,434	3,686	3,451	3,719	4,131	3,593
Special follow-up visits	6,096	5,267	4,843	5,214	6,559	5,439	4,573	4,313	4,847	3,861
Visits to cases of tuberculosis .. ..	20,500	21,006	19,018	17,352	17,115	14,621	12,188	13,102	12,231	11,482
Visits re cases of puerperal fever .. ..	51	86	76	77	64	109	76	92	105	97
Visits re measles .. ..	41	89	83	55	29	90	241	33	180	2
Visits re whooping cough	42	104	48	9	127	69	16	69	133	55
Visits re diarrhoea .. ..	60	45	29	83	115	42	121	131	132	42
Visits re chicken-pox ..	9	19	8	10	8	23	9	12	25	22
Visits re ophthalmia neonatorum .. ..	431	427	564	563	775	492	457	700	510	700
Visits re pneumonia ..	276	348	360	305	299	370	368	370	489	454
Visits re trachoma .. ..	3	1	5	6	5	1	2	4	3	13
Visits re influenza .. ..	1	—	2	1	2	4	5	15	21	9
Visits re other diseases..	76	154	81	121	79	127	106	182	92	104
Visits re diphtheria immunization .. ..	1,115	1,025	2,150	2,830	3,882	3,532	2,987	3,168	3,166	2,221
Visits re diphtheria .. ..	1	13	54	167	241	359	82	109	141	—
Visits re midwives .. ..	796	625	560	962	1,247	1,010	856	1,057	1,165	1,123
Visits re schools .. ..	491	596	569	781	687	547	591	527	863	424
Visits to school children	756	900	870	740	449	694	910	1,213	835	811
Visits to shops and factories .. ..	229	209	410	572	523	129	212	107	205	325
Visits to nursing homes	88	92	114	151	123	137	105	133	105	115
Visits re verminous persons .. ..	5	10	44	25	43	151	61	50	56	39
Visits re dental treatment .. ..	94	130	189	156	181	183	277	316	394	361
House-to-house visitations .. ..	7,312	6,350	5,884	6,042	6,465	6,730	4,207	4,873	4,770	5,308
Visits re venereal disease	7,169	7,808	8,876	8,071	7,195	6,291	5,896	5,718	5,206	5,364
Visits re prospective foster mothers ..	51	21	45	63	42	64	84	48	12	—
Visits to prospective foster homes re evacuees .. ..	—	—	—	—	—	—	—	—	283	—
Visits re evacuees .. ..	—	—	—	—	15	27	35	47	48	—
Visits to orthopaedic cases .. ..	3,588	3,502	3,341	3,302	2,241	681	—	—	—	—
Other visits .. ..	732	1,157	1,023	1,155	1,629	2,416	2,226	1,904	1,694	1,329
Visits by Social Welfare Investigator .. ..	2,630	2,114	1,515	1,631	1,968	1,860	1,754	1,535	2,454	2,668
Total visits ..	128,165	122,064	116,417	118,843	118,969	114,269	96,497	100,834	99,209	94,683
Complaints referred to Chief Health Inspector	43	21	19	44	80	55	41	48	31	52

#### NOTIFICATION OF BIRTHS

The Regulations re Early Notification of Births (made by the Minister of Public Health in 1920) require the notification of births in the Municipality within twenty-four hours.

During the year 1948-49, the number of births and still births notified (including births to mothers who were non-Cape Town residents) was 16,584, as follows:—

Notified by midwives and nurses (other than extern or intern institutional cases)	6,602
Notified by doctors .. ..	787
Notified by institutions (extern or intern) .. ..	8,984
Notified by parents and others .. ..	83
Notified by health visitors .. ..	128

There were 335 births notified in Langa Native Township.

In Table I, on page 120, the births and still births notified as having taken place in the Municipality during the year are classified by ward according to the manner in which the mothers were attended.



The following is a summary of the table:—

	Attended	Births	Percentage
In private houses:			
By private doctors .. .. .		780	5.2
By private midwives:			
Certificated .. .. .		4,932	33.0
Uncertificated .. .. .		1,495	10.0
By public midwives or midwife students .. .. .		1,691	11.3
No doctor or midwife .. .. .		65	0.4
No information .. .. .		67	0.5
		9,030	60.4
In institutions:			
Public institutions .. .. .		4,607	30.8
Private nursing homes .. .. .		1,318	8.8
		5,925	39.6

The extern births attended by certificated private midwives continued to increase in proportion to those attended by uncertificated women. In the year 1930-31, 80 per cent of midwife births (extern) were attended by uncertificated midwives. In the present year the percentage was 23.3 per cent.

The public institutions in which most confinements have taken place are the Peninsula Maternity Hospital, Somerset Hospital, the Booth Memorial Hospital, St. Monica's Home, Groote Schuur Hospital and Vrede Oord. Public extern midwifery is done from the Peninsula Maternity Hospital, Vrede Oord, St. Monica's Home and Somerset Hospital.

#### SUPERVISION OF MIDWIFERY

Supervision of persons (other than medical practitioners) practising midwifery in the municipal area has been continued during the past year. This is pursuant to the regulations framed under Section 18 (b) of the Public Health (Amendment) Act No. 15 of 1928.

Frequent visits to these midwives in their own homes are paid by the supervisor of midwives and it has been found that midwives readily appreciate the fact that there is someone to whom they can apply for advice and guidance when any difficulty arises. The Medical Officer in Charge, Maternal and Child Welfare and the Supervisor are on call at any hour of the day or night.

During the year under review, there has been a slight reduction in the number of practising midwives. The midwifery needs of the municipal area are well catered for however, by the district staffs of the Maternity Hospitals and private midwives with the exception of the Retreat area; but as houses are built in the municipal housing scheme in this locality to replace pondokkie dwellings, it is hoped that another qualified midwife will take up practice from one of the new houses.

It is emphasised again, however, that the difficulties and problems created by Native mothers who fail to make provision for their confinements are still being encountered at both Windermere and Retreat.

In October, 1948, new regulations for registered midwives made under Section 4 of Act No. 45 of 1944 (Nursing Act), as amended by Act No. 12 of 1946 were promulgated by the Minister of Health. Under these regulations, it has become compulsory for all registered midwives to keep very comprehensive records of histories, ante-natal visits and charts of the lying-in period of all women attended in confinement. This has created some difficulties for the older midwives who trained many years ago, and the supervisor of midwives has kept in close touch in assisting these midwives with the keeping of records in their registers.

The transactions on the list of midwives during the year are shown in the following table:—

Midwives.	Certificated.		Uncertificated.		Total.
	Eur.	Non-E.	Eur.	Non-E.	
On the list 30th June, 1948 .. .. .	109	90	8	19	226
Added to list during 1948-49 .. .. .	15	5	1	—	21
Removed from list by resolution of Council .. .. .	—	—	—	1	1
Removed from list, having ceased to practise in the Municipality .. .. .	19	4	—	2	25
On list 30th June, 1949 .. .. .	105	91	9	16	221

One of the health visitors holds the position of supervisor of midwives. The extent of her work is indicated by the following figures:—

Number of visits to midwives in their own homes .. .. .	716
Midwives interviewed at office .. .. .	66
Inspections held during 1948-49 .. .. .	13
Attendances of midwives at inspections .. .. .	154
Total visits paid by supervisor .. .. .	2,173

In August, 1948, 10 doctors taking the Post Graduate Diploma in Public Health, attended the Inspection of midwives held at Bokmakirie.

## ASSISTED MIDWIFERY

During the year, the City Council paid the fees of private midwives attending indigent persons in 38 cases, the total disbursement amounting to £76 10s. In 3 of these cases, the Police called a midwife to women at confinement.

Fees to medical practitioners called in by midwives to indigent confinement cases with complications were paid in 21 cases, the total disbursement amounting to £24 18s.

*Prosecutions.*

In February, 1949, R.F. (Coloured certificated midwife) was involved in an inquest, regarding a maternal death. Allegations of neglect by the midwife were made by relatives of the deceased and the Medical Officer of Health requested the C.I.D. to investigate.

The Magistrate's findings were that the evidence did not warrant the institution of criminal proceedings.

In February, 1949, I.E.S. (European certificated midwife) was reported to the S.A. Nursing Council. She undertook work which was outside her scope as a midwife. No disciplinary action was taken against her, but the Council advised her that her conduct had not been justified.

*Removals.*

E.M. (Coloured uncertificated midwife) was removed by resolution of the Council from the list of midwives, on the grounds that she had acted in a manner prejudicial to the health of her patients, had no knowledge of asepsis and her bag and register were invariably incomplete. This action was confirmed by the Minister of Health.

## PUERPERAL FEVER

Reported cases of this notifiable disease are investigated by the maternal and child welfare branch. Cases are admitted to the City Hospital.

The cases of puerperal fever reported in the year 1948-49 corrected for imported cases and misdiagnosis, numbered 49 (7 European and 42 non-European). There were 2 Cape Town deaths from the disease according to date of registration in the year.

The mortality from this cause for a series of years, expressed as a rate per 1,000 live births, is shown on page 18.

*Attendance at confinement.*

Forty-five of the cases were confined at home and four in hospitals. Of the 45 at home, 18 were attended in labour by midwives only, 3 by a doctor and 2 by doctors and midwives; 20 were unattended (7 being abortions); in two cases no information.

*Condition of child.*

Twenty-five of the cases supervened upon the birth of a living child and 22 a dead foetus. Of the 22 cases following delivery of a dead foetus, 1 was of a dead viable foetus and 21 of a non-viable foetus. Seventeen of the cases were reported as occurring in women in the first confinement.

*Treatment.*

Thirty-two of the cases (corrected for misdiagnosis and for imported cases) were treated in the City Hospital, 2 in the Groote Schuur Hospital, 1 in the Somerset Hospital and 1 in the Booth Memorial Hospital; the remaining 13 cases were treated at home.

There was one case at the Langa Native Township.

## NURSING AND MATERNITY HOMES

Private nursing and maternity homes may be carried on only if registered by the Secretary for Public Health, and are to be conducted in accordance with the regulations made by the Minister under the Public Health Act. The inspection of such premises is made by the City Health Department on behalf of the Secretary for Public Health, to whom reports of the inspections are sent. This work is undertaken by the Deputy Medical Officer of Health through the maternal and child welfare branch of the Department. One of the health visitors is appointed as assistant inspector of nursing homes in addition to her other duties.

On 30th June, 1949, there were 27 registered private Nursing and Maternity Homes in the municipal area as follows:—

									Premises	Beds
General	..	..	..	..	..	..	..	..	18	572
Maternity	..	..	..	..	..	..	..	..	9	143
									—	—
Total	..	..	..	..	..	..	..	..	27	715
									—	—

During the year ended 30th June, 1949, 1 registered general and maternity Home, with 15 beds for general cases and 15 beds for maternity cases, was taken over by the Cape Hospital Board and re-opened as a Maternity Home.

One new private nursing home for medical cases was registered with 9 beds, and 1 new private maternity home with 6 beds.

The health visitor who deals with this branch of the work made the following visits of inspection:—

Annual inspection	..	..	..	..	..	17
Re-registration of premises	..	..	..	..	..	18
Subsequent visits	..	..	..	..	..	65
						—
Total	..	..	..	..	..	100
						—



Full reports were sent to the Secretary for Health as follows:—

				<i>Re New applica- tions</i>	<i>Re Registered premises</i>
General	..	..	..	4	10
Maternity	..	..	..	1	7
				—	—
Totals	..			5	17
				—	—

#### DAY NURSERIES AND NURSERY SCHOOLS

Promotive health work among pre-school children and toddlers is hampered in many cases because the parents, with poor housing accommodation and a constant struggle against the high cost of living, are unable to provide the correct food, rest, fresh air and care which these children need. The solution to this problem lies in the provision of nurseries and nursery schools, for children in overcrowded slum areas. As these are primarily a health provision, the City Council assists many of the voluntary bodies to run such nurseries, and has established three Municipal Nursery Schools. When funds become available there are plans for further nursery schools, which are most urgently needed for children of working mothers of all races. In order that the children may derive the maximum benefit from their attendance at the nursery school, trained nursery school teachers are in charge, and conduct the schools on approved Nursery School lines. The nursery school assistants employed are young girls of 15 to 17 years who stay for one or two years, and derive much benefit from the training in child care, which fits them to become useful children's nurses, and later to be capable mothers in their own homes.

#### MUNICIPAL NURSERIES AND NURSERY SCHOOLS

Two of these institutions are run in conjunction with Municipal Housing schemes, namely, Bokmakirie Day Nursery and Nursery School, serving the Council's housing schemes in Bokmakirie and Q-Town and Bloemhof Nursery School serving the Bloemhof Flats. The third nursery school which is unrelated to a housing scheme, is at Shelley Street, Salt River, and serves the busy industrial areas of Salt River and Woodstock.

*The Bokmakirie Creche and Nursery School* has accommodation for 78 children under school age, 19 being babies and 59 children between 2 and 6 years. Its close association with the welfare centre, which is built in the same grounds, makes for efficient and convenient working.

The supervisor of the Creche and Nursery School is a trained Health Visitor and a trained non-European midwife helps in the nursery; a European nursery school teacher is in charge of the children of nursery school age.

*The Bloemhof Nursery School.* This nursery school is run in the community centre attached to the Bloemhof Municipal Flats in Constitution Street. There is accommodation for 40 children from 3-6 years. These are all children of residents in the Bloemhof, Constitution Street and Canterbury Street Flats. A Nursery school teacher is in charge, with 3 non-European girls as helpers, and a non-European cook. The school had to be closed for the first quarter of 1949 owing to shortage of staff, but was opened again on April 19th, 1949. During this time, the Nursery school children attended for daily dinners and milk.

*The Shelley Street Nursery School.* This nursery school is not part of a housing scheme, but is in the centre of a congested area in Salt River where there are many families living under extremely poor conditions with the employment of women in adjacent factories. Forty-five Coloured children attend the Nursery school, which is under the direction of a European nursery school teacher with 4 non-European girls as assistants. The hours are from 9 a.m. to 4 p.m. and meals are provided. The parents are asked to make some payment for each child attending the nursery.

The attendances at the Municipal Nursery Schools during the year ended 30th June, 1949, are shown in the following table:—

	Shelley Street.	Bloemhof.	Bokmakirie.
New entrants .. .. .	28	21	40
Mean total on register .. .. .	47	28	78
Daily sessions .. .. .	221	160	230
Mean attendances per session .. .. .	39	37	62
Total attendances .. .. .	8,786	5,968	14,306

*The Kew Town Resident Nursery.* A cottage in the Municipal Housing Scheme at Kew Town is run as a foster home for young infants whose mothers have tuberculosis. The infants are usually admitted when they leave a maternity home, while the mothers are undergoing treatment in a tuberculosis hospital or at a sanatorium.

There is accommodation for six infants at a time in the care of a house mother and assistant. The infants have thrived well and results have been most satisfactory in safeguarding the infants from early infection and in providing a home for the babies whose mothers are thus, during their illness, saved from anxiety. The infants are kept for a limited time until other arrangements can be made. Some are adopted; others are placed in the care of relatives or returned to their homes when their mothers have been certified as non-infectious.

The Nurseries and Nursery Schools run by private and charitable organisations are as follows:—

##### (1) Board of Aid Day Nurseries.

- European Day Nursery at the corner of Roeland Street and Harrington Street, Cape Town. This Day Nursery caters for European children 6 months to 6 years. Its capacity is 56.
- Non-European Day Nursery, Tafelberg House, Canterbury Street, Cape Town. This Day Nursery caters for non-European children 3 months to 6 years. Its capacity is 106.

(2) *A.C.V.V. Day Nursery.*

A Day Nursery for European children is included in the Social Centre and European Working Girls' Home at 41, Salt River Road, Salt River. Its capacity is 40.

(3) *The Liberman Institute, Nursery School, Muir Street, Cape Town.*

This nursery school is run for non-European children in District Six. It is recognised as a Nursery School by the Cape Provincial Education Department and receives a Provincial Grant in Aid. It caters for 70 children up to the age of 6 years. The school is staffed by two non-European Nursery School teachers under the supervision of the Institute Supervisor. The school follows the Provincial school terms. During the holidays, the needy children receive daily meals and milk at Aspelg Street Welfare Centre.

(4) *Marion Institute, 124, Chapel Street, Cape Town.*

A Nursery School for non-European children is run at the Marion Institute. It caters for 52 children. Mid-day meals and milk are provided.

(5) *Chiappini Street, Nursery Play Centre.*

This play centre is run by the Eoan Group assisted by a subsidy from the Social Welfare Union Department, 80 children between 2½ and 6 years are catered for. There are two full-time helpers with Buxton Trainees as part-time assistants. The building lent by the City Council leaves much to be desired but improvements have been effected since the close of the year.

(6) *Janet Bourhill Institution, 3rd Avenue, Claremont.*

A Day Nursery for non-European children is included in the institution which aims at the promotion of the health and social welfare of non-Europeans in the area. The Day Nursery caters for 42 children.

(7) *Union of Jewish Women Creche and Day Nursery.*

A Creche and Day Nursery for non-European children at 2nd Avenue, Kensington. This Creche and Day Nursery caters for 60 children from 1 to 6 years.

(8) *Wesleyan Church Day Nursery, Ronde Vlei, Retreat.*

This Nursery caters for 35 children. The cost of feeding the children is borne by the City Council.

(9) *Cafda Day Nursery, Retreat.*

A Day Nursery for non-European children is run in conjunction with the Social Centre. Although out of the municipal area, several children from the municipal area attend the nursery. It caters for 40 children under 6 years.

*Training Schools.*

Nursery School teachers are trained at the Buxton Training College, Moltano Road, Claremont. A good deal of their practical training is done in the various Nursery Schools, and in the Municipal Nursery Schools, in addition to the Lady Buxton Home Nursery School.

Training of non-European girls as Nursery and domestic helps is carried out with the Board of Aid non-European Nursery, the Janet Bourhill Institute and the Municipal Nursery Schools.

## PROTECTED INFANTS.

Children under 10 years of age who are maintained apart from their parents or close relatives and are living with foster-parents have by law to be registered by the foster-mother with the Commissioner of Child Welfare of the District. Infant protection visitors are appointed by the Commissioner to visit and report at regular intervals, so that the interests of the children are safeguarded.

In Cape Town the Commissioner of Child Welfare has appointed the health visitors of the Child Welfare Branch, to act as infant protection visitors. As the branch is concerned with the health and welfare of pre-school children, the visiting of protected infants of school-going age was found to be a waste of the health visitors' time. In February, 1948, therefore, the matter was discussed with the Secretary for Social Welfare and the Commissioner of Child Welfare and it was arranged for the responsibility for supervision of Protected Infants over 6 years of age to be transferred to the Department of Social Welfare.

The practice of placing children with foster-mothers is very common in Cape Town, especially among non-Europeans. Many of the foster-mothers care for the children well, and receive regular payment. When the parents of the foster-child are unmarried, however, payments may become irregular or cease altogether after a few months, and the parents may disappear. Further, an infant may be placed with unsuitable foster-parents who take foster-children only as a means of making a living.

All these social problems affect the welfare of the young child, and are brought to light at the health visitors periodic visits. Where a foster-mother is not suitable, arrangements are made where possible for a child's removal to better conditions.

The number of Protected Infants registered in the period 1st July, 1948, to 30th June, 1949, was as follows:—

Cape Town Magisterial District .. .. .	102
Wynberg Magisterial District .. .. .	154
Simonstown Magisterial District .. .. .	1
	<hr/>
	257

The total number of visits made by health visitors during the year to Protected Infants was 2,007.

## ADOPTION OF CHILDREN

Any person who is desirous of adopting a child in Cape Town usually applies in the first instance to the adoption committee of the Society for the Protection of Child Life; similarly, anyone who wishes to have a child adopted is referred to the Secretary of the Adoption Committee. Where an adoption is to be arranged, this committee acts in an advisory capacity to the Commissioner of Child Welfare



who is responsible for authorizing legal adoption under the Children's Act. Adoptive parents and the children concerned are usually kept under supervision for a period to see how the adoption works before it is made final. The list of proposed adoptions are referred to the Maternal and Child Welfare Officers, who advise as to the suitability and health of the persons concerned.

The number of cases for adoption during the year was:—

Europeans .. .. .	122
Non-Europeans .. .. .	119
Total .. .. .	241

#### CARE OF CHILDREN SUFFERING FROM ORTHOPAEDIC DEFECTS.

The Child Welfare Branch has since the appointment in 1944 of an Orthopaedic Health Visitor carried out the supervision, treatment and after-care of all children suffering from crippling deformities. The main causes of these are tuberculosis, poliomyelitis and congenital abnormalities.

The work is of great benefit to the community, since the early treatment of many orthopaedic cases prevents permanent crippling.

During the year under review the work of the Orthopaedic Health Visitor increased to such an extent that it was arranged that she should have under her care only children up to the age of eight years. In March, 1949, the Cape Hospital Board appointed a sister to take responsibility for the children over that age, and this nurse works in close co-operation with the Orthopaedic Health Visitor of this department.

The following is a record of the cases dealt with by the Orthopaedic Health Visitor.

##### Clinics.

In co-operation with the Cape Hospital Board and the Cripple Care Association arrangements were made in October, 1948, for the attendance of an orthopaedic surgeon with two nursing sisters once a month at four centres, Aspeling Street, Bokmakierie, Wynberg and Windermere, to see cases requiring orthopaedic treatment and supervision. These clinics have proved of great assistance to the children concerned, as they have done away with the necessity for frequent periodic journeys to the Groote Schuur Hospital out-patient department and also reduced the number of patients having to attend the crowded sessions at the hospital.

There were 389 children under supervision on 30th June, 1949. Of these, 40 were European, 37 Native and 312 Coloured.

##### Causes of disablement.

Surgical tuberculosis (43 active) .. .. .	83
Infantile paralysis .. .. .	46
Spastic paralysis .. .. .	15
Congenital deformities .. .. .	97
Deformities due to rickets .. .. .	110
Perthe's disease .. .. .	1
Flat feet .. .. .	22
Septic arthritis .. .. .	10
Paralysis due to other causes .. .. .	5
	389

##### Other particulars of the work effected are as follows:—

Number of clinics held with surgeon in attendance .. .. .	43
Number of other clinics .. .. .	85
Attendances at surgeon's clinics .. .. .	1,483
Attendances at other clinics .. .. .	1,066
Attendances of Orthopaedic Health Visitor at Groote Schuur Hospital out-patients' department .. .. .	46
Children admitted to orthopaedic institutions for treatment .. .. .	62
Children discharged from institutions to this department for after-care .. .. .	53
Children in hospital on 30th June, 1949 .. .. .	48
Children moved out of the municipal area and referred to a Cape Hospital Board after-care sister for supervision .. .. .	40
Children referred to a Cape Hospital Board after-care sister for supervision on reaching the age of eight .. .. .	400
Recoveries .. .. .	65
Deaths .. .. .	23

#### DIPHTHERIA IMMUNIZATION.

Sessions for diphtheria immunization have been continued during the year at the welfare centres, primary schools and institutions.

A team consisting of a doctor and two health visitors carries out work at the various welfare centres in rotation as well as at primary schools and institutions. Sessions are held on four mornings a week, and for the rest of the time the nurses are engaged in propaganda work, in keeping the records up to date and in interviewing principals of schools and institutions.

Consent forms are sent to the parents of all children under 10 years who are entering school for the first time. Each individual record is checked, and children who have not been previously immunized receive two injections of alum precipitated toxoid, those who have been immunized in infancy receive a "booster" injection to protect them at the time when exposure to infection is most likely to occur.

The sending out of "birthday" postcards, advising immunization to every parent whose baby is born in the municipal area who has reached the age of six months, has increased the number of children immunized in the first year of life.

The Schick test is now carried out mainly at institutions and hospitals for adults who come into contact with babies and small children. Any positive reactors are immunized.

The work done at the municipal sessions during the year ended 30th June, 1949, is shown by the following figures:—

*Number of sessions.*

At schools	..	..	..	..	..	..	..	72
At institutions	..	..	..	..	..	..	..	25
At child welfare centres	..	..	..	..	..	..	..	114
								211

*First series protective inoculations.*

First.	Second.	Third.	Total.
12,760	10,413	19	23,192

*Second series of stimulating doses given.*

First.	Second.	Total.
1,267	14	1,281

*Persons immunized.*

Age.	European.	Non-European.	All races.
0—1	784	3,367	4,151
1—2	206	852	1,058
2—3	167	755	922
3—4	83	677	760
4—5	107	570	677
5—6	241	423	664
6—7	591	1,118	1,709
7—8	285	1,116	1,401
8—9	182	956	1,138
9—10	130	637	767
10—11	74	391	465
11 and over	116	137	253
Age unknown	23	39	62
	2,989	11,038	14,027
At schools	..	..	5,264
At institutions	..	..	762
At child welfare centres	..	..	8,001
			14,027

*Injections given.*

Toxoid antitoxin floccules (B.W.T.A.F.)	..	..	..	321
Alum-precipitated toxoid (S.A.A.P.T.)	..	..	..	24,152
				24,473

*Persons Schick-tested.*

Positive.	Negative.	Total.
77	109	188

## OPHTHALMIA NEONATORUM AND GONORRHOEAL OPHTHALMIA.

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

The number of cases of these diseases reported in year 1948-49 corrected for imported cases and misdiagnosis was 253 (15 European and 238 non-European).

Of these 253, 3 were not in the newly-born, being at the time of onset aged 23, 24 and 24 days, respectively.

The number of Cape Town cases of true ophthalmia neonatorum notified during the year was therefore 250, comprising 15 European and 235 non-European. Of these 250 cases, 77 were born in institutions and 173 at home. Of the 173 home confinements 4 were recorded as having been attended by doctors and 165 by midwives; 1 was unattended (in 3 cases no information).

Every case has been kept under observation by the health visitors in order to secure efficient treatment. The use of penicillin and the sulphonamide drugs has increased the efficiency of treatment, and except in cases under private medical practitioners these drugs are dispensed by the health visitors under the authority of the medical officers of the maternal and child welfare centres, to which the patients are brought for consultation. Some of the cases have been treated by the district nurses of the Cape Hospital Board and at the out-patient departments of the Board. The number of cases requiring in-patient treatment has been greatly reduced by the use of sulphonamides and penicillin.

It is to be recorded that the health visitors reported 147 of the cases as "slight" and 98 as "moderate" or "grave" (in 5 cases no information).

In addition to the above figures there were at the Langa Native Township 9 native cases of ophthalmia.

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

Eyes completely recovered	..	..	..	247
Cases of blindness	..	..	..	—
Sight damaged	..	..	..	—
Died before recovery	..	..	..	1
Lost trace of	..	..	..	11
				259



## SOCIAL WELFARE WORKER.

There are two officials engaged in this work; the Senior Social Worker is an experienced health visitor and she is assisted by a Junior Social Worker who holds the diploma in Social Science or its equivalent.

Social problems relating to expectant mothers and young children are referred for advice. The problems are mainly in relation to unmarried mothers and their infants.

During the year 140 of the unmarried mothers dealt with were under the age of 16 years and were made the subject of special enquiry and assistance. In addition, cases were investigated for inquiry under the Children's Act, and in order to obtain support in difficult cases.

Of the cases dealt with, 11 per cent were European, 82 per cent mixed race and 7 per cent Natives. Many cases drifting in from adjacent Divisional Council areas or from further afield become social problems in the city; and when possible, efforts are made to return problem cases to their own homes.

The work done during the year may be summarized as follows:—

Cases interviewed in office .. .. .	1,535
Visits made to cases in hospitals and institutions .. .. .	672
Visits made to new cases at home .. .. .	438
Subsequent visits .. .. .	1,891
Interviews at Magistrate's Court or Court offices .. .. .	67

## SECTION IV.—DENTAL BRANCH.

(PREPARED BY DR. S. WINER, CHIEF DENTAL OFFICER.)

The extensive prevalence of dental disease in South Africa is a problem of considerable national importance, and its treatment and prevention therefore occupy an important role in the national and local health programmes.

Dental caries has its highest incidence along the coastal belt, and although this condition is not more prevalent in Cape Town than in other coastal areas, the problem is nevertheless one of considerable public health importance. Whilst the occurrence of dental disease or ill formed dentitions is not confined to any particular social group, the severity of the condition is considerably aggravated by environmental factors which arise from poverty, malnutrition, ignorance and dirt. Oral hygiene itself will not prevent the occurrence of dental disease but it does tend to diminish the severity of dental infection. Education aimed at promoting an appreciation of health factors, including hygiene, should start at an early age and should be included in the school curriculum.

Another factor contributing to the prevalence of dental disease is the failure of some of the public, particularly among those of the poorer section, to avail themselves of early conservative treatment, and as a result they are rendered edentulous at a comparatively early age.

The year under review represents the first full year of operation of the Hope Street Dental Clinic. Before the establishment of this clinic dental treatment was provided only for cases attending the maternal and child welfare clinics, the tuberculosis clinics, patients in the City Infectious Diseases Hospital, residents of the Langa Native Township and necessitous school children. All types of dental treatment are undertaken at the Dental Clinic, including the provision of artificial dentures.

During the year under review, 6,282 persons, involving 14,602 attendances, were treated at the Dental Clinic. These figures indicate that facilities for dental treatment are now available for a large section of the community for whom no previous provision was made and who, hitherto, were not in a position to pay the fees of private dentists.

On the surgical side it has been found advantageous to perform the majority of operations for extractions of teeth under general anaesthesia, and by the system of group bookings it has been made possible to engage anaesthetists for a substantial number of cases at each session. It is interesting to note that during the year 673 anaesthetic sessions were held and 13,422 anaesthetics administered. At the Hope Street Clinic some original work in the development of analgesia for operations was successfully undertaken, the results of which were published in the professional journals.

A service never before undertaken or even contemplated in Cape Town is the provision of orthodontic treatment for underprivileged children. Ordinarily the cost of such treatment is beyond the resources even of most middle class families. This highly specialized form of treatment is now being undertaken with a considerable measure of success.

*Financial.*

One of the factors militating against the acceptance of responsibility for full dental treatment on a national scale is the heavy expense involved. (In Britain national health dentistry is estimated to cost £30,900,000 in 1950.) In order to overcome this difficulty and at the same time provide a comprehensive scheme of treatment, a system has been devised in Cape Town whereby treatment is given only to those persons unable to afford the fees of private practitioners. A scale of fees, within the means of most applicants, has been drawn up and even these fees are either reduced or remitted in cases of poverty. Where it can be ascertained that an indigent person requires artificial dentures for the benefit of his or her health, or to fit that person for the labour market, the Union Department of Health refunds the cost of providing dentures. Fees are also recovered from charitable organizations, certain sick funds, the Cape Education Department, and the Divisional Council of the Cape. At Langa Township the cost is borne by the Native Revenue Account. By this means the expenditure on dental services has been reduced to less than half, and it is hoped later to obtain from the Union Department of Health a refund of half the loss incurred by the Council.

As an indication of the financial value of the services provided by the Council, it has been estimated that the cost based on low industrial practice fees would exceed £44,000. The net expenditure debited against the Dental Branch is estimated at £7,000.

*Branches.*

Apart from the work carried out at the Central Dental Clinic in Hope Street, facilities for dental treatment for school children, and for cases referred by the Maternal and Child Welfare Branch, are provided at the infant welfare clinics at Aspeling Street, Cape Town, St. James Street, Woodstock, Wynberg Town Hall, Athlone and Lansdowne. Sessions are held at the Tuberculosis Clinic, Chapel Street, for out-patients, and at the City Infectious Diseases Hospital for in-patients. Treatment is also available at the Langa Hospital for the inhabitants of the Langa Native Township.

Reference must be made to the inadequate facilities for dental treatment at the Wynberg Town Hall. As cases from as far afield as Claremont to Kalk Bay are treated there, some improvement is indicated. Another area that should be specially catered for is Windermere.



*Staff.*

The staff consists of the following:

Chief dental officer.  
Deputy dental officer.  
Assistant dental surgeon.  
3 Dental mechanics.  
4 Nurses.  
3 Clinic assistants.  
3 Clerks.  
Caretaker-cleaner.  
Labourer.  
Laundress.

The professional staff are assisted by part-time dental surgeons, anaesthetists and nurses.

As the system of providing a complete dental service as has been undertaken in Cape Town is new to South Africa it is to be expected that some criticism will be encountered. On the other hand, the expressions of appreciation from individuals and organizations far outweigh any such criticism. The increasing demand for the services provided is an adequate indication of the value of this institution to the health organization of Cape Town.

## DENTAL CLINICS.

Centre.		Sessions.	New cases.		Total attendances.		Extractions (persons).		Fillings (persons).		Other dental treatment.		Dentures supplied (persons).	
			E.	O.	E.	O.	E.	O.	E.	O.	E.	O.	E.	O.
Hope Street, Cape Town	General:	782												
	Adults .. ..		970	3,917	3,035	8,682	671	3,046	212	28	2,152	5,608	263	464
	Children .. ..		493	902	1,257	1,628	443	745	129	38	685	845	24	9
	School Children:													
	School Board ..	46	139	49	374	84	160	33	109	42	105	9	—	—
Aspelng Street, Cape Town	Non-School Board	2	—	68	—	68	—	55	—	—	—	13	—	—
	Nursing and expectant mothers ..	51*	—	238	—	334	—	319	—	—	—	15	—	—
	Pre-school children:													
	School children:													
	School Board ..	52	—	1,045	—	1,799	—	1,489	—	—	—	310	—	—
Woodstock	Non-School Board	8	—	164	—	237	—	213	—	—	—	24	—	—
	Nursing and expectant mothers ..	63*	48	261	70	340	64	326	—	—	6	14	—	—
	Pre-school children:													
	School children:													
	School Board ..	127	494	468	1,494	940	975	802	265	30	254	108	—	—
Athlone	Non-School Board	27	16	462	23	720	22	655	—	—	1	65	—	—
	Nursing and expectant mothers ..	49*	—	242	1	329	1	312	—	—	—	17	—	—
	Pre-school children:													
	School children:													
	School Board ..	36	—	753	—	1,243	—	1,086	—	—	—	157	—	—
Lansdowne	Non-School Board	11	—	181	—	313	—	283	—	—	—	30	—	—
	School children:													
	School Board ..	45	174	170	423	335	288	274	64	16	71	45	—	—
	Non-School Board	—	—	—	—	—	—	—	—	—	—	—	—	—
	Nursing and expectant mothers ..	53*	25	293	62	573	26	396	—	—	36	183	8	27
Wynberg	Pre-school children:													
	School children:													
	School Board ..	84	134	612	444	1,098	199	930	142	3	103	165	—	—
	Non-School Board	8	—	115	—	247	—	207	—	—	—	40	—	—
City Hospital ..	In-patients ..	25	21	67	76	76	17	50	30	4	29	22	—	—
	Westlake Tuberculosis Hospital ..													
	In-patients ..	7	34	1	65	1	19	—	11	—	35	1	—	—
	Langa Hospital													
	Native residents, Langa ..	43	—	459	—	786	—	779	—	—	—	7	—	—
Tuberculosis Clinic, Chapel Street ..	Out-patients ..	57	37	242	107	576	21	227	—	—	86	349	15	55
	Lady Michaslis Orthopaedic Home ..													
	In-patients (school children) ..	4	36	39	43	49	15	15	—	—	28	34	—	—
	Totals .. ..	1,580	2,825	11,729	7,738	21,617	3,168	13,367	962	161	3,608	8,089	210	555

\*Including pre-school children.



## SECTION V.—INFECTIOUS AND OTHER DISEASES.

The cases of compulsorily notifiable diseases reported in the Municipality of Cape Town during the year ended 30th June, 1949, are shown in Table P on page 127.

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

In the tables on pages 128 to 130, the notified cases (corrected) are classified by race and:—

(Table Q) in months according to date of notification.

(Table R) in age and sex groups.

(Table S) in wards.

The number of cases notified in a series of past years is set out in Table T on page 131, and similar information as to deaths from these and certain other infectious diseases will be found in Tables C and E on pages 112 and 114.

Other statistical details as to deaths from infectious diseases are contained in Table A at page 80 and in Tables B and C, on pages 111 and 112.

## ENTERIC OR TYPHOID FEVER.

The cases of this disease reported in the year 1948-49, corrected for misdiagnosis and imported cases, numbered 56 (14 European and 42 non-European), equivalent to an incidence rate of 0.14 per 1,000 population (0.07 European and 0.20 non-European).

The number of deaths amongst these 56 cases was 10 (2 European and 8 non-European), giving a case mortality of 17.9 per cent (14.3 European and 19.0 non-European).

The total deaths from enteric fever according to date of registration in the year as belonging to Cape Town numbered 10 (2 European and 8 non-European), equivalent to a death rate of 0.02 per 1,000 population (0.01 European and 0.04 non-European).

There was one case of enteric fever in the Langa Native Township.

Two cases occurred in institutions, viz. one at the Cape Town Gaol and one at the Monte Rosa Hospital (nurse). The other cases occurred in 50 houses, in 47 of which there was one case each, in 2 two cases and in 1 three cases.

Of the 56 Cape Town cases, 49 were treated in the City Hospital and 5 in other hospitals. One case was nursed at home and 1 died before receipt of notification.

Five of the 56 Cape Town cases were admitted to the City Hospital for another disease which afterwards proved to be enteric fever. In addition, 64 cases which were originally admitted to the City Hospital as suffering from enteric fever were afterwards found not to be suffering from this disease.

65 extra municipal cases of enteric fever (including 2 from overseas) were admitted to the City Hospital for Infectious Diseases. In 35 cases the diagnosis was confirmed. In addition, 4 cases admitted to the City Hospital for another disease were afterwards found to be cases of enteric fever.

Reference to Tables Q, R and S on pages 128, 129 and 130 will show the notifications for the year in months, age-groups and wards of the City. Other particulars will be found in the table on page 34 and in Table T on page 131.

There were no enteric fever carrier cases reported during the year.

The incidence of enteric fever has declined since the high prevalence of the disease in the year 1946-47.

## DIPHTHERIA.

The cases of this disease reported in the year 1948-49, corrected for misdiagnosis and imported cases, numbered 93 (33 European and 60 non-European), equivalent to an incidence rate of 0.23 per 1,000 population (0.17 European and 0.29 non-European).

The number of deaths among the 93 cases was 7 (3 European and 4 non-European), giving a case mortality of 7.5 per cent (9.1 European and 6.7 non-European).

The total deaths from diphtheria, according to date of registration in the year as belonging to Cape Town, numbered 7 (3 European and 4 non-European), equivalent to a death rate of 0.02 per 1,000 population (0.02 European and 0.02 non-European). All the deaths were in children under 10 years of age.

There was one case of diphtheria in the Langa Native Township.

The distribution of the 93 Cape Town cases was general throughout the Municipality. One of the cases occurred in the City Hospital (nurse). The remaining cases occurred in 90 houses, in 88 of which there was one case each and in 2 two cases.

Of the 93 Cape Town cases, 91 were treated at the City Hospital and two died on receipt of notification. In addition, 200 cases notified and admitted to the City Hospital as suffering from diphtheria were afterwards found not to be suffering from this disease.

Excluded from the above figures, 138 extra municipal cases of diphtheria, including 2 from overseas, were admitted to the City Hospital. In 76 cases the diagnosis was confirmed. One patient admitted for another disease proved to be a case of diphtheria.

Other particulars will be found in the table on page 34 and in Tables Q to T on pages 128 to 131.

Particulars regarding diphtheria immunization will be found on page 29.

The incidence of diphtheria showed a decline, the number for the year 1948-49 being 93 compared with 137 in the previous year. The figure for the year under review is well below the average of the last five years.

*Diphtheria carrier.*—Nine non-Europeans were admitted to the City Hospital as "diphtheria carriers". In 25 cases (7 European and 18 non-European) which were admitted as diphtheria the diagnosis was changed to "diphtheria carrier". One non-European admitted as a case of chicken-pox was found also to be a diphtheria carrier.

Of the 5 non-European patients from outside the Municipality 2 were admitted to the City Hospital as "diphtheria carrier" and in 3 cases admitted as diphtheria the diagnosis was changed to "diphtheria carrier".

There was one "diphtheria carrier" in the Langa Native Township.



## SCARLET FEVER.

The cases of this disease reported in the year 1948-49, corrected for misdiagnosis and imported cases, numbered 213 (188 European and 25 non-European), equivalent to an incidence rate of 0.53 per 1,000 population (0.97 European and 0.12 non-European).

There were no deaths from scarlet fever during the year under review.

There were no cases of this disease in the Langa Native Township.

Every ward in the Municipality of Cape Town was involved in the year's total. Of the 213 Cape Town cases, 4 occurred in a boarding school in ward 9, and 8 occurred in institutions, viz., 4 at St. Anne's Home, 1 at the McGregor Home, 1 at the City Hospital (nurse), 1 at the Groote Schuur Hospital (nurse) and 1 at the Victoria Hospital (nurse). The remaining cases occurred in 178 houses, in 161 of which there was one case each, in 13 two cases, in 3 three cases and in 1 five cases.

182 of the 213 Cape Town cases were treated at the City Hospital and 31 were treated at home. All the 31 patients treated at home were satisfactorily isolated. Besides the 182 cases treated at the City Hospital, 10 cases notified and admitted as suffering from scarlet fever were afterwards found not to be suffering from this disease.

40 extra municipal cases of scarlet fever, including 2 from overseas were admitted to the City Hospital. The diagnosis was confirmed in 37 cases. One of the patients from overseas was admitted to the City Hospital for another disease which proved to be scarlet fever.

The distribution of the 213 Cape Town cases, according to months, age-groups and wards of the City will be found in the Tables Q, R and S on pages 128, 129 and 130, respectively. Other particulars will be found in the table below and in Table T on page 131.

The incidence of scarlet fever amongst Europeans in Cape Town in the year 1948-49, showed a slight increase over the previous year.

## CORRECTED NOTIFICATION AND DEATH RATES PER 1,000 POPULATION FROM ENTERIC FEVER, DIPHTHERIA AND SCARLET FEVER.

Year.	Enteric fever.				Diphtheria.				Scarlet fever.			
	Notifications.		Deaths.		Notifications.		Deaths.		Notifications.		Deaths.	
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.
1914-15 ..	3.13	2.89	0.26	0.30	1.94	0.82	0.20	0.29	0.98	0.13	0.03	—
1915-16 ..	1.96	1.73	0.01	0.37	2.27	0.67	0.20	0.25	1.54	0.10	—	—
1916-17 ..	1.90	1.92	0.16	0.41	1.91	0.53	0.12	0.17	0.60	0.05	—	—
1917-18 ..	1.55	1.58	0.13	0.40	1.20	0.41	0.08	0.14	1.09	0.17	—	—
1918-19 ..	2.20	2.40	0.19	0.42	1.22	0.31	0.03	0.13	1.65	0.23	—	—
1919-20 ..	2.60	2.50	0.22	0.52	1.30	0.45	0.08	0.15	2.84	0.29	0.03	—
1920-21 ..	3.46	3.78	0.37	0.56	0.75	0.29	0.05	0.04	2.25	0.18	0.02	—
1921-22 ..	1.98	2.48	0.20	0.50	0.86	0.22	0.08	0.07	0.94	0.11	—	—
1922-23 ..	1.71	1.64	0.21	0.31	1.15	0.28	0.10	0.06	0.45	0.06	—	—
1923-24 ..	1.12	1.04	0.11	0.23	1.51	0.55	0.08	0.12	0.24	0.03	—	—
1924-25 ..	0.72	1.02	0.07	0.21	1.90	0.45	0.15	0.09	0.46	0.01	—	—
1925-26 ..	0.78	1.05	0.07	0.18	1.60	0.48	0.07	0.12	1.15	0.08	—	0.01
1926-27 ..	1.02	1.26	0.13	0.28	1.62	0.89	0.10	0.16	1.07	0.11	—	—
1927-28 ..	0.84	1.19	0.08	0.22	1.25	0.54	0.08	0.11	1.76	0.05	0.02	—
1928-29 ..	0.76	0.86	0.10	0.22	1.23	0.60	0.10	0.13	1.17	0.08	—	0.01
1929-30 ..	0.65	0.79	0.06	0.14	1.23	0.45	0.10	0.09	1.93	0.16	0.01	0.01
1930-31 ..	0.71	0.84	0.06	0.19	1.38	0.76	0.06	0.09	3.11	0.32	0.01	—
1931-32 ..	0.51	0.78	0.09	0.19	0.86	0.53	0.05	0.09	0.87	0.14	—	—
1932-33 ..	0.21	0.23	0.02	0.04	1.00	0.57	0.06	0.05	0.85	0.14	—	—
1933-34 ..	0.36	0.36	0.01	0.05	1.33	0.80	0.04	0.08	0.71	0.07	—	—
1934-35 ..	0.22	0.36	0.04	0.07	1.61	1.00	0.06	0.14	1.55	0.10	0.01	—
1935-36 ..	0.20	0.31	0.02	0.04	1.25	0.88	0.07	0.12	3.95	0.24	0.02	0.01
1936-37 ..	0.22	0.67	0.01	0.09	1.45	0.83	0.01	0.08	2.98	0.20	0.02	0.01
1937-38 ..	0.37	0.28	0.03	0.05	2.20	1.73	0.12	0.23	0.72	0.09	0.01	—
1938-39 ..	0.09	0.25	0.01	0.03	3.36	1.55	0.12	0.31	0.51	0.05	—	—
1939-40 ..	0.22	0.22	0.01	0.12	1.75	0.84	0.03	0.12	0.76	0.07	—	—
1940-41 ..	0.07	0.16	0.01	0.06	1.21	0.76	0.04	0.05	1.30	0.11	—	—
1941-42 ..	0.23	0.45	0.01	0.07	1.52	0.85	0.04	0.10	1.67	0.06	0.01	—
1942-43 ..	0.55	0.41	0.02	0.08	0.98	0.81	0.06	0.09	0.94	0.04	—	—
1943-44 ..	0.10	0.52	0.02	0.04	1.3	0.61	0.01	0.19	0.91	0.04	0.01	—
1944-45 ..	0.12	0.42	0.02	0.09	0.51	0.48	0.03	0.07	0.82	0.09	0.01	0.01
1945-46 ..	0.12	0.45	0.02	0.06	0.15	0.44	0.01	0.06	1.80	0.22	—	0.01
1946-47 ..	0.13	0.73	0.03	0.12	0.28	0.29	0.01	0.03	1.36	0.10	—	—
1947-48 ..	0.19	0.33	0.03	0.04	0.34	0.36	0.02	0.03	0.81	0.12	—	0.01
1948-49 ..	0.07	0.20	0.01	0.04	0.17	0.29	0.02	0.02	0.97	0.12	—	—

## CEREBROSPINAL FEVER.

There were 62 Cape Town cases (13 European and 49 non-European) of cerebrospinal fever reported in the year 1948-49, equivalent to an incidence rate of 0.15 per 1,000 population (0.07 European and 0.23 non-European).

The total deaths from cerebrospinal fever according to the date of registration in the present year as belonging to Cape Town, numbered 10 (3 European and 7 non-European), giving a death-rate of 0.02 per 1,000 population (0.02 European and 0.03 non-European).

There was one case of cerebrospinal fever in the Langa Native Township.

Six of the 62 Cape Town cases were certified as having died from cerebrospinal fever before receipt of notification, of which 2 died in hospital and 4 at home. The remaining 56 cases were treated at the City Hospital (4 died).

With the addition of the cases from outside the Municipality, the total number of cases admitted to the City Hospital as suffering from cerebrospinal fever was 369, out of which 101 proved to be suffering from the meningococcal infection.

Other particulars will be found in the table on page 35 and in Tables Q to T on pages 128 to 131.

## ACUTE POLIOMYELITIS.

The cases of this disease reported in the year 1948-49, corrected for misdiagnosis and imported cases, numbered 19 (8 European and 11 non-European), equivalent to an incidence rate of 0.05 per 1,000 population (0.04 European and 0.05 non-European).



There were no deaths from poliomyelitis during the present year.

16 of the 19 Cape Town cases were in children under 10 years of age and 3 were adults, in the age-groups 15-25, 35-45 years and 55-65 years. There were no secondary household cases.

There were no cases of acute poliomyelitis in the Langa Native Township.

29 cases (14 European and 15 non-European) were admitted to the City Hospital under the diagnosis of acute poliomyelitis, of which 13 were afterwards found not to be suffering from this disease. One patient (European) admitted to the City Hospital for another disease proved to be a case of acute poliomyelitis. Two other patients (1 European and 1 non-European) notified as acute poliomyelitis were admitted to the Conradie Home.

In addition to the above figures there were 12 cases admitted to the City Hospital from outside the Municipality, two of which were originally admitted for another disease but were afterwards found to be cases of acute poliomyelitis. One other case which arrived in ward 7 from Vereeniging, Transvaal, already ill from this disease, was admitted to the City Hospital.

Other particulars will be found in the following table and in Tables Q to T on pages 128 to 131.

It is gratifying to note that the incidence of this disease was less prevalent in the present year than in the previous year.

#### INFECTIVE ENCEPHALITIS.

Two cases (E.F., N.M.) of infective encephalitis belonging to Cape Town, were reported in the year 1948-49.

The European female was originally notified as a case of acute poliomyelitis and was admitted to the City Hospital, where it was found that the disease was infective encephalitis. The Native male died before receipt of notification. This is the only death from this disease recorded in the year under review.

There were two non-European males admitted to the City Hospital from outside the Municipality under the diagnosis of cerebrospinal fever. In both instances the diagnosis was changed to infective encephalitis.

Other particulars will be found in the following table and in Tables Q to T on pages 128 to 131.

#### CASES (CORRECTED) AND DEATHS FROM CEREBROSPINAL FEVER, ACUTE POLIOMYELITIS, AND INFECTIVE ENCEPHALITIS.

Year.	Cerebrospinal fever.				Acute poliomyelitis.				Infective encephalitis.			
	Cases.		Deaths.		Cases.		Deaths.		Cases.		Deaths.	
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.
1915-16 ..	2	-	-	-	4	5	-	-	-	-	-	-
1916-17 ..	2	-	1	-	3	1	1	2	-	-	-	-
1917-18 ..	4	2	3	2	3	2	1	1	-	-	-	-
1918-19 ..	3	5	-	5	2	2	2	-	-	-	-	-
1919-20 ..	3	6	3	5	1	1	-	1	-	-	-	-
1920-21 ..	4	1	3	1	3	1	-	-	3	1	2	1
1921-22 ..	4	1	-	-	1	1	1	1	5	-	5	-
1922-23 ..	4	5	4	2	-	1	-	1	3	1	2	1
1923-24 ..	2	3	2	3	1	-	-	-	5	4	3	4
1924-25 ..	6	19	5	11	1	1	1	1	6	5	3	4
1925-26 ..	4	21	5	19	-	-	-	-	6	10	6	7
1926-27 ..	10	39	6	29	2	-	1	-	6	5	4	5
1927-28 ..	39	183	18	92	8	4	2	1	8	3	3	3
1928-29 ..	30	101	16	59	4	1	1	-	7	5	5	3
1929-30 ..	14	48	8	27	11	6	3	1	4	3	3	-
1930-31 ..	4	18	3	15	5	5	-	2	4	4	-	3
1931-32 ..	7	35	3	21	-	-	-	-	7	2	5	2
1932-33 ..	8	22	5	15	4	4	1	2	4	4	-	1
1933-34 ..	3	17	3	17	8	3	-	-	2	-	-	-
1934-35 ..	5	20	3	15	11	14	1	3	8	3	2	1
1935-36 ..	1	9	1	10	1	3	-	-	4	3	2	4
1936-37 ..	7	11	7	9	7	2	2	-	1	3	2	1
1937-38 ..	3	15	2	5	4	2	4	-	4	4	2	1
1938-39 ..	5	33	1	17	2	0	-	-	-	2	-	1
1939-40 ..	2	24	1	7	5	11	-	-	2	3	1	-
1940-41 ..	23	45	4	8	5	4	-	1	1	5	1	3
1941-42 ..	19	47	1	4	4	3	2	2	3	1	2	-
1942-43 ..	23	80	2	13	2	-	-	-	6	3	3	2
1943-44 ..	39	222	9	26	5	1	-	-	-	2	-	-
1944-45 ..	25	80	6	18	46	18	1	1	-	1	-	1
1945-46 ..	16	58	1	12	10	4	1	2	1	-	-	-
1946-47 ..	15	31	2	6	4	3	-	-	-	5	-	1
1947-48 ..	5	33	1	9	13	13	2	-	-	-	-	-
1948-49 ..	13	49	3	7	8	11	-	-	1	1	-	1

#### ERYSIPELAS.

In the year 1948-49, the number of notified cases of erysipelas in the Municipality of Cape Town was 29 (13 European and 16 non-European), which is the lowest since the year 1923-24, when 26 cases were notified.

One of the cases died in the City Hospital. The patient was a European female, 56 years of age and had cirrhosis of the liver, which was regarded as a contributory cause of her death.

There were two cases of erysipelas in the Langa Native Township.

Other particulars will be found in Tables Q to T on pages 128 to 131.

#### INFLUENZA AND PNEUMONIA.

The number of cases of pneumonia reported in the year 1948-49, corrected for misdiagnosis and imported cases, were as follows: Influenzal pneumonia 17 (5 European and 12 non-European); acute primary pneumonia 370 (36 European and 334 non-European).

The distribution of these cases, according to months, age-groups and wards of the City, will be found in the Tables Q to S on pages 128 to 130. Reference to Table T on page 131 will show the notifications of both these diseases for a series of years, classified for race.



There were five cases of acute primary pneumonia in the Langa Native Township. The deaths from influenza since the epidemic in 1918 and from bronchitis and pneumonia (all forms) with the corresponding death rates, are set out in the following table:—

Year.	Influenza.				Bronchitis.				Pneumonia (all forms).			
	European.		Non-European.		European.		Non-European.		European.		Non-European.	
	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.
1918-19 ..	864	9.33	2,893	36.41	47	0.51	216	2.72	239	2.58	229	2.88
1919-20 ..	2	0.02	5	0.06	39	0.40	203	2.52	71	0.74	385	4.77
1920-21 ..	1	0.01	18	0.22	42	0.42	237	2.91	89	0.89	418	5.13
1921-22 ..	5	0.05	10	0.12	43	0.42	197	2.36	112	1.09	379	4.54
1922-23 ..	6	0.06	5	0.06	39	0.37	222	2.58	91	0.86	407	4.72
1923-24 ..	3	0.03	3	0.03	32	0.30	185	2.07	92	0.85	445	4.98
1924-25 ..	25	0.22	29	0.32	29	0.26	148	1.59	58	0.52	323	3.46
1925-26 ..	13	0.12	22	0.23	26	0.23	213	2.25	70	0.63	269	2.84
1926-27 ..	13	0.11	18	0.18	40	0.35	255	2.62	84	0.74	387	3.96
1927-28 ..	20	0.16	52	0.46	39	0.30	305	2.69	96	0.75	509	4.49
1928-29 ..	23	0.18	33	0.28	40	0.31	217	1.87	93	0.71	390	3.56
1929-30 ..	32	0.24	29	0.24	36	0.27	221	1.86	65	0.49	338	2.84
1930-31 ..	9	0.06	26	0.21	46	0.23	201	1.61	58	0.42	345	2.77
1931-32 ..	30	0.22	43	0.34	35	0.25	218	1.74	100	0.72	403	3.22
1932-33 ..	12	0.08	18	0.14	20	0.14	157	1.22	71	0.50	385	3.00
1933-34 ..	8	0.06	9	0.07	30	0.21	170	1.29	61	0.42	346	2.63
1934-35 ..	30	0.20	27	0.20	29	0.20	278	2.06	114	0.77	482	3.57
1935-36 ..	36	0.24	32	0.23	19	0.12	193	1.37	92	0.60	453	3.21
1936-37 ..	13	0.08	17	0.12	35	0.23	132	0.93	57	0.37	317	2.23
1937-38 ..	24	0.15	24	0.16	34	0.22	252	1.73	80	0.51	465	3.19
1938-39 ..	15	0.09	15	0.10	30	0.19	170	1.14	79	0.50	446	2.18
1939-40 ..	17	0.10	12	0.08	20	0.12	131	0.86	66	0.41	438	2.86
1940-41 ..	18	0.11	18	0.11	27	0.16	159	1.01	73	0.44	442	2.50
1941-42 ..	8	0.05	10	0.06	21	0.13	129	0.78	68	0.42	474	2.87
1942-43 ..	8	0.05	8	0.05	33	0.20	128	0.77	61	0.37	412	2.48
1943-44 ..	12	0.07	13	0.07	12	0.07	182	1.02	60	0.36	581	3.27
1944-45 ..	5	0.03	9	0.05	19	0.11	118	0.64	59	0.34	425	2.30
1945-46 ..	3	0.02	9	0.05	20	0.11	113	0.59	47	0.26	372	1.96
1946-47 ..	4	0.02	10	0.05	18	0.10	126	0.64	56	0.31	364	1.86
1947-48 ..	9	0.05	5	0.02	12	0.06	109	0.53	57	0.30	442	2.15
1948-49* ..	3	0.02	12	0.06	18	0.09	98	0.47	56	0.29	293	1.41

Corrected for outward transfers, and from 1924-25—1947-48 inclusive for European inward transfers.

\*Corrected for outward transfers only.

In the year under report, the non-European death rate from bronchitis and pneumonia (all forms) was the lowest ever recorded for the City.

The following figures for deaths from bronchitis and pneumonia in 1948-49 show the contrast between Europeans and non-Europeans compared with the figures for the previous year.

	1948-49.		1947-48.	
	European.	Non-European.	European.	Non-European.
Under 5 years of age .. ..	13	289	21	435
0-1 year .. ..	{ 11	{ 192	{ 18	{ 281
1-2 years .. ..	{ 2	{ 64	{ 3	{ 100
2-5 years .. ..	{ —	{ 33	{ —	{ 54
All other ages .. ..	64	102	45	116
Total .. ..	74	391	66	551

The infant mortality rate per 1,000 live births from these causes for a series of past years are set out in Table M on page 124, where it will be seen that the non-European infant mortality rate for the year 1948-49 is the lowest on record.

The seasonal character of mortality from bronchitis and pneumonia will be seen in Table C on page 112.

#### TYPHUS FEVER.

Eight cases (E.M. 1, E.F. 5, C.F. 1, N.F. 1) belonging to Cape Town were recorded under this heading in the year 1948-49. Three of the cases (E.F. 1, C.F. 1, N.F. 1) were diagnosed as typhus fever and five cases (E.M. 1, E.F. 4) were regarded as suffering from tick-bite fever.

One of the European females and the Native female were originally notified as enteric fever and admitted to the City Hospital, where it was found that the disease was typhus fever. Four of the cases (E.M. 1, E.F. 3) who were admitted to the City Hospital for another disease, were afterwards proved to be cases of tick-bite fever.

In addition to the above figures, there were three cases (E.M. 2, E.F. 1) of tick-bite fever and 1 case (C.M.) of typhus fever from outside the Municipality. They were all treated at the City Hospital and recovered.

#### LEPROSY.

Two cases of leprosy were notified during the year 1948-49 in the persons of a Native male and Coloured male resident in Cape Town and one case in the person of a Native male resident in the Langa Native Township. The three cases were admitted to the Conradie Home, Pinelands, C.P., on receipt of notification and subsequently transferred to the Leper Institution, Pretoria. The probable source of the infection was not known.



## SMALLPOX.

One case of smallpox was notified to this department on 1st November, 1948, in the person of a Native male adult, who apparently contracted the disease outside the municipal area.

On investigating this case, it was found that he left his employer's address in Oranjezicht, Cape Town, on 1st May, 1948, for Rhodesia, on vacation. On his return from Rhodesia on the 20th October, 1948, he was informed by his employer that his services were no longer required. He then went to live with his brother in Sea Point, who was employed as house-boy. On the 24th October, 1948, he became ill with severe headache and backache and reported to the out-patient department at the Somerset Hospital where he was subsequently admitted for observation. On the 1st November, 1948, it was discovered that he had smallpox and was immediately transferred to the isolation and quarantine station at the Brooklyn Hospital and discharged on 13th December, 1948.

His brother and two Coloured male in-patients at the Somerset Hospital, who shared the same ward with this case, were admitted to the isolation and quarantine station at the Brooklyn Hospital on the same day as smallpox contacts. They were discharged a fortnight later as not having contracted the disease.

## ANTHRAX.

There were no cases of this disease reported in the municipal area of Cape Town in the year 1948-49. A case of anthrax in the person of a European female, 56 years of age, was admitted to the City Hospital from Wellington, C.P., on the 30th April, 1949, and discharged on the 10th June, 1949.

## TRACHOMA.

Four cases of this disease were notified during the year 1948-49 in persons belonging to Cape Town, as follows:—

European male, aged 23 (ward 5). History unknown. Treated as out-patient at Groote Schuur Hospital.

Coloured male, aged 39 (ward 1). History unknown. Treated as out-patient at Somerset Hospital.

Coloured female, aged 24 (ward 2). History unknown. In-patient at Somerset Hospital.

Coloured female, aged 39 (ward 3). The department was unable to trace this case subsequent to notification.

In addition to the above, 2 cases of trachoma were reported in persons outside the Municipality. One was a Coloured female from Vredendal, C.P., who was an in-patient at the Peninsula Maternity Hospital. The other case was a seaman (Chinese) from a ship arriving in port. He received in-patient treatment at the Somerset Hospital.

## MEASLES AND WHOOPING COUGH.

In the following table the number of deaths from measles and whooping cough, together with the corresponding rates, are shown for a series of years:—

Year.	Measles.				Whooping cough.			
	Deaths.		Rate per 1,000 population.		Deaths.		Rate per 1,000 population.	
	Eur.	Non-E.	Eur.	Non-E.	Eur.	Non-E.	Eur.	Non-E.
1914-15	1	—	0.01	0.01	16	72	0.20	0.95
1915-16	2	—	0.02	—	2	2	0.02	0.03
1916-17	20	147	0.23	1.90	12	20	0.14	0.26
1917-18	1	7	0.09	0.09	10	40	0.11	0.51
1918-19	3	2	0.03	0.03	7	22	0.08	0.28
1919-20	9	12	0.01	0.15	10	29	0.10	0.36
1920-21	2	27	0.02	0.33	16	41	0.16	0.50
1921-22	—	—	—	—	—	5	—	0.06
1922-23	3	21	0.03	0.24	8	25	0.08	0.29
1923-24	20	116	0.19	1.30	21	69	0.19	0.77
1924-25	1	2	0.01	0.02	4	10	0.04	0.11
1925-26	—	6	—	0.06	5	20	0.04	0.21
1926-27	9	38	0.08	0.39	7	26	0.06	0.27
1927-28	3	12	0.02	0.11	21	74	0.16	0.66
1928-29	9	9	0.07	0.08	11	32	0.08	0.28
1929-30	3	17	0.02	0.14	6	15	0.04	0.13
1930-31	—	17	—	0.14	9	58	0.06	0.47
1931-32	8	39	0.06	0.31	8	44	0.06	0.35
1932-33	—	—	—	—	10	32	0.07	0.25
1933-34	3	23	0.02	0.17	1	19	0.01	0.14
1934-35	6	80	0.04	0.59	5	19	0.03	0.14
1935-36	3	—	0.02	—	10	178	0.07	1.26
1936-37	—	4	—	0.03	3	23	0.02	0.16
1937-38	6	65	0.04	0.45	—	20	—	0.14
1938-39	1	7	0.01	0.05	1	81	0.01	0.54
1939-40	—	—	—	—	4	66	0.02	0.43
1940-41	4	37	0.02	0.23	3	43	0.02	0.27
1941-42	5	6	0.03	0.01	3	54	0.02	0.33
1942-43	2	20	0.01	0.12	2	5	0.01	0.03
1943-44	2	48	0.01	0.27	6	33	0.04	0.18
1944-45	2	9	0.01	0.03	2	90	0.01	0.49
1945-46	1	29	0.01	0.15	—	5	—	0.03
1946-47	1	19	0.01	0.10	2	17	0.01	0.09
1947-48	1	27	0.01	0.13	5	102	0.03	0.50
1948-49*	—	17	—	0.08	1	18	0.01	0.09

Corrected for outward transfers, and from 1924-25—1947-48 inclusive for European inward transfers.

\*Corrected for outward transfers only.

## MEASLES.

There were 17 deaths from measles in the year 1948-49 (all non-Europeans). Sixteen of the deaths were in children under 5 years of age and 1 under 10 years of age. Most of the deaths occurred in wards 8 and 10.

Other information will be found in Tables A to F on pages 80 to 117.

There were no deaths from measles in the Langa Native Township.

63 cases (27 European and 36 non-European) of measles were treated at the City Hospital.

## WHOOPIING COUGH.

There were 19 deaths (1 European and 18 non-European) from whooping cough in the year 1948-49, compared with 107 deaths (5 European and 102 non-European) in the previous year. All the 19 deaths in the present year were in children under 5 years of age. 10 of the 18 non-European deaths occurred in ward 15.

Other information will be found in Tables A to F on pages 80 to 117.

There were 3 deaths from whooping cough, all in children under 2 years of age, in the Langa Native Township.

22 cases (8 European and 14 non-European) of whooping cough were treated at the City Hospital.

The mortality from whooping cough amongst non-Europeans was in a phase of quiescence after the severe outbreak in the previous year.

## DIARRHOEAL DISEASES.

The deaths certified in the year 1948-49, as being due to diarrhoea and enteritis numbered 500 (18 European and 482 non-European) as compared with 404 (24 European and 380 non-European) in the previous year.

The deaths for the year 1948-49 were classified as follows:—

	European.	Non-European.	All races.
Diarrhoea and enteritis (under 2 years) ..	14	443	457
Diarrhoea and enteritis (2 years and over)	4	39	43
Cholera nostras .. .. .	—	—	—
Dysentery, bacillary .. .. .	—	—	—
Dysentery, amoebic .. .. .	1	2	3
Dysentery, other .. .. .	—	—	—
Total .. .. .	19	484	503
Diarrhoeal death rate per 1,000 population	0.10	2.32	1.25

The seasonal character of diarrhoea and enteritis is shown in Table C on page 112, where it will be seen that amongst non-Europeans the mortality was least in the months of July—December and highest in the months January—June.

Of the 482 non-European deaths from diarrhoea and enteritis in the year under review, 134 occurred in ward 8 (including 104 in the district of Windermere), 97 in ward 10, 83 in ward 15, 50 in ward 6 and 118 in the rest of Cape Town.

The non-European mortality rate from diarrhoea and enteritis in the year 1948-49, was 23.2 times as great as the European rate. In children under 1 year of age, the non-European mortality rate from diarrhoea and enteritis, per 1,000 live births, was 6.9 times as great as the European (see Table F1 on page 116).

Table F2 on page 117 shows the trends in mortality from diarrhoea and enteritis over the last five years.

## CANCER.

The number of deaths certified during the year as being due to cancer was 403 (256 European and 147 non-European).

The deaths from cancer registered during the year 1948-49, and the corresponding rates, are classified below according to the parts of the body affected:—

Part affected.	European.		Non-European.		All races.	
	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
Buccal cavity and pharynx ..	6	0.03	4	0.02	10	0.02
Digestive organs and peritoneum ..	124	0.64	88	0.42	212	0.53
Respiratory organs .. .. .	23	0.12	8	0.04	31	0.08
Uterus .. .. .	16	0.08	21	0.10	37	0.09
Other female genital organs .. ..	4	0.02	2	0.01	6	0.01
Breast .. .. .	32	0.17	7	0.03	39	0.10
Prostate .. .. .	10	0.05	1	0.01	11	0.03
Other male genital organs .. ..	2	0.01	—	—	2	0.01
Male and female genito-urinary organs	15	0.08	5	0.02	20	0.05
Skin .. .. .	2	0.01	1	0.01	3	0.01
Other or unspecified organs .. ..	22	0.11	10	0.05	32	0.07
Total .. .. .	256	1.32	147	0.71	403	1.00

The variation in the number of deaths from cancer over the last five years is shown in Table D, on page 113. The death rates per 1,000 population for this malignant disease during the past 10 years, are shown in Table E on page 114. Other statistics concerning cancer mortality are shown in Tables A to E on pages 80 to 114.



## SECTION VI.—TUBERCULOSIS.

(PREPARED BY DR. W. L. HOOLE, TUBERCULOSIS OFFICER.)

The new cases of this disease reported in the year 1948-49, corrected for misdiagnosis and imported cases, numbered 2,028. They are classified in the following table, where the corresponding incidence rates per 1,000 population are shown:—

Race.	Sex.	Notified cases.			Incidence rates.		
		Pulmonary.	Other forms.	All forms.	Pulmonary.	Other forms.	All forms.
European .. ..	Male .. ..	142	21	163	1.52	0.23	1.75
	Female .. ..	97	12	109	0.96	0.12	1.08
	Total .. ..	239	33	272	1.23	0.17	1.40
Non-European .. ..	Male .. ..	892	140	1,032	8.67	1.36	10.03
	Female .. ..	603	116	724	5.74	1.09	6.83
	Total .. ..	1,500	256	1,756	7.18	1.23	8.41
All races .. ..	Male .. ..	1,034	161	1,195	5.27	0.82	6.09
	Female .. ..	705	128	833	3.41	0.62	4.03
	Total .. ..	1,739	289	2,028	4.32	0.71	5.03

The deaths from tuberculosis and the corresponding death rates are shown in the next table (corrected for outward transfers):—

Race.	Sex.	Deaths.			Death rates		
		Pulmonary.	Other forms.	All forms.	Pulmonary.	Other forms.	All forms.
European .. ..	Male .. ..	48	10	58	0.52	0.10	0.62
	Female .. ..	20	4	24	0.20	0.04	0.24
	Total .. ..	68	14	82	0.35	0.07	0.42
Coloured .. ..	Male .. ..	366	80	446	4.49	0.98	5.47
	Female .. ..	322	86	408	3.43	0.91	4.34
	Total .. ..	688	166	854	3.92	0.95	4.87
Native (not Langa) .. ..	Male .. ..	95	16	111	5.63	0.95	6.58
	Female .. ..	39	5	44	4.46	0.57	5.03
	Total .. ..	134	21	155	5.23	0.82	6.05
Asiatic .. ..	Male .. ..	3	2	5	0.72	0.48	1.20
	Female .. ..	4	1	5	1.36	0.34	1.70
	Total .. ..	7	3	10	0.99	0.42	1.41
All Non-European .. ..	Male .. ..	464	98	562	4.52	0.96	5.48
	Female .. ..	365	92	457	3.45	0.87	4.32
	Total .. ..	829	190	1,019	3.98	0.91	4.89
All races .. ..	Male .. ..	512	108	620	2.62	0.55	3.17
	Female .. ..	385	96	481	1.87	0.46	2.33
	Total .. ..	897	204	1,101	2.23	0.51	2.74
Native (Langa) .. ..	Male .. ..	23	6	29	2.91	0.76	3.67
	Female .. ..	17	6	23	5.73	2.03	7.76
	Total .. ..	40	12	52	3.68	1.10	4.78

## NOTIFICATIONS.

There has been a strong accentuation of the usual predominance of males over females in the notification of pulmonary tuberculosis amongst Europeans; last year the new cases, 252, were almost equally divided between the sexes; in the year under report both the number and the rates per 1,000 population have increased in males and decreased in females, and in each case the change has been considerable.

The following table shows the number of new cases of tuberculosis amongst European males and females and the corresponding discovery rates per 1,000 population for the years 1947-48 and 1948-49 respectively:—

Europeans.	New cases.				Discovery rates per 1,000 population.			
	Pulmonary.		Other forms.		Pulmonary.		Other forms.	
	1947-48.	1948-49.	1947-48.	1948-49.	1947-48.	1948-49.	1947-48.	1948-49.
Males .. ..	127	142	10	21	1.40	1.52	0.11	0.23
Females .. ..	125	97	17	12	1.27	0.96	0.17	0.12

Unfortunately these figures cannot vouchsafe the greater security of women against tuberculosis in the future; they more probably reveal the uneasy truth that tuberculosis is found in Cape Town wherever it is searched for. There is no doubt that the increase in the discovery-rate in men is largely derived from their attendance in greater numbers at the Mass Radiography Service, and it is indeed puzzling to find such a pleasing reduction in the discovery-rate amongst women in the first working year of Mass Radiography. The European population is estimated at 194,050. The number of new cases of pulmonary tuberculosis decreased from 252 to 239, and as shown above this decrease was entirely due to the improvement of the distaff side. The discovery rate per 100,000 fell from 134 to 123.

The estimated non-European population is 208,800. The number of new cases of pulmonary tuberculosis increased from 1,489 to 1,500. The discovery-rate per 100,000 population decreased from 735 to 718 owing to the increase in population. Here again the decrease was entirely due to the reduction amongst females.

The incidence rates of pulmonary tuberculosis amongst non-Europeans for the years 1940-41 to 1948-49 are set out below:—

Year.	No. of cases notified.	Incidence rate.
1940-41 .. ..	883	5.59
1941-42 .. ..	1,072	6.61
1942-43 .. ..	1,233	7.40
1943-44 .. ..	1,706	9.49
1944-45 .. ..	1,491	8.05
1945-46 .. ..	1,558	8.17
1946-47 .. ..	1,507	7.67
1947-48 .. ..	1,489	7.35
1948-49 .. ..	1,500	7.18

Incidence rates of pulmonary tuberculosis amongst European males and females for the years 1940-41 to 1948-49 are set out below:—

Year.	Males.	Females.
1940-41 .. ..	1.02	0.88
1941-42 .. ..	1.31	0.99
1942-43 .. ..	1.31	1.03
1943-44 .. ..	1.42	1.23
1944-45 .. ..	1.44	0.91
1945-46 .. ..	1.42	1.28
1946-47 .. ..	1.72	1.04
1947-48 .. ..	1.40	1.27
1948-49 .. ..	1.52	0.96

The notification of cases of non-pulmonary tuberculosis during the year under review, corrected for imported cases and errors of diagnosis, are classified below. Although the total approximates to that of the preceding year, there has been an increase of 27 cases of tubercular meningitis and a decrease of glandular and disseminated tuberculosis.

The figures in regard to orthopaedic and genito-urinary tuberculosis cannot be put forward as reliable, owing to the continued failure of the general hospitals to notify these types of tuberculosis.

	European.		Non-European.		Total.
	Male.	Female.	Male.	Female.	
Meninges .. ..	14	5	74	72	165
Abdominal* .. ..	—	2	8	8	18
Bones and joints .. ..	2	3	29	8	42
Glands .. ..	3	—	5	9	17
Genito-urinary system .. ..	1	—	1	1	3
Disseminated .. ..	—	2	20	15	37
Other organs .. ..	1	—	3	3	7
Total .. ..	21	12	140	116	289

\* Includes tabes mesenterica and tuberculosis of bowels, peritoneum and abdominal or mesenteric glands.

#### DEATHS.

Fewer people died of tuberculosis in Cape Town in the year ending 30th June, 1949, than in the previous year. Deaths from all forms of tuberculosis numbered 1,101 compared with 1,270. The mortality rate for all races was 274 per 100,000 population, this represents a reduction of 14.4 per cent below the 1947-48 rate.

The death rates from tuberculosis corrected for outward transfers, are shown in the following table for a period of five years:—



Race.	Pulmonary tuberculosis.					Tuberculosis, other forms.				
	1948-49	1947-48	1946-47	1945-46	1944-45	1948-49	1947-48	1946-47	1945-46	1944-45
European .. ..	0.35	0.54	0.60	0.64	0.62	0.07	0.10	0.10	0.10	0.11
Coloured .. ..	3.92	4.59	4.09	4.69	4.59	0.95	0.93	0.90	0.99	1.07
Native .. ..	5.23	6.02	6.71	8.79	7.64	0.82	1.04	1.33	1.44	1.44
Asiatic .. ..	0.99	1.90	1.10	0.83	1.77	0.42	0.15	0.63	0.17	0.53
Non-European ..	3.18	4.67	4.29	5.00	4.81	0.91	0.92	0.94	0.98	1.09
All races .. ..	2.23	2.67	2.50	2.89	2.78	0.51	0.53	0.54	0.56	0.62

In the first full year of the Streptomycin age a reduction in mortality is to be expected if adequate hospital treatment is also available. The deaths from pulmonary tuberculosis have been reduced since last year in both Europeans and non-Europeans. In the former the rates per 100,000 population dropped from 54 to 35 and in the latter from 467 to 398; a percentage improvement of 35 and 15 respectively. This variance in improvement between the two groups of population is primarily due to the relatively greater inadequacy of accommodation for the non-Europeans, secondarily it is due to the more frequent refusal of hospital treatment, the later stage of the disease at the time of discovery and the occasional acute form of the disease in Natives. Despite this improvement, the mortality among non-Europeans is still alarming and remains a challenge to civic effort and goodwill particularly when results justify the claim that the present methods are only deprived of real success by inadequate hospital accommodation.

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

	European.		Non-European.		Total.
	Male.	Female.	Male.	Female.	
Tuberculosis, meningeal .. ..	8	2	73	68	151
" abdominal .. ..	—	1	4	6	11
" of bones and joints .. ..	—	—	3	2	5
" of genito-urinary system ..	1	—	—	1	2
" disseminated .. ..	—	1	17	15	33
" of other organs .. ..	1	—	1	—	2
Total .. ..	10	4	98	92	204

The death rates from tuberculosis (corrected for outward transfers) are shown in the following table for a series of years:—

					Death rate per 1,000 population.		
					European.	Non-European.	All races.
2.8 years ended 30th June, 1916 .. ..	..	..	..	..	1.04	4.69	2.82
5 " " " " 1921 .. ..	..	..	..	..	0.88	4.47	2.53
5 " " " " 1926 .. ..	..	..	..	..	0.79	4.09	2.28
5 " " " " 1931 .. ..	..	..	..	..	0.74	4.75	2.62
5 " " " " 1936 .. ..	..	..	..	..	0.84	4.99	2.82
5 " " " " 1941 .. ..	..	..	..	..	0.76	4.55	2.62
5 " " " " 1946 .. ..	..	..	..	..	0.72	6.06	3.45
1 year ended 30th June, 1937 .. ..	..	..	..	..	0.55	4.19	2.31
1 " " " " 1938 .. ..	..	..	..	..	0.86	4.76	2.75
1 " " " " 1939 .. ..	..	..	..	..	0.79	4.77	2.75
1 " " " " 1940 .. ..	..	..	..	..	0.72	4.25	2.48
1 " " " " 1941 .. ..	..	..	..	..	0.77	4.77	2.78
1 " " " " 1942 .. ..	..	..	..	..	0.73	5.38	3.08
1 " " " " 1943 .. ..	..	..	..	..	0.68	6.09	3.40
1 " " " " 1944 .. ..	..	..	..	..	0.73	6.90	3.91
1 " " " " 1945 .. ..	..	..	..	..	0.73	5.90	3.40
1 " " " " 1946 .. ..	..	..	..	..	0.74	5.98	3.45
1 " " " " 1947 .. ..	..	..	..	..	0.70	5.23	3.04
1 " " " " 1948 .. ..	..	..	..	..	0.64	5.59	3.20
1 " " " " 1949 .. ..	..	..	..	..	0.42	4.89	2.74

Other particulars will be found in Tables A to F, on pages 80 to 117 and M to T, on pages 124 to 131.

#### PROVISION OF TREATMENT.

The in-patient accommodation available for cases of pulmonary tuberculosis includes the following (30th June, 1949):—

At the City Hospital, Portsworld Road: 64 beds for Europeans and 84 for non-European females.

At Brooklyn Hospital: 246 beds for non-European males.

At Nelspoort Sanatorium: a varying number. During the year 1948-49, the average daily number of Cape Town cases at the Sanatorium was 37 Europeans and 26 non-Europeans.

At the Native Hospital, Langa: a varying number. During the year 1948-49, the average daily number of cases was 5.4 (all Natives).

The Sunshine Home for Children, Bellville: a holiday home for children in a depressed state of health; reserved for tuberculosis contacts; provides accommodation for 60 Europeans and 42 non-Europeans. During the year, 114 children (66 European and 48 non-European), were admitted; average length of stay was 247 days for Europeans and 299 days for non-Europeans.

The same class of case is admitted to the Eaton and McGregor Convalescent Homes of the Cape Hospital Board. During the year the following cases were admitted to these Homes from the tuberculosis clinic:—

	No.	Average length of stay.
McGregor Home:		
European children .. .. .	7	36 days.
Eaton Home:		
Coloured children .. .. .	5	19 "
Coloured adults .. .. .	9	
European adults .. .. .	1	

Provision for surgical cases of tuberculosis is made in the hospitals of the Cape Hospital Board, the Maitland Cottage Homes and St. Joseph's Home, Philippi.

Particulars of the clinic centres for tuberculosis maintained by the City Health Department are given below.

Part of the approved municipal expenditure on these services is repaid to the City Council by the Union Health Department and the Provincial Administration.

The anti-tuberculosis branch of the City Health Department is under the direction of a full-time tuberculosis officer, whose office, with that of his administrative staff and the tuberculosis health visitors, and the case-worker of the Tuberculosis Care Committee, is at the clinic centre at Chapel Street, Cape Town.

The X-ray examinations of patients from the clinics are made at the City Hospital, Portwood Road. Here the Medical Superintendent (Dr. J. F. Wicht) also conducts a clinic for special cases, particularly those who have undergone artificial pneumothorax as in-patients at the City Hospital or Nelspoort Sanatorium and require periodical refills. The work of this clinic is recorded at page 56.

#### ANTI-TUBERCULOSIS CENTRES.

The central clinic building at Chapel Street, Cape Town, near the boundary between central Cape Town and Woodstock, was brought into use on 3rd January, 1941. It comprises a waiting-room, interviewing room and dispensary, and Care Committee room; an administrative wing, including the Tuberculosis Officer's office, clerical and records office, health visitors' office, staff room and kitchen; and a clinical wing, including 3 clinical rooms, dental room, recovery room, dark rooms, dressing cubicles, X-ray room, developing room and a mass radiography unit.

There is a second special tuberculosis clinic building at Church Street, Wynberg, and tuberculosis clinic sessions are also held at the general clinics at Windermere.

The weekly sessions number 13, viz., 7 at Cape Town (2 for Europeans and 5 for non-Europeans), 4 at Wynberg (1 for Europeans and 3 for non-Europeans) and 2 at Windermere for non-Europeans. In addition, there are 3 sessions held during the month at the Central Clinic, Chapel Street, in the evening from 5 p.m. to 7 p.m. (1 for Europeans and 2 for non-Europeans). These sessions are conducted by the Tuberculosis Officer and part-time consultants.

During the year there were 26,208 attendances at the clinics, and 7,333 persons attended for the first time; the details are shown in the following table:—

				1948-49.		1947-48.	
				New consultations.	Total attendances.	New consultations.	Total attendances.
<i>Cape Town:</i>							
European:	Males	..	..	852	2,251	786	1,965
	Females	..	..	844	2,179	395	1,627
Non-Eur.:	Males	..	..	1,851	7,033	1,280	5,037
	Females	..	..	1,688	5,748	1,249	4,884
Total				5,235	17,211	3,710	13,513
<i>Wynberg:</i>							
European:	Males	..	..	137	565	194	689
	Females	..	..	251	783	115	610
Non-Eur.:	Males	..	..	622	2,853	777	2,940
	Females	..	..	695	2,791	729	2,856
Total				1,705	6,992	1,815	7,095
<i>*Langa:</i>							
Native:	Males	..	..	—	—	33	61
	Females	..	..	—	—	37	72
Total				—	—	70	133
<i>Windermere:</i>							
European:	Males	..	..	—	—	—	—
	Females	..	..	1	1	1	1
Non-Eur.:	Males	..	..	182	973	177	741
	Females	..	..	207	1,025	185	782
Total				390	1,999	363	1,524

\* Closed on 21st February, 1948.



The European attendances increased by 887 and the non-European increased by 3,056. The European "new cases" increased by 594 and the non-European increased by 781.

The total number of medical sessions was 629.

As the main object is diagnosis, the aim is to restrict attendances of those already passed as non-tuberculous and to increase the number of first attendances ("new cases") in search of early or unrecognized disease.

The consultations at the clinics during the year under report are classified in the following table:—

Persons attending for first time.	Europeans.					Non-Europeans.					All races.
	Adults.		Children.		Total.	Adults.		Children.		Total.	
	M.	F.	M.	F.		M.	F.	M.	F.		
Notified :											
Accepted .. ..	53	36	1	1	91	160	114	67	47	388	479
Observation ..	1	—	—	—	1	3	7	8	6	24	25
Not accepted ..	3	2	2	—	7	19	17	2	3	41	48
	57	38	3	1	99	182	138	77	56	453	552
Suspects :											
Notified .. ..	75	67	9	6	157	491	242	88	80	900	1,057
Observation ..	5	9	1	2	17	54	21	11	11	97	114
Non-tuberculous	509	536	108	108	1,261	1,077	1,138	258	242	2,715	3,976
	589	612	118	116	1,435	1,622	1,401	357	333	3,713	5,148
Contacts :											
Notified .. ..	2	4	6	6	18	14	12	40	32	98	116
Observation ..	—	—	1	—	1	—	2	15	11	28	29
Non-tuberculous	107	222	111	99	539	103	282	266	298	949	1,488
	109	226	118	105	558	117	296	321	341	1,075	1,633
Total ..	755	876	239	222	2,092	1,921	1,835	755	730	5,241	7,333

#### NOTIFIED CASES.

Of the 552 cases who presented themselves for examination as the result of notification, 48 (9 per cent) were found to be non-tuberculous.

#### SUSPECTS.

Each year this group includes an increasing number of persons who attend for examination on their own initiative as the result of a general awareness of the menace of tuberculosis and of the advantages of regular X-ray examination.

#### CONTACTS.

At present, contacts in the most susceptible age-groups are not being examined in sufficient number, but all are now examined in a more comprehensive manner since the installation of X-ray facilities at the clinics on 15th April, 1947.

1,633 contacts examined represent 142 per 100 deaths, as compared with the pre-war figure of 178 in England.

*Tuberculous meningitis.*—In the 165 local cases of this condition notified during the year an open case of pulmonary tuberculosis was known or found to have been living in contact with the deceased in 84 cases (i.e. 51 per cent). The infecting agents were mainly father (22), mother (7), brother (5), sister (9) and relatives and friends (41).

*Laboratory examinations.*—The anti-tuberculosis section wishes to acknowledge the accuracy and promptitude with which the Union Health Department provides this service free of cost.

#### NOTIFICATION.

The sources of the notification received during the year under report (including imported infections, i.e. those now resident in the Cape Town municipal area and known to have contracted the disease before arrival) were as follows:—

	Cape Town.	Imported infection.	Langa.	Outside Cape Town cases.	Cases cancelled.	Total.
Private practitioners .. ..	1,016	48	10	47	34	1,155
Consultants .. ..	9	6	—	8	—	23
	1,025	54	10	55	34	1,178
Groote Schuur Hospital ..	241	8	8	75	4	336
Cape Town Free Dispensary ..	41	2	—	—	1	44
Wynberg (Victoria) Hospital ..	23	—	—	14	—	37
Woodstock Hospital ..	14	—	—	—	1	15
Valkenberg Mental Hospital ..	8	—	—	3	—	11
Somerset Hospital ..	79	4	1	28	1	113
Other hospitals and institutions	6	3	1	10	—	20
	412	17	10	130	7	576
City Health Department:						
Anti-tuberculosis Centres ..	350	5	7	12	—	374
City Hospital .. ..	116	3	1	56	—	176
Brooklyn Hospital .. ..	5	—	—	—	—	5
Langa Hospital .. ..	2	—	59	1	—	62
Domiciliary medical service	22	—	—	—	1	23
Other centres .. ..	50	1	—	—	1	52
	545	9	67	69	2	692
Port Health Officer .. ..	1	—	—	8	—	9
Immigration Officer .. ..	—	4	—	—	—	4
	1	4	—	8	—	13
Magistrate, Police and District Surgeons .. ..	16	1	—	6	1	24
From public mortuaries ..	13	1	2	2	—	18
	29	2	2	8	1	42
Transferred from other Local Authorities:						
Cape Divisional Council ..	2	3	—	14	—	19
Others .. ..	4	1	1	4	—	10
	6	4	1	18	—	29
South African Medical Corps ..	10	2	—	8	—	20
Total .. ..	2,028	92	90	296	44	2,550

A study of the origin of notifications emphasizes our dependence on the goodwill of the general practitioners who provide 46 per cent of the total notifications. The number of notifications received from hospitals has decreased as a result of diverting the work of diagnosis from the general hospitals to the tuberculosis clinics, a policy advocated by both the Cape Hospital Board and the City Health Department. A few private practitioners have called upon us to provide fresh tuberculin for the purpose of the Mantoux test, which is so valuable that it should be widely employed in paediatric practice and in child welfare clinics.

The ideal is to examine every notified case. An arbitrary analysis of the primary notifications shows the degree and reasons of failure:—

	Cape Town.	Imported infection.	Langa.
Attended clinic .. ..	1,265	56	20
Failed to attend .. ..	763	36	70
Total .. ..	2,028	92	90
Failure to attend clinic:			
In hospital .. ..	272	16	49
Too ill .. ..	193	11	3
Died before notification ..	45	2	—
First advice through death registration ..	146	2	12
Refusals .. ..	65	—	—
Under private care .. ..	12	2	—
Untraceable .. ..	21	—	2
Moved out of area on notification ..	9	3	4
Total .. ..	763	36	70



Each year the reasons for failing to attend the clinic are tabulated and it will be interesting to see if the number of (1) bedfast cases; and (2) those dead on notification is decreased by the expansion of the work of the clinics (including the introduction of the mass radiography service in April, 1948).

Period.	Total Cape Town cases notified.	Bedfast on notification.	Percentage of total cases notified.	Dead on notification.	Percentage of total cases notified.
1945-46 .. .. .	2,195	168	7.7	298	13.6
1946-47 .. .. .	2,023	214	10.6	236	11.7
1947-48 .. .. .	2,034	224	11.0	182	9.0
1948-49 .. .. .	2,028	193	9.5	191	9.4

In every 5 cases discovered, 1 is beyond any help and has already caused havoc. The presence of large numbers of infectious cases of tuberculosis in our midst maintains its endemicity, the extent of which can be accurately gauged by the number of persons found by the Mantoux test to be infected.

The danger from those at large is obvious and should not be disregarded. Whilst we have 9,000 pulmonary cases in Cape Town and only 500 of them in hospitals, then we shall continue to have an annual crop of 2,000 new cases. It will take a very long time to make up the leeway by merely concentrating on the treatment of early cases, in the few beds available.

The proportion of local notifications who attended the clinic was 62 per cent, and a further 13 per cent were in hospital. However, the proportion of cases who were dying or already dead when first brought to official notice remained at the same discouraging figure as already shown in the table above.

The health visitors cover the whole of their respective districts and also assist at the clinical sessions. Their duties need tact and energy and include advice on rest, isolation, nutrition, the disposal of sputum, disinfection and general hygiene. From the dispensary point of view, their main purpose is to secure the attendance of the notified case and of the contacts. The proportion of refusals will continue to diminish as clinic and hospital facilities are improved.

During the year the visits made by the health visitors were 2,150 (primary) and 20,500 (total) as compared with 2,115 and 20,063 in the previous year.

The City Council provides bread and milk as additional nourishment for indigent cases of tuberculosis. The ordinary daily allowance for a patient is 1 lb. bread and 1 pint milk. 184 new cases were put on this allowance during the year, and the cost of the supplies was £2,021 0s. 1d.

### HOSPITALIZATION.

There is much to be learnt from the table below. The number of patients admitted to hospital in Cape Town from outside the municipal area is a measure of the deficient services in the country areas, and a tribute to the up-to-date treatment in the City Hospital, and the generously broad view that the Department adopts towards those in need of treatment and unable to secure it elsewhere.

Only a quarter of the new cases were admitted to hospital: in those countries which have tackled their tuberculosis problem successfully there is now often a ratio of three beds available to every newly notified case.

	Cape Town.		Langa.		Outside Cape Town cases.
	Local.	Imported infection.	Local.	Imported infection.	
New pulmonary cases notified during the year .. .. .	1,739	88	71	2	200
Known to have had T.B. positive sputum .. .. .	506	33	19	1	—
New pulmonary cases admitted to institutions for treatment of tuberculosis .. .. .	535	28	48	2	129
Proportion of new cases admitted .. .. .	30.8%		68.5%		64.5%
Died before receipt of notification .. .. .	144	4	10	—	—
Died within 1 month of notification .. .. .	203	11	12	—	—
" 1 to 3 months of notification .. .. .	122	8	7	—	—
" 3 to 6 months of notification .. .. .	69	7	3	—	—
" 6 to 12 months of notification .. .. .	98	3	3	—	—

Outside Cape Town cases—Cases admitted to City Hospital or other hospital from outside the municipal area.

The total number of Cape Town cases of pulmonary tuberculosis admitted to institutions during the year are as follows:—

	European.		Non-European.		Total.
	Males.	Females.	Males.	Females.	
City Hospital, Cape Town .. ..	35	46	50	133	264
Brooklyn Hospital, Cape Town ..	—	—	351	—	351
Langa Hospital, Cape Town ..	—	—	36	21	57
Airemount Nursing Home, Cape Town	33	24	—	—	57
Elizabeth Donkin Hospital, Port Elizabeth .. ..	—	—	1	—	1
Infectious Diseases Hospital, Stellenbosch .. ..	1	1	—	—	2
King George V Hospital, Durban ..	1	—	—	1	2
McVicar Hospital, Lovedale .. ..	—	—	5	—	5
Nelspoort Sanatorium, Restvale ..	29	40	24	46	139
Rietfontein Hospital, Johannesburg ..	—	—	1	—	1
Sir Henry Elliott Hospital, Umtata ..	—	—	1	—	1
Sonstraal Hospital, Paarl .. ..	—	—	1	—	1
Springkell Sanatorium, Johannesburg ..	1	—	—	—	1
West End Hospital, Kimberley ..	—	—	10	3	13
Total .. ..	100	111	480	204	895

The main objective of the clinics has not yet been attained; we are not finding and treating the early case. Of the annual admissions to Nelspoort Sanatorium the proportion of Group I cases shown in the table below, was only 27 per cent. The early case does not feel ill and so provides the greatest resistance to the acceptance of six to twelve months in hospital, unless it fortunately happens that he or she has been scared by an haemoptysis.

#### NELSPOORT SANATORIUM.

The Nelspoort Sanatorium is on the Karoo at an elevation of about 3,260 ft. above sea level, and on the main railway line at a distance of 371 miles from Cape Town. It is a Union Government institution and there is an advisory committee, which includes the Mayor, the Town Clerk and the Medical Officer of Health of Cape Town. During the year ended 30th June, 1949, there were 139 admissions of Cape Town municipal patients. Of these admissions 17 were of patients who had had a previous period of treatment in the institution, the number of new cases being 122.

The monthly average number of Cape Town municipal patients in the Sanatorium during the year 1948-49 was 63 (37 Europeans and 26 non-Europeans).

The selection of municipal cases for admission to Nelspoort Sanatorium is made, as to clinic patients by the Tuberculosis Officer, and as to in-patients at the City Hospitals by the Medical Superintendent of Hospitals.

The cases admitted to Nelspoort Sanatorium are classified below according to the stage of the disease:—

	I.	II.	III.	Total.
European: Male .. ..	6	16	7	29
Female .. ..	11	18	11	40
Non-European: Male .. ..	6	7	11	24
Female .. ..	15	20	11	46
All races .. ..	38	61	40	139

#### CARE COMMITTEE FOR TUBERCULOSIS PATIENTS.

The voluntary Care Committee works in close co-operation with the City Health Department. Office and storage accommodation is provided at the municipal anti-tuberculosis centre, and the salary and motor-car allowance of the almoner employed by the Committee are paid by the City Council. Other funds are provided by the King George V Silver Jubilee Fund and the Community Chest.

The work done during the year 1948-49 is indicated by the following statistics:—

Families helped by payment of rent .. ..	144
.. .. maintenance grants .. ..	25
.. .. rent and maintenance grants .. ..	26
.. .. payment of foster-mother .. ..	6
.. .. provision of clothing and blankets .. ..	169
No. of articles of clothing distributed .. ..	648
.. .. blankets distributed .. ..	51
Almoner:	
Visits paid .. ..	1,029
Interviews given .. ..	1,263
New cases handled .. ..	165

*Patient's Friend.*—This is an apt name for the case worker employed by the Care Committee for tuberculosis patients. Almost every adult person incapacitated by tuberculosis needs financial help and the work, although still handicapped by lack of funds, is now well co-ordinated through the help of the General Board of Aid and the Department of Social Welfare. It is an indispensable factor in securing the co-operation of the patient and has increasingly served to keep the patient in hospital for an adequate period and in a contented and hopeful frame of mind.



## MASS RADIOGRAPHY SERVICE.

## HISTORY.

As soon as mass miniature radiography was accepted as a valuable and even essential auxiliary to a case-finding scheme, the Council in 1943 authorized the purchase of the necessary apparatus. At that time it was impossible to secure apparatus from the United Kingdom, and after some delay, a Keleket machine arrived from the United States. The working factors are: 60-100 KV., 50-200 MA., FS., distance 40 inches, screen to film 34 inches, a Morgan-Hodges phototimer, a Fairchild camera with 1.5 lens and a 70 mm. film. A rotating anode allows 500 exposures to be taken in a day. The apparatus can be adapted to take a 14 by 17 in. film by taking the tube back to 52 in. and the use of an aluminium-backed cassette to allow the phototimer to function. After further delay incurred in the adaptation of the small space available at the central clinic in Chapel Street, this apparatus was installed and the service was made available to the public on 13th April, 1948.

Any means which furthers the avowed object of finding the early case and isolating the infectious one must be fully used in any area known to have such a high incidence as Cape Town, as is shown by the figures given below. Mass radiography certainly attains this end.

It would be foolhardy to claim that the diagnosis of pulmonary tuberculosis in the future will be always made sufficiently early but failures will be less frequent and from now on the patient will share the responsibility of the delay if he has omitted to attend for examination with his colleagues.

A return of 11 cases of active tuberculosis in every 1,000 persons examined fully justifies the expense, energy and skill entailed in the work; it is more than double the average figure obtained in many English surveys.

The disadvantages of engendering a false sense of security in those passed as normal and of overburdening the clinics with observation cases is fully realized. It is similarly realized that the evaders are likely to contain a high proportion of persons, who owing to their symptoms suspect that they may be suffering from tuberculosis, but many of the hesitant and laggard are corralled by the refusal to examine a factory group unless the volunteer-rate is over 80 per cent. In several groups the attendance has been 100 per cent.

The success of mass radiography service depends on publicity, and acknowledgment for their help is due to the local Press and South African Broadcasting Corporation. Additional propaganda was provided by a colour film made by Mr. Lewis Lewis and his colleagues in a local insurance company. This has not yet been adequately exhibited to social agencies, clubs, factory groups and welfare organizations. The expense of this production was met by the Tuberculosis Samaritan Fund and at no cost to public funds; unfortunately the Department of Education was not prepared to make a copy of the film in colour.

Mass radiography will never replace the general practitioner in anti-tuberculosis work, in fact, it increases the need for the closest co-operation between the clinic and the family doctor. Concurrently all propaganda teaches the public the early symptoms of tuberculosis and encourages them to attend their own doctor, who should be constantly reminded that no chest examination is complete without an X-ray.

The lack of hospital accommodation reduces the value of the M.R.S., but the revelation of tuberculosis to an individual patient at least allows him to take some preventive measures in the home.

The established routine of recalling for a 14 by 17 in. film all those who show abnormal shadows has been followed. The patient then attends a special session which is held on Saturday morning for the convenience of workers; a full history is taken and physical and bacteriological examinations are carried out and finally a tuberculin test is applied. If the abnormality is considered to be due to tuberculosis, the patient is then referred to the tuberculosis clinics.

It should be noted that no effort has been made to X-ray large groups of children under the age of 15. The age-group 5-15 years is known to provide a minimal incidence of progressive tuberculosis. If an enlightened principal of a school has occasionally requested the examination of pupils, they are first submitted to a Mantoux test and only the reactors are X-rayed.

The examinations have been carried out in working time and the M.R.S. is deeply indebted to employers and their welfare officers for their co-operation which has largely prevented hardship to employees by allowing observation cases to continue work, by financially aiding the unfit and assuring them of re-employment on recovery.

A most successful scheme has been introduced by the Industrial Council for the Printing and Newspaper Industries of South Africa, whereby all employees receive 80 per cent of their wages on condition that they accept adequate treatment for their tuberculosis. Since its introduction no patient in this group has refused hospital or sanatorium treatment.

## PROCEDURE.

The organizing clerk actively solicits the attendance of employees by contact with the employer, welfare officer, trade union or industrial councils; appointments are staggered in the larger groups to reduce the operating time to a minimum and 60 persons at a time are brought up by a shuttle service at reduced rates through the goodwill of the local transport company.

The first session of the day at 8.30 a.m. is reserved for pre-employment examinations, which have been welcomed by several large firms on the grounds that their workers should not be exposed to massive infection in the factory and that the entry into pension schemes and sick benefit societies of persons with undisclosed disease is thereby prevented.

It appears a rational step to insist on an X-ray examination as a preliminary condition to employment and this procedure has been already adopted by a few organizations including the City Council of Cape Town, the printing industry and a leading tobacco firm. Legislation has been introduced in several countries to ensure the compulsory radiological examination of all those who by their occupation might endanger the health of children, e.g. teachers.

## RESULTS.

The following table shows the number of examinations, classified according to sex and race, carried out during the year ended 30th June, 1949:—

European.		Non-European.		Total.
Males.	Females.	Males.	Females.	
6,420	4,129	7,353	2,500	20,402

Recalled for further examination: 900 (359 Europeans, 541 non-Europeans).  
Number of patients who attended for large films (14 by 17 in.): 868.

A final diagnosis of active tuberculosis was made in 238 cases as follows:—

	European.		Non-European.		Total.
	Males.	Females.	Males.	Females.	
Pulmonary tuberculosis ..	36	18	160	24	238
Under observation ..	10	10	54	11	85
Incidence of active tuberculosis per 1,000 persons examined .. ..	5.1		18.7		11.7

## SECTION VII—VENEREAL DISEASES.

(PREPARED BY DR. C. K. O'MALLEY, M.C., M.B., B.Ch., B.A.O., M.Sc. (Hon. Causa.) (NUI.), D.M.R.E. (CMB.), VENEREAL DISEASE OFFICER.

## EPIDEMIOLOGY.

This, the third year of the Penicillin era, shows no decrease in the number of new cases of venereal disease reporting for the first time in the municipal area. Indeed, there is a slight increase over the corresponding number for last year. Yearly variations, however, are to be expected and are probably without any statistical significance.

The number of new cases registered at the various clinics for the year ending 30th June, 1949, was 5,852.

Table I analyses this figure into its components according to race, sex and disease.

TABLE I.—CLASSIFICATION OF NEW CASES ACCORDING TO RACE, SEX AND INCIDENCE RATE PER 1,000 POPULATION.

	Cases.	Rate per 1,000 population.
<i>Race :</i>		
European .. .. .	732	3.8
Non-European .. .. .	5,120	23.3
<i>Sex :</i>		
Male .. .. .	2,823	13.8
Female .. .. .	3,029	14.4
<i>Disease :</i>		
Syphilis .. .. .	2,778	6.7
Congenital Syphilis .. .. .	608	1.5
Gonorrhoea .. .. .	1,385	3.3
Other venereal diseases .. .. .	120	0.3
Non-venereal diseases .. .. .	799	1.9
Undiagnosed .. .. .	162	0.4
All new cases .. .. .	5,852	14.1

The usual rate of one European case to seven non-Europeans is maintained. On the other hand, there is no significant difference in the number of new male cases as compared with the number of new female cases. Syphilis is the most common of all the venereal diseases, if these figures are taken as representing the true state of affairs. Congenital syphilis, though entirely preventable, accounts for almost one-fifth of all the new cases of syphilis of all types, and is almost entirely confined to the non-European element. Congenital syphilis amongst Europeans is relatively uncommon. Firstly, perhaps because there are so fewer illegitimate European children, and secondly because the pregnant European mother is more likely to avail herself of the facilities for ante-natal care than the non-European. The rarer venereal diseases such as lympho-granuloma and granuloma inguinale are not often seen. The writer does not remember ever having seen a proven case of the latter in the last 20 years!

Other points in Table I. demanding attention are:—



- (1) The number of cases who reported for examination, but who were found not to be suffering with a venereal disease, is gratifyingly high—799 out of 5,852, that is, 13.7 per cent. If ALL the cases who came to the clinic were found to have a venereal disease, it would be logical to assume that there were many more sufferers who stayed away. But when a large number make use of our service on the slightest suspicion of anything wrong, it means that the population in general is aware of the importance of early treatment.
- (2) The TRUE incidence rate for diagnosed cases of venereal disease, that is, the rate obtained by omitting those found not to have a venereal disease and those remaining undiagnosed, is 11.8 per thousand population, and this is made up in the following manner:—

Europeans .. .. .	2.6
Non-Europeans .. .. .	20.0

TABLE II.—COMPARISON BETWEEN THE EUROPEAN VENEREAL DISEASE INCIDENCE RATE OF CAPE TOWN WITH THAT OF OTHER CITIES.

	Population.	New cases, 1948.	Rate per 1,000 population.
Glasgow .. .. .	1,110,000	7,554	6.8
Montreal .. .. .	1,151,670	6,198	5.4
Sydney .. .. .	1,603,024	3,871	2.4
Cape Town .. .. .	194,050	732	3.8

That the incidence of venereal disease amongst the European population of Cape Town is not alarmingly high, is evident from Table II which gives the incidence rate of several cities compared with that of the European population of Cape Town. All the same, Table III shows that the general incidence of venereal disease remains approximately at the same level, and that despite all efforts to educate the public and supply its needs. It looks as if there will always be a residue of illness, preventable though it may be, due to man's inherent inability to learn from past events, save through the channel of bitter experience. No drug, no matter how miraculous, will of itself lessen the incidence of venereal disease, which is fundamentally due to lack of control of the sex instinct and its insistent demand for satisfaction. Penicillin has achieved wonders in the treatment of syphilis but though it can, and does, destroy the causative germs of the disease it does not alter man's inherent impulse to satisfy his sexual appetite. In the long run it is this urge which leads to promiscuity. And these are the circumstances in which sexually acquired diseases thrive and are perpetuated. If it were possible to give all and sundry even a short course of penicillin treatment, supposing for a moment such a gigantic social experiment were possible, venereal diseases could be exterminated. As in politics, as in state relations, so with our problem, the main obstacle to overcome is man's own intransigence and his lack of will power to surmount the obstacles in his path. The means are at hand to conquer the venereal diseases, only man's inability to save himself is lacking.

TABLE III.—INCIDENCE RATE OF VENEREAL DISEASE DURING THE FIFTEEN-YEAR PERIOD 1935-49.

Year ended 30th June.	Total new cases.	Population.	Rate per 1,000 population.
1935 .. .. .	3,746	293,249	12.8
1936 .. .. .	3,598	293,180	12.1
1937 .. .. .	3,971	300,800	13.2
1938 .. .. .	4,007	308,429	13.0
1939 .. .. .	4,537	315,398	14.4
1940 .. .. .	4,212	322,813	13.1
1941 .. .. .	3,623	320,164	11.4
1942 .. .. .	4,152	326,250	12.5
1943 .. .. .	4,099	331,726	12.4
1944 .. .. .	4,897	337,152	14.6
1945 .. .. .	3,591*	356,940	10.1
1946 .. .. .	4,854*	362,762	13.4
1947 .. .. .	5,318*	390,549	13.6
1948 .. .. .	4,733*	401,728	11.8
1949 .. .. .	4,891*	413,729	11.8

\* Excluding non-venereal and undiagnosed cases.

Up to 1949 there were five municipal centres at which free advice and treatment were given to anyone concerning venereal disease. In this year a notable addition was made. A new clinic was built at Retreat which provided free medical and surgical advice and treatment to all. This achievement was accomplished by the civic sense and initiative of the medical students group attending the University of Cape Town. Aided by their own Students' Rag, the Red Cross and Toc H, they erected a clinic of practical design on land granted them by the City Council of Cape Town. All those who contributed to the fruition of this altruistic, though practical, conception are to be warmly congratulated not only for the material wants which they helped to fulfil but for the selfless motives which prompted their actions. The Students' Committee placed their premises at the disposal of the Medical Officer of Health for conducting sessions for the treatment of venereal disease. Retreat is a large non-European residential area and numerous patients from there attended the municipal centre at Wynberg at some cost and inconvenience. The establishment of a centre in their own area will prove of great benefit to these needy patients and the Health Department is under a deep obligation to the Students' Committee for their thoughtful and generous gesture.

Table IV gives the number of new patients registering at the various clinics throughout the municipal area together with the number of "attendances" or consultations given. It should be noted that Windermere and Langa deal only with non-Europeans. The new clinic at Retreat had not begun to receive venereal disease patients by the end of June, 1949.

TABLE IV.—NUMBER OF NEW CASES AND ATTENDANCES CLASSIFIED ACCORDING TO THE LOCALITY OF THE MUNICIPAL TREATMENT CENTRES.

Centre.	New cases.	Attendances.
City Hospital, Portsworld Road .. .. .	1,712	21,258
Salt River .. .. .	1,693	28,127
Wynberg .. .. .	1,184	18,429
Windermere .. .. .	462	4,994
Langa .. .. .	82	1,073
Pre-natal clinics (at child welfare centres) .. .. .	719	4,743
Totals .. .. .	5,852	78,624

A start was made in erecting the new clinic at the City Hospital, Portsworld Road, in January, 1949, when the site was handed over to the contractors. This represents the fruition of a long projected scheme, as the present building had long since become inadequate and was ill-suited to deal with the large number of patients. The physical contours of Cape Town make the choice of location of public clinics rather difficult. Cape Town is a long-drawn-out narrow city with a central area devoted to business premises and a string of far-flung suburbs. Though the City Hospital is not centrally situated, it is accessible by bus both from Cape Town on the one hand and the residential suburbs of Green Point and Sea Point on the other.

A detailed analysis of all new cases registered during the year is presented in Table V. The classification follows that advocated by the Union Health Department for the compilation of their statistics, though the subdivision of attendances into diagnostic groups seems to the writer to be both unnecessary and valueless.

TABLE V.—NEW CASES AND TOTAL ATTENDANCES, CLASSIFIED ACCORDING TO DIAGNOSIS, SEX AND RACE.

Disease.	New cases.					Total attendances.				
	European.		Non-European.		Total.	European.		Non-European.		Total.
	Male.	Fe-male.	Male.	Fe-male.		Male.	Fe-male.	Male.	Fe-male.	
1. Seronegative primary syphilis .. .. .	12	3	42	58	115	236	26	1,403	222	1,887
2. Seropositive primary syphilis .. .. .	21	3	173	43	240	469	116	5,105	447	6,137
3. Secondary syphilis .. .. .	38	10	240	278	566	791	488	6,273	6,127	13,679
4. Tertiary syphilis (1) .. .. .	12	8	95	110	225	233	222	1,861	1,921	4,237
5. Endosyphilis (2) .. .. .	18	47	195	1,309	1,569	506	991	5,360	17,211	24,068
6. Neurosyphilis .. .. .	10	—	32	22	64	357	73	777	214	1,421
	111	71	777	1,820	2,779	2,592	1,916	20,779	26,142	51,429
7. Congenital syphilis (under 1 year) .. .. .	1	6	74	408	489	30	80	1,155	3,727	4,992
8. Congenital syphilis (over 1 year) .. .. .	—	8	16	94	118	28	341	1,045	3,318	4,732
Total syphilis .. .. .	112	85	867	2,322	3,386	2,650	2,337	22,979	33,187	61,153
9. Gonorrhoea .. .. .	245	38	949	112	1,344	1,205	328	7,303	717	9,553
10. Gonococcal vulvovaginitis .. .. .	—	3	—	36	39	—	34	—	143	177
11. Gonococcal ophthalmia .. .. .	—	—	—	2	2	—	—	—	5	5
Total gonorrhoeal infections .. .. .	245	41	949	150	1,385	1,205	362	7,303	865	9,735
12. Ulcus molle .. .. .	17	—	96	4	117	24	15	287	22	348
13. Lymphopathia venereum .. .. .	—	—	1	—	1	—	—	5	—	5
14. Granuloma venereum .. .. .	—	—	—	—	—	—	—	—	—	—
15. Venereal warts .. .. .	—	—	2	—	2	—	—	15	—	15
16. Phagedaena .. .. .	—	—	—	—	—	—	—	—	—	—
Total venereal diseases .. .. .	374	126	1,915	2,476	4,891	3,879	2,714	30,589	34,074	71,256
17. Non-venereal disease .. .. .	191	25	277	306	799	349	86	689	1,018	2,142
18. Undiagnosed .. .. .	10	5	37	110	162	400	154	2,068	2,604	5,226
	575	156	2,229	2,892	5,852	4,628	2,954	33,346	37,696	78,624

(1) Clinically recognizable.

(2) Diagnosed on result of serological test alone.



There are certain points in Table V which merit special attention, apart from the predominance of non-European over European patients, which has already been mentioned, but which the figures in Table V emphasize to an astounding degree.

- (1) There were 3,386 cases of syphilis diagnosed out of a total of 5,852 cases registered, of these only 197 were Europeans.
- (2) Early cases of syphilis, that is to say, syphilis in a contagious communicable form, are represented by the diagnoses 1, 2 and 3. In this group there were 921 individuals, only 87 being Europeans—not a large number from a European population of 194,050.
- (3) The largest single diagnostic group is that represented by non-European females, 1,309, whose only sign of syphilis was the fact that a blood test had given a positive reaction characteristic of syphilis. None of these patients had any symptoms of syphilis, so that if a routine blood test had not been done, these individuals would have gone on having children liable in their turn to become infected.
- (3) The number of discovered congenital syphilitic children is large, and the proportion of non-European to Europeans in this group is indicative of the prevalence of syphilis amongst the coloured section of our community. Out of 607 diagnosed cases of congenital syphilis 15 were Europeans and 592 non-Europeans. Unfortunately there are good grounds for assuming that many unfortunate children afflicted with syphilis are never recognized as such, or are only discovered later on in life when irreparable damage has been done to vital organs, and ineffaceable stigmata have left their mark.
- (4) Gonorrhoea in Cape Town is represented by 1,385 cases. This figure by no means represents the true volume of this disease. To-day, thanks to the rapid curative action of penicillin, it is no longer a public health problem. Treatment is so simple that no doubt hundreds of cases are treated by private practitioners and thus their records are lost to us. Males predominate in this disease group, 1,194 compared to 191 females. Now the reason for this disparity is not far to seek. The disease is more noticeable to the male than to the female. Hence he is more likely to run to his doctor for advice and treatment. The female on the contrary, looks upon the symptoms and signs of the disease as natural phenomena, or at least she does not regard them as of serious import. In other parts of the world, notably in population groups who are educated on public health matters, gonorrhoea is usually more common than syphilis. It is gratifying to note the few cases of gonorrhoea in little girls (diagnosis 10) and the very rare occurrence of gonorrhoeal ophthalmia (diagnosis 11).
- (5) Soft chancre (diagnosis 12), so common in some communities, is not so in Cape Town. There were only 117 cases of which only 4 were females. Soft chancre in itself is nowadays a trivial complaint. Its importance lies in the fact that it must be distinguished from syphilis and, for that, at least three months' observation and repeated blood tests are necessary.
- (6) The remaining venereal diseases, lymphopathia venereum and granuloma venereum are not common in Cape Town. The writer has never seen a case of the latter disease nor has one been reported for many years in other parts of the Union. Both are disfiguring and potentially dangerous diseases, but are now robbed of a lot of their danger by the curative action of the newer antibiotic drugs such as aureomycin and chloromycetin.
- (7) The number of individuals found NOT to be suffering from a venereal disease (though attending at one or other of the clinics for a suspected infection) is large—as high as 799. This is all to the good. It means that these individuals were either sent or induced to attend for investigation because a venereal disease was suspected, or perhaps because such and such a person was a contact of a known venereal patient. We welcome this large attendance of non-venereal patients as an index of awareness about the possibility of infection under certain conditions, and the availability of a free service to determine the presence or absence of the suspected infection.
- (8) In the category "18" of Table V are listed those patients who remain undiagnosed at the end of the year. This does not mean these 162 individuals are suffering from some condition which baffles investigation, but simply that at the end of June, 1949, sufficient data were not to hand to warrant a precise classification in certain cases. Most of them are subsequently classified. A few default so soon after their initial attendance that they remain permanently undiagnosed.

#### HOSPITAL TREATMENT OF VENEREAL DISEASE.

The majority of cases admitted to the venereal wards are suffering from a venereal disease in an infectious and communicable form. A directive from the Union Health Department lays down, in fact, that only such cases shall be admitted for treatment for which a refund is claimed. As a financial provision this is no doubt commendable. But the wider outlook, that all types of syphilis, for example, could be admitted, would provide excellent opportunities for the clinical study of the numerous aspects of this ubiquitous disease. One would not of course admit to ordinary venereal disease wards cases of advanced general paralysis of the insane. But early cases of G.P.I. and such cases as tabes, optic atrophy, syphilis of the liver, bones, etc., could with great advantage be grouped and studied in the one institution. Penicillin is the drug of choice in syphilis to-day. It is safe and free from dangerous toxic effects. It is effective in varying degree in all types and in all stages of syphilis. The proper evaluation of this splendid drug could be made by observing its effects in different clinical types of syphilis, were such types available for study.

Early cases of syphilis were treated by a combination of penicillin, arsenic and bismuth. For hospital cases crystalline penicillin G, dissolved in sterile saline solution is the form of penicillin chosen. This choice is determined by the availability of supplies, and this particular form of the drug is available in large quantities. The total dosage depends on the body weight and is administered by intramuscular injection at 3-hourly intervals over a period of approximately 10 days. The normal adult receives a total dosage of 3 million to 5 million units, children and infants proportionately less. Every third day an intravenous injection of a standard arsenical drug is given intravenously and an insoluble bismuth preparation is given once weekly. The individual doses in both these instances are determined by the weight of the individual patient. After the patient is discharged from hospital, treatment is continued for a varying period, depending on the type of case, with weekly injections of an arsenical and bismuth. The patient is then placed under observation for a two-year period, during which time numerous tests are carried out on the blood and spinal fluid to establish the fact of cure.



Statistical surveys made from time to time show that a high percentage of cures are obtained in such cases. But it is important to realize at the same time that a percentage of failures seems to be an inevitable accompaniment of syphilis therapy.

TABLE VI.—ADMISSION OF V.D. CASES TO HOSPITAL CLASSIFIED ACCORDING TO DIAGNOSIS, SEX AND RACE.

Disease.	European.		Non-European.		Total.
	Male.	Female.	Male.	Female.	
1. Seronegative primary syphilis .. .. .	6	—	5	—	11
2. Seropositive primary syphilis .. .. .	8	2	15	3	28
3. Secondary syphilis .. .. .	23	2	60	173	258
4. Tertiary syphilis (1) .. .. .	4	—	6	1	11
5. Endosyphilis (2) .. .. .	3	—	3	5	11
6. Neurosyphilis .. .. .	3	1	1	1	6
7. Congenital syphilis (under 1 year) .. ..	—	—	8	6	14
8. Congenital syphilis (over 1 year) .. ..	—	1	4	4	9
Total syphilis .. .. .	47	6	102	193	348
9. Gonorrhoea .. .. .	3	—	18	3	24
10. Gonococcal vulvovaginitis .. .. .	—	2	—	—	2
11. Gonococcal ophthalmia .. .. .	—	—	—	—	—
Total gonorrhoeal infections .. .. .	3	2	18	3	26
12. Ulcus molle .. .. .	—	—	2	2	4
13. Lymphopathia venereum .. .. .	—	—	—	—	—
14. Granuloma venereum .. .. .	—	—	—	—	—
15. Venereal warts .. .. .	—	—	—	—	—
16. Phagedaena .. .. .	—	—	—	—	—
Total venereal disease .. .. .	50	8	122	198	378
17. Non-venereal disease .. .. .	—	—	—	3	3
18. Undiagnosed .. .. .	—	—	—	—	—
Grand total .. .. .	50	8	122	201	381

(The actual number of individuals was 376 as some patients had more than one disease.)

(1) Clinically recognizable.

(2) Diagnosed on result of serological test alone.

Every endeavour is made to keep well abreast of modern trends in therapy—not always with unqualified success. Penicillin is used in vast quantities in other countries. Supplies of the later penicillin preparations are not available in such quantities in South Africa though the tendency is to rely more and more on this drug in the treatment of all kinds of syphilis. No dangers arise from its use and this makes it the treatment of choice in such conditions as syphilis in pregnant women, where it not only almost guarantees an infant free from syphilis but does so without any risk to the mother.

In the accompanying table, Table VI, it is evident that the non-European female with early contagious syphilis is the most frequent type of in-patient. Non-European males are more reluctant to leave their work. And the same can be said of Europeans of both sexes, who scarcely figure in the details of hospital admissions.

#### CONTACTS.

Only 96 alleged contacts were reported to the Medical Officer of Health during the current year. This is a ridiculously small quota of the 5,852 new patients registered during the year. Of course many other contacts may have been induced to attend the clinics by other methods. Table VII illustrates only those who were officially notified, thus rendering them liable to prosecution under the Public Health Act.

TABLE VII.—NUMBER OF CONTACTS OF PATIENTS SUFFERING FROM VENEREAL DISEASES IN A COMMUNICABLE FORM REPORTED TO THE MEDICAL OFFICER OF HEALTH AND DEALT WITH ACCORDINGLY.

Number of contacts reported .. .. .	96
Number of such contacts who reported for examination .. .. .	47
Number of those who attended found to be suffering from a venereal disease .. .. .	33

No effort should be spared in endeavouring to trace contacts in every case of a venereal disease. So many young people, however, profess to have no knowledge of the identity of their sex partners! Promiscuity with unknown people is a commonplace event with both sexes in Cape Town. Sometimes only one name of the sex partner is known but not the address. Indeed, it is not uncommon for a young couple to be consorting for weeks on end without anything but the vaguest idea of each other's identity.



## DEFAULTERS.

Action is taken in every case of default from treatment. In the case of females a visit is made to the patient's home by one of the female nurse/visitor staff. Each of these ladies has her own particular district and in the course of time she comes to know all the patients residing in her visiting area. At the first visit the patient is advised to re-attend for her own good, but subsequently, especially if a warning notice has been issued by the Medical Officer of Health, a sterner line is taken and the defaulter is informed of the possible legal consequences of continuing to absent herself from treatment. Only when the patient is suffering from a venereal disease in a communicable form is such a course followed.

In the case of males no home visits are made. Instead, a special form of letter is sent urging the defaulter to return to the clinic. If this produces no response after two more attempts, a statutory warning notice is delivered by personal service to the defaulting patient. The next step, in the event of further non-compliance, is to report the defaulter to the magistrate. This course, however, is only adopted when the person in question is suffering from a disease in a contagious communicable form.

The accompanying table, Table VIII, shows the number of defaulters who were dealt with as described in the above paragraph.

TABLE VIII.

Home visits to female defaulting patients . . . .	7,169
Letters to male defaulting patients . . . . .	5,928
Referred to magistrate under Public Health Act . . . .	104

## ORGANIZATION.

The permanent medical staff of the V.D. Branch comprises two full-time medical officers, who do not engage in private practice, the Venereal Diseases Officer and the Deputy Venereal Diseases Officer. They are assisted by several part-time medical officers who conduct some of the sessions and are remunerated accordingly. The schedules of treatment and the general management of patients are controlled by the Venereal Diseases Officer and every endeavour is made to keep abreast of the rapid increase in our knowledge and methods for combating venereal disease. The drugs used in treatment are supplied free by the Union Health Department, but as the source of supply is the Central Medical and Veterinary Stores situated in Pretoria, the arrangement inevitably leads to delays. An alternative which recommends itself on the grounds of expediency, would be for the chief pharmacist of the Cape Town Health Department to indent directly on those firms who had secured the Government contracts. These indents could be countersigned by the chief Union medical officer of the district—in this case the Deputy Chief Health Officer stationed in Cape Town.

Penicillin is gradually replacing arsenic and bismuth in the treatment of syphilis. Some authors go so far as to say that the latter drugs have no longer any role in the management of this disease. Though it is true that excellent results were obtained in the pre-penicillin era, treatment was so prolonged that few stayed the course and although failures are also met with when penicillin is employed, the overall results are better since treatment is completed much more rapidly and far more patients attend till this is accomplished.

Plentiful supplies of penicillin, especially of procaine penicillin in oil, are indispensable nowadays if full benefit is to be reaped of the most recent advances in the therapeutic control of venereal disease.

In addition to the Venereal Diseases Officer, and the Deputy Venereal Diseases Officer, the V.D. Branch comprises the following permanent members:—

Six nurse-visitors: These ladies perform technical duties at the female sessions, visit defaulting patients at their homes or places of work, and trace female contacts.

Five male nurses or technical assistants who attend at the male sessions and in addition carry out ward duties in the male wards. The general supervision of this staff is under a senior male nurse. The Kahn tests and a great deal of microscopic work are performed by members of the permanent staff, who are highly proficient at this type of work.

Two caretaker/assistants stationed at Salt River and Wynberg, respectively, are responsible for the maintenance of their buildings and the requisitioning of the medical and other supplies. In addition they perform certain technical duties during the medical sessions.

Part-time medical officers conduct some of the medical sessions which are too numerous for the two permanent medical officers to deal with themselves. They receive a fee for each session and while each doctor is personally responsible for the medical care of his own patients, the general standards of treatment and management are laid down by the Venereal Diseases Officer.

In order to expedite the handling of venereal disease cases microscopic examinations are performed at each centre so as to arrive at a diagnosis as early as possible.

TABLE IX.—NUMBER OF PATHOLOGICAL EXAMINATIONS CARRIED OUT IN VENEREAL DISEASES BRANCH.

	Positive.	Negative.	Doubtful.	Total.
Number of dark-ground examinations for Sp. Pall . . . .	544	345	—	889
Number of smear examinations for gonococci . . . . .	1,375	201	—	1,576
Number of blood sera tested by Kahn test . . . . .	1,733	1,176	390	3,299

In addition, the Kahn test for syphilis is carried out at the City Hospital venereal diseases clinic by Mr. Austen, a member of the male nursing staff.

The accompanying table shows the volume of work done at the various clinics, which otherwise would have to be done by the Government Laboratory. It is an accepted standard, in any case, that no service purporting to diagnose and treat venereal diseases should be without a microscope specially equipped for dark ground illumination.

The general standards of treatment and diagnosis which are in force in the venereal diseases service in Cape Town are similar to those which obtain in centres overseas. Close attention is paid to the special literature in order to follow as closely as possible the most recent development in this field.



## SECTION VIII—CITY HOSPITALS.

(PREPARED BY DR. J. F. WICHT, M.A., M.D., D.P.H., F.C.C.P., T.D.D., MEDICAL SUPERINTENDENT OF HOSPITALS).

The City group of hospitals consists of the following institutions:—

- (1) The City Hospital for Infectious Diseases, situated in Portswood Road, Cape Town.
- (2) The Brooklyn Hospital for Chest Diseases at Koeberg Road, Maitland. In previous reports this was called Rentzkie's Farm Hospital but it was considered desirable to change the name in December, 1948.
- (3) Langa Native Hospital, situated at Langa Native Township.

Each of these institutions will be dealt with in its special section.

The staff at the City Hospital, Portswood Road, and at Brooklyn Hospital, Koeberg Road, are shown on page 78.

## CITY HOSPITAL FOR INFECTIOUS DISEASES, PORTSWOOD ROAD.

The hospital is situated near the North Gate of the docks and is bounded on the south-western side by the Green Point Sports Ground. The Somerset Hospital, forming the north-eastern boundary, is separated from the hospital by a road. The north-western boundary is a piece of ground laid out in tennis courts by a sports club, while Portswood Road forms the south-eastern boundary. The total area of the hospital ground is 7½ acres.

The first buildings were erected in 1899 and were occupied by the military authorities during the Boer War until 1902, when the hospital was re-occupied by the Municipality and opened for the isolation and treatment of infectious diseases. It has since been gradually extended.

The hospital provides accommodation for 430 patients. Ordinarily, patients suffering from the following diseases can be admitted to the hospital: enteric fever, diphtheria, erysipelas, puerperal fever, cerebrospinal fever, acute anterior poliomyelitis, infective encephalitis, and, except when unusually prevalent, scarlet fever. Cases of other infectious diseases are admitted for special medical or social reasons. Accommodation is also provided for cases of pulmonary tuberculosis and venereal diseases. Since October, 1943, all non-European males suffering from tuberculosis are treated at Brooklyn Hospital, the whole of the non-European tuberculosis wards at Portswood Road being thus made available for females.

The medical staff (June 30th, 1949) consists of medical superintendent, deputy medical superintendent, one resident medical officer and two house physicians. The house physicians are changed every six months.

The hospital provides a six-months' training course for registered nurses in preparation for the South African Nursing Council's examination for fever nurses. A scheme is also in operation by which probationer nurses who are undergoing their general training in Cape Town spend three months at the City Hospital, during which time they receive instruction in fever nursing.

The staff of registered nurses and trainees is augmented by unregistered nursing assistants. A proportion of the nursing staff consists of non-European women.

Visits to patients are allowed twice weekly (on Wednesdays and Sundays). Children under 16 years are not allowed and visitors to the infectious blocks remain outside the ward and converse with the patients through the windows. In cases of dangerous illness near relatives are allowed to enter the ward, and special precautions are taken to avoid infection.

## A NOTE ON TETANUS.

Reference to the annual reports of the City Health Department shows that patients suffering from tetanus are admitted to the City Hospital.

It is obviously in the interests of these patients that they should be attended to in a hospital in which both medical and nursing staffs have had special experience in treating the disease. At the City Hospital a system of treatment has been evolved and immediate steps are taken to control the disease. These may be summarized as follows:—

- (a) Prevention of spasms by sedation and by excluding stimuli, e.g., the patient is nursed in a darkened room where noise is reduced to a minimum. A nurse is in constant attendance.
- (b) The administration of adequate doses of tetanus antitoxin. The intrathecal route is no longer used and the serum is given either by the intravenous or by the intramuscular route. The latter method is chosen in mild cases with no spasms; in more severe cases, part of the dose may be injected into the vein, the remainder being given into the muscles, preferably in the vicinity of the wound. In urgent cases intravenous administration of the total dose (about 240,000 units) is necessary. The patient should first be tested for serum sensitivity, and if sensitive, the intramuscular route should be chosen. When the serum is given intravenously it should be diluted with warmed saline and should be allowed to flow in slowly. Adrenalin should always be at hand in case of anaphylactic shock. It may be advisable to give a general anaesthetic when administering serum.
- (c) The treatment of the wound with a view to preventing the continued formation of tetanus toxin, e.g., by irrigation with hydrogen peroxide, by opening up punctured wound, and where necessary by removing foreign bodies. As septic wounds favour the growth of the tetanus organism, routine injections of penicillin are given. These are also of benefit in preventing lung complications in deeply drugged patients. The presence of a foreign body in the wound may lead to relapse owing to the maturation of a fresh crop of tetanus spores. One example of this was seen in a boy of about ten years of age, whose tetanus was caused by a wound in the calf of the leg, inflicted by a home-made hockey stick. He left hospital cured of the attack of tetanus, but with the wound unhealed. A fortnight later he was re-admitted with similar symptoms and again responded to treatment. During convalescence the wound was probed and a large splinter about three-quarters of an inch long was extracted.

It should be noted that cases of tetanus tend to fall into one of three categories:—

- (a) Those in which a minimal amount of toxin has been formed and which will respond favourably to small amounts of antitoxin. In these cases spasms are usually absent, or if present are



mild. It is highly probable that mild cases occur with spontaneous recovery. A note of warning is necessary. Although a patient with tetanus may not appear to be seriously ill when first seen, a rapid deterioration may occur in spite of antitoxin treatment. Spasms may set in and the clinical picture may change in a few hours. This is due to the action of toxin which has combined with the central nervous system and which cannot be dislodged by the action of the antitoxin.

- (b) Severe cases in which a lethal dose of toxin has combined with the central nervous system. These are hopeless and will not respond to treatment. They are usually characterized by a short incubation period and, what is more important, a short invasion period, i.e., the time between the onset of muscular stiffness and spasms is short. Occasionally a spasm may be the first symptom. If the spasms are controlled by deep sedation the patient dies of tetanus toxæmia with bulbar symptoms, such as hyperpnoea. Hyperpyrexia is a common terminal event. It is of course necessary to try and save these patients but to the experienced observer the prognosis is only too obvious.
- (c) Cases in which careful sedation and adequate doses of antitoxin will save the patient's life. These test the skill of both physician and nurse. Under-sedation may lead to a sudden fatal spasm, while over-sedation spells pulmonary complications.

A wide variety of sedatives may be employed, from bromide and chloral mixtures to intravenous pentothal, according to the needs of the case, though morphia is contra-indicated. Sedatives should be given with the purpose of relaxing the patient's muscles and preventing spasms. On no account should they be given at set intervals. An intelligent nurse can be trained to give the sedative when signs of restlessness threaten, and what is equally important, withhold the dose when the patient appears to be suitably drugged. A clock-watching nurse is a dangerous person—I have known nurses who watch a patient in spasm and who wait until the hands of the clock reach the hour before giving the patient his sedative. Not infrequently a sudden spasm causes death from laryngeal obstruction. To avoid this it has been suggested that tracheotomy should be performed in advance but this appears to be an extreme measure.

It is gratifying to be able to record that the newly discovered refined products of curare give excellent relaxation and enable much lighter sedation to be practised, thus minimizing the danger of pulmonary complications.

The nature of the wound through which the tetanus bacillus enters varies from an almost imperceptible scratch to a serious laceration of the tissues. Reference to the literature of the subject shows that tetanus may follow wound infected by soil, especially in highly manured agricultural areas, that it is not infrequent after gunpowder burns, and that a host of substances such as Fullers Earth, imperfectly sterilized tow used for vaccination pads, catgut sutures and commercial gelatin may contain the spores.

At the City Hospital the following types of wound have been noted: punctured wounds of the feet caused by nails, etc. (these have a high mortality rate), injuries to the fingers while pruning plants, dog bites, wounds containing foreign bodies such as wooden splinters, pieces of glass or bone, impetigo contagiosa (a fatal case), old syphilitic ulcers over the tibiae, and minor scratches especially on the feet. In some cases no wound could be found and an internal lesion was postulated.

Two puerperal cases were noted—one following criminal abortion (fatal) and the other after full-time delivery (recovered). Cases of tetanus neonatorum from umbilical infection were not infrequent in Coloured and African children, and the death rate in these was high.

As regards minor injuries, a particularly sad case occurred in a young girl of 18 years of age who barked her shin on the stairway of the public building in which she worked, and who died of tetanus ten days later. Her symptoms began suddenly in the early hours of the morning when she found herself unable to swallow. A state of generalized spasm followed and she died about 48 hours later.

In many cases the infection could have been prevented by a prophylactic injection of tetanus antitoxin at the time the wound was sustained, or by previous active immunization. On the other hand, many of the injuries were so slight that medical advice was not sought.

The conscientious practitioner is often in doubt as to whether a particular wound warrants the injection of antitoxin which may give rise to serum sickness or even to anaphylaxis. The latter condition is extremely rare, and even the severest serum sickness is preferable to an attack of tetanus.

All wounds contracted in the garden, farmyard or street, unless they are of the most minor nature, require tetanus antitoxin. Antitoxin should also be given in all cases where nails or thorns cause punctured wounds, or where the presence of a foreign body is suspected. Fatal tetanus has followed the prick of a rose thorn, and nail punctures, as was remarked earlier in this note, are particularly dangerous. As a precautionary measure, children should not be allowed to run about barefoot in gardens or on cultivated ground unless they have been actively immunized against tetanus. There seems to be a good case for the more widespread adoption of active immunization though critics will probably point out that in civil life the death rate from the disease is relatively insignificant. Nevertheless, tetanus-conscious parents who have their children immunized would enjoy a sense of security and many domestic tragedies would be averted.

Examples of neglect to give antitoxin will be given in the following cases:—

- (a) A little boy of 11 years was walking barefooted in the country when he trod on the stalk of a plant. The wound was dressed by a doctor but no antitoxin was given. A severe attack of tetanus followed, which fortunately responded to treatment.
- (b) An African labourer's thumb was stitched with horsehair sutures, but no A.T.S. was given. He developed tetanus and died.
- (c) A woman fell in the back garden of her home and lacerated her calf on a piece of galvanized iron which was lying in a furrow. Several stitches were inserted by her doctor but A.T.S. was not given. Tetanus supervened but she recovered. This case is also of interest on account of the extensive nature of the wound and because she was admitted to hospital at the same time as the young girl who died as a result of barking her shin.

The diagnosis of tetanus rarely presents difficulties, though occasionally anomalous types are seen, including the local and the cephalic forms. Cases of this nature have not occurred in the City Hospital series.

The onset of muscular stiffness with some degree of trismus in the presence of a wound should be sufficient to draw attention to early tetanus and should ensure prompt treatment. Similarly, spasm of the pharyngeal muscles and general muscular spasms should lead the patient's medical attendant to consider tetanus as a cause.



Not infrequently practitioners fail to diagnose quite obvious cases of tetanus and because of the stiffness of the spinal muscles patients have been sent to the City Hospital as cases of meningitis. The following is an interesting example of self diagnosis. A precocious little boy of eleven who had a slight wound on his toe persisted in walking barefoot in a neighbour's cowstall. Several days later he developed stiffness in the neck and back and in spite of scepticism on the part of the family doctor he assured his parents that he had lock jaw and was going to die. His diagnosis was correct, but his powers of prognosis were less accurate and he recovered from a severe attack of tetanus for which curare was used to control the spasms. Even at the height of his illness this remarkable child made himself unpopular with doctors and nurses by his cynical criticism of the medical profession.

On the day of his discharge when asked if he would like to be a doctor when he grew up, his only reply was a derogatory snort.

In the absence of a wound the diagnosis of tetanus may be less easy to the unpractised observer, but to the experienced, the signs and symptoms are usually highly characteristic. Stress is laid on the fact that in addition to generalized rigidity of the back and limbs, the abdominal muscles are usually board-like. One of the City Hospital patients had actually been suspected of having an acute abdomen before tetanus was diagnosed.

Patients with tetanus usually have a surprised look, due to the raising of the eyebrows by the tensed superciliary muscles. This is much more obvious than the "risus sardonius" mentioned in text-books. They also tend to take up a characteristic attitude in bed by raising their arms and holding on to the rail above their heads. Spasms may be absent, mild or violent, and in extreme cases opisthotonos is seen.

Occasionally, the differential diagnosis is difficult and in case of doubt antitoxin should be given. Tuberculous meningitis sometimes presents tetanus-like symptoms, as do other cerebral conditions. True tetany should not cause difficulty—strychnine poisoning presents similarities and differences, but no cases occurred in the City Hospital series. Hysterical tetano-phobia is usually easily distinguished from the real disease, though confusion occurred in the following case which was seen in consultation in the wards of another institution.

The patient, a man of 35, sustained a compound fracture of the elbow in a motor car accident. The joint was put up in plaster (Trueta's method) in the presence of severe sepsis. The patient was pyrexial and about three weeks later he began to get attacks which were not typical of tetanus and in which he threw himself about in his bed. The surgeon in charge wished to exclude tetanus and my opinion was asked. After a careful consideration of the case, taking into account the fact that antitoxin had been given at the time of the accident and that the patient was tetanus-conscious, it was decided that he was suffering from tetano-phobia. As a precautionary measure a full therapeutic dose of tetanus antitoxin was given and sedation was advised. The sepsis could not be treated as sulphonamides and penicillin had not yet been discovered. The patient died the same night, and at autopsy the tetanus bacillus was grown from the wound. In this case, where a severely infected wound was being treated, anaerobically it would have been wise to have given a prophylactic dose of antitoxin every week until the wound had healed.

The City Hospital practice, drawn as it is from a wide area, gives an erroneous picture of the incidence of tetanus in relation to the number of wounds sustained by the population, since only those patients who develop the disease come under consideration. Like the proverbial fisherman, one is not able to produce "the one that got away", i.e., the person whose wound might have, but did not, give rise to tetanus.

Nevertheless there are fairly clear indications for the prophylaxis and treatment of tetanus, and it is hoped that the general practitioner who has not had the opportunity of studying the disease at first hand will find these notes of use.

In doubtful cases the help of an experienced member of the permanent staff of the City Hospital is readily available, as we are particularly interested in the disease and are constantly endeavouring to improve our system of treatment. Early diagnosis and prompt treatment undoubtedly save lives, whereas delay may be fatal.

#### X-RAY DEPARTMENT AND CLINICAL ROOM.

This department is available not only for in-patients but also for ex-patients from this and other hospitals and for cases referred from the tuberculosis clinic. The work done during the year under report is indicated in the following table:—

New cases (not previously attended at the hospital or tuberculosis clinic) .. .. .	329	
Total attendances:		
Out-patients .. .. .	11,604	
In-patients .. .. .	5,243	
	<hr/>	16,847
Examinations and treatments:		
Skiagrams .. .. .	8,433	
Screenings .. .. .	11,627	
Consultations .. .. .	1,010	
Refills .. .. .	3,763	
Aspirations .. .. .	89	
Mantoux tests .. .. .	735	
Blood sedimentation .. .. .	1	
Thoracoscopy .. .. .	9	
Thoracoplasty .. .. .	1	
Bronchogram .. .. .	5	
Internal pneumolysis .. .. .	53	
Examinations .. .. .	1	
	<hr/>	25,727



## DENTAL CLINIC.

The dental officer attends weekly and provides dental attention for tuberculosis in-patients.

During the year under report, 121 patients attended and 233 teeth were extracted. Further details are shown in the table on page 32.

## OPERATING THEATRE.

The operations performed in the operating theatre for the year were as follows:—

Appendicectomy .. .. .	3
Bronchoscopy .. .. .	9
Fistulectomy .. .. .	1
Laparotomy and drainage .. .. .	1
Laryngoscopy and removal of specimen ..	1
Mastoid .. .. .	2
Phrenic nerve crush .. .. .	28
Posterior colpotomy .. .. .	1
Thoracoplasty .. .. .	1
Typhoid perforation, laparotomy ..	1
	<hr/>
	48
	<hr/>

These figures do not include the operations tracheotomy and intubation of the larynx, which are carried out in special rooms attached to the diphtheria wards.

During the year the operation of tracheotomy for laryngeal diphtheria was performed on 53 patients with 45 recoveries.

## HOSPITAL STATISTICS.

The daily average of beds occupied in the City Hospital, Portswood Road, and Brooklyn Hospital in the year under report was as follows:—

			<i>European.</i>	<i>Non-European.</i>
Tuberculosis:				
From Cape Town Municipality .. ..	55	233		
From outside Municipality .. ..	22	60		
Venereal diseases:				
From Cape Town Municipality .. ..	1	9		
From outside Municipality .. ..	1	2		
Other diseases:				
From Cape Town Municipality .. ..	37	52		
From outside Municipality .. ..	20	25		
	<hr/>	<hr/>		
	136	381		
	<hr/>	<hr/>		

The average daily number of patients in the hospital (exclusive of Brooklyn Hospital) for a series of years is as follows:—

1923-24 62.9	1924-25 69.6	1925-26 107.7	1926-27 125.5	1927-28 151.7	1928-29 156.2
1929-30 159.1	1930-31 204.3	1931-32 238.2	1932-33 245.3	1933-34 256.7	1934-35 263.4
1935-36 280.2	1936-37 268.4	1937-38 267.4	1938-39 362.3	1939-40 331.4	1940-41 330.4
1941-42 342.3	1942-43 354.3	1943-44 354.4	1944-45 348.4	1945-46 364.3	1946-47 340.9
1947-48 351.7	1948-49 323.5				

Details in regard to cases treated are shown in Tables 1 and 2, on page 58.













## BROOKLYN HOSPITAL FOR CHEST DISEASES, KOEBERG ROAD, MAITLAND.

This hospital was operated under the same medical and nursing staff as the City Hospital until 1st June, 1948, when Dr. H. R. Ackermann was appointed Deputy Medical Superintendent and Miss A. J. Glenday, Matron. The hospital now has a separate medical and nursing staff though it remains under the general supervision of the Medical Superintendent of Hospitals and is dependent on the City Hospital for laundry and X-ray services. As there is not a suitable theatre at the Brooklyn Hospital, patients are transferred to the City Hospital for major surgery.

In addition to the tuberculosis beds at this hospital, there is a compound containing a brick ward and a wood and iron building for the isolation and treatment of persons suffering from smallpox (including Amdas). Cases of smallpox are infrequent, but when they occur considerable inconvenience is entailed as the patients and staff of the whole institution are re-vaccinated and visiting is restricted to persons who have either been vaccinated or are willing to undergo vaccination on the spot.

These procedures are adopted even on a mere suspicion of smallpox, and it is hoped that in the near future the wards in question will be removed from the grounds of the Brooklyn Hospital for Chest Diseases to a suitably isolated place on the outskirts of the City or beyond its boundaries.

The hospital caters for non-European male tuberculosis patients only, and at the end of the year under report there were 246 beds in the institution.

The accompanying diagram shows the layout of the hospital which is comprised of the following buildings, numbered as follows:—

*No. 1—Nurses' Home.*

This is a modern well constructed building. It was built in two sections, the first in 1942 and the second in 1947 and contains 40 bedrooms, 2 lounges, 2 dining-rooms, kitchen, etc. The section completed in 1942 is occupied by non-European trained nurses and the other section by European nursing sisters.

*No. 2—Medical Officer's Residence.*

A well constructed building, modern in design and finish. Completed in 1947.

*Nos. 3, 4 and 5—Wards A, B and C.*

Well constructed buildings designed in accordance with modern army type plan. Erected in 1942; accommodation for 38 patients each.

*Nos. 6, 7 and 8—Wards D, E and F.*

Similar in size and construction to Wards A, B and C and with certain minor improvements. A portion of Ward D is used as a clinic and screening room, thereby reducing the accommodation in that ward to 32 beds.

*Nos. 9, 10 and 11.*

Wards erected prior to 1924 for accommodating smallpox contacts. No. 9, which was Ward 3, was adapted in January, 1949, for use as a home for non-European nursing assistants; No. 10, for use by non-European nurses; No. 11, for use by patients for recreation purposes.

The buildings are of poor construction and finish. In addition, Nos. 9 and 10 are inconveniently situated, and No. 11 is in a bad state of repair.

*No. 12—Main kitchen and boiler-house.*

Erected in 1947. Well constructed and finished and satisfactorily equipped.

*No. 13—Native male orderlies' quarters.*

A well built structure erected in two sections, the first in 1942 and the second in 1947. The building has accommodation for 32 Native male orderlies.

*No. 14—Store.*

Brick built structure completed in 1947. It includes a main and a subsidiary store, office and cold room.

*No. 15—Store.*

Built in 1924 of corrugated iron and in a dilapidated state.

*No. 16—Kitchen.*

Built of brick prior to 1924. It is of poor construction and finish. The building was renovated and converted into a kitchen for preparing meals for Moslem patients.

*No. 17—Workshop.*

Built prior to 1924 of corrugated iron and originally used as a kitchen.

*Nos. 18 and 19—Wards 1 and 2.*

Brick built structures erected prior to 1924 for accommodating smallpox contacts. Poor construction and bagged finish. Ward 1 accommodates 24 patients and Ward 2 is now used as an occupational therapy workshop.

*No. 20—Caretaker's quarters and nurses' rooms.*

The caretaker's quarters were constructed prior to 1924, with subsequent additions to accommodate nursing staff engaged to nurse smallpox patients and contacts. The nurses quarters are now used as administrative offices.

*No. 21—Mortuary.*

Brick building of poor construction and bagged finish. Erected prior to 1924.

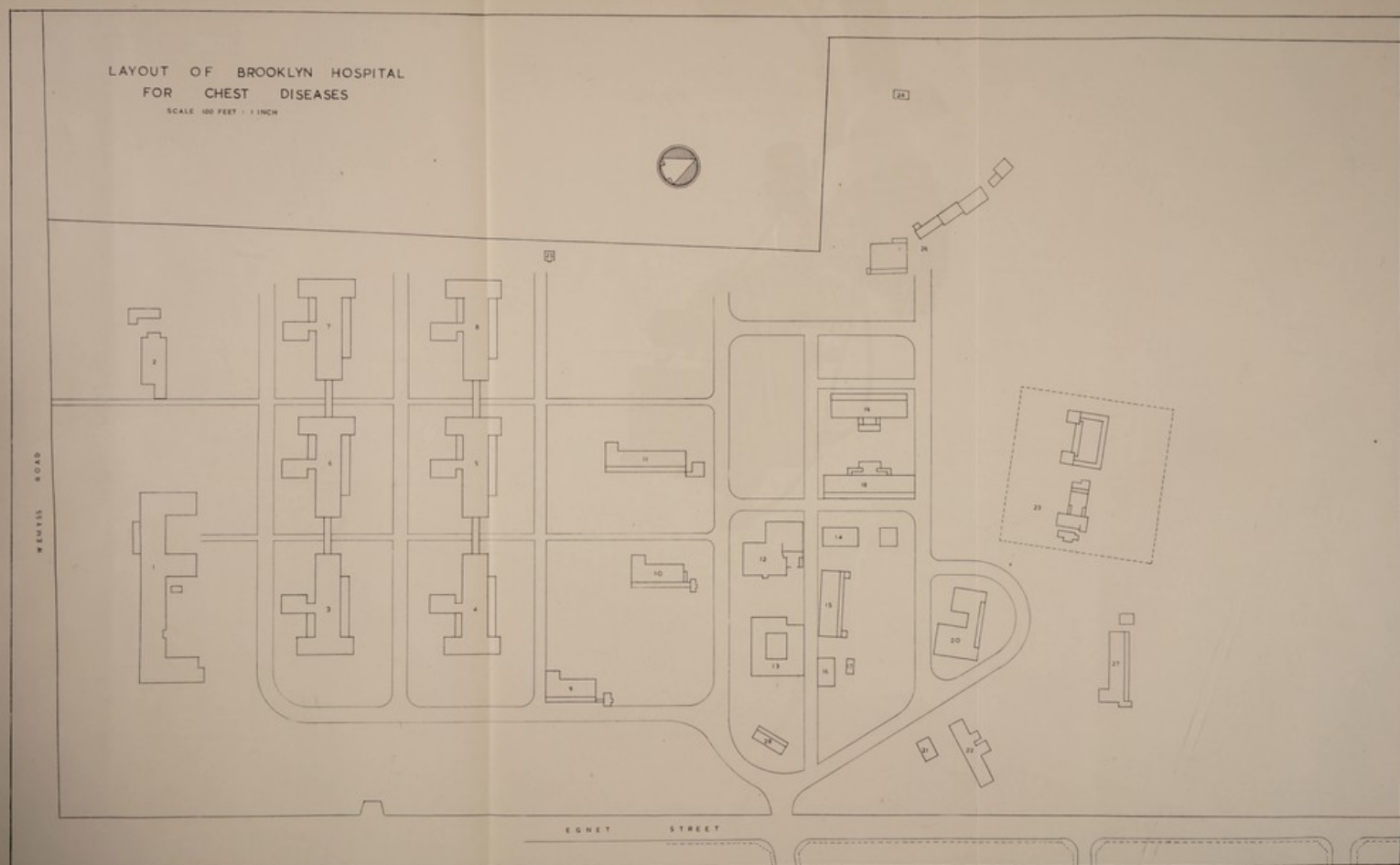
*No. 22—Disinfection station and boiler.*

Constructed of corrugated iron. An Equifex disinfectant is provided.



LAYOUT OF BROOKLYN HOSPITAL  
FOR CHEST DISEASES

SCALE 100 FEET = 1 INCH



LAYOUT OF BROOKLYN HOSPITAL  
FOR CHEST DISEASES

SCALE 1/4" = 1' 0"





No. 23—Smallpox hospital enclosed in corrugated iron fence.

- (a) Brick built block containing 12 beds.
- (b) Wood and iron building intended for 32 patients.
- (c) Kitchen.

Nos. 24 and 25—Sewage pumping stations.

No. 26—Old farm house and outbuildings.

These were the original buildings on the estate. They are unfit for habitation and no longer in use.

No. 27—Ward.

Constructed prior to 1924 for the accommodation of smallpox contacts and since used as a home for non-European nurses. It is of poor construction and finish and inconvenient.

No. 28—Ward.

Constructed prior to 1924 and now used as quarters for Native male orderlies.

#### BED-STATE.

At the beginning of September, 1948, the bed-state of the Hospital was 170, made up as follows:—

Ward 1	..	..	..	..	..	24
Ward A	..	..	..	..	..	38
Ward B	..	..	..	..	..	38
Ward C	..	..	..	..	..	38
Ward D	..	..	..	..	..	Unopened
Ward E	..	..	..	..	..	32
Ward F	..	..	..	..	..	Unopened

During the same month Ward F was opened and patients from Wards A, B and C were transferred to it in turn to allow of the internal and external redecoration of the wards. During December redecoration was completed and 38 patients were admitted to Ward D. In February, 1949, sufficient nursing staff had been recruited to permit of the opening of Ward F, and a further 38 patients were admitted. Thus the number of beds available was increased to 246.

#### ADMISSIONS, DISCHARGES AND DEATHS.

Tables 3 and 4 on page 59 show:—

- (a) The number of patients in hospital at the beginning and at the end of the year under report, and the admissions, discharges and deaths during the year;
- (b) the number of patient days; and
- (c) the areas from which the patients were admitted.

#### TREATMENT OF PATIENTS.

The Deputy Medical Superintendent performs minor surgical procedures such as thoracoscopy and the phrenic operation. Artificial pneumothorax and pneumoperitoneum treatment are carried out in the wards, and a department has been opened where out-patients are able to receive refills.

The Deputy Medical Superintendent and his house physicians attend the surgical consultations which are held at the City Hospital and refer cases for discussion.

#### URGENT NEEDS OF THE HOSPITAL.

The following extensions to the hospital are urgently needed:—

- (1) The provision of properly constructed internal roads and layout of the grounds.
- (2) A medical and surgical block with out-patient rooms, X-ray plant, operating theatres for major and minor surgery, and post-operative wards.
- (3) A security fence around the hospital.
- (4) A laundry.
- (5) The provision of a nurses' home for the non-European nursing assistants.

#### LANGA NATIVE HOSPITAL.

At Langa Native Township the Native residents are provided with free medical attention at a hospital with 27 beds and out-patient department, and are visited in their own homes by a nurse or medical officer if required. They are also provided on the same lines as the rest of the Municipality, with infant consultations, pre-natal, dental and V.D. clinics and health visiting.

The work of the hospital is conducted by Dr. A. J. Wilson, M.B., Ch.B., who is non-resident. Out-patient departments are conducted by Dr. Wilson, daily at 8.30 a.m., and evening clinics are provided.

Dr. Wilson also visits patients in their homes.

The hospital is under the general supervision of the Medical Superintendent of Hospitals who pays it a weekly visit. There is no X-ray apparatus and patients are referred to the City Hospital for the taking of films. There is close co-operation as regards tuberculosis work between Langa Hospital and the City and Brooklyn Hospitals.

An extern municipal midwifery service is provided for the Township women in their own homes. The confinement fee is 11s.

The activities of the hospital and clinics for the year under report are shown by the following figures:—

Daily mean number of in-patients .. ..	23.59
In-patients admitted .. ..	684*
New out-patients .. ..	4,611
Attendances by out-patients .. ..	32,293

Visits to patients at their homes by—

Doctor .. ..	2,100
Nurse .. ..	660

Midwifery service—

Confinements attended (extern) .. ..	194
Visits made by midwife .. ..	2,748

Pre-natal clinic—

New cases .. ..	262
Total attendances .. ..	1,360

Infant consultations—

New cases .. ..	339
Total attendances .. ..	3,947

V.D. clinic—

New cases .. ..	82
Total attendances .. ..	1,073

Dental clinic—

New cases .. ..	459
Total attendances .. ..	786

\* The diagnosis in in-patients was as follows:—

Abortion and miscarriage .. ..	17	Influenza .. ..	20
Abscess .. ..	21	Injuries from accidents or violence .. ..	105
Admitted after operation .. ..	3	Meningismus .. ..	1
Admitted with mother or infant .. ..	26	Mental disorders and deficiency .. ..	4
Apoplexy .. ..	1	Ophthalmia neonatorum .. ..	2
Appendicitis .. ..	4	Other diseases of circulatory system .. ..	4
Asthma .. ..	6	Other diseases of digestive system .. ..	8
Bilharzia .. ..	2	Other diseases of nervous system .. ..	4
Boils .. ..	3	Other diseases of skin and cellular tissue .. ..	10
Born in hospital .. ..	5	Pellagra .. ..	4
Bronchitis and pneumonia .. ..	62	Pleurisy .. ..	4
Cancer .. ..	7	Puerperal fever .. ..	1
Cellulitis .. ..	3	Pyorrhoea .. ..	3
Circumcision .. ..	1	Pyrexia of unknown origin .. ..	4
Confinement .. ..	5	Quinsy .. ..	13
Diarrhoea and enteritis .. ..	49	Rheumatism .. ..	10
Diseases of bones and joints .. ..	9	Salpingitis .. ..	19
Diseases of ear .. ..	5	Scurvy .. ..	5
Diseases of eye .. ..	11	Senility .. ..	1
Diseases of female genital organs .. ..	8	Septic infection .. ..	16
Diseases of genito-urinary system .. ..	10	Syphilis .. ..	7
Diseases of heart .. ..	13	Tonsillitis .. ..	8
Diseases of male genital organs .. ..	4	Tuberculosis, pulmonary .. ..	57
Diseases peculiar to the first year of life .. ..	4	Tuberculosis, other forms .. ..	12
Diseases of pregnancy and parturition .. ..	8	Whooping cough .. ..	8
Diseases of the spleen .. ..	1	Worms .. ..	4
Dysentery .. ..	8	Diagnosis doubtful or indefinite .. ..	11
Epilepsy .. ..	9	Other conditions .. ..	26
Epistaxis .. ..	1		
Erysipelas .. ..	6		684
Hemiplegia .. ..	1		

The home address of the in-patients were as follows:—

Langa Native Township .. ..	616
Elsewhere in Cape Town Municipality .. ..	38
Extra-municipal .. ..	30

The following patients were Workmen's Compensation Act cases:—

In-patients .. ..	41
Out-patients .. ..	502

# SCABIES AND PEDICULOSIS.

## (CLEANSING STATION.)

The cleansing station at 15, Cowley Street, Cape Town, is provided for the disinfection of verminous persons and their clothing. It is in the charge of a superintendent, who works under the supervision of a medical officer, and has two non-European assistants. The work consists mainly of the treatment of scabies, which is more prominent in Cape Town than pediculosis.



The attendances in the year under report were as follows:—

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 .. ..	31	—	1	32	82	—	1	83
European girls .. ..	29	—	8	37	90	—	15	105
Non-European boys .. ..	482	—	21	503	1,539	—	39	1,578
Non-European girls .. ..	517	—	170	687	1,673	—	263	1,936
Total children .. ..	1,059	—	200	1,259	3,384	—	318	3,702
<i>Adults :</i>								
European males .. ..	17	10	—	27	42	10	—	52
European females .. ..	19	1	2	22	50	4	3	57
Non-European males .. ..	109	1	—	110	256	1	—	257
Non-European females .. ..	179	—	7	186	409	—	10	419
Total adults .. ..	324	12	9	345	757	15	13	785
<i>Total persons :</i>								
European .. ..	96	11	11	118	265	14	18	297
Non-European .. ..	1,287	1	198	1,486	3,877	1	312	4,190
All races .. ..	1,383	12	209	1,604	4,142	15	330	4,487

N.B.—Some of the cases of scabies were infested also with lice.

#### AMBULANCE AND DISINFECTING STATION.

This is situated in the grounds of the City Hospital, Portswood Road. There is garage accommodation, in which are housed (besides other departmental cars) three ambulances for the removal of cases of infectious disease, two vans for the transport of infectious and disinfected bedding, and one van for the distribution of supplies to the municipal hospitals and clinics.

The disinfecting station contains two Washington-Lyon pressure steam disinfectors and a formalin fumigating chamber.

The ambulance and disinfecting service is staffed by two removal officers, five motor drivers and two labourers. This staff is also responsible for the disinfecting of houses and other premises for infectious diseases and other conditions. A fitter, assisted by a boiler attendant and labourer, is in charge of the disinfecting station and supervises the machinery of the hospital laundry. The disinfection of bedding, etc., for both the hospitals is also done at the disinfecting station.

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

Ambulance journeys (return).		Premises disinfected.	
To City Hospital.	To other hospitals or premises.	For tuberculosis.	For other infectious diseases.
1,803	184	902	1,111

The distance covered during the year by the vans and ambulances was 94,455 miles.

### SECTION IX.—SANITARY ADMINISTRATION.

#### HEALTH INSPECTORS.

On 30th June, 1949, the staff of health inspectors consisted of the chief health inspector, the assistant chief health inspector, 5 divisional health inspectors, 27 health inspectors, 2 assistant health inspectors, and 4 learner health inspectors; besides 3 health inspectors for dairies and 4 pest control officers. A meat inspector for the inspection of dead meat imported into the Municipality is also attached to the Department.

For sanitary inspection the Municipality is divided into five divisions, each of which is sub-divided into districts (29 in all). In each division the inspector in charge has no district of his own, and he is responsible for the work of the district inspectors in his division and the taking of samples under the Food, Drugs and Disinfectants Act. The work of the pest control officers is separated from the divisional system. They deal with the rat-proofing of buildings, the destruction of town and veld rodents, and the prevention of mosquito breeding. The district inspectors are also concerned in this work. All the inspectors work under the control of the Chief Health Inspector, who, with his assistant, is also responsible for the municipal washhouses and the public sanitary conveniences.

The work of the district health inspection staff includes the investigation of notified cases of infectious disease (except tuberculosis, pneumonia, ophthalmia, trachoma, puerperal fever and diseases notifiable by school teachers, such as measles and whooping cough); the inspection of dwelling houses, shops, food places and vehicles, stables and other places where animals are kept (except licensed cow-sheds); inspections concerning the licensing and regulation of licensed, registered and regulated trades, residential hotels and boarding houses, and of theatres and other places of amusement and camping sites; the inspection of courts, lanes, alleys, open land, refuse tips and standing water; the inspection of municipal washhouses and sanitary conveniences; investigations into social conditions in connection

with remission of fees for treatment in municipal hospitals; and the de-verminization of incoming natives to the Langa Native Township, or wherever the circumstances demand.

The meat inspector undertakes the inspection and stamping of meat killed outside and brought into the municipal area.

The inspections recorded as made by the health inspectors (other than the meat inspector and pest control officers) during the year ended 30th June, 1949, were as follows:—

*Inspections made:*

Public markets	3,276
Butchers' shops	7,800
Dealers' and general dealers' shops (food)	19,520
Dealers' and general dealers' shops (no food)	4,498
Fish and poultry shops	2,627
Bakers' shops (without bakehouses)	167
Bakehouses	676
Milk shops (purveyors of milk)	5,734
Ice-cream purveyors and manufacturers	1,747
Tea shops	1,719
Cafés	1,221
Restaurants	2,857
Eating-houses	996
Residential hotels and boarding houses	2,181
Aerated-water manufacturers	153
Other places where food is manufactured	260
Hawkers' premises	4,154
Hawkers' carts	2,339
Butchers' carts and carriers	297
Milk-delivery vehicles and carriers	990
Fish vehicles	139
Bakers' vehicles	183
Ice-cream vehicles	30
Tents	145
Sideshows	130
Theatres and bioscopes	528
Billiard saloons	89
Common lodging houses	44
Tenement houses	2,605
Dwellings, <i>re</i> Slums Act	19
Other house inspections	51,011
Hairdressers	2,085
Laundries	226
Mattress-makers and upholsterers	124
Other factories and workplaces	3,921
Courts, lanes and alleys	4,970
Open land	3,330
Piggeries	162
Horse stables	4,766
Dairy stables	3,771
Cattle dealers' premises	64
Visits made in connection with infectious disease	2,995
Hackney carriages	—
Standing water, catchpits, etc., <i>re</i> mosquitoes	354
Sites or premises <i>re</i> plans of proposed buildings	290
Public sanitary conveniences	5,419
Refuse tips	488
Washhouses	335
Other visits	5,423
<b>Total</b>	<b>156,838</b>

*Particulars in connection with visits recorded in the above inspections:—*

Visits to premises where action was taken in connection with rodent infestation	65
Visits at which premises were disinfected	10
Drain tests carried out	157
Visits where enquiries were made <i>re</i> outworkers	4

The notices served by health inspectors during the year under review are enumerated below:—

*Proceedings begun by:—*

Verbal notices	1,220
Written request notices	—
Formal written notices	4,644

Total proceedings begun 5,864

Written notices following verbal notices 411

*Total notices served:—*

Verbal notices	1,220
Request notices	—
Formal notices	5,210
Final notices	709

Total 7,139



The number of items included in the 5,864 notices were as follows:—

Ward 1	.. .. .	671
Ward 2	.. .. .	906
Ward 3	.. .. .	828
Ward 4	.. .. .	1,455
Ward 5	.. .. .	1,362
Ward 6	.. .. .	2,259
Ward 7	.. .. .	1,789
Ward 8	.. .. .	931
Ward 9	.. .. .	871
Ward 10	.. .. .	257
Ward 11	.. .. .	205
Ward 12	.. .. .	460
Ward 13	.. .. .	557
Ward 14	.. .. .	1,319
Ward 15	.. .. .	1,120
Total	.. .. .	14,990

Other defects were dealt with by the inspectors by reports for transmission to the City Engineer and other departments of the Corporation as follows:—

Stopped drains	.. .. .	440
Defective water fittings	.. .. .	108
Unauthorized structures	.. .. .	50
Undrained premises	.. .. .	177
Structural defects to premises	.. .. .	35
Other defects	.. .. .	46

#### STABLE PREMISES.

The municipal regulations empower the Council to prohibit the use for the keeping of animals, any stable, cowshed, pigstye, kraal, etc., which in its opinion is "unfit, undesirable or objectionable by reason of its locality, construction or manner of use". The City Council may also restrict the number or kind of animals to be kept at any such premises. During the year ended 30th June, 1949, the City Council prohibited the further use of 11 stable premises (equine) for the keeping of animals.

Previously, since 1929, the City Council had prohibited the use of 131 stable premises. Many others have been closed without formal action by the City Council.

These figures do not include dairy stables that had been closed by order of the City Council.

No further progress has been made with the proposal to provide sanitary communal stables in which people who depend on the use of horses for their living (such as hawkers), may obtain accommodation at a small rental.

#### ANTI-RODENT OPERATIONS.

Plague is endemic in veld rodents over a large part of the rural areas of South Africa. During the year ended 30th June, 1947, the Union Health Department reports that there were 23 human cases (Cape Province 16, Orange Free State 7) and 12 human deaths. All the cases were non-Europeans.

The sandy Cape Flats are infested with gerbilles and other veld rodents, but plague infection in rodents has not approached nearer to Cape Town than the Ceres basin and the Van Rhynsdorp district near the Olifants River towards its mouth. There has been no outbreak of plague in Cape Town since about 1901, when there was an epidemic which spread from the infection of rats in the Port. At that time many parts of the country were also affected. And until 1938, when a few human cases occurred in Port Elizabeth and rats were found to be plague-infected in that city, there has been no infection of rats in South Africa for many years.

In view of this position an anti-rodent staff is maintained in the City Health Department, consisting of the 4 pest control officers and 26 ratcatchers. This staff devotes itself to the examination of plans; the rat-proofing of buildings and the destruction of rodents, especially rats and veld rodents. *Rattus rattus*, both *rattus* and *alexandrinus* and *Rattus norvegicus* are found in the business centres and old houses of the city, *Rattus rattus frugivorus* in the suburbs, and *Rattus norvegicus* on the sea beaches and in the banks of streams, etc. Systematic destruction of gerbilles is carried out in the unbuilt-on part of the municipal area on the Cape Flats, stretching from Table Bay to False Bay; and this is supported by similar work carried on by the Cape Divisional Council on the Cape Flats more to the east.

In the built-up areas, attention is given chiefly to the rat-proofing of premises which attract, harbour and nourish rats, and the destruction of rats in infested premises. In the granting of trading licences for grocers' shops and the like, rat-proofing has been insisted on. Many wooden floors in such premises have been replaced by concrete. Rat-proofing is required in accordance with the Union Government Regulations in the erection of new shops and stores or alterations, additions, etc.

The work done during the year under review is indicated by the following figures:—

Inspections by pest control officers:			
<i>Re</i> rodents	.. .. .	11,590	
<i>Re</i> mosquitoes	.. .. .	4,716	
			16,306
Inspections <i>re</i> rodents by other inspectors	.. .. .		64
Inspections <i>re</i> mosquitoes by other inspectors	.. .. .		354
Visits made to lands and premises by ratcatchers:			
<i>Re</i> rodents	.. .. .	60,773	
<i>Re</i> mosquitoes	.. .. .	21,136	
			81,909

## REPORT OF THE MEDICAL OFFICER OF HEALTH.

## Number of notices served by pest control officers:

Verbal notices .. .. .	17
Written notices .. .. .	267
	<hr/> 284

## Number of rodents caught and destroyed:

Brown rats .. .. .	8,719
Black rats .. .. .	2,666
Gerbilles .. .. .	985
	<hr/> 12,370

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 health inspectors in connection with rodents.

The rodents destroyed and recovered are shown in the following table:—

## RODENTS CAUGHT AND DESTROYED.

Year ended 30th June.	Brown rats.	Black rats.	Gerbilles.	Total.
1926 .. .. .	8,409	1,206	3,430	13,045
1927 .. .. .	8,716	1,282	1,537	11,535
1928 .. .. .	7,651	1,352	816	9,819
1929 .. .. .	6,803	1,388	414	8,605
1930 .. .. .	5,297	1,631	510	7,438
1931 .. .. .	3,982	1,918	770	6,670
1932 .. .. .	4,103	2,017	634	6,754
1933 .. .. .	3,939	2,556	929	7,424
1934 .. .. .	3,839	2,690	1,321	7,850
1935 .. .. .	3,257	3,597	543	7,397
1936 .. .. .	3,757	3,240	610	7,607
1937 .. .. .	3,642	4,030	619	8,291
1938 .. .. .	3,793	6,063	585	10,441
1939 .. .. .	4,407	5,376	514	10,297
1940 .. .. .	6,002	4,891	182	11,075
1941 .. .. .	4,896	3,793	77	8,766
1942 .. .. .	6,038	4,147	48	10,233
1943 .. .. .	7,240	5,066	405	12,711
1944 .. .. .	8,573	4,692	176	13,441
1945 .. .. .	9,748	3,606	55	13,409
1946 .. .. .	9,082	1,879	287	11,248
1947 .. .. .	6,231	2,210	56	8,497
1948 .. .. .	8,678	2,185	348	11,211
1949 .. .. .	8,719	2,666	985	12,370

## MOSQUITOES.

One of the pest control officers specializes also in anti-mosquito work. He investigates local prevalences of mosquitoes discovered through complaints or otherwise, and controls permanent anti-mosquito measures in the Black River Valley. Two of the rat-catching staff under his supervision devote the whole of their time to oil-spraying of waters where mosquitoes are bred. The number of inspections, etc., is shown under the previous heading.

The chief prevalence of mosquitoes is in those parts of the southern suburbs which are within a mile or two of the sewage disposal works at Athlone.

The nuisance is worst during the early part of the rainy season before the weather has become cold. The mosquitoes are almost exclusively *Culex*. *Anopheles* and *Aedes* are not found.

Mosquito prevalence is liable to occur in any part of the Municipality through breeding taking place in local collections of water. It is by no means confined to the summer.

Trapped street catchpits are apt to cause trouble, and require constant attention by the City Engineer's Department.

## CAMPING.

Camping on private sites within the municipal area has been kept under observation by the health inspectors. During the year 1948-49, 30 applications for the erection of tents, etc., were received, all of which were granted and were for occupation by 328 persons.

## FOOD, DRUGS AND DISINFECTANTS ACT.

In terms of Government Notice No. 1572 of 1932, the Minister of Public Health added the Municipality of the City of Cape Town to the list of local authorities empowered under Government Notice No. 666 of 1930 to administer the Food, Drugs and Disinfectants Act in respect of (a) perishable articles mentioned or defined in the Regulations under the Act, and (b) flour, meal, bread and any other article of food not packed or sold in a sealed package. The number of samples to be examined for the Municipality in the Government Chemical Laboratory free of charge was fixed at 607 by Government Notice No. 295 of 1937 as from 26th May, 1937.

Sampling duty is undertaken by the five divisional health inspectors.



The following is a record of the samples taken during the year ended 30th June, 1949:—

Nature of sample.	No. of samples.	Not genuine.					Genuine.
		No action taken.	Letter sent.	Warning notice sent.	Summons applied for.	Total.	
Milk .. .. .	453	—	—	1	37	38	415
Meat products ..	81	—	—	—	10	10	71
Minced meat ..	41	—	—	—	10	10	31
Dripping .. ..	12	—	—	—	—	—	12
Lard .. .. .	1	—	—	—	—	—	1
Honey .. .. .	2	—	—	—	—	—	2
Ice-cream .. ..	12	—	—	—	2	2	10
Frosted malt ..	1	—	—	—	—	—	1
Tail fat .. ..	1	—	—	—	—	—	1
Fruit cordials ..	6	—	—	—	—	—	6
Mixed coffee ..	1	—	—	—	—	—	1
Totals .. .. .	611	—	—	1	59	60	551

Of the 59 summonses in respect of samples taken during the year ended 30th June, 1949, 6 cases were not heard until after the end of the year. Nine cases in respect of samples taken in the previous year were heard in the year under report. Sixty-two cases were therefore heard during the year and are included in the list of prosecutions at page 72.

The results of analysis of the samples of milk taken were as follows:—

Percentage of milk fat.	No. of samples.	Percentage of milk-solids-not-fat.	No. of samples.
2.0—2.4	6	5.5—6.0	1
2.5—2.9	27	6.0—6.4	—
3.0—3.4	195	6.5—6.9	1
3.5—3.9	165	7.0—7.4	4
4.0—4.4	41	7.5—7.9	3
4.5—4.9	10	8.0—8.4	2
5.0—5.4	5	8.5—8.9	312
5.5—5.9	3	9.0—9.4	122
6.0—6.4	1	9.5—9.9	4
			4 (sour)

#### SALE OF MILK AND ICE-CREAM.

##### *Compulsory Pasteurization of Milk.*

During the year the only further steps taken consisted of an interview with the Administrator and the Executive Council, at which the various regulations to enforce pasteurization were discussed. It is hoped that the necessary regulations will be promulgated before the end of the year.

##### *Dairy Regulations and Licences.*

The number of dairy premises licensed\* for the sale of milk in the Municipality at 30th June, 1949, was as follows:—

	In the municipal area.	Outside the municipal area.
	30th June, 1949.	30th June, 1949.
Cowsheds .. .. .	10	258
Milkshops .. .. .	144	3

\*Including certain premises in use but not licensed at the date stated.

##### *Staff.*

One veterinary officer, provided with transport, confines himself to the veterinary inspection of dairy cattle, the supervision of cowsheds of all producers, both within and outside the municipal area, who supply milk for consumption in the city, and the supervision of all pasteurization plants. He is assisted by two full-time dairy inspectors in the inspection of producers' premises, and by one inspector who assists in the supervision of pasteurization plants, in taking samples for bacteriological examination and in laboratory work. During the year under report inspections were made as follows:—

Dairy stables .. .. .	3,771
Milk shops .. .. .	5,734
Milk delivery vehicles .. .. .	990
Ice-cream premises .. .. .	1,747
Ice-cream vehicles .. .. .	30

##### *Milkshops and Ice-cream Premises.*

Milkshops and ice-cream premises are under the inspection of the health inspectors but the Veterinary Officer in addition supervises and inspects premises where milk is pasteurized in the municipal area. Two plants are in operation and a careful check is kept on the efficiency of their operation.

In the following table the figures for dairies refer to the calendar year 1949, and those for ice-cream to the year ended 30th June, 1949:—

	Cowshed premises.		Milk shop premises.	Manufacturers and vendors of ice-cream.
	In the municipal area.	Outside the municipal area.		
Applications for licences received .. ..	18	295	173	566
Licences issued .. .. .	13	286	161	561
Applications cancelled .. .. .	4	8	10	1
Licences not granted .. .. .	1	1	2	4

Of the 566 persons licensed to make or sell ice-cream only 14 were licensed for its manufacture. The remainder were licensed only for selling ice-cream not made on the premises. The 14 licensed for the manufacture of ice-cream include 4 who have a large wholesale trade.

#### Control of Pasteurization Plants.

Systematic daily sampling of the two licensed pasteurization plants was undertaken. Samples were collected from the two licensed plants at intervals during the day, as many as six samples being taken from one plant during the day, and subjected to the phosphatase test. In the control of a pasteurization plant this was found to be essential since the efficacy of pasteurization varies during the day. It was frequently found that in the course of the day one sample would show definite under-pasteurization, while the remainder proved to be properly pasteurized. Both Neave's modification of the Kay-Graham test and the additional test devised by the Veterinary Officer, Dr. Horwitz, were used during the year.

In all, 1,192 phosphatase tests were carried out: of this total 55 or 4.6 per cent proved to be definitely under-pasteurized.

#### Samples of Milk Tested for Total Bacteria, Year ended 30th June, 1949.

Milk samples taken by the City Health Department are examined by the Breed Smear method by the Veterinary Officer in his laboratory. The procedure adopted is the same as that described last year—all samples are kept at room temperature for as near as possible, eight hours after production before examination; the standards adopted were those laid down last year of 500,000 organisms per ml. for the summer months and 200,000 per ml. for the winter months. Using this yard stick, of the 1,575 samples examined, 847 were satisfactory, i.e., 53.8 per cent. The fixed time factor resulted in counts showing a fairly close correlation to the method of production, i.e., the worse the methods of production the higher the count.

Of the 1,575 samples examined by the Breed method, 205 or 13.0 per cent showed the presence of streptococci and cell groups suggestive of mastitis.

#### Samples of Milk Tested for Tubercle Bacilli: Year ended 30th June, 1949.

	Positive.	Negative.	Total.
Samples taken from mixed milk of herd .. ..	4	222	226
Bulked samples:			
Raw milk .. .. .	1	9	10
Total .. .. .	5	231	236

In addition to the above routine samples, four samples from individual cows were taken to follow up the routine samples reported as positive. One was positive and three negative.

#### Examination of Dairy Cows.

During part of the year under review, 4,253 cows, belonging to 132 dairies, were examined clinically, and as a result, 354 milk samples were taken from individual cows and examined in the Department's laboratory. The following diseased conditions were encountered during examination of herds:—

Mastitis (acute and chronic) .. .. .	232
Mange .. .. .	42
Emaciation .. .. .	7
Tuberculosis (other than tuberculosis of the udder) ..	4
Tubercular mastitis .. .. .	5
Contagious abortion .. .. .	9

The adoption, as a routine, of the examination of milk samples from individual quarters of all cases suspicious of early tubercular mastitis for the presence of the cell groups described by Torrance (*Veterinary Record*, April 29th, 1922) and Matthews (*Veterinary Record*, April 11th, 1931) brought to light 5 cases of early tubercular mastitis within a day after the clinical examination. This not only made the use of the guinea-pig inoculation unnecessary but enabled the Department to take immediate action to prevent the sale of milk containing tubercle bacilli. Formerly, the use of guinea-pig inoculation involved a waiting period of six weeks before a definite diagnosis could be made.

#### Additional Laboratory Work.

The following additional laboratory work was carried out by the Veterinary Officer in his laboratory:—



*Ice-cream.*

228 samples of ice-cream were examined by means of the Breed Smear. A standard of 300,000 per c.c. was laid down as a yard stick for ice-cream kept at freezing temperature at the factory, preliminary work showing that under clean normal conditions this standard could easily be reached. Of the 228 samples examined 159 satisfied this standard and 69 were above this standard. 231 samples of ice-cream were examined for efficiency of pasteurization. 220 proved to be efficiently pasteurized and 11 underpasteurized.

*Dairy Herds.*

Samples from individual cows were examined for the following conditions:—

Mastitis: 623; of which 119 were positive and 39 doubtful. Of the doubtful samples 33 subsequently proved to be positive.

Tuberculosis: 59 samples from individual cows were examined—5 were positive.

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

Municipal Regulations provide for the annual licensing of these premises and the controlling of the equipment and management. Applications for licences are considered by the responsible Committee after report by the Medical Officer of Health.

The following is an analysis of the applications dealt with during the year ended 30th June, 1949:—

	Restaurants.	Tea Shops.	Cafés.	Eating-houses.	Boarding Houses.
1. Applications received . . . . .	207	593	30	47	333
2. Granting of licences recommended (without conditions) . . . . .	136	454	20	17	330
3. Granting of licences recommended (subject to conditions) . . . . .	71	136	9	30	—
4. Number under item 3 later reported as having complied with conditions . . . . .	50	83	7	19	—
5. Refusal of licences recommended . . . . .	—	1	—	—	—
6. Applications withdrawn . . . . .	—	2	1	—	3

## REGISTERED TRADES.

*Mattress-makers, Laundries, Barbers and Hairdressers.*

Government regulations regarding mattress-makers and upholsterers (Government Notice No. 1384 of 1938), prohibit any person from carrying on those trades unless registered annually by the Council. The municipal regulations prohibit any person from carrying on any laundry "by way of trade or for purposes of gain", unless registered annually by the Council. The municipal regulations also prohibit any person from carrying on the trade or business of a barber or hairdresser unless registered by the Council.

The figures in the following table refer to the calendar year 1949:—

	Mattress-makers and Upholsterers.	Laundries.	Barbers and Hairdressers.
Applications received . . . . .	20	9	249
Registration certificates issued . . . . .	15	3	209
Registration granted subject to conditions . . . . .	5	4	39
Registration refused . . . . .	—	—	—
Applications withdrawn . . . . .	—	2	1

*Hawkers and Pedlars:*

The municipal regulations also require annual licences for hawkers and pedlars. The following figures refer to the year ended 30th June, 1949:—

	Hawkers and Pedlars.
1. Applications received . . . . .	1,885
2. Granting of licences recommended (without conditions) . . . . .	1,117
3. Granting of licences recommended (subject to conditions) . . . . .	722
4. Refusal of licences recommended . . . . .	30
5. Number under items 3 and 4 later recommended . . . . .	382
6. Applications withdrawn . . . . .	16

## TRADE LICENCES.

The Licences Consolidation Ordinance No. 19 of 1930, as amended, provides that a certificate must be obtained from the Council before a licence is issued to trade as a general dealer, fresh produce dealer, baker, butcher, restaurant (etc.) keeper, hawker, pedlar, motor garage, or mineral water manufacturer or dealer, and further that no application for such certificate 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 grounds of public health. All applications for certificates are referred by the responsible committee to the Medical Officer of Health for report, and the consequent inspections involve a considerable amount of work on the part of the health inspectors. The licences, which are designed for revenue purposes, must be renewed annually, but the Council's certificate is only required when they are issued for the first time or transferred.

The following is an analysis of applications for certificates dealt with during the year ended 30th June, 1949:—

	General dealers.	Fresh produce dealers.	Butchers.	Bakers.	Motor garages.	Mineral water dealers.	Mineral water manufacturers.
1. Applications received .. ..	1,123	291	21	4	34	49	2
2. Granting of licences recommended (without conditions) ..	621	140	3	1	18	26	2
3. Granting of licences recommended (subject to conditions)	470	140	18	3	15	22	—
4. Number under item 3 later reported as having complied with conditions ..	391	118	13	3	11	13	—
5. Refusal of licences recommended ..	21	5	—	—	—	1	—
6. Applications withdrawn .. ..	11	6	—	—	1	—	—

Figures for hawkers and pedlars and for restaurant (etc.) keepers are shown on the previous page.

## INSPECTION OF MEAT AND OTHER FOODSTUFFS.

The inspection of meat from animals killed at the municipal abattoir is under the control of the Director and Veterinary Surgeon, and is reported on in the Mayor's Minute. 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 depots appointed by the Council. There it is inspected and stamped by the meat inspector attached to the City Health Department.

The following is a return of meat from animals slaughtered outside the City and brought in for sale within the municipal area during the year ended 30th June, 1949:—

Description.	Inspected.	Passed.	Condemned partly.	Condemned entirely.	
				Amount.	Percentage.
Carcases of pork .. ..	49,115	48,367	603	145	0.30
Pigs' plucks .. .. { livers ..	49,115	45,884	—	3,231	6.57
{ lungs ..	49,115	46,925	—	2,190	4.46
{ hearts ..	49,115	48,703	—	412	0.84

The following return shows the imported meat condemned at the depots appointed by the Council, classified under the various diseases for which it was condemned, during the period 1st July, 1948, to 30th June, 1949:—

Description.	Total.	Abscess.	Bruised.	Cysts (Hydatid).	Emaciation.	Erysipelas (Swine).	Hepatitis.	Inflammation.	Measles.	Moribund.	Necrosis.	Pericarditis.	Pleurisy.	Pneumonia.	Pyæmia.	Sarcocysts.	Tuberculosis.
Carcases of pork	111	—	4	—	1	1	—	—	57	7	—	—	1	1	3	6	30
Parts of pork ..	637	87	6	—	—	—	—	—	—	—	—	—	—	—	—	—	544
Pigs'—																	
Livers ..	3,231	6	—	2,784	—	—	50	271	—	—	120	—	—	—	—	—	—
Lungs ..	2,190	30	—	401	—	—	—	1,599	—	—	—	—	—	160	—	—	—
Hearts ..	412	—	—	—	—	—	—	—	—	—	—	412	—	—	—	—	—



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

Removed from.	Measly beef.		Measly pork.	
	Carcasses.	Weight (lbs.).	Carcasses.	Weight (lbs.).
Municipal abattoir and Cape Town depots .. .. .	4,226	2,010,235	103	11,228

#### Food Inspection by Health Inspectors.

The following foodstuffs were condemned as unfit for human consumption as the result of ordinary inspections by the health inspectors or the meat inspector, other than inspections of imported meat, during the year ended 30th June, 1949:—

	Weight (lb.).		Weight (lb.).
<i>Meat:</i>			
Beef .. .. .	89	Ginger .. .. .	20
Biltong .. .. .	80	Kolyanna .. .. .	15
Minced meat .. .. .	9	Leeks .. .. .	93
		Lettuce .. .. .	3,210
<i>Poultry and Game:</i>		Marrows .. .. .	1,954
Turkeys .. .. .	1,342	Mealies .. .. .	1,054
Geese .. .. .	31	Mint .. .. .	5
Ducks .. .. .	103	Mixed vegetables .. .. .	44
Fowls .. .. .	6,059	Onions .. .. .	14,999
Game .. .. .	500	Parsley .. .. .	90
		Parsnips .. .. .	51
<i>Fish:</i>		Peas (green) .. .. .	16,920
Preserved fish .. .. .	11,138	Peppers .. .. .	140
		Potatoes .. .. .	8,871
<i>Fruit and Vegetables:</i>		Potatoes (sweet) .. .. .	5,796
Apples .. .. .	1,182	Pumpkins .. .. .	9,859
Avocado pears .. .. .	5,397	Radishes .. .. .	693
Bananas .. .. .	3,020	Spinach .. .. .	705
Egg fruit .. .. .	12	Squashes .. .. .	5,644
Figs .. .. .	100	Sweet potatoes .. .. .	3,078
Gooseberries .. .. .	10	Tomatoes .. .. .	17,395
Grapes .. .. .	60	Turnips .. .. .	4,788
Grapefruit .. .. .	637		
Granadillas .. .. .	564	<i>Other Provisions:</i>	
Guavas .. .. .	90	Bacon .. .. .	784
Kumquats .. .. .	56	Canned fruit .. .. .	15,254
Lemons .. .. .	1,257	Cereals .. .. .	30
Mangoes .. .. .	9,428	Cheese .. .. .	695
Melons .. .. .	2,365	Cod liver oil .. .. .	4
Naartjies .. .. .	753	Eggs .. .. .	60
Nectarines .. .. .	200	Flour .. .. .	20
Oranges .. .. .	228	Ham .. .. .	116
Pawpaws .. .. .	24,084	Honey .. .. .	1
Peaches .. .. .	2,066	Jam .. .. .	304
Pears .. .. .	8	Malt .. .. .	1
Pineapples .. .. .	1,110	Milk (condensed) .. .. .	52
Pomegranates .. .. .	120	Moskonfy .. .. .	4
Prunes .. .. .	24	Peas (dried) .. .. .	29
Quinces .. .. .	73	Pickles and delicacies .. .. .	1,407
Rhubarb .. .. .	16	Polony .. .. .	5
Water melons .. .. .	18,751	Preserved fruit .. .. .	282
Beans (green) .. .. .	48,500	Pudding powder .. .. .	147
Beetroot .. .. .	3,702	Raisins .. .. .	2,160
Betel leaves .. .. .	5	Rice .. .. .	16
Bringles .. .. .	536	Sauerkraut .. .. .	25
Cabbages .. .. .	11,961	Spaghetti .. .. .	119
Cauliflowers .. .. .	1,945	Sugar .. .. .	3,245
Carrots .. .. .	2,605	Sweets .. .. .	117
Celery .. .. .	135	Syrup (golden) .. .. .	2
Chillies .. .. .	307	Tea .. .. .	57
Cucumbers .. .. .	5,066	Tinned meat .. .. .	570
Garlic .. .. .	3,461	Tinned vegetables .. .. .	561
		Other tinned food .. .. .	2,243

#### CASES BEFORE THE MAGISTRATE.

The following table gives particulars of cases heard by the magistrates during the year ended 30th June, 1949, at the instance of the City Health Department. In most of the cases there were two or more separate counts; the counts are not enumerated in the table. In some cases more than one person was summonsed for the same offence; if any one accused was fined or reprimanded the case is recorded in the table accordingly, notwithstanding that the other accused may have been discharged:—

Nature of offence.	Number of cases.							Total Fines.
	Total.	Fined.	Suspended sentence.	Reprimanded.	Summons withdrawn.	Discharged.	No. of persons summoned.	
								£ s. d.
Dwelling-house premises in insanitary condition (including the keeping of animals) .. .. .	2	2	—	—	—	—	2	14 0 0
Dwelling-house premises in insanitary condition (excluding the keeping of animals) .. .. .	25	19	—	1	1	4	28	129 10 0
Keeping animals in contravention of the Council's prohibition .. .. .	1	1	—	—	—	—	1	10 0 0
Insanitary conditions or other offences at food premises:								
Butchers' shop premises .. .. .	5	4	—	1	—	—	9	25 10 0
Bakehouse premises .. .. .	1	1	—	—	—	—	9	5 0 0
Other food premises .. .. .	8	8	—	—	—	—	9	39 10 0
Insanitary conditions or other offences in trans- port or delivery of foodstuffs:								
Meat .. .. .	1	—	—	—	—	1	2	—
Milk .. .. .	29	26	—	—	—	3	63	163 0 0
Other foodstuffs .. .. .	12	12	—	—	—	—	15	30 0 0
Selling foodstuffs in contravention of the Food, Drugs and Disinfectants Act:								
Milk .. .. .	37	32	1	—	3	1	38	326 0 0
Sausage, minced meat, etc. .. .. .	22	22	—	—	—	—	45	130 0 0
Ice cream .. .. .	2	1	—	—	—	1	8	10 0 0
Broken rice .. .. .	1	1	—	—	—	—	8	1 0 0
Selling, etc., diseased, unsound or unwholesome foodstuffs .. .. .	3	2	—	—	—	1	5	25 0 0
Trading as purveyor of milk without licence (no cows kept) .. .. .	8	8	—	—	—	—	15	79 10 0
Trading as hawker without licence .. .. .	7	7	—	—	—	—	11	5 10 0
Other nuisances or insanitary conditions .. .. .	9	9	—	—	—	—	10	55 10 0
Neglect of children (Children's Act) .. .. .	2	1	1	—	—	—	2	10 0 0
Total .. .. .	175	156	2	2	4	11	280	1,059 0 0

## PUBLIC SANITARY CONVENIENCES.

The following is a list of the public sanitary conveniences open at 30th June, 1949, together with the number of attendants employed:—

Chalet.	Attendants.	
	Male.	Female.
Aberdeen Street, Woodstock .. .. .	2	2
Bakoven .. .. .	2	1
Beach Road, Sea Point .. .. .	2	2
Beach Road, Three Anchor Bay .. .. .	1	1
Camps Bay Beach .. .. .	2	1
The Camp, Camps Bay .. .. .	1	—
Castle Bridge .. .. .	2	2
Castle Street, Cape Town .. .. .	3	—
Claremont Park .. .. .	1	1
Clifton, 4th Beach .. .. .	1	1
De Waal Park .. .. .	2	1
Dock Road, Cape Town .. .. .	3	—
Early Morning Market, Sir Lowry Road .. .. .	3	1
Gleemoor, Athlone .. .. .	3	2
Green Point Common .. .. .	1	—
Greenmarket Square .. .. .	2	2
Hanover Street, Cape Town .. .. .	2	1
Jurgens Park .. .. .	2	—
Kalk Bay .. .. .	2	1
Kalk Bay Beach (Non-European) .. .. .	1	1
Keurboom Park .. .. .	1	—
Kloof Nek .. .. .	1	1
Ladies' Rest Room, Darling Street .. .. .	—	2
McGregor Street, Cape Town .. .. .	2	2
Mayor's Garden .. .. .	2	2
Maitland Outspan .. .. .	2	1
Mowbray .. .. .	2	1
Muizenberg Beach .. .. .	2	2
Museum, Cape Town .. .. .	2	1
Queen's Park .. .. .	1	1
Queen Victoria Street, Cape Town .. .. .	2	1
Ralph Street, Claremont .. .. .	2	2
Riebeeck Square .. .. .	2	1



Chalet.	Attendants.	
	Male.	Female.
St. Andrew's Square .. .. .	2	—
St. James' Beach .. .. .	2	1
Salt River Market .. .. .	3	2
Sea Point Swimming Pool (Non-European) .. .. .	1	1
Searle Street, Woodstock .. .. .	2	1
Shelley Street, Salt River .. .. .	2	2
Spencer Road, Salt River .. .. .	1	1
Station Road, Observatory .. .. .	2	1
Strand Street, Cape Town .. .. .	1	1
Three Anchor Bay (Children's playground) .. .. .	—	1
Trafalgar Park .. .. .	2	1
Victoria Walk .. .. .	1	1
Windermere .. .. .	2	2
Wynberg .. .. .	2	1
	82	53
Relief attendants .. .. .	14	9
Night-shift attendants .. .. .	4	2
	100	64

In general the conveniences shown as being staffed by one attendant are open from 8 a.m. to 6 p.m., and those with two from 7 a.m. to 11 p.m. The male conveniences at the Castle Street, Dock Road, Early Morning Market and Salt River Market are open twenty-four hours a day and the female sections at the Early Morning and Salt River Markets are open all night on three nights of the week. Of the six night-shift attendants mentioned above, three attendants (2 male, 1 female) staff the two market chalets at night.

It is customary during the summer season (November-April) to extend the hours at the seaside conveniences. During this season the conveniences are staffed by two attendants in each section, i.e. male and female. They are open from 7 a.m. to 11 p.m.

In the winter season the staff is reduced to one attendant in each section and the conveniences are open from 8 a.m. to 6 p.m.

The following is a list of conveniences which are affected by this seasonal change:—

Bakoven.  
Camp's Bay Beach.  
Clifton, 4th Beach.  
St. James Beach.  
Sea Point Swimming Pool (non-European).  
Three Anchor Bay, Beach Road.  
Kalk Bay.  
Kalk Bay Beach (non-European).

The convenience at Muizenberg (Beach Road) is open from 7 a.m. to 11 p.m. throughout the year.

#### MUNICIPAL WASHHOUSES.

There are eight municipal washhouses, at each of which there is a caretaker in charge, and one assistant (except that at Hanover Street and Hout Street there are two assistants and at Kalk Bay no assistant). With the exception of Hanover Street they are supplied with cold water only and the drying and bleaching are done in the open air.

All except Kalk Bay are equipped with electric irons. At the Hanover Street washhouse the washing troughs are supplied with steam, and "hydro-extractor" drying chambers, ironing machines and electric irons are provided.

At the Hout Street washhouse there is an installation for hot and cold water shower-baths.

The charges made for washing are as follows: At Plattekilip, Mowbray and Claremont, 3d. per day; at Hout Street, Wynberg and Salt River, 4d. per day; at Kalk Bay, 6d. per day. The charges for ironing (including use of electric iron) is 1d. per hour. At Hanover Street the charges are 3d. for two hours and 3d. for each additional hour up to a maximum of 1s. 6d. per day (including ironing facilities).

The charges for the use of the shower-baths at Hout Street are as follows: Adults, 3d.; children, 2d.

The attendances and takings at the washhouses (including ironing rooms) during the year ended 30th June, 1949, were as follows:—

	Attendances.	Money taken.		
		£	s.	d.
Hout Street .. .. .	11,089	210	7	5
Plattekilip .. .. .	4,523	58	13	5
Hanover Street .. .. .	12,987	800	3	9
Salt River .. .. .	3,819	62	1	2
Mowbray .. .. .	10,065	181	17	7
Claremont .. .. .	9,498	178	9	8
Wynberg .. .. .	6,028	121	0	0
Kalk Bay .. .. .	2,852	71	6	0
	60,861	£1,683	19	0

The attendances and takings at the Hout Street shower-baths during the year ended 30th June 1949, were as follows:—

							Shower-baths.		
							Atten- dances.	Money taken.	
Adults	..	..	..	..	..	..	32,340	£	s. d.
Children	..	..	..	..	..	..	217	404	5 2
								1	16 2
Total							32,557	406	1 4

#### HOUSING.

The greater part of the Cape Town Municipality consists of houses built of masonry according to the standards of the time of their erection, served by the municipal water supply and water-carriage sewerage, and with well-constructed streets. Most of the dwellings are separate houses built for one family each, detached, semi-detached or in terraces; but there is a growing number of blocks of flats, and a few tenement houses built to be occupied by several tenants.

If the houses were occupied in the manner originally intended housing conditions would be mainly satisfactory. The chief factor responsible for slum conditions is the overcrowding caused by the fact that there are not enough houses for the population, itself the result of economic conditions. Houses suitable for one family, and in many cases small even for one large family, are occupied by several families, sometimes to the extent of one family per room. The overcrowded families are naturally mostly from the poorest strata of society, usually (though not invariably) non-European, and often of low social standard. The resulting squalor is increased by decay of the fabric of the houses which such occupation induces.

The same shortage of houses and economic stringency is largely responsible for the other phase of the local housing problem, viz., the occupation of unauthorized and insanitary structures on the Cape Flats fringing Cape Town, often without made roads, water supply or sanitary services, and sometimes subject to winter flooding. The Council has ample legal powers to prohibit such building and occupation, but has not found itself prepared to drive out the occupants from the only shelter available for them.

These housing conditions have been aggravated by the influx of Natives from the territories attracted by the prospect of remunerative employment. Nevertheless they are of old standing. The Director of Census published a statistical report on Coloured housing in Cape Town based on the 1921 census; and the Medical Officer of Health submitted a report in 1924 and 1932 based on a housing survey in central Cape Town, in which the overcrowding and housing shortage were clearly brought out and municipal housing urged as the primary remedy. The matter has since been the subject of repeated consideration by the Council and its committees and officers. Since 1920 up to 30th June, 1948, the City Council and the Citizens' Housing League Utility Company have completed the erection of about 7,900 houses, in addition to the building of Langa Township.

The dwellings completed by the Council in the year under report were as follows:—

	Houses.	Average cost per dwelling.
Q-Town, Athlone (non-European) .. .. .	112	£ 1,009

In the year under report, the following dwellings for Europeans were completed at Epping Garden Village (Cape Division) by the Citizens' Housing League Utility Company:—

Houses.	Flats.	Cottages.	Average cost per dwelling.
9	—	—	£ 1,800
—	6 (1 block)	—	830
—	—	16 (8 blocks)	719
—	—	198	800

The dwellings completed bring the figures from 1920 to 30th June, 1949, for public housing operations in Cape Town and suburbs (exclusive of Langa Native Township) to the following:—

	European.	Non-European.	Total.
Within Cape Town municipal area:			
City Council .. .. .	1,046	4,308	5,354
Citizens' Housing League Utility Co. ..	801	28	829
	1,847	4,336	6,183
Outside Cape Town municipal area:			
Citizens' Housing League Utility Co. ..	1,769	—	1,769
Total .. .. .	3,616	4,336	7,952



The number of new dwelling houses built in the calendar year 1949 in the Municipality (abstracted from the City Engineer's return) as compared with the growth of population is shown in the following table:—

Year.	Estimated increase in population.	Buildings for human habitation completed (dwellings).	Year.	Estimated increase in population.	Buildings for human habitation completed (dwellings).
1915 ..	3,980	123	1933 ..	6,150	1,068
1916 ..	4,110	103	1934 ..	6,270	1,711
1917 ..	4,240	99	1935 ..	6,430	1,937
1918 ..	4,380	69	1936 ..	5,220	1,320
1919 ..	4,500	91	1937 ..	5,270	1,272
1920 ..	4,680	139	1938 ..	4,710	1,274
1921 ..	5,340	210	1939 ..	4,840	1,555
1922 ..	4,950	308	1940 ..	4,970	2,086
1923 ..	5,080	425	1941 ..	5,100	1,489
1924 ..	5,220	561	1942 ..	7,450	1,063
1925 ..	5,380	335	1943 ..	8,800	651
1926 ..	5,320	444	1944 ..	9,720	1,005
1927 ..	5,070	675	1945 ..	10,050	870
1928 ..	5,450	846	1946 ..	10,400	778
1929 ..	5,570	1,773	1947 ..	10,760	990
1930 ..	5,700	1,320	1948 ..	11,140	1,086
1931 ..	5,640	1,564	1949 ..	11,546	1,638
1932 ..	6,000	1,102			

City extended by incorporation of the district of Windermere, 1943-44.

## SECTION X.—OTHER SERVICES.

### DOMICILIARY MEDICAL SERVICE.

The City Council provides medical attention in their homes for indigent sick persons needing such service. Since 1st April, 1944, the work has been carried out by a permanent medical officer. It is done in co-operation with the District Nursing Organization of the Cape Hospital Board. Arrangements for the supply of medicines, etc., are made with local chemists.

The visits made by the medical officer in the year under report were as follows:—

Ward 1 .. ..	13	Ward 10 .. ..	281
" 2 .. ..	72	" 11 .. ..	16
" 3 .. ..	188	" 12 .. ..	266
" 4 .. ..	74	" 13 .. ..	70
" 5 .. ..	630	" 14 .. ..	165
" 6 .. ..	335	" 15 .. ..	557
" 7 .. ..	683		
" 8 .. ..	275	Total .. ..	3,675
" 9 .. ..	50		

One half of the cost of medical attention and medicines and the full cost of surgical appliances are refunded to the City Council by the Union Government.

### FREE BURIALS.

The Public Health Act places upon the City Council the responsibility for the removal and burial of the body of any destitute person, or any dead body which is unclaimed or of which no responsible person undertakes the burial. The cost falls upon the City Council, although it may be legally recovered from any responsible person who is able to pay. Practically all such burials undertaken by the Council are of the bodies of persons whose relations are unable to pay, and very little is recovered. Each year a contract is given out to an undertaker to carry out this work for the Council. In the year ended 30th June, 1949, the number of such burials was 291.

### RELIEF WORKS.

During the period under review an average of 158 men have been employed on relief works maintained by the City Council. The total expenditure of the Council under this heading in the year 1949 was £169,718 4s. 8d., of which £108,285 9s. 3d. was paid in wages, including cost-of-living allowance. The Government repaid to the Council £12,828 14s. 10d. in the form of subsidy.

### BOARD OF AID.

Poor relief in the City of Cape Town is administered by the Cape Town 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 Cape Town and three members of the City Council.

Its funds are provided by the Department of Social Welfare and the City Council, supplemented to a small extent by voluntary donations. Under Section 16 of the Finance Act, No. 27 of 1940, the responsibility of the Provincial Administration in this matter was transferred to the Union Department of Social Welfare as from 1st April, 1940.

The Secretary of the Board of Aid has kindly supplied the following statistics for the calendar years 1948 and 1949:—

	1948.		1949.	
	£	s. d.	£	s. d.
Income from voluntary sources .. .. .	485	0 0	576	0 0
Subsidy from Provincial Administration for investigations re Conradie Home applications .. .. .	120	0 0	120	0 0
Subsidy from Department of Social Welfare .. .. .	21,043	10 0	18,880	2 6
Subsidy from City Council .. .. .	21,043	10 0	18,880	2 6
Expenditure on relief, excluding administration costs .. .. .	20,804	19 8	11,186	0 0
Number of applications received .. .. .	3,010		3,031	

The Board maintains a hostel in Canterbury Street for low-paid Coloured youths and Coloured old-age pensioners of both sexes. Accommodation is provided for 100 youths and 120 pensioners.

The Board aims at improving the socio-economic position of the youths accommodated in the hostel by giving them vocational guidance, and providing recreational facilities and other amenities they would not be able to enjoy when housed in slum or semi-slum areas.

Special attention is given by the trained staff in charge of the institution to suitable employment for all youths and many requests for boys are received daily from prospective employers.

Aged Coloureds are accommodated in the hostel at £1 10s. per month inclusive. Recreational facilities and other amenities are provided to make old-age as comfortable as possible.

Family rehabilitation work is continued by the Board in the Bokmakirie Settlement where the Board rent 30 cottages from the City Council. Here families, who have been dependent on poor relief, are housed under supervision of a trained social worker. Once they have made sufficient progress they are transferred to the City Council's sub-economic housing schemes.

Two day nurseries are maintained by the Board. The Tafelberg Day Nursery in Canterbury Street accommodates 106 Coloured children aged 3 months to 6 years. The European nursery in Harrington Street has accommodation for 56 children.

#### FOOD SUPPLIED BY CITY HEALTH DEPARTMENT.

Free dinners are provided at fourteen welfare centres on Mondays to Fridays inclusive to nursing and expectant mothers and children under school age who are found by the medical officers to be suffering from under nourishment caused by poverty. The figures for the year under report are given on pages 20 and 23. The dinners given numbered 112,171 (mothers, 31,005; children, 81,166). To these figures are to be added 28,252 dinners supplied to children at the municipal nursery schools (see page 27).

Free milk is also provided at the welfare centres for necessitous children under school age. This is supplied without cost to the Council under the scheme of the Dairy Industry Control Board by arrangement with the School Board. The milk meals are consumed at the centres. During the year the attendances for milk meals numbered 159,763 and 9,562 gallons of milk were consumed. To these figures are to be added 26,062 milk meals supplied from the same source to children at the municipal nursery schools.

Dried milk for bottle-fed infants is issued at the welfare centres. The mothers are charged cost price if they can afford to pay; otherwise the dried milk is supplied at a reduced price or free. In the year ended 30th June, 1949, 1,711 new cases were supplied and 48,680 lbs. of dried milk were issued. The cost was £5,273 13s. 4d. (see page 21). As a result of this provision no suckling infant in the Municipality need lack an adequate diet on account of poverty.

The City Council also provides bread and milk as additional nourishment for indigent cases of tuberculosis. The ordinary daily allowance for a patient is 1 lb. bread and 1 pint milk. 185 new cases were put on this allowance during the year, and the cost of the supplies was £2,021 0s. 1d.

#### 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, but on parts of the Flats natural drainage scarcely exists 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, but this is being gradually overcome by the extension of the drainage system.

The town is sewered on the "separate" system, the stormwater being taken by separate channels to the nearest natural outfall, namely the sea, or the Liesbeek and Black Rivers with 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 and thence to the sea.

##### STORMWATER PROGRESS.

Progress was made with the stormwater drainage schemes in Q-Township and Retreat Native Housing Scheme. Portions of the Liesbeek, Black and Blaauwvlei Rivers were canalized to relieve flooding and to eliminate stagnant pools.

##### SEWERAGE.

With the exception of a few outlying areas, such as Windermere, portions of Athlone, Crawford, Claremont, Heathfield, Retreat, etc., practically the entire built-up part of the Municipality is provided with water-borne sewerage facilities.

Rapid progress is being made in the construction of sewers to serve the Belmead area and Epping-Uitvlugt.



## PAIL CLOSETS.

The City Engineer's Department undertakes the weekly collection of sterco in the outlying un-sewered areas, but two removals weekly are effected in the Windermere area. In parts of the Cape Flats this work is carried out with great difficulty 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. On Muizenberg Flats in the sand dunes, animal-drawn sledge has to be used for the work. The work is carried out in the day time. An initial payment of 15s. is required for the installation of a pail but no charge is made for ordinary removals and renewals. Extra removals are carried out, when necessary, at a charge of ninepence per removal.

The sterco collected in the district Diep River to Heathfield is buried in trenches on municipal land at Wynberg Flats. Elsewhere it is passed into the sewers at the depositing depots at Camps Bay, Maitland, Kensington, Athlone, Kenilworth and Muizenberg.

At Plumstead, Diep River, Heathfield, Muizenberg, Clovelly and Kalk Bay, the O'Brien earth closet is in use, the service, including removals, being undertaken by a private firm under contract with the Corporation. Householders are required to provide the closets and the removals are paid for by the Corporation. Ordinary pail closets are allowed in Heathfield district. 70 premises are at present provided with this service, but the number is gradually being reduced as property owners connect their premises to the Council's sewers. Slop-water removal services are undertaken by the Corporation at Lakeside and Kalk Bay.

## HOUSE REFUSE REMOVALS.

The removal of house refuse is carried out by the Cleansing Branch of the City Engineer's Department as follows:—

In Cape Town proper, every weekday, and on Sundays in certain congested parts. Sunday services are carried out at other premises, also, on special payment.

In Green Point and Sea Point four times a week. Hotels and boarding houses, however, have a service every weekday and on Sundays, if required, subject to special payment.

In Woodstock and Salt River (from Cape Town to Station Road, Observatory), four times a week at general properties, but every weekday at certain business premises.

In the Southern Suburbs from Mowbray to Heathfield and in the Maitland Ward, three times a week but with a daily service to certain business premises.

In Windermere two removals weekly.

In Muizenberg-Kalk Bay, four times a week in respect of general properties, but every weekday for hotels, boarding houses and certain business premises. During the summer season refuse removals are executed from hotels on Sundays on payment of a special charge.

Clifton, Camps Bay and Lakeside three times a week.

Added areas on the Cape Flats, twice a week.

During the year the quantity of refuse removed was 443,814 cubic yards.

In all areas house refuse is disposed of by controlled tipping.

## Milk.

The distribution of State-aided milk is administered by the School Board for the Cape Division, and the Secretary of the Board has kindly supplied the following statement for the whole Cape Division, of the school feeding scheme into which the State-aided milk scheme was merged:—

## NATIONAL FEEDING SCHEME FOR SCHOOL CHILDREN.

The scheme was continued for all schools on much the same lines as during preceding years. It was found increasingly difficult to provide a suitable variety of foodstuffs with the daily grant of only 2d. per pupil.

More fresh fruit was supplied than during the previous year. Margarine was used as a satisfactory substitute for butter as it has the same food value but is considerably cheaper. Considerably less raisins and peanuts were supplied to schools.

The following table indicates the amount and variety of foodstuffs supplied to all schools:—

Commodity.	January — March.	April — June.	July — September.	October — December.	Total for year.
Milk .. .. gals.	57,487	110,282	115,224	93,168	376,161
Powdered milk .. lbs.	192	936	552	216	1,896
Butter .. .. lbs.	13,036	18,463	18,289	15,637	65,425
Margarine .. .. lbs.	468	2,616	3,029	2,363	8,476
Cheddar cheese .. lbs.	20,363	33,289	26,637	16,235	96,524
Pasteurized cheese .. lbs.	3,735	4,395	3,852	3,360	15,342
Cocoa .. .. lbs.	2,784	7,563	6,836	2,610	19,793
Moskonfy .. .. lbs.	1,387	4,074	7,956	4,253	17,670
Sugar .. .. pkts.	237	518	407	259	1,421
Oranges .. .. pkts.	—	17,000	23,347	11,515	51,862
Orange juice .. .. lbs.	1,200	1,350	660	2,010	5,220
Grapes .. .. lbs.	21,375	4,931	—	—	26,306
Raisins .. .. lbs.	28,875	45,875	32,175	20,825	127,750
Fruit salad .. .. lbs.	9,325	16,450	13,825	7,525	47,125
Crystallized fruit .. lbs.	6,659	4,927	796	456	12,838
Bread .. .. lbs.	134,819	172,876	166,215	119,201	593,111
Peanuts .. .. lbs.	23,124	27,999	24,665	16,459	92,247
Peanut butter .. .. lbs.	12,131	15,427	14,298	10,128	51,984
Fresh fruit and vegetables (other than grapes and oranges) .. ..	£4,502 0 0	£8,218 0 0	£5,545 0 0	£6,382 0 0	£24,647 0 0

At the end of the year the following schools were included in the Scheme:—

European	..	..	102 (27,574 children)
Coloured	..	..	181 (57,085 children)
Native	..	..	11
			<hr/>
			294 (84,659 children—European and Coloured)

#### HYDROGEN CYANIDE FUMIGATION.

Under the Hydrogen Cyanide Fumigation Regulations (Government Notices Nos. 804 of 30th April, 1943, and 605 of 13th April, 1945), no person may undertake the fumigation of any "building or premises" with hydrogen cyanide unless he has obtained a certificate of competence from the Union Health Department or a "First Schedule" local authority. Certificates granted by local authorities are subject to confirmation and counter-signature by the Secretary for Public Health. A certificate may not be issued unless the candidate worked for twelve months as a fumigator prior to 30th April, 1943, or has worked for six months under a certificated fumigator.

In August, 1943, the Medical Officer of Health, Cape Town, was requested and authorized by the Secretary for Public Health to undertake the examination and certification (subject to the prescribed confirmation), of candidates from areas outside Cape Town not under "First Schedule" authorities.

In the year ended 30th June, 1949, there were no certificates issued by the Medical Officer of Health.

### SECTION XI.—STAFF OF CITY HEALTH DEPARTMENT.

The full-time staff as at 30th June, 1949, was as follows:—

#### ADMINISTRATIVE BRANCH.

Medical Officer of Health.  
Deputy Medical Officer of Health.  
Assistant Deputy Medical Officer of Health.  
Chief Administrative Officer.  
Chief Clerk.  
Principal Clerks, 2.  
Clerks-in-Charge, 7.  
Senior Clerks, 3.  
Clerks, 4.  
Junior Clerks, 4.  
Senior Shorthand Typiste.  
Senior Clerk Typiste.  
Head Office Messenger.  
Messenger Learner.  
Motor Drivers, 6.  
Caretaker/Cleaner.  
Labourer.

#### MATERNAL AND CHILD WELFARE BRANCH.

Maternal and Child Welfare Officer.  
Deputy Maternal and Child Welfare Officer.  
Senior Assistant Maternal and Child Welfare Officer.  
Assistant Maternal and Child Welfare Officer.  
Chief Health Visitor.  
Assistant Chief Health Visitor.  
Senior Health Visitors, 13.  
Supervisor of Midwives.  
Health Visitors, 23.  
Junior Health Visitors, 10.  
Social Welfare Visitor.  
Clinic Assistants, 3.  
Clerk.  
Junior Clerk.  
Senior Clerk Typiste.  
Shorthand Typiste.  
Clerk Typistes, 2.  
Nursery School Teachers, 3.  
Nursery School Superintendent.  
Domestic Adults, 23.  
Domestic Juveniles, 14.  
Cooking Hands, 14.  
Labourers, 2.  
Night Watchmen, 2.

#### VENEREAL DISEASES BRANCH.

Venereal Diseases Officer.  
Deputy Venereal Diseases Officer.  
Senior Health Visitors, 3.  
Health Visitors, 2.  
Junior Health Visitor.  
Head Male Nurse.  
Male Nurses, 7.  
Senior Clerk.  
Senior Clerk Typiste.  
Clerk Typiste.  
Domestic Adult.  
Labourers, 2.

#### TUBERCULOSIS BRANCH.

Tuberculosis Officer.  
Senior Radiographer.  
Senior Health Visitors, 3.  
Health Visitors, 2.  
Junior Health Visitors, 3.  
Clerk-in-Charge.  
Senior Clerk.  
Clerks, 2.  
Junior Clerk.  
Clerk-Typistes, 2.  
Domestic Adults, 2.  
Caretaker/Cleaner.  
Labourer.

#### CITY HOSPITAL, INCLUDING AMBULANCE AND DISINFECTION SERVICES.

Medical Superintendent of Hospitals.  
Deputy Medical Superintendent.  
Resident Medical Officer.  
House Physicians, 2.  
Matron.  
Assistant Matron.  
Home Sister.  
Night Sister.  
Theatre Sister.  
Sisters, 8.  
Staff Nurses, 2.  
Student Nurses, 10.  
Nurse.  
Nursing Assistants, 6.  
Probationer Nurses, 16.  
Chief Pharmacist.  
Senior Pharmacist.  
Pharmacist.  
Dispensary Assistant.  
Radiographer.  
Disinfection Officer.  
Ambulance Officer.  
Clerk-in-Charge.  
Clerks, 2.  
Junior Shorthand Typiste.  
Junior Clerk.  
Senior Works Foreman.  
Fitter.  
Handyman/Electrician.  
Handyman/Carpenter.  
Brush-hand Learner.  
Works Storeman.  
Storehand.  
Boiler Attendant.  
Labourers, 13.  
Laundry Supervisor.  
Seamstresses, 3.  
Laundresses, 25.  
Housekeeper.  
Housemaids, 24.  
Native Male Orderlies, 36.  
Hospital Cooks, 4.  
Senior Telephone Operators, 2.  
Telephone Operator.  
Hospital Porters, 4.  
Ambulance and Motor-drivers, 5.



## BROOKLYN HOSPITAL FOR CHEST DISEASES.

Deputy Medical Superintendent.  
 House Physicians, 2.  
 Matron.  
 Sisters, 10.  
 Non-European Nurses, 15.  
 Male Nursing Assistants, 3.  
 Non-European Probationer Nurses, 2.  
 Non-European Nursing Assistants, 30.  
 Occupational Therapist.  
 Hospital Caretaker.  
 Hospital Porters, 3.  
 Senior Telephone Operator.  
 Seamstress.  
 Native Male Orderlies, 36.  
 Boiler Attendant.  
 Hospital Cooks, 4.  
 Labourers, 9.  
 Clerk.  
 Junior Shorthand Typiste.  
 Kitchen Supervisor.  
 Handyman-Carpenter.  
 Motor Driver.

## NATIVE HOSPITAL, LANGA.

Medical Officer.  
 Matron.  
 Sister.  
 Native Nurses, 3.  
 Junior Male Nurse.  
 Male Nursing Assistant.  
 Native Midwives, 4.  
 Native Male Orderlies, 5.  
 Domestic Adult.  
 Hospital Cooks, 2.

## HEALTH INSPECTION BRANCH.

Chief Health Inspector.  
 Assistant Chief Health Inspector.  
 Divisional Health Inspectors, 5.

Pest Control Officers, 4.  
 Senior Health Inspectors, 11.  
 Health Inspectors, 16.  
 Assistant Health Inspectors, 2.  
 Learner Health Inspectors, 4.  
 Clerk-in-Charge.  
 Senior Clerk.  
 Junior Clerk.  
 Junior-Shorthand Typiste.  
 Washhouse Caretaker/Fitter.  
 Washhouse Caretakers, 6.  
 Assistant Washhouse Caretakers, 6.  
 Ratcatchers, 15.  
 Ratcatchers Assistants, 7.  
 Ratcatchers Assistant-Learners, 4.  
 Motor-Driver.  
 Checker.  
 Fireman/Stoker.  
 Labourers, 5.  
 Drain Tester.  
 Attendants at Public Sanitary Conveniences,  
 157.

## DAIRY INSPECTION.

Veterinary Officer.  
 Dairy Inspectors, 3.

## DENTAL BRANCH.

Chief Dental Officer.  
 Deputy Dental Officer.  
 Assistant Dental Surgeon.  
 Dental Mechanics, 3.  
 Dental Nurses, 3.  
 Clinic Assistants, 2.  
 Senior Health Visitor.  
 Clerk.  
 Junior Clerk.  
 Clerk/Typiste.  
 Domestic Adult.  
 Caretaker/Cleaner.  
 Labourer.

## REPORT OF THE MEDICAL OFFICER OF HEALTH.

TABLE A1. DEATHS REGISTERED IN 1948-49 CLASSIFIED FOR CAUSES, RACE, SEX, AGE-GROUPS AND WARDS.  
Deaths in Cape Town of non-Residents (Outward Transfers) are excluded from the table proper and shown separately. (52 weeks ended 1st July, 1949).

E.—EUROPEANS. O.—OTHER, OR NON-EUROPEAN.

CAUSE OF DEATH.		Race.	AGE-GROUPS: CORRECTED FOR OUTWARD TRANSFERS.												TOTALS.		Deaths in Cape Town of Non-Residents (Excluded from foregoing columns.)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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			0 to 1		1 to 2		2 to 5		5 to 10		10 to 15		15 to 25		25 to 35			35 to 45		45 to 55		55 to 65		65 to 75		75 to 85		85 and upwards		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.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
I.—Infectious and parasitic diseases		{ E. O.	5 82	—	2 72	10 64	4 57	11 218	5 191	1 21	3 27	1 11	5 61	13 118	84 —	9 65	15 120	4 49	3 35	7 16	4 12	8 41	2 24	3 24	3 24	—	—	1 9	1 9	72 1,683	40 516	112 1,163	15 124	14 66																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
II.—Cancer and other tumours		{ E. O.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—</

\* Including the deaths of 4 newly-born infants (2 males and 2 females) of unknown race.



## SUMMARY.

WARDS: CORRECTED FOR OUTWARD TRANSFERS.

CAUSE OF DEATH.	Race.	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		Not Allocated, Residential Addresses Unascertained.		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- sone.	
		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.
I.—Infectious and parasitic diseases ..	{E. O. 14	3	1	1	2	2	4	5	2	2	5	4	3	3	8	5	7	5	12	6	3	2	4	4	2	1	1	4	6	1	2	2	40	112	
II.—Cancer and .. other	{E. O. 1	14	19	12	15	28	31	6	11	5	75	56	61	46	29	28	11	85	17	3	121	121	5	25	15	18	27	45	21	84	59	13	647	516	
III.—Rheumatism, diseases of nutrition, of endocrine glands and other	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	10	15	1	17	10	4	4	3	3	8	10	5	9	5	13	4	116	149		
IV.—Diseases of the blood and blood-forming organs	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
V.—Chronic poisonings and intoxication ..	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
VI.—Diseases of the nervous system and sense organs ..	{E. O. 4	9	10	13	14	4	5	8	11	4	8	1	2	4	8	4	4	13	1	1	5	2	8	1	10	6	5	9	7	8	9	10	82	210	
VII.—Diseases of the circulatory system ..	{E. O. 48	32	25	11	17	8	33	33	20	15	16	5	11	29	15	15	13	29	24	18	4	27	18	23	18	10	18	26	33	10	1	1	87	106	
VIII.—Diseases of the respiratory system (not specified as tuberculous)	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
IX.—Diseases of the digestive system ..	{E. O. 10	4	1	3	5	1	4	1	2	1	3	1	3	1	6	5	4	3	6	3	1	1	4	5	6	3	3	4	7	4	2	5	58	111	
X.—Non-venereal diseases of the genito-urinary system and annexa ..	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
XI.—Diseases of pregnancy and perinatal state ..	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
XII.—Diseases of the skin and cellular tissues ..	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
XIII.—Diseases of the bones and organs of movement ..	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
XIV.—Congenital malformations ..	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
XV.—Diseases peculiar to the first year of life ..	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
XVI.—Senility, old age ..	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
XVII.—Violent or accidental deaths ..	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
XVIII.—Ill-defined causes of death ..	{E. O. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Totals ..	{E. O. 94	88	73	50	52	33	79	62	42	38	25	28	184	109	79	67	46	91	40	20	49	52	50	55	50	45	60	70	75	40	40	957	804	1,761	
Totals, all races ..	{E. O. 11	3	32	38	104	96	14	7	212	184	213	20	369	324	21	11	73	63	71	126	75	267	181	43	9	2,101	1,675	3,776	2,479	5,541*	3,776	5,541*	3,776		

\* Including 4 of unknown race.



## REPORT OF THE MEDICAL OFFICER OF HEALTH

[illegible]



CAUSE OF DEATH.	Race.	WARDS: CORRECTED FOR OUTWARD TRANSFERS.																														Not Allocated. Residential Addresses Uncertain.		TOTALS.		
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		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.			
I. INFECTIVE AND PARASITIC DISEASES—DISEASES DUE TO BACTERIA.																																				
Typhoid fever ..	{E. O.	-	-	-	-	-	-	1	-	-	-	-	1	-	2	2	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	5	5	10
Paratyphoid fevers ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Plague, bubonic and septicaemic ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Plague, pneumonic ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Plague, unspecified ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cholera ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Undulant fever ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cerebrospinal meningococcal meningitis ..	{E. O.	-	-	-	-	1	-	-	-	1	-	1	-	2	-	1	2	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	4	5	9
Anthrax ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Scarlet fever ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Whooping cough ..	{E. O.	-	-	-	-	1	1	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	5	5	-	-	1	8	10	18	
Diphtheria ..	{E. O.	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	1	-	-	-	1	1	-	1	1	-	3	1	4	5	
Erysipelas ..	{E. O.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	
Tetanus ..	{E. O.	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3	5	
Tuberculosis of respiratory system ..	{E. O.	1	-	1	2	1	3	1	2	-	2	1	7	3	4	3	9	2	5	4	2	1	1	2	2	1	-	4	1	2	1	1	48	20	6	
Tuberculosis of central nervous system ..	{E. O.	-	-	-	1	-	1	-	-	1	-	1	-	1	-	1	-	1	1	1	1	-	1	1	1	2	3	3	12	5	1	1	73	68	141	
Tuberculosis of intestines and peritoneum ..	{E. O.	1	-	-	-	-	-	-	1	-	2	-	-	1	1	1	-	-	-	-	1	-	-	-	-	-	-	-	2	-	-	4	6	10		
Tuberculosis of vertebral column ..	{E. O.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	1	-	3	1	4	
Tuberculosis of other bones and joints ..	{E. O.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	
Tuberculosis of skin ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tuberculosis of lymphatic system ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	
Tuberculosis of genito-urinary system ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	1	1	1	-	
Tuberculosis of other organs ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	
Tuberculosis, acute miliary ..	{E. O.	-	-	-	-	-	-	1	-	-	1	-	-	-	4	1	-	-	3	7	1	-	-	-	1	1	1	2	3	3	1	-	15	15	30	
Tuberculosis, chronic miliary ..	{E. O.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2	1	1	2	
Leprosy ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Purulent infection and septicaemia (non-puerperal) ..	{E. O.	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	2	3	5		
Gonococcal infections (all sites) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glanders ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tularaemia ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other bacterial diseases ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dysentery, bacillary ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dysentery, amoebic ..	{E. O.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	2	-	1	2	
Other protozoal dysentery ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dysentery, other and unspecified forms ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Malaria ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Blackwater fever ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sleeping sickness (trypanosomiasis) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other diseases due to parasitic protozoa ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



Death Classification.			AGE-GROUPS: CORRECTED FOR OUTWARD TRANSFERS.																																TOTALS.			Persons.	Deaths in three years.
Code No.	International Code No.	CAUSE OF DEATH.	Race.	0 to 1		1 to 2		2 to 5		Total under 5		5 to 10		10 to 15		15 to 25		25 to 35		35 to 45		45 to 55		55 to 65		65 to 75		75 to 85		85 and upwards.									
				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.				
040	30	I. (Cont.) Locomotor ataxia (tabes dorsalis) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
041	30	General paralysis of the insane ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	4	-	3	1	-	-	-	-	-	-	-	-	-	-	11	1	12			
042	30	Aneurysm of the aorta ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	1	4	-	-	1	1	-	2	-	2	-	-	7	3	10				
043	30	Syphilis, congenital ..	{E. O.	15	9	2	4	-	1	17	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	14	31				
044	30	Syphilis, other forms ..	{E. O.	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	2	2	1	-	1	1	-	-	1	-	-	-	-	5	4	9				
045	31	Relapsing fever ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
046	32	Weil's disease ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
047	32	Other diseases due to spirochetes ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
048	33	Influenza with respi- ratory complications specified ..	{E. O.	-	-	-	-	1	-	1	-	-	-	-	-	1	-	1	-	1	-	-	-	-	-	-	1	-	-	-	-	1	1	2	-				
049	33	Influenza without respiratory complica- tions specified ..	{E. O.	5	2	1	-	-	-	6	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	6	2	8				
050	34	Smallpox ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
051	34	Amias and alastrim ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
052	35	Measles ..	{E. O.	1	4	5	3	-	3	6	10	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	11	17					
053	36	Acute poliomyelitis & polioencephalitis ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
054	37	Acute lethargic (or epidemic) encephal- itis ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	1	-				
055	37	Parkinsonism (post- encephalitic) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
056	38	Yellow fever ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
057	38	Rabies ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
058	38	Herpes zoster (zona) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-				
059	38	Varicella (chicken pox) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
060	38	German measles ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
061	38	Other diseases due to viruses ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1	1	1	-	-			
062	39	Typhus, louse-borne ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
063	39	Typhus, flea-borne ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
064	39	Typhus, tick-borne, tick-bite fever ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
065	39	Typhus, unspecified ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
066	40	Ankylostomiasis ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
067	41	Hydatid disease ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
068	42	Cestodes-tape ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
069	42	Trematodes-fluke ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
070	42	Other diseases due to helminths-nematodes —round ..	{E. O.	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-				
071	42	Other diseases due to helminths-bilharzia ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
072	42	Other diseases due to helminths — others and unspecified ..	{E. O.	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-				
073	43	Mycoses ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
074	44	Veneral diseases (other than syphilis or gonorrhoea) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
075	44	Pernicious lympho- granulomatosis (Hodgkin's disease) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	2	1	-	-	-	-	-	-	-	-	-	-	4	2	4	1				
076	44	Mumps ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
077	44	Other infectious or parasitic diseases ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Totals for I ..				{E. O.	5	82	64	72	70	4	64	57	218	191	21	27	7	11	61	118	84	65	120	49	9	35	35	13	16	52	42	3	1	1	72	40	112	1	1



CAUSE OF DEATH.	Race.	WARDS: CORRECTED FOR OUTWARD TRANSFERS.																														Not Allocated, Residential Address Unascertained.	TOTALS.			
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		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.					
(Contd.)																																				
Acromotor ataxia (tabes dorsalis) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
General paralysis of the insane ..	{E. O.	-	-	-	-	1	-	2	-	3	-	1	-	-	-	2	-	-	-	1	-	-	-	-	-	-	-	-	2	-	11	1	12			
Aneurysm of the aorta ..	{E. O.	-	-	-	-	-	-	2	-	-	-	1	-	-	-	1	1	-	-	-	-	-	-	-	-	2	1	1	1	-	1	3	10			
Syphilis, congenital ..	{E. O.	-	-	-	-	-	-	-	-	1	1	2	-	5	7	-	2	1	-	-	-	2	-	-	-	2	1	1	4	2	-	17	14	31		
Syphilis, other forms ..	{E. O.	-	-	-	1	-	-	1	-	1	1	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	1	1	-	-	5	4	9			
Relapsing fever ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Tell's disease ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Other diseases due to spirochaetes ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Influenza with respiratory complications specified ..	{E. O.	1	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	1	2				
Influenza without respiratory complications specified ..	{E. O.	-	-	1	1	-	-	-	-	2	-	-	-	1	-	-	2	1	-	-	1	-	-	-	-	-	-	-	-	-	6	2	8			
Smallpox ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Amass and alastrim ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Measles ..	{E. O.	-	-	1	-	1	-	-	-	1	-	-	-	1	4	-	3	3	-	-	-	-	1	-	-	-	1	1	-	-	6	11	17			
Acute poliomyelitis & polioencephalitis ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Acute lethargic (or epidemic) encephalitis ..	{E. O.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1				
Parkinsonism (post-encephalitic) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Yellow fever ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Rabies ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Herpes zoster (zona) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	1					
Varicella (chicken pox) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
German measles ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Other diseases due to viruses ..	{E. O.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	1					
Typhus, louse-borne ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Typhus, flea-borne ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Typhus, tick-borne, tick-bite fever ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Typhus, unspecified ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Ankylostomiasis ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Hydatid disease ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Cestodes-tape ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Trematodes-fluke ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Other diseases due to helminths — nematodes—round ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1				
Other diseases due to helminths — bilharzia ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Other diseases due to helminths — others and unspecified ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1				
Mycoses ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Veneral diseases (other than syphilis or gonorrhoea) ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Pernicious lympho-granulomatosis (Hodgkin's disease) ..	{E. O.	-	-	1	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	4			
Mumps ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Other infectious or parasitic diseases ..	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Totals for I ..	{E. O.	3	1	1	2	2	4	5	2	2	2	4	3	8	5	7	5	12	7	12	6	3	4	4	1	2	1	1	2	4	6	1	2	72	40	112







[illegible]







CAUSE OF DEATH.	Race.	WARDS: CORRECTED FOR OUTWARD TRANSFERS.																														Not Allocated, Residential Admissions Unascertained.		TOTALS.	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		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.	Persons.			
II. (Contd.)																																			
Exophthalmic goitre	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Exoedema and cretinism	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other diseases of the thyroid glands	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Diseases of the parathyroid glands (Tetany)	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Diseases of the thymus	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Adison's disease	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other diseases of the adrenal glands	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Acromegaly	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Malnutrition	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other general diseases	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Scurvy, infantile	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Scurvy, other forms	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Beri-beri	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Pellagra	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Rickets	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other vitamin-deficiency diseases	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Totals for III	{E. O.	1	2	1	1	1	1	1	3	1	1	1	1	3	2	2	3	1	2	8	1	1	2	2	2	2	2	2	2	2	1	1	13	23	36
V. DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.																																			
Primary purpura	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Hemophilia	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other and unspecified hemorrhagic conditions	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Perniciou anemia	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other hyperchromic anemias	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Hypochromic anemias	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other and unspecified anemias	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Leukemia	{E. O.	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Leukemia	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Splenic anemia	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Jantli's disease	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other diseases of the spleen	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Agranulocytosis	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Erythrocytosis	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other diseases of the blood and blood-forming organs	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Totals for IV	{E. O.	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
VI. CHRONIC POISONINGS AND INTOXICATIONS.																																			
Acute alcoholism	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Chronic alcoholism	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Unspecified alcoholism	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Lead poisoning specified as occupational	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		







CAUSE OF DEATH.	Race.	WARDS: CORRECTED FOR OUTWARD TRANSFERS.																														Not Allocated, Residential Address Unascertained.		TOTALS.			
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		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.	Persons.					
V. (Contd.)																																					
Lead poisoning not specified as occupational ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Occupational poisoning ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Poisoning by narcotic and soporific drugs ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Other non-occupational poisoning ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Unspecified poisoning ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Totals for V ..	{ E. O. }	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2			
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.																																					
Intra-cranial abscess ..	{ E. O. }	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2				
Other forms of encephalitis (non-epidemic) ..	{ E. O. }	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	3				
Meningitis, pneumococcal ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	3				
Other forms of meningitis (non-meningococcal) ..	{ E. O. }	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2				
Diseases of the medulla and spinal cord, other than locomotor ataxia and disseminated sclerosis ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1			
Cerebral hemorrhage (not due to injury at birth) ..	{ E. O. }	3	8	7	6	5	5	8	2	6	2	5	3	7	2	3	6	7	-	3	14	-	5	1	7	3	3	3	7	4	4	1	2	44	81	125	
Cerebral embolism and thrombosis ..	{ E. O. }	-	1	3	5	1	-	1	3	1	1	-	-	-	-	-	1	2	-	5	3	-	4	3	-	2	1	2	1	1	4	3	5	19	31	50	
Hemiplegia and other paralysis of unstated origin ..	{ E. O. }	-	-	-	-	1	1	-	-	2	1	1	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	1	-	4	3	7		
Mental disorders and deficiency (excluding general paralysis of the insane) ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	1	3		
Epilepsy ..	{ E. O. }	1	-	-	1	-	-	-	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3	12	6	5	11		
Convulsions in children under 5 years of age ..	{ E. O. }	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	3			
Chorea ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Neuritis (non-rheumatic) ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Paralysis agitans (Parkinson's disease) ..	{ E. O. }	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	1	
Disseminated sclerosis ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other diseases of the nervous system ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Diseases of the organs of vision ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Diseases of the ear and the mastoid process ..	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	6	
Totals for VI ..	{ E. O. }	4	9	10	13	4	5	8	11	4	8	1	2	4	8	4	4	8	13	1	5	7	8	1	10	6	5	4	9	7	8	9	10	82	128	210	
	{ E. O. }	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						







CAUSE OF DEATH.	Race.	WARDS : CORRECTED FOR OUTWARD TRANSFERS.																														Not Allocated. Residential Addresses Unascertained.		TOTAL LS.		
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		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.					
		{E.	{O.	{E.	{O.	{E.	{O.	{E.	{O.	{E.	{O.	{E.	{O.	{E.	{O.	{E.	{O.	{E.	{O.	{E.	{O.	{E.	{O.	{E.	{O.	{E.	{O.	{E.	{O.	{E.	{O.					
VII. (Contd.)																																				
Diseases of the coronary arteries and angina pectoris ..	{E.	27	11	11	4	4	5	18	7	9	7	2	2	4	3	6	6	12	5	3	3	12	7	10	7	9	7	8	4	16	3	3	1	153	82	235
	{O.	-	-	1	-	4	3	-	-	9	5	13	3	3	3	4	4	2	1	1	6	3	-	1	5	1	1	4	2	3	2	-	-	54	28	
Heart disease specified as rheumatic ..	{E.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	1	2	
	{O.	-	-	-	-	-	-	-	-	-	-	2	1	1	-	-	1	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	3	3	10	
Heart disease not specified as rheumatic ..	{E.	4	3	-	1	1	-	-	1	-	1	-	-	2	1	1	1	-	2	1	3	1	-	-	1	1	1	-	-	-	-	-	10	15	25	
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	-	-	-	6	5		
Aneurysm, except of heart and aorta ..	{E.	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	-		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Arterio-sclerosis, excluding diseases of the coronary arteries, renal sclerosis and cerebral hemorrhage ..	{E.	5	4	2	1	4	1	1	2	-	-	-	2	3	-	-	1	-	2	3	-	1	2	3	2	3	2	-	1	5	5	2	2	32	27	59
	{O.	-	-	-	-	3	2	-	-	3	7	1	-	2	1	-	2	-	-	5	9	-	-	2	3	4	2	1	-	8	6	1	-	29	30	
Gangrene (including cancer oris) ..	{E.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	3	1	4	
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2	1		
Other diseases of the arteries ..	{E.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Diseases of the veins ..	{E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	1	
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Diseases of the lymphatic system ..	{E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
High blood pressure ..	{E.	-	-	-	-	1	2	3	2	1	-	-	3	1	-	2	4	3	1	-	3	2	3	1	2	-	2	4	3	1	1	-	26	19	45	
	{O.	-	-	-	-	1	-	3	5	2	3	3	3	5	3	5	-	-	1	8	-	2	2	1	3	6	7	3	2	1	-	-	34	35	69	
Other diseases of the circulatory system (including hypertension) ..	{E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Totals for VII ..	{E.	48	32	25	11	17	8	33	20	15	16	5	11	20	9	15	13	29	24	18	4	27	18	23	18	18	19	18	26	33	10	11	11	354	250	605
	{O.	-	1	3	6	16	16	1	1	31	33	38	32	15	18	43	32	4	3	29	33	-	5	11	12	14	14	22	18	24	11	1	-	252	235	487
VIII. DISEASES OF THE RESPIRATORY SYSTEM (NOT SPECIFIED AS TUBERCULOUS).																																				
Diseases of the nasal fossae and annexa ..	{E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Diseases of the larynx ..	{E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Bronchitis, acute ..	{E.	-	-	1	-	1	-	-	-	7	3	2	2	-	-	15	10	-	1	6	7	-	1	1	1	-	-	2	2	5	6	-	2	2	4	
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Bronchitis, chronic ..	{E.	1	-	-	-	-	1	-	-	1	-	-	2	-	-	1	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	12	2	14	
	{O.	-	-	-	-	2	-	-	5	1	-	-	-	-	5	1	-	-	7	2	-	-	-	-	-	-	-	1	-	1	-	1	19	6	25	
Broncho-pneumonia, including capillary bronchitis ..	{E.	-	3	2	1	2	1	3	-	1	3	-	1	1	3	2	2	2	-	-	-	1	1	3	1	2	1	1	1	2	3	2	23	23	46	
	{O.	1	-	2	6	8	7	-	6	12	19	9	7	4	21	20	-	1	29	24	1	-	7	3	12	7	5	5	10	13	2	-	130	111	241	
Pneumonia, lobar ..	{E.	-	1	-	-	1	-	-	-	4	4	2	1	3	1	4	7	-	1	1	-	-	1	2	1	1	-	1	1	-	-	-	3	5	8	
	{O.	-	-	3	-	-	-	1	-	4	4	2	1	3	1	4	7	-	4	1	-	-	-	1	2	1	1	-	6	2	1	-	31	18	49	
Pneumonia, unspecified, including acute congestion of the lungs ..	{E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	1	1	2		
	{O.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	2	1	3			
Empyema ..	{E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other unspecified forms of pleurisy (not specified as tuberculous) ..	{E.	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	3			
Hæmorrhagic infarction of the lung (including pulmonary embolism) ..	{E.	-	-	1	-	1	-	-	-	-	-	-	-	1	-	-	1	1	-	1	-	-	-	-	-	-	-	3	2	-	-	3	6	11		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	1	-	-	-	-	-	-	-	1	-	1	-	1	5	6		
Chronic or unspecified congestion of the lungs (including hypostatic pneumonia of unknown origin) ..	{E.	-	-	-	-	-	-	-	-	-	-	-	3	-	-	1	-	1	-	-	-	1	3	1	-	1	-	-	-	-	1	-	4	9	13	
	{O.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2		
Asthma ..	{E.	1	1	-	-	-	-	1	-	-	-	1	2	1	-	-	1	1	-	1	2	1	-	1	2	1	1	-	-	2	1	-	1	5	10	
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Pulmonary emphysema ..	{E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Miners' phthisis without tuberculosis ..	{E.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Miners' phthisis with tuberculosis ..	{E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other occupational respiratory diseases ..	{E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Gangrene of the lung ..	{E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	{O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Abscess of the lung ..	{E.	-	-	-	-	-	-	-	-</																											



Death Classification.		AGE-GROUPS: CORRECTED FOR OUTWARD TRANSFERS.																								TOTALS.		Persons.		Deaths in City.		Deaths in Suburbs.											
Code No.	International Code No.	CAUSE OF DEATH.	Race.	0 to 1		1 to 2		2 to 5		Total under 5		5 to 10		10 to 15		15 to 25		25 to 35		35 to 45		45 to 55		55 to 65		65 to 75		75 to 85		85 and upwards.		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.				
		IX. DISEASES OF THE DIGESTIVE SYSTEM																																									
450	115	Diseases of the teeth and gums ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
451	115	Septic sore throat ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
452	115	Other diseases of the pharynx and tonsils	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-		
453	115	Diseases of other and unspecified sites ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
454	116	Diseases of the oesophagus ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
455	117	Ulcer of the stomach	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	1	1	3	-	3	3	1	-	-	-	
456	117	Ulcer of the duodenum	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	1	-	-	-	
457	118	Other diseases of the stomach (except cancer and other malignant tumours)	{E. - - - - - O. - - - - -	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	
458	119	Diarrhoea and enteritis (under 2 years of age) ..	{E. 8 5 - 1 - O. 171 134 81 57 -	-	-	-	-	-	-	8 6 -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8 6 -	14 5	252 191 443 23	-	-	-	-			
459	120	Diarrhoea and enteritis (2 years of age and over) ..	{E. - - - - - O. - - - - -	-	-	-	-	15 13	15 13	1 3	-	-	-	-	2	-	1 1	1	-	-	-	1	1	-	1	1	-	1	1	-	-	-	3 1	4	-	-	21 18 39 1	-	-	-	-		
460	120	Ulceration of the intestines (except duodenum)	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	1	-	-	-	
461	121	Appendicitis ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	-	-	-	-	-	-	1	-	1	-	-	-	2 3	5	1	1	1	1	1	1	1	1	1	
462	122	Hernia ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	-	-	3 3 6 1	-	-	-	-	
463	122	Intestinal obstruction	{E. - - - - - O. - - - - -	-	-	-	-	-	-	3	-	-	-	-	-	-	-	1	1	-	2	3	1	1	-	2	1	1	1	-	-	8 2	10 4	9 2	3 6 9 2	-	-	-	-	-	-	-	-
464	123	Diverticulitis ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
465	123	Other diseases of the intestines ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	
466	124	Cirrhosis of the liver, with mention of alcoholism ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	1	2	-	2	-	-	-	-	-	-	-	-	8 1	9	-	-	3 - 3 -	-	-	-	-		
467	124	Cirrhosis of the liver, without mention of alcoholism ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	3	-	2	2	1	-	1	2	-	-	-	-	-	13 3	16 2	3 3 1	4 1	-	-	-	-	-	-		
468	125	Acute yellow atrophy of the liver (not associated with pregnancy or the puerperium) ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	-	-	2 - 2 -	-	-	-	-	
469	125	Other diseases of the liver ..	{E. - - - - - O. - - - - -	-	-	-	-	1	-	1	-	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2	2	-	-	3 - 3 -	-	-	-	-	
470	126	Biliary calculi ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	2 1	3	12	-	-	-	-	-	-	-	
471	127	Cholecystitis without record of biliary calculi ..	{E. - - - - - O. - - - - -	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1	1	2	-	-	-	1 4	5	1	1	1	1	1	1	1	1	1	1
472	128	Diseases of the pancreas (other than diabetes) ..	{E. - - - - - O. - - - - -	-	-	-	-	1	-	1	-	-	-	-	-	-	-	1	-	1	1	-	-	-	-	-	-	1	-	-	-	-	1 2	2	-	-	2 - 2 -	-	-	-	-		
473	129	Peritonitis without stated cause ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	
		Totals for IX ..	{E. 8 5 - 1 - O. 171 134 81 57 -	-	-	-	-	1 1	8 7 -	-	-	2 1	2	-	-	2 7	1 14	6 7	2 5	3 5	6 1	-	-	51 28	79 20	295 225	529 31																
		X. DISEASES OF THE URINARY AND GENITAL SYSTEMS (NOT VENEREAL OR CONNECTED WITH PREGNANCY OR THE PUERPERIUM).																																									
500	130	Nephritis, acute ..	{E. - 1 - - - O. 2 4 3 2 3 2 8 8 1 1 -	-	-	-	-	-	-	1	-	-	-	2	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	2	2	4	-	-	-	-	-	-	-	-
501	131	Nephritis, chronic ..	{E. - - - - - O. 1 - - - -	-	-	-	-	-	1 1	1	-	-	-	-	-	1	3	-	1 4	2 6	9 7	6 5	6 5	4 2	4 2	4 2	4 2	4 2	4 2	4 2	4 2	29 32	61 4	31 27	58 4	-	-	-	-	-	-	-	-
502	132	Nephritis not stated to be acute or chronic ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4 2	6	-	-	-	-	-	-	-	-	-
503	133	Pyelitis, pyelonephritis and pyelocystitis ..	{E. - - - - - O. - 1 - - -	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	5	8 3	9 1	-	-	-	-	-	-
504	133	Other diseases of the kidneys and uterus (not connected with pregnancy) ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	
505	134	Calculi of the urinary passages ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
506	135	Cystitis ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
507	135	Other diseases of the bladder ..	{E. - - - - - O. - - - - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



[illegible]



[illegible]



[illegible]







CAUSE OF DEATH.	Race.	WARDS: CORRECTED FOR OUTWARD TRANSFERS.																														Not Allocated. Residential Address Unascertained.		TOTALS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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[illegible]



CAUSE OF DEATH.	Race.	WARDS: CORRECTED FOR OUTWARD TRANSFERS.																														Not Allocated, Residential Address Unascertained.		TOTALS	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		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.	Persons.			
XV. (Contd.)																																			
Other specified diseases (including gangrene or hemorrhage of umbilicus, icterus neonatorum, acute catarrhal hepatitis .. .. .	{E. O.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	2	2	
Totals for XV ..	{E. O.	1	3	2	2	1	1	1	3	2	1	17	3	2	2	7	9	2	1	2	2	5	1	2	3	1	2	1	3	4	1	-	36	22	
XVI. SENILITY, OLD AGE.																																			
Senility (age 65 and over) .. .. .	{E. O.	-	1	-	-	2	1	-	2	1	2	-	-	1	-	1	-	-	1	-	-	3	-	3	-	2	-	1	1	1	-	2	6	18	
XVII. VIOLENT OR ACCIDENTAL DEATHS.																																			
Suicide .. .. .	{E. O.	-	1	3	-	1	-	2	-	1	-	-	-	1	1	-	-	-	-	-	2	-	2	-	-	-	1	1	-	-	1	-	14	3	
Homicide .. .. .	{E. O.	-	1	-	2	-	2	1	2	-	2	1	4	-	1	-	8	2	1	-	3	-	-	-	-	-	-	3	1	2	1	29	6		
Accidental injury by railway, road and other transport ..	{E. O.	-	1	4	-	2	1	-	-	-	1	3	1	-	1	6	3	-	1	7	1	-	1	1	-	-	3	-	1	-	22	24			
Accidental injury by industrial or other mechanical causes	{E. O.	1	-	2	1	1	-	1	-	1	2	-	-	1	-	-	4	-	2	-	3	1	-	1	1	-	-	-	-	1	1	12	14		
Injury by venomous animals .. .. .	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Injury by other animals .. .. .	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Food poisoning .. .. .	{E. O.	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Accidental absorption of poisonous gases	{E. O.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-			
Other acute accidental poisoning (not by gas) .. .. .	{E. O.	-	1	-	-	-	-	1	-	-	-	-	-	1	-	-	-	1	-	1	-	1	-	-	-	-	-	-	-	-	2	3			
Conflagration .. .. .	{E. O.	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2	1	2	8	1			
Accidental burns (conflagration excepted)	{E. O.	-	1	-	1	-	-	-	-	-	1	-	-	-	-	1	2	-	-	2	-	-	-	-	-	-	-	-	-	-	1	2			
Accidental mechanical suffocation .. .. .	{E. O.	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	1	1			
Accidental drowning	{E. O.	-	-	2	-	1	-	-	1	-	1	-	-	-	-	1	-	-	1	-	-	1	-	1	-	1	-	1	-	2	5	6			
Cataclysm (all deaths, whatever their cause)	{E. O.	-	4	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	2	12	12			
Hunger or thirst .. .. .	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Excessive cold	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Excessive heat (including heat stroke on mines) .. .. .	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Lightning .. .. .	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Other accidents due to electric currents	{E. O.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1			
Anesthetic accidents (experiments, normal childbirth, sterilizing or aesthetic operations or operations of unknown nature) .. .. .	{E. O.	1	-	1	-	-	-	-	1	1	-	-	1	2	-	3	-	1	-	-	-	-	-	-	-	-	-	1	2	4	4				
Lack of care of the new-born .. .. .	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Deaths of persons in military service during operations of war .. .. .	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Deaths of civilians due to operations of war	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Legal executions .. .. .	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Open verdict .. .. .	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Totals for XVII ..	{E. O.	2	4	11	1	7	7	7	3	9	2	3	4	7	6	1	3	1	3	1	2	2	6	-	1	-	4	4	1	1	65	17			
XVIII. ILL-DEFINED CAUSES OF DEATH.																																			
Sudden death .. .. .	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Ill-defined causes .. .. .	{E. O.	1	1	1	1	5	2	2	10	5	12	10	9	4	4	7	5	1	-	12	10	1	-	1	-	3	1	2	1	1	39	13			
Found dead—cause unknown .. .. .	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Other deaths from unknown or unspecified causes .. .. .	{E. O.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Totals for XVIII ..	{E. O.	1	1	1	1	5	2	2	10	5	12	10	9	4	4	7	5	1	-	12	10	1	-	1	-	3	1	2	1	1	39	13			













TABLE A3. DEATHS OF NATIVES (NOT RESIDENT IN LANGA) CLASSIFIED AS IN TABLE A1 (Included in Table A1).

[illegible]

## REPORT OF THE MEDICAL OFFICER OF HEALTH.

TABLE A3 (Continued).

Section.	Code No.	CAUSE OF DEATH.	AGE GROUPS (YEARS).																																TOTALS.				Deaths in Charge Town of non-residents (ex-cluded).
			0 to 1		1 to 2		2 to 5		Total under 5		5 to 10		10 to 15		15 to 25		25 to 35		35 to 45		45 to 55		55 to 65		65 to 75		75 to 85		85 and upwards.										
			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.							
IX	458	Diarrhoea and enteritis (under 2 years of age) ..	32	26	21	9	-	-	53	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53	35	88	4						
IX	459	Diarrhoea and enteritis (2 years of age and over) ..	-	-	-	-	3	3	3	3	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	3	4	7	1					
IX	462	Hernia ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-						
IX	463	Intestinal obstruction ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-						
IX	467	Cirrhosis of the liver, without mention of alcoholism ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
IX	473	Peritonitis without stated cause ..	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-						
X	500	Nephritis, acute ..	1	12	-	-	-	-	1	12	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-						
X	501	Nephritis, chronic ..	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-						
X	502	Nephritis not stated to be acute or chronic ..	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-						
X	503	Pyelitis, pyelonephritis and pyelocystitis ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-						
X	512	Diseases of the ovaries, fallopian tubes and parametria ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-						
XI	554	Ectopic gestation ..	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-						
XIV	702	Congenital malformation of the heart ..	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-						
XIV	708	Other stated congenital malformations ..	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1						
XV	750	Congenital debility ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1						
XV	751	Premature birth ..	13	15	-	-	-	-	13	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	15	28	-						
XV	752	Intracranial or spinal hæmorrhage due to injury at birth ..	2	2	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	4	-						
XV	753	Other birth injuries ..	2	2	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	4	-						
XV	754	Asphyxia during or after birth, atelectasis ..	-	5	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	-					
XV	757	Melaena neonatorum ..	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-						
XV	758	Other specified diseases (including gangrene or hæmorrhage of umbilicus, icterus neonatorum, acute catarrhal hepatitis ..	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-						
XVII	850	Suicide ..	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-						
XVII	863	Homicide ..	-	-	-	-	-	-	-	-	-	-	-	2	-	4	-	1	1	-	-	1	-	-	-	-	-	-	-	8	1	9	1						
XVII	864	Accidental injury by railway, road and other transport ..	-	-	-	-	-	-	-	-	-	-	-	1	-	4	-	4	-	2	-	-	-	-	-	-	-	-	-	11	-	11	5						
XVII	880	Accidental injury by industrial or other mechanical causes ..	-	-	-	-	-	-	-	-	-	-	-	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	6	1					
XVII	886	Accidental absorption of poisonous gases ..	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
XVII	890	Conflagration ..	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2	1	3	-						
XVII	891	Accidental burns (conflagration excepted) ..	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-						
XVII	893	Accidental drowning ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-						
XVII	884	Injury by animals (excluding venomous animals) ..	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-						
XVII	904	Other accidents due to electric currents ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1						
XVII	906	Anæsthetic accidents (experiments, normal childbirth, sterilizing or æsthetic operations or operations of unknown nature) ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1						
XVIII	951	Ill-defined causes ..	8	7	1	-	-	3	9	10	-	1	-	-	-	3	-	6	1	6	3	3	-	1	1	1	-	-	-	2	1	3	-						
		Totals ..	88	92	49	26	18	16	155	134	5	4	1	1	19	12	47	17	56	8	36	15	10	8	10	1	1	1	1	2	341	203	544	56					



TABLE A3 (Continued).

Code No.	CAUSE OF DEATH.	WARDS:																														Not allocated. Residential addresses unascertained.		TOTALS.			
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		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.	Persons.	
58	Diarrhoea and enteritis (under 2 years of age) ..	-	-	-	1	-	-	-	1	2	1	2	3	-	-	28	18	-	-	5	6	-	-	-	-	1	-	4	1	11	4	-	-	53	35	88	
59	Diarrhoea and enteritis (2 years of age and over) ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	3	4	7	
62	Hernia ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1		
63	Intestinal obstruction ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1		
67	Cirrhosis of the liver, without mention of alcoholism ..	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1		
73	Peritonitis without stated cause ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1		
80	Nephritis, acute ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	4	4	8		
81	Nephritis, chronic ..	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	1	-	2	-	-	4	12	16			
82	Nephritis not stated to be acute or chronic ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	1			
83	Pyelitis, pyelonephritis and pyelocystitis ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1			
12	Diseases of the ovaries, fallopian tubes and parametria ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1		
54	Ectopic gestation ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2		
82	Congenital malformations of the heart ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1		
88	Other stated congenital malformations ..	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2		
50	Congenital debility ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1			
51	Premature birth ..	-	-	-	-	-	-	1	-	-	1	1	1	-	-	4	5	-	-	5	2	-	-	-	-	-	-	12	12	4	-	13	15	28			
52	Intracranial or spinal haemorrhage due to injury at birth ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10	20			
53	Other birth injuries ..	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	10	10	20		
54	Asphyxia during or after birth, atelectasis ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	2	-	-	5	-	5			
57	Molaena neonatorum ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2		
58	Other specified diseases (including gangrene or haemorrhage of umbilicus, icterus neonatorum, acute catarrhal hepatitis) ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2		
50-53	Suicide ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1		
54-57	Homicide ..	-	-	-	-	1	1	-	-	1	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	8	1	9			
58-59	Accidental injury by railway, road and other transport ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	2	-	-	-	1	-	-	-	-	-	2	-	2	11	-	11			
80-82	Accidental injury by industrial or other mechanical causes ..	-	-	1	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	6	-	6		
83-88	Accidental absorption of poisonous gases ..	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	10	1	11		
89	Conflagration ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	4		
90	Accidental burns (conflagration excepted) ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2		
91	Accidental drowning ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1			
92	Injury by animals (excluding venomous animals) ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1		
93	Anaesthetic accidents (experiments, normal childbirth, sterilizing or operations of unknown nature) ..	-	-	-	-	-	-	-	-	1	1	-	-	-	-	1	-	-	-	2	2	-	-	-	-	-	-	-	-	-	3	5	2	29	15	44	
94-97	Ill-defined causes ..	-	-	1	1	1	2	-	-	2	1	1	-	-	-	14	4	-	-	2	2	-	-	-	1	-	-	-	-	-	-	-	2	2	29	15	44
98	Totals ..	1	1	7	9	10	7	4	2	17	12	13	15	1	1	138	75	1	-	49	36	1	1	6	1	6	2	6	4	71	37	10	341	203	544		

TABLE A4.—DEATHS OF RESIDENTS IN WINDERMERE, CLASSIFIED AS IN TABLE A1.  
(Included in Table A1.)

[illegible]



TABLE A4 (Continued).

No.	Code No.	CAUSE OF DEATH.	Race.	AGE GROUPS (YEARS).																																TOTALS.	
				0 to		1 to 2		2 to 5		Total under 5		5 to 10		10 to 15		15 to 25		25 to 35		35 to 45		45 to 55		55 to 65		65 to 75		75 to 85		85 and upwards.							
				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.				
X	462	Hernia . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
X	463	Intestinal obstruction . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
X	469	Other diseases of the liver . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
X	473	Peritonitis without stated cause . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
X	500	Nephritis, acute . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
X	501	Nephritis, chronic . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
X	512	Diseases of the ovaries, fallopian tubes, and parametria . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
XI	552	Abortion, without mention of septic conditions, spontaneous, therapeutic or of unspecified origin . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
XI	554	Ectopic gestation . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
XI	568	Puerperal thrombophlebitis . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
III	650	Osteomyelitis and periostitis . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
IV	702	Congenital malformation of heart . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
IV	704	Congenital pyloric stenosis . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
CV	750	Congenital debility . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
XV	751	Premature birth . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
XV	752	Intra-cranial or spinal hæmorrhage due to injury at birth . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
XV	753	Other birth injuries . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
XV	754	Asphyxia during or after birth, atelectasis . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
XV	758	Other specified diseases (including gangrene or hæmorrhage of umbilicus, icterus neonatorum, acute catarrhal hepatitis) . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
VII	850-863	Suicide . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
VII	864-867	Homicide . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
VII	868-879	Accidental injury by railway, road and other transport . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
VII	880-885	Accidental injury by industrial or other mechanical causes . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
VII	886-894	Accidental absorption of poisonous gases . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
VII	891	Accidental burns (conflagration excepted) . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
VII	906	Anæsthetic accidents (experiments, normal childbirth, sterilizing or æsthetic operations or operations of unknown nature) . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
III	951	Ill-defined causes . . . . .	E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Totals . . . . .				E.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					

TABLE A5. DEATHS OF NATIVES RESIDENT IN LANGA CLASSIFIED AS IN TABLE A1.  
(Excluded from Table A1.)

Section	Code No.	CAUSE OF DEATH.	AGE GROUPS (YEARS).																												TOTALS		
			0 to 1		1 to 2		2 to 5		Total under 5		5 to 10		10 to 15		15 to 25		25 to 35		35 to 45		45 to 55		55 to 65		65 to 75		75 to 85		85 and Upwards.		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.					
I	011	Whooping cough ..	-	1	-	2	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	
I	015	Tuberculosis of respiratory system ..	-	-	1	1	3	4	4	5	1	-	-	2	7	5	4	3	3	1	3	1	1	-	-	-	-	-	-	23	17	40	
I	016	Tuberculosis of central nervous system ..	2	-	-	2	1	-	3	2	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	5	2	7	
I	018	Tuberculosis of vertebral column ..	-	-	-	1	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	
I	021	Tuberculosis of lymphatic system ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
I	024	Tuberculosis, acute miliary ..	-	-	-	-	-	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	
I	042	Aneurysm of the aorta ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	
I	043	Syphilis, congenital ..	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
I	044	Syphilis, other forms ..	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
II	102	Cancer of the stomach and duodenum ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	
II	104	Cancer of the liver ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	
II	119	Cancer of other or unspecified organs ..	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	1	
VII	357	Other chronic myocarditis ..	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	1	1	-	-	-	-	-	-	-	-	4	1	
VII	358	Diseases of the coronary arteries and angina pectoris ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	1	-	-	-	-	-	-	-	3	1	
VII	362	Arterio-sclerosis, excluding diseases of the coronary arteries, renal sclerosis and cerebral haemorrhage ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1
VIII	403	Bronchitis, chronic ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	
VIII	404	Broncho-pneumonia, including capillary bronchitis ..	3	2	-	1	1	-	4	3	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	5	3	
VIII	405	Lobar pneumonia ..	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
VIII	418	Other diseases of the respiratory system not specified as occupational ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	1
IX	458	Diarrhoea and enteritis (under 2 years of age) ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	1
IX	459	Diarrhoea and enteritis (2 years of age and over) ..	4	10	1	1	-	-	5	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	11	
X	500	Nephritis, acute ..	-	-	-	-	1	2	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	
X	501	Nephritis, chronic ..	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
XI	551	Abortion induced for reasons other than therapeutic ..	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2	2
XI	567	General or local puerperal infection (including puerperal tetanus) with or without mention of pyelitis ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
XIV	708	Other stated congenital malformations ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
XV	751	Premature birth ..	1	2	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	
XV	758	Other specified diseases (including gangrene or haemorrhage of umbilicus, icterus neonatorum, acute catarrhal hepatitis) ..	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
XVII	864-867	Homicide ..	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
XVII	868-879	Accidental injury by railway, road and other transport ..	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
XVII	880-882	Accidental injury by industrial or other mechanical causes ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	1
XVII	885-886	Accidental drowning ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XVII	893	IB-defined causes ..	-	1	-	1	-	-	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	2
XVIII	951	Totals ..	14	16	3	9	6	7	23	32	2	-	-	2	8	7	12	5	7	2	7	2	6	3	-	1	1	-	-	-	66	54	120



TABLE B.—Deaths Classified for Causes and Race : 1948-49

(Corrected for Outward Transfers.)

Disease.	Euro- pean.	Native (not Langa).	Asiatic.	Other Coloured.	Non- Euro- pean.	Total all races.	Native (Langa).
Typhoid and paratyphoid fevers .. .. .	2	2	—	6	8	10	—
Meningococcal cerebrospinal meningitis .. .. .	3	1	—	6	7	10	—
Scarlet fever .. .. .	—	—	—	—	—	—	—
Whooping cough .. .. .	1	5	—	13	18	19	3
Diphtheria .. .. .	3	—	—	4	4	7	—
Erysipelas .. .. .	1	—	—	—	—	1	—
Tetanus .. .. .	3	1	—	4	5	8	—
Tuberculosis of respiratory system .. .. .	68	134	7	688	829	897	40
Tuberculosis of central nervous system .. .. .	10	7	3	131	141	151	7
Tuberculosis, other forms .. .. .	4	14	—	35	49	53	5
Leprosy .. .. .	—	—	—	—	—	—	—
Purulent infection and septicaemia (non puerperal) .. .. .	2	2	1	—	3	5	—
Gonococcal infections (all sites) .. .. .	—	—	—	—	—	—	—
Dysentery (all forms) .. .. .	1	1	—	1	2	3	—
Syphilis (all forms, including parasyphilitic diseases) .. .. .	5	8	1	53	62	67	3
Influenza .. .. .	3	3	—	9	12	15	—
Smallpox .. .. .	—	—	—	—	—	—	—
Measles .. .. .	—	3	—	14	17	17	—
Acute poliomyelitis and polioencephalitis .. .. .	—	—	—	—	—	—	—
Acute infectious encephalitis (lethargic or epidemic) .. .. .	—	—	—	1	1	1	—
Typhus and typhus-like diseases (rickettsioses) .. .. .	—	—	—	—	—	—	—
Rest of Section I (001-077). Other infectious and parasitic diseases .. .. .	6	—	—	5	5	11	—
Cancer (all forms) .. .. .	256	16	2	129	147	403	4
Rest of Section II (100-196). Tumours, non-malignant, or of un- determined nature .. .. .	9	—	1	7	8	17	—
Acute rheumatic fever .. .. .	1	1	1	8	10	11	—
Diabetes .. .. .	32	—	2	21	23	55	—
Rest of Section III (149-170). Other forms of rheumatism, diseases of nutrition and of the endocrine glands, "other general diseases," and vitamin deficiency diseases .. .. .	3	—	—	5	5	8	—
Section IV (200-214). Diseases of the blood and blood-forming organs .. .. .	11	1	1	7	9	20	—
Section V (250-258). Chronic poisonings and intoxication .. .. .	2	—	—	—	—	2	—
Intracranial lesions of vascular origin .. .. .	182	8	—	155	163	345	—
Rest of Section VI (300-317). Other diseases of the nervous system and sense organs .. .. .	28	4	—	26	30	58	—
Cardiac diseases .. .. .	493	20	10	326	356	849	8
Arterio-sclerosis (excluding diseases of the coronary arteries, renal sclerosis and cerebral haemorrhage) .. .. .	59	1	1	57	59	118	1
High blood pressure .. .. .	45	4	3	62	69	114	—
Rest of Section VII (350-368). Other diseases of the circulatory system .. .. .	8	—	1	2	3	11	—
Bronchitis and pneumonia (all forms) .. .. .	74	61	8	322	391	465	10
Rest of Section VIII (400-418). Other diseases of the respiratory system .. .. .	37	6	1	25	32	69	1
Ulcer of the stomach and duodenum .. .. .	3	—	—	3	3	6	—
Diarrhoea and enteritis (under two years of age) .. .. .	14	88	4	351	443	457	16
Diarrhoea and enteritis and ulceration of the intestines (two years old and over) .. .. .	5	7	—	32	39	44	3
Appendicitis .. .. .	5	—	—	1	1	6	—
Diseases of the liver and biliary passages .. .. .	36	1	—	12	13	49	—
Rest of Section IX (450-473). Other diseases of the digestive system .. .. .	16	3	1	17	21	37	—
Nephritis .. .. .	71	11	4	74	89	160	—
Rest of Section X (500-515). Other diseases of the urinary and genital systems (not venereal or connected with pregnancy or the puerperium) .. .. .	27	2	—	14	16	43	—
Puerperal sepsis .. .. .	2	—	—	—	—	2	2
Rest of Section XI (550-575). Other diseases of pregnancy, childbirth and the puerperal state .. .. .	4	1	—	20	21	25	—
Section XII (600-602). Diseases of the skin and cellular tissue .. .. .	1	—	—	2	2	3	—
Section XIII (650-653). Diseases of the bones—organs of movement .. .. .	1	—	—	2	2	3	—
Section XIV (700-709). Congenital malformations .. .. .	8	2	1	16	19	27	1
Section XV (750-758). Diseases peculiar to the first year of life .. .. .	58	44	9	257	310	368	4
Section XVI (800). Senility (age 65 and over) .. .. .	24	—	—	12	12	36	—
Suicide .. .. .	17	1	—	4	5	22	—
Rest of Section XVII (850-916). Other violent or accidental deaths* .. .. .	65	37	1	92	130	195*	6
Section XVIII (950-953). Causes ill-defined or unknown .. .. .	52	44	2	136	182	234	3
Total .. .. .	1,761	544	65	3,167	3,776	5,537	129

\* In addition to the figures against this cause of death, there are the deaths of 4 newly-born infants (2 males, 2 females) of unknown race.

TABLE C.—Deaths by Causes, Race and Date of Registration. 1948-49.

(Corrected for Outward Transfers.)

Disease.	Race.	July (4 weeks).	August (5 weeks).	September (4 weeks).	October (4 weeks).	November (5 weeks).	December (4 weeks).	January (4 weeks).	February (4 weeks).	March (5 weeks).	April (4 weeks).	May (5 weeks).	June (4 weeks).	Year (52 weeks).
Enteric fever ..	Eur.	—	1	—	—	—	—	—	—	—	1	—	—	12
	Non-E.	—	2	1	1	—	—	1	—	1	—	1	1	8
Meningococcal cerebrospinal meningitis	Eur.	—	—	1	1	—	—	1	—	—	—	—	—	3
	Non-E.	1	3	—	1	—	—	—	—	—	1	—	1	7
Scarlet fever ..	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping cough ..	Eur.	—	—	—	—	—	1	—	—	—	—	—	—	1
	Non-E.	—	—	—	1	1	—	1	1	—	—	7	7	18
Diphtheria ..	Eur.	—	—	—	—	1	—	—	—	1	—	—	1	3
	Non-E.	1	—	1	—	—	—	—	—	1	1	—	—	4
Purulent infection—septicaemia and erysipelas (non-puerperal)	Eur.	—	—	—	—	—	—	—	—	1	1	—	1	3
	Non-E.	—	—	—	1	—	—	—	—	1	1	—	—	3
Tuberculosis, respiratory system ..	Eur.	3	4	5	9	11	7	4	4	5	5	8	3	68
	Non-E.	57	80	63	68	73	64	84	53	67	71	87	62	829
Tuberculosis, other forms ..	Eur.	1	3	—	—	2	—	1	1	—	—	1	5	14
	Non-E.	9	20	19	10	17	14	22	11	25	16	13	14	190
Syphilis (all forms, including parasyphilitic diseases)	Eur.	1	1	—	—	—	—	1	—	1	—	1	—	5
	Non-E.	1	8	5	4	5	3	11	5	5	3	9	3	62
Influenza ..	Eur.	—	1	1	1	—	—	—	—	—	—	—	—	3
	Non-E.	1	2	1	2	—	1	—	—	1	—	2	2	12
Measles ..	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E.	1	2	4	2	2	2	1	—	2	1	—	—	17
Acute anterior poliomyelitis and poliomyelitis	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute infectious encephalitis	Eur.	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E.	—	1	—	—	—	—	—	—	—	—	—	—	1
Cancer ..	Eur.	20	22	21	19	23	18	18	13	30	19	29	24	256
	Non-E.	8	10	11	12	10	17	18	6	18	12	16	9	147
Acute rheumatic fever	Eur.	—	—	—	—	1	—	—	—	—	—	—	—	1
	Non-E.	1	3	1	—	1	1	2	—	—	1	—	—	10
Diabetes ..	Eur.	3	4	5	3	2	3	2	2	—	2	3	3	32
	Non-E.	4	5	4	1	1	—	1	2	1	1	3	—	23
Intracranial lesions of vascular origin	Eur.	7	15	14	17	19	11	17	12	20	10	20	20	182
	Non-E.	16	12	17	10	13	10	17	10	13	6	18	21	163
Cardiac diseases ..	Eur.	45	47	41	40	42	29	43	34	33	43	46	50	493
	Non-E.	34	42	26	25	36	23	21	16	31	24	33	45	356
Arterio-sclerosis (excluding diseases of the coronary arteries, renal sclerosis, and cerebral haemorrhage)	Eur.	8	10	3	6	5	4	1	2	3	4	6	7	59
	Non-E.	6	8	3	4	3	4	8	2	2	5	4	10	59
Bronchitis and pneumonia	Eur.	6	10	4	2	8	2	7	7	4	4	4	16	74
	Non-E.	33	51	30	41	36	26	26	26	32	27	25	38	391
Diarrhoea and enteritis	Eur.	1	1	2	1	1	2	1	3	5	1	—	—	18
	Non-E.	12	10	15	16	28	46	88	58	63	48	52	46	482
Nephritis ..	Eur.	9	7	4	9	7	7	5	4	5	4	3	7	71
	Non-E.	4	13	7	3	7	8	6	5	7	6	11	12	89
Puerperal sepsis ..	Eur.	—	—	—	—	—	—	—	—	—	—	—	2	2
	Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—
Other diseases of pregnancy, childbirth, and the puerperal state	Eur.	—	—	—	—	1	1	1	—	—	—	—	1	4
	Non-E.	2	5	—	2	4	2	1	1	2	1	—	1	21
Congenital malformations and diseases of early infancy	Eur.	10	6	3	6	1	10	9	3	5	6	6	1	66
	Non-E.	15	27	24	26	27	25	33	23	32	28	38	31	329
Senility ..	Eur.	3	1	3	1	1	2	4	2	—	1	2	4	24
	Non-E.	2	1	—	1	3	—	3	—	—	—	1	1	12
Violence ..	Eur.	2	9	4	6	14	2	11	4	9	10	4	7	82
	Non-E.	12	21	8	13	10	6	16	5	7	15	11	11	135
All causes ..	Eur.	138	176	139	156	170	114	148	111	142	131	158	178	1,761
	Non-E.	252	368	268	271	308	280	404	247	350	306	378	344	3,776



**TABLE D.—Deaths Classified for principal Causes and Race: 1944-45 to 1948-49.**

(Corrected for Outward Transfers.)

Cause of Death.	1948-49		1947-48		1946-47		1945-46		1944-45		Total (5 Years).	
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.
Enteric fever .. .. .	2	8	5	8	5	24	3	11	3	17	18	68
Measles .. .. .	—	17	1	27	1	19	1	29	2	9	5	101
Scarlet fever .. .. .	—	—	—	1	—	—	—	2	1	1	1	4
Whooping cough .. .. .	1	18	5	102	2	17	—	5	2	90	10	232
Diphtheria .. .. .	3	4	3	6	2	6	2	12	5	12	15	40
Influenza .. .. .	3	12	9	5	3	10	3	9	4	9	22	45
Purulent infection and septicaemia (non-puerperal) .. .. .	2	3	2	—	1	3	3	1	4	3	12	10
Acute poliomyelitis and polioence- phalitis .. .. .	—	—	2	—	—	—	1	2	1	1	4	3
Acute infective encephalitis .. .. .	—	1	—	—	—	1	—	—	—	1	—	3
Meningococcal cerebrospinal men- ingitis .. .. .	3	7	1	9	2	6	1	12	6	18	13	52
Tuberculosis, respiratory system ..	68	829	103	958	109	840	114	951	108	888	502	4,466
Tuberculosis, other forms .. .. .	14	190	20	189	19	184	18	187	19	202	90	952
Syphilis .. .. .	—	40	—	49	4	66	6	66	4	53	14	274
General paralysis of the insane: tabes dorsalis .. .. .	1	12	3	19	4	19	4	16	3	15	15	81
Aneurysm of the aorta .. .. .	4	10	8	10	7	26	10	23	10	21	39	90
Cancer (all forms) .. .. .	256	147	269	154	269	135	244	146	226	143	1,264	725
Acute rheumatic fever .. .. .	1	10	—	11	1	17	2	19	8	23	12	80
Diabetes .. .. .	32	23	47	24	33	16	38	19	45	30	195	112
Intracranial lesions of vascular ori- gin .. .. .	182	163	200	149	169	174	167	156	170	195	888	837
Arterio-sclerosis .. .. .	59	59	61	30	50	26	57	28	67	33	294	176
Cardiac diseases .. .. .	493	356	575	427	462	386	446	403	476	408	2,452	1,980
Bronchitis .. .. .	18	98	10	109	18	126	18	113	18	118	82	564
Pneumonia (all forms) .. .. .	56	293	56	442	50	364	47	372	59	425	268	1,896
Diarrhoea and enteritis (under 2 years of age) .. .. .	14	443	16	350	16	302	25	311	19	459	90	1,865
Diarrhoea and enteritis (2 years of age and over) .. .. .	4	39	8	30	11	30	6	36	8	39	37	174
Nephritis .. .. .	71	89	76	82	59	75	65	89	59	90	330	425
Puerperal sepsis .. .. .	2	—	—	7	—	4	1	8	—	4	3	23
Other diseases of pregnancy, child- birth and puerperal state .. .. .	4	21	4	11	1	11	6	14	2	18	17	75
Congenital malformations .. .. .	8	19	12	23	13	22	17	14	16	28	66	106
Diseases peculiar to the first year of life .. .. .	58	310	73	311	62	329	63	299	68	268	324	1,517
Senility .. .. .	24	12	27	21	38	19	32	22	32	18	153	92
Suicide .. .. .	17	5	19	8	21	9	15	4	12	6	84	32
Homicide .. .. .	3	35	11	27	6	36	7	44	10	44	37	186
Other violent or accidental deaths ..	62	95	79	96	53	101	52	93	45	97	291	482
Other causes .. .. .	296	408	244	319	218	288	240	286	250	309	1,248	1,610
Total .. .. .	1,761	3,776	1,949	4,014	1,709	3,691	1,714	3,802	1,762	4,095	8,895	19,378
Death rate per 1,000 population ..	9.10	18.13	10.18	19.55	9.33	18.84	9.62	19.99	10.16	22.18	9.67	19.69

TABLE E.—Death Rates per 1,000 Population for 1948-49 and Ten Previous Years by Causes and Race.  
(Corrected for Outward Transfers.)

Disease.	Race.	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	Mean for 10 years.	1948	1949.
Enteric fever .. .. .	Eur. Non-E.	0-01 0-03	0-01 0-02	0-01 0-06	0-01 0-07	0-03 0-08	0-02 0-04	0-02 0-09	0-02 0-06	0-03 0-12	0-03 0-04	0-02 0-06	0-01 0-04	—
Measles .. .. .	Eur. Non-E.	0-01 0-05	—	0-03 0-23	0-03 0-04	0-01 0-12	0-01 0-27	0-01 0-05	0-01 0-15	0-01 0-10	0-01 0-13	0-01 0-12	—	0-08
Scarlet fever .. .. .	Eur. Non-E.	—	—	—	0-01	—	0-01	0-01	—	—	—	—	—	—
Whooping cough .. .. .	Eur. Non-E.	0-01 0-54	0-03 0-43	0-01 0-27	0-02 0-33	0-01 0-03	0-04 0-18	0-02 0-49	—	0-01 0-09	0-03 0-50	0-02 0-28	0-01 0-09	—
Diphtheria .. .. .	Eur. Non-E.	0-12 0-31	0-03 0-12	0-04 0-05	0-04 0-10	0-06 0-09	0-02 0-08	0-03 0-07	0-01 0-06	0-01 0-03	0-02 0-03	0-04 0-09	0-02 0-02	—
Influenza .. .. .	Eur. Non-E.	0-09 0-10	0-10 0-08	0-10 0-11	0-05 0-06	0-05 0-05	0-07 0-07	0-02 0-05	0-02 0-05	0-02 0-05	0-05 0-02	0-05 0-06	0-02 0-06	—
Purulent infection—septicaemia, and erysipelas (non- puerperal) .. .. .	Eur. Non-E.	0-05 0-11	0-06 0-10	0-04 0-03	0-09 0-09	0-06 0-04	0-01 0-06	0-02 0-02	0-02 0-02	0-01 0-02	0-01 —	0-04 0-04	0-02 0-01	—
Acute anterior poliomyelitis and polioencephalitis .. .. .	Eur. Non-E.	—	—	—	0-01 0-01	—	—	0-01 0-01	0-01 0-01	—	—	—	—	—
Acute infectious encephalitis .. .. .	Eur. Non-E.	—	0-01	0-01	0-01	0-02	—	—	—	—	—	—	—	—
Meningococcal cerebrospinal meningitis .. .. .	Eur. Non-E.	0-01 0-11	0-01 0-05	0-03 0-05	0-01 0-02	0-01 0-08	0-05 0-20	0-03 0-10	0-01 0-06	0-01 0-03	0-01 0-04	0-02 0-07	0-02 0-03	—
Tuberculosis, respiratory system .. .. .	Eur. Non-E.	0-07 4-04	0-56 3-56	0-67 4-02	0-67 4-41	0-53 4-95	0-63 5-77	0-62 4-81	0-64 5-00	0-60 4-29	0-54 4-67	0-61 4-58	0-35 3-98	—
Tuberculosis, other forms .. .. .	Eur. Non-E.	0-09 0-73	0-16 0-69	0-10 0-75	0-07 0-98	0-15 1-14	0-10 0-14	0-11 1-09	0-10 0-98	0-10 0-94	0-10 0-92	0-11 0-94	0-07 0-91	—
Syphilis .. .. .	Eur. Non-E.	0-05 0-38	0-06 0-53	0-04 0-48	0-06 0-48	0-05 0-31	0-06 0-46	0-02 0-29	0-03 0-35	0-02 0-34	—	0-04 0-38	—	0-19
General paralysis of the insane : tabes dorsalis .. .. .	Eur. Non-E.	—	—	0-03 0-09	0-01 0-14	0-03 0-11	0-01 0-11	0-02 0-08	0-02 0-08	0-02 0-10	0-02 0-09	0-02 0-10	0-01 0-06	—
Aneurysm of the aorta .. .. .	Eur. Non-E.	—	—	0-04 0-04	0-06 0-06	0-07 0-08	0-04 0-05	0-06 0-11	0-06 0-12	0-04 0-13	0-04 0-05	—	0-02 0-05	—
Cancer .. .. .	Eur. Non-E.	1-33 0-76	1-10 0-67	1-28 0-79	1-50 0-78	1-41 0-70	1-40 0-77	1-30 0-78	1-37 0-76	1-47 0-69	1-41 0-75	1-36 0-75	1-32 0-71	—



TABLE E—Continued.

Disease.	Race.	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	Mean for 10 years.	1948
Acute rheumatic fever	Eur. Non-E.	0.03 0.13	0.02 0.13	0.04 0.13	0.02 0.39	0.07 0.34	0.03 0.23	0.05 0.12	0.01 0.10	0.01 0.09	0.05 0.05	0.03 0.17	0.01 0.05
Diabetes	Eur. Non-E.	0.21 0.06	0.27 0.06	0.34 0.90	0.31 0.99	0.32 0.93	0.31 0.94	0.26 0.98	0.21 0.94	0.18 0.92	0.25 0.92	0.25 1.37	0.17 0.94
*Intracranial lesions of vascular origin	Eur. Non-E.	0.08 1.51	0.08 1.75	0.96 0.38	0.78 0.25	0.79 0.47	0.98 0.38	1.06 0.39	0.82 0.32	0.89 0.27	0.73 0.13	1.37 1.09	0.78 0.30
*Arterio-sclerosis	Eur. Non-E.	1.20 1.80	1.16 1.86	0.29 2.28	0.19 2.09	0.11 2.86	0.20 2.45	0.18 2.74	0.15 2.50	0.13 2.52	0.15 2.08	0.15 2.47	0.28 2.55
Cardiac diseases	Eur. Non-E.	1.71 0.68	1.38 0.54	1.65 0.58	2.09 0.54	2.03 0.53	2.27 0.40	2.21 0.44	2.12 0.36	1.97 0.37	2.08 0.34	1.97 0.47	1.71 0.38
Bronchitis and pneumonia	Eur. Non-E.	4.12 0.16	3.71 0.27	3.81 0.20	3.66 0.35	3.25 0.23	4.28 0.23	2.94 0.17	2.55 0.17	2.50 0.15	2.68 0.13	3.30 0.20	1.88 0.09
Diarrhoea and enteritis	Eur. Non-E.	1.88 0.45	2.15 0.41	2.63 0.46	3.27 0.38	2.52 0.29	3.00 0.41	2.71 0.34	1.82 0.36	1.69 0.32	1.85 0.40	2.34 0.38	2.31 0.37
Nephritis	Eur. Non-E.	0.53 0.01	0.67 0.01	0.45 0.02	0.44 0.02	0.53 0.01	0.45 0.02	0.49 0.02	0.47 0.04	0.38 0.02	0.40 0.03	0.48 0.06	0.43 0.01
Puerperal sepsis	Eur. Non-E.	0.06 0.05	0.09 0.02	0.08 0.02	0.06 0.03	0.07 0.01	0.10 0.03	0.02 0.02	0.04 0.03	0.02 0.01	0.03 0.02	0.06 0.02	0.01 0.02
Other diseases of pregnancy, childbirth, and puerperal state	Eur. Non-E.	0.11 0.38	0.08 0.43	0.09 0.40	0.11 0.46	0.16 0.49	0.12 0.41	0.10 0.48	0.07 0.45	0.06 0.41	0.05 0.44	0.09 0.44	0.10 0.34
Congenital malformations and diseases of early infancy	Eur. Non-E.	1.61 0.21	1.40 0.15	1.62 0.17	1.62 0.15	1.44 0.12	1.71 0.17	1.60 0.18	1.64 0.18	1.79 0.21	1.63 0.14	1.61 0.17	1.58 0.12
Senility	Eur. Non-E.	0.10 0.47	0.13 0.47	0.15 0.44	0.15 0.51	0.18 0.42	0.06 0.32	0.10 0.39	0.12 0.42	0.10 0.44	0.10 0.57	0.12 0.44	0.06 0.42
Violence	Eur. Non-E.	0.67 1.75	0.65 1.48	0.93 1.47	0.90 1.66	0.64 1.59	0.83 1.30	0.89 1.43	0.74 1.35	0.75 1.19	0.64 1.27	0.75 1.44	0.65 1.52
Other causes	Eur. Non-E.	1.99 10.06	1.76 9.87	1.80 10.12	1.95 10.85	1.53 10.84	1.92 9.89	1.66 10.16	1.50 9.62	1.46 9.33	1.55 10.18	1.70 10.08	1.96 9.10
Total	Eur. Non-E.	21.66 19.89	19.89 19.89	21.72 19.89	23.30 21.59	21.59 21.59	25.51 25.51	22.18 22.18	19.99 19.99	18.84 18.84	19.55 19.55	21.37 21.37	18.13 18.13

\*There has been some variation in the allocation of deaths as between these two causes. City extended by incorporation of the district of Windermere 1943-44.

TABLE F1.—Deaths of Infants under 1 Year of Age, Classified by Causes, Race and Age, 1948-49.

(CORRECTED FOR OUTWARD TRANSFERS.)

Classification No.	DISEASE.	RACE.	Under 1 year.												TOTAL under one year.		
			Under 1 day.	Under 2 days.	Under 3 days.	Under 4 days.	Under 5 days.	Under 6 days.	Under 7 days.	Total under 7 days.	Under 1 week.	Under 2 weeks.	Under 3 weeks.	Under 4 weeks.	Total under 4 weeks.	Over 4 weeks & under 12 months.	Per-sons.
010	Scarlet fever .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
011	Whooping cough .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
012	Diphtheria .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
013	Erysipelas .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
016	Tuberculosis of central nervous system	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
017	Tuberculosis of intestines and periton- eum	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
018, 019 to 025	Tuberculosis, other forms .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
043	Syphilis, congenital .. ..	Eur. Non-E.	2	2	1	—	—	—	—	—	—	—	—	—	—	—	—
052	Measles .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
169	Rickets .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
302 and 303	Simple meningitis .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
310	Convulsions .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
402 and 403	Bronchitis .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
404 to 406	Pneumonia, all forms .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
468	Diarrhoea and enteritis .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
700 to 709	Congenital malformations .. ..	Eur. Non-E.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
750	Congenital debility .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
751	Premature birth .. ..	Eur. Non-E.	23	5	3	1	1	1	33	1	3	1	37	—	—	—	—
752 and 753	Injury at birth.. ..	Eur. Non-E.	65	38	18	18	8	9	160	27	11	9	207	7	7	125	37
754 to 758	Other diseases peculiar to the first year of life	Eur. Non-E.	3	4	3	3	4	5	12	—	2	—	14	—	—	—	—
892	Suffocation (overlying) .. ..	Eur. Non-E.	4	15	3	4	—	—	33	5	—	—	1	39	2	—	—
907	Lack of care of the new born ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	Other causes .. ..	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals		All Races	137*	72	34	40	21	13	8	325*	50	31	23	429*	53	73	76

\* Including 4 of unknown race.



**TABLE F2.—Deaths of Infants under 1 Year of Age, Classified by Causes and Race, for Five Years, 1944-45 to 1948-49.**

(Corrected for Outward Transfers.)

Cause of Death.	1948-49		1947-48		1946-47		1945-46		1944-45		Total (5 years).	
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.
Scarlet fever .. .. .	—	—	—	1	—	1	—	1	—	—	—	3
Whooping cough .. . .	1	9	2	42	2	6	—	1	—	42	5	100
Diphtheria .. . . .	—	2	1	2	—	1	1	—	3	—	2	9
Erysipelas .. . . .	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis of central nervous system .. . . .	1	38	1	24	3	25	3	25	1	28	9	140
Tuberculosis of intestines and peritoneum .. . . .	—	2	—	—	—	4	—	2	—	—	—	8
Tuberculosis, other forms .. . . .	2	52	2	63	2	45	1	42	—	48	7	250
Syphilis, congenital .. . . .	—	25	—	24	—	43	1	41	—	31	1	164
Measles .. . . .	—	5	1	9	—	5	1	10	1	3	3	32
Rickets .. . . .	—	—	—	—	—	—	—	—	—	2	—	2
Simple meningitis .. . . .	5	4	1	8	2	7	—	2	1	5	9	26
Convulsions .. . . .	—	3	—	4	—	9	—	6	1	9	1	31
Bronchitis .. . . .	2	43	1	63	—	50	1	46	1	54	5	256
Pneumonia, all forms .. . . .	9	149	17	218	9	174	12	164	11	177	58	882
Diarrhoea and enteritis .. . . .	13	304	15	261	12	231	24	217	14	313	78	1,326
Congenital malformations .. . . .	7	16	11	17	12	18	15	10	14	23	59	84
Congenital debility .. . . .	—	10	—	6	—	12	—	12	2	5	2	45
Premature birth .. . . .	37	222	55	201	42	208	53	198	45	190	232	1,019
Injury at birth .. . . .	14	37	8	50	10	59	4	38	11	30	47	214
Other diseases peculiar to the first year of life .. . . .	7	41	10	55	10	50	6	50	10	43	43	239
Suffocation (overlying) .. . . .	1	—	1	—	1	1	2	2	—	3	5	6
Lack of care of the new-born .. . . .	—	—	—	—	—	—	—	—	—	—	—	—
Other causes .. . . .	10	103	16	45	4	28	8	43	9	30	47	249
Total .. . . .	109	1,065	142	1,093	109	977	132	911	121	1,039	613	5,085
Infant mortality rate per 1,000 live births .. . . .	29.29	110.88	37.06	122.20	27.46	107.97	37.61	109.40	33.91	127.19	32.96	115.32

TABLE G.—Deaths in Institutions, 1948-49.

Institution.	Total deaths.		Deaths belonging to Cape Town.		Deaths not belonging to Cape Town (outward transfers).	
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.
Groote Schuur Hospital .. .. .	402	452	266	270	136	182
City Hospital .. .. .	49	299	36	263	13	96
Somerset Hospital .. .. .	1	240	—	177	1	63
Brooklyn Chest Hospital .. .. .	—	124	—	92	—	32
Victoria Hospital .. .. .	37	80	28	50	9	30
Valkenberg Mental Hospital .. .. .	57	44	35	28	22	16
Woodstock Hospital .. .. .	26	38	16	32	10	6
Peninsula Maternity Hospital .. .. .	20	43	11	37	9	6
Volkshospitaal .. .. .	53	—	17	—	36	—
Sea Point Nursing Home .. .. .	42	—	37	—	5	—
Cape Jewish Aged Home .. .. .	36	—	35	—	1	—
Rondebosch Hospital .. .. .	24	11	15	7	9	4
Elizabeth Private Hospital .. .. .	31	—	20	—	11	—
The Monastery Nursing Home .. .. .	30	—	22	—	8	—
St. Joseph's Sanatorium .. .. .	26	—	14	—	12	—
Belmont Nursing Home .. .. .	22	—	15	—	7	—
Hof Street Nursing Home .. .. .	19	—	12	—	7	—
Cambridge Nursing Home .. .. .	16	—	13	—	3	—
Alexandra Institution .. .. .	15	1	15	1	—	—
Airemount Nursing Home .. .. .	13	—	11	—	2	—
Monte Rosa Hospital .. .. .	13	—	6	—	7	—
Booth Memorial Hospital .. .. .	12	—	8	—	4	—
Hilary Nursing Home .. .. .	11	—	8	—	3	—
Tamboers Kloof Nursing Home .. .. .	11	—	6	—	5	—
Leeuwendal Nursing Home .. .. .	9	—	3	—	6	—
Ladies' Christian Home .. .. .	8	—	8	—	—	—
Inverurie Nursing Home .. .. .	7	—	4	—	3	—
Biblis Nursing Home .. .. .	7	—	7	—	—	—
Military Hospital, Wynberg .. .. .	6	2	5	1	1	1
"Vrede Oord" .. .. .	—	6	—	6	—	—
Princess Christian Home .. .. .	5	—	5	—	—	—
Kingsbury Nursing Home .. .. .	5	—	3	—	2	—
Nazareth Home .. .. .	5	—	5	—	—	—
Notley Nursing Home .. .. .	5	—	5	—	—	—
Leighwood Hospital .. .. .	5	—	4	—	1	—
St. Monica's Home .. .. .	—	5	—	4	—	1
Princess Alice Home .. .. .	—	4	—	2	—	2
Lady Buxton Home .. .. .	3	—	—	—	3	—
Mowbray Nursing Home .. .. .	3	—	1	—	2	—
Delherbe Nursing Home .. .. .	3	—	3	—	—	—
Cape Town Gaol Hospital .. .. .	—	2	—	2	—	—
Good Hope Nursing Home .. .. .	1	—	1	—	—	—
Clarendon Nursing Home .. .. .	1	—	1	—	—	—
Gables Nursing Home .. .. .	1	—	1	—	—	—
Maitland Cottage Homes .. .. .	—	1	—	1	—	—
Dorcas Home .. .. .	1	—	—	—	1	—
Total .. .. .	1,041	1,352	702	913	339	439
Langa Hospital .. .. .	—	63	—	60	—	3



TABLE H.—Registered Births and Still-Births for the year 1948-1949 classified in wards as to Race, Sex, Legitimacy and Percentage of Total Births in Institutions.  
(Corrected for outward transfers.)

Wards.	EUROPEAN.										NON-EUROPEAN.										TOTALS.				STILL-BIRTHS.				Percentage of total births, including still-births, occurring in institutions.			
	Legitimate.					Illegitimate.					Total.					Legitimate.					Illegitimate.					Total.						
	Males.		Females.		Total.	Males.		Females.		Total.	Males.		Females.		Total.	Males.		Females.		Total.	Males.		Females.		Total.	European.		Non-European.			Total still-births.	
1 ..	102	103	1	3	103	106	209	10	10	25	12	35	22	57	209	57	266	—	—	—	—	—	—	—	—	—	—	—	—	—	80.7	
2 ..	104	87	2	2	106	89	195	90	72	39	28	129	100	229	195	229	424	4	—	7	—	—	—	—	—	—	—	—	—	—	55.9	
3 ..	78	83	1	3	79	86	165	244	201	55	66	299	267	566	165	566	731	1	—	20	5	—	—	—	—	—	—	—	—	—	35.0	
4 ..	136	136	6	7	142	143	285	15	23	18	24	33	47	80	285	80	365	2	—	1	—	—	—	—	—	—	—	—	—	—	65.4	
5 ..	86	83	3	4	89	87	176	396	428	140	100	536	528	1,064	176	1,064	1,240	1	—	29	7	—	—	—	—	—	—	—	—	—	35.0	
6 ..	70	68	5	4	75	72	147	475	459	101	105	576	564	1,140	147	1,140	1,287	3	—	26	7	—	—	—	—	—	—	—	—	—	30.0	
7 ..	157	162	5	7	162	169	331	220	211	49	50	269	261	530	331	530	861	7	—	12	4	—	—	—	—	—	—	—	—	—	31.7	
8 ..	207	209	10	8	217	217	434	504	485	206	199	710	684	1,394	434	1,394	1,828	6	—	35	31	—	—	—	—	—	—	—	—	—	33.6	
9 ..	161	183	7	7	168	190	358	59	49	21	13	80	62	142	358	142	500	5	—	4	2	—	—	—	—	—	—	—	—	—	41.2	
10 ..	82	86	1	2	83	88	171	766	805	195	194	961	999	1,960	171	1,960	2,131	4	—	47	19	—	—	—	—	—	—	—	—	—	25.9	
11 ..	110	100	—	—	110	100	210	52	52	12	9	64	61	125	210	125	335	3	—	—	—	—	—	—	—	—	—	—	—	—	32.5	
12 ..	142	143	—	1	142	144	286	179	178	45	41	224	219	443	286	443	729	4	—	13	5	—	—	—	—	—	—	—	—	—	27.3	
13 ..	83	84	2	1	85	85	170	152	149	43	36	195	185	380	170	380	550	2	—	10	2	—	—	—	—	—	—	—	—	—	34.7	
14 ..	192	171	5	—	197	171	368	216	182	60	57	276	239	515	368	515	883	5	—	14	5	—	—	—	—	—	—	—	—	—	28.5	
15 ..	97	105	4	2	101	107	208	325	301	156	149	481	450	931	208	931	1,139	5	1	18	12	—	—	—	—	—	—	—	—	—	22.7	
Not allocated (un-ascertained addresses) ..	1	—	3	4	4	4	8	1	1	23	24	24	25	49	8	49	61*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total ..	1,808	1,803	55	55	1,863	1,858	3,721	3,704	3,606	1,188	1,107	4,892	4,713	9,605	3,721	9,605	13,330*	52	1	236	100	—	—	—	—	—	—	—	—	—	31.6	
Excluded from above figures.																																
(1) Births in Cape Town which did not belong thereto ..																																
(2) Lange Township ..																																

\* Including four of unknown race.

TABLE I.—Births and Still-Births notified, Classified for attendance at confinement and for home address of Mother, 1948-49.

CLASSIFICATION.	WARDS OF THE CITY.															Total of Wards.	Excluded from foregoing columns.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		Langa	Non-Resident.
Private doctors .. .. .	9	15	34	6	30	44	32	230	23	140	23	37	26	83	48	780	—	14
Private midwives (including any non-medical persons attending a confinement)																		
Certificated .. .. .	3	52	190	53	319	490	329	421	119	1,529	88	291	197	372	479	4,932	17	23
Uncertificated .. .. .	—	11	44	6	18	73	25	562	4	113	26	64	64	106	379	1,495	—	9
Midwives (or midwife students) from:																		
Booth Memorial Hospital .. .. .	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—
St. Monica's Home .. .. .	—	23	151	—	2	2	—	2	—	3	—	—	1	1	1	187	1	1
Peninsula Maternity Hospital .. .. .	—	11	11	13	238	245	172	4	26	9	—	2	1	3	2	739	1	6
Somerset Hospital .. .. .	1	23	10	—	6	2	3	263	—	4	—	2	1	—	—	319	1	3
District nurse midwives .. .. .	—	—	—	—	1	—	—	95	—	2	—	—	—	1	122	221	—	1
Vrede Oord, Tuin Plein .. .. .	—	—	1	8	137	73	—	1	—	—	—	—	—	2	—	222	—	1
No doctor or midwife .. .. .	—	2	1	1	1	1	—	22	—	15	1	1	2	3	13	65	—	1
No information .. .. .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	67	—	—
Confinement in institution..:																		
Booth Memorial Hospital .. .. .	50	61	69	123	58	25	59	50	104	8	74	61	28	63	33	871	—	275
St. Monica's Home .. .. .	2	3	39	10	20	32	15	62	6	95	15	15	13	30	61	425	5	104
Peninsula Maternity Hospital .. .. .	9	20	19	43	217	245	129	201	55	181	20	63	55	98	79	1,440	37	367
Somerset Hospital .. .. .	32	117	165	19	112	107	35	229	13	122	8	21	29	32	38	1,090	34	215
Vrede Oord, Tuin Plein .. .. .	2	—	8	6	14	11	4	9	1	9	3	3	8	2	11	94	12	45
Magdalena Huis .. .. .	—	1	1	—	—	—	1	1	1	1	—	—	1	—	—	3	10	26
Other public institutions .. .. .	—	5	8	11	46	42	44	91	27	189	12	59	45	48	47	677	29	138
Private nursing homes .. .. .	156	90	77	93	44	26	38	49	141	36	130	141	87	165	45	1,318	—	414
Totals .. .. .	264	436	829	397	1,263	1,418	886	2,292	520	2,456	400	760	558	1,009	1,358	14,955	137	1,643

Births actually occurring in the Langa Native Township are excluded from the above table. They numbered 335.



TABLE J.—Births in Institutions, 1948-49.

## LIVE-BIRTHS.

Institution.	Total Live-births.		Live-births belonging to Cape Town.		Live-births not belonging to Cape Town (Outward Transfers).	
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.
Peninsula Maternity Hospital .. .. .	480	1,240	338	1,037	142	203
Somerset Hospital .. .. .	—	1,241	—	1,054	—	187
Booth Memorial Hospital .. .. .	1,126	—	846	—	280	—
Groote Schuur Hospital .. .. .	4	667	3	554	1	113
St. Monica's Home .. .. .	—	514	—	416	—	98
Leighwood Nursing Home .. .. .	387	—	270	—	117	—
Delherbe Nursing Home .. .. .	359	—	269	—	90	—
Kingsbury Nursing Home .. .. .	333	—	249	—	84	—
Inverurie Nursing Home .. .. .	287	—	247	—	40	—
Mowbray Nursing Home .. .. .	260	—	199	—	61	—
"Vrede Oord" .. .. .	—	139	—	98	—	41
Magdalena Huis .. .. .	37	—	5	—	32	—
Good Hope Nursing Home .. .. .	35	—	32	—	3	—
House of Correction .. .. .	—	8	—	6	—	2
Valkenberg Mental Hospital .. .. .	1	2	1	1	—	1
The Monastery Nursing Home .. .. .	1	—	1	—	—	—
Victoria Hospital .. .. .	1	—	—	—	1	—
Hof Street Nursing Home .. .. .	1	—	—	—	1	—
Total .. .. .	3,312	3,811	2,460	3,166	852	645

## STILL-BIRTHS.

Institution.	Total Still-births.		Still-births belonging to Cape Town.		Still-births not belonging to Cape Town (Outward Transfers).	
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.
Groote Schuur Hospital .. .. .	1	64	1	56	—	8
Peninsula Maternity Hospital .. .. .	20	43	11	30	9	13
Somerset Hospital .. .. .	—	49	—	39	—	10
St. Monica's Home .. .. .	—	14	—	12	—	2
Booth Memorial Hospital .. .. .	9	—	7	—	2	—
Leighwood Nursing Home .. .. .	8	—	6	—	2	—
"Vrede Oord" .. .. .	—	5	—	5	—	—
Delherbe Nursing Home .. .. .	4	—	2	—	2	—
Kingsbury Nursing Home .. .. .	2	—	2	—	—	—
Mowbray Nursing Home .. .. .	2	—	1	—	1	—
Rondebosch Hospital .. .. .	—	1	—	—	—	1
House of Correction .. .. .	—	1	—	—	—	1
Good Hope Nursing Home .. .. .	1	—	1	—	—	—
The Monastery Nursing Home .. .. .	1	—	1	—	—	—
Inverurie Nursing Home .. .. .	1	—	1	—	—	—
Total .. .. .	49	177	33	142	16	35

TABLE K.—Populations and Vital Statistics for the separate Wards of the City, 1948-49.

(Corrected for Outward Transfers.)

Wards of the City. <sup>(1)</sup>	Populations as enumerated at the Census, May, 1946.			Births.		Illegitimate births.		Illegitimate births, percentage of total births.		Deaths.		Natural Increase (Excess of births over deaths).		Deaths under 1 year of age.		Infant Mortality (per 1,000 births).		Deaths from Tuberculosis (all forms).	
	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.
1 ..	14,637	3,150	17,787	209	57	4	37	1-91	64-91	182	14	27	43	5	3	23-92	52-63	1	4
2 ..	12,537	5,320	17,857	195	229	4	67	2-05	29-26	123	90	72	139	4	31	20-51	135-37	3	30
3 ..	9,107	10,819	19,926	165	566	4	121	2-42	21-38	85	200	80	366	3	55	18-18	97-17	3	55
4 ..	16,208	2,584	18,792	285	80	13	42	4-56	52-50	141	21	144	59	7	10	24-56	125-00	5	5
5 ..	8,513	23,092	31,605	176	1,064	7	240	3-98	22-56	80	396	96	668	3	97	17-05	91-17	3	118
6 ..	6,327	23,486	29,813	147	1,140	9	206	6-12	18-07	53	397	94	743	7	104	47-62	91-23	5	96
7 ..	13,743	10,233	23,976	331	530	12	99	3-03	18-08	129	183	202	347	8	39	24-17	73-58	11	48
8 ..	15,970	24,156	40,126	434	1,394	18	405	4-15	29-05	113	737	321	657	23	339	53-00	243-19	8	168
9 ..	18,898	8,899	27,797	358	142	14	34	3-91	23-94	169	44	189	98	10	7	27-93	49-30	13	11
10 ..	4,280	24,652	28,932	171	1,960	3	389	1-75	19-85	60	693	111	1,267	5	214	29-24	109-18	8	215
11 ..	13,162	5,348	18,510	210	125	—	21	—	16-80	101	32	109	93	3	13	14-29	104-00	5	4
12 ..	11,543	10,360	21,903	286	443	1	86	0-35	19-41	105	136	181	307	5	31	17-48	69-98	5	35
13 ..	11,710	10,722	22,432	170	380	3	79	1-76	20-79	95	132	75	248	5	35	29-41	92-11	1	38
14 ..	11,842	11,295	23,137	368	515	5	117	1-36	22-72	130	201	238	314	13	40	33-33	77-67	6	56
15 ..	10,817	17,627	28,444	208	931	6	305	2-88	32-76	115	448	93	483	8	139	38-46	149-30	4	122
Not allocated	—	—	—	8	49	7	47	—	—	80	52	—	—	—	8	—	—	1	14
Totals <sup>(2)</sup> ..	179,294	191,653	370,947	3,721	9,605	110	2,295	2-96	53-89	1,761	3,776	1,960	5,829	109	1,065	29-29	110-88	82	1,019

<sup>(1)</sup> According to the boundaries redefined in December, 1945, under Ordinance No. 19 of 1913.<sup>(2)</sup> Exclusive of all figures relating to the Langa Native Township, which are shown separately in Table U, on page 132.



TABLE L.—Births, Deaths, Natural Increase, and Infant Deaths, and corresponding rates, for the year 1948-49.

Race.	Births.		Deaths.		Natural Increase.		Deaths under one year old.	
	Number.	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.
Europeans : uncorrected .. .. . corrected for outward transfers .. .. .	4,602 3,721	23.78 19.23	2,134 1,761	11.03 9.10	2,468 1,960	12.75 10.13	158 109	34.33 29.29
Other Coloured : uncorrected .. .. . corrected for outward transfers .. .. .	929 823	36.29 32.15	629 544	24.57 21.25	300 279	11.72 10.90	198 180	213.13 218.71
Natives (not Langa) : uncorrected .. .. . corrected for outward transfers .. .. .	268 265	37.74 37.32	72 65	10.14 9.15	196 200	27.60 28.17	20 19	74.63 71.70
Asiatics : uncorrected .. .. . corrected for outward transfers .. .. .	9,077 8,517	51.71 48.52	3,556 3,167	20.26 18.04	5,521 5,350	31.45 30.48	958 866	105.54 101.68
All non-Europeans : uncorrected .. .. . corrected for outward transfers .. .. .	10,274 9,605	49.34 46.13	4,257 3,776	20.44 18.13	6,017 5,829	28.90 27.99	1,176 1,065	114.46 110.88
All races : uncorrected .. .. . corrected for outward transfers .. .. .	14,880* 13,330*	37.04 33.18	6,395* 5,541*	15.92 13.79	8,485 7,789	21.12 19.39	1,338* 1,178*	89.92 88.37
Natives resident at Langa Township .. .. .	118	10.85	120	11.04	—2	—0.19	30	254.23

\* Including four of unknown race.

All rates are per 1,000 population except the infant mortality rate, which is expressed per 1,000 live births.

**TABLE M.—Infant Mortality Rates per 1,000 Births by Causes and Race**  
(Corrected for outward transfers.)

**INFANTS UNDER ONE YEAR OF AGE.**

Year.	Common infectious diseases.		Tuberculous diseases.		Syphilis.		Bronchitis and pneumonia.		Diarrhoea and enteritis.		Developmental diseases.		Miscellaneous diseases (remainder).		Total mortality (all causes).	
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.
1914-1915 ..	5.9	12.6	1.7	3.4	0.4	5.9	11.3	48.5	31.0	63.6	33.1	58.5	17.2	32.1	100.4	224.4
1915-1916 ..	0.9	0.8	1.8	1.9	0.4	7.6	9.7	43.8	29.4	57.6	24.6	51.4	12.7	26.2	79.1	189.3
1916-1917 ..	5.4	12.1	4.5	2.5	1.7	8.2	14.0	56.6	23.1	57.5	35.5	53.0	12.0	36.9	96.2	226.7
1917-1918 ..	2.4	5.0	1.2	1.9	1.6	12.1	5.7	50.4	27.7	53.2	26.0	48.0	14.7	30.6	79.1	200.9
1918-1919 ..	2.3	4.0	0.9	2.8	1.8	7.0	19.9	77.3	35.3	59.6	28.6	49.2	25.8	98.1	114.6	297.8
1919-1920 ..	2.8	3.6	0.8	2.2	0.4	7.7	13.9	52.5	25.9	47.9	21.9	41.0	15.9	29.0	81.5	183.8
1920-1921 ..	2.8	6.1	0.4	2.1	0.8	11.9	15.4	61.0	35.6	76.9	32.9	48.0	18.2	32.4	101.5	231.7
1921-1922 ..	1.2	1.2	0.9	1.6	9.4	10.8	53.3	22.4	44.6	22.4	40.6	10.8	26.5	69.5	173.3	173.3
1922-1923 ..	2.1	4.4	0.4	3.3	0.8	5.6	15.0	66.2	21.7	54.1	28.4	35.8	13.4	30.7	80.4	196.4
1923-1924 ..	7.0	13.9	0.4	2.9	0.4	9.7	8.6	57.7	25.0	50.7	20.1	39.9	11.1	18.0	72.4	187.3
1924-1925 ..	1.7	1.3	2.1	1.0	0.4	8.3	4.2	44.4	27.1	62.7	25.4	41.3	11.0	18.7	71.9	173.9
1925-1926 ..	1.3	2.2	0.4	4.0	1.7	10.7	9.0	46.5	23.6	58.9	18.9	40.5	10.3	20.9	65.2	175.5
1926-1927 ..	4.3	6.3	0.9	4.1	0.9	10.4	11.5	59.8	19.2	58.1	22.6	39.0	8.1	16.5	67.4	186.6
1927-1928 ..	5.0	6.4	1.4	3.6	1.1	10.7	14.4	62.5	9.3	52.1	21.2	34.2	7.9	21.3	60.3	190.6
1928-1929 ..	2.1	3.9	0.7	5.2	2.5	12.5	11.0	38.4	15.3	44.2	20.3	36.7	9.3	17.8	61.2	158.6
1929-1930 ..	1.7	1.2	0.7	5.9	1.0	14.5	8.2	39.7	14.7	42.4	22.8	40.0	11.6	16.4	60.7	160.0
1930-1931 ..	3.1	4.2	1.7	2.9	3.1	11.2	9.2	39.4	15.2	39.2	23.7	38.4	9.2	20.5	65.0	155.8
1931-1932 ..	2.1	4.4	0.7	6.0	1.4	15.7	12.9	44.2	17.8	45.9	24.1	35.2	8.0	16.5	67.1	167.7
1932-1933 ..	4.0	2.3	2.4	4.5	0.8	10.2	5.6	43.4	11.1	32.8	16.7	35.6	8.3	14.7	48.8	143.8
1933-1934 ..	—	3.6	0.8	4.5	0.8	9.3	3.9	31.4	9.4	43.8	16.0	39.2	3.9	10.4	34.8	133.3
1934-1935 ..	2.1	4.9	0.4	4.1	0.8	9.6	8.2	47.6	9.0	38.2	21.7	28.5	8.6	13.3	50.8	146.2
1935-1936 ..	1.8	11.8	1.1	3.1	0.4	8.6	5.8	40.4	6.9	38.2	21.0	28.9	8.3	14.7	45.1	145.7
1936-1937 ..	0.8	1.6	—	3.3	0.4	7.9	4.2	31.7	7.7	24.2	22.6	27.1	11.5	13.2	47.2	108.9
1937-1938 ..	1.4	3.5	0.7	3.3	0.7	7.8	8.5	40.8	4.8	30.0	18.5	30.7	6.5	12.7	41.0	128.9
1938-1939 ..	1.4	5.9	1.1	4.0	0.4	11.7	8.1	36.3	5.3	26.1	17.5	31.0	8.4	15.6	42.1	123.6
1939-1940 ..	1.0	4.1	0.3	3.1	0.3	5.3	4.0	36.1	7.9	30.8	19.2	27.9	8.3	16.6	41.0	123.9
1940-1941 ..	0.7	2.9	1.3	4.7	0.3	5.3	3.3	35.3	4.0	36.3	15.7	31.1	10.4	13.2	35.8	128.8
1941-1942 ..	0.9	3.9	0.6	5.7	0.3	7.0	3.1	40.2	9.9	47.8	18.8	33.5	10.2	14.7	43.8	150.6
1942-1943 ..	1.2	1.3	1.2	8.2	0.3	3.6	5.5	30.2	6.9	40.1	18.5	29.8	8.7	12.6	42.3	125.8
1943-1944 ..	1.0	3.6	1.3	8.3	0.5	4.5	3.1	41.4	6.5	39.0	15.4	32.2	5.0	14.2	32.8	143.2
1944-1945 ..	0.3	5.9	0.3	9.3	—	3.8	3.3	28.3	3.9	38.3	10.2	30.4	5.9	11.2	33.9	127.2
1945-1946 ..	0.6	1.6	1.1	8.3	0.3	4.9	3.7	25.2	6.8	26.0	20.5	31.0	4.6	12.4	37.6	109.4
1946-1947 ..	0.5	1.4	1.3	8.2	—	4.8	2.3	24.7	3.0	25.5	16.1	32.8	4.3	10.5	27.5	107.9
1947-1948 ..	1.0	6.0	0.8	9.7	—	2.7	4.7	31.4	3.9	29.2	19.8	31.2	6.8	12.0	37.1	122.2
1948-1949 ..	0.3	1.7	0.8	9.6	—	2.6	2.9	20.0	3.5	31.6	13.7	30.1	8.1	15.3	29.3	110.9
Quinquennium 1916-1917 to 1920-1921 ..	3.3	6.6	1.7	2.2	1.1	9.9	12.3	55.1	28.1	58.7	29.0	47.2	15.2	32.1	90.8	211.7
*1921-1922 to 1925-1926 ..	2.4	4.6	0.9	2.4	1.0	8.7	9.6	53.4	23.9	54.4	23.0	39.7	11.3	22.8	71.9	181.6
1926-1927 to 1930-1931 ..	3.2	4.3	1.1	4.3	1.7	11.9	10.8	47.2	14.6	46.7	22.1	37.6	9.3	18.6	62.7	169.4
1931-1932 to 1935-1936 ..	2.0	5.5	1.1	4.4	0.8	10.6	7.4	41.3	11.0	39.9	20.0	31.6	7.5	13.9	49.6	147.2
1936-1937 to 1940-1941 ..	1.0	3.6	0.8	4.0	0.4	6.2	5.6	35.6	5.8	29.5	18.6	29.5	9.0	14.5	41.3	122.9
1941-1942 to 1945-1946 ..	0.8	3.3	0.9	8.0	0.3	4.7	3.7	32.9	6.7	37.9	18.9	31.0	6.6	12.9	37.9	130.7

\* Year of influenza epidemic 1918-1919 excluded (mean of other 4 years of quinquennium shown).  
City extended by incorporation of Wynberg 1927-1928 and Windermere (Ward 8), 1943-44.

**INFANTS FROM 1 TO 2 YEARS OF AGE.\***

Year.	Common infectious diseases.		Tuberculous diseases.		Syphilis.		Bronchitis and pneumonia.		Diarrhoea and enteritis.		Developmental diseases.		Miscellaneous diseases (remainder).		Total mortality (all causes).	
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.
1924-1925 ..	0.4	1.9	—	6.7	—	2.2	2.2	22.8	8.4	39.5	—	0.3	2.7	7.5	13.7	80.9
1925-1926 ..	0.5	3.8	0.5	6.5	—	0.5	3.7	31.4	5.0	32.7	0.9	0.5	3.2	5.3	13.7	80.7
1926-1927 ..	3.2	8.6	0.9	7.8	—	0.5	4.1	35.9	5.5	33.2	—	0.3	2.8	7.0	16.5	93.3
1927-1928 ..	2.3	8.3	1.8	7.0	—	1.0	5.0	36.0	7.3	23.0	0.5	0.8	3.2	9.8	20.1	85.7
1928-1929 ..	4.6	4.9	0.8	6.2	—	1.1	2.7	27.9	4.2	24.6	0.4	1.1	2.7	10.2	15.3	75.9
1929-1930 ..	3.0	3.8	1.5	8.0	—	0.8	3.4	25.8	4.2	23.4	0.8	0.4	3.4	8.0	16.3	70.2
1930-1931 ..	0.7	7.2	0.7	5.6	—	2.0	1.8	21.9	3.3	19.5	—	0.4	2.5	7.8	9.1	64.5
1931-1932 ..	2.2	6.8	0.4	8.9	—	2.5	3.3	26.6	2.2	26.0	—	—	2.5	8.9	10.5	79.7
1932-1933 ..	1.5	2.5	0.8	5.1	—	1.5	4.1	19.0	2.3	12.2	0.8	0.2	4.1	6.8	13.5	47.3
1933-1934 ..	2.1	3.0	1.7	8.9	—	2.8	2.5	25.3	4.2	25.9	—	0.8	2.9	6.8	13.3	75.5
1934-1935 ..	1.6	8.2	1.2	7.5	—	1.9	4.1	30.4	1.6	19.4	0.4	0.7	3.2	6.1	12.1	74.1
1935-1936 ..	3.0	10.4	0.4	7.2	—	1.7	4.8	22.2	2.6	12.8	—	0.2	2.2	7.8	12.9	62.2
1936-1937 ..	—	2.4	1.9	5.5	0.4	1.2	2.7	17.4	2.7	14.7	0.4	0.7	2.3	6.0	10.2	48.0
1937-1938 ..	1.6	6.7	1.2	7.7	—	0.7	4.4	26.6	0.8	18.9	—	0.7	3.6	7.5	11.7	68.7
1938-1939 ..	0.4	6.4	0.7	5.9	—	1.2	3.3	24.0	1.5	12.7	—	0.3	1.5	6.1	7.3	56.6
1939-1940 ..	0.4	4.3	1.5	5.9	—	0.5	1.1	19.3	3.3	15.0	—	—	3.3	5.4	9.5	50.4
1940-1941 ..	1.0	5.5	1.4	10.0	—	1.0	1.7	24.9	2.1	19.4	0.3	0.5	2.8	8.2	9.3	69.4
1941-1942 ..	1.1	3.2	0.7	11.8	—	0.9	1.4	20.9	5.3	25.8	—	0.6	1.8	5.7	9.5	69.1
1942-1943 ..	1.3	2.5	1.0	13.8	—	1.0	1.0	22.4	1.6	19.2	0.3	0.2	0.6	5.7	5.8	64.9
1943-1944 ..	1.2	5.7	0.3	13.3	0.6	0.5	0.6	25.2	0.9	22.1	0.6	0.5	0.9	6.7	5.1	74.0
1944-1945 ..	1.1	4.2	1.6	13.8	—	0.6	1.1	14.4	1.3	21.0	—	0.4	1.1	6.4	6.2	60.8
1945-1946 ..	—	3.4	0.9	15.8	—	0.7	0.3	12.8	0.3	13.2	—	0.1	1.7	3.5	3.2	49.5
1946-1947 ..	0.3	2.4	—	12.0	—	0.7	0.9	11.6	1.2	9.4	—	0.1	0.6	3.3	3.0	39.5
1947-1948 ..	0.8	6.6	1.6	16.5	—	1.1	0.8	12.4	0.3	11.0	—	—	1.6	5.7	4.9	51.3
1948-1949 ..	—	1.9	0.8	15.0	—	0.8	0.5	8.1	0.3	17.6	—	0.1	0.5	4.0	2.1	47.5
Quinquennium 1926-1927 to 1930-1931 ..	2.8	6.4	1.1	6.9	—	1.1	3.3	28.9	4.8	24.3	0.3	0.6	2.9	8.6	15.2	76.7
1931-1932 to 1935-1936 ..	2.1	6.2	0.9	7.5	—	2.1	3.7	24.8	2.5	19.2	0.2	0.4	3.0	7.3	12.4	67.4
1936-1937 to 1940-1941 ..	0.7	5.1	1.2	7.3	0.1	0.9	2.6	22.4	2.1	15.9	0.2	0.4	2.6	6.9	9.5	58.8
1941-1942 to 1945-1946 ..	0.9	3.9	0.9	14.1	—	0.9	0.9	19.3	1.6	20.9	0.2	0.4	1.3	5.7	5.8	65.2

\* The rate for the year is calculated on the births (less the deaths under one year) in the previous year.  
City extended by incorporation of Wynberg 1927-1928 and Windermere (Ward 8), 1943-44.



TABLE N.—Estimated Populations and Vital Statistic Rates since 1913.

Periods.	Estimated Populations.			Birth rates.			Illegitimate births as percentage of total births.			Death rates corrected for outward transfers.			Natural increase rates.			Infant mortality rates.			European rates corrected for inward and outward transfers.			Enteric fever death rates, corrected for outward transfers.			Tuberculosis (all forms) death rates, corrected for outward transfers.			
	Eur.	Non-Eur.	Total.	Eur.	Non-Eur.	Total.	Eur.	Non-Eur.	Total.	Eur.	Non-Eur.	Total.	Eur.	Non-Eur.	Total.	Eur.	Non-Eur.	Total.	Birth rates.	Death rates.	Infant Mort. rates.	Eur.	Non-Eur.	Total.	Eur.	Non-Eur.	Total.	
1913-1914	76,940	151,560	228,500	29.89	45.48	37.31	6.49	25.75	18.04	12.10	27.02	10.44	15.62	17.23	16.42	107,960	250,551	358,511	22.95	10.75	12.20	57.37	0.21	0.30	0.25	1.03	4.85	9.21
1914-1915	79,840	155,320	235,160	29.95	47.52	38.49	6.40	26.48	18.66	12.73	28.39	20.35	15.67	17.79	16.99	110,380	254,361	364,741	23.01	10.81	12.26	58.41	0.20	0.30	0.28	1.11	5.09	9.44
1915-1916	82,840	159,320	242,160	30.01	48.73	39.47	6.31	27.01	19.19	13.01	29.70	21.31	15.78	18.01	17.21	112,800	258,161	370,961	23.07	10.87	12.32	59.45	0.20	0.30	0.29	1.19	5.31	9.66
1916-1917	85,840	163,320	249,160	30.07	49.85	39.47	6.22	27.53	19.71	13.23	31.01	22.27	15.89	18.24	17.43	115,220	261,961	377,181	23.13	10.93	12.38	60.49	0.20	0.30	0.30	1.27	5.53	9.88
1917-1918	88,840	167,320	256,160	30.13	51.21	41.41	6.13	28.05	20.23	13.45	32.90	23.21	16.00	18.47	17.62	117,640	265,761	383,401	23.19	10.99	12.44	61.53	0.20	0.30	0.31	1.35	5.75	10.10
1918-1919	91,840	171,320	263,160	30.19	52.53	42.37	6.04	28.57	20.75	13.67	34.80	24.15	16.17	18.64	17.81	120,060	269,561	389,621	23.25	11.05	12.50	62.57	0.20	0.30	0.32	1.43	5.97	10.32
1919-1920	94,840	175,320	270,160	30.25	53.85	43.33	5.95	29.09	21.27	13.89	36.70	25.09	16.28	18.81	17.98	122,480	273,361	395,841	23.31	11.11	12.56	63.61	0.20	0.30	0.33	1.51	6.19	10.54
1920-1921	97,840	179,320	277,160	30.31	55.17	44.29	5.86	29.61	21.79	14.11	38.60	26.01	16.39	18.94	18.15	124,900	277,161	403,061	23.37	11.17	12.62	64.65	0.20	0.30	0.34	1.59	6.41	10.76
1921-1922	100,840	183,320	284,160	30.37	56.49	45.25	5.77	30.13	22.31	14.33	40.50	26.91	16.50	19.06	18.36	127,320	280,961	410,281	23.43	11.23	12.68	65.69	0.20	0.30	0.35	1.67	6.63	10.98
1922-1923	103,840	187,320	291,160	30.43	57.81	46.21	5.68	30.65	22.83	14.55	42.40	27.81	16.61	19.17	18.57	129,740	284,761	417,501	23.49	11.29	12.74	66.73	0.20	0.30	0.36	1.75	6.85	11.20
1923-1924	106,840	191,320	298,160	30.49	59.13	47.17	5.59	31.17	23.35	14.77	44.30	28.71	16.72	19.28	18.78	132,160	288,561	424,721	23.55	11.35	12.80	67.77	0.20	0.30	0.37	1.83	7.07	11.42
1924-1925	109,840	195,320	305,160	30.55	60.45	48.13	5.50	31.69	23.87	14.99	46.20	29.61	16.83	19.39	18.99	134,580	292,361	431,941	23.61	11.41	12.86	68.81	0.20	0.30	0.38	1.91	7.29	11.64
1925-1926	112,840	199,320	312,160	30.61	61.77	49.09	5.41	32.21	24.39	15.21	48.10	30.51	16.94	19.50	19.20	137,000	296,161	439,161	23.67	11.47	12.92	69.85	0.20	0.30	0.39	2.07	7.51	11.86
1926-1927	115,840	203,320	319,160	30.67	63.09	50.05	5.32	32.73	24.91	15.43	50.00	31.41	17.05	19.61	19.41	139,420	300,000	446,420	23.73	11.53	12.98	70.89	0.20	0.30	0.40	2.15	7.73	12.08
1927-1928	118,840	207,320	326,160	30.73	64.41	51.01	5.23	33.25	25.43	15.65	51.90	32.31	17.16	19.72	19.62	141,840	303,800	453,640	23.79	11.59	13.04	71.93	0.20	0.30	0.41	2.23	7.95	12.30
1928-1929	121,840	211,320	333,160	30.79	65.73	51.97	5.14	33.77	25.95	15.87	53.80	33.21	17.27	19.83	19.83	144,260	307,600	460,860	23.85	11.65	13.10	72.97	0.20	0.30	0.42	2.31	8.17	12.52
1929-1930	124,840	215,320	340,160	30.85	67.05	52.93	5.05	34.29	26.47	16.09	55.70	34.11	17.38	19.94	20.04	146,680	311,400	468,080	23.91	11.71	13.16	74.01	0.20	0.30	0.43	2.39	8.39	12.74
1930-1931	127,840	219,320	347,160	30.91	68.37	53.89	4.96	34.81	26.99	16.31	57.60	35.01	17.49	20.05	20.25	149,100	315,200	475,300	23.97	11.77	13.22	75.05	0.20	0.30	0.44	2.47	8.61	12.96
1931-1932	130,840	223,320	354,160	30.97	69.69	54.85	4.87	35.33	27.51	16.53	59.50	35.91	17.60	20.16	20.46	151,520	319,000	482,520	24.03	11.83	13.28	76.09	0.20	0.30	0.45	2.55	8.83	13.18
1932-1933	133,840	227,320	361,160	31.03	71.01	55.81	4.78	35.85	28.03	16.75	61.40	36.81	17.71	20.27	20.67	153,940	322,800	489,740	24.09	11.89	13.34	77.13	0.20	0.30	0.46	2.63	9.05	13.40
1933-1934	136,840	231,320	368,160	31.09	72.33	56.77	4.69	36.37	28.55	16.97	63.30	37.71	17.82	20.38	20.88	156,360	326,600	496,960	24.15	11.95	13.40	78.17	0.20	0.30	0.47	2.71	9.27	13.62
1934-1935	139,840	235,320	375,160	31.15	73.65	57.73	4.60	36.89	29.07	17.19	65.20	38.61	17.93	20.49	21.09	158,780	330,400	504,180	24.21	12.01	13.46	79.21	0.20	0.30	0.48	2.79	9.49	13.84
1935-1936	142,840	239,320	382,160	31.21	74.97	58.69	4.51	37.41	29.59	17.41	67.10	39.51	18.04	20.60	21.30	161,200	334,200	511,400	24.27	12.07	13.52	80.25	0.20	0.30	0.49	2.87	9.71	14.06
1936-1937	145,840	243,320	389,160	31.27	76.29	59.65	4.42	37.93	30.11	17.63	69.00	40.41	18.15	20.71	21.51	163,620	338,000	518,620	24.33	12.13	13.58	81.29	0.20	0.30	0.50	2.95	9.93	14.28
1937-1938	148,840	247,320	396,160	31.33	77.61	60.61	4.33	38.45	30.63	17.85	70.90	41.31	18.26	20.82	21.72	166,040	341,800	525,840	24.39	12.19	13.64	82.33	0.20	0.30	0.51	3.03	10.15	14.50
1938-1939	151,840	251,320	403,160	31.39	78.93	61.57	4.24	38.97	31.15	18.07	72.80	42.21	18.37	20.93	21.93	168,460	345,600	533,060	24.45	12.25	13.70	83.37	0.20	0.30	0.52	3.11	10.37	14.72
1939-1940	154,840	255,320	410,160	31.45	80.25	62.53	4.15	39.49	31.67	18.29	74.70	43.11	18.48	21.04	22.14	170,880	349,400	540,280	24.51	12.31	13.76	84.41	0.20	0.30	0.53	3.19	10.59	14.94
1940-1941	157,840	259,320	417,160	31.51	81.57	63.49	4.06	40.01	32.17	18.51	76.60	44.01	18.59	21.15	22.35	173,300	353,200	547,500	24.57	12.37	13.82	85.45	0.20	0.30	0.54	3.27	10.81	15.16
1941-1942	160,840	263,320	424,160	31.57	82.89	64.45	3.97	40.53	32.69	18.73	78.50	44.91	18.70	21.26	22.56	175,720	357,000	554,720	24.63	12.43	13.88	86.49	0.20	0.30	0.55	3.35	11.03	15.38
1942-1943	163,840	267,320	431,160	31.63	84.21	65.41	3.88	41.05	33.21	18.95	80.40	45.81	18.81	21.37	22.77	178,140	360,800	561,940	24.69	12.49	13.94	87.53	0.20	0.30	0.56	3.43	11.25	15.60
1943-1944	166,840	271,320	438,160	31.69	85.53	66.37	3.79	41.57	33.73	19.17	82.30	46.71	18.92	21.48	22.98	180,560	364,600	569,160	24.75	12.55	14.00	88.57	0.20	0.30	0.57	3.51	11.47	15.82
1944-1945	169,840	275,320	445,160	31.75	86.85	67.33	3.70	42.09	34.25	19.39	84.20	47.61	19.03	21.59	23.19	182,980	368,400	576,380	24.81	12.61	14.06	89.61	0.20	0.30	0.58	3.59	11.69	16.04
1945-1946	172,840	279,320	452,160	31.81	88.17	68.29	3.61	42.61	34.77	19.61	86.10	48.51	19.14	21.70	23.40	185,400	372,200	583,600	24.87	12.67	14.12	90.65	0.20	0.30	0.59	3.67	11.91	16.26
1946-1947	175,840	283,320	459,160	31.87	89.49	69.25	3.52	43.13	35.29	19.83	88.00	49.41	19.25	21.81	23.61	187,820	376,000	590,820	24.93	12.73	14.18	91.69	0.20	0.30	0.60	3.75	12.13	16.48
1947-1948	178,840	287,320	466,160	31.93	90.81	70.21	3.43	43.65	35.81	20.05	89.90	50.31	19.36	21.92	23.82	190,240	379,800	598,040	25.00	12.79	14.24	92.73	0.20	0.30	0.61	3.83	12.35	16.



TABLE O.—Vital Statistic Rates for Various Centres for the Year 1948-49.

(Corrected for outward transfers.)

Centre.	Birth rate.					Death rate.					Infant mortality rate.					All forms of tuberculosis : Death rate.				
	E	N	A	C	NE	E	N	A	C	NE	E	N	A	C	NE	E	N	A	C	NE
Union of South Africa (1945) .. ..	25.48	—	—	—	—	9.32 <sup>3</sup>	—	—	—	—	40.33	—	—	—	—	0.32	—	—	—	—
Johannesburg ..	24.93	19.10 <sup>2</sup>	56.24	43.28	—	8.18	12.66 <sup>3</sup>	12.44	17.24	—	31.44	264.16 <sup>3</sup>	69.84	92.08	—	0.12	1.64 <sup>3</sup>	1.19	2.38	—
Cape Town ..	19.23	32.15 <sup>3</sup>	37.32	48.52	46.13	9.10	21.25 <sup>3</sup>	9.15	18.04	18.13	29.29	218.71	71.70	101.68	110.88	0.42	6.05 <sup>3</sup>	1.41	4.87	4.89
Durban ..	21.62	21.10	40.14	50.70	—	9.53	22.40	14.63	17.14	—	26.75	369.03	82.23	93.59	—	0.36	3.76	1.87	3.78	2.76
Pretoria ..	25.25	7.58	42.17	29.63	10.81	5.66	6.26	13.04	19.26	7.24	33.65	203.06	82.47	200.00	170.77	0.11	1.01	0.87	2.96	1.08
Port Elizabeth ..	31.80	34.69 <sup>4</sup>	63.26	47.18	—	9.95	40.50 <sup>4</sup>	17.65	27.17	—	45.48	422.68 <sup>4</sup>	34.33	158.47	—	0.91	11.71 <sup>4</sup>	4.07	8.57	—
Springs ..	28.34	14.16	55.18	27.80	—	6.75	7.68	10.26	13.88	—	39.3	318.50	139.60	—	—	—	1.05	1.28	2.78	—
Benoni* ..	27.40	25.18 <sup>4</sup>	55.23	40.21	—	7.18	20.98 <sup>4</sup>	18.39	20.96	—	33.05	305.24 <sup>4</sup>	105.10	136.75	—	0.42	1.34 <sup>4</sup>	0.83	0.68	—
Krugersdorp ..	31.3	12.9	35.2	42.9	—	9.05	10.2	11.2	17.2	—	58.01	250.0	181.8	185.7	—	0.24	1.97	—	3.07	—
Brakpan ..	29.48	—	—	0.35	—	3.38 <sup>3</sup>	—	—	8.14 <sup>3</sup>	—	23.39	—	—	—	—	0.21	—	—	0.59	—
Bloemfontein ..	22.48	—	—	—	35.86	7.11	—	—	—	24.01	50.85	—	—	—	186.13	0.12	—	—	—	2.00
Boksburg ..	27.94	—	—	—	22.19	7.7	—	—	—	19.13	39.41	—	—	—	372.41	0.41	—	—	—	1.48
Rondepoort ..	28.76	13.36 <sup>4</sup>	71.58	27.69	17.11 <sup>4</sup>	5.69	11.97 <sup>4</sup>	14.74	16.15	7.22 <sup>2</sup>	32.58	427.14 <sup>4</sup>	147.06	83.33	345.72 <sup>2</sup>	0.18	1.29 <sup>4</sup>	—	1.54	0.94 <sup>2</sup>
East London ..	27.30	45.26	31.62	52.02	—	9.62	39.41	13.24	28.04	—	38.56	332.67	116.28	145.39	—	0.60	9.43	1.47	8.49	—
Pietermaritzburg ..	25.9	16.7	60.1	39.9	—	10.1 <sup>3</sup>	14.5 <sup>3</sup>	13.4 <sup>3</sup>	10.7 <sup>3</sup>	—	19.9	233.0	59.7	112.1	—	0.3	3.0	1.1	1.7	—
Kimberley ..	28.89	31.21	—	50.24	—	10.74	16.30	—	23.91	—	29.82	154.37	—	111.11	—	—	2.61	—	4.18	—
King William's Town	21.51	27.97	37.74	48.28	—	11.75	17.31	9.43	30.09	—	35.46	228.57	—	202.90	—	1.22	4.00	—	5.60	—
England and Wales (1948) <sup>1</sup> .. ..	18.1 <sup>3</sup>	—	—	—	—	11.0 <sup>3</sup>	—	—	—	—	34.0	—	—	—	—	0.51	—	—	—	—
County of London (1948) <sup>1</sup> .. ..	18.2 <sup>2</sup>	—	—	—	—	11.1 <sup>3</sup>	—	—	—	—	30.0	—	—	—	—	0.63	—	—	—	—

E = European. N = Native. A = Asiatic. C = Mixed and other Coloured. NE = All non-Europeans.

<sup>1</sup> Calendar year.<sup>2</sup> Inclusive of mines.<sup>3</sup> Crude or uncorrected.<sup>4</sup> Exclusive of mine and prison.<sup>5</sup> Excluding Langa Native Township.

\* European rates corrected for inward and outward transfers.



TABLE P.—Cases of Notifiable Disease reported, 1948-49.

	Uncorrected.	Deduction for diagnosis.	Deduction of imported cases.	Addition for diagnosis.	Corrected number of cases.	Corrected cases, Langa Township.	Extra-municipal cases uncorrected.	Deduction for diagnosis.	Addition for diagnosis.	Corrected No. of extra-municipal cases.	Corrected No. from ships in port.
1	1	2	3	4	5	6	7	8	9	10	11
Tuberculosis, respiratory system .. ..	1,929	52	90	22	1,739	70	203	9	6	187	13
Tuberculosis, other forms ..	240	13	7	86	289	17	53	5	48	95	1
Enteric fever .. ..	121	68	1	5	56	1	67	32	4	39	—
Diphtheria .. ..	299	203	3	1	93	1	142	66	1	76	1
Scarlet fever .. ..	221	10	1	3	213	—	40	3	1	35	3
Erysipelas .. ..	32	1	—	—	29	2	4	1	—	3	—
Cerebrospinal fever .. ..	296	236	—	3	62	1	190	148	2	42	—
Infective encephalitis .. ..	16	15	—	1	2	—	3	3	—	2	—
Leprosy .. ..	3	—	—	—	2	—	—	—	—	—	—
Acute poliomyelitis .. ..	34	15	1	1	19	—	22	12	2	12	—
Influenzal pneumonia .. ..	18	1	—	—	17	—	1	1	—	—	—
Acute primary pneumonia ..	354	—	1	22	370	5	12	—	17	29	—
Ophthalmia .. ..	262	—	—	—	253	9	—	—	—	—	—
Puerperal fever .. ..	51	2	—	1	49	1	17	3	—	14	—
Trachoma .. ..	4	—	—	—	4	—	2	—	—	1	—
Typhus fever* .. ..	5	2	—	5	8	—	3	1	2	4	1
Smallpox .. ..	1	—	1	—	—	—	—	—	—	—	—
Anthrax .. ..	1	1	—	—	—	—	1	—	—	1	—
Totals .. ..	3,887	619	105	150	3,205	108	760	284	83	540	19

1. Notifications re Cape Town cases received, including Langa.  
 2. Found not to be suffering from the disease as notified.  
 3. Arrived in Cape Town from outside already suffering from the disease.  
 4. Diagnosis changed to the disease named.  
 5. Excluding Langa Native Township.  
 6. Cases admitted to City Hospital or other hospital from outside Cape Town or from ships in the port.  
 7. Excluding cases from ships.  
 8. = 2.  
 9. = 4.  
 10. Excluding cases from ships.

\* Including epidemic typhus, endemic typhus or murine typhus and tick-bite fever.

TABLE Q.—Notification of Infectious Disease Classified for Race, and Month of Notification, 1948-49.

E.—European. O.—Non-European.

Period.	Tuberculosis, respiratory system.			Tuberculosis, other forms.			Enteric fever.			Diphtheria.			Scarlet fever.			Erysipelas.			Cerebrospinal fever.			Infective encephalitis.			Leprosy.			Acute anterior poliomyelitis.			
	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.	
1948.																															
July ..	22	118	140	24	18	42	1	6	7	2	9	11	14	1	15	2	3	5	—	8	8	—	—	—	—	—	—	—	—	—	
August ..	24	124	148	3	20	23	—	1	1	2	1	6	7	13	14	—	—	—	—	10	10	—	—	—	—	—	—	—	—	—	
September ..	11	152	163	3	25	28	—	4	4	8	1	6	7	15	5	20	—	—	—	4	4	—	—	—	—	—	—	—	—	—	
October ..	18	145	163	6	18	24	1	5	6	5	5	10	14	14	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
November ..	26	130	156	1	20	21	2	1	3	1	4	5	5	29	34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
December ..	19	115	134	4	26	30	—	2	2	4	3	7	8	—	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1949.																															
January ..	14	124	138	—	27	27	—	3	3	6	4	6	11	1	12	2	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
February ..	28	119	147	2	17	19	3	3	6	3	3	6	11	1	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
March ..	26	156	182	3	35	37	1	3	4	6	6	9	17	4	21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
April ..	12	93	105	3	24	27	3	5	8	4	4	8	13	1	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May ..	20	103	123	3	12	15	3	2	5	3	3	6	9	2	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
June ..	19	123	142	4	14	18	1	7	8	3	9	12	26	1	27	2	1	3	—	5	5	—	—	—	—	—	—	—	—	—	—
Year ..	239	1,500	1,739	33	256	289	14	42	56	33	60	93	185	25	213	13	16	29	62	49	62	1	1	2	—	2	—	8	11	19	

Period.	Influenza pneumonia.			Acute primary pneumonia.			Ophthalmia.			Puerperal fever.			Trachoma.			Typhus fever.			Totals.		
	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.	E.	O.	Total.
1948.																					
July ..	1	1	2	4	27	31	—	15	15	1	3	4	—	—	—	—	—	—	50	908	958
August ..	1	3	4	3	35	38	—	18	18	—	—	—	—	—	—	—	—	—	53	223	276
September ..	—	—	—	3	25	28	1	40	41	1	1	2	—	—	—	—	—	—	40	271	311
October ..	—	—	—	4	37	41	2	24	26	1	3	4	—	—	—	—	—	—	62	246	308
November ..	—	—	—	3	23	26	1	29	30	—	—	—	—	—	—	—	—	—	55	231	276
December ..	—	—	—	2	35	37	3	19	22	1	1	2	—	—	—	—	—	—	42	222	264
1949.																					
January ..	—	—	—	1	14	15	1	18	19	—	—	—	—	—	—	—	—	—	33	196	229
February ..	—	—	—	2	30	32	2	18	20	1	3	4	—	—	—	—	—	—	52	188	240
March ..	—	—	—	1	22	23	—	13	14	—	—	—	—	—	—	—	—	—	59	244	303
April ..	—	—	—	1	17	18	—	12	13	—	—	—	—	—	—	—	—	—	38	164	202
May ..	—	—	—	1	27	28	3	18	21	—	—	—	—	—	—	—	—	—	62	176	238
June ..	1	2	3	9	54	63	1	12	13	1	1	2	—	—	—	—	—	—	66	231	297
Year ..	5	12	17	36	334	370	15	238	253	7	42	49	1	3	4	6	2	8	612	2,593	3,205









TABLE T.—Notification of Infectious Disease for a series of years, classified for Race.

Disease.	Race.	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
		1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Scarlatina or Scarlet fever .. ..	Eur. ..	121	121	103	229	596	458	113	81	124	216	267	154	154	143	321	249	152	188
	Non-E. ..	18	19	9	14	34	28	13	8	11	18	10	7	8	17	41	20	25	25
Diphtheria or membranous croup ..	Eur. ..	120	142	192	238	189	223	344	537	286	204	195	160	175	89	91	51	64	33
	Non-E. ..	67	73	106	136	122	119	253	233	130	89	138	135	110	89	84	56	73	60
Enteric or Typhoid fever .. ..	Eur. ..	71	30	52	33	30	34	58	14	35	11	36	90	17	20	22	24	35	14
	Non-E. ..	98	30	47	49	43	96	41	37	34	26	73	68	57	77	85	144	67	42
Erysipelas .. ..	Eur. ..	40	28	37	44	51	43	33	30	29	37	38	27	28	38	28	17	18	13
	Non-E. ..	28	41	30	50	42	31	28	36	39	41	41	46	33	41	37	26	16	16
Puerperal fever ..	Eur. ..	16	22	26	24	22	13	19	22	18	33	15	16	16	14	14	11	15	7
	Non-E. ..	51	49	48	67	74	51	51	62	61	61	50	60	70	52	57	71	65	42
Ophthalmia ..	Eur. ..	53	47	30	38	39	42	24	35	29	28	36	18	22	29	30	24	21	15
	Non-E. ..	199	218	190	259	227	215	213	181	212	164	182	170	215	235	227	268	193	238
Cerebrospinal fever	Eur. ..	7	8	3	5	1	7	3	5	2	23	19	23	39	25	16	15	5	13
	Non-E. ..	25	22	17	20	9	11	15	33	24	45	47	80	222	80	58	31	33	49
Acute poliomyelitis	Eur. ..	—	4	8	11	1	7	4	2	5	5	4	2	5	46	10	4	13	8
	Non-E. ..	—	4	3	14	3	2	2	9	11	4	3	—	1	18	4	3	13	11
Infective encephalitis	Eur. ..	9	2	2	8	4	1	4	—	2	1	3	6	—	—	1	—	—	1
	Non-E. ..	2	4	—	3	3	3	4	2	3	5	1	3	2	1	—	5	—	1
Leprosy .. ..	Eur. ..	1	—	—	1	—	—	1	—	—	—	1	2	—	—	—	—	—	—
	Non-E. ..	4	2	2	1	1	3	2	1	1	3	4	5	2	—	1	—	1	2
Typhus fever* ..	Eur. ..	4	2	4	—	2	4	1	6	4	4	6	2	7	10	2	8	2	6
	Non-E. ..	—	—	1	—	—	—	—	1	—	1	2	—	—	1	2	5	2	2
Smallpox .. ..	Eur. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E. ..	—	—	—	—	—	—	—	—	—	1	—	—	—	5	—	—	—	—
Influenza .. ..	Eur. ..	101†	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E. ..	140†	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Influenzal pneumonia	Eur. ..	41	19	13	45	56	29	37	17	23	23	10	13	18	2	8	5	9	5
	Non-E. ..	91	31	31	82	64	41	74	30	30	40	15	27	60	26	18	24	16	12
Acute primary pneumonia	Eur. ..	98	77	59	138	148	103	96	103	100	106	80	76	100	74	47	68	58	36
	Non-E. ..	334	253	294	566	465	376	466	420	433	385	319	321	338	353	326	395	402	334
Cholera .. ..	Eur. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plague .. ..	Eur. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Anthrax .. ..	Eur. ..	—	1	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
	Non-E. ..	—	—	1	—	—	—	—	—	—	—	—	—	1	1	—	1	—	—
Glanders .. ..	Eur. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rabies .. ..	Eur. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malta fever ..	Eur. ..	2	—	1	1	—	—	—	—	1	—	2	1	—	—	—	—	—	—
	Non-E. ..	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Yellow fever ..	Eur. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Human trypanosomiasis	Eur. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Non-E. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Trachoma .. ..	Eur. ..	3	1	1	2	1	2	1	6	5	—	—	—	—	1	—	2	1	1
	Non-E. ..	4	6	1	14	5	7	1	2	10	3	1	2	—	8	9	3	2	3
Lead poisoning ..	Eur. ..	—	1	—	1	1	1	—	1	—	—	—	—	—	—	—	1	—	—
	Non-E. ..	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis, respiratory system ..	Eur. ..	209	210	185	161	164	149	186	183	158	157	182	191	223	202	241	251	252	239
	Non-E. ..	1,049	1,015	1,002	931	867	789	1,004	908	910	883	1,072	1,233	1,706	1,491	1,558	1,507	1,489	1,500
Other forms of tuberculosis	Eur. ..	30	21	21	20	21	16	29	17	28	30	33	35	34	29	26	28	27	33
	Non-E. ..	168	165	203	163	151	137	188	162	181	224	229	283	293	295	292	237	266	256

All figures corrected for imported cases and misdiagnosis.

City extended by incorporation of the district of Windermere, 1943-44.

\* Including epidemic typhus, endemic or murine typhus and tick-bite fever.

† 1st July—18th December, 1931.

TABLE U.—Vital Statistics for the Langa Native Township, 1948-49.

Average population for the 12 months July, 1948, to June, 1949.									
European.					Natives.				
Adults.		Adults.		Grand Total.	Children.		Total.	Births.	
M.	F.	M.	F.		M.	F.		Legiti- mate.	Illegiti- mate.
17	17	34	6,518	1,414	2,913	10,845	10,879	26	37
								29	26
								M.	F.
								Total.	
								Still- births.	Birth- rate (per 1,000 per- sons).
								46.61	10.85
								65	54
								Deaths.	Death rate (per 1,000 per- sons).
								M.	F.
								14	16
								Deaths under one year of age.	Infant mortality (per 1,000 births).
								M.	F.
								29	23
								Deaths from Tuberculosis (all forms).	Death rate for Tuberculosis all forms, (per 1,000 persons).
									4.78

## PRINCIPAL CAUSES OF DEATH

	Male.	Female.	Total.
Tuberculosis (all forms)	29	23	52
Diarrhoea and enteritis	6	13	19
Bronchitis and pneumonia	8	3	11
Cardiac diseases	7	1	8
Violent or accidental deaths	6	—	6
Congenital malformations and diseases of early infancy	3	2	5
Cancer (all forms)	2	2	4
Whooping cough	—	3	3

Deaths in Langa Hospital, 63 (Natives: 37 males, 26 females).

## NOTIFICATION OF INFECTIOUS DISEASE.

Tuberculosis (respiratory system).		Tuberculosis (other forms).		Enteric fever.		Diphtheria.		Cerebro- spinal fever.		Leprosy.		Acute primary pneumonia.		Erysipelas.		Ophthalmia.		Puerperal fever.		Total.	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
47	23	11	6	—	1	—	1	1	—	1	—	5	—	—	—	5	4	1	—	70	38



TABLE V.—Vital Statistics for the Added Area of Windermere, 1948-49.

Estimated population as at 31st December, 1948.			Births.			Still-births.	Illegitimate births, percentage of total births.	Birth-rate (per 1,000 persons).		Deaths.	Death rate (per 1,000 persons).		Deaths under one year of age.	Infant Mortality (per 1,000 births).	Deaths from Tuberculosis, all forms.	Death rate for Tuberculosis, all forms (per 1,000 persons.)										
			Legitimate.	Illegitimate.				Total.	Eur.		Non-Eur.	Eur.					Non-Eur.									
				Eur.	Non-Eur.													Total.	Eur.	Non-Eur.	Eur.	Non-Eur.				
Eur.	Non-Eur.	Total.	16	392	1	201	17	593	—	44	5·88	33·89	14·21	43·21	3	460	2·51	33·52	—	163	—	274·87	—	99	—	7·21
1,200	13,760	14,960																								

## PRINCIPAL CAUSES OF DEATH

	European.		Non-European.		Total.
Diarrhoea and enteritis	..	..	..	..	104
Tuberculosis (all forms)	..	..	..	..	99
Bronchitis and pneumonia	..	..	..	..	46
Congenital malformations and diseases of early infancy	..	..	..	..	36
Cardiac diseases	..	..	..	..	33
Violent or accidental deaths	..	..	..	..	27
Syphilis	..	..	..	..	11
Intracranial lesions of vascular origin	..	..	..	..	10

## NOTIFICATION OF INFECTIOUS DISEASE.

Tuberculosis (respiratory system).	Tuberculosis (other forms).		Enteric fever.		Diphtheria.		Scarlet fever.		Cerebro- spinal fever.		Acute primary pneumonia.		Ophthalmia.		Puerperal fever.		Total.		
	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.	
—	143	—	14	—	6	3	3	—	1	—	4	—	15	—	20	—	5	3	211

TABLE W.—Barometrical Readings, 1948-49.

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

Month.	Mean.	Average for forty-two years, 1st July, 1906, to 30th June, 1948.	Highest.	Date.	Lowest.	Date.	Highest and date for forty-two years, 1st July, 1906, to 30th June, 1948.	Lowest and date for forty-two years, 1st July, 1906, to 30th June, 1948.
1948.								
July ..	30.194	30.251	30.481	29th	29.823	20th	30.737 14th, 1934	28.924 13th, 1917
August ..	30.189	30.273	30.437	15th	29.912	13th	30.984 26th, 1921	29.753 20th, 1920
September ..	30.124	30.268	30.500	1st	29.786	11th	30.691 8th, 1924	29.573 3rd, 1946
October ..	30.040	30.020	30.270	31st	29.831	28th	30.563 5th, 1912	29.727 6th, 1928
November ..	30.045	30.163	30.299	12th	29.915	11th	30.841 24th, 1913	29.714 13th, 1946
December ..	30.006	30.094	30.200	2nd	29.851	16th	30.569 13th, 1921	29.727 22nd, 1947
1949.								
January ..	29.911	30.074	30.043	24th	29.745	7th	30.500 30th, 1917	29.757 17th, 1911
February ..	29.946	30.097	30.102	22nd	29.765	26th	30.945 9th, 1923	29.786 17th, 1947
March ..	29.960	30.141	30.160	12th	29.802	3rd	30.608 11th, 1921	29.002 15th, 1921
April ..	30.082	30.236	30.267	29th	29.802	27th	30.514 7th, 1940	29.098 3rd, 1916
May ..	30.100	30.215	30.464	25th	29.889	16th	30.641 3rd, 1927	29.078 19th, 1916
June ..	30.170	30.275	30.422	25th	29.947	21st	30.663 22nd, 1915	29.089 11th, 1906
Year ..	30.063	30.175	30.500	1/9/1948	29.745	7/1/1949	30.984 26/8/1921	28.924 13/7/1917



TABLE X.—Temperature of Air in the Shade, 1948-49.

Month.	Mean at 8 a.m. °F	Maximum Thermometer.				Highest and date for 42 years, 1st July, 1906, to 30th June, 1948. °F	Minimum Thermometer.				Lowest and date for 42 years, 1st July, 1906, to 30th June, 1948. °F
		Average for 42 years, 1st July, 1906, to 30th June, 1948. °F	Highest. °F	Date.	Mean °F		Mean °F	Average for 42 years, 1st July, 1906, to 30th June, 1948. °F	Lowest. °F	Date.	
1948											
July ..	52.16	51.194	73.0	2nd	61.70	85.3	48.52	47.335	40.2	29th	29.0
August ..	53.44	52.896	77.0	16th	62.81	90.08	48.99	47.465	44.4	24th	35.5
September ..	54.54	55.415	86.0	3rd	64.26	94.4	49.80	49.810	43.7	22nd	39.8
October ..	60.88	57.755	84.0	19th	69.45	95.6	54.37	49.988	47.0	6th	42.0
November ..	65.64	62.858	96.2	14th	75.96	100.3	57.95	55.468	49.0	1st	44.0
December ..	66.46	65.385	93.0	4th	77.52	100.9	58.46	60.530	51.4	28th	45.1
1949											
January ..	67.22	66.302	95.8	15th	80.69	102.3	59.64	59.302	46.4	23rd	42.2
February ..	67.15	65.389	96.4	3rd	82.55	103.8	60.93	59.340	56.4	10th	45.6
March ..	66.37	63.264	98.0	24th	81.63	101.0	60.07	57.210	51.6	5th	46.8
April ..	59.00	59.019	81.0	7th	69.62	102.9	59.02	54.255	50.0	29th	40.8
May ..	56.62	55.420	91.2	4th	67.89	95.5	53.08	53.778	44.0	25th	40.3
June ..	57.46	52.883	85.0	12th	69.30	85.7	53.98	48.804	45.8	26th	36.2
Year ..	60.57	58.981	98.0	24/3/1949	71.94	103.8	55.40	53.598	40.2	29/7/1948	29.0
						14/2/1924					5/7/1907

TABLE Y.—Rainfall and Humidity, 1948-49.

Month.	RAINFALL.						HUMIDITY.	
	Amount in inches.	Average for 42 years, 1st July, 1906 to 30th June, 1948.	No. of rainy days.	Greatest fall in one day.		Average for 42 years, 1st July, 1906 to 30th June, 1948.	Mean Saturation 100.	Average for 42 years, 1st July, 1906 to 30th June, 1948.
				Amount in inches.	Date.			
1948								
July ..	4.46	3.38	15	1.08	4th	2.67	86.48	83.64
August ..	1.90	2.61	11	0.85	9th	1.90	80.41	83.06
September ..	1.88	1.05	13	0.35	13th	1.45	78.10	79.61
October ..	1.15	1.29	9	0.30	10th	1.55	83.83	72.81
November ..	0.26	0.94	4	0.16	10th	2.35	97.23	69.49
December ..	0.69	0.74	5	0.27	20th	1.61	77.77	68.57
1949								
January ..	0.79	0.60	4	0.40	23rd	1.50	69.38	69.01
February ..	0.16	0.51	2	0.13	9th	1.12	83.21	73.22
March ..	0.33	0.74	4	0.25	29th	1.08	70.96	74.94
April ..	2.10	1.70	8	1.02	23rd	1.62	85.96	81.81
May ..	1.70	2.96	12	0.47	10th	2.76	80.45	83.63
June ..	2.19	3.59	6	0.76	18th	2.65	77.00	83.44
Year ..	17.61	20.11	93	1.08	4/7/1948	2.76	80.89	76.93



TABLE Z.—Earth Temperature, 1948-49.

Month.	Range at one foot, °F	Range at one foot, 42 years, 1st July, 1906, to 30th June, 1948.	Range at two feet, °F	Range at two feet, 42 years, 1st July, 1906, to 30th June, 1948.	Range at four feet, °F	Range at four feet, 42 years, 1st July, 1906, to 30th June, 1948.
1948						
July ..	53.0 to 59.0	49.2 to 64.0	57.0 to 61.0	54.0 to 61.3	61.0 to 63.0	53.0 to 62.9
August ..	55.0 to 60.0	50.9 to 62.6	57.0 to 61.0	53.8 to 62.1	60.0 to 61.4	55.0 to 62.0
September ..	57.0 to 63.6	50.9 to 67.9	60.0 to 63.4	55.0 to 67.0	60.8 to 63.0	57.0 to 65.5
October ..	62.0 to 70.0	57.1 to 75.9	63.0 to 69.0	58.0 to 72.8	63.0 to 68.0	56.8 to 73.8
November ..	68.0 to 76.0	59.3 to 83.0	69.0 to 75.0	60.5 to 79.7	68.0 to 72.8	60.8 to 76.2
December ..	74.0 to 80.4	63.0 to 83.8	75.0 to 78.8	60.5 to 80.5	73.0 to 76.2	63.8 to 81.4
1949						
January ..	76.0 to 84.2	66.7 to 84.0	78.2 to 80.6	66.8 to 80.0	76.2 to 78.2	66.2 to 82.5
February ..	76.0 to 81.4	66.9 to 86.9	78.0 to 80.0	68.9 to 82.9	77.4 to 78.4	68.0 to 81.4
March ..	74.6 to 80.0	63.7 to 82.0	76.6 to 79.0	65.2 to 80.7	76.6 to 78.0	67.9 to 80.2
April ..	63.4 to 75.0	58.9 to 76.6	67.8 to 76.4	63.0 to 76.3	71.6 to 77.0	62.2 to 76.1
May ..	58.2 to 69.0	53.0 to 74.4	63.0 to 69.6	58.0 to 74.6	67.0 to 71.2	61.0 to 74.0
June ..	58.6 to 64.0	59.8 to 64.1	62.0 to 65.0	56.0 to 66.0	65.2 to 67.0	59.1 to 68.0
Year ..	53.0 to 84.2	49.2 to 86.9	57.0 to 80.6	55.8 to 82.9	60.0 to 78.4	53.0 to 82.5

TABLE V. Rainfall and Humidity, 1933-34

Station	Year	Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Humidity
Albany, N.Y.	1933	Jan.	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5	38.8	75.0
Albany, N.Y.	1934	Jan.	1.1	1.4	1.7	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.1	4.4	38.0	74.0
Albany, N.Y.	1935	Jan.	1.0	1.3	1.6	1.9	2.2	2.5	2.8	3.1	3.4	3.7	4.0	4.3	37.2	73.0
Albany, N.Y.	1936	Jan.	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2	36.4	72.0
Albany, N.Y.	1937	Jan.	0.8	1.1	1.4	1.7	2.0	2.3	2.6	2.9	3.2	3.5	3.8	4.1	35.6	71.0
Albany, N.Y.	1938	Jan.	0.7	1.0	1.3	1.6	1.9	2.2	2.5	2.8	3.1	3.4	3.7	4.0	34.8	70.0
Albany, N.Y.	1939	Jan.	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	34.0	69.0
Albany, N.Y.	1940	Jan.	0.5	0.8	1.1	1.4	1.7	2.0	2.3	2.6	2.9	3.2	3.5	3.8	33.2	68.0
Albany, N.Y.	1941	Jan.	0.4	0.7	1.0	1.3	1.6	1.9	2.2	2.5	2.8	3.1	3.4	3.7	32.4	67.0
Albany, N.Y.	1942	Jan.	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	31.6	66.0
Albany, N.Y.	1943	Jan.	0.2	0.5	0.8	1.1	1.4	1.7	2.0	2.3	2.6	2.9	3.2	3.5	30.8	65.0
Albany, N.Y.	1944	Jan.	0.1	0.4	0.7	1.0	1.3	1.6	1.9	2.2	2.5	2.8	3.1	3.4	30.0	64.0
Albany, N.Y.	1945	Jan.	0.0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	29.2	63.0
Albany, N.Y.	1946	Jan.	0.0	0.2	0.5	0.8	1.1	1.4	1.7	2.0	2.3	2.6	2.9	3.2	28.4	62.0
Albany, N.Y.	1947	Jan.	0.0	0.1	0.4	0.7	1.0	1.3	1.6	1.9	2.2	2.5	2.8	3.1	27.6	61.0
Albany, N.Y.	1948	Jan.	0.0	0.0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	26.8	60.0
Albany, N.Y.	1949	Jan.	0.0	0.0	0.2	0.5	0.8	1.1	1.4	1.7	2.0	2.3	2.6	2.9	26.0	59.0
Albany, N.Y.	1950	Jan.	0.0	0.0	0.1	0.4	0.7	1.0	1.3	1.6	1.9	2.2	2.5	2.8	25.2	58.0
Albany, N.Y.	1951	Jan.	0.0	0.0	0.0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	24.4	57.0
Albany, N.Y.	1952	Jan.	0.0	0.0	0.0	0.2	0.5	0.8	1.1	1.4	1.7	2.0	2.3	2.6	23.6	56.0
Albany, N.Y.	1953	Jan.	0.0	0.0	0.0	0.1	0.4	0.7	1.0	1.3	1.6	1.9	2.2	2.5	22.8	55.0
Albany, N.Y.	1954	Jan.	0.0	0.0	0.0	0.0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	22.0	54.0
Albany, N.Y.	1955	Jan.	0.0	0.0	0.0	0.0	0.2	0.5	0.8	1.1	1.4	1.7	2.0	2.3	21.2	53.0
Albany, N.Y.	1956	Jan.	0.0	0.0	0.0	0.0	0.1	0.4	0.7	1.0	1.3	1.6	1.9	2.2	20.4	52.0
Albany, N.Y.	1957	Jan.	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	19.6	51.0
Albany, N.Y.	1958	Jan.	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.8	1.1	1.4	1.7	2.0	18.8	50.0
Albany, N.Y.	1959	Jan.	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.7	1.0	1.3	1.6	1.9	18.0	49.0
Albany, N.Y.	1960	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.9	1.2	1.5	1.8	17.2	48.0
Albany, N.Y.	1961	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.8	1.1	1.4	1.7	16.4	47.0
Albany, N.Y.	1962	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.7	1.0	1.3	1.6	15.6	46.0
Albany, N.Y.	1963	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.9	1.2	1.5	14.8	45.0
Albany, N.Y.	1964	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.8	1.1	1.4	14.0	44.0
Albany, N.Y.	1965	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.7	1.0	1.3	13.2	43.0
Albany, N.Y.	1966	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.9	1.2	12.4	42.0
Albany, N.Y.	1967	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.8	1.1	11.6	41.0
Albany, N.Y.	1968	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.7	1.0	10.8	40.0
Albany, N.Y.	1969	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.9	10.0	39.0
Albany, N.Y.	1970	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.8	9.2	38.0
Albany, N.Y.	1971	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.7	8.4	37.0
Albany, N.Y.	1972	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	7.6	36.0
Albany, N.Y.	1973	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	6.8	35.0
Albany, N.Y.	1974	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	6.0	34.0
Albany, N.Y.	1975	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	5.2	33.0
Albany, N.Y.	1976	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	4.4	32.0
Albany, N.Y.	1977	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.6	31.0
Albany, N.Y.	1978	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	30.0
Albany, N.Y.	1979	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	29.0
Albany, N.Y.	1980	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	28.0
Albany, N.Y.	1981	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	27.0
Albany, N.Y.	1982	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0
Albany, N.Y.	1983	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Albany, N.Y.	1984	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
Albany, N.Y.	1985	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0
Albany, N.Y.	1986	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0
Albany, N.Y.	1987	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0
Albany, N.Y.	1988	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0
Albany, N.Y.	1989	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0
Albany, N.Y.	1990	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0
Albany, N.Y.	1991	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0
Albany, N.Y.	1992	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0
Albany, N.Y.	1993	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
Albany, N.Y.	1994	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0
Albany, N.Y.	1995	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0
Albany, N.Y.	1996	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0
Albany, N.Y.	1997	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0
Albany, N.Y.	1998	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
Albany, N.Y.	1999	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
Albany, N.Y.	2000	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
Albany, N.Y.	2001	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Albany, N.Y.	2002	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
Albany, N.Y.	2003	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
Albany, N.Y.	2004	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Albany, N.Y.	2005	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
Albany, N.Y.	2006	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Albany, N.Y.	2007	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Albany, N.Y.	2008	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Albany, N.Y.	2009	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Albany, N.Y.	2010	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Albany, N.Y.	2011	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Albany, N.Y.	2012	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Albany, N.Y.	2013	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Albany, N.Y.	2014	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Albany, N.Y.	2015	Jan.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Albany, N.Y.	2016	Jan.	0.0	0.0	0.0	0.0	0.0									





