

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

Contributors

Cape Town (South Africa). City Health Department.

Publication/Creation

[Capetown] : [Cape Times], [1963]

Persistent URL

<https://wellcomecollection.org/works/uqtyp2ms>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

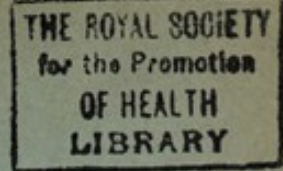
You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>



28676



The Corporation
OF
The City of Cape Town



ANNUAL REPORT
OF THE
Medical Officer of Health

1963

RCB/9(ak)



22501416697



City of Cape Town. - Stad Kaapstad.

With the Compliments of the Medical Officer of Health.

Met die Komplimente van die Mediese Gesondheidsbeampte.



City of Cape Town - Star Hospital

With the compliments of the Medical Officer of Health.
That the compliments can be addressed to the Medical Officer of Health.

Report of **The Corporation** Health

FOR THE YEAR 1963

OF

The City of Cape Town

I have the honour to present my 11th report on the health conditions of the City of Cape Town, together with an account of the work carried out by the City Health Department, for the year 1963. Health conditions throughout the year have been satisfactory.

Vital Statistics

The publication of the final figures of the Census of 1960 reveals an overall increase in the population of the Metropolitan Area of Cape Town of 15.2 per cent since 1951, amounting to an increase of 14.9 per cent during the post-war period (1946-1960).

The annual estimates of population have been based on this report on the basis of the final Census figures, and will therefore be a more accurate reflection of the actual population of the City of Cape Town than the figures published in the previous reports.

In view of the large scale increase in the population of the City of Cape Town, it has been decided to make a more detailed study of the health conditions of the various groups living in the various areas of the City.

The population of the City of Cape Town in 1963 was estimated at 1,100,000, an increase of 1.5 per cent on the 1962 estimate.

The following number of persons were registered as residents in the City of Cape Town in 1963: 1,100,000. The population of the City of Cape Town in 1963 was estimated at 1,100,000, an increase of 1.5 per cent on the 1962 estimate.

Deaths

According to the returns of the Registrar of Births and Deaths, 1,100 Europeans and 1,100 non-European live births were registered during the year as belonging to the Municipality of Cape Town. This is 1,000 less than the number reported in the department for the previous year.

The main difficulties facing the registration of births are to be the lack of machinery for enforcing the law requiring registration of births, and the paucity of the staff which would be required to carry out the necessary work. It is therefore necessary to make arrangements for the registration of births in the various areas of the City.

In justice to the public, it is necessary to make a more detailed study of the health conditions of the various groups living in the various areas of the City. It is therefore necessary to make arrangements for the registration of births in the various areas of the City.

Comparison with the previous year shows a decrease in the number of deaths registered during the year. This is due to a number of factors, including a decrease in the number of deaths registered during the year.

The following number of persons were registered as residents in the City of Cape Town in 1963: 1,100,000. The population of the City of Cape Town in 1963 was estimated at 1,100,000, an increase of 1.5 per cent on the 1962 estimate.

There was a decrease in the number of deaths registered during the year. This is due to a number of factors, including a decrease in the number of deaths registered during the year.

The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate. The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate.

The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate. The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate.

Deaths

The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate. The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate.

The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate. The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate.

The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate. The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate.

The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate. The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate.

The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate. The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate.

The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate. The number of deaths registered during the year was 1,100. This is a decrease of 1.5 per cent on the 1962 estimate.

**ANNUAL REPORT**

OF THE

Medical Officer of Health**1963**

The Corporation

The City of Cape Town



ANNUAL REPORT

Medical Officer of Health

WELLCOME LIBRARY
+
AnnRep
WA28
.H05
C23
1963

THE CORPORATION OF THE CITY OF CAPE TOWN.

Report of the Medical Officer of Health

FOR THE YEAR 1963

To His Worship the Mayor and Councillors
of the City of Cape Town.

Ladies and Gentlemen,

I have the honour to present my 12th report on the health conditions of the City of Cape Town, together with an account of the work carried out by the City Health Department, for the year 1963. Health conditions throughout the year have been satisfactory.

Vital Statistics.

The publication of the final figures of the Census of 1960 reveals an overall increase in the population of the Municipality of Cape Town of 15.2 per cent since 1951, compared with an increase of 14.9 per cent during the previous inter-Censal period 1946-1951.

The annual estimates of population have been adjusted in this report to the basis of the final Census figures, and will therefore be at variance with figures temporarily derived from preliminary Census figures and quoted for the past three years. Allowance has also been made for areas on the eastern boundary incorporated within the Municipality during 1963.

In view of the large scale movement of Bantu out of the city to the Townships of Langa and Guguletu, it has been decided to make use of the tally of this racial group known to the Bantu Administration of the Council in preference to calculations based on Census findings.

The population of the city as at 30th June, 1963, is therefore assessed at 571,440 (European 196,080, non-European 375,360).

The dwindling number of Bantu still residing in the city proper removes any further necessity for the practice in these reports of furnishing separate statistics for Bantu resident in the city and those in the Townships.

Births.

According to the returns of the Registrar of Births and Deaths, 3,616 European and 13,637 non-European live births were registered during the year as belonging to the Municipality of Cape Town. This is 3,000 less than the number notified direct to the department by institutions, midwives and medical practitioners.

The main difficulties leading to non-registration of births appear to be the lack of machinery for enforcing the law requiring registration of births, and the geography of the city which necessitates the underprivileged travelling long distances to effect registration. Any remedies for these conditions are likely to prove a lengthy process both in the application thereof and for results to become evident.

In justice to the health records of the city, the growing annual discrepancy in the number of births recorded can no longer be ignored, and with a view to taking the serious step of relegating State registrations to a supplementary status in these statistics, two sets of figures for births are set out in this report.

Comparison with the previous year however must be confined to State registered births until further comparable figures of departmental birth notifications become available in 1964.

The European birth rate declined by 3.7 per cent, mainly by reason of fewer births in the northern sector of the city. More than 90 per cent of the European confinements took place in institutions.

There was a sharp rise in European illegitimacy, the percentage being the highest for twenty years.

The non-European birth rate also declined, but this does not reflect the true position. Only half the non-European births take place in institutions, and this figure probably should be still less owing to the large number of unregistered births. There is no immediate prospect of any large scale improvement in the availability of maternity bed accommodation for this section of the community.

The usual preponderance of male over female births continued.

The stillbirth rate is high and rising, but is adversely affected by non-registration of births.

Deaths.

The number of deaths registered as occurring among city residents was 5,913 (2,027 European and 3,883 non-European) equivalent to a death rate of 10.34 for both races. This death rate varies only slightly from the previous year.

The total number of European deaths declined, with little variation among the main causes of death.

Among non-Europeans, the inclusion of events in the Bantu Townships must be taken into consideration, but comparison on the same level with the previous year shows a continued small decline in deaths from gastro enteritis - the most formidable killer of the very young in this group. Unfortunately deaths from measles have reached a new peak (87 deaths), but unlike other major infectious diseases such as tuberculosis, we have as yet no particularly satisfactory preventive measures for combating this menace. The production of a live attenuated measles virus antigen which produces minimal or mild clinical reactions in the recipient has still to be evolved.

Infant Mortality.

An appreciable decline in European infant mortality following decreases in infant deaths in most categories was balanced by an inexplicable and sharp rise in the number of infant deaths from prematurity.

The causes of non-European infant deaths fluctuated dramatically compared with the previous year, with gains on the side of pneumonia, congenital malformation and prematurity, and losses in deaths from measles, bronchitis, injury at birth and ill-defined causes, resulting in an overall increase in infant deaths in this group.

Considering the degree of squalor and overcrowding in certain parts of the municipality, the rise in infant mortality, though disappointing, is understandable. Despite great new housing schemes which have sprung up in the suburbs, slum conditions of long standing still exist in the central city and in semi-rural areas along the municipal perimeter.

Maternal Mortality.

22 Maternal deaths were recorded, 16 of these being related to abortion. Self inducement is mentioned in only one of these cases. Ante-natal care and advice is available within easy reach of most expectant mothers in the city, but the weapon to combat carelessness and lack of forethought has yet to be forged.

Infectious Diseases.

Two minor outbreaks of typhoid fever contributed to a total of 33 cases reported, i.e. a family of eight found to be suffering from the disease, and fourteen cases known to have contracted the disease in the local gaol. This latter episode may have lengthy consequences in that very few of the scattered prisoners discharged from the gaol when the affected section was closed were traced. Pains-taking investigation into tracing carriers and their strict surveillance and control led to the extraordinarily low incidence of the past two years, but now many more possible sources of infection are unknown to the department and will remain so until pinpointed by further cases.

The unprecedented decline in the incidence of diphtheria recorded in 1962 has been consolidated with another year of low incidence. Even at 33 cases, the incidence was only half of what it has been for many years since the introduction of diphtheria immunisation. However the pool of infection represented by the annual crop of "carriers", i.e. children found by chance at clinics and out-patient centres to be harbouring the infection, is still maintained.

Another low record in the number of cases of scarlet fever (49) notified to the department has to be recorded. Possibly this is occasioned by the mildness of scarlet fever today and the fact that many cases occurring in the city are, for a variety of reasons, not notified by the family physician.

18 Cases of poliomyelitis were notified to the department and hospitalised. This is disappointing after the strenuous efforts of the department to attain a fully vaccinated state among the infant age groups. A breakdown of these cases reveals that the majority are un-immunised or only partly-immunised. Apathy and disinterest on the part of the mothers of these cases are in the main responsible for this state of affairs.

The high incidence of measles reported during the past three years was gravely accentuated in 1963 with twice the number of cases admitted to the City Infectious Diseases Hospital and the unprecedented recording of 87 deaths. Practically all occurred in the non-European group and associated with nearly all these cases was one or other form of gross malnutrition. All these children were gravely ill and demand inspired nursing and medical care, including the frequent performance of tracheotomies.

The first case of anthrax since 1952 has to be recorded. Both the present and the previous cases handled skins in the course of their daily task, and in the present instance adequate precautions were taken at the premises to keep employees aware of the danger of infection.

Unsatisfactory working conditions at the premises of a battery manufacturing firm were probably responsible for a case of lead poisoning occurring. Various improvements recommended were promptly complied with.

The promulgation of "kwashiorkor" as a notifiable disease resulted in the huge total of 384 cases of this disease being reported during the year. Investigations by health visitors of the department invariably revealed these to have a background of poverty, ignorance, squalor, indifference and illegitimacy. Where the advice of the health visitor was followed, good recoveries were reported.

The Government subsidised powdered skim milk scheme operating from the child welfare centres of the city has materially covered many children in the particularly dangerous period between one and two years of age and prevented them from developing kwashiorkor.

Veneral Diseases.

Attendance at the municipal treatment centres is still rising. The fact that there were practically the same number of new cases of syphilis at the clinics during the year under review as there were in London in 1962 is alarming and discouraging. A special effort in tracing contacts suffering from both gonorrhoea and syphilis brought an outstanding number of these individuals to the clinics for examination, but until females can be induced to attend the clinics in far greater numbers, the pool of infection existing in the city is not likely to be materially reduced.

Tuberculosis.

Notification rates of pulmonary tuberculosis were lower than in the previous year, and the death rates followed the same trend. Notification of non-pulmonary tuberculosis is inaccurate and with the fewness of deaths fluctuations in the rates can be expected and are, as a result, of no great significance.

Attendances at the clinics increased. Greater readiness to undertake treatment, for which a knowledge of better aid available to dependents must be partially responsible, has become apparent.

The discovery of 1,560 new cases of pulmonary tuberculosis, in proportion of seven non-white cases to one white case, should disturb the civic conscience, as also the fact that 16 out of every 1,000 residents in the city are known to be suffering from the disease.

Dental Branch.

Two additional clinics came into operation during the year. Total attendances at all dental clinics increased by 18 per cent. As in previous years most attendances at the clinics were because of established disease. Promotive and preventive dentistry is not practised to any great extent because individuals are not prepared to accept the concept that this form of dental practice is rewarding and worthwhile. Dental Health Education requires to be based on different concepts than those practised at present. Possibly the fluoridisation of the local water, which contains little fluorine, will assist in stepping up the preventive and promotive aspects of the Dental Branch.

Child Welfare.

The programme of building up a chain of modern child welfare centres continued with the opening

during the year of two new centres: one at Guguletu Township and the other at Silvertown (Athlone). Plans are on the drawing board for a new creche and nursery school at the Retreat Housing Estate.

Attendances at the maternal and child welfare clinics increased by 10 per cent, and at 380,000, gives rise to speculation as to what the upper limit could be. This Branch is essentially a network of preventive services curbing incipient dangerous or undesirable conditions in mother, the child, and the home, through the efforts of the health visitor in the clinics as well as in the home.

Environmental Sanitation.

The number of public health nuisances dealt with by formal notice declined, but more frequent recourse had to be made to the Court for enforcement of the municipal regulations.

Several consignments of tomatoes arriving at the wholesale market were found to be contaminated by wrappers impregnated with a toxic preservative. The State Department of Health were informed and the necessary information was passed to the State Department of Agriculture so that the growers, who farmed in the north-eastern Transvaal, could be warned. All such contaminated consignments were seized and destroyed.

Apart from this particular incident, there was a considerable reduction in the amount of fruit and vegetables condemned at the markets.

The Department co-operated with the South African Bureau of Standards during the year in testing the rat-resisting quality of certain materials designated as rodent-proof. The results revealed that *Rattus norvegicus*, the more common rat at the Cape, is more determined and better at penetrating materials than is *Rattus rattus*, or the black Indian rat which was the test animal used by the S.A.B.S. in the Transvaal.

An indication of one changing custom in the city is provided by the annual decrease in attendances at the municipal washhouses. These heretofore reasonably well patronised premises are not, and never have been, economic propositions, but if not reasonably well patronised must yield place to the domestic electric washing machine and privately-operated laundrettes.

Housing.

The expansion of municipal housing schemes was continued actively throughout the year with the completion of a further 2,136 houses for non-Europeans. Garden Cities, a Housing Utility, non-profit making Company, entered the field of non-European housing with the erection of its first 100 houses at Retreat.

Although no systematic slum clearance scheme has been formulated for the central city area, it is becoming noticeable that certain very old properties are, for one reason or another, being demolished.

Acknowledgments.

I desire to acknowledge with appreciation and gratitude the loyal support and ever willing assistance given to me by all members of my staff. I have also to thank the other Heads of Departments for their full co-operation in dealing with the many aspects of health which impinged on their activities. To the Chairman and members of your Health Committee as well as other members of the Council may I also say a big thank you for all their consideration and much appreciated support at all times.

I am, Ladies and Gentlemen,

Your obedient servant,

E.D. COOPER.

M.D., F.R.C.P. (Glasg.), D.P.H., F.R.S.H.
Professor of Public Hygiene, University of Cape Town
Medical Officer of Health.

City Health Department,
Libertas,
Hertzog Boulevard,
CAPE TOWN.

October, 1964.

OBITUARY

It is with much regret that I have to record the death of Dr. L.I. Cohen, the Venereal Diseases Officer, on the 6th January, 1963.

Dr. Cohen graduated M.R.C.S. and L.R.C.P. (Lond.) from the London Hospital in 1928 and on his return to South Africa was in general practice in Riversdale for a number of years. He joined the Health Department as Deputy Venereal Diseases Officer under the late Dr. C.K. O'Malley on the 1st February, 1939. On the retirement of Dr. O'Malley, Dr. Cohen was appointed in his stead on the 23rd July, 1950, and served the Department loyally and faithfully until his untimely death.

During the last five years of his life Dr. Cohen was not in good health, but he never complained, and notwithstanding steady deterioration, he refused to take sick leave or to be pensioned from the service. He worked to the end, and died as he wanted to: "in harness".

CONTENTS

	PAGE
LEADING STATISTICS	8
SECTION I. — NATURE AND SOCIAL CONDITIONS	9
Physical geography	9
Area	9
Climate	9
Social and economic conditions	10
Water supply	10
Drainage	10
Markets	10
Abattoirs	11
Wards	11
SECTION II. — VITAL STATISTICS	11
Population	11
Health indicators	12
Birth statistics	13
General mortality	16
Infant mortality	22
Maternal mortality	27
SECTION III. — MATERNAL AND CHILD WELFARE	30
Maternal and child welfare centres	30
Health visiting in the home	32
Notification of births	34
Supervision of midwifery	35
Puerperal fever	35
Ophthalmia neonatorum and Gonorrheal ophthalmia	35
Immunisation	36
School clinics	37
Children suffering from orthopaedic defects	37
Day nurseries and nursery schools	38
Protected infants	39
Adoption of children	39
Social welfare work	39
SECTION IV. — DENTAL BRANCH	39
SECTION V. — INFECTIOUS AND OTHER DISEASES	41
Enteric or typhoid fever	42
Diphtheria	42
Scarlet fever	43
Cerebrospinal fever	43
Acute poliomyelitis	43
Influenza and pneumonia	44
Leprosy	45
Measles	45
Whooping cough	45
Diarrhoeal diseases	46
Anthrax	48
Lead poisoning	48
Food poisoning	48
Kwashiorkor	49
Cancer	49
SECTION VI. — TUBERCULOSIS	50
Notifications	51
Deaths	54
Anti-tuberculosis centres	57
Sources of notification	59
Hospitalization	60
Tuberculosis register	61
Mass radiography service	61
SECTION VII. — VENEREAL DISEASES	62

SECTION VIII. — CITY HOSPITALS	66
City Hospital for Infectious Diseases	66
Brooklyn Hospital for Chest Diseases	67
Ambulance and disinfecting station	69
Scabies and pediculosis (cleansing station)	70
SECTION IX. — ENVIRONMENTAL SANITATION	70
Establishment	70
Scope of work	71
Food, Drugs and Disinfectant Act	72
Trading licences	75
Inspection of meat and other foodstuffs	79
Municipal washhouses	78
Milk	80
Housing	83
SECTION X. — OTHER SERVICES	85
Domiciliary medical service	85
Hydrogen cyanide fumigation	85
Free burials	85
Board of Aid	85
Drainage, sewerage and scavenging	85
SECTION XI. — STAFF OF THE CITY HEALTH DEPARTMENT	87
TABULAR STATEMENTS IN THE APPENDIX:—	
Table A. — Summary of deaths	90
Table B. — Deaths by causes (short list) and race	91
Table C. — Deaths by causes (short list) and month of registration	92
Table D. — Death rates by causes (short list) for a series of years	93
Table E. — Deaths of infants under 1 year of age, by causes (short list)	95
Table F. — Deaths of infants by month of registration	96
Table G. — Deaths of infants by legitimacy	97
Table H. — Births and still-births by race, sex, legitimacy and wards	98
Table I. — Births in institutions	99
Table J. — Discontinued.	
Table J. — Births, deaths, natural increase, infant deaths and corresponding rates	100
Table K. — Infant mortality rates by causes	101
Table L. — Estimated population and vital statistic rates since 1913	103
Table M. — Vital statistic rates for various towns	104
Table N. — Notification of infectious disease by months	105
Table O. — Notification of infectious disease by age-groups	106
Table P. — Notification of infectious disease by wards, etc.	107
INDEX	108

MUNICIPALITY OF THE CITY OF CAPE TOWN

LEADING STATISTICS, YEAR ENDED 31ST DECEMBER, 1963.

				European	Non-European	All races
Area: — 93.71 sq. miles.						
Total population	..	..	..	196,080	375,360	571,440
Birth rate	..	..	..	18.4	36.3	30.2
Death rate	..	..	..	10.34	10.34	10.35
Infant mortality rate	..	..	..	23.2	86.1	73.0
Maternal mortality rate	..	..	..	—	1.57	1.24
Tuberculosis death rate	..	..	..	0.11	0.51	0.38
Enteric incidence rate	..	..	..	—	0.09	0.06
Enteric death rate	..	..	..	—	—	—

All the above rates are annual and expressed as per 1,000 population of each class, except the infant and the maternal mortality rate, the former being expressed as per 1,000 live births occurring during the year (corrected) and the latter per 1,000 live and still births. The figures for the African Townships are excluded from these rates.

RAINFALL.

Amount in inches	14.76	(Average 20.84)
No. of rainy days	89	(Average 102)

TEMPERATURE.

Maximum	100.4 F.	(Average 61.5 F.)
Minimum	44.6 F.	

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1963.

SECTION I. 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 (3,549 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.

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 as the result of the construction of the new harbour.

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 on 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, and marine suburbs, known as Green Point, Sea Point, Clifton, Camps Bay and Bakoven (Wards 1 and 2) 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 $4\frac{1}{2}$ miles, and the parts on the Flats contain a number of scattered townships and estates, some of which are served by the Cape Flats railway, which forms a loop lying in a more easterly position than the suburban line.

There is an extension of the Municipality beyond Salt River in a north-easterly direction on the Flats bordering Table Bay. This (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 of Cape Town on 31st December, 1963, amounted to 93.71 square miles. The eastern boundary was adjusted on 1st January, 1963, to incorporate Guguletu and adjoining land, Welcome Estate and vicinity, King David Country Club, Yorkshire Estate and vicinity, thereby adding 5.93 square miles to the municipal area. 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. $33^{\circ} 55'$ S., Long. $18^{\circ} 25'$ E., its climate is largely determined by the fact that during the summer season the prevailing winds are south-easterly and in the winter 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 seaboards 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.

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

Thirty-four per cent of the total population of the Municipality of Cape Town (including the Bantu Townships) of over 571,000 consists of Whites or 'Europeans'. The other 66 per cent is commonly designated as 'non-European', 78 per cent of these non-Europeans are of the mixed race known as Cape Coloured, the remainder consists of Bantu and Indians.

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 R9 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 poor. The social and cultural level is low but is showing signs of steady improvement. 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 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 Bantu constitute only 20 per cent of the non-Europeans. They live in the Council's Bantu townships, 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. With the provision of additional housing at Guguletu Township a great step forward has been made in removing the Bantu from slum areas in the city and from the unsanitary shacks at Windermere and the Cape Flats. It is anticipated that very few Bantu will be resident in these latter areas within 12 months. Many of the Bantu 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 detribalised Bantu 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 7,000 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 inter-mingled, and there is nothing approaching complete segregation of the races. The State Department of Community Development has commenced to unscramble the present hotchpotch of White and non-White residential areas. This activity is placing additional strains on the local authority's attempts to reduce overcrowding and clear the many slums in the city area, as the requirement by this State Department for new sub-economic homes, although varying from scheme to scheme, has amounted to as much as 50 per cent. 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 Bantu 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.

WATER SUPPLY

The following are the main sources of supply —

Wemmershoek Dam	12,900 million gallons
Steenbras Dam	7,543 million gallons
5 Reservoirs on Table Mountain	522 million gallons

During 1963 the daily consumption varied between a maximum of 66.5 million gallons during the summer and a minimum of 25.2 million gallons during the winter. The average daily consumption during the year was 43.7 million gallons.

Fourteen local authorities obtain their supplies of water from the Cape Town undertaking.

DRAINAGE.

Practically the entire built-up area of the municipality is provided with water-borne sanitation.

The principal sewage treatment plant is located at Athlone with a dry weather flow of 18 million gallons per day. The Athlone plant is now completely surrounded by residential areas and is only 5 miles from the centre of the city.

At the Wynberg-Muizenberg sewage works the sewage from Wynberg to Clovelly, amounting to 3 million gallons per day, is treated in recirculated oxidation ponds. Construction has started on the Cape Flats Sewage Treatment Scheme which will treat the sewage from Guguletu, Nyanga and developing areas on the Cape Flats. The ultimate capacity of this scheme will be 18 million gallons per day and treatment would be based on photosynthetic oxidation in recirculated oxidation ponds.

MARKETS

The new Wholesale and Early Morning Market at Epping, built at a cost of over R2,000,000, was opened on 3rd July, 1961. Designed specifically to meet the particular needs of Cape Town, the main hall is believed to be the biggest structure of its kind in Southern Africa. Ancillary buildings consisting of a three-platform railway terminal, administrative block, special auction block for graded and standardised products, loading platforms for 348 lorries, and minor facilities such as restaurant, rest rooms, etc. have also been built, and each one of these sections has been designed for extension when the need arises.

In moving from the old market in Sir Lowry Road, which served the city since 1812, the city's main market has been transferred from conditions of congestion to a realm of orderly spaciousness where everything has been planned to facilitate business and bring about improvements in every branch of the complex marketing organisation.

ABATTOIRS.

There is no change in conditions at the Municipal Abattoir which still remains extremely congested. Building of the new R3,000,000 abattoir started in September, 1963, and is progressing. It is estimated that the new abattoir will be completed during the second half of 1965. When the new abattoir comes into commission meat will be handled in as hygienic a manner as anywhere in the world.

MUNICIPAL WARDS.

The following is a guide to the municipal wards as re-delimited in November, 1960. Unfortunately the Census of 1960 was not conducted according to this new delimitation of the wards, so that density and ward populations will not be known for some time to come.

- Ward 1. Camps Bay, Clifton, Fresnaye, portion of Sea Point.
- Ward 2. Portion of Sea Point, Three Anchor Bay, Green Point.
- Ward 3. Harbour and adjoining lower central area.
- Ward 4. Tamboers Kloof, Oranjezicht.
- Ward 5. Gardens, Vredehoek, Zonnebloem.
- Ward 6. Lower Woodstock, Salt River.
- Ward 7. Portion of upper Salt River, Observatory, Mowbray.
- Ward 8. Brooklyn, Kensington, Maitland, Langa, Epping Industrial.
- Ward 9. East Claremont, Wyndover, Belvedere, portion of Crawford.
- Ward 10. Athlone, lower Lansdowne, Guguletu Township.
- Ward 11. Rondebosch.
- Ward 12. Newlands, Claremont.
- Ward 13. Kenilworth, Wynberg.
- Ward 14. Wittebome, Plumstead, Southfield.
- Ward 15. Diep River to Clovelly.

SECTION II. - VITAL STATISTICS.

The vital statistics in this report refer to the Municipality of Cape Town and are for the calendar year 1963. Births and deaths are attributed to date of registration.

The custom of previous reports in giving separate statistics for Bantu Townships has been abandoned in favour of grouping all Bantu as a group for statistical purposes.

The birth and death statistics are shown variously as:-

'Crude or uncorrected', including all births and deaths registered during the year as having occurred in the Municipality of Cape Town

'Corrected for outward transfers', which is the foregoing after 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.

'Corrected', which is the foregoing after the addition of locally registered births and deaths of Cape Town residents occurring outside the municipal area.

Information as to births and deaths, including inward and outward transfers, is extracted from the records, and by courtesy of the local Registrar of Births and Deaths.

In the Table on page 103 of this report the record of vital statistical rates is set out for a series of years.

Rounding: Figures are rounded off independently of one another and, therefore, may not add to totals.

POPULATION.

The estimated population of the Municipality of Cape Town for the year under review and the previous year is shown in the following table. Except in the case of the Bantu, it is calculated for the middle of the period (30th June) from the final figures of the Census of 1960 and 1951.

Changing conditions relating to the presence of Bantu in the city have rendered preferable the use of the tally of the Bantu population known to the Bantu Administration of the Council, as being more factual than calculations based on the Census findings.

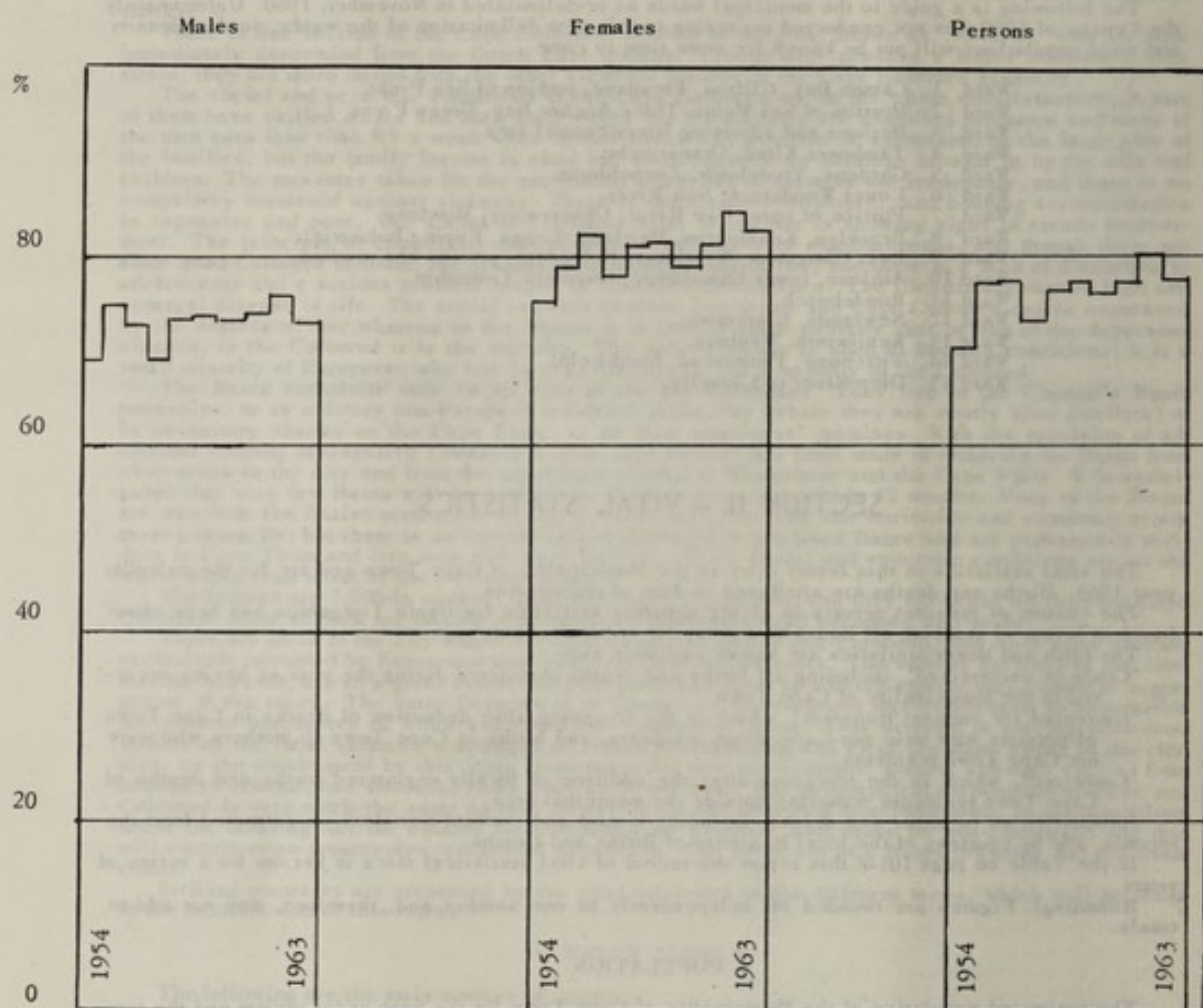
As the Townships, particularly Guguletu, absorb more and more Bantu, there is a corresponding shrinking in the number of Bantu resident in the city, although a small proportion of those entering the Townships originate from areas outside the city boundary.

On the 1st January, 1963, an area of 5.9 square miles was added to the municipality, which necessitated an arbitrary increase of the estimated Coloured population by 6,000.

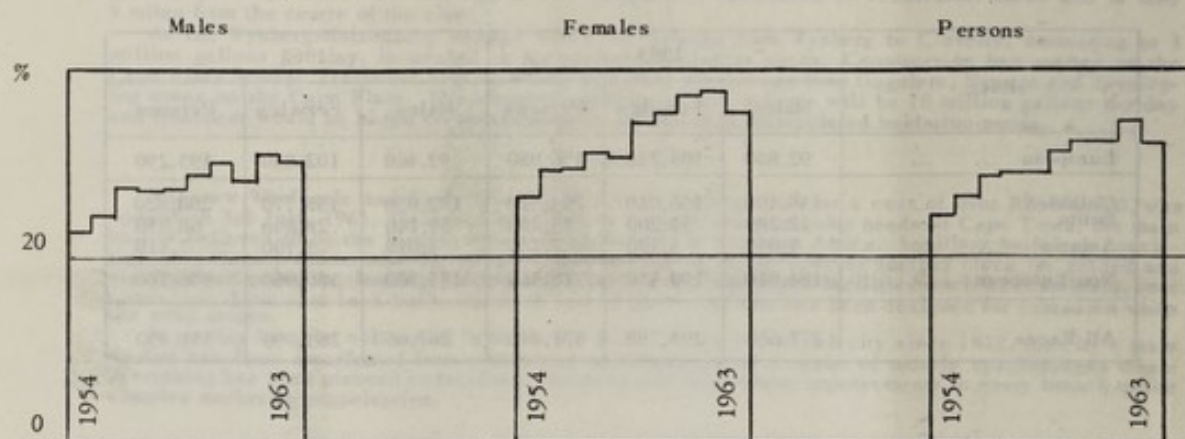
Race	1963			1962		
	Males	Females	Persons	Males	Females	Persons
European	92,840	103,240	196,080	92,460	102,830	195,290
Coloured	138,490	156,030	294,520	132,050	148,770	280,820
Bantu	42,280	31,200	73,480	39,140	28,890	68,030
Asiatic	4,040	3,320	7,360	4,010	3,300	7,310
Non-European ...	184,810	190,550	375,360	175,200	180,960	356,160
All Races	277,650	293,790	571,440	267,660	283,790	551,450

HEALTH INDICATORS

Percentage of deaths, age 55 years and over.

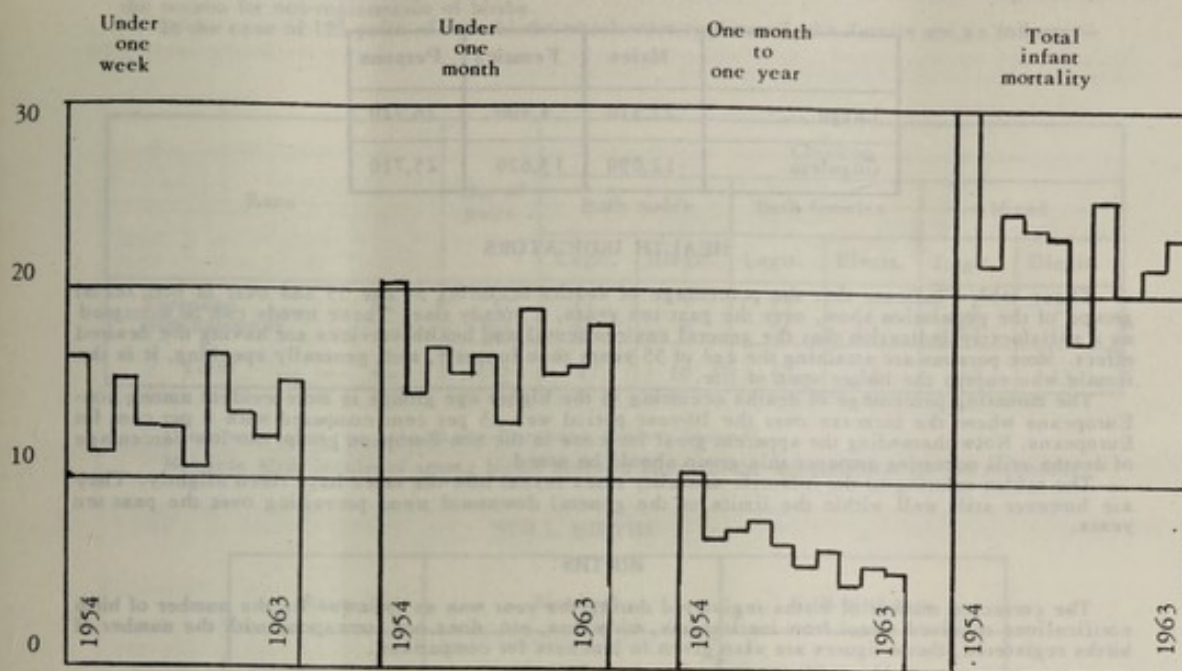


(a) Europeans

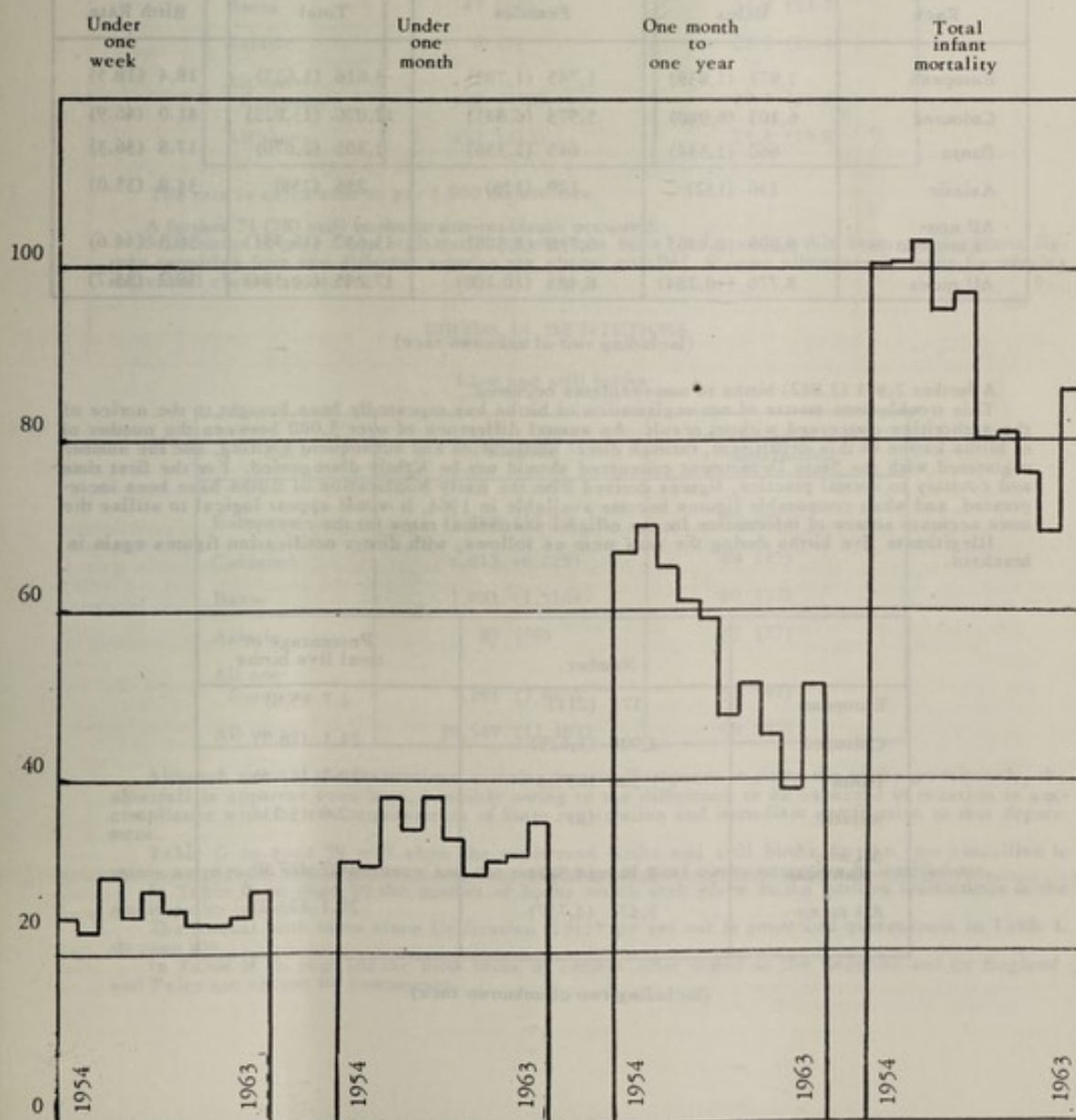


(b) Non-Europeans

INFANT MORTALITY RATES PER 1,000 LIVE BIRTHS



(a) Europeans



(b) Non-European

The following is an annual average of the population of the two Bantu Townships, included in in previous table, based on an enumeration made at the end of each month by the Township authorities.

	Males	Females	Persons
Langa ...	22,310	4,400	26,710
Guguletu	12,090	13,620	25,710

HEALTH INDICATORS

These tables indicate that the percentage of deaths occurring at age 55 and over in both racial groups of the population show, over the past ten years, a steady rise. These trends can be accepted as a satisfactory indication that the general environmental and health services are having the desired effect. More persons are attaining the age of 55 years than formerly, and, generally speaking, it is the female who enjoys the longer span of life.

The mounting percentage of deaths occurring in the higher age groups is more evident among non-Europeans where the increase over the 10-year period was 35 per cent compared with 8 per cent for Europeans. Notwithstanding the apparent great increase in the non-European group, the low percentage of deaths still occurring amongst this group should be noted.

The tables relating to the infantile mortality rates reveal how the rates have risen slightly. They are however still well within the limits of the general downward trend prevailing over the past ten years.

BIRTHS

The corrected number of births registered during the year was as follows. As the number of birth notifications received direct from institutions, midwives, etc. does not correspond with the number of births registered, these figures are also given in brackets for comparison.

Race	Males	Females	Total	Birth Rate
European	1,871 (1,838)	1,745 (1,795)	3,616 (3,633)	18.4 (18.5)
Coloured	6,103 (6,980)	5,973 (6,843)	12,076 (13,823)	41.0 (46.9)
Bantu	660 (1,334)	645 (1,336)	1,305 (2,670)	17.8 (36.3)
Asiatic	136 (132)	120 (126)	256 (258)	34.8 (35.0)
All non-European	6,899 (8,446)	6,738 (8,305)	13,637 (16,751)	36.3 (44.6)
All races	8,770 (10,284)	8,483 (10,100)	17,255 (20,384)	30.2 (35.7)

(Including two of unknown race)

A further 2,871 (2,842) births to non-residents occurred.

This troublesome matter of non-registration of births has repeatedly been brought to the notice of the authorities concerned without result. An annual difference of over 3,000 between the number of births known to this department, through direct notification and subsequent visiting, and the number registered with the State Department concerned should not be lightly disregarded. For the first time and contrary to normal practice, figures derived from the Early Notification of Births have been incorporated, and when comparable figures become available in 1964, it would appear logical to utilise the more accurate source of information for the official statistical rates for the city.

Illegitimate live births during the year were as follows, with direct notification figures again in brackets.

	Number	Percentage of total live births
European	171 (211)	4.7 (5.8)
Coloured	2,908 (3,623)	24.1 (26.2)
Bantu	388 (895)	29.7 (33.5)
Asiatic	5 (8)	2.0 (3.1)
All non-European	3,301 (4,526)	24.2 (27.0)
All races	3,474 (4,737)	20.1 (23.2)

(Including two of unknown race)

A further 740 (738) illegitimate live births to non-residents occurred.

In conjunction with the previous table of total births, it can be deduced that illegitimacy is not the reason for non-registration of births.

In the case of 193 pairs of twin births which were registered, the details are as follows:—

Race	No. of pairs	Children					
		Both males		Both females		Mixed	
		Legit.	Illegit.	Legit.	Illegit.	Legit.	Illegit.
European	32	11	1	12	1	7	—
Non-European	161	36	9	51	10	42	13
Total	193	47	10	63	11	49	13

There were also two sets of non-European triplets (mixed).

Multiple birth incidents among births notified direct to the department were not recorded.

STILL BIRTHS.

Race	Number	Still birth rate
European	44 (42)	12.0 (11.4)
Coloured	335 (267)	27.0 (18.9)
Bantu	47 (96)	34.8 (34.7)
Asiatic	6 (7)	22.9 (26.4)
All non-European	388 (370)	27.7 (21.6)
All races	432 (412)	24.4 (19.8)

The rate is calculated as per 1,000 maternities.

A further 74 (78) still births to non-residents occurred.

Still births require State registration to obtain a burial order and in this instance the above figures resulting from two different sources are almost parallel, if some allowance is made for varying individual claims as to race.

BIRTHS IN INSTITUTIONS

Live and still births

Race	Number	Percentage of total maternities
European	3,368 (3377)	92 (93)
Coloured	6,013 (6,229)	48 (45)
Bantu	1,081 (1,516)	80 (57)
Asiatic	87 (70)	33 (27)
All non-European	7,181 (7,815)	51 (47)
All races	10,549 (11,192)	60 (55)

Although most of the institutions catering for non-Europeans register the births gratuitously, the shortfall is apparent even here, possibly owing to the difference to be expected in reaction to non-compliance with the two requirements of State registration and immediate notification to this department.

Table G on page 98 will show the registered births and still births for the year classified in wards as to race, sex, legitimacy and the percentage of total births occurring in institutions.

In Table H on page 99 the number of births which took place in the various institutions in the municipality is listed.

The Annual birth rates since Unification (1913) are set out in years and quinquennia in Table L on page 103.

In Table M on page 104 the birth rates of certain other towns in the Republic and for England and Wales are set out for comparison.

BIRTH RATES

The following table shows the variation in the number of births and birth rates per 1,000 population for the Municipality of Cape Town over a period of five years. The rates for the years 1960 onwards are based on the final figures of the Census of 1960.

Race	1963		1962		1961		1960		1959	
	Live births	Birth rate	Live births	Birth rate	Live births	Birth rate	Live births	Birth rate	Live births	Birth rate
European	3,616	18.4	3,734	19.1	3,689	19.0	3,556	18.4	3,772	19.2
Coloured	12,076	41.0	11,942	42.5	11,666	42.7	11,283	42.4	10,560	35.3
Bantu	1,305	17.8	1,274	18.7	1,527	23.0	1,383	21.3	1,284	26.9
Asiatic	256	34.8	245	33.5	257	35.4	286	39.7	323	40.2
Non-European	13,637	36.3	13,461	37.8	13,450	38.8	12,952	38.3	12,167	34.3
All races *	17,255	30.2	17,200	31.2	17,144	31.7	16,514	31.1	15,941	28.9

* Including those of unknown race.

GENERAL MORTALITY

The deaths and death rates per 1,000 population are shown in the following table:—

Race	Crude Total		Outward Transfers		Inward Transfers		Corrected Deaths	Death rate	Death rate 1962
	M.	F.	M.	F.	M.	F.			
European	1,280	1,138	273	217	51	48	2,027	10.34	10.5
Coloured	1,984	1,639	348	284	75	62	3,128	10.62	10.2
Bantu	507	318	125	72	44	33	795	9.59	10.4
Asiatic	40	14	3	1	—	—	50	6.79	6.7
Non-European	2,531	1,971	476	357	119	95	3,883	10.34	10.2
All races *	3,811	3,109	749	574	170	143	5,913	10.35	10.3

* Including 3 of unknown race.

Deaths in the Bantu Townships are now included in the above table, and the rates for the previous year have been adjusted accordingly for comparison.

The death rate for Europeans decreased by 1.5 per cent compared with the previous year, due to fewer deaths generally and hypertension and pneumonia in particular, but offset to some extent by a greater number of deaths allocated to senility.

Among non-Europeans the death rate increased by 1.8 per cent mainly due to increased deaths from measles, senility and vascular lesions, in that order. Although the total number of deaths is the highest on record, some consolation can be derived from the continued decline in deaths from gastro enteritis, the most formidable killer of the very young. There is also the possibility that the inclusion within the municipal boundary of a large district on the Cape Flats where there are many shack dwellers, has had an initial adverse effect on the death rate.

Table L on page 103 sets out the annual death rates in years and quinquennia since Unification in 1913.

For the purpose of comparison the death rates for certain other towns in the Republic and for England and Wales are set out in Table M on page 104.

Deaths registered as belonging to the Bantu Townships are included in the foregoing figures. Particulars regarding these will be found in Table A on page 90.

PRINCIPAL CAUSES OF MORTALITY

Among Europeans the ranking order of principal causes of death remains unchanged from the previous year except that a small increase in deaths from tuberculosis restores this cause of death to eminence among the principal causes. Minor variations in the number of deaths from the causes listed are to be expected, and have occurred, the most significant being a reduction in deaths from bronchitis and pneumonia.

In the non-European group there were increased deaths in all categories except senility and enteritis, while measles as a cause of death enters the list for the first time. It is disappointing that infant diseases should maintain such prominence even through far greater numbers of non-Europeans are now better housed than ever before.

Int. Code No.	European			Int. Code No.	Non-European		
	Cause of Death	Deaths	Death rate		Cause of Death	Deaths	Death rate
410-416 420-422 430-434 440-443 140-205	Cardiovascular diseases (including hypertension with heart disease) .. Malignant neoplasms (including neoplasms of lymphatic and haematopoietic tissues) ..	665	3.39	410-416 420-422 430-434 440-443 571, 764	Cardiovascular diseases (including hypertension with heart disease) .. Diarrhoea & enteritis (including diarrhoea of the newborn) ..	578	1.53
330-334 450-456	Arterial diseases (including vascular lesions affecting central nervous system) ..	314	1.60	760-762 765-776	Certain diseases of early infancy (excluding pneumonia and diarrhoea of the newborn) ..	461	1.23
794	Senility without mention of psychosis ..	280	1.43	330-334 450-456	Arterial diseases (including vascular lesions affecting central nervous system) ..	409	1.09
E800-E999	Accidents, poisonings and violence (external cause) ..	262	1.34	490-493 500-502 763	Bronchitis and pneumonia (including pneumonia of the newborn) ..	396	1.05
490-493 500-502 763	Bronchitis & pneumonia (including pneumonia of the newborn) ..	108	0.55	140-205	Malignant neoplasms (including neoplasms of lymphatic & haematopoietic tissues) ..	362	0.96
760-762 765-776	Diseases peculiar to early infancy (excluding pneumonia & diarrhoea of the newborn) ..	49	0.25	E800-E999	Accidents, poisonings and violence (external cause) ..	290	0.77
260	Diabetes ..	51	0.26	001-019	Tuberculosis (all forms) ..	257	0.68
001-019	Tuberculosis (all forms) ..	22	0.11	794	Senility without mention of psychosis ..	193	0.51
590-594	Nephritis and nephrosis ..	22	0.11	85-86	Measles ..	88	0.23
						85	0.23

The deaths listed above account for 83 per cent of all deaths.

Further details of the deaths for the year 1963 will be found in Tables A to C, pages 90 to 92 and in Table D, on pages 93 and 94, the rates of mortality of a short list of causes are shown by race with the corresponding figure for the previous ten years.

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, diarrhoea and enteritis, bronchitis and pneumonia, which are fostered by bad living conditions and malnutrition, result in a greater mortality in the non-European groups. 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 non-Europeans are in part due not only to the fact that there is a greater proportion of young children in the non-European group but also to the lower nutritional status of this group. (The figures for infant mortality in Table K on page 101 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, Age at Death, page 18).

SEASONAL VARIATION.

The seasonal variation in mortality is shown in the table below and in Table C on page 92 where the deaths for the year are classified for specific causes.

	1958	1959	1960	1961	1962	Mean 5 years	1963
January	505	451	379	478	449	452	512
February	456	368	407	381	375	397	410
March	422	364	451	387	404	406	433
April	447	399	413	399	368	405	376
May	439	452	445	416	418	434	452
June	418	446	488	490	472	463	462
July	439	464	451	529	547	486	504
August	416	419	494	520	487	467	622
September	427	400	405	394	405	406	554
October	397	379	401	433	404	403	477
November	374	346	450	409	350	386	419
December	341	356	392	313	328	346	376
Total	5,081	4,844	5,176	5,149	5,007	5,051	5,597
Mean	423	404	431	429	417	421	466
Per 1,000 population ...	9.8	8.8	10.3	10.3	9.9	9.9	9.8

AGE AT DEATH

The number of deaths at various ages, with the percentage of total deaths, is 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 ..	52	32	7	5	31	13	417	257	551	662	1,058	969
	Coloured ..	500	391	147	174	86	52	686	418	292	382	1,711	1,417
	Bantu ..	146	125	49	51	28	13	173	68	30	22	426	279
	Asiatic ..	7	5	—	—	2	4	10	4	18	—	37	13
	Non-Eur. ..	653	521	196	225	116	69	869	490	340	404	2,174	1,709
All races ..		705	553	203	230	147	82	1,286	747	891	1,066	3,232	2,678
Percent- age	European ..	4.9	3.3	0.7	0.5	2.9	1.3	39.4	26.5	52.1	68.3	100	100
	Coloured ..	29.2	27.6	8.6	12.3	5.0	3.7	40.1	29.5	17.1	27.0	100	100
	Bantu ..	34.3	44.8	11.5	18.3	6.6	4.7	40.6	24.4	7.0	7.9	100	100
	Asiatic ..	18.9	38.5	—	—	5.4	30.8	27.0	30.8	48.6	—	100	100
	Non-Eur. ..	30.0	30.5	9.0	13.2	5.3	4.0	40.0	28.7	15.6	23.6	100	100
All races ..		21.8	20.6	6.3	8.6	4.5	3.1	39.8	27.9	27.6	39.8	100	100

The percentage of non-European deaths under one year of age is seven times greater than that for Europeans. In the non-European group 30.2 per cent of all deaths occur under the age of one year.

Deaths under five years of age constitute 4.7 per cent of all deaths in Europeans, as compared with 41.1 per cent in non-Europeans (Coloured 38.7, Bantu 52.6, Asiatic 24.0 respectively). The non-European figure increased from 37.3 per cent.

Deaths under 25 years of age constitute 6.5 per cent of all deaths in Europeans compared with 6.8 per cent in the previous year, while among non-Europeans 45.8 per cent of all deaths occurred under 25 years of age, an increase from 42.3 recorded in the previous year.

The following table shows the percentage of deaths in age groups at intervals during the past years:—

Year	European									
	0-1		1-5		5-25		25-65		65 +	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1915	23	24								
1925	16	13	4	7	8	8	45	40	27	32
1935	6	9	4	3	7	9	42	37	41	41
1945	7	7	2	2	4	5	40	35	47	51
1955	5	3	1	1	2	1	36	29	56	66
1960	5	3	1	1	2	2	39	29	53	65
1963	5	3	1	1	3	1	39	27	52	68
	Non-European									
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1915	39	36								
1925	34	33	16	19	10	14	33	26	6	8
1935	27	28	21	21	10	13	33	28	9	10
1945	26	24	15	19	10	15	39	30	10	12
1955	32	33	14	16	6	5	33	26	15	20
1960	31	31	10	10	6	5	37	29	17	26
1963	30	31	9	13	5	4	40	29	16	24

The deaths and death rates per 1,000 population are shown in the accompanying table according to sex:-

Race	Crude		Corrected					
			Deaths		Rate 1963		Rate 1962	
	M.	F.	M.	F.	M.	F.	M.	F.
European	1,280	1,138	1,058	969	11.4	9.4	11.5	9.6
Coloured	1,984	1,639	1,711	1,417	12.4	9.1	11.5	9.0
Bantu	507	318	426	279	10.1	8.9	10.6	10.2
Asiatic	40	14	37	13	9.2	3.9	8.0	5.2
Non-European	2,531	1,971	2,174	1,709	11.8	9.0	11.2	9.1
All races	3,811	3,109	3,232	2,678	11.6	9.1	11.3	9.3

DEATHS IN INSTITUTIONS

The number of deaths occurring in institutions and the percentage of total deaths are shown in the following table:-

Race	Crude		Corrected for Outward Transfers	
	Deaths in institutions	Percentage of total deaths	Deaths in institutions	Percentage of total deaths
European	1,401	65	946	49
Coloured	1,733	48	1,161	39
Bantu	496	60	311	50
Asiatic	28	52	25	50
Non-European	2,257	50	1,497	41
All races	3,658	53	2,443	44

There are 46 recognised general hospitals and private nursing homes in the municipality.

HOME ACCIDENTS

The following list of deaths in Cape Town from accidents in the home has been compiled from death certificates where mention is made of an accident being either the main or a contributing cause of death :-

Cause	Sex	Age Groups									
		0-4		5-14		15-24		25-64		65 +	
		E.	O.	E.	O.	E.	O.	E.	O.	E.	O.
Burns	M.	1	2	-	1	-	1	2	6	-	-
	F.	-	1	3	-	-	1	1	5	-	-
Falls	M.	-	-	-	-	-	1	2	1	6	1
	F.	-	-	-	-	-	-	2	1	10	4
Suffocation	M.	1	-	-	-	-	-	-	-	-	-
	F.	-	-	-	-	-	-	-	-	-	-
Poisoning by drugs	M.	-	2	-	-	-	-	-	-	-	-
	F.	-	1	-	-	-	-	-	-	-	-
Carbon Monoxide Poisoning	M.	-	1	-	1	-	-	-	-	-	-
	F.	-	1	-	-	-	-	-	-	-	-
Drowning	M.	-	-	-	-	-	-	-	-	-	-
	F.	-	-	-	-	-	1	-	-	-	-
Total	M.	2	5	-	2	-	2	4	7	6	1
	F.	-	3	3	-	-	2	3	6	10	4

Falls, especially in the elderly in all racial groups are responsible for the majority of deaths arising as the result of home accidents. The elderly, uncertain in their muscle co-ordination and balance, are only too liable to fall when subjected to highly polished floor surfaces, sliding mats or carpets, or poorly designed and ill lighted stairs and steps. Persons and bodies responsible for the care of this group should ever be on the alert to guard against these obvious dangers for the elderly in the home.

DEATHS BY OCCUPATION

Deaths at certain ages are classified here as to occupation at time of death.

Occupation	Sex	Age Groups								Out of City	
		15-25		25-45		45-65		65 +			
		E.	O.	E.	O.	E.	O.	E.	O.	E.	O.
Agriculture	M.	-	-	-	-	1	-	2	-	17	2
	F.	-	-	-	-	-	-	-	-	-	-
Clerical	M.	1	-	12	2	33	3	7	-	15	1
	F.	-	-	4	-	6	-	1	-	4	-
Domestic Servant	M.	-	-	-	3	-	-	1	-	-	-
	F.	-	5	-	21	-	-	3	-	-	10
Fishing and Marine	M.	1	2	5	12	4	11	1	6	8	
	F.	-	-	-	-	-	-	-	-	-	-
Invalid	M.	4	4	2	19	3	16	1	4	2	4
	F.	-	1	3	1	6	6	5	2	1	1
Labourer	M.	-	42	-	147	4	186	1	12	1	115
	F.	-	-	-	-	-	-	-	-	-	-
Managerial	M.	-	-	5	-	25	-	25	22	11	-
	F.	-	-	-	-	-	-	-	-	-	-
Commercial	M.	-	-	-	3	24	8	17	9	8	-
	F.	-	-	-	-	-	-	-	-	-	-
Professional	M.	-	-	1	-	21	-	16	-	9	-
	F.	-	-	-	-	3	1	1	-	1	-
Police and Military	M.	2	-	5	1	7	2	1	-	4	-
	F.	-	-	-	-	-	-	-	-	-	-
Salesman	M.	1	1	6	7	25	12	5	1	4	2
	F.	-	1	1	-	2	-	-	-	-	-
Scholar	M.	7	4	1	-	-	-	-	-	3	1
	F.	1	5	-	-	-	-	-	-	-	3
Teacher	M.	-	-	1	3	3	3	1	1	2	1
	F.	-	-	-	-	-	-	1	-	1	1
Tradesman	M.	7	4	12	30	51	80	12	14	23	15
	F.	-	-	-	-	-	-	-	-	-	-
Transport	M.	-	-	3	14	14	27	2	2	23	7
	F.	-	-	-	-	-	-	-	-	-	-
Other Workers	M.	-	4	3	11	13	53	6	17	10	4
	F.	1	6	3	7	5	7	-	-	3	1
Housewives	M.	-	-	-	-	-	-	-	-	-	-
	F.	2	16	23	106	141	210	293	66	121	79
Retired, etc.	M.	-	2	8	29	104	125	427	242	87	38
	F.	-	1	1	6	47	75	323	311	49	19
Total	M.	23	63	64	281	332	522	524	325	225	198
	F.	4	35	35	141	210	310	626	382	180	114

Corrected for outward transfers only

SUICIDE.

The suicide rate per 1,000 population has doubled itself since 1957. During this period 3.7 times as many males as females committed suicide, the non-European proportion being slightly higher than in the case of Europeans. Nearly half of these events occurred among persons in the prime of life, i.e. age-group 25-45 years.

Deaths by suicide. Number.

Year	European		Non-European		Total			Rate per 1,000
	Male	Female	Male	Female	Male	Female	Persons	
1957 ...	10	3	6	1	16	4	20	0.04
1958 ...	14	3	9	1	23	4	27	0.05
1959 ...	12	5	8	5	20	10	30	0.06
1960 ...	20	7	16	3	36	10	46	0.09
1961 ...	20	7	9	3	29	10	39	0.07
1962 ...	24	7	14	—	38	7	45	0.08
1963 ...	21	4	15	5	36	9	45	0.08

Death by suicide. Age group.

Year.	10-15		15-25		25-45		45-65		65 +		Total
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	
1957 ...	—	—	—	2	6	3	5	1	2	1	20
1958 ...	—	—	1	3	7	4	7	3	2	—	27
1959 ...	—	—	1	6	5	5	7	2	4	—	30
1960 ...	—	1	2	3	12	10	10	3	3	2	46
1961 ...	—	—	4	3	10	8	11	1	2	—	39
1962 ...	1	—	2	3	9	8	18	2	2	—	45
1963 ...	—	—	2	4	12	12	9	4	2	—	45

Deaths by suicide. Mode.

	1957	1958	1959	1960	1961	1962	1963
Drug poisoning ...	4	4	7	14	20	23	15
Hanging ...	6	5	9	8	6	8	9
Firearms ...	3	7	5	6	6	9	8
Carbon monoxide poisoning ...	2	1	4	6	3	4	6
Falls ...	1	1	2	4	3	—	4
Railway ...	1	2	1	5	—	1	2
Drowning ...	2	4	1	2	—	—	1
Wounds ...	1	2	1	1	1	—	—
Burns ...	—	1	—	—	—	—	—

ACCIDENTAL DEATHS

The table below sets out the causes of accidental deaths over a series of years. These figures represent the minimum of deaths from unnatural causes, as inquest findings do not always establish the cause of death.

	1963	1962	1961	1960	1959
Railway	9	5	8	10	9
Road traffic	135	114	135	114	106
Poisoning	6	9	14	11	7
Falls	31	37	25	30	25
Drowning	21	21	23	20	19
Asphyxia	2	6	9	5	6
Burns	29	14	17	23	17
Trauma	9	8	4	10	—
Firearms	—	2	2	3	—
Electrocution	—	3	—	—	—
Miscellaneous	5	3	6	10	12
Total	247	222	243	236	201

Statistical practice limits the figures in above table to residents of the city. There were, for instance, 45 additional deaths of non-residents due to road traffic accidents and 39 other accidental deaths which took place within the municipal area.

DEATH RATES

The following table shows the variation in the number of deaths and death rates per 1,000 population for the Municipality of Cape Town over a period of five years. The rates for the year 1960 onwards are based on the final figures of the Census of 1960. Figures for the Bantu Townships have been included.

Race	1963		1962		1961		1960		1959	
	Deaths	Death Rate	Deaths	Death Rate	Deaths	Death Rate	Deaths	Death Rate	Deaths	Death Rate
European ..	2,027	10.34	2,058	10.54	1,986	10.21	2,116	10.92	1,957	9.96
Coloured ..	3,128	10.62	2,862	10.19	2,982	10.91	2,821	10.60	2,601	8.69
Bantu ..	705	9.59	709	10.42	716	10.78	680	10.50	387	8.10
Asiatic ..	50	6.79	49	6.70	57	7.85	63	8.74	59	7.34
Non-European	3,883	10.34	3,620	10.16	3,755	10.82	3,564	10.54	3,047	8.58
All races * ..	5,913	10.35	5,683	10.31	5,746	10.61	5,686	10.68	5,006	9.07

* Including those of unknown race

INFANT MORTALITY

The deaths of infants under one year of age and the corresponding rates per 1,000 live births registered during the year 1963 are shown in the following table :—

Race	Crude		Outward Transfers		Inward Transfers		Corrected infant deaths	Infant mortality rate	Rate 1962
	M.	F.	M.	F.	M.	F.			
European ..	89	58	37	26	—	—	84	23.2	21.7
Coloured ..	637	506	146	121	9	6	891	73.8	66.1
Bantu ..	185	144	49	30	10	11	271	207.7	173.5
Asiatic ..	8	5	1	—	—	—	12	46.9	32.7
Non-European	830	655	196	151	19	17	1,174	86.1	69.8
All races * ..	919	713	233	177	19	17	1,260	73.0	59.1

Including 2 of unknown race.

Infant Mortality Rates.

The infant mortality rate is of special significance because it is regarded as one of the most sensitive indexes of health conditions of the general population. The correct computation of this rate is therefore important. Errors in the rate arise from under-registration of births, and it is difficult to understand the apathy of State authorities concerned when confronted with the fact that, annually, 3,000 more births are known to this department than are registered.

In fairness to this city and to those engaged in research and statistical projects, it has been decided to supplement the conventional figures with those derived from a second equally authoritative source (Early Notification of Births Regulation) and yielding results considered by this department to be *de facto*.

Race	Infant deaths	Rate per 1,000 live births, based on	
		Registrations	Notifications
European	84	23.2	23.1
Coloured	891	73.8	64.5
Bantu	271	207.7	101.5
Asiatic	12	46.9	46.5
All non-European	1,174	86.1	70.1
All races	1,260	73.0	61.8

There were three more European infant deaths than in the previous year, with only minor variations in individual causes of death.

Among non-Europeans a considerable increase in infant deaths occurred, mainly as a result of increased deaths from measles, bronchitis and injury at birth. Due allowance should be made for the inclusion of events in the Bantu Townships.

In the year under review 65 per cent of the total deaths among European infants occurred in the first week of life (perinatal period) and 77 per cent in the first month (neonatal). Among non-Europeans the percentages were 31 and 41 respectively.

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 K on page 101. This Table indicates very clearly the fall in infant mortality over the past forty years, and in recent years the decline in the number of infant deaths from tuberculosis. Tables E and F on pages 95 and 97 show the deaths of infants classified according to age, cause, months and legitimacy.

The infant mortality rates since Unification (1913) are set out in years and quinquennia in Table L on page 103.

Infant Mortality, 1963, (corrected for outward transfers):—

	European	Non-European	All races.
First quarter	31 (32)	95 (89)	82 (78)
Second quarter	22 (22)	82 (62)	67 (55)
Third quarter	21 (20)	81 (62)	69 (55)
Fourth quarter	18 (18)	76 (60)	64 (53)

The rate based on birth notifications is given in brackets.

The neonatal (under 4 weeks) and post neonatal (over 4 weeks but under one year) mortality rates per 1,000 live births registered are shown in the following table, classified for certain causes. The rates based on birth notifications are not given here as there is no comparison with the previous year available and in any case the difference in individual causes of death would be insignificant.

Cause of death	Neonatal mortality rate		Post neonatal mortality rate		Infant mortality rate	
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.
Whooping cough	—	—	—	0.29	—	0.29
Scarlet fever	—	—	—	—	—	—
Measles	—	—	0.28	2.13	0.28	2.13
Diphtheria	—	—	—	0.07	—	0.07
Tuberculosis (all forms)	—	—	—	0.59	—	0.59
Syphilis	—	0.37	—	0.07	—	0.44
Bronchitis and pneumonia	0.83	2.05	0.83	10.91	1.66	12.98
Diarrhoea and enteritis	0.55	1.17	0.55	24.05	1.11	25.23
Immaturity	6.91	15.40	—	0.51	6.91	15.91
Injury at birth	2.49	5.21	—	—	2.49	5.21
Congenital malformations	1.38	1.83	1.11	1.32	2.49	3.15
Other diseases of early infancy	4.70	7.63	—	1.10	4.70	8.73
Other and ill-defined or unknown causes	1.11	1.47	2.49	9.90	3.60	11.37
Total	18	35	5	51	23	86

The only significant variations in the European neonatal rates were due to seven more deaths from immaturity than in the previous year, and four fewer deaths from congenital malformation. Among non-Europeans, fewer neonatal deaths from diarrhoea and congenital malformation were offset by a substantial increase in deaths from injury at birth.

The post neonatal rate for Europeans decreased by 6.6 per cent but the number of deaths involved is very small. The non-European rate increased by 30.5 per cent due to a fourfold increase in deaths from measles, together with greatly increased number of deaths from ill-defined or unknown causes.

The increase in rate for gastro enteritis as set out in the foregoing table is due to the inclusion in the general rate of deaths by this condition occurring in the Bantu Townships. In previous reports these deaths were recorded separately.

The trend in infant mortality since 1954 is as follows —

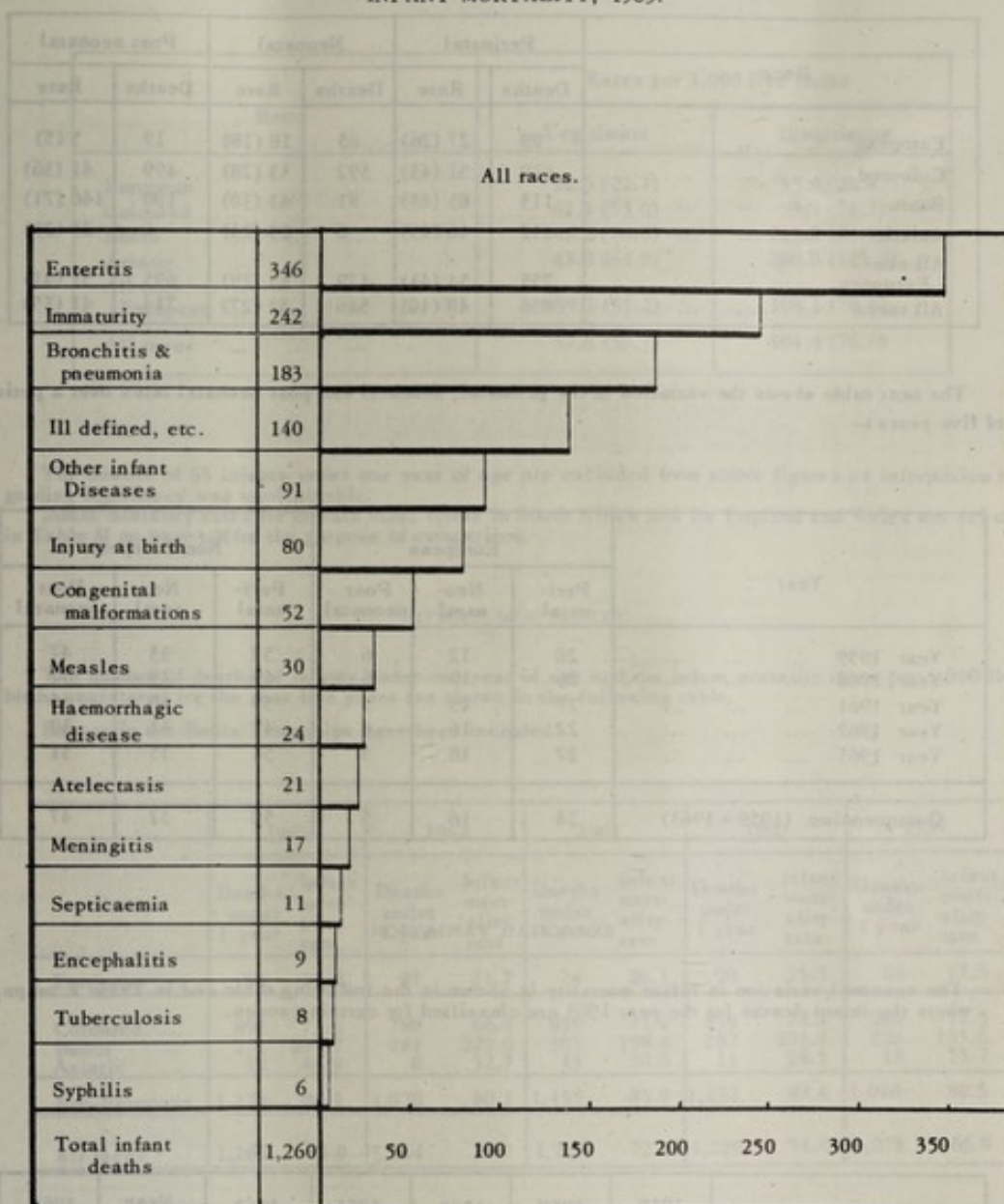
Europeans

Cause of death	1964	1955	1956	1957	1958	1959	1960	1961	1962	1963
Whooping cough ...	—	—	—	—	—	—	—	—	—	—
Tuberculosis ...	0.3	0.3	—	—	—	—	—	—	—	—
Measles ...	—	—	—	—	—	—	—	—	—	0.3
Diphtheria ...	—	—	—	—	—	—	—	—	—	—
Syphilis ...	—	—	—	—	—	—	—	—	—	—
Bronchitis and pneumonia ...	4.9	1.5	1.1	2.0	4.4	2.7	1.7	1.1	2.7	1.7
Gastro enteritis ...	1.7	1.8	3.1	1.4	0.3	0.3	1.1	1.9	1.3	1.1
Immaturity ...	9.0	4.5	6.7	6.2	6.5	4.2	7.6	6.8	5.1	6.9
Injury at birth ...	4.9	2.1	3.6	2.8	2.2	1.9	3.7	1.1	2.1	2.5
Congenital malformations ...	4.6	5.4	3.9	3.6	5.7	4.0	3.7	3.0	3.8	2.5
Other diseases of early infancy ...	2.3	4.2	4.2	4.2	2.7	3.2	3.4	4.6	5.9	4.7
Other causes ...	2.6	1.8	2.0	3.4	1.4	1.3	4.2	1.6	0.8	3.6
All causes ...	30	21	25	24	23	18	25	20	22	23

Non-Europeans

Whooping cough ...	0.6	0.8	0.1	1.0	0.3	0.4	0.5	0.5	0.3	0.3
Tuberculosis ...	4.3	3.3	2.6	2.7	0.9	1.1	0.4	0.6	0.2	0.6
Measles ...	0.2	0.7	0.1	1.0	0.7	0.5	1.1	0.8	0.5	2.1
Diphtheria ...	—	0.2	—	0.1	—	—	—	0.2	0.1	0.1
Syphilis ...	0.3	0.3	0.2	0.4	0.1	0.2	0.2	0.2	0.1	0.4
Bronchitis and pneumonia ...	13.6	15.5	14.8	15.1	15.7	11.7	12.6	10.8	12.3	13.0
Gastro enteritis ...	41.6	45.4	42.3	35.1	38.8	28.8	29.1	26.1	21.3	25.2
Immaturity ...	12.7	13.4	17.4	14.6	16.8	12.9	13.1	14.0	15.1	15.9
Injury at birth ...	6.2	5.7	5.7	5.7	5.4	5.1	4.4	4.0	3.8	5.2
Congenital malformations ...	2.9	2.9	3.2	3.4	2.6	3.0	2.9	3.5	4.3	3.2
Other diseases of early infancy ...	6.8	6.0	8.6	6.6	8.4	9.2	7.7	7.6	6.1	8.7
Other causes ...	11.4	6.8	8.1	9.7	7.9	7.5	8.9	7.8	5.8	11.4
All causes ...	101	101	103	95	98	80	81	76	70	86

INFANT MORTALITY, 1963.



Proportion of infant deaths, neonatal 43.3%
post neonatal 56.7%

The following table shows the corrected number of perinatal (stillbirths and deaths in the first week of life), neonatal and post neonatal deaths for the various races and the corresponding rates per 1,000 live births registered, with rates based on birth notifications in brackets.

Race	Perinatal		Neonatal		Post neonatal	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
European	99	27 (26)	65	18 (18)	19	5 (5)
Coloured	630	51 (43)	392	33 (28)	499	41 (36)
Bantu	113	83 (44)	81	62 (30)	190	146 (71)
Asiatic	12	46 (49)	6	23 (23)	6	23 (23)
All non-European	755	54 (43)	479	35 (29)	695	51 (41)
All races	856	48 (40)	546	32 (27)	714	41 (35)

The next table shows the variation in the perinatal, neonatal and post neonatal rates over a period of five years :-

Year	European			Non-European		
	Peri-natal	Neo-natal	Post neonatal	Peri-natal	Neo-natal	Post neonatal
Year 1959	20	12	6	52	33	47
Year 1960	26	19	6	49	29	52
Year 1961	27	15	5	55	30	46
Year 1962	22	16	6	47	31	39
Year 1963	27	18	5	54	35	51
Quinquennium (1959 - 1963)	24	16	5	50	32	47

SEASONAL VARIATION

The seasonal variation in infant mortality is shown in the following table and in Table E on page 96 where the infant deaths for the year 1963 are classified for certain causes.

	1958	1959	1960	1961	1962	Mean 5 years	1963
January	163	136	98	123	112	126	159
February	123	102	111	90	95	104	114
March	129	96	107	95	84	102	109
April	119	100	95	72	76	92	89
May	102	63	80	78	80	81	85
June	82	92	103	94	86	91	91
July	98	76	64	86	106	86	97
August	77	75	87	88	80	81	114
September	73	71	83	80	63	74	90
October	73	64	75	78	71	72	104
November	86	85	94	91	49	81	77
December	99	82	93	64	54	78	93
TOTAL	1,224	1,042	1,090	1,039	956	1,070	1,222
Mean	102.0	86.8	90.8	86.6	79.7	89.0	102
Per 1,000 live births	80.0	65.5	68.3	63.5	58.2	66.9	70.9

Corrected for outward transfers only.

The infant mortality in respect of legitimate and illegitimate infants amongst the various races is shown in the following table. The alternative rate shown in brackets is based on births notified direct to the department.

Race	Rates per 1,000 live births	
	Legitimate	Illegitimate
European	22.6 (22.7)	35.0 (28.4)
Coloured	62.1 (55.8)	93.1 (74.7)
Bantu	147.2 (76.0)	219.0 (94.9)
Asiatic	43.8 (44.0)	200.0 (125.0)
All non-European	69.2 (53.2)	108.1 (78.8)
All races	57.6 (50.7)	104.4 (76.6)

The deaths of 65 infants under one year of age are excluded from above figures as information regarding legitimacy was unobtainable.

Infant mortality rates for certain other towns in South Africa and for England and Wales are set out in Table M on page 104 for the purpose of comparison.

INFANT MORTALITY

The number of deaths of infants under one year of age and the infant mortality rates per 1,000 live births registered for the past five years are shown in the following table.

Events in the Bantu Townships have been included.

Race	1963		1962		1961		1960		1959	
	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 ...	84	23.2	81	21.7	74	20.1	90	25.3	66	17.5
Coloured ...	891	73.8	789	66.1	839	71.9	839	74.4	766	72.5
Bantu ...	271	207.7	281	220.6	303	198.4	282	203.9	226	135.6
Asiatic ...	12	46.9	8	32.7	13	50.6	11	38.5	18	55.7
Non-European	1,174	86.1	1,078	80.1	1,155	85.9	1,132	87.4	1,010	80.5
All races *	1,260	73.0	1,164	67.7	1,234	72.0	1,228	74.4	1,078	66.0

* Including those of unknown race

MATERNAL MORTALITY.

The following table shows the corrected number of deaths from causes ascribed to pregnancy and child-birth including abortion, and the corresponding rate per 1,000 total deliveries (live and still births). The alternative rate shown in brackets is based on births notified direct to the department.

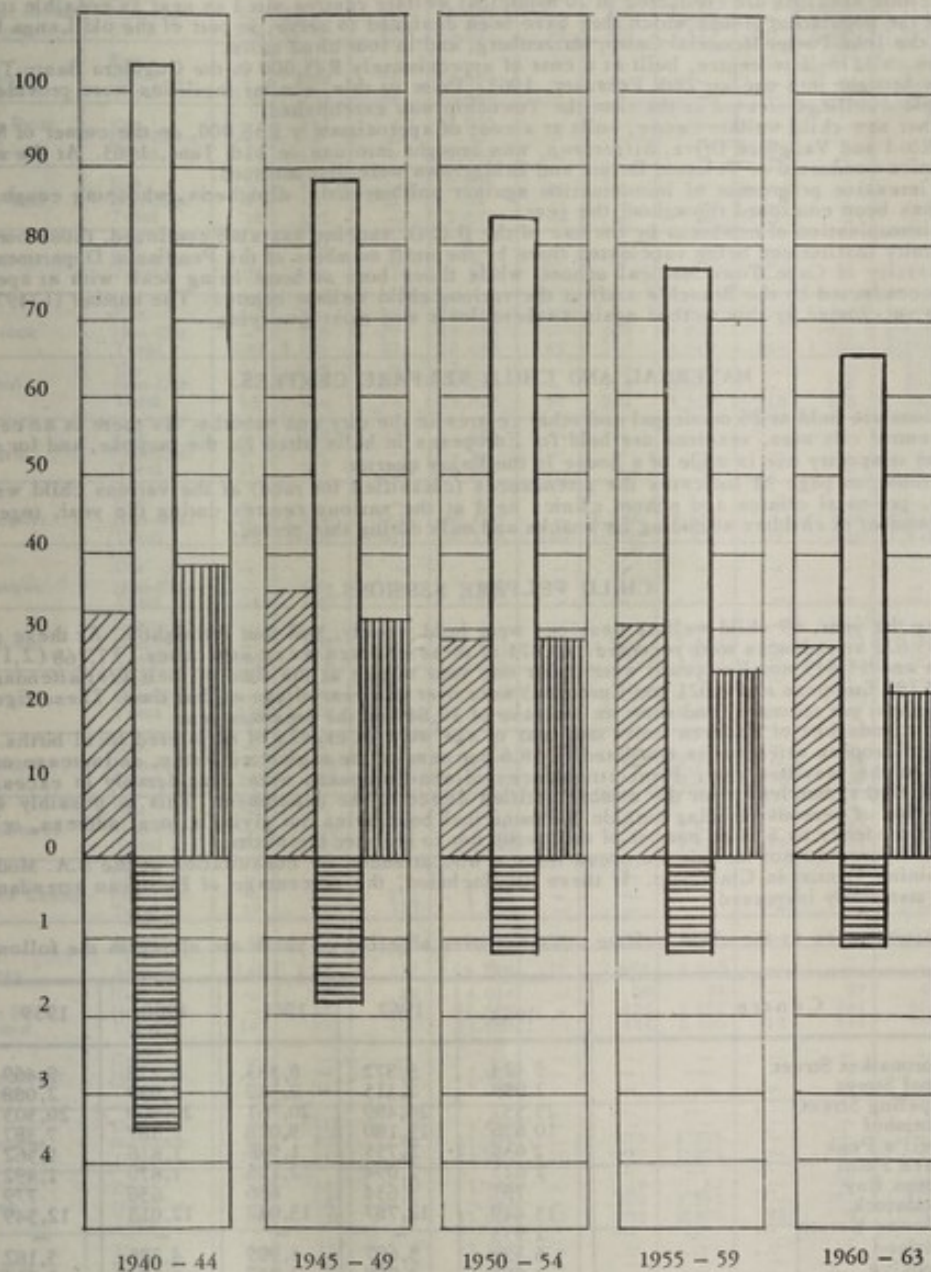
Int. Code No.	Cause of death	Deaths			Maternal mortality rates
		Eur.	Non-E.	All races	All races
681 640, 641, 651, 682, 684	Puerperal fever Other puerperal septicaemia (including abortion with sepsis) ...	— —	— 14	— 14	— 0.79 (0.67)
642, 652, 685-686	Toxaemia of pregnancy and the puerperium ...	—	2	2	0.11 (0.10)
643-644 670-672 650	Haemorrhage of pregnancy and childbirth Abortion without mention of sepsis or toxaemia ...	— —	1 2	1 2	0.06 (0.05) 0.11 (0.10)
645-649 673-680 683 687-689	Other complications of pregnancy, childbirth and the puerperium ...	—	3	3	0.17 (0.14)
	All causes (except puerperal septicaemia) ...	—	8	8	0.45 (0.38)
	Total ...	—	22	22	1.24 (1.06)

Three of above deaths occurred in Langa Bantu Township. Another maternal death, a Langa resident, was classified as accidental. The deceased had attended an ante-natal clinic, was confined institutionally, and transferred to a general hospital where she died. The inquest finding was "death due to heart failure following caesarian operation".

The maternal mortality rates per 1,000 total deliveries registered during 1963 and in the previous years were as follows—

	Puerperal septicaemia			Other causes			All causes		
	Eur.	Non-E.	All races	Eur.	Non-E.	All races	Eur.	Non-E.	All races
1950-54	0.11	0.34	0.29	0.46	1.12	0.96	0.57	1.47	1.24
1955-59	0.11	0.39	0.33	0.27	1.11	0.91	0.38	1.50	1.24
1958	—	0.42	0.32	—	0.83	0.64	—	1.25	0.95
1959	—	0.56	0.43	0.26	0.56	0.49	0.26	1.12	0.92
1960	—	0.86	0.67	—	0.70	0.55	—	1.57	1.22
1961	0.27	0.46	0.42	—	0.61	0.48	0.27	1.07	0.89
1962	0.27	0.31	0.30	0.27	0.69	0.60	0.53	1.00	0.89
1963	—	1.00	0.79	—	0.57	0.45	—	1.57	1.24

MATERNAL, NEO-NATAL AND INFANT MORTALITY
TOGETHER WITH STILL BIRTHS - ALL RACES.
IN FIVE YEAR PERIODS FROM 1940 - 60



NEO-NATAL MORTALITY (Rate per 1,000 live births)
(Deaths under one month)

INFANT MORTALITY (Rate per 1,000 live births)
(Deaths under one year)

STILL BIRTHS (Rate per 1,000 live and still births)

MATERNAL MORTALITY (Rate per 1,000 live & still
births)

SECTION III. - MATERNAL AND CHILD WELFARE.

DR. ISOBEL ROBERTSON, B.A., M.B., CH.B., D.P.H.,
MATERNAL AND CHILD WELFARE OFFICER.

This Branch is, in the main, responsible for health education and for preventive work amongst expectant mothers and pre-school children. The main activities of the Branch are set out in the following pages and in the carrying out of these duties the staff of 57 Health Visitors are guided and controlled by four full-time and 50 part-time Medical Officers.

The clinic sessions are conducted in 20 municipal welfare centres sited as near as possible to the homes of the population groups which they have been designed to serve, in part of the old Langa Hospital, in the John Power Memorial Camp, Muizenberg, and in four hired halls.

A new child welfare centre, built at a cost of approximately R43,000 in the Guguletu Bantu Township was brought into use on 28th February, 1963. Prior to this, similar facilities were provided at two sample dwellings erected at the time the Township was established.

Another new child welfare centre, built at a cost of approximately R36,000, on the corner of Klipfontein Road and Vanguard Drive, Silvertown, was brought into use on 11th June, 1963. At the same time, clinics conducted at Welcome Estate and Bridgetown were discontinued.

The intensive programme of immunisation against poliomyelitis, diphtheria, whooping cough and tetanus has been continued throughout the year.

The immunisation of newborns by the use of the B.C.G. vaccine has also continued, those born in the maternity institutions being vaccinated there by the staff members of the Paediatric Department of the University of Cape Town Medical school, while those born at home being dealt with at special sessions conducted by the Branch's staff at the various child welfare centres. The number (17,497) of newborns vaccinated by this method against tuberculosis was most gratifying.

MATERNAL AND CHILD WELFARE CENTRES.

Sessions are held at 26 municipal and other centres in the city and suburbs. As there is no centre for the central city area, sessions are held for Europeans in halls hired for the purpose, and for non-Europeans temporary use is made of a house in the Malay quarter.

The table on page 31 indicates the attendances (classified by race) at the various child welfare sessions, pre-natal clinics and school clinics held at the various centres during the year, together with the number of children attending for snacks and milk during this period.

CHILD WELFARE SESSIONS.

During the year, 69 child welfare sessions were held weekly, and four fortnightly. At these sessions, 333,622 attendances were recorded. 19,874 of these children were new cases. 17,768 (2,119 European and 15,649 non-European) were under one year of age at the time of their first attendance, and 2,106 (85 European and 2,021 non-European) were over one year of age at that time. These figures are the highest yet recorded, and show an increase of 30,849 on the previous year.

First attendances of children under one year of age were in excess of registered local births. Of these, the European attendances amounted to 58.6 per cent of the registered births, an increase of 10 per cent on the previous year. First attendances of non-Europeans were considerably in excess of registered births, but less than the number notified direct to the department. This is possibly due to infiltration of persons residing outside the municipal boundaries but giving a local address, or because of a tendency by a large number of this group not to register the births.

These figures do not include European infants who attended for consultation at the S.A. Mothercraft Training Centre in Claremont. If these are included, the percentage of European attendances would be materially increased.

The attendances at the child welfare sessions over a period of years are shown in the following table:-

Centre	1963	1962	1961	1960	1959
Shortmarket Street	9,424	9,872	8,333	9,778	9,469
Kloof Street	2,089	2,315	2,312	2,039	2,088
Aspeling Street	25,551	26,489	20,761	20,509	20,303
Bloemhof	10,626	11,180	9,028	7,387	7,387
Devil's Peak	2,035	1,755	1,948	1,816	1,562
Green Point	2,025	2,094	2,126	1,870	1,492
Camps Bay	787	634	636	636	779
Woodstock	13,449	12,787	13,047	12,013	12,549
Welcome Estate	1,953	—	—	—	—
Maitland	5,323	5,607	4,909	4,781	5,182
Brooklyn	3,083	3,008	2,947	3,184	3,014
Kensington	36,120	35,191	29,756	27,964	28,088
Langa	4,795	4,425	3,565	3,416	4,076
Guguletu	19,799	16,501	12,893	11,050	3,343
Athlone	23,544	24,186	22,468	20,196	17,023
Bokmakirie	15,313	13,380	11,690	11,589	11,440
Bonteheuwel	28,422	22,099	380	—	—
Bridgetown	6,860	14,210	11,089	—	—
Silvertown	13,601	—	—	9,308	7,972
Claremont (Station Road) ...	14,596	11,653	8,456	7,741	7,648
Claremont (Wesley Street) ...	7,000	5,871	5,821	5,326	5,395
Claremont (Franklin Road) ...	—	63	698	1,045	721
Lansdowne	12,983	11,377	9,081	8,382	7,505
Wynberg	11,050	11,260	11,807	12,168	9,909
Parkwood and Southfield ...	6,178	6,180	5,990	7,841	6,063
Heathfield	11,149	11,461	8,343	—	—
Retreat Road, Retreat	—	—	—	7,975	7,640
11th Avenue, Retreat	38,131	32,694	26,782	21,076	22,939
Muizenberg (Atlantic Road) ...	—	—	295	389	358
Muizenberg (Prince George Drive)	7,105	5,587	4,409	3,148	—
Kalk Bay	631	894	922	1,058	988
Totals ...	333,622	302,773	240,492	223,700	204,933

Centre	Race	Infant consultations			Pre natal clinics			School clinics			Dinners		
		Sessions	First Attendances		Total Attendances	Sessions	Attendances		Sessions	Attendances		Attendances	
			Under year	Over 1 year			First	Total		First	Total	Adults	Children
Shortmarket Str. Cape Town	Eur. Non-Eur. Total	151	574 574	15 15	9,424 9,429	— — —	226 226 226	765 765 765	— — —	197 197 197	572 572 572	1,350 1,350 1,350	6,699 6,699 6,699
Kloof Street Cape Town	Eur. Non-Eur. Total	— 50 —	242 242 —	1 1 —	2,089 2,089 —	— — —	— — —	— — —	— — —	— — —	— — —	— — —	— — —
Aspeling Street, Cape Town	Eur. Non-Eur. Total	— 242 —	1,195 1,195 —	36 36 —	25,551 25,551 —	— 25 —	591 591 —	2,622 2,622 —	— 39 —	1,031 1,031 —	3,330 3,330 —	625 625 —	4,515 4,515 —
Bloemhof, Cape Town.	Eur. Non-Eur. Total	— 150 —	494 494 —	22 22 —	10,626 10,626 —	— — —	— — —	— — —	— — —	— — —	— — —	— — —	— — —
Devil's Peak Est., Cape Town	Eur. Non-Eur. Total	— 46 —	181 181 —	4 4 —	2,035 2,035 —	— — —	— — —	— — —	— — —	— — —	— — —	— — —	— — —
Green Point	Eur. Non-Eur. Total	— 50 —	122 122 —	— — —	2,025 2,025 —	— — —	— — —	— — —	— — —	— — —	— — —	— — —	— — —
Camps Bay	Eur. Non-Eur. Total	— 27 —	84 84 —	1 1 —	787 787 —	— — —	— — —	— — —	— — —	— — —	— — —	— — —	— — —
Woodstock	Eur. Non-Eur. Total	— 199 —	285 740 1,025	10 23 33	3,211 10,238 13,449	— 49 —	1 256 257	2 1,046 1,048	— 156 —	389 791 1,180	1,413 2,760 4,173	— — —	— — —
Maitland	Eur. Non-Eur. Total	— 95 —	105 345 450	6 23 29	1,235 4,088 5,323	— 50 —	25 356 381	40 1,512 1,552	— 18 —	50 188 238	129 705 834	— — —	— — —
Brooklyn	Eur. Non-Eur. Total	— 51 —	212 212 —	10 10 —	3,083 3,083 —	— — —	— — —	— — —	— — —	— — —	— — —	— — —	— — —
Kensington	Eur. Non-Eur. Total	— 248 —	1,496 1,496 —	163 163 —	36,120 36,120 —	— 100 —	1,506 1,506 —	5,450 5,450 —	— 25 —	569 569 —	1,445 1,445 —	1,725 1,725 —	14,343 14,343 —
Bridgetown	Eur. Non-Eur. Total	— 44 —	238 238 —	22 22 —	6,860 6,860 —	— — —	— — —	— — —	— — —	— — —	— — —	— — —	— — —
Silvertown	Eur. Non-Eur. Total	— 108 —	602 602 —	87 87 —	13,601 13,601 —	— 27 —	340 340 —	1,433 1,433 —	— — —	— — —	— — —	— — —	— — —
Athlone	Eur. Non-Eur. Total	— 221 —	1,458 1,458 —	134 134 —	23,544 23,544 —	— 100 —	1,098 1,098 —	4,801 4,801 —	— 25 —	491 491 —	1,066 1,066 —	1,280 1,280 —	8,744 8,744 —
Bokmakarie	Eur. Non-Eur. Total	— 147 —	505 505 —	37 37 —	15,313 15,313 —	— 98 —	737 737 —	3,349 3,349 —	— 40 —	198 198 —	373 373 —	1,754 1,754 —	10,480 10,480 —
Bonteheuwel	Eur. Non-Eur. Total	— 198 —	1,209 1,209 —	279 279 —	28,422 28,422 —	— 52 —	958 958 —	3,622 3,622 —	— 36 —	661 661 —	1,026 1,026 —	— — —	— — —
Welcome Estate	Eur. Non-Eur. Total	— 17 —	200 200 —	111 111 —	1,953 1,953 —	— — —	— — —	— — —	— — —	— — —	— — —	— — —	— — —
Langa	African	48	511	18	4,795	51	530	2,140	—	—	—	—	—
Guguletu	African	148	1,734	337	19,799	110	1,562	7,013	—	—	—	—	—
Station Road, Claremont	Eur. Non-Eur. Total	— 147 —	373 444 817	22 80 102	4,014 10,582 14,596	— 51 —	20 424 444	93 2,002 2,095	— 18 —	27 311 338	45 655 700	— — —	— — —
Wesley Street, Claremont	Eur. Non-Eur. Total	— 100 —	241 241 —	25 25 —	7,000 7,000 —	— — —	— — —	— — —	— — —	— — —	— — —	1,345 1,345 —	7,091 7,091 —
Lansdowne	Eur. Non-Eur. Total	— 191 —	112 737 849	8 75 83	1,449 11,534 12,983	— 50 —	437 437 —	1,839 1,839 —	— — —	— — —	— — —	— — —	— — —
Wynberg	Eur. Non-Eur. Total	— 150 —	183 547 730	12 55 67	1,706 9,344 11,050	— 51 —	23 570 593	63 2,337 2,400	— 23 —	367 367 —	1,022 1,022 —	884 884 —	2,936 2,936 —
Southfield	Eur. Non-Eur. Total	— 144 —	137 239 376	3 18 21	1,612 4,566 6,178	— — —	— — —	— — —	— — —	— — —	— — —	691 691 —	2,470 2,470 —
Heathfield	Eur. Non-Eur. Total	— 173 —	83 360 443	8 55 63	961 10,188 11,149	— — —	— — —	— — —	— — —	— — —	— — —	1,632 1,632 —	8,008 8,008 —
Retreat	Eur. Non-Eur. Total	— 248 —	1,546 1,546 —	389 389 —	38,131 38,131 —	— 97 —	1,520 1,520 —	5,892 5,892 —	— 38 —	772 772 —	2,175 2,175 —	805 805 —	10,258 10,258 —
Prince George Drive Muizenberg	Eur. Non-Eur. Total	— 52 —	181 181 —	12 12 —	7,105 7,105 —	— — —	— — —	— — —	— — —	— — —	— — —	— — —	— — —
Kalk Bay	Eur. Non-Eur. Total	— 24 —	53 53 —	5 5 —	631 631 —	— 20 —	26 26 —	105 105 —	— — —	— — —	— — —	— — —	— — —
TOTAL	Eur. Non-Eur. Total	— 3,469 —	2,119 15,649 17,768	85 2,021 2,106	24,207 309,415 333,622	— 987 —	69 11,137 11,206	198 45,928 46,126	— 434 —	489 5,549 6,038	1,623 15,129 16,752	12,091 12,091 —	75,544 75,544 —

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.

Voluntary Centre	No. of sessions in the year	No. of new cases (Infants)	Total attendances (Infants)	Total attendances (Toddlers)
Bowwood Road, Claremont	199	469	3,174	8
Sea Point	56	167	655	—

ADVISORY WORK AT CHILD WELFARE SESSIONS

At the sessions, mothers are advised on correct feeding and hygiene of infants and pre-school children.

Breast feeding is encouraged, and sessions are held by the health visitors at which instructional test feeds are performed. During the year, instructional test feeds were given to 356 European mothers and 2,382 Coloured and Bantu mothers.

Dried milk for infants who cannot be entirely breast fed, and supplementary milk for children with protein malnutrition are supplied at the centres under the direction of the medical officers at cost or below cost to those mothers unable to afford the full retail price. In cases of poverty the milk may be supplied free. Vitamin oil and such medicines as may be ordered are supplied on similar terms.

During the year, 3,622 new cases were supplied with dried milk and 97,433 pounds were issued (full cream 84,860 lbs., skim 12,573 lbs.).

The pilot scheme started in 1961 for the distribution of powdered skim milk to necessitous toddler groups and subsidised by the State Health Service was continued on a permanent basis with a State Department subsidy of 5c. per lb. on powdered skim milk costing 15c. per lb.

This milk is distributed to indigent pre-school toddlers showing signs of malnutrition, in an effort to prevent the development of kwashiorkor. The milk was issued to 1,500 children per week. During the year a total quantity of 77,318 lbs. of this milk powder was issued.

The scheme has resulted in a much larger attendance at municipal child welfare clinics, and an improvement in the general standard of nutrition among the toddlers.

Further reference to kwashiorkor is made on page 48 of this report.

MEDICAL EXAMINATIONS.

All infants attending welfare centres are medically examined at their first visit and periodically thereafter. 124,603 Children were so examined. Children requiring special treatment are referred to hospital or to their own doctors. Minor ailments in indigent cases are treated at the centres.

SUPPLEMENTARY FEEDING.

At 10 of the centres supplementary meals were served throughout the year from Monday to Friday to indigent expectant and nursing mothers and pre-school children.

These meals consist of soup, cheese, fruit and enriched bread spread with a mixture of margarine, peanut butter, food yeast and golden syrup. Liquid skimmed milk was supplied at 6 of these centres.

HEALTH VISITING IN THE HOME.

Home visiting can be considered the most important aspect of the work of the health visitor, since it aims at teaching the mother the care of her child in relation to the home. Visits are made soon after an infant's birth and thereafter as frequently as the health visitor's time permits, but not less frequently than every three months during the first year of life.

The health visitors undertake home visiting for children under school age, visiting of expectant mothers, and in addition, the visiting required for ophthalmia neonatorum, puerperal fever, whooping cough, and other infectious ailments of childhood. Each health visitor assists at sessions held at the centre which lies in her district.

The full complement of health visiting staff on 31st December, 1963 was as follows:—

Principal Health Visitor.

Health Visitors —

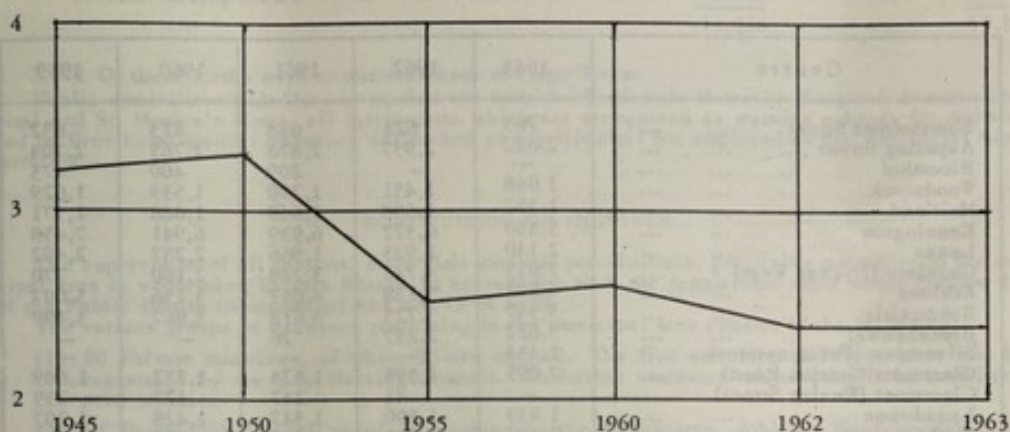
European	32
Coloured	16
Bantu	2
Clinic Nurses	7
Clinic Assistants	10
Social Welfare Worker	1

Two further Bantu health visitors who work in the Bantu Townships are attached to the Department for administrative purposes.

Special duties are performed by nine of the health visitors and clinic nurses—

Diphtheria, poliomyelitis and B.C.G. vaccination	5
Orthopaedic clinics and visiting	1
School clinics and visiting	2
Supervision of midwifery	1

The number of health visitors available per 1,000 live births in recent years has been as follows:-



These numbers do not permit the Branch to provide the type of cover that is necessary for many of the low socio-economic groups who require continuous and close supervision.

The following table shows the number of visits made during 1963 and the previous year by health visitors and social welfare worker. Visits made by the health visitors of the tuberculosis and venereal disease branches are included here for convenience.

Visits in connection with:-

	1963	1962
Births	20,108	19,227
Subsequent revisits	66,301	68,027
Child deaths	1,416	1,450
Expectant mothers	2,390	813
Midwives	1,910	2,018
Orthopaedic	1,649	2,025
Schools	1,103	1,991
Protected infants	1,670	1,928
Social welfare	3,904	3,488
Infectious diseases	1,653	1,597
Other visits	12,172	11,563
	<u>114,276</u>	<u>114,127</u>
Tuberculosis	45,259	45,425
Venereal disease	674	935
	<u>160,209</u>	<u>160,487</u>

PRE-NATAL CLINICS.

Pre-natal sessions are conducted at all the larger centres and the work is carried out in close co-operation with the public maternity hospitals which fall either under the Provincial Administration or charitable organisations.

In view of the inadequate number of maternity beds in Cape Town, the Provincial Administration's maternity hospitals limit admission as far as possible to primiparae, abnormal confinements, women who have had seven or more pregnancies, and those where bad socio-economic conditions preclude confinement at home. Women attending the ante-natal clinics are referred to one or other local maternity institution when hospital confinement is considered advisable for any of the above reasons.

7,208 Cases were attended by private midwives in their own homes, and many of these women attended the welfare centres for ante-natal care.

During the year, 19 pre-natal sessions were held weekly and 2 fortnightly, at which there were 11,206 new cases. The total attendances numbered 46,126 details of which are shown on page 31.

The number of new cases attending the municipal pre-natal sessions amounted to 65 per cent of the number of registered live births (2 per cent European and 82 per cent non-European).

In addition to the above municipal sessions, pre-natal sessions are also held at the Peninsula, Somerset and Mowbray maternity hospitals which fall under Provincial Administration, and at St. Monica's Home run by a private religious organisation.

Midwives working within the municipal area are supervised by the department's supervisor of midwives, and are encouraged to attend the pre-natal centre with their patients to see the doctor.

Routine serological tests for syphilis are carried out on all women attending pre-natal sessions and specific treatment is provided for those requiring it. 14,629 Blood specimens were taken during the year (213 European and 14,416 non-European). Of these, 666 gave positive or doubtful reactions.

Routine tests are done by the Provincial Blood Transfusion laboratory on all women attending ante-natal sessions to ascertain their blood-grouping. Those who proved to be Rhesus negative are further investigated and referred to hospital if necessary.

Routine testing for haemoglobin levels of all women attending ante-natal sessions is done by the Provincial blood transfusion laboratory.

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

Centre	1963	1962	1961	1960	1959
Shortmarket Street	765	624	638	813	632
Aspeling Street	2,622	2,937	2,876	2,765	2,704
Bloemhof	—	—	209	400	473
Woodstock	1,048	1,451	1,290	1,539	1,629
Maitland	1,552	1,608	1,648	1,668	1,571
Kensington	5,450	6,372	6,939	6,941	7,458
Langa	2,140	1,923	1,966	2,257	2,492
Guguletu (Nyanga West) ...	7,013	4,740	3,748	2,160	770
Athlone	4,801	5,128	4,057	3,156	3,007
Bokmakirie	3,349	3,725	3,618	3,867	3,409
Bonteheuwel	3,622	2,237	26	—	—
Silvertown (Petuniastreet) ...	1,433	—	—	—	—
Claremont (Station Road) ...	2,095	1,595	1,573	1,752	1,609
Claremont (Wesley Street) ...	—	41	247	377	239
Lansdowne	1,839	1,500	1,347	1,428	1,207
Wynberg	2,400	1,683	1,732	1,968	1,503
Parkwood and Southfield ...	—	329	897	1,041	664
Retreat Road, Retreat	—	—	—	4	4
11th Avenue, Retreat	5,392	6,159	5,832	4,801	4,791
Kalk Bay	105	95	41	50	55
Totals	46,126	42,147	38,684	36,987	34,217

POST-NATAL CLINICS.

Fortnightly sessions are held at seven of the child welfare centres in co-operation with the S.A. Council for Maternal and Family Welfare.

At these sessions each woman receives routine post-natal examination and any abnormalities found are treated or, if necessary, referred to the gynaecological department of one of the hospitals.

Routine cytological examination on women attending these clinics with a view to detecting early malignancy in the female genital tract was commenced in February, 1960. Where atypical cells were discovered, the women are referred to a special gynaecology clinic at Groote Schuur Hospital.

Number of cytological examinations	2,177
Number showing infections	293
Number showing suspicious cells	—
(Grade 3 atypia)	16
Number showing malignant cells	—
(Grade 4-5 atypia)	6

Instruction in family limitation and spacing is given when this is deemed advisable for socio-medical or other reasons. During the year there were 1,830 new cases (138 European and 1,692 non-European) and a total attendance of 6,209 (413 European and 5,796 non-European).

NOTIFICATION OF BIRTHS

The regulations regarding Early Notification of Births (made by the Minister of Health in 1920) require the notification of all births in the municipality to the Medical Officer of Health within twenty-four hours of their occurrence. This information is invaluable to the department for the follow up of all new births.

In addition, births must also under the relevant section of the Births, Marriages and Deaths Registration Act, as amended, be registered with the Registrar of Births and Deaths at any time within seven days of occurrence by the father of the child or, failing him, some other responsible person present at the time of birth.

During the year, 23,716 births and still births were notified (including births to mothers who were not Cape Town residents) as follows—

Notified by midwives and nurses (other than extern or intern institutional cases)	7,228
Notified by doctors	599
Notified by institutions (extern or intern)	15,889

There were 528 births notified in the Langa Bantu Township and 1,702 in Guguletu Bantu Township.

The births and still births notified as having taken place in the municipality during the year are further classified hereunder—

Attended	Births	Percentage
<i>In private houses:</i>		
By private doctors	599	2.5
By private midwives:		
Certificated	6,754	28.5
Uncertificated	454	1.9
By institutional midwives or student midwives	1,863	7.9
No doctor or midwife	20	0.1
	<u>9,690</u>	<u>40.9</u>

<i>In institutions:</i>	<i>Births</i>	<i>Percentage</i>
Public institutions	8,184	34.5
Private nursing homes	5,842	24.6
	14,026	59.1

2,842 Of these births were to non-residents of Cape Town.

Public domiciliary midwifery is carried out from the Peninsula Maternity Hospital, Somerset Hospital and St. Monica's Home, all institutions which are recognised as training schools for midwives, and by Provincial district midwives unattached to any Hospital but employed by the Provincial Administration.

SUPERVISION OF MIDWIVES.

The supervision of all persons, other than medical practitioners, practising midwifery in the municipal area is undertaken by this Branch in accordance with the regulations made under Section 18(b) of the Public Health (Amendment) Act No. 15 of 1928.

The various groups of midwives practising in the municipal area consist of the following:—

- (1) 90 Private midwives, of whom 85 are trained. The five untrained midwives have now been registered by the S.A. Nursing Council. No further untrained midwives will be permitted to start practice.
- (2) 16 Provincial district midwives working in the Kensington, Athlone, Bonteheuwel, Langa, Lansdowne and Retreat areas, where there is much poverty.
- (3) Midwives attached to the training schools doing district work in the vicinity of the training schools and in the outlying district of Windermere.
- (4) 3 Midwives employed at the Grassy Park Health Centre (outside the Municipality) provide a district service for the contiguous area of Parkwood Estate which is within the municipality.

In approved indigent cases delivered on district, private midwives are paid by the department for services rendered in those areas not served by the provincial district midwives or midwives from the training schools.

Assisted midwifery

An amount of R368 was paid to private midwives during the year. Fees paid to medical practitioners called in by midwives to indigent cases with obstetrical emergencies amounted to R220.

Inspections

Regular meetings for private midwives are held at the various centres every quarter, at which talks on midwifery are given by the departmental medical officers, and inspections of the midwives' records and equipment are carried out by the supervisor of midwives. At these sessions the opportunity is taken of encouraging the midwives to discuss their problems with the doctors. In addition, regular visits are paid by the supervisor to the homes of the midwives.

The extent of the supervisor's work is indicated by the following figures—

Midwives interviewed at office	69
Visits paid to midwives in their own homes ...	1,727
Inspections held	20
Attendances of midwives at inspections	335
Total visits by supervisor	2,667

PUERPERAL FEVER

Reported cases of this notifiable infectious disease are investigated by the Maternal and Child Welfare Branch and are admitted to the City Infectious Diseases Hospital where necessary.

Two non-European cases of puerperal fever were reported during the year. Both the cases were confined at home, delivered of living children, and both were admitted and treated in the City Infectious Diseases Hospital.

One of the cases occurred in the Guguletu Bantu Township.

Two further cases were admitted to the City Hospital direct from outside the municipal area.

The 14 deaths shown under the heading 'puerperal septicaemia' in the table on page were all due to septic abortion. Maternal mortality rates for a series of years are also shown on page 28.

OPHTHALMIA

For the purpose of notification, ophthalmia neonatorum is defined as a purulent inflammation of the eyes of an infant occurring within twenty-one days of birth, whether it be due to infection with the 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.

311 (52 European and 259 non-European) cases of ophthalmia neonatorum were notified, which represents 1.8 per cent of the registered live births. Of these, 158 were born in institutions and 26 confined at home by hospital institutional staff. The remaining 127 cases were confined at home. 7 Of these were attended by doctors, 118 by private midwives and 2 were unattended.

Swab results are recorded in 292 cases, of which 56 were positive for gonococci, 6 doubtful and the remainder negative.

It is to be recorded that the health visitors reported 117 of the cases as 'slight', 93 as moderate or grave and with no comment on the remainder. With the exception of those cases where contact was lost through transfer of domicile, all cases were known to have recovered.

DIPHTHERIA, WHOOPING COUGH AND TETANUS IMMUNISATION

Two immunising teams, each consisting of a medical officer, health visitor and an assistant, conducted 10 immunising sessions per week throughout the year at clinics, institutions and schools. A postcard is sent to all parents whose infants have reached the age of five months indicating the seriousness of diphtheria and advising immunisation by a private doctor or by the staff of the nearest clinic.

At the Department's sessions the triple antigen of diphtheria, whooping cough and tetanus toxoid is used. A booster injection against the selfsame diseases is given one year after the initial course to all infants, and further injections against diphtheria and tetanus to school entrants.

The work done at the municipal sessions during the year is shown by the following figures:—

Number of sessions:

At schools	...	...	...	...	217
At institutions	...	...	...	...	59
At child welfare centres	...	...	...	...	622
					898

Attendances at these sessions decreased by 5.6 per cent compared with the previous year, and are shown in the following table. The number of non-European first attendances of infants under one year of age approximates the number of births registered, but the apparent shortfall among Europeans may be accounted for by immunisations performed by private general medical practitioners, of which there is no official record.

Race	AGE GROUP											Total Attendances
	0 - 1			1 - 6				School age				
	1st	2nd	3rd	1st	2nd	3rd	Booster	1st	2nd	3rd	Booster	
Eur.	2,462	2,328	2,240	512	569	567	1,514	680	631	527	1,514	13,544
Non-Eur.	12,560	10,320	8,825	4,019	4,214	4,452	3,923	4,533	4,235	4,085	5,191	66,357
Total	15,022	12,648	11,065	4,531	4,783	5,019	5,437	5,213	4,866	4,612	6,705	79,901

Race	Material Used			
	Diph.	D/WC/T.	D/TET.	A.D.F.
Eur.	310	7,937	5,247	50
Non-Eur.	1,976	36,487	27,760	134
Total	2,286	44,424	33,007	184

POLIOMYELITIS IMMUNISATION.

Immunisation against poliomyelitis was made compulsory throughout the Republic under Notice No. 1989 published in Government Gazette No. 683 of 27th December, 1963.

Since the mass oral live attenuated (Sabin) polio immunisation campaign held in 1961, the distribution of polio vaccine has been continued for all new babies, immigrants and children who have not previously been done. The vaccine is available at special sessions held weekly in two centres and at all sessions where diphtheria immunisation is performed.

The number of municipal immunisation sessions held during the year is shown by the following figures:—

At schools	...	...	...	...	158
At institutions	...	...	...	...	59
At child welfare centres	...	...	...	...	713
					930

Race	New cases					Total first attendances	Subsequent attendances		Total attendances
	0 - 1 years	1 - 3 years	3 - 6 years	School age	Adult		2nd	3rd	
Eur.	3,690	456	268	211	1,611	6,236	7,050	12,810	26,096
Non-Eur.	13,103	1,790	1,442	1,298	7,237	24,870	25,746	37,107	87,723
Total	16,793	2,246	1,710	1,509	8,848	31,106	32,796	49,917	113,819

B.C.G. VACCINATION

B.C.G. vaccination of newborn infants has continued. The material used was freeze dried B.C.G. supplied by the State Health Service. Infants born in the Provincial hospitals and in St. Monica's and the Salvation Army homes were immunised by the Staff of those homes. In the case of infants born on the district, the health visitor at her first visit invited the mother to bring the baby to the local welfare centre where vaccination was done as soon after birth as possible.

Number of B.C.G. vaccinations:—

	European	Non-European	Total
Groote Schuur Hospital	704	—	704
Mowbray Maternity Hospital	904	—	904
Peninsular Maternity Hospital	—	2,260	2,260
Somerset Hospital	—	1,567	1,567
St. Monica's Home	—	1,033	1,033
Salvation Army Home	—	1,308	1,308
Municipal child welfare centres	1,521	8,200	9,721
	3,129	14,368	17,497

SCHOOL CLINICS

By arrangement with the Provincial Administration, school clinics are organised by the Maternal and Child Welfare Branch and held during the school term at certain of the municipal welfare centres.

General sessions with a medical officer in attendance are held weekly at Woodstock, Bonteheuvel, Retreat, Aspeling Street (city), and fortnightly at Shortmarket Street (city), Maitland, Kensington, Claremont, Athlone and Wynberg.

Cases requiring specialised attention are referred to the appropriate out-patients department of a general hospital, or to a child guidance or mental hygiene clinic, while those suffering from the effects of malnutrition and debility following illness are sent to convalescent homes. Where necessary, visits are made to the homes of such children and the parents or guardians interviewed.

Ophthalmic sessions with specialists in attendance are held three times per week at the Woodstock centre and weekly at Bokmakierie.

Two health visitors are employed on this work.

The work done during the year is shown in the table on page 31 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	254	722	976	235	4,777	5,012
Total attendances	926	2,297	3,223	697	12,832	13,529
Number of sessions held	—	—	158	—	—	276
Children fitted with spectacles:						
Full-paying	199	366	565			
Part paying	47	338	385			
Free	39	38	77			

ORTHOPAEDIC WORK.

The Child Welfare Branch is responsible for the care of children under 6 years of age living within the municipal area who are suffering from orthopaedic conditions but are not in hospital.

The Department employs one orthopaedic health visitor who works in close collaboration with the with the Orthopaedic District Sisters of the Provincial Administration, and divides her time between domiciliary visiting and clinic sessions.

Clinics.

Monthly sessions are held in four centres with an orthopaedic surgeon in attendance, two orthopaedic sisters from the Provincial Administration, an orthopaedic technician, clinic clerk and Cripple Care Worker.

Weekly sessions are also held in these centres, where the treatment ordered by the orthopaedic surgeon is carried out by the orthopaedic sisters.

The following figures give an indication of the work of the orthopaedic health visitor:—

Number of children on record—

European	38
Coloured	299
Bantu	44

House visits made 1,728

Sessions held—

Surgeons	44
Sisters	324
	368

Attendances at sessions—

Surgeons	1,454
Sisters	6,817
	8,271

The causes of disablement are varied but more than half of these are due to poliomyelitis and congenital deformities.

DAY NURSERIES AND NURSERY SCHOOLS.

The employment of married women in factories, domestic work and other spheres of labour has become a necessity for many families, who could not otherwise maintain a reasonable standard of living.

Many of the infants of working mothers are cared for by foster mothers. Although the care given is often good, in some cases it leaves much to be desired.

Nurseries and nursery schools are therefore an essential health measure for the underprivileged child providing, as they do, proper care in hygienic surroundings, in addition to forming constructive social and educational backgrounds. Four nursery schools, one with creche attached, and a day nursery at Langa Township are maintained by the Branch and are supervised by a senior European nursery school teacher.

A new creche and day nursery at the Guguletu Bantu Township was opened on 7th October, 1963.

All private nursery schools and creches must be registered by the State Department of Social Welfare, and with a view to assisting this body, a municipal health visitor visits them and reports on the suitability or otherwise of the premises in question.

BOKMAKIRIE CRECHE AND NURSERY SCHOOL.

This nursery school serves the Council's housing schemes in Kew Town and Bokmakirie and has accommodation for 80 children under school age, 20 babies between 3 months and 2 years, and 60 children between 2 and 6 years of age. The nursery is open from 8 a.m. to 5 p.m., Mondays to Fridays, and meals are provided. It is staffed by a creche superintendent, three non-European junior nursery school teachers, and three helpers.

BLOEMHOF NURSERY SCHOOL.

This school is run in the Bloemhof Community Centre attached to the municipal housing scheme in Constitution Street, Cape Town. There is accommodation for 40 children from 3 to 6 years of age, under the supervision of a European nursery school teacher, and a non-European junior nursery school teacher. The nursery is open from 8 a.m. to 5 p.m. and a mid-day dinner is provided.

SHELLEY STREET NURSERY SCHOOL.

This nursery school is situated in the centre of a busy factory area in Salt River, and is very popular. There is accommodation for 45 children from 3 to 6 years of age, under the supervision of two non-European junior nursery school teachers. The nursery school is open from 8 a.m. to 5 p.m. and meals are provided.

HYMAN LIBERMAN INSTITUTE NURSERY SCHOOL.

The nursery school at the Hyman Liberman Institute is conducted in the hall of the Institute and caters for 50 children between the age of 3 and 6 years. The facilities available at this school are not very good and plans have been submitted to the responsible Committee of the Council for approval so that a modern nursery school can be erected adjacent to the present site. The nursery school is open from 8 a.m. to 5 p.m. and meals are provided.

LANGA DAY NURSERY.

A day nursery is conducted in the Langa Bantu Township for 20 infants and 60 children between the age of 2 and 6 years. There are two trained Bantu nurses, three adult helpers and 2 juvenile helpers.

GUGULETU NURSERY SCHOOL AND CRECHE.

A new day nursery at Guguletu Bantu Township, built at a cost of approximately R13,000, was opened on 7th October, 1963. It has accommodation for 20 babies under two years of age, and 60 children between the age of 2 and 6 years.

The attendances at the municipal nurseries and nursery schools during the year are shown in the following table :-

	Shelley St.	Bloemhof	Bokmakirie	Langa	Liberman Institute	Guguletu
New entrants	29	32	28	50	26	81
Mean total on register ...	50	45	80	75	50	79
Daily sessions	202	210	210	248	210	61
Mean attendances per session	42	38	69	58	42	67
Total attendances	8,528	7,973	14,470	14,443	8,920	4,094

A resident nursery for the infants of tuberculous non-European women is run in a cottage in the municipal housing scheme in Kew Town. The infants are admitted, as soon after birth as possible, to enable the mothers to be transferred to a tuberculosis hospital for treatment.

The home has accommodation for six infants with a non-European house-mother in charge. They are vaccinated with B.C.G., and remain in the home until the mothers are in a fit condition to care for them or some other suitable arrangements can be made.

PROTECTED INFANTS.

Children under 7 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 for Child Welfare of the district. Infant protection visitors who visit and report on these children are appointed by the Commissioner.

In Cape Town, the health visitors of the Child Welfare Branch have been nominated to act as infant protection visitors.

The practice of placing children with foster mothers particularly amongst non-Europeans is very common in Cape Town. Many of these foster mothers diligently care for their wards but difficulties do arise when payments tend to become irregular or cease altogether owing to the fact that the parents, being unmarried, frequently disappear.

All social problems which might affect the welfare of the young child are brought to light by the health visitor at her periodic visits. Should a foster mother prove unsuitable, the Commissioner for Child Welfare is informed so that arrangements may be made for the removal of the child to some more suitable person.

The number of protected infants registered in the year was as follows —

Cape Town Magisterial district	...	...	82
Wynberg Magisterial district	...	...	208
			<u>290</u>

ADOPTION OF CHILDREN.

Any person who is desirous of adopting a child in Cape Town usually applies in the first instance to a recognised Adoption Society. Similarly, anyone who wishes to have a child adopted is referred to the Secretary of any one of these Adoption Societies. Where an adoption is to be arranged, these Societies act in an advisory capacity to the Commissioner for Child Welfare who is responsible for authorising legal adoption under the Children's Act. The list of proposed adoptions is referred to the Maternal and Child Welfare Officer for information.

During the current year the following number of infants were placed with adoptive parents —

Europeans	...	...	96
Non-Europeans	...	...	116
			<u>212</u>

SOCIAL WELFARE WORK

One social welfare worker is attached to the Branch, particularly to safeguard the interests of unmarried mothers and their infants. She is available for interviews each morning and in the afternoons visits private homes, institutions and maternity homes in connection with cases.

Many requests for advice and help from expectant mothers, and mothers of small children, are in connection with non-support from fathers and reputed fathers. Many of these are for various reasons loath to report to the non-support officer.

As required under the Immorality Act 1957, all cases of unmarried mothers under the age of 16 years are fully investigated. During 1963, 280 cases (20 European, 198 Coloured and 62 Bantu) were so investigated.

The social welfare investigator visits in an advisory capacity rescue homes and reports to the health visitors when the mothers and babies leave such institutions.

Close contact and co-operation is maintained with Societies such as the Society for the Protection of Child Life, Afrikaanse Christelike Vrouens Vereniging, Mental Health Society, Social Welfare Department and non-support officers.

SECTION IV. — DENTAL BRANCH.

(DR. L.H. CROXFORD, PRINCIPAL DENTAL OFFICER.)

Dental disease among the indigent and semi-indigent population of Cape Town has shown no evidence of any decrease during the past year.

The erection of two additional dental clinics at Petunia Street, Silvertown, and at Guguletu Bantu Township in 1963, has not appreciably alleviated the position. The increase of population merely serves to accentuate the inadequacy of the means we adopt to combat this almost universal problem.

Fluoridation of Water Supplies.

This method of combating dental caries has made progress during the past year, and has become acceptable to a larger group of responsible persons all over the world.

The recent ruling in the Irish Courts that the addition of fluoride to the extent of 1 p.p.m. does not infringe any rights guaranteed by the Irish Constitution will have interesting and beneficial repercussions in centres where doubt regarding this method of preventing dental caries is still being assessed. It is necessary that the State Department of Health, through the Minister, make an authoritative statement on this matter as soon as possible.

REPORT OF THE MEDICAL OFFICER OF HEALTH

DENTAL CLINICS

Centre		Sessions	New cases		Total attendances		Extractions (Persons)		Fillings (Persons)		Examinations and other dental treatment		Dentures supplied (Persons)	
			E.	N.E.	E.	N.E.	E.	N.E.	E.	N.E.	E.	N.E.	E.	N.E.
Hope Street, Cape Town	General:													
	Adults ...	1,540	1,104	5,811	3,724	15,148	585	4,221	472	251	2,736	10,718	258	932
	School children ...	373	754	1,811	2,866	3,596	564	1,521	369	80	1,976	2,025	4	
	Total ...	1,913	1,858	7,622	6,590	18,744	1,149	5,742	841	331	4,712	12,743	262	932
Aspeling Street, Cape Town	Nursing and expectant mothers ...	54		81		167		152				15		
	Pre-school children ...			348		633		613				20		
	School children ...	39		821		957		756				201		
	Total ...	93		1,250		1,757		1,521				236		
Woodstock	Nursing and expectant mothers ...	28		21		74		70				4		
	Pre-school children ...			129		284		272				12		
	School children ...	52	262	617	380	912	260	719	9	1	111	192		
	Total ...	80	262	767	380	1,270	260	1,061	9	1	111	208		
Maitland	General:													
	Adults ...	50	18	497	36	861	17	365			19	496		
	Children ...		28	273	66	498	38	223			28	275		
	Nursing and expectant mothers ...	97	15	344	17	444	9	365			8	79		
	Pre-school children ...		44	499	56	663	51	585			5	80		
	School children ...	145	183	1,409	445	1,756	166	1,478	220		68	279		
	Total ...	292	288	3,022	620	4,222	281	3,016	220		128	1,209		
Athlone	Nursing and expectant mothers ...	72		163		214		202				45		
	Pre-school children ...			539		720		693				27		
	School children ...	62	30	1,264	30	1,553	29	1,388			1	165		
	Total ...	134	30	1,966	30	2,487	29	2,283			1	237		
Silvertown	General:													
	Adults ...	29		209		349		145				204		
	Children ...			221		415		211				204		
	Nursing and expectant mothers ...	61		162		242		205				37		
	Pre-school children ...			382		524		444				80		
	School children ...	69		1,040		1,598		1,368				230		
	Total ...	159		2,014		3,128		2,373				755		
Wynberg	Nursing and expectant mothers ...	36	2	125	4	156	4	152				4		
	Pre-school children ...		10	248	13	324	12	310				14		
	School children ...	177	216	1,539	450	2,165	162	1,649	185	81	114	441		
	Total ...	213	228	1,912	467	2,645	178	2,111	185	81	115	459		
Retreat	General:													
	Adults ...	102	4	1,115	12	1,966	7	839			6	1,130		
	Children ...		8	558	25	1,027	16	461			9	566		
	Nursing and expectant mothers ...	66	1	285	2	395	2	352				46		
	Pre-school children ...		1	431	1	591	1	544				48		
	School children ...	60		935		1,491		1,208				283		
	Total ...	228	14	3,324	40	5,470	26	3,404			15	2,073		
Lansdowne	Nursing and expectant mothers ...	2				4		4				5		
	Pre-school children ...					26		21						
	School children ...	107	227	690	492	797	192	628	188		115	169		
	Total ...	109	227	690	492	827	192	653	188		115	174		
Langa	Residents	50		470		1,025		914					111	
Guguletu	General:													
	Adults ...	96		889		1,501		614				889		
	Children ...			916		1,538		626		1		913		
	Nursing and expectant mothers ...	30		137		235		119				119		
	Pre-school children ...			138		260		146				115		
	Total ...	126		2,080		3,534		1,505		1		2,036		
City Hospital	In-patients	10	4	95	6	186	3	70			3	116		
Brooklyn Chest Hospital	In-patients	13		153		292		120				172		
Dr. A.J. Stals Sanatorium	In-patients	12		159		459		194				265		
Spencer Road, Salt River	Tuberculosis out-patients	75	1	267	46	1,141	2	253	8	5	37	896	5	16
Lady Michaelis Home	School children	4	31	17	41	23	20	6			21	17		
Other schools	School children	103	2,221	2,752	2,323	2,795		43			2,323	2,752		
Total	Adults ...		1,148	10,804	3,845	24,566	628	9,204	479	256	2,808	15,205	263	1,09
	Children ...		4,122	17,771	8,273	25,883	1,630	16,072	1,820	541	4,937	9,308	4	
	Persons ...	3,614	5,270	28,575	12,118	50,449	2,258	25,276	2,299	797	7,745	24,513	267	1,09

Dental Survey.

A dental survey of 5,000 Cape Town school children was carried out in 1963 by this Branch, with some surprising and astonishing results. It was found that, on the average, each child, irrespective of race, sex, or social status, had 8.5 decayed or decaying teeth.

This indicates that purely local measures in the prevention of dental caries are totally inadequate and that more effective general methods of prevention (e.g. fluoridation) are necessary.

The subjoined table gives the detailed findings of the survey which were arrived at after purely macroscopic examinations with dental mirrors and probes.

Race	Income group	Number of children	Missing teeth	Extractions required	Teeth filled	Teeth decayed	Total decayed, missing and filled	Average per child	Caries free
European	Upper	1,377	2,153	339	7,388	2,469	12,349	8.9	27
	Lower	1,143	3,013	660	2,434	3,683	9,790	8.5	21
Non-European	Upper	977	3,019	725	309	4,077	8,130	8.1	25
	Lower	1,377	3,787	1,426	108	6,306	11,627	8.4	41
Total		4,894	11,972	3,150	10,239	16,535	41,896	8.5	114

Apart from this special survey of school children, attendances at the sessions were maintained at approximately the same level as in the previous year. An increase of 15 per cent in attendances of non-European children for extractions coupled with a decrease of 10 per cent for fillings cannot be viewed with complacency.

Staff.

Dr. N.P. Louw and Dr. L. Cottrell, the Deputy and the Assistant Full-time Dental Officers' resignations from the branch took effect on the 31st December, 1963. Both officers, who were highly skilled in the type of work provided by the branch, will be sadly missed.

The full-time staff of the Dental Branch as at 31st December, 1963, consisted of the following —

Chief Dental Officer
Deputy Dental Officer
Assistant Dental Officer
Senior Clinic Nurse
Dental Nurses, 6
Clinic Assistants, 4
Dental Mechanics, 5
Social Welfare Visitor
Clerical Staff, 4
Caretaker/Cleaner
Labourer
Laundresses, 3
Domestic

The full-time professional staff is assisted by a number of part-time dental surgeons, anaesthetists, nurses and clinic assistants. The table on page 40 indicates the services rendered during the year.

SECTION V. — INFECTIOUS AND OTHER DISEASES.

The cases of compulsorily notifiable diseases reported in the Municipality of Cape Town during the year are shown in the tables on pages 105 to 107 classified by race and:

Table N, in months according to date of notification.

Table O, in age and sex groups.

Table P, in wards.

Other statistical details as to deaths from infectious diseases are contained in Tables A, B, and C on pages 90 to 92.

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

Distribution of cases by race.

	European	Coloured	Bantu	Asiatic	Total
Tuberculosis, pulmonary	112	1,035	519	6	1,672
Tuberculosis, other forms	6	72	19	—	97
Enteric	—	29	3	—	32
Diphtheria	6	24	3	—	33
Scarlet fever	36	12	—	1	49
Erysipelas	3	4	1	—	8
Cerebrospinal fever ...	3	13	2	—	18
Infective encephalitis	1	2	1	—	4
Acute poliomyelitis ...	—	15	3	—	18
Ophthalmia neonatorum	52	232	26	1	311
Puerperal fever	—	1	1	—	2
Leprosy	—	—	1	—	1
Anthrax	—	1	—	—	1
Whooping cough	20	58	2	—	80
Lead poisoning	—	1	—	—	1
Kwashiorkor	—	292	90	2	384
Total	239	1,791	671	10	2,711

ENTERIC OR TYPHOID FEVER

The number of cases reported during the year, corrected for misdiagnosis and imported cases, was 32, all non-European, equivalent to an incidence rate of 0.06 per 1,000 population, (0.09 for non-Europeans only). There were no deaths from this disease. During the previous year there were 9 cases.

This unfortunate increase in incidence was due to two factors, i.e., a family of eight in Bonteheuwel being found to be suffering from the disease, and thirteen cases admitted from, or known to have contracted the disease in the local gaol.

A patient admitted to Groote Schuur Hospital direct from this gaol was notified to this Department as suffering from typhoid fever and removed to the City Infectious Disease Hospital. The serious implications of this occurrence were immediately referred to the State Health Service. Thereafter, unilateral action by this authority created many problems. Cases from the gaol, and from among prisoners discharged therefrom were admitted to the City Hospital as late as six weeks after the first notification. Only seven out of 60 municipal residents discharged from the gaol after the closure of the female section were traced. Two of these were admitted to the City Hospital suffering from typhoid fever. The gaol caters for short term prisoners only, and the episode was soon over as far as the prison authorities were concerned, but the effects, e.g. carriers, may have repercussions for many years to come.

Three typhoid carriers were discovered, one of whom was an aged immigrant from Central Africa, and another a Bantu female who had served a sentence in the local gaol.

In addition, 24 other cases were admitted to the City Infectious Diseases Hospital from outside the municipal area.

Further particulars will be found in the table on page 43 and in Tables N to P on pages 105 to 107

DIPHTHERIA

The cases of this disease reported during the year, corrected for misdiagnosis and imported cases, numbered 33 (6 European and 27 non-European), equivalent to an incidence rate of 0.06 per 1,000 population (0.03 European and 0.07 non-European). During the previous year 6 European and 17 non-European cases were reported.

Although a very slight rise in the number of cases as compared with the previous year has to be reported, the record low incidence of the previous year, 1962, can now definitely be regarded as a milestone to remember in the slow but persistent anti-diphtheria work of the department.

Of the 33 cases in the year under review, three non-Europeans aged 5 months, 6 months and 2 years respectively died. There was no record of immunisation in any of these fatal cases.

One of the cases notified, a child of 3 years, had received two injections of triple antigen some four months previously, and four other children had received full immunisation at an earlier age.

Two cases occurred in institutions, one of them being a trainee nurse. No secondary infection occurred within the same household.

All the cases were admitted to the City Infectious Diseases Hospital.

Two of the 33 cases reported occurred in Guguletu Township, one of which proved fatal.

As in the previous year, one-third of the total cases occurred in Ward 10 (Athlone).

Excluded from the above figures are 53 cases from outside the city area but treated at the City Hospital. Two European and four non-European deaths occurred in this group.

Diphtheria Carriers.

Thirteen non-European diphtheria carriers were reported in the city area and one at Guguletu Township. All were admitted to the City Infectious Diseases Hospital. In addition, five diphtheritic carriers were admitted to the City Hospital from outside the city limits.

Details of the department's work in immunisation is given in the following table and also on page 36.

Year	Number of Notifications			Persons Immunized		
	Eur.	Non-Eur.	All Races.	Eur.	Non-Eur.	All Races.
1939-40 ..	286	130	416	2,541	2,421	4,962
1944-45 ..	89	89	178	2,517	8,465	10,982
1949-50 ..	60	62	122	3,298	10,256	13,554
1954-55 ..	32	81	113	4,162	17,955	22,117
1960 ..	27	60	87	4,021	20,422	24,443
1961 ..	17	61	78	4,409	23,369	27,769
1962	6	17	23	5,578	27,485	33,063
1963	6	27	33	6,362	26,476	32,838

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.
Average												
1916-20	2.04	2.03	0.14	0.42	1.58	0.47	0.10	0.17	1.54	0.17	0.01	—
1921-25	1.80	1.99	0.19	0.36	1.23	0.36	0.09	0.08	0.87	0.10	0.00	—
1926-30	0.81	1.03	0.09	0.21	1.39	0.59	0.09	0.12	1.42	0.10	0.01	0.01
1931-35	0.40	0.51	0.04	0.11	1.24	0.73	0.05	0.09	1.42	0.15	0.00	—
1936-40	0.22	0.35	0.02	0.05	2.00	1.17	0.07	0.17	1.78	0.13	0.01	0.00
1941-45	0.21	0.35	0.02	0.07	0.99	0.66	0.04	0.08	1.13	0.07	0.01	0.00
1946-50	0.12	0.37	0.02	0.06	0.25	0.33	0.02	0.04	1.22	0.16	—	0.00
1951-55	0.07	0.24	—	0.01	0.18	0.20	0.01	0.02	0.96	0.13	—	0.00
1956-60	0.03	0.13	—	0.00	0.10	0.16	0.01	0.01	0.55	0.04	0.00	0.00
Year												
1961	—	0.01	—	—	0.09	0.20	0.01	0.02	0.48	0.05	—	—
1962	—	0.03	—	—	0.03	0.06	—	0.01	0.36	0.01	—	—
1963	—	0.10	—	—	0.03	0.08	—	0.01	0.18	0.04	—	—

SCARLET FEVER

The cases of this disease reported in the year, corrected for misdiagnosis and imported cases, numbered 49 (36 European and 13 non-European), equivalent to an incidence rate of 0.09 per 1,000 population (0.18 European and 0.03 non-European). There were no deaths from this disease. In the previous year there were 74 cases.

There were no cases in the Bantu Townships.

Spread of infection occurred in three instances with two cases in each house. Permission was granted to nurse 25 cases at home under satisfactory conditions of isolation, including two instances of two cases in one household. One case occurred in a mothercraft training centre, and three cases in a mental hospital.

In addition, 12 cases were admitted to the City Infectious Diseases Hospital from outside the municipal area.

Other particulars will be found in the table above and in Tables N to P on pages 105 to 107.

CEREBROSPINAL FEVER

During the year 18 cases (3 European and 15 non-European) were notified, equivalent to an incidence rate of 0.03 per 1,000 population (0.02 European and 0.04 non-European). One of these cases died in the City Hospital. In the previous year 36 cases were confirmed of which four died. One of these deaths was registered in the year under review.

All the cases were treated at the City Infectious Diseases Hospital except one case admitted to the Military Hospital.

Two of the abovementioned cases occurred in Guguletu Township. In addition, 22 cases (7 European and 15 non-European) were admitted to the City Infectious Diseases Hospital from outside the municipal area. One of these non-European cases proved fatal.

Further particulars will be found in the following table and in Tables N to P on pages 105 to 107.

ACUTE POLIOMYELITIS

The cases of this disease reported during the year, corrected for misdiagnosis and imported cases, numbered 18, all non-European, equivalent to an incidence rate of 0.03 per 1,000 population (0.05 for non-Europeans only). There were no deaths from this disease. During the previous year there were 6 cases.

All the cases except one were admitted to the City Infectious Disease Hospital. There was one instance of secondary infection (twins). No institution was involved.

Two of the cases had been fully immunised, while two others had received single oral doses. The remainder were un-immunised. Two of the 18 cases reported during the year occurred in Guguletu Township.

In addition, 30 cases (5 European and 25 non-European) were admitted to the City Infectious Diseases Hospital from outside the municipal area, with one death.

Information regarding polio inoculation will be found on page 36, and further details of incidence in Table N to P on pages 105 to 107.

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.
Average												
1916-20	3	3	1	2	3	2	1	1				
1921-25	4	6	3	3	1	1	0	1	4	2	3	2
1926-30	19	78	11	45	5	2	1	0	6	5	4	4
1931-35	5	22	3	17	6	5	0	1	4	3	1	1
1936-40	4	18	2	10	4	5	1	—	2	3	1	1
1941-45	26	95	4	16	12	5	1	1	2	2	1	1
1946-50	12	40	2	9	8	8	1	0	1	2	—	1
1951-55	12	50	1	8	17	13	2	—	2	2	—	1
1956-60	7	22	1	3	32	75	2	3	1	10	1	3
Year												
1961	5	20	—	1	3	5	—	—	1	5	—	4
1962	5	29	—	4	—	6	—	—	1	5	—	4
1963	3	15	1	1	—	18	—	—	1	3	—	1

INFLUENZA AND PNEUMONIA

These diseases are not now notifiable in the Cape Town Municipality, but deaths from influenza and from bronchitis and pneumonia, with the corresponding death rates, are set out in the following table:—

Period	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
Average												
1921-25	8	0.07	13	0.15	37	0.35	198	2.30	88	0.84	394	4.57
1926-30	20	0.16	31	0.28	36	0.29	240	2.26	82	0.66	379	3.54
1931-35	18	0.12	25	0.19	32	0.23	205	1.58	81	0.57	392	3.04
1936-40	21	0.13	20	0.14	28	0.18	176	1.21	75	0.48	424	2.89
1941-45	10	0.06	12	0.07	22	0.13	143	0.84	64	0.39	467	2.74
1946-50	4	0.03	9	0.05	18	0.09	105	0.52	56	0.30	365	1.81
1951-55	5	0.03	6	0.02	16	0.08	50	0.20	52	0.27	249	0.96
1956-60	3	0.02	6	0.02	11	0.06	30	0.09	53	0.27	263	0.78
Year												
1961	6	0.03	10	0.03	7	0.04	18	0.06	58	0.30	272	0.91
1962	—	—	2	0.01	11	0.06	32	0.11	61	0.32	249	0.82
1963	6	0.03	9	0.03	11	0.06	54	0.16	38	0.19	308	0.90

The following figures for deaths from bronchitis and pneumonia show the contrast between Europeans and non-Europeans compared with the previous year:—

	1963		1962	
	European	Non-European	European	Non-European
Under 5 years of age ...	6	249	13	203
0-1 years ...	6)	177)	11)	156)
1-2 years ...	—)	48)	2)	33)
2-5 years ...	—)	24)	—)	14)
All other ages	43	113	59	78
	<u>49</u>	<u>362</u>	<u>72</u>	<u>281</u>

The infant mortality rate per 1,000 live births from these causes for a series of past years is set out in Table K, on pages 101 and 102.

The seasonal character of mortality from bronchitis and pneumonia will be found in Table C, on page 92.

LEPROSY

One case of leprosy was reported from Langa Township in the person of a Bantu male adult who had recently arrived in the city from the native territories.

MEASLES

87 measles deaths (85 non-European) occurred in the city during the year. In the previous year there were 29 deaths. 63 of the city deaths in the present period occurred in children under two years of age, and 22 before reaching the age of five years. 30 non-residents also died of measles.

During the year, 523 cases of measles were admitted to the City Infectious Diseases Hospital, of whom 203 were from outside the city area, 9 from Langa Township and 18 from Guguletu Township.

Of the 320 city cases, one was a doctor and 17 were nurses at general hospitals. Three nurses at the City Hospital also contracted the disease. The greatest prevalence was during the five months of winter.

It should be noted that measles is not a notifiable disease except under certain circumscribed circumstances, so that the figures quoted above only refer to those cases brought to the notice of the department through admission to the City Infectious Diseases Hospital as the result of inability of isolating, bad home conditions or to serious complications supervening.

The grave increase in morbidity and mortality from measles as revealed by available figures is a cause for some concern.

Period	Measles			
	Deaths		Rate per 1,000 population	
	European	Non-European	European	Non-European
Average:				
1916-20	7	34	0.08	0.43
1921-25	5	33	0.05	0.38
1926-30	5	16	0.04	0.16
1931-35	3	32	0.02	0.24
1936-40	2	15	0.01	0.11
1941-45	3	24	0.02	0.14
1946-50	1	24	0.01	0.12
1951-55	—	14	0.00	0.05
1956-60	1	18	0.00	0.05
Year				
1961	1	33	0.01	0.11
1962	1	28	0.01	0.09
1963	2	85	0.01	0.25

WHOOPIING COUGH

For the period under review the number of cases was 80 (20 European and 60 non-European), equivalent to an incidence rate of 0.14 per 1,000 population (0.10 European and 0.16 non-European). There were 8 non-European deaths registered, but one of these cases was notified in the previous year. During the previous year there were 55 cases and 8 deaths.

Spread of infection occurred in nine instances, i.e. two cases were notified in each of four dwellings, three cases in each of two dwellings, and four cases in each of three dwellings. Two cases occurred in institutions without spread of infection. 29 of the cases were admitted to the City Infectious Diseases Hospital, four of whom died. The distribution of the 80 cases according to months of occurrence, wards and age-groups will be found in Tables N to P on pages 105 to 107.

In addition to above figures, 19 cases were admitted to the City Hospital from outside the municipal area.

Two of the 80 cases occurred in Guguletu Township.

Further details of whooping cough immunisation at municipal centres will be found on page 36.

Period	Whooping cough							
	Notifications		Incidence rate per 1,000 population		Deaths		Death rate per 1,000 population	
	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.	Eur.	Non-Eur.
Average								
1916-20	—	—	—	—	11	37	0.13	0.48
1921-25	—	—	—	—	10	30	0.09	0.35
1926-30	—	—	—	—	10	33	0.08	0.31
1931-35	—	—	—	—	7	34	0.04	0.27
1936-40	—	—	—	—	4	74	0.02	0.51
1941-45	—	—	—	—	3	45	0.02	0.26
1946-50	—	—	—	—	2	42	0.01	0.20
1951-55	188	576	1.00	2.24	1	19	0.00	0.07
1956-60	48	162	0.25	0.48	—	8	—	0.02
Year								
1961	24	108	0.12	0.36	—	8	—	0.03
1962	15	40	0.08	0.13	—	8	—	0.03
1963	20	60	0.10	0.18	—	8	—	0.02

DIARRHOEAL DISEASES

The deaths registered during the year due to diarrhoea and enteritis (corrected) numbered 469 as compared with 375 in the previous year. The corresponding death rate for the city was 0.87 per 1,000 population (0.04 European and 1.35 non-European).

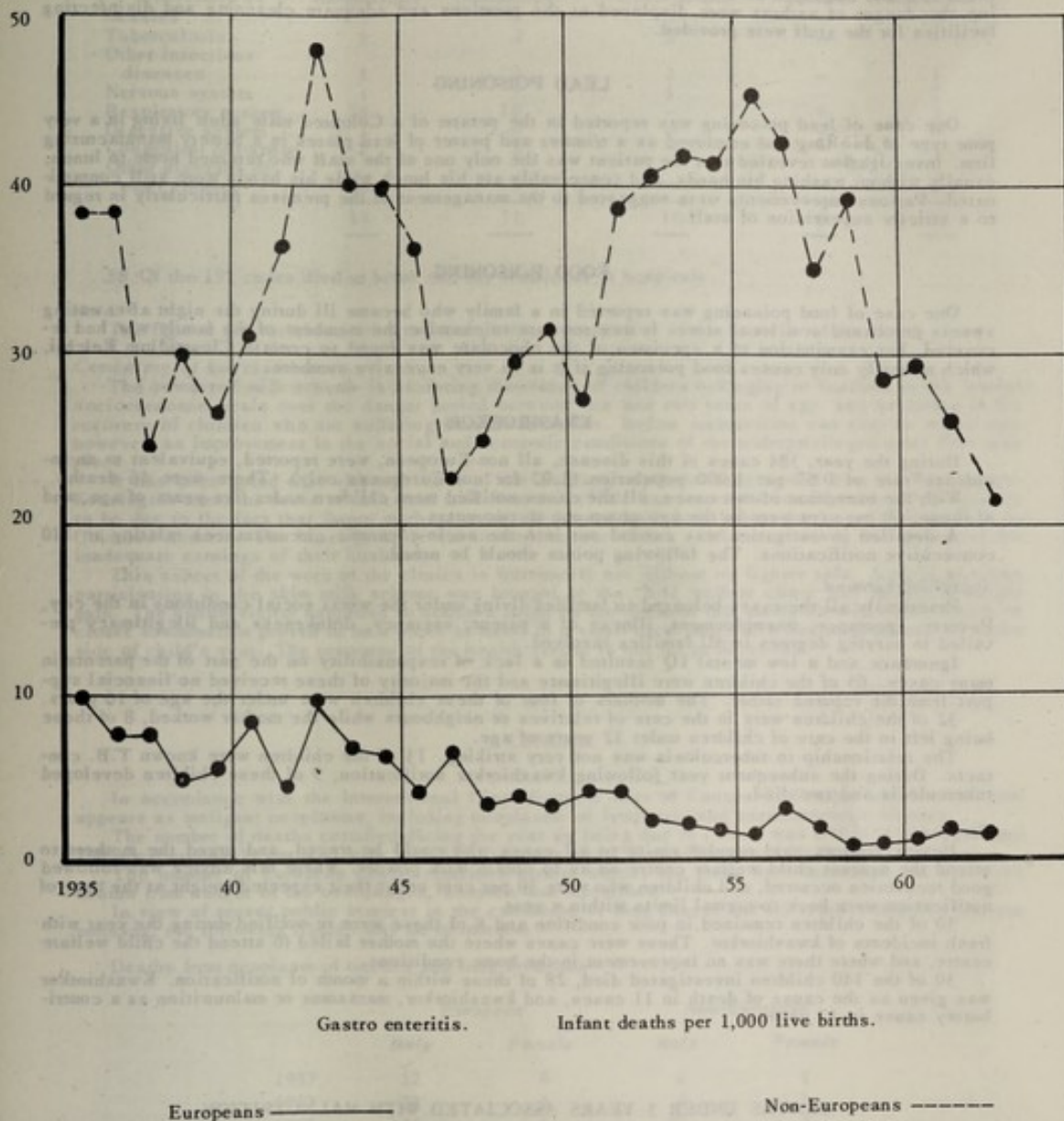
The deaths from diarrhoeal diseases for the year are classified as follows—

Int. Code No.	Disease	European	Non-European	All races
571, 764	Gastro-enteritis and colitis, including diarrhoea of the newborn	8	461	469
572	Chronic enteritis and ulcerative colitis	3	5	8
043	Cholera	—	—	—
045	Dysentery, bacillary	—	—	—
046	Dysentery, amoebic	—	4	4
047-048	Dysentery, other forms	—	—	—
	Total ...	11	470	481
	Diarrhoeal death rate per 1000 population	0.06	1.37	0.89

Of the 461 non-European deaths from diarrhoea and enteritis 110 occurred in the Bantu Townships, 110 in Ward 10, 70 in Ward 15, and 171 in the rest of the city. 97.8 of these deaths were under five years of age, i.e. 342 under one year, 84 between one and two years, and 25 between two and five years. Compared with the previous year, the number of deaths increased in Guguletu Township and in Ward 10, but decreased appreciably in Ward 8.

Infant deaths from diarrhoea and enteritis for a series of years—

Year	Diarrhoea and Enteritis					
	European		Non-European		All races	
	Male	Female	Male	Female	Male	Female
Average						
1946-50	9	6	142	107	151	113
1951-55	5	3	224	206	229	209
1956-60	3	2	210	195	213	197
Year						
1961	3	4	181	150	184	154
1962	3	2	183	158	186	160
1963	2	2	190	152	192	154



ANTHRAX

One case of anthrax was reported in the person of a Coloured male adult living at Bonteheuwel (Ward 10), and employed as a skin sorter at a fresh produce warehouse. Notices and pictures explaining the danger of anthrax were displayed at the premises and adequate cleansing and disinfecting facilities for the staff were provided.

LEAD POISONING

One case of lead poisoning was reported in the person of a Coloured male adult living in a very poor type of dwelling and employed as a trimmer and paster of lead plates in a battery manufacturing firm. Investigation revealed that the patient was the only one of the staff who returned home to lunch, usually without washing his hands, and conceivably ate his lunch while his hands were still contaminated. Various improvements were suggested to the management of the premises particularly in regard to a stricter supervision of staff.

FOOD POISONING

One case of food poisoning was reported in a family who became ill during the night after eating sweets purchased at a local store. It was too late to examine the members of the family who had recovered, but examination of a specimen of the chocolate was found to contain *Clostridium Welchii*, which normally only causes food poisoning if it is in very excessive numbers.

KWASHIORKOR

During the year, 384 cases of this disease, all non-European, were reported, equivalent to an incidence rate of 0.67 per 1,000 population (1.02 for non-Europeans only). There were 46 deaths. With the exception of two cases, all the cases notified were children under five years of age, and of these, 60 per cent were in the age group one to two years.

A detailed investigation was carried out into the socio-economic circumstances relating to 140 consecutive notifications. The following points should be noted.

Social background.

Practically all the cases belonged to families living under the worst social conditions in the city. Poverty, ignorance, unemployment, illness of a parent, vagrancy, drunkenness and illegitimacy prevailed in varying degrees in all families involved.

Ignorance and a low mental IQ resulted in a lack of responsibility on the part of the parents in many cases. 65 of the children were illegitimate and the majority of these received no financial support from the reputed father. The mothers of four of these children were under the age of 16 years.

32 of the children were in the care of relatives or neighbours while the mother worked, 8 of these being left in the care of children under 12 years of age.

The relationship to tuberculosis was not very striking. 13 of the children were known T.B. contacts. During the subsequent year following kwashiorkor notification, 9 of these children developed tuberculosis and two died.

Progress

Health visitors paid regular visits to all cases who could be traced, and urged the mothers to attend the nearest child welfare centre so as to obtain milk powder. Where this advice was followed good recoveries occurred, and children who were 30 per cent under their expected weight at the time of notification were back to normal limits within a year.

30 of the children remained in poor condition and 8 of these were re-notified during the year with fresh incidents of kwashiorkor. These were cases where the mother failed to attend the child welfare centre, and where there was no improvement in the home conditions.

30 of the 140 children investigated died, 28 of these within a month of notification. Kwashiorkor was given as the cause of death in 11 cases, and kwashiorkor, marasmus or malnutrition as a contributory cause in 12 cases.

DEATHS UNDER 5 YEARS ASSOCIATED WITH MALNUTRITION

Deaths in children under 5 years of age in the year under review in which malnutrition probably played a major role were as follows—

Deaths from gastro enteritis	555
Deaths in which malnutrition is mentioned as a main or contributory cause	191

These 191 deaths are analysed as follows—

Classified as	City residents	Bantu Townships	Imported cases	Total
Kwashiorkor	39	7	36	82
Other Nutritional deficiency states	7	1	2	10
Other causes	59	7	33	99
	<u>105</u>	<u>15</u>	<u>71</u>	<u>191</u>

The 99 deaths attributed to other causes are analysed as —

Classified as	Contributory cause				
	Malnutrition	Marasmus	Kwashiorkor	Rickets	Diarrhoea
Measles	5	4	5	—	13
Tuberculosis	3	2	2	—	—
Other infectious diseases	1	2	2	—	1
Nervous system	1	3	1	—	2
Respiratory system	18	10	—	6	1
Digestive system	1	—	—	—	—
Congenital deformity	2	1	—	—	1
Other diseases of early infancy	2	9	—	—	1
	<u>33</u>	<u>31</u>	<u>10</u>	<u>6</u>	<u>19</u>

58 Of the 191 cases died at home and the remainder in hospitals.

Note.

The figures set out above refer to local deaths irrespective of the domicile of deceased.

Combating of kwashiorkor.

The powdered milk scheme is assisting thousands of children belonging to families in the lowest socioeconomic scale over the danger period between one and two years of age, and assisting in the recovery of children who are suffering from kwashiorkor. Before malnutrition can ever be wiped out, however, an improvement in the social and economic conditions of the underprivileged must first take place.

It has been noted that although most of the Bantu group have been moved from the Windermere-Kensington area, the issue of fullcream milk from this clinic has increased considerably. This appears to be due to the fact that Bantu mothers as a rule breast feed their babies for longer periods than do Coloured mothers. The latter group return to work sooner after a confinement so as to supplement the inadequate earnings of their husbands.

This aspect of the work of the clinics is fortunately not without its lighter side. A child who was participating in the skim milk scheme was brought to the child welfare clinic and showed a weight gain. The health visitor happened to notice a bulge on the chest of this partly clothed child, which on closer examination proved to be a piece of metal in a small cloth bag which had been pinned to under side of child's vest. The response of the health visitor is not for publication!

CANCER

In accordance with the International Classification List of Causes of Death, this disease now appears as malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues.

The number of deaths certified during the year as being due to cancer was 604 (314 European and 290 non-European) compared with 569 (313 European and 256 non-European) for the previous year.

The number of European deaths remained almost static, but there were increased non-European deaths from cancer of the oesophagus, stomach and intestines.

In view of recent public interest in the causation of lung cancer and its relationship to cigarette smoking, the following figures may be of interest —

Deaths from neoplasm of trachea and lung bronchus —

	European		Non-European	
	Male	Female	Male	Female
1937	12	6	6	1
1947	21	3	4	2
1957	46	6	27	5
1960	34	12	27	2
1961	33	11	33	3
1962	41	9	31	9
1963	37	9	33	8

From these figures it is obvious that lung cancer among males is worthy of consideration such deaths being further analysed as follows —

	European		Non-European	
	Under 55 yrs.	Over 55 yrs.	Under 55 yrs.	Over 55 yrs.
	%	%	%	%
1958	17	83	43	57
1959	22	78	41	59
1960	9	91	48	52
1961	12	88	36	64
1962	17	83	45	55
1963	17	83	29	70

The deaths from cancer registered during the year and the corresponding rates are classified in the following table according to the parts of the body affected.

Int. Code No.	Parts affected	European		Non-European		All races	
		Deaths	Rate	Deaths	Rate	Deaths	Rate
140-148	Malignant neoplasm of buccal cavity and pharynx	10	0.05	9	0.02	19	0.03
150	Malignant neoplasm of oesophagus	4	0.02	21	0.06	25	0.04
151	Malignant neoplasm of stomach	45	0.23	62	0.17	107	0.19
152-153	Malignant neoplasm of intestine	35	0.18	20	0.05	55	0.10
154	Malignant neoplasm of rectum	10	0.05	2	0.01	12	0.02
155-156	Malignant neoplasm of liver	11	0.06	16	0.04	27	0.05
157	Malignant neoplasm of pancreas	16	0.08	8	0.02	24	0.04
162-163	Malignant neoplasm of trachea and bronchus of lung	46	0.23	41	0.11	87	0.15
170	Malignant neoplasm of breast	27	0.14	17	0.05	44	0.08
171-172	Malignant neoplasm of cervix uteri	16	0.08	19	0.05	35	0.06
177	Malignant neoplasm of prostate	15	0.08	5	0.01	20	0.03
181	Malignant neoplasm of bladder	7	0.04	5	0.01	12	0.02
-	Malignant neoplasm of other and unspecified sites	43	0.22	41	0.11	84	0.15
200-205	Neoplasms of lymphatic and haematopoietic tissues	24	0.12	21	0.06	45	0.08
175	Malignant neoplasm of ovary	5	0.03	3	0.01	8	0.01
	Total	314	1.60	290	0.77	604	1.06

SECTION VI - TUBERCULOSIS.

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

The new cases of this disease reported in the year 1963, corrected for misdiagnosis and imported cases, numbered 1,769. They are classified in Table A, where the corresponding incidence rates are also shown:-

TABLE A.

Race	Sex	Notified cases			Incidence rates		
		Pul-monary	Other forms	All forms	Pul-monary	Other forms	All forms
European	Male	71	1	72	0.76	0.01	0.78
	Female	41	5	46	0.40	0.05	0.45
	Total	112	6	118	0.57	0.03	0.60
Coloured	Male	597	40	637	4.31	0.29	4.60
	Female	438	32	470	2.81	0.21	3.01
	Total	1,035	72	1,107	3.51	0.24	3.76
Bantu	Male	363	10	373	8.59	0.24	8.82
	Female	156	9	165	5.00	0.29	5.29
	Total	519	19	538	7.06	0.26	7.32
Asiatic	Male	2	-	2	0.50	-	0.50
	Female	4	-	4	1.20	-	1.20
	Total	6	-	6	0.82	-	0.82
All Non-European	Male	962	50	1,012	5.21	0.27	5.48
	Female	598	41	639	3.14	0.22	3.35
	Total	1,560	91	1,651	4.16	0.24	4.40
All races	Male	1,033	51	1,084	3.72	0.18	3.90
	Female	639	46	685	2.18	0.16	2.33
	Total	1,672	97	1,769	2.93	0.17	3.10
Langa (Included above)	Male	174	1	175	7.80	0.04	7.84
	Female	27	2	29	6.14	0.45	6.59
	Total	201	3	204	7.53	0.11	7.64
Guguletu (Included above)	Male	117	7	124	9.68	0.58	10.26
	Female	104	4	108	7.64	0.29	7.93
	Total	221	11	232	8.60	0.43	9.02

The deaths from tuberculosis and the corresponding death rates are shown in Table B (corrected):—

TABLE B.

Race	Sex	Deaths			Death rates		
		Pul-monary	Other forms	All forms	Pul-monary	Other forms	All forms
European	Male ...	17	—	17	0.18	—	0.18
	Female ...	5	—	5	0.05	—	0.05
	Total ...	22	—	22	0.11	—	0.11
Coloured	Male ...	105	12	117	0.76	0.09	0.84
	Female ...	32	8	40	0.21	0.05	0.26
	Total ...	137	20	157	0.47	0.07	0.53
Bantu	Male ...	25	4	29	0.59	0.09	0.69
	Female ...	6	1	7	0.19	0.05	0.22
	Total ...	31	5	36	0.42	0.07	0.49
Asiatic	Male ...	—	—	—	—	—	—
	Female ...	—	—	—	—	—	—
	Total ...	—	—	—	—	—	—
All Non-European	Male ...	130	16	146	0.70	0.09	0.79
	Female ...	38	9	47	0.20	0.05	0.25
	Total ...	168	25	193	0.45	0.07	0.51
All races	Male ...	147	16	163	0.53	0.06	0.59
	Female ...	43	9	52	0.15	0.03	0.18
	Total ...	190	25	215	0.33	0.04	0.38
Langa (Included above)	Male ...	13	1	14	0.58	0.04	0.63
	Female ...	1	—	1	0.23	—	0.23
	Total ...	14	1	15	0.52	0.04	0.56
Guguletu (Included above)	Male ...	5	1	6	0.41	0.08	0.50
	Female ...	3	—	3	0.22	—	0.22
	Total ...	8	1	9	0.31	0.04	0.35

NOTIFICATIONS

Tuberculosis in a population of 571,440, including the two Bantu townships, was responsible for

215 deaths in 1963, compared with 215 in 1962.

1,769 persons newly notified to have active disease;

1,872 last year.

9,481 residents on the tuberculosis register, compared with 8,543 in 1962.

The total number of Cape Town cases admitted to hospital was 1,522 compared with 1,230 in 1962.

The Mass Radiography Service adjoining the central clinic in Chapel Street examined 72,992 persons — 70,860 last year.

There were 63,362 attendances at the six widely dispersed clinics, including 11,669 persons attending for the first time, compared with 61,772 attendances, including 11,504 new consultations, in 1962.

The incidence of all forms of tuberculosis in all races in Cape Town was 310 per 100,000 in 1963, compared with 339 in 1962: this represents an annual reduction of 8.5 per cent. SANTA has announced a national increase of 6 per cent and attributes this mainly to the Bantu.

Tuberculosis in 1963.

The number of new cases of active pulmonary tuberculosis notified during the year was 1,672 compared with 1,738 in 1962. The incidence per 100,000 was 293 in comparison with 315 last year, denoting a percentage reduction of 7 per cent.

112 new cases of pulmonary tuberculosis were notified amongst Europeans, giving an incidence of 57 per 100,000 compared with 128 cases and an incidence of 66 last year. Both sexes share in this improvement: and the incidence in males is as usual almost twice that in females.

Whilst an increase of the population helps to reduce the incidence rate, it has a more beneficial effect on the European figures in that the adult increase is partially due to immigrants who have been passed as free of tuberculosis prior to entry: whereas the non-European incidence benefits from the higher natural increase of population, it is likely to suffer from any influx of adult workers who are mainly derived from the country areas, where tuberculosis is acknowledgedly prevalent. There are many factors under the general heading of socio-economic stresses militating against the non-Europeans: whilst they have doubtlessly benefitted from the upsurge of industrialisation, these stresses can be narrowed down to the hard fact that they have to live more often with the tubercle bacillus under conditions of persistent exposure to massive infection at a susceptible age or stage. This battle is too frequently one-sided and permanently waged following the failure to uncover the infectious case timely, and later to ensure prompt and adequate therapy. The ailing worker need no longer fear

that loss of work owing to disability by tuberculosis will lead to poverty and deprivation of his family, and the general knowledge of the increased aid to dependents from official sources must be partially responsible for the greater readiness to present himself for examination and, if necessary, to undertake treatment hopefully and conscientiously. Amongst other and more general factors, the reduced anxiety in regard to his family and, we hope, the reputation of the clinic system, are responsible for the progressive annual increase of examinees at the clinics and the Mass Radiography Service amounting jointly to 84,661 persons in the year under report. However, these failures and delays are more common amongst the poor, with the result that the incidence of pulmonary tuberculosis amongst non-Europeans is 7.3 times greater than among Europeans: this ratio has been approximately constant over the years.

1,560 new cases of pulmonary tuberculosis were discovered amongst non-Europeans compared with 1,610 in the preceding year: the Coloured group provided almost the same total in each year, 30 more male cases and 31 fewer female cases were found in 1963, and the Coloureds therefore only contributed to an improved general incidence of 351 compared with 371 per 100,000 by the better rate for females - 281 instead of 317 - and by the increase of population.

This improvement amongst Coloured females is deservedly gained as Coloured women make good patients in that they more readily accept both hospital treatment, possibly influenced by the popularity and good standing of the sanatorium reserved for them, and post-hospital care by their attendance at the evening clinic sessions after their restoration to work.

Surprisingly, the reduction of the total notifications of non-European pulmonary cases is mainly due to the fall from 406 to 363 cases in Bantu males: these totals include all ages and usually about a third refer to children under the age of 15 years. This improvement derives from a reduction of 50 cases in the urban area and of 28 in Langa, and an increase of 35 in Guguletu. These are largely artificial variants owing to the continued exodus of Bantu families from the city area to the new Guguletu township and to the expansion of case-finding at the clinic opened as recently as November, 1963.

Bantu males in Langa may benefit, as far as tuberculosis is concerned, by the barrack system whereby infection from the unrecognised case is limited by 15,000 being housed in rooms with one to four bunks: they undoubtedly benefit from their more regular and intensive examination by the Mass Radiography Service, as almost all are employed, usually by larger concerns, who make good use of this service.

These two factors, together with the exodus of families to the remote Guguletu Township where women and children attend the clinic in greater number than working men, play a part in a striking anomaly revealed by contrasts of lowered incidence. The rate per 100,000 for Bantu males has fallen by 142 at Langa and by 13 at Guguletu, whereas for Bantu females it has fallen by 134 at Guguletu and by 25 in their much smaller number at Langa. The full explanation of this disparity is not immediately obvious: the total incidence of pulmonary tuberculosis in the two villages is published as 753 in Langa and 860 in Guguletu, compared with 875 and 938 in the previous year. These figures are still calamitously high and it is to be hoped that further energetic work on modern lines can at least maintain the present rate of reduction.

Notifications of Bantu females, again of all ages, remained materially unchanged at 156 compared with 160 in 1962. The distribution of these cases similarly changed owing to the continued movement of Bantu families from the city area, where there was a reduction of 27, whilst there was an increase of 24 new cases in Guguletu. In Langa with a stable community and a permanent female minority, which however must have increased, the notifications of all Bantu females fell by one.

Distribution of pulmonary tuberculosis according to age amongst non-Europeans.

This follows standard trends. Compared with males, the burden always falls more heavily on adolescent and young adult females, who this year exceptionally have a smaller share than women in the next age-group (25-35 years). A shift in the discovery or development of tuberculosis in men to the middle years is a fairly recent trend and from 35 to 55 years of age they provided 308 cases, a third of the male total, whilst women of the same age provided only 93 cases, comprising a sixth of the total female notifications.

A report from the London County Council (1962) showed that children under the age of 15 years provided 8.1 per cent of the total new pulmonary cases. Scrutiny of Table C (1963) shows that children under 15 provided 32.4 per cent of the total cases in Cape Town. The proportion of children reported as 33.3 per cent in last year's report applies only to urban non-Europeans. These figures support the claim, previously mentioned, that the onslaught by the *Tubercle bacillus* on children is too often a losing battle.

In striking contrast, the intensity of exposure apparently plays little part in European families, for Table J astonishingly shows that out of 682 Europeans classified as contacts to a known case and including 288 children not one was found to be suffering from tuberculosis: and only 14 European children were notified as suffering from tuberculosis (all forms) throughout the year. There may well be some failure to notify European children: it is acknowledged that the family doctor can play an important part in the treatment of childhood tuberculosis, and if the parents and doctor wish to treat a child in the home, their obligations are met if they bring the case to official notice by notification. The paucity of these figures must have some bearing on any decision in regard to universal B.C.G. vaccination. An unexplained comparative freedom of schoolchildren between the ages of 10 and 15 years is acknowledged as world-wide and European children in Cape Town could not provide a better example: it must be the first year in which no case of tuberculosis in any form has been reported in this large group.

Tuberculosis is where you look for it. A more intensive and persistent search will produce greater number of new cases, as was demonstrated several years ago by the colossal mass X-ray campaign mounted in Glasgow. Locally the examination of contacts was responsible for the first attendance of 4,306 persons in this group (Table J). These consisted of 1,578 adults and adolescents and of 2,728 children under the age of 15 years. The older group provided 41 new cases and the children, being more susceptible, provided 165 new cases. The percentage yield was 2.6 and 6.0 respectively.

This confirms the value of the examination of child contacts whose initial attendance was responsible for the discovery of a third of total new cases of pulmonary disease in non-European children.

The discovery within one year of 1,560 new cases of pulmonary tuberculosis amongst non-Europeans may disturb the civic conscience and some relief is obtained by studying Table C which shows that 506 of the total new cases occurred in children under the age of 15 years (32.4 per cent). It is a coincidence that these children were exactly divided into 253 boys and 253 girls, rather than a confirmation that the *tubercle bacillus* is oblivious to sex: the boys formed 26.3 per cent of the male total of 962, and the girls formed 42.3 per cent of the smaller female total of 598 new pulmonary cases.

This leaves a less formidable total of adult and adolescent tuberculosis affecting 709 men and 345 women (1,054) who of course provide the potential hazard to the public health.

However it should be noted that the increase of notifications of pulmonary tuberculosis amongst children under 15 years from 421 to 506 was not associated with the increased yield from child contacts who numbered 2,344 in 1962 and 2,728 in 1963 (Table J) and revealed 202 and 165 new cases, providing an incidence per 1,000 contacts of 86.2 and 60.5 respectively, and prompting the happy conclusion that children are being increasingly spared the consequences of exposure or withstanding them more successfully.

We can be encouraged, but not satisfied, that, in an increasing population, the notifications of pulmonary tuberculosis amongst all non-Europeans has been reduced from 1,610 last year to 1,560, recalling that a third of these totals were children with a less damaging form of disease.

However, it can be safely claimed that the discovery and treatment of primary tuberculosis is rewarding and moreover reduces the chances of disease in other parts of the body, including the meninges. Whilst such treatment may have to give precedence to the B.C.G. vaccination of infants which was inaugurated by the Child Welfare Branch in 1959, it is difficult to assess the position owing to the failure of the general hospitals, etc. to notify all cases of non-pulmonary tuberculosis.

The notifications of tuberculous meningitis only are regarded as accurate, as this form constitutes an emergency and all cases should reach hospital in a modern community. It is therefore disappointing to find that 25 cases of this disabling and lethal disease were reported during the year, and hardly consoling to cite the figures of 49 in 1961 and 108 in 1953.

It must be noted here that Table A omits the large group of Bantu and others who are found to be suffering from pulmonary tuberculosis within six months of their arrival in Cape Town, and are therefore not classified as the responsibility of the City Council of Cape Town. It has been formerly emphasized that Mass Radiography of migrant workers on entry would earlier reveal many cases and also reduce Cape Town expenditure. For example, in a trainload of some 200 Bantu labourers engaged for work in the docks, over 20 cases of apparent pulmonary tuberculosis were picked up by Mass Radiography Service for assessment within three weeks of their arrival. It is pertinent (or impertinent) to add that the expenditure on this service is entirely placed on the ratepayers of Cape Town.

Tables C, D and E in the current report do not provide an accurate comparison with previous years in regard to the total figures for non-Europeans in that they now include the Bantu from Langa and Guguletu Townships.

TABLE C
NOTIFICATIONS OF PULMONARY TUBERCULOSIS ACCORDING TO AGE GROUP.

	Sex	0-	1-	5-	10-	15-	25-	45-	65-	Total
European	M	—	3	2	—	10	20	29	7	71
	F	—	5	1	—	6	17	9	3	41
Non-European	M	28	137	67	21	116	380	186	27	962
	F	15	156	56	26	108	184	48	5	598

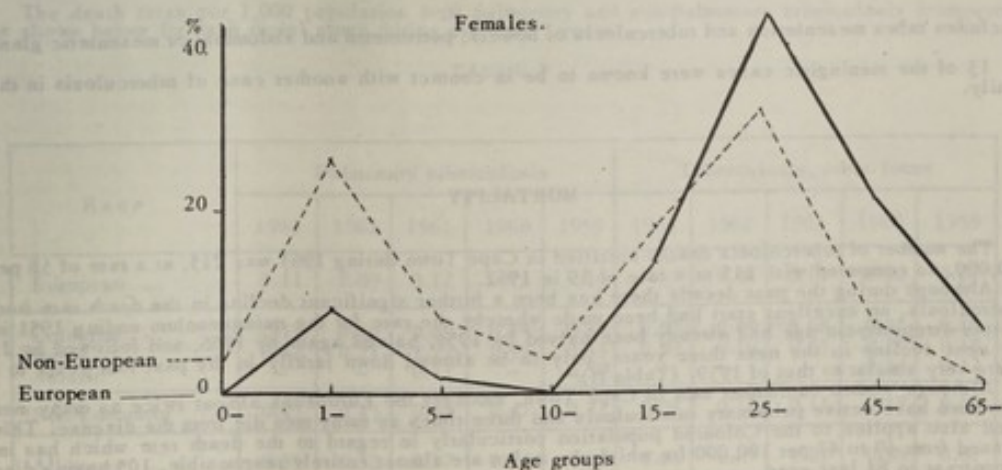
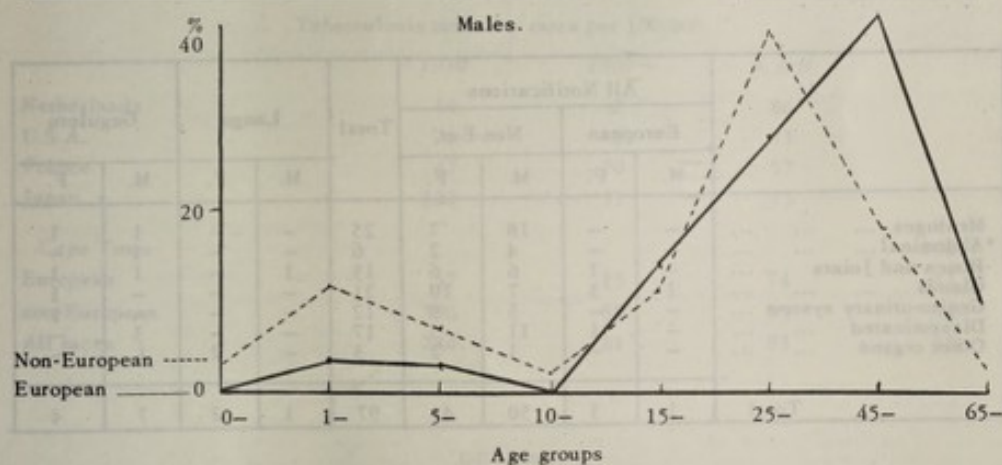


TABLE D

	New cases				Discovery rates per 1,000 population			
	Pulmonary		Other forms		Pulmonary		Other forms	
	M.	F.	M.	F.	M.	F.	M.	F.
European:								
Year 1952-53 ..	139	108	11	9	1.55	1.09	0.12	0.09
1953-54 ..	142	97	10	9	1.57	0.97	0.11	0.09
1954-55 ..	126	72	15	8	1.39	0.72	0.16	0.08
1956 ..	111	61	6	6	1.21	0.60	0.07	0.06
1957 ..	123	61	7	5	1.33	0.60	0.08	0.05
1958 ..	93	55	3	3	1.00	0.54	0.03	0.03
1959 ..	99	49	10	12	1.06	0.47	0.11	0.12
1960 ..	66	59	7	6	0.70	0.57	0.07	0.06
1961 ..	89	45	13	14	0.98	0.44	0.14	0.44
1962 ..	79	49	2	5	0.86	0.48	0.02	0.05
1963 ..	71	41	1	5	0.76	0.40	0.01	0.05
Non-European:								
Year 1952-53 ..	923	761	131	134	7.18	5.69	1.02	1.00
1953-54 ..	848	689	140	130	6.29	4.92	1.04	0.93
1954-55 ..	857	743	112	116	6.07	5.07	0.79	0.79
1956 ..	898	717	99	95	5.92	4.57	0.65	0.60
1957 ..	978	728	82	81	6.15	4.43	0.52	0.49
1958 ..	803	609	52	59	4.82	3.54	0.31	0.34
1959 ..	767	545	91	90	4.39	3.02	0.52	0.50
1960 ..	678	536	57	51	3.70	2.84	0.31	0.27
1961 ..	680	536	106	103	4.76	3.35	0.74	0.66
1962 ..	978	632	71	56	5.58	3.49	0.41	0.31
1963 ..	962	598	50	41	5.21	3.14	0.27	0.22

TABLE E

	All Notifications				Total	Langa		Guguletu	
	European		Non-Eur.						
	M.	F.	M.	F.		M.	F.	M.	F.
Meninges	—	—	18	7	25	—	—	1	1
*Abdominal... ..	—	—	4	2	6	—	—	1	—
Bones and Joints ...	—	1	6	6	13	1	—	1	1
Glands	1	3	7	10	21	—	—	—	1
Genito-urinary system ...	—	—	3	9	12	—	—	—	1
Disseminated	—	1	11	5	17	—	—	3	—
Other organs	—	—	1	2	3	—	2	1	—
Total	1	5	50	41	97	1	2	7	4

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

13 of the meningitic cases were known to be in contact with another case of tuberculosis in the family.

MORTALITY

The number of tuberculosis deaths certified in Cape Town during 1963 was 215, at a rate of 38 per 100,000, as compared with 215 or a rate of 39 in 1962.

Although during the past decade there has been a further significant decline in the death rate from tuberculosis, an excellent start had been made whereby the rate for the quinquennium ending 1951 in the pre-streptomycin age had already been halved by 1954, halved again by 1956, and followed by 25 per cent decline in the next three years, only to be slowed down jerkily in the past four years to a figure very similar to that of 1959. (Table H).

Although women outnumber men in Cape Town, amongst the Europeans almost twice as many men as women have active pulmonary tuberculosis and three times as many men die from the disease. This trend also applies to the Coloured population particularly in regard to the death rate which has increased from 40 to 47 per 100,000 for which the males are almost entirely responsible, 105 having died in contrast to 84 last year.

The death rate for Coloureds from all forms of tuberculosis in 53 per 100,000 in Cape Town, and according to the latest information available, was cited as 95.5 per 100,000 for the whole country in 1961, for Whites in Cape Town 11 and in South Africa 6.6, and in Denmark 3.8, Hongkong 69, and Peru 75.5.

The deaths from tuberculosis as listed for Bantu lose significance in that, following the traditional return of the mortally ill to their homes in the Transkei, the deaths from tuberculosis acquired here are not debited to Cape Town when they occur outside the municipal area, but correction is made for outsiders dying in the city.

In 1963, pulmonary tuberculosis was responsible for 190 deaths or 88.4 per cent of the deaths from all forms of tuberculosis (82.8 per cent last year). Of these 190 deaths, 30 occurred before notification and 36 within a month of notification. No European children died of tuberculosis in any form, and 13 non-European children died from pulmonary tuberculosis.

Tuberculous meningitis.

	Notifications		Deaths		(Under 1 year)
	European	non-European	European	non-European	
1954 - 58	22	411	11	251	54
1959 - 63	13	189	3	102	20

It must be recognised that deaths do not apply directly to the persons notified, for instance, in 1958 there were two European deaths but only one notification. One of the deaths must have been notified in the previous year.

The saving of life is a particularly formidable task in children under the age of one year, and the non-European infants have fortunately had an equal share in the reduction of the total deaths in each five-year period.

In 411 non-European cases there were 251 deaths (61 per cent).

In 189 non-European cases there were 102 deaths (45 per cent).

Whilst the recovery rate has improved, it is the considerable reduction of incidence which is mainly responsible for the improvement in the death rate.

Tuberculosis mortality rates per 100,000.

	1950	1960	% fall	
Netherlands	14	2	86	
U.S.A.	21	6	71	
France	47	20	57	
Japan	122	31	75	
<i>Cape Town</i>				1963
European	57	15	74	11
non-European	396	59	85	51
All races	244	41	83	38

DEATHS

The death rates per 1,000 population from pulmonary and non-pulmonary tuberculosis (corrected) are shown below for each racial group during the past 5 years:-

TABLE F

Race	Pulmonary tuberculosis					Tuberculosis, other forms				
	1963	1962	1961	1960	1959	1963	1962	1961	1960	1959
European ...	0.11	0.09	0.12	0.13	0.16	—	0.01	0.01	0.02	0.01
Coloured ...	0.47	0.40	0.49	0.45	0.42	0.07	0.09	0.08	0.11	0.10
Bantu ...	0.42	0.71	1.22	0.97	0.33	0.07	0.18	0.53	0.20	0.10
Asiatic ...	—	—	0.42	—	0.50	—	—	—	0.14	0.12
Non-European ...	0.45	0.45	0.54	0.47	0.41	0.07	0.10	0.11	0.12	0.10
All races ...	0.33	0.32	0.37	0.34	0.32	0.04	0.07	0.07	0.08	0.07

The deaths from non-pulmonary tuberculosis registered during the year are classified below according to the certifications.

TABLE G.

	Deaths				Total	Langa	Gugu- letu
	European		Non-Eur.				
	M.	F.	M.	F.			
Tuberculosis, meningeal	—	—	9	5	14	—	—
" abdominal	—	—	2	—	2	1	—
" of bones and joints	—	—	1	1	2	—	—
" of genito-urinary system	—	—	1	—	1	—	—
" disseminated... ..	—	—	3	3	6	—	1
" of other organs	—	—	—	—	—	—	—
	—	—	16	9	25	1	1

The death rates per 1,000 of the population from all forms of tuberculosis (corrected) are in the following table for the past 48 years:—

TABLE H

						Death rate per 1,000 population		
						European	Non-Eur.	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
5 " " " " 1951	...	...	...	...	...	0.57	4.51	2.71
5 " " " 31st Dec., 1956	...	...	...	...	...	0.20	1.70	1.09
5 " " " " 1961	...	...	...	...	...	0.16	0.71	0.50
1 " " " " 1952	...	...	...	...	...	0.26	2.97	1.81
1 " " " " 1953	...	...	...	...	...	0.21	2.07	1.29
1 " " " " 1954	...	...	...	...	...	0.24	1.77	1.15
1 " " " " 1955	...	...	...	...	...	0.17	1.21	0.80
Calendar year 1956	...	...	...	...	...	0.13	0.76	0.52
" " 1957	...	...	...	...	...	0.15	0.87	0.60
" " 1958	...	...	...	...	...	0.18	0.69	0.51
" " 1959	...	...	...	...	...	0.17	0.51	0.39
" " 1960	...	...	...	...	...	0.15	0.59	0.41
" " 1961	...	...	...	...	...	0.13	0.64	0.44
" " 1962	...	...	...	...	...	0.09	0.55	0.39
" " 1963	...	...	...	...	...	0.11	0.51	0.38

ANTI-TUBERCULOSIS CENTRES

TABLE I.

	New Consultations			Total Attendances		
	1963	1962	1961	1963	1962	1961
Cape Town:						
Eur.	1,381	1,433	1,258	4,496	4,898	4,513
Non-Eur.	2,819	3,328	3,085	16,328	17,204	16,296
Total	4,200	4,761	4,343	20,824	22,102	20,809
Wynberg:						
Eur.	666	693	606	2,294	2,424	2,432
Non-Eur.	1,987	1,862	1,930	9,001	9,045	9,327
Total	2,653	2,555	2,536	11,295	11,469	11,759
Kensington:						
Eur.	—	—	—	—	—	—
Non-Eur.	892	1,113	961	6,725	8,287	8,011
Total	892	1,113	961	6,725	8,287	8,011
Athlone:						
Eur.	1	1	—	1	1	—
Non-Eur.	2,543	1,872	1,703	12,521	10,541	9,654
Total	2,544	1,873	1,703	12,522	10,542	9,654
Langa:						
Bantu	504	480	485	4,549	4,136	4,057
Guguletu:						
Bantu	876	722	469	7,447	5,236	3,643
Total:						
Eur.	2,048	2,127	1,864	6,791	7,323	6,945
Non-Eur.	9,621	9,377	8,633	56,571	54,449	50,988
Total	11,669	11,504	10,497	63,362	61,772	57,933

No. of sessions:—	Cape Town	...	...	439
	Wynberg	...	...	241
	Kensington	...	...	189
	Athlone	...	...	257
	Langa	...	...	99
	Guguletu	...	...	100

1,325

These six clinics serve a population of over half a million in the municipal area extending for 26 miles: the new estate of Steenberg is 16 miles from the central City Hospital to which the inhabitants have to travel for large films. It is hoped that this disadvantage will be largely remedied by the provision next year of a travelling inter-clinic X-ray unit fitted with an Odelco camera and 100 mm. film.

Evening clinics are held at the central clinic in Chapel Street in the first week of every month for the benefit of patients who have continued or been returned to work. This avoids any possibility of their deprivation of a half-day's pay and almost guarantees them against relapse: it is an arduous and cheerful session when some 150 non-Europeans attend after a day's work to prove the value of continued co-operation.

Both the new consultations and the total attendances have exceeded last year's figures: it is essential to keep up with the increase of population. Whilst there is some overlapping, the new consultations and the Mass Radiography Service present the formidable total of 84,661 persons who have been examined for pulmonary tuberculosis during the year.

It is to be hoped that no complacency will develop amongst Europeans following their reduced incidence, which has been more than halved in ten years. There was a fall-off in new examinees of 79 and this is largely accounted for by a reduction of 66 attending as contacts following the 12 fewer notifications of pulmonary tuberculosis.

Changes in total attendances and new consultations have followed the exodus from the central city area and from Windermere to the vast Athlone settlement, where over two thousand extra attendances overcrowded the one now-distant clinic. This pressure will be relieved by a new clinic at Petunia Street (Silvertown), nearing completion. A similar large increase has occurred at Guguletu, and the attendance at Langa has improved by over 400.

The primary consultations at the clinics during the year are classified in the table below:—

TABLE J.

Persons attending for first time	European					Non-European					All races
	Adults		Children		Total	Adults		Children		Total	
	M.	F.	M.	F.		M.	F.	M.	F.		
Notified:											
Accepted ...	22	9	3	1	35	149	98	69	56	372	407
Observation	—	—	—	—	—	2	5	2	2	11	11
Not accepted	5	1	1	—	7	12	10	9	1	32	39
	27	10	4	1	42	163	113	80	59	415	457
Suspects:											
Notified ...	52	22	1	1	76	534	205	77	86	902	978
Observation	—	—	—	—	—	15	18	10	4	47	47
Non-tuberculous	404	513	193	136	1,246	1,352	1,449	565	585	3,951	5,197
	456	535	194	137	1,322	1,901	1,672	652	675	4,900	6,222
Contacts:											
Notified ...	—	—	—	—	—	26	15	84	81	206	206
Observation	2	—	—	—	2	3	1	9	3	16	18
Non-tuberculous	159	235	143	145	682	438	1,095	1,212	1,339	4,084	4,766
	161	235	143	145	684	467	1,111	1,305	1,423	4,306	4,990
Total	644	780	341	283	2,048	2,531	2,896	2,037	2,157	9,621	11,669

Notified cases.

Of the 457 persons who attended the clinic as the result of notification, 39 (8.5 per cent) were found to be non-tuberculous.

Suspects.

This large group of 6,222 attended the clinics as the result of the advice of their family doctors, wives and employers, or on the instructions of the general hospitals, dispensaries and welfare agencies. An increasing number attend on their own initiative and this freewill attendance is encouraged: 978 (15.7 per cent) were found to be suffering from tuberculosis. As a corollary, 84.3 per cent left the clinic with feelings of relief and reassurance.

Contacts.

As previously noted, not one of 396 European adults nor of 288 European children were found to be suffering from active tuberculosis. However we are not yet convinced that we are wasting our time. In this instance relief is afforded to parents who have often brought their children for examination following the discovery of tuberculosis in a household servant. Parents can easily acquire peace of mind in this regard by using the Domestic Hour of the Mass Radiography Service (at noon sharp every Thursday, telephone 3-3798).

Owing to the larger families and overcrowding, and the failure to secure recognition of their disease in an earlier stage and then to isolate themselves in hospital if infectious, the yield from non-European contacts is higher. 1,578 adult contacts, among whom women greatly outnumbered men owing to the opportunity of examining the mothers accompanying their children, provided 41 new cases of pulmonary tuberculosis (2.6 per cent), and 2,728 child contacts provided 195 new cases (6.0 per cent).

During the four previous years the percentage yield has been 8.6, 7.4, 7.7 and 9.2 per cent in the year 1959, and it is pleasing to see it reduced.

AMBULATORY TREATMENT.

Centre	Injections				Total
	European		Non-European		
	Males	Females	Males	Females	
Chapel Street	820	503	5,071	2,196	8,590
Wynberg	226	358	984	380	1,948
Kensington	—	—	658	780	1,438
Athlone	—	—	3,064	1,300	4,364
Langa	—	—	3,651	729	4,380
Guguletu	—	—	2,624	2,950	5,574
Total	1,046	861	16,052	8,335	26,294

SCREENINGS.

Centre	Europeans		Non-Europeans		Total
	Males	Females	Males	Females	
Chapel Street	1,155	1,113	2,916	2,669	7,853
Wynberg	544	699	1,703	2,245	5,191
Kensington	—	—	990	1,184	2,174
Athlone	—	—	2,200	3,046	5,246
Langa	—	—	861	462	1,323
Guguletu	—	—	—	—	—
Total	1,699	1,812	8,670	9,606	21,787

P.A.S. and/or I.N.H. TREATMENT.

New cases

Centre	European		Non-European		Total
	Males	Females	Males	Females	
Chapel Street	51	22	355	159	587
Wynberg	11	7	144	86	248
Kensington	—	—	55	58	113
Athlone	—	—	100	91	191
Langa	—	—	87	23	110
Guguletu	—	—	73	88	161
Total	62	29	814	505	1,410

No. of domiciliary injections given: 12,655

SOURCES OF NOTIFICATION

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

TABLE K.

Private practitioners	387
General hospitals and other institutions	701
City Health Department branches	895
Other local authorities	283
	<u>2,266</u>

The following table gives an arbitrary analysis of all primary notifications showing the degree and reasons for the failure to attend the clinics.

TABLE L.

	Cape Town	Imported Infection	Langa	Guguletu	Outside Cape Town	Total
Attended clinic	1,178	255	181	207	11	1,832
Failed to attend	155	33	23	25	198	434
	1,333	288	204	232	209	2,266
Failure to attend clinic:						
In hospital	88	21	12	15	198	334
Hospital out-patients	6	1	—	1	—	8
Too ill	11	—	—	—	—	11
Died before notification	—	—	1	—	—	1
First advice through death registration	20	1	1	2	—	24
Refusals	12	5	3	2	—	22
Under private care	4	—	—	—	—	4
Untraceable or decamped on notification	14	5	6	5	—	30
	155	33	23	25	198	434

The proportion of notifications who attended the clinics was 88 per cent and a further 7 per cent were in hospital *ab initio*.

TABLE M

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
1949-50	2,002	122	6.1	159	7.9
1954-55	2,049	54	2.6	78	3.8
1960	1,460	7	0.5	30	2.1
1961	1,586	5	0.3	33	2.1
1962	1,872	6	0.3	41	2.2
1963	1,769	11	0.6	25	1.4

HOSPITALIZATION

TABLE N

	Urban		Langa	Guguletu	Outside Cape Town cases
	Local	Imported infection.			
New pulmonary cases notified during the year	1,250	270	201	221	172
Known to have had T.B. positive sputum	315	91	63	41	—
New pulmonary cases admitted to institutions for treatment of tuberculosis	545	127	85	66	172
Proportion of new cases admitted	44.2%	—	35.7%	—	—
Died before receipt of notification	25	—	2	3	—
Died within 1 month of notification	29	2	3	2	—
Died within 1 to 3 months of notification	3	1	—	—	—
Died within 3 to 6 months of notification	5	1	—	—	—

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

The total number of Cape Town cases of pulmonary tuberculosis admitted to institutions during the year was 1,522 compared with 1,230 last year.

These were distributed as follows —

TABLE O

	European		Non-European		Total
	Males	Females	Males	Females	
City Hospital, Cape Town	102	62	28	247	439
Brooklyn Chest Hospital	—	—	505	44	549
Other institutions	9	5	343	177	534

TUBERCULOSIS REGISTER

The total number of persons known by the Department to be suffering from tuberculosis and to be living in the Cape Town municipal area on 31st December, 1963, is given below.

TABLE P

DISTRICT (not Wards)	Pulmonary			Non-pulmonary (chiefly bones and joints)			Total
	Eur.	Col.	Bantu	Eur.	Col.	Bantu	
Bakoven, Sea Point, Central Cape Town, Tamboers Kloof, Gardens, Oranjezicht and Vredehoek	286	334	46	18	30	5	719
Old 'District Six'	3	713	50	—	22	—	788
Maitland Garden Village, Kensington, Windermere, Brooklyn and Rugby ..	68	1,085	22	6	35	—	1,216
Woodstock, Salt River	104	399	8	7	21	1	540
Observatory, Mowbray, Rosebank, Black River, Hazendal, Bokmakirie & Kewtown ..	112	364	13	11	27	—	527
Rondebosch, Newlands, Claremont, Kenil- worth, Wynberg and Wittebome	125	460	27	—	10	—	622
Lansdowne, Kromboom Est., Meadows Est., Hampton Est., Crawford, Athlone ..	19	395	7	—	14	3	438
Bonteheuwel to Bridgetown	—	515	7	—	19	1	542
Plumstead to Clovelly	135	1,434	128	5	22	2	1,726
Silvertown, Belgravia, Surrey Estate ..	3	748	75	—	30	3	859
Langa	—	—	682	—	—	12	694
Guguletu	—	—	763	—	—	47	810
Total ..	855	6,447	1,828	47	230	74	9,481

MASS RADIOGRAPHY SERVICE

The mass X-ray service at the tuberculosis clinic, Chapel Street, Cape Town, was made available to the public on 13th April, 1948. The comparative figures of the miniature film examinations made from that date to the end of the year under report, are shown in the following table, classified according to race and sex:—

TABLE Q

Period	European		Non-European		Total
	Males	Females	Males	Females	
Year 1949 — 50	10,066	7,999	12,869	4,449	35,383
" 1954 — 55	14,668	10,643	19,839	15,877	61,027
" 1960	13,254	8,220	22,286	24,363	68,123
" 1961	12,361	8,531	24,109	22,359	67,360
" 1962	12,156	7,956	27,496	23,252	70,860
" 1963	12,930	8,163	27,318	24,581	72,992

In addition to the 72,992 miniature film examinations made during the year, 2,696 large films were taken, as compared with 2,822 in the previous year.

2,045 persons were recalled for further examination. Of these 571 were found to be suffering from active tuberculosis compared with 483 in the previous year. This represents 0.8 per cent of the 72,992 miniature films examined in the year under review.

Comparative figures for the incidence of active pulmonary tuberculosis discovered in the various age groups are given in the following table for a series of years:—

TABLE B

Year	Race	Active tuberculosis discovered								Extra municipal cases (included in foregoing columns)			
		Age-groups										Total	
		15-25 years		25-35 years		35-45 years		45 years and over					
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
1949-50	European ..	16	24	13	13	10	6	7	—	46	43	11	5
	Non-European ..	65	55	98	11	66	12	32	2	261	80	49	11
	All races ..	81	79	111	24	76	18	39	2	307	123	60	16
1954-55	European ..	13	14	22	15	14	2	14	2	63	33	15	9
	Non-European ..	79	82	110	69	53	15	34	6	276	172	85	23
	All races ..	92	96	132	84	67	17	48	8	339	205	100	32
1960	European ..	2	8	9	5	2	2	10	3	23	18	7	4
	Non-European ..	57	92	96	67	63	23	40	8	256	190	44	33
	All races ..	59	100	105	72	65	25	50	11	279	208	51	37
1963	European ..	6	8	9	2	6	2	12	1	33	13	8	5
	Non-European ..	64	67	92	64	118	25	88	7	362	163	65	20
	All races ..	70	75	101	66	124	27	100	8	395	176	73	25

Of the 571 new cases of pulmonary tuberculosis discovered, 113 were previously known to the anti-tuberculosis clinic. A very high proportion of these cases denied having any symptoms and maintained that they were in a very good state of health and well able to carry on with their work.

Fortunately this method of diagnosis reveals the comparatively early and minimal tuberculosis lesion so that treatment in their own homes more often than not suffices.

Cases desiring private medical treatment were referred to their own medical practitioners with full reports.

Although the mass X-ray service is primarily for Cape Town residents a fair proportion of residents outside the city were X-rayed because they were employed within the Cape Town municipal area. In the year under review 98 extra-municipal cases of tuberculosis were discovered, compared with 65 the previous year. These extra-municipal cases were referred for treatment to the local authority concerned.

SECTION VII. — VENEREAL DISEASE.

(DR. A. J. WILSON, VENEREAL DISEASE OFFICER.)

The year under review shows an increase of 919 new cases attending the municipal treatment centres compared with the previous year. 363 European new cases were registered during the year as against 327 for the previous year. 5,163 non-European new cases attended as against 4,280 for the previous year.

The total attendances numbered 21,586 (1,358 European and 20,228 non-European) as compared with 18,183 in 1962, 16,512 in 1961, and 13,980 in 1960.

The number of new cases of syphilis increased by 336, while recorded cases of congenital syphilis amounted to 47 as against 20 for the previous year.

TABLE I

				1963		1962	
				New cases	Incidence rate	New cases	Incidence rate
Race:							
	European ..	..	..	363	1.9	327	1.7
	Non-European ..	..	..	5,163	13.8	4,280	12.0
Sex:							
	Male ..	..	..	4,234	15.2	3,433	12.8
	Female ..	..	..	1,292	4.4	1,174	4.1
Disease:							
	Syphilis ..	..	..	1,483	2.6	1,147	2.1
	Syphilis, congenital ..	..	..	47	0.1	20	0.0
	Gonorrhea ..	..	..	3,422	6.0	2,894	5.2
	Other venereal diseases ..	..	..	61	0.1	19	0.0
	Non-venereal diseases ..	..	..	402	—	430	—
	Undiagnosed ..	..	..	111	—	97	—
All new cases ..				5,526	9.7	4,607	8.4

The true incidence rate for diagnosed cases of venereal disease, that is, the rate obtained by omitting those cases found not to have venereal disease and those remaining undiagnosed, was 8.8 per 1,000 population (1.6 European and 13.8 non-European). Last year the true incidence rates were 7.8, 1.4 and 11.6 respectively.

As venereal disease is not, except under certain specific circumstances, one of the notifiable infectious diseases, it should be realised that these rates are based on the number of individuals treated for venereal disease at the municipal treatment centres and take no cognisance of persons treated by family practitioners.

A record of new cases of venereal disease and the incidence rates for the municipality of Cape Town are set out in the following table for a series of years.

TABLE II

Year	Total new cases *	Population (including African Township)	Incidence rate per 1,000 population
1930	3,316	262,192	12.6
1940	4,212	322,813	13.1
1950	4,461	424,207	10.5
1955	3,208	490,992	6.5
1960	3,227	519,171	6.2
1961	3,795	530,166	7.2
1962	4,080	551,450	7.8
1963	5,016	571,440	9.0

*Excluding non-venereal and undiagnosed cases

In table III a detailed analysis of all new cases registered in the year is presented. The classification follows that advocated by the State Health Service for compilation of their statistics.

TABLE III

Disease	New cases					Total attendances				
	European		Non-Eur.		Total	European		Non-Eur.		Total
	M.	F.	M.	F.		M.	F.	M.	F.	
1 Seronegative primary Syphilis	10	4	276	47	337	76	12	1,166	107	1,361
2 Seropositive primary Syphilis	19	1	301	39	360	123	5	1,348	142	1,618
3 Secondary syphilis ..	1	1	140	229	371	14	22	913	1,254	2,203
4 Tertiary syphilis (1)	3	—	8	9	20	13	—	103	111	227
5 Endosyphilis (2)	1	6	70	295	372	19	47	533	1,240	1,839
6 Neurosyphilis ..	1	—	18	4	23	1	—	221	69	291
7 Congenital syphilis (under 1 year) ..	—	—	27	16	43	—	—	132	98	230
8 Congenital syphilis (over 1 year) ..	—	—	1	3	4	—	—	5	32	37
Total syphilis	35	12	841	642	1,530	246	86	4,421	3,053	7,806
9 Gonorrhea	228	28	2,845	296	3,397	684	84	8,209	774	9,751
10 Gonococcal vulvovaginitis	—	—	—	17	17	—	—	—	107	107
11 Gonococcal ophthalmia	—	—	—	11	11	—	—	—	15	15
Total gonorrheal infections	228	28	2,845	324	3,425	684	84	8,209	896	9,873
12 Ulcus molle	—	—	18	14	32	—	—	24	16	40
13 Lymphopathia venereum	—	—	—	5	5	—	—	—	5	5
14 Granuloma venereum ..	—	—	—	1	1	—	—	—	1	1
15 Venereal warts	5	1	8	9	23	5	1	13	10	29
Total venereal diseases	268	41	3,712	995	5,016	935	171	12,667	3,981	17,754
16 Non-gonococcal urethritis	7	—	27	—	34	21	—	75	—	96
17 Non-venereal disease ..	27	12	119	207	365	40	19	149	286	494
18 Undiagnosed	5	3	69	34	111	114	58	1,593	1,478	3,243
Grand Total	307	56	3,927	1,236	5,526	1,110	248	14,484	5,745	21,587

(1) Clinically recognizable.

(2) Diagnosed on result of serological test alone.

The following figures, extracted from Table III, give some indication of the extent of venereal disease among teenagers. Similar figures for previous years are unfortunately not available for comparison. In future reports these specialised figures will be recorded.

	New cases, teenagers		
	Syphilis	Gonorrhoea	Undiagnosed and non-venereal
European Males	2	23	4
Females	1	5	3
Non-European Males	78	278	49
European Females	94	43	80
Total	175	349	136

These new cases comprise 11.7 per cent of all new cases and have been classified by age as follows:—

Age in years	European		Non-European	
	Male	Female	Male	Female
13	1	—	1	6
14	—	—	4	12
15	1	—	10	15
16	4	1	41	25
17	6	—	68	40
18	5	3	122	50
19	12	5	159	69
Total	29	9	405	217

The following table shows how the number of new cases of venereal disease attending the centres is again increasing.

TABLE IV

Year	New cases										Total						
	Syphilis, congenital		Syphilis, other forms		Gonorrhoeal infections		Other venereal diseases										
	E.	C.	E.	C.	E.	C.	E.	C.									
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.									
1945	2	11	120	263	93	51	758	1353	191	31	528	123	8	1	51	7	3591
1950	5	5	149	338	96	25	809	1479	167	12	1141	146	15	—	61	13	4461
1955	1	—	5	45	15	12	290	506	175	12	1840	90	53	1	111	52	3208
1960	1	—	9	6	18	8	291	419	180	4	2109	144	2	—	31	5	3227
1961	—	2	7	13	14	10	433	433	207	15	2411	219	3	—	24	4	3795
1962	—	—	11	9	30	9	547	561	216	20	2425	233	4	—	13	2	4080
1963	—	—	28	19	35	12	813	623	228	28	2845	324	5	1	26	29	5016

MUNICIPAL TREATMENT CENTRES

Four municipal treatment centres continue to function for free advice and treatment of venereal disease, i.e. at the City Infectious Diseases Hospital, Salt River, Wynberg and Kensington. During the year, 21 medical sessions (4 European and 17 non-European) were held each week.

Table V shows the number of new cases (including non venereal) registered at the various municipal treatment centres, together with the number of attendances or consultations held. It should be noted that male and female sessions for Europeans and non-Europeans are held at the City Hospital and Wynberg centres, male and female sessions for non-Europeans together with a European female session at Salt River, and male and female sessions for non-Europeans only at Kensington.

TABLE V

Centre	Sessions	New cases	Attendances
City Hospital, Portsworld Road	402	1,382	5,182
Salt River	304	2,794	10,603
Wynberg	98	951	4,254
Kensington	101	255	1,288
Pre-natal clinics (at child welfare centres)	—	144	290
Total	905	5,526	21,587

An analysis of patients discharged from the treatment centres is given below. Owing to the length of time involved in treatment, rest periods, etc., it follows that only a portion of the new cases registered during 1963 would qualify for this table. In practice, patients who discontinue attendance at the clinics and fail to respond to written reminders are regarded as self discharged.

Disease	Discharged Cured		Self Discharged after :—						Transferred
			One Attendances		2 – 5 Attendances		Over 5 Attendances		
	M.	F.	M.	F.	M.	F.	M.	F.	
1. Seronegative primary syphilis	12	—	36	3	60	4	57	5	—
2. Seropositive primary syphilis	20	2	29	3	72	10	81	7	—
3. Secondary syphilis	2	7	21	19	43	57	44	76	3
4. Tertiary syphilis (1)	—	2	1	—	1	—	4	2	—
5. Endosyphilis (2)	—	10	4	17	15	54	25	45	2
6. Neurosyphilis	—	1	—	—	2	—	7	1	—
7. Congenital syphilis (under 1 year)	—	1	—	—	1	—	—	—	1
8. Congenital syphilis	—	—	—	—	—	—	—	—	—
Total Syphilis	34	23	91	42	194	125	218	136	6

Ten of above cases were seamen from ships in harbour.

VENEREAL DISEASE CONTACTS

290 Contacts were reported to the Medical Officer of Health during the year. This figure although a great improvement on previous years, is far from satisfactory when one considers that the number of cases registered for investigation and treatment was 5,016. This implies that a large reservoir of undetected venereal disease continues to exist in this city. Notwithstanding intensive interrogation of many of the male victims of the disease, it is invariably found that their infected partners were picked up and are completely unknown to the sufferer. As the result of such promiscuity the problem of stamping out the disease becomes insuperable.

PATHOLOGICAL EXAMINATION

In order to establish an early diagnosis microscopic examinations of all discharges are carried out at all clinic sessions. Pathological examinations carried out in the venereal diseases Branch during the year were as follows:—

TABLE VI

	Positive	Negative	Doubtful	Total
Number of dark-ground examinations for Sp. Pall	712	139	—	851
Number of smear examinations for gonococci	3,134	51	—	3,185

In addition, 7,889 blood specimens and 1,874 smears were sent to the Government laboratory for examination.

SECTION VIII. - CITY HOSPITALS.

(DR. H. R. ACKERMANN, M.B., CH.B., T.D.D., F.C.C.P., MEDICAL SUPERINTENDENT OF HOSPITALS.)

The city group of hospitals consists of the following institutions:-

- (1) The City Hospital for Infectious Diseases in Portwood Road, Cape Town.
- (2) The Brooklyn Hospital for Chest Diseases at Koeberg Road, Maitland.

CITY HOSPITAL FOR INFECTIOUS DISEASES, PORTSWOOD ROAD.

The hospital provides accommodation for 518 patients. Ordinarily, patients suffering from the following diseases can be admitted to the hospital: enteric fever, diphtheria, erysipelas, puerperal fever, cerebrospinal fever, acute poliomyelitis, infective encephalitis and scarlet fever. Cases of other infectious diseases are admitted for special medical or social reasons. Accommodation is also provided for cases of pulmonary tuberculosis.

The medical staff at the 31st December, 1963, consisted of the Medical Superintendent of Hospitals, Deputy Medical Superintendent and six medical officers.

HOSPITAL STATISTICS

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

Disease	From Cape Town Municipality		From outside Municipality	
	European	Non-Eur.	European	Non-Eur.
Measles	1.5	11.8	0.9	8.8
Acute poliomyelitis	—	1.3	0.2	3.0
Cerebrospinal fever	0.2	0.9	0.2	0.9
Diphtheria	0.7	4.9	1.2	5.0
Enteric fever	0.3	3.8	0.2	2.4
Scarlet fever	0.4	0.4	0.3	0.2
Whooping cough	0.8	1.4	0.1	1.1
Tuberculosis, pulmonary ..	41.8	359.9	26.5	59.3
Tuberculosis, other forms ..	1.2	29.9	2.5	10.7
Other diseases	2.1	6.7	0.9	2.6
Total	49	421	33	94

The average daily number of patients in the hospital (exclusive of Brooklyn Hospital) was 313.

Patients treated in City Hospital during the year:-

	European		Non-European		Total
	M.	F.	M.	F.	
Patients in hospital 31st Dec., 1962	43	36	55	149	283
Admitted	202	201	495	712	1,610
Discharged	195	202	439	636	1,472
Died	8	6	51	52	117
In hospital 31st December, 1963 ..	42	29	60	173	304

Age grouping of patients

	Under 5 years	5-14 years	15-24 years	Over 25 years	Total
European	98	73	99	212	482
Non-Eur.	824	190	139	258	1,411
Total	922	263	238	470	1,893

X-RAY DEPARTMENT AND CLINICAL ROOM

This department is available not only for in-patients but also for out-patients from this and other hospitals, and for cases referred from the tuberculosis clinic.

	European	Non-European	Total
Attendances	5,312	13,291	18,603

Clinical room:

Screenings	19	35	54
Refills	19	33	52
Surgical consultations	84	360	444
Clinics	327	491	818
Mantoux tests	617	192	809
Schick tests	109	122	231
Special injections (bronchograms)	44	60	104
Other injections	686	805	1,491

X-ray department:

X-rays			14,550
Bronchograms	47	63	110
Tomograms	86	137	223
Miniature X-rays	576	1,008	1,584
Special X-rays	38	106	144

OPERATING THEATRE

The operations performed during the year were as follows:-

Appendicectomy	1
Bronchoscopy	8
Cervical snip	1
Cervical gland biopsy	1
Cholecystectomy	1
Diagnostic curettage	1
Excision of glands	2
Incision and drainage of abscess	6
Incision of finger	1
Laparotomy	3
Repair of tongue	1
Removal of sutures of tongue	1
Termination of pregnancy	2

DENTAL CLINIC

The dental officer attends periodically and provides dental attention for tuberculosis inpatients. During the year under report 192 patients attended for dental treatment. Further details are shown in the table on page 40.

BROOKLYN HOSPITAL FOR CHEST DISEASES

This institution with the medical and nursing staff is under the general supervision of the Medical Superintendent of Hospitals, and is dependent on the City Infectious Diseases Hospital for dispensary services only.

The total bed state of this hospital is as follows:-

Ward A. 38	Ward S. 22 (11 males and 11 females)
Ward B. 38	Ward 1. 24 (Moslem ward)
Ward C. 38	Ward 2. 24 (School boy age group)
Ward D. 38	Ward 3. 13
Ward E. 36	Ward 4. 21
Ward F. 38	Total 330 beds

The average daily number of in-patients during the year was 284. Percentage of beds occupied 86.2. Details of the work done by the hospital are shown in the following tables.

Chemo-therapy and routine grade rest/exercise continues as the basis of successful treatment.

A marked drop in major thoracic operations has been a feature during the year.

The work of the X-ray department has been on a par with that done in the previous year.

Patient turnover has dropped to 564 admissions.

The staff were routinely vaccinated during the year, and in addition booster doses of TAB vaccine were given to the laundry staff.

Staff

The new Matron (Miss E.E. Clarkson) instituted a rank system among the nurse aides which has proved successful.

The hospital has not had a full complement of medical officers throughout the year, and both the specialised surgical and general work has suffered in consequence.

DEVELOPMENT

During March, the orderlies' quarters were painted throughout and certain modifications made internally.

Between May and September, a new Occupational Therapy Block was built and put into use. This has improved the working conditions of the therapist and her staff and has re-stimulated interest among the patients.

The resident medical officer's house was painted throughout during the period July/August - all that remains to be done is to re-roof this building.

Beetle eradication from the roofs of Wards A, D, E and the Deputy Medical Superintendent's residence started in October. This was found to be much more extensive than anticipated, so the contractors were still busy on the first roof at the close of the year. Arising from this very essential maintenance work, Ward D was emptied of all patients who were accommodated elsewhere in the hospital. This led to a bed shortage and drop in admissions for the balance of the year.

Laundry

All machinery has been installed but no progress has been made on the formalin room.

Quarterly figures	Articles	Bags
1st Quarter	256,433	1,214
2nd Quarter	261,985	1,591
3rd Quarter	277,695	1,688
4th Quarter	260,157	1,517
	<u>1,056,270</u>	<u>6,010</u>

Patients treated in Brooklyn Chest Hospital during the year were as follows -

	Males	Non-Europeans only Females	Total
In hospital 31st December, 1963	285	2	287
Admitted	519	45	564
Discharged	463	46	509
Died	75	1	76
Remaining in hospital at end of year	266	-	266

EXAMINATIONS AND TREATMENT

	Staff	In- patients	Out- patients	Total
Refills A.P.P.	-	56	-	56
Examinations	34	-	-	34
Sick parade	590	-	-	590
Mantoux tests	64	-	-	64
Blood sedimentations	-	-	66	66
Special injections	171	-	-	171
Aspirations chest	-	83	-	83
Lumbar punctures	-	53	-	53
Intubations	-	16	-	16
Inductions	-	8	-	8
Vaccinations	254	-	-	254

DENTAL CLINIC

	New cases	Extractions	Other	Total
Adults	149	118	168	286
Children	4	2	4	6
Sessions	-	-	-	13

X-RAY DEPARTMENT

	Skia-grams	Broncho-grams	Tomo-grams	Surgeons' Consultations	Orthopaedic	Special Examinations
Staff	804	—	—	—	22	—
In-patients	3,354	167	99	199	116	56
Clinic (B.C.H.)	85	—	27	4	2	—
Ex Chapel Street)						
Langa, City)						
Hospital, Wyn-						
berg & Athlone)	539	—	—	—	—	—
Divisional Council	740	—	—	—	—	—
Valkenburg Hospital	11	—	—	—	—	—
F.O.S.A.	309	4	—	—	—	—
Windermere and						
Guguletu	2,308	—	—	—	—	—

OPERATING THEATRE.

Major Thoracic.

Pneumectomy	13
Lobectomy	36
Segmental wedge resection	10
Thoracotomy	8
Thoracoplasty	2
Oesophagectomy	2

Minor Thoracic.

Bronchoscopy	23
Pleural biopsy	2
Oesophagoscopy	1
Tracheotomy	3
Drainage of empyema	1

Major general	24
Minor general	9
Orthopaedic	6
Minor urological	22
Oto-rhino-laryngeal	3
Cardiac	1
Major gynaecological	3
Minor gynaecological	4

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 the ambulance officer, disinfection officer, 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. The disinfection of bedding, etc., for both the hospitals is also done at the disinfecting station. The general ambulance service for the city is operated by the Town Clerk.

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
1370	193	492	623

The distance covered during the year by the vans and ambulances was 154,954 miles.

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 prevalent in Cape Town than pediculosis.

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

Persons	First attendances						Total attendances					
	Scabies	Impetigo	Body lice	Ring worm	Head lice	Total	Scabies	Impetigo	Body lice	Ring worm	Head lice	Total
<i>Children under 16 years of age:</i>												
European boys	24	3	—	—	3	30	34	6	—	—	3	43
European girls	46	2	—	—	18	66	59	3	—	—	18	80
Non-European boys ..	1 255	159	—	1	24	1 439	2 879	513	—	4	24	3 420
Non-European girls ..	1 230	203	—	—	110	1 543	2 784	729	—	—	134	3 647
Total children	2 555	367	—	1	155	3 078	5 756	1 251	—	4	179	7 190
<i>Adults:</i>												
European males	4	—	1	—	—	5	6	—	1	—	—	7
European females .. .	15	—	1	—	—	16	19	—	1	—	—	20
Non-European males ..	372	15	—	—	1	388	559	26	—	—	1	586
Non-European females ..	370	12	—	—	3	385	519	27	—	—	8	554
	761	27	2	—	4	794	1 103	53	2	—	9	1 167
<i>Total persons:</i>												
European	389	5	2	—	21	417	418	9	2	—	21	450
Non-European	3 227	389	—	1	138	3 755	6 741	1 295	—	4	167	8 207
All races	3 316	394	2	1	159	3 872	6 859	1 304	2	4	188	8 357

SECTION IX. — ENVIRONMENTAL SANITATION.

ESTABLISHMENT

In keeping with the ever-expanding growth of this city, the end of 1962 saw a break with the establishment and control of the Health Inspectorate Branch which had persisted unchanged since 1929 when the Branch comprised a headquarter staff and 5 divisional health inspectors in charge of 5 divisions covering the whole of the municipal area.

The health inspectorate staff then consisted of

- (a) Chief health inspector.
- (b) Assistant chief health inspector.
- (c) 5 Divisional health inspectors.
- (d) District health inspectors (24)
- (e) Rodent inspectors (2)
- (f) Dairy inspectors (2)
- (g) Learner health inspectors (3)

With effect from 1st January, 1963, the Staff Committee and Council agreed that the headquarter staff be increased by the appointment of an additional post of senior assistant chief health inspector. This additional appointment permitted of a subdivision of duties and apportionment of work amongst three senior officers as set out in the schedule below.

The incumbent of the post of assistant chief health inspector was appointed to the new senior position and the post of assistant chief health inspector was advertised and ultimately filled by the senior division health inspector.

The new organisational set-up has resulted in an increase in efficient administration of the health inspectorate branch and enabled the most senior officers in this branch to exercise better control of their increasing responsibilities.

For economic reasons it was not possible to recommend a corresponding increase in the divisional system of this branch despite the obvious necessity therefor, and owing to the unfortunate persistent difficulty in filling existent vacant posts of district health inspectors, as is borne out by the following table of authorised posts and actual incumbents.

	Authorised	Actual
Chief health inspector	1	1
Senior assistant chief health inspector	1	1
Assistant chief health inspector	1	1
Divisional health inspectors	5	5
Health inspectors (White)	31	26
Health inspectors (Coloured)	1	1
Health inspectors (Bantu)	3	3
Learner health inspectors	5	3
Dairy inspectors	3	3
Pest control officers	3	3

One of the pest control officers is seconded to the Building Survey Branch of the City Engineer's Department as representative of this Department, i.e. full-time plans scrutiny officer.

ORGANISATION

(a) Divisional health inspectors

Since 1929 the health inspectorate branch has been organised on the divisional system, i.e. the subdivision of the municipal area into 5 divisions with a divisional health inspector in charge, and each division subdivided into districts with each district inspector responsible for all public health aspects in his district, except dairies and pest control.

Over the period of 35 years this "all-in system" has proved its value as opposed to the "specialist inspector system" which is in operation in some large South African cities.

The de-centralisation of control through the divisional health inspectors enables me and my inspectorate headquarters officers to exercise a more flexible and efficient control of all aspects of public health work.

The divisional health inspectors, who act as my "eyes" in each division, exercise primarily a supervisory function of the district health inspectors in each division, plus the taking of food samples in terms of the Food, Drugs and Disinfectants Act, No. 13 of 1929. One divisional health inspector is charged with the duties of taking regular water samples from reservoirs and water filtration plants for bacteriological analysis and control. The senior divisional health inspector also acts on the inspectorate headquarters staff in the absence on leave or illness of any of the three headquarters officials.

(b) Pest control officers

Of the three pest control officers, one is specially appointed to deal with the scrutiny of building plans in the Building Survey Branch of the City Engineer's Department as my representative and is responsible directly to my chief health inspector for this aspect of the department's work.

This work involves specifically the enforcing of the duties imposed on a local authority by the Government Rodent Proofing Regulations and all other aspects of public health control of building construction.

The remaining two pest control officers are concerned primarily with the destruction of rodents in urban and undeveloped areas, the control of cockroaches in private sewers, the elimination of mosquitoes by the treatment of vleis and other breeding spots within the municipality.

(c) District health inspectors.

These inspectors are the "back-bone" of public health work in the divisional control system as theirs is the responsibility for all and varied aspects of public health problems in their districts. They in turn are the eyes and ears of their divisional health inspectors and what they see and hear is reflected back to me via the divisional health inspectors and inspectorate headquarters officials.

Apart from investigation of all complaints referred to the department and reports on all applications in terms of the Housing Act, No. 10 of 1957 for the demolition of, or conversion of dwelling or residential premises to other purposes; reports on premises in terms of the Slums Act, No. 53 of 1934; reports on the suitability of premises to be licensed in terms of the Registration of Businesses Ordinance, No. 15 of 1953; food inspection, and of course the routine inspection of foodstuffs exposed for sale in all food shops, and the instruction of food handlers in proper food protection and hygiene, form a most important and valuable function of these inspectors.

One of the most experienced and competent district inspectors is seconded to the Epping Wholesale Market for full-time duty at this and other subsidiary markets under the control of the Director of Markets, i.e. Grand Parade stalls, Salt River, Mowbray, Rondebosch and Plumstead retail markets, in addition to fishmarkets in Dock Road and Hanover Street, Cape Town.

(d) Learner health inspectors.

The policy in operation since 1929 of appointing learner health inspectors to receive practical training simultaneously with their theoretical training has proved invaluable to the department, and is borne out by the fact that all the present inspectorate headquarters officials, two of the divisional health inspectors, and most of the senior health inspectors served at some time in the past in such capacity.

SCOPE OF WORK

The scope of the work carried out by the various sections of the inspectorate branch are set out in the schedules which follow.

Divisional health inspectors. Food, Drugs and Disinfectants Act.

The number of free samples that could be examined for the municipality by the Government Chemical Laboratory was fixed at 766 by Government Notice No. 997 of 11th July, 1958. Sampling duty is undertaken by the five divisional inspectors.

The following is a record of the samples taken during the year:—

Nature of Sample	No. of samples	Adulterated	Prosecuted	Warned	Fines R
Milk	291	3	2	1	60
Sausage	101	23	14	6	364
Mince meat	141	25	22	3	480
Cream	92	—	—	—	—
Polony	30	4	3	1	55
Ice cream	15	2	1	1	5
Yoghourt	23	—	—	—	—
Fresh meat	21	1	1	—	30
Buttermilk	10	—	—	—	—
Cheese	34	—	—	—	—
Other	10	—	—	—	—
Total ...	768	58	43	12	994

Pest control officers.

The two pest control officers primarily responsible for the rodent, mosquito and cockroach control measures in the city are assisted by 24 Cape Coloured rodent operatives, whose duties involve routine block-baiting with Warfarin and its derivatives for rodent control. In the year under review 39,060 lbs. of bait were laid.

The following schedule details the rodent control work carried out by this section during the year under review.

Inspections by pest control officers:

<i>Re</i> rodents	7,258	
<i>Re</i> mosquitoes	691	7,949

Inspections *re* rodents by other inspectors .. 68

Inspections *re* mosquitoes by other inspectors .. 459

Visits made to lands and premises by rat-catchers:

<i>Re</i> rodents	66,291	
<i>Re</i> mosquitoes	24,460	90,751

Number of notices served by pest control officers:

Verbal notices	3	
Written notices	14	17

Number of rodents caught and destroyed:

Brown rats	5,371	
Black rats	269	
Gerbilles	1,106	6,746

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

Year	Brown rats	Black rats	Gerbilles	Total
1926	8,409	1,206	3,430	13,045
1936	3,757	3,240	610	7,607
1946	9,082	1,879	287	11,248
1956	4,868	1,487	1,489	7,844
1960	6,266	957	821	8,044
1961	6,363	551	952	7,866
1962	6,090	319	963	7,372
1963	5,371	269	1,106	6,746

Experiments are continually being conducted to determine the effectiveness of the rodent proofing properties of various building materials. These results have disclosed the interesting fact that materials declared rodent proof by S.A. Bureau of Standards tests using *Rattus rattus* have proved to fail in our experiments using *Rattus norvegicus* which are prevalent in Cape Town and coastal areas. It would appear therefore that S.A.B.S. tests using rodents common only to the interior of the country are not valid.

The Cape Town representative of the S.A. Bureau of Standards has been in touch with this department in regard to conducting tests in Cape Town using *Rattus norvegicus* and my staff are co-operating in such tests. It was considered highly dangerous to import *Rattus norvegicus* into the Transvaal where the S.A. Bureau of Standards test laboratories are situated owing to the possibility of such rodents escaping and infesting the Transvaal where they are unknown at present.

The tests were duly carried out during 1963 at the pest control centre with specimens of board measuring $7\frac{1}{4} \times 6\frac{1}{2} \times \frac{1}{4}$ inches, the boards, 80 in number, supplied by the Bureau of Standards consisted of limba and pine wood.

Five double cages, i.e. 10 compartments, each measuring $18 \times 9 \times 6$ inches constructed of metal and covered with strong wire mesh screening were used in the test. These cages were also supplied by the S.A. Bureau of Standards.

A slit in the centre position of the cage which is adjustable to fit any test specimen to a maximum width of 3 inches enables the insertion of the test specimen or barrier.

The slit is constructed in such a manner that when the test specimen is in position a metal frame or beading of 1 inch in width will cover the perimeter of the test specimen.

Ten (one to each cage) apparently healthy normal adult specimens of the species *Rattus norvegicus* (Brown rat) which had been trapped and not bred in captivity were used in the tests.

Test conditions as specified by the Bureau of Standards were followed regarding room temperature, humidity, room kept dark and quiet, etc.

The procedure entailed a training period of five days for each rat. During this period the rat with water supply was placed in the cage with a thick cardboard barrier between it and the food supply on the other side. The barriers were placed in position at 5 p.m. each evening and the following morning at 8 a.m. in each instance it was found that the rat had penetrated the cardboard to reach the food. The rats were then fed for two days.

Following test method No. 1 as laid down and using 10 test specimens with a slot the boards were placed in position at 5 p.m. and the following morning at 8 a.m. it was found that all the boards had been penetrated by the rats with the exception of one.

This procedure was followed each day until the 40 slotted test boards had been used. On each occasion it was found that during the fifteen hour period from 5 p.m. to 8 a.m. the rats had penetrated the slotted boards to reach the food supply on the other side.

Following test method No. 2 as laid down the test specimens without slots were then used as barriers between the rats and the food. The solid boards were placed in position at 5 p.m. and examined at 8 a.m. the following morning. It was noted that the specimens had been scratched and gnawed but had not been penetrated.

The same procedure was followed the following day and upon examination it was found that a number of boards had almost been penetrated.

The next morning it was found that 6 of the ten test specimens had been penetrated. These had been under test for three days at 15 hours per day making a total of 45 hours.

The other four rats which had not penetrated the barriers appeared to be very weak, having been without food for three days. The following morning (4th day) two rats had penetrated the barriers but two had died.

During the following tests with the remainder of the solid boards as test specimens it was found that the average time taken by a rat to penetrate to the food was three days of 15 hours. The limba timber appeared to take slightly longer to penetrate than the pine which is softer.

It was observed that after two days without food the rats appeared to be most active, after three days they became rather weak and after four days without food they became very lethargic and did not appear to be capable of doing much damage to the test specimens.

It should be noted that when using the slotted boards as test specimens the rodents were able to see and smell the food on the other side whereas when the solid boards were used the rat had not the same incentive to penetrate the barrier as it was unable to see the food.

In view of the tests carried out at the pest control centre it is obvious that none of the specimens submitted were rodent proof.

MOSQUITOES

The pest control officers specialise also in anti-mosquito work. They investigate local prevalence of mosquitoes discovered through complaints or systematic inspections. They also control permanent anti-mosquito measures in the Black River valley, extending from the Bokmakierie Township to the Royal Observatory, as well as giving attention to seasonal collections of standing water and other known mosquito breeding foci within the municipal area. Four of the ratcatching staff under their control devote the whole of their time to oil-spraying of waters where mosquitoes are likely to breed. In addition to these four operatives, another employee carries out regular oil treatment of standing water at the sewage disposal works at Athlone.

During 1963, owing to extensive road works in connection with the national road and connecting ways to the D.F. Malan airport, collections of water in proximity to these through ways have required constant and repeated attention by the pest control staff so as to prevent mosquito breeding.

The increasing popularity of private swimming pools has increased the number of potential breeding places and added to the burden of mosquito control.

COCKROACHES

In addition to dealing with anti-rodent work and mosquito control, an increasingly important section of environmental sanitation has been the control of cockroaches in food establishments and foul and stormwater sewers.

These tasks are shared by the district health inspectors and the pest control officers. Where infestation is traced to the municipal sewers control measures are carried out by the City Engineer's Roads and Drainage staff.

During the year under review, the Roads and Drainage staff detailed to control cockroach infestation in the sewers, foul and stormwater, in the area from Bakoven to Woodstock, completed their task with very satisfactory results.

Complaints of cockroach infestation are investigated jointly by the City Engineer's Department and this department, and appropriate action taken according to locality of any infestation discovered.

PLANS

The senior pest control officer (seconded to the Building Survey Branch of the City Engineer's Department) dealt with the following plans and minor works permits during the year under review.

Examination of building plans:

With requirements	...	...	...	1,622
No objection	...	...	...	506
				<u>2,128</u>

District health inspectors

The inspections recorded as made by the district health inspectors during the year were as follows—

Aerated water factories	..	..	..	130
Bakehouses	..	..	..	526
Boarding houses and hotels	..	..	..	2,386
Chalets	..	..	..	7,931
Dairy stables	..	..	..	2,195
Foodshops	..	..	..	28,397
Other shops	..	..	..	7,850
Hawkers	..	..	..	3,117
Horse stables and cattle premises	..	..	..	1,258
House inspections	..	..	..	25,784
Ice cream dealers	..	..	..	2,460
Infectious diseases	..	..	..	860
Markets	..	..	..	3,206
Milk shops	..	..	..	4,888
Africans vaccinated	..	..	..	13,847
Office interviews	..	..	..	1,924
Open land, beaches	..	..	..	4,057
Places of entertainment	..	..	..	533
Refuse tips	..	..	..	578
Restaurants and cafes	..	..	..	7,368
Schools	..	..	..	131
Streets and lanes	..	..	..	2,504
Vehicles	..	..	..	3,740
Washhouses	..	..	..	301
Other visits	..	..	..	8,706
				<u>134,677</u>

Particulars in connection with visits recorded in the above inspections:

Visits to premises where action was taken in connection with rodent infestation	..	..	..	68
Visits at which premises were disinfected	..	..	..	2
Drain tests carried out	..	..	..	42

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

Proceedings begun by:

Verbal notices	..	..	..	..	187
Formal written notices	..	..	..	..	<u>1,522</u>
					1,709
Total proceedings begun					

Written notices following verbal notices 1

Total notices served:

Verbal notices	..	..	..	..	187
Formal notices	..	..	..	..	<u>1,523</u>
Final notices	..	..	..	..	<u>439</u>
					<u>2,149</u>
Total					

The number of items included in the 2,149 notices were as follows:—

	Drainage	Household	Business	Stable	Other	Total
Ward 1 ..	1	41	12	1	12	67
Ward 2 ..	2	28	14	—	4	48
Ward 3 ..	5	29	31	—	10	75
Ward 4 ..	9	91	24	—	17	141
Ward 5 ..	5	122	30	—	14	171
Ward 6 ..	24	186	124	1	19	354
Ward 7 ..	2	71	31	—	6	110
Ward 8 ..	4	116	115	1	17	253
Ward 9 ..	—	7	2	—	1	10
Ward 10 ..	1	15	24	—	4	44
Ward 11 ..	1	2	4	—	1	8
Ward 12 ..	2	17	5	—	12	36
Ward 13 ..	2	50	36	5	15	108
Ward 14 ..	3	81	52	—	32	168
Ward 15 ..	1	41	66	2	33	143
Total	62	897	570	10	197	1,736

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	372
Defective water fittings	13
Unauthorised structures	18
Undrained premises	18
Structural defects to premises	11
Other defects	9

CASES BEFORE THE MAGISTRATES

The following table gives particulars of cases heard by the magistrates during the calendar year 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 R
	Total	Fined	Repri- manded	Dis- charged	With- drawn	
Dwelling-house premises in insanitary condition	11	8	—	1	2	209
Insanitary conditions or other offences at food premises ...	9	7	—	1	1	140
Selling foodstuffs in contravention of the Food, Drugs and Disinfect- ants Act:	58	43	12	—	3	994
Unregistered delivery vehicle ...	2	1	—	1	—	10
Trading without licence	16	13	1	1	1	181
Insanitary stables	2	2	—	—	—	57
Total	98	73	14	4	7	1,591

TRADING LICENCES

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:—

	Restaur- ants	Tea Shops	Cafes	Eating- Houses	Boarding Houses
1. Applications received	309	1,176	67	28	206
2. Granting of licences recommended (without conditions)	266	967	50	19	188
3. Granting of licences recommended (subject to conditions)	43	209	17	9	18
4. Number under item 3 later reported as having complied with conditions	29	121	7	3	1
5. Refusal of licences recommended	—	—	—	—	—
6. Applications withdrawn	—	—	—	—	—

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.

	Mattress- makers and Upholsterers	Laundries	Barbers and Hairdressers
Applications received	16	34	497
Registration certificates issued	15	30	431
Registration granted subject to conditions	1	4	66
Registration refused	—	—	—
Applications withdrawn	—	—	—

Hawkers and Pedlars

The municipal regulations also require annual licences for hawkers and pedlars.

	Hawkers	Pedlars
1. Applications received	2,009	357
2. Granting of licences recommended (without conditions)...	671	348
3. Granting of licences recommended (subject to conditions)	1,338	9
4. Refusal of licences recommended	—	—
5. Number under items 3 and 4 later recommended	230	—
6. Applications withdrawn	—	—

Unauthorised hawking in the central city area has received the serious consideration of the Council during the year. It is commonly acknowledged that the situation had got out of hand, but a proposal to enforce a complete ban immediately invoked a threat by the hawking fraternity to boycott the wholesale market. Various proposals as to fixed stands and standardised barrows were considered, but are irrelevant to the main problem of restoring law and order and preventing deliberate provocative and repeated obstruction of the roads. Present indications are that the problem will be solved in due course.

TRADE LICENCES

The Registration of Business Ordinance, No. 15 of 1953, provides that a certificate must be obtained from the Council before a licence is issued to trade as a general dealer, fresh produce dealer, apothecary, 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 following is an analysis of applications for certificates dealt with during the year:—

	General dealers	Fresh produce dealers	Butchers	Bakers	Motor garages	Mineral water dealers	Mineral water manufacturers	Apothecary	Live Stock dealer
1. Applications received	1 307	363	55	1	57	90	—	11	1
2. Granting of licences recommended (without conditions) ...	639	112	23	—	20	31	—	9	1
3. Granting of licences recommended (subject to conditions) ...	668	251	32	1	37	59	—	2	—
4. Number under item 3 later reported as having complied with conditions ...	274	140	18	—	14	21	—	1	—
5. Refusal of licences recommended ...	—	—	—	—	—	—	—	—	—
6. Applications withdrawn	—	—	—	—	—	—	—	—	—

Food inspection

The following foodstuffs were condemned as unfit for human consumption as the result of ordinary inspections by health inspectors and the market health inspector during the year.

	Weight (lbs.)		Weight (lbs.)
Fruit:—		Vegetables:—	
Pome	9,123	Bulbs and leaves	14,480
Drupe	4,330	Flowers	3,590
Citrus	35,882	Leaves and stems	84,902
Vine	670	Roots	14,759
Small fruit	2,380	Seed fruits	491,822
Miscellaneous	31,400	Tubers	128,050
	<u>83,785</u>		<u>737,603</u>

Other provisions:—

Canned food	6,548	Meat	1,745
Canned milk	1,589	Coffee	22
Condiments	287	Patent foods	128
Confectionery	2,678	Rice	94
Delicacies	237	Sugar	100
Fish	2,809	Tea	70
			<u>16,307</u>

After a lapse of nearly ten years, in May, 1963 my attention was directed to a recurrence of contamination of a consignment of tomatoes produced in the Northern Transvaal, and revealed through a complaint by a purchaser of such tomatoes at the Epping municipal market.

The next consignment from the same producer, sent to two different market agents, was examined and a pungent odour was noticeable in the orange-coloured papers in which the tomatoes were wrapped. Tests by smell and taste seemed to indicate that the contaminant was the same as that recorded in my Annual report of 1954, i.e. sodium orthophenyl-phenate.

A specimen box was submitted to the Officer-in-Charge, Government Chemical Laboratory where it was established that the wrapping paper was impregnated with "Di-phenyl", a similar contaminant to sodium orthophenyl-phenate.

The wrapping papers were inscribed "Union of South Africa—Empire Produce" and it would appear that as these wrapping papers—normally used for citrus fruits—were unusable for export purposes owing to the wording, the packer had decided to use them for wrapping his tomatoes.

The volatile nature of the "Di-phenyl" had facilitated its absorption throughout the tomatoes, and as the substance had a toxicity ratio of 7 to 10 in relation to sodium orthophenyl-phenate, the whole consignment of 521 boxes of 10 lbs. each was seized and detained on 8th May, 1963.

The attention of the Chief Regional Health Officer, State Health Service, Cape Town, was again directed to this malpractice of contamination of foodstuffs with the request that his Head Office, Pretoria, take appropriate action.

The Fruit and Food Technology Research Institute, Stellenbosch, whose attention had been directed to the case by the State Health Service expressed great interest and requested a specimen box for experimental purposes.

Further examination on 9th May, revealed that the consignment of 521 boxes of tomatoes included two types of wrapping papers, i.e. the 11 inch square impregnated papers on large tomatoes, and 8 inch square un-impregnated papers on the smaller tomatoes.

This necessitated extra work in sorting out the two types, as it was clear that there was no contamination of the small type of tomatoes in the un-impregnated wrappers, and 271 boxes of this type were subsequently released for sale on the 19th May, 1963.

On the 13th May, 1963, a further consignment of 407 trays of tomatoes from the same producer was received at the market, and it was established that the wrappers of these tomatoes had also been impregnated with Di-phenyl and had contaminated the tomatoes. The whole consignment was consequently destroyed.

On 17th May, 1963, a consignment of 1,010 trays of tomatoes was received at the market by two different market agents from a different Tzaneen, Transvaal, producer.

On examination it was found that certain trays of tomatoes contained Di-phenyl impregnated wrappers and in other instances un-impregnated wrappers. There were also trays in which both types of wrappers were mixed.

This again necessitated the whole consignment being sorted and resulted in the release for sale of 901 trays of tomatoes with unimpregnated wrappers and the destruction of 109 trays of tomatoes with impregnated wrappers or where there was a mixture of the two types of wrappers.

Subsequent consignments of tomatoes from the original producer in the Northern Transvaal revealed that the use of the coloured wrappers had been discontinued and that white un-impregnated wrappers were now being used. It would appear that action taken by the Chief Regional Health Officer, State Health Service, had borne fruit.

However, despite the efforts recorded above, some three months later, on 13th August, a further 920 trays of tomatoes consigned from Malelane, Eastern Transvaal, reached the Epping municipal market with wrapping papers also heavily impregnated with Di-phenyl which had contaminated the tomatoes, necessitating the destruction of the whole consignment.

A further consignment of 500 trays of tomatoes from the same source reached Cape Town on 14th August, and similarly had to be destroyed for the same reason.

On 16th August, a further consignment of 720 trays of tomatoes reached Cape Town and had to be similarly treated.

The wastage of this enormous amount of health-giving food by its destruction as a result of contamination by improper use of wrapping papers cannot be too strongly deplored.

This department and the State Health Service endeavoured to ensure that the State Agriculture Department was timeously advised of the first occurrence in May, 1963, but it would appear that information was not distributed to all tomato growers, hence the recurrence.

Subsequent consignments from the same producer were wrapped in un-impregnated white wrappers.

MUNICIPAL WASHHOUSES

There are six washhouses in the municipal area, namely, at Hout Street, Hanover Street, Salt River, Mowbray, Claremont and Wynberg. At each of four washhouses there is a caretaker, at one an assistant caretaker, and at one washhouse (Hout Street) there are two assistant caretakers. At Hanover Street washhouse the washing troughs are supplied with steam, and 'hydro-extractor' drying chambers, ironing machines and electric irons are provided. All the others are supplied with cold water only and the drying and bleaching are done in the open air.

The charges for washing and ironing are: for washing 5c per day and for ironing (including use of electric irons) 2c per hour at all the washhouses, except the Hanover Street washhouse, where the charges are 10c per half day for washing and ironing (combined).

At Hout Street washhouse there is an installation for hot and cold water shower-baths. The charges for the use of the shower-baths are as follows: adults 3c, children 2c.

The attendances and takings at the washhouses (including ironing rooms) during the year were as follows:-

	Attendances	Money taken
Hout Street	7,084	493.71
Hanover Street	10,486	1812.90
Salt River	2,422	132.09
Mowbray	9,556	811.40
Claremont	11,348	907.29
Wynberg	6,859	489.97
	<u>47,755</u>	<u>R4,647.36</u>

The drop of over 1,000 from the previous year's total of attendances at the washhouses may result from the replacement of washerwomen by an ever increasing number of laundrettes in the city.

The attendances and takings at the Hout Street shower-baths during the year were as follows:-

	Shower-baths	
	Attendances	Money taken
Adults	17,519	523.83
Children	2,139	42.74
Total	<u>19,658</u>	<u>R566.57</u>

The construction of a new public bath house in the Hout Street area has been shelved temporarily but it is anticipated that the unit will be erected during 1964. Its need in this congested area where practically every dwelling is devoid of a bathroom requires no stressing.

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. 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, where it is inspected and stamped.

Butchers' Meat

The following is a return of meat condemned at the abattoir with diseases discovered:—

Cause	Number of Items				Portions (Weight)
	Beef	Mutton	Veal	Pork	
Abscess	4,621		2	1	
Actinomycosis	606				
Adenitis	4	4		1	
Anaemia	1	4			
Anaplasmosis					
Angiomatosis	148			14	
Bladderworm	1,022			313	
Botriomycosis				2	
Bruising	820	88	12	34	97,760
Caseous Lymphadenitis		59,944			4,092
Cirrhosis	3	7,795		282	
Cysts	579	3,527		2,161	
Degenerate parasites		3			
Dermatitis		2			
Emaciation	1	71	7	1	
Enteritis				1	
Erysipelas				1	
Fevered	49	90	47	12	
Flukes	987	1,138	1	14	
Gangrene	59	6	4	8	
Immaturity		1	18		
Inflammation	159		2	4	
Jaundice	4	107	72	3	
Lymphadenitis	1				
Mastitis	4			1	
Metritis	4	6	1		
Moribund	1	33	1		
Necrosis		150	2	3,288	
Nephritis		13	3	1	
Neoplasms	1	1		1	
Oedema	1	5	1		
Pericarditis	71	1	2	1	
Peritonitis	23	22	3	19	
Pleurisy	6	9	5	86	9,953
Pneumonia	29	201	46	821	
Pyæmia	14	173	32	17	
Redwater	13				
Sarcosporidiosis	18			7	
Septicaemia	6	22	3	2	
Stilesia		79,091	2		
Strongyles		148			
Synovitis				2	
Tuberculosis	33		1	371	
Tumour	1				
Uraemia		10	1	1	

AIR POLLUTION

An Air Pollution Prevention Bill has been drafted during the year. It is aimed mainly at controlling the volume of gases, smoke and dust discharged into the air by industry, but also makes provision for the law to be applied to motor vehicles. Factory chimneys in the municipality are under constant surveillance by health inspectors but smoke from ships, harbour craft and locomotives of the South African Railways are responsible for over 85 per cent of the "smog" conditions of central Cape Town. Notwithstanding representations to the local System Manager's office of the South African Railways, conditions continue to deteriorate. There is a slight hope that the promulgation of the new Air Pollution Prevention Bill will assist the department in clearing Cape Town of its pall of smoke on still days.

MILK AND ICE CREAM

The Regulations governing the compulsory pasteurisation of all milk offered for sale in Cape Town (except milk from accredited disease-free herds, of which none is licensed at present) have been in force since 8th May, 1953.

Following initial difficulties a steady and progressive improvement in the bacterial quality of the milk as supplied to the public has resulted.

Staff

One veterinary officer confines himself to the veterinary inspection of dairy cattle, the supervision of cowsheds of all producers who supply milk for consumption in the city, the supervision of all pasteurising plants, as well as ice cream factories. He is assisted by two full-time dairy inspectors in the inspection of producers' premises and one full-time dairy inspector who assists in the supervision of pasteurising plants and ice cream factories, in taking samples and in laboratory work. A laboratory technical assistant confines himself to the laboratory where tests are performed and recorded. At all times a very close linkage exists between the laboratory and the field workers of this Branch.

During the year under review the work listed below was carried out—

Control of raw milk.

Dairy farms licensed to sell milk in Cape Town ...	235
Average number of gallons of milk produced daily ...	56,995
Average number of gallons of milk consumed daily ...	44,839
Average number of gallons of milk surplus daily ...	12,156
Total number of inspections on farms ...	2,559
Herds inspected ...	73
Investigations on farms regarding high bacterial counts ...	225
Recording of temperatures of mechanically cooled milk ...	237

Breed smears of 4,414 samples of milk were examined, of which 366 (8.3 per cent) were found to be unsatisfactory.

Mastitis was diagnosed in 88 (2.0 per cent) of these samples. Numerous pus cells were seen in 248 (5.6 per cent) of the samples.

It was decided to pay special attention to pus cells, and any count of 900,000 or more per ml. was noted and regarded as probably due to mastitis.

During the year gravitation cream smears were made from 250 composite bulk milk samples from producers. Mastitis was diagnosed in 32 (12.8 per cent) of these samples.

Whenever mastitis was diagnosed or numerous pus cells seen on milk smears in the laboratory, the producers were notified by letter and the herd examined. In this connection 336 letters were sent to producers. Prevention, diagnosis and treatment were then discussed with the farmers concerned.

A circular letter was posted to each licensed milk producer advising him of the advantages of annual inoculation against anthrax.

One hundred and three improvements to the structure of farm dairies were made, due to the advice, or on the instructions of, the Milk Control Branch.

On a number of occasions farmers appealed to this Branch for assistance and advice regarding unsatisfactory butterfat percentages of their milk. All such requests were fully investigated and the necessary advice furnished. During the course of these investigations 14 butterfat tests were performed of which two were unsatisfactory.

Control of pasteurised milk.

Pasteuring plants licensed and certified	9
Total number of visits to pasteurising plants	2,589

Phosphatase tests.

For the period under review, 2,037 phosphatase tests on pasteurised milk samples were carried out, of which 34 (1.7 per cent) proved to be under-pasteurised. Of these, four were grossly under-pasteurised, three were underpasteurised, and 27 were very slightly underpasteurised.

Two hundred and ten phosphatase tests were performed on samples of cream. Of these only 7 were very slightly underpasteurised.

Bacterial counts

Breed smears of 2,438 samples were examined, of which 30 (1.2 per cent) were unsatisfactory.

B. coli tests.

838 tests were carried out, of which 351 (41.9 per cent) were unsatisfactory.

Control of ice cream.

The five licensed ice cream factories were visited on 217 occasions. Of the 277 samples of ice cream submitted to the phosphatase test, none proved to be underpasteurised. Three hundred and twenty samples of ice cream were examined by the Breed smear method, twenty-one of which proved unsatisfactory. Two hundred and ninety-eight *B. coli* tests were performed on samples of ice cream, of which 19 were unsatisfactory.

Vi-tests.

Vi-tests on 326 persons were carried out during the year.

Veterinary and laboratory work

The following additional veterinary and laboratory work was carried out during the year under review.

1. 1,321 tests were performed on milk samples submitted by other Municipalities. Fifty samples proved to be unsatisfactory.
2. Numerous tests on the caustic concentration of the sumps of bottle washing machines, and "lipstick" and bacteriological tests on milk bottles were again performed as part of the educational and instructional campaign for the benefit of the milk pasteurisers. These tests have assisted the Department in rectifying faults in the bottle cleansing and sterilising system.
3. "Bacto-strip" testing for B.coli. During the year numerous Bacto-strip tests were carried out and were again found to be most useful in illustrating the degree of B.coli contamination.
4. Brucellosis. A total of 194 contagious abortion ring tests were performed on composite bulk milk samples from farms. Forty-one tests indicated the presence of C.A. antibodies. Each positive test was followed up with an explanatory letter and a visit to the farm.
5. Antibiotics in milk. Three hundred and forty-five tests were done to check on the presence of antibiotics in samples of raw milk. Ten tests indicated the presence of penicillin. Subsequent investigations on the farms confirmed the laboratory results.
6. Sweet curdling. Extensive tests were done during the year to determine the reason for sweet curdling in the milk from one pasteurising plant.
7. Abattoirs. The Veterinary Officer deputised for the Director of Abattoirs during that official's absence on leave and other duties.

MILK SAMPLING.

Bacteriological counts of raw milk examined by the Breed smear method.

	No. of samples examined	% unsatisfactory
1948	1,449	39.4
1949	1,575	46.2
1950	1,891	44.9
1951	1,397	43.0
1952	1,287	39.0
1953	1,229	36.5
1954	1,346	51.6
1955	4,669	51.1
1956	5,896	23.0
1957	4,519	25.0
1958	3,478	16.6
1959	4,242	11.1
1960	3,500	6.7
1961	4,950	4.5
1962	4,182	4.3
1963	4,414	8.3

Milk samples are allowed to incubate at atmospheric temperature for 8 hours after sampling. The counts are then assessed on their merits, using a count of 500,000 organisms per ml. in hot weather and 300,000 organisms in cool weather, as an indication of unsatisfactory quality, and finally marking only those samples as unsatisfactory which compare unfavourably with the general trend for that period.

The reasons for unsatisfactory samples are investigated by the field staff as soon as possible. Bacteriological counts of pasteurised milk examined by the Breed smear method.

	No. of samples.	% unsatisfactory
1954	1,168	28.4
1955	1,675	14.2
1956	2,458	1.6
1957	3,284	1.0
1958	2,735	0.5

After 1958 this test was made more stringent by allowing milk to incubate at room temperature for 8 hours.

	No. of samples.	% unsatisfactory
1959	2,636	1.3
1960	2,518	1.1
1961	2,719	0.6
1962	2,628	1.3
1963	2,438	1.2

For the sake of convenience, counts over 300,000 organisms per ml. were considered unsatisfactory and immediately investigated. The Dairy Regulations require a count of less than 100,000 per ml. at the time of sampling.

Presumptive test for presence of coliform organisms in 1 ml. of milk.

	No. of samples.	% unsatisfactory.
1951	190	76
1952	69	68
1953	381	59
1954	392	49
1955	277	48
1956	818	48
1957	1,229	51
1958	1,146	52
1959	1,175	44
1960	945	45
1961	1,023	43
1962	771	44
1963	838	42

Phosphatase tests of pasteurised milk samples.

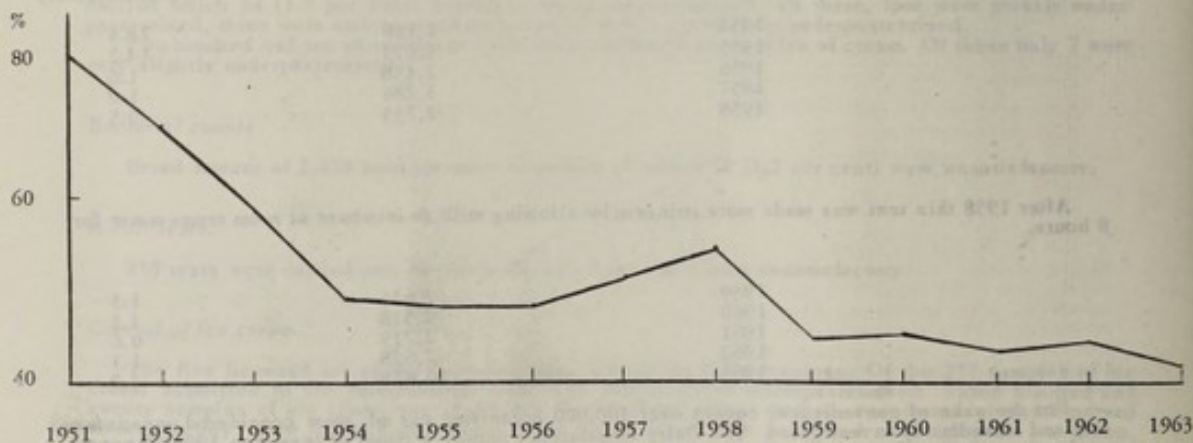
	No. of samples.	% underpasteurised.
1950	1,557	6.3
1951	1,834	6.5
1952	1,716	3.5
1953	2,069	2.0
1954	1,995	1.4
1955	2,055	1.0
1956	2,487	1.0
1957	2,861	0.8
1958	2,249	0.5
1959	2,399	1.5
1960	2,228	0.3
1961	2,200	0.3
1962	2,216	0.3
1963	2,037	0.3

Slightly underpasteurised samples are not shown as unsatisfactory in above table. The phosphatase test used in the laboratory indicates as slightly underpasteurised, that milk which has been heated to 161 deg. F. for 15 seconds.

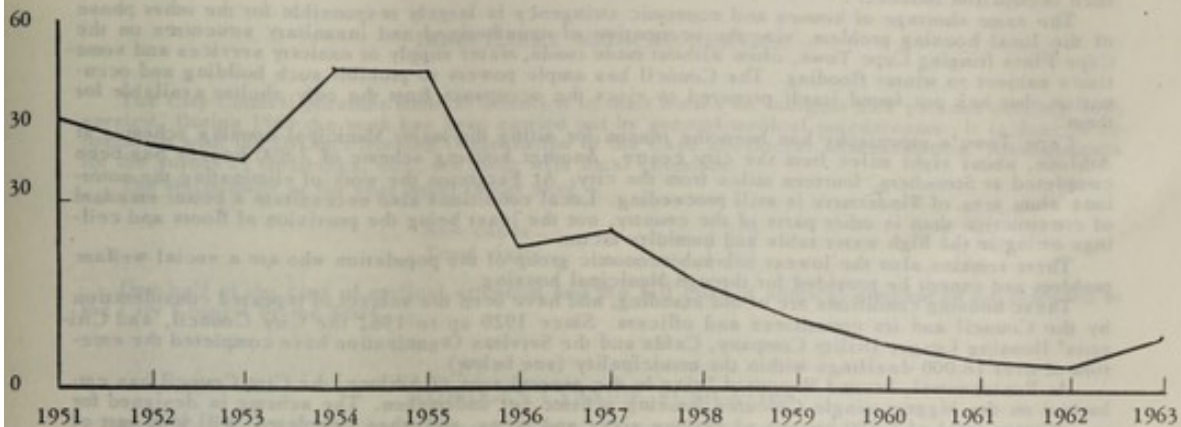
The test also indicates as slightly underpasteurised, boiled milk to which has been added 0.1 per cent raw milk.

MILK CONTROL

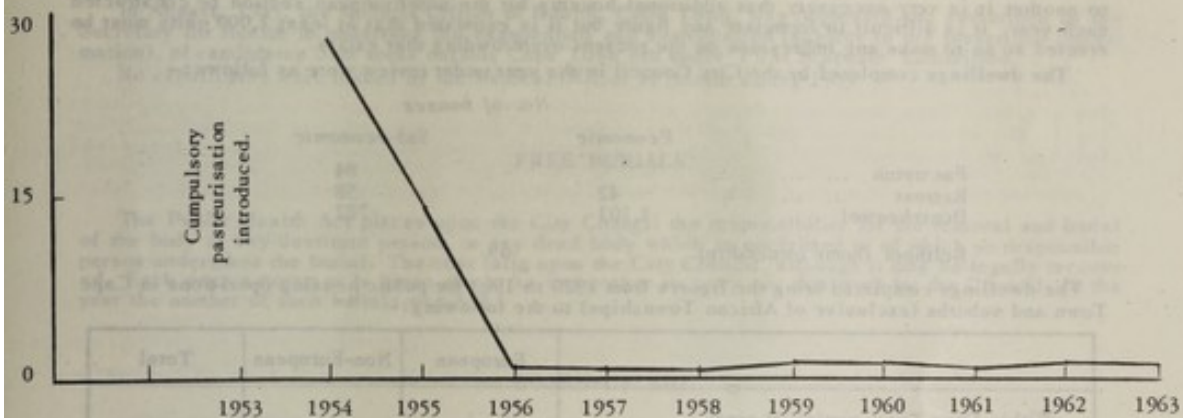
% positive B.coli. Pasteurised milk.



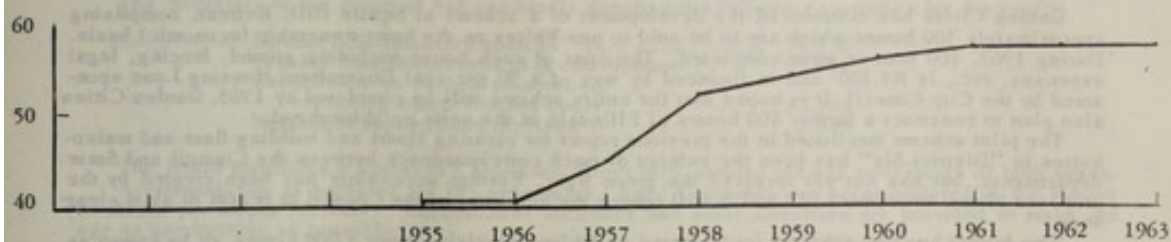
% unsatisfactory bacterial counts. Raw milk.



% unsatisfactory bacterial counts. Pasteurised milk.



Gallons per day. (Thousands)



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. Private enterprise is today making little or no provision for the housing of the lower income groups owing to the high building costs of erecting such dwellings and have concentrated on the erection of large blocks of flats. Such flat development is taking place all over the municipality, but far and away the most popular suburb for such development is the Sea Point, Three Anchor Bay, Green Point and the Kenilworth areas. There is a decided danger in the overcrowding of any one area with large flat blocks owing to the danger of ultimate deterioration of both building and inmates and the possibility of slum conditions eventually developing.

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 over-crowded 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 unauthorised 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 powers to prohibit such building and occupation, but has not found itself prepared to eject the occupants from the only shelter available for them.

Cape Town's topography has been the reason for siting the major Municipal housing schemes at Athlone, about eight miles from the city centre. Another housing scheme of 2,800 houses has been completed at Steenberg, fourteen miles from the city. At Factreton the work of eliminating the notorious slum area of Windermere is still proceeding. Local conditions also necessitate a better standard of construction than in other parts of the country, not the least being the provision of floors and ceilings owing to the high water table and humidity factor.

There remains also the lowest sub-sub-economic group of the population who are a social welfare problem and cannot be provided for through Municipal housing.

These housing conditions are of old standing, and have been the subject of repeated consideration by the Council and its committees and officers. Since 1920 up to 1962 the City Council, and Citizens' Housing League Utility Company, Cafda and the Servitas Organisation have completed the erection of over 18,000 dwellings within the municipality (see below).

At Bonteheuwel, beyond Vanguard Drive in the general area of Athlone, the City Council has embarked on the biggest single Coloured housing scheme yet undertaken. The scheme is designed for an ultimate total of 5,500 houses of various sizes and types, and when completed, will form part of one of the largest areas housing the Coloured community.

In view of the increased tempo of building at Bonteheuwel, Retreat and Guguletu, the Council is erecting houses departmentally as well as by contract. The building units function with artisans recruited from the building industry and working under conditions of service applicable to that industry. Coloured housing is based on standard plans evolved by the National Housing Commission.

With the enforcement of the Group Areas Act and the displacement of racial groups from one area to another it is very necessary that additional housing for the non-European section be constructed each year. It is difficult to formulate any figure but it is estimated that at least 2,000 units must be erected so as to make any impression on the present overcrowding that exists.

The dwellings completed by the City Council in the year under review were as follows:—

	No. of houses	
	Economic	Sub-economic
Factreton		84
Retreat	42	58
Bonteheuwel	1,101	782
Belthom (home ownership)	69.	

The dwellings completed bring the figures from 1920 to 1963 for public housing operations in Cape Town and suburbs (exclusive of African Townships) to the following:—

	European	Non-European	Total
Within Cape Town municipal area:			
City Council	1,131	16,097	17,228
Citizens' Housing League Utility Co. ...	1,063	28	1,091
Cafda	—	336	336
Servitas Organisation	84	—	84
Garden Cities	—	100	100
Total	2,278	16,561	18,839

Garden Cities has commenced the development of a scheme at Square Hill, Retreat, comprising approximately 300 homes which are to be sold to non-Whites on the home-ownership (economic) basis. During 1963, 100 houses were completed. The cost of each house including ground, fencing, legal expenses, etc., is R4,100 and is financed by way of a 90 per cent Government Housing Loan sponsored by the City Council. It is hoped that the entire scheme will be completed by 1965. Garden Cities also plan to construct a further 400 homes at Elfindale in the same neighbourhood.

The pilot scheme mentioned in the previous report for clearing slums and building flats and maisonettes in "District Six" has been the subject of much correspondence between the Council and State departments, but has not yet received the green light. Further uncertainty has been created by the proposed Slums Amendment Bill which will reduce the autonomy of the Council in regard to slum clearance.

Two further housing schemes for Coloured at Athlone involving some 3,000 homes, to be known as Vanguard Estate and Heideveld, are being considered by the Council.

The number of new dwelling houses built during the year in the Municipality as compared with the growth of population is shown in the following table:—

Year	Estimated increase in population	Buildings for human habitation completed (dwellings)
1915 ..	3,980	123
1925 ..	5,380	335
1935 ..	6,430	1,937
1945 ..	10,400	870
1955 ..	7,030	2,155
1960 ..	7,940	1,817
1961 ..	8,150	1,259
1962 ..	8,350	2,609
1963 ..	14,560	2,550

SECTION X. - OTHER SERVICES.

DOMICILIARY MEDICAL SERVICE

The City Council provides medical attention in their homes for indigent sick persons needing such service. During 1963 the work has been carried out by general medical practitioners. It is done in co-operation with the District Nursing Organization of the Cape Provincial Administration. Arrangements for the supply of medicines, etc., are made with local chemists.

The visits made in the year under report were -

New cases	...	...	278
Total visits	...	...	1,561

One half of the cost of medical attention and the full cost of surgical appliances are refunded to the City Council by the State.

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 State Health Service or a 'First Schedule' local authority. Certificates granted by local authorities are subject to confirmation and counter-signature by the Secretary for Health. A certificate may not be issued unless the candidate worked for 12 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 authorised by the Secretary for Health to undertake the examination and certification (subject to the prescribed confirmation), of candidates from areas outside Cape Town not under 'First Schedule' authorities.

No certificates were issued by the Medical Officer of Health during 1963.

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. Each year a contract is given out to an undertaker to carry out this work for the Council. In the year the number of such burials was 392.

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, supplemented to some 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 Department of Social Welfare as from 1st April, 1940.

The Secretary of the Board of Aid has kindly supplied the following statistics for the year:-

Income from voluntary sources	...	...	R 3,350
Subsidy from Department of Social Welfare	...	...	85,632
Expenditure on outdoor poor relief, excluding administration costs	...	...	27,163
Number of applications received	...	...	2,248

The Board maintains a hostel in Canterbury Street for Coloured old-age pensioners of both sexes. Accommodation is provided for 105 pensioners. Aged Coloureds are accommodated in the Hostel at R7.00 per month inclusive. Recreational facilities and other amenities are provided to make old age as comfortable as possible.

Two-Day nurseries are maintained by the Board. The Tafelberg Day Nursery in Canterbury Street accommodates 106 Coloured children aged three months to six years. The European nursery in Harrington Street has accommodation for 50 children.

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 sited 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 rises to or very near the surface.

The city is sewered on the 'separate' system, the stormwater being conducted by separate channels to the nearest outfall namely the sea, or into the Liesbeek and Black Rivers, which drain the 'southern suburbs' North of Kenilworth and flow into Table Bay as the Salt River. South of Kenilworth the streams run South and discharge into a series of vleis or lakes and thence to the sea at False Bay.

The Keyser River at Lakeside has been widened and deepened from Zand Vlei to the Main Road. The canalisation of the Diep River and the Sand River from the Main Road, Plumstead, to Zand Vlei,

by means of concrete lining, has also been completed as well as a concrete canal providing an outlet from Lange Vlei to the Sand River. Further work on the canalisation of the Black River is in progress at present, and as a result of these works flooding during the periods of heavy rain will be obviated. Canalisation of the Liesbeek River in areas subject to flooding is now virtually complete.

The Vygekraal River upstream of Vanguard Drive is being widened and deepened, this work should be completed by 1966.

SEWERAGE

With the exception of a few outlying areas, such as portions of Windermere, Athlone, Crawford, Claremont, Heathfield, Retreat, etc., practically the entire built-up part of the municipality is provided with water-borne sewerage facilities.

Both the Windermere and Retreat Main Sewerage Schemes are well advanced.

The Council in terms of an agreement with the Cape Divisional Council, accepts and treats sewage from Goodwood, Parow and the Divisional Council local areas of Thomson, Epping Garden Village, similarly the Council accepts and treats all sewage from Pinelands and the Divisional Council local areas of Bergvliet, Meadowridge and Bishopscourt and portion of Ferness Township, Ottery.

Waterborne sewerage has been provided for the Bonteheuvel Housing Scheme and will soon be available for the Guguletu Housing Scheme. The provision of waterborne sewerage in the Blomvlei River Catchment comprising the area east of Belgravia Road and south of Klipfontein Road is now being undertaken and facilities will be available by 1965.

The Council has authorised a sewerage scheme for sections of Diep River, Heathfield and Retreat between Prince George Drive and the suburban railway not included in existing schemes, this scheme should take three to four years to complete.

PAIL CLOSETS.

Regular removals of night soil were effected from all premises requiring such service in unsewered areas in Camps Bay, Rugby, Windermere, and added areas of Mowbray, Rondebosch, Claremont and in Wynberg, Diep River, Heathfield, Retreat and Lakeside. Pail contents were disposed of by discharging into the sewerage system through intakes at Brooklyn, Kensington, Athlone, Kenilworth and Muizenberg. Stercus from the Southfield/Diep River/Heathfield areas was buried on Council-owned land off Prince George Drive, Southfield. Approximately 380,000 pail clearances were effected. Similarly, 41,679 removals were made from O'Brein dry earth closets in the municipal and certain abutting areas.

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 Sunday in certain congested sectors. Sunday services are also carried out at other premises 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 the payment of a special charge.

In Woodstock and Salt River (from Cape Town to Station Road, Observatory) four times a week, but every weekday at certain specific 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.

Clifton, Camps Bay and Lakeside, three times a week.

Certain added areas on the Cape Flats, twice a week.

During the year the quantity of refuse removed was 530,802 cubic yards.

In all areas house refuse is disposed of by controlled tipping.

SECTION XI - STAFF OF CITY HEALTH DEPARTMENT

The authorised establishment of the City Health Department as at 31st December, 1963, was as follows -

ADMINISTRATIVE BRANCH

Medical Officer of Health
Senior Assistant Medical
Officer of Health
Assistant Medical Officer
of Health
Medical Officer
Administrative Officer
Administrative Assistant
Chief Clerk
Senior Clerk
Clerks, 19
Senior Secretarial Assistant
Shorthand Typiste, Gr. II
Female Clerical Assistants, 2
Office Attendants, 2
Caretaker/Cleaner
Labourer

HEALTH INSPECTION BRANCH

Principal Health Inspector
Senior Assistant Principal
Health Inspector
Assistant Principal Health
Inspector
Divisional Health Inspectors, 5
Health Inspectors, 32
Learner Health Inspectors, 5
Pest Control Officers, 3
Clerks, 2
Female Clerical Assistant
Washhouse Caretaker/Fitter
Washhouse Caretakers, 3
Assistant Washhouse Caretakers, 4
Motor Driver
Stores Yardsman
Checker
Fireman/Stoker
Pest Control Operatives, 24
Labourers, 5
Attendants at public sanitary
conveniences, 152

MILK CONTROL

Veterinary Officer
Dairy Inspectors, 3
Laboratory Technician

MATERNAL & CHILD WELFARE BRANCH

Maternal and Child Welfare Officer
Deputy Maternal and Child Welfare
Officer
Clinical Medical Officers, 2
Principal Health Visitor
Clinic Sister/Health Visitors, 50
Clinic Nurses, 7
Nursery School Supervisor
Nursery School Teacher
Junior Nursery School Teachers, 6
Senior Social Welfare Visitor
Female Clerical Assistants, 4
Clerk
Junior Creche Superintendents, 2
Clinic Assistants, 10
Nursery Assistants, 3
Caretakers, 2
Laundresses, 4
Domestics, 26
Children's Helps, 6
Cooking Hands, 18
Drivers, 4
Storehand
Labourers, 3
Nightwatchmen, 4

TUBERCULOSIS BRANCH

Tuberculosis Officer
Deputy Tuberculosis Officer
Clinic Medical Officers, 2
Radiographer
Clinic Sister/Health Visitors, 10
Clinic Nurses, 5
Clerk/Typistes, 2
Senior Clerk
Clerks, 8
Clinic Assistants, 4
Domestics, 2
Caretaker/Cleaner
Labourers, 4

VENEREAL DISEASE BRANCH

Venereal Disease Officer
Clinic Sister
Domestic
Labourers, 2
Male Nurses, 2

DENTAL BRANCH

Principal Dental Officer
Deputy Dental Officer
Assistant Dental Surgeon
Senior Dental Mechanic
Dental Mechanics, 4
Senior Clinic Nurse
Dental Nurses, 6
Clerks, 3
Female Clerical Assistant
Social Welfare Visitor
Clinic Assistants, 4
Laundresses, 3
Domestic
Caretaker/Cleaner
Labourer

CITY HOSPITAL FOR
INFECTIOUS DISEASES

Medical Superintendent of
Hospitals
Deputy Medical Superintendent
of Hospitals
Resident Medical Officers, 3
Junior Resident Medical
Officers, 3
Matron
Assistant Matron
Sisters, 19
Sister Tutor
Staff Nurses, 18
Student Nurses, 24
Nursing Assistants, 38
Nurse Aides, 41
Radiographer
Occupational Therapist
Principal Pharmacist
Senior Pharmacist
Pharmacists, 3
Lady Wardens, 2
Disinfection Officer
Ambulance Officer
Senior Clerk
Clerks, 3
Female Clerical Assistants, 2
Clinic Assistant
Senior Works Foreman
Handyman/Electrician
Handyman/Carpenter
Brush Hand
Works Storeman
Painter
Boiler Attendant
Laundry Supervisor
Senior Laundress
Laundresses, 4
Housekeeper
Housemaids, 36
Kitchen Supervisors, 3
Seamstress, 4
Hospital Cooks, 8
Senior Telephone Operators, 2
Telephone Operator
Senior Hospital Porter
Hospital Porters, 6
Bantu Male Orderlies, 66
Labourers, 12
Ambulance and Motor Drivers, 4

BROOKLYN HOSPITAL

Deputy Medical Superintendent
Resident Medical Officers, 5
Matron
Assistant Matron
Sisters, 14
Staff Nurses, 29
Probationer Nurses, 2
Non-European Nurse Aides, 66
Non-European Male Nursing
Assistant
Radiographer
Clinic Assistants, 2
Occupational Therapist

Lady Warden
Clerks, 2
Female Clerical Assistant
Senior Works Foreman
Laundry Manager
Laundress, 31
Fitter
Unindentured Mason
Craft Worker
Brush Hand
Boiler Attendants, 3
Storekeeper

Housekeeper
Seamstress, 2
Kitchen Supervisors, 2
Hospital Cooks, 4
Senior Telephone Operator
Telephone Operators, 2
Hospital Porters, 5
Male Orderlies, 70
Labourers, 21
Patrolmen, 3
Motor Drivers, 3

CHANGES IN PERSONNEL.

Dr. A.J. Wilson appointed Venereal Diseases Officer 1st April, 1963.

Dr. N.P. Louw, Deputy Dental Officer, resigned 31st December, 1963.

Dr. D.M. Langerman appointed Senior Assistant Medical Officer of Health 1st November, 1963.

Dr. Stewart.

The Department lost the services of a valued and loyal officer when Dr. Alexander Stewart, my Deputy, retired on the 3rd September, 1963, on reaching the age of Superannuation.

Dr. Stewart graduated M.B., Ch.B., at Cape Town University in July, 1931, joined the Health Department on the 1st February, 1932. While employed in the Department he proceeded to take the Diploma in Public Health of the University of Cape Town in 1934.

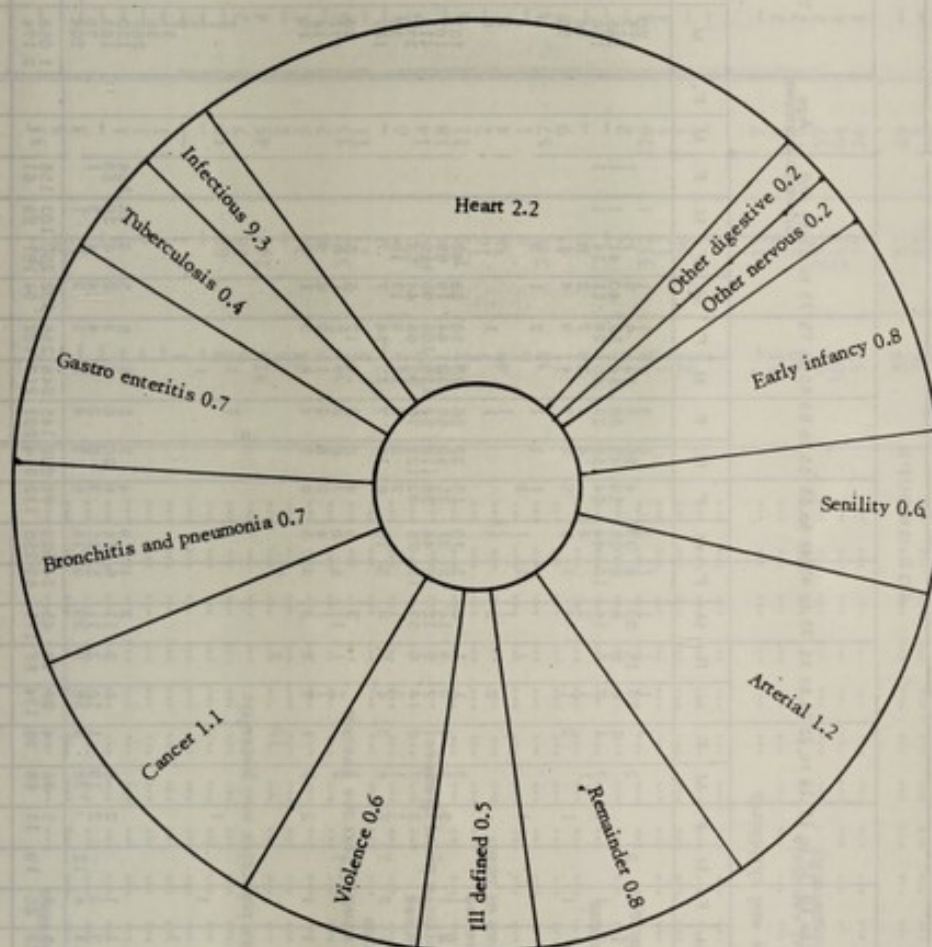
For many years Dr. Stewart acted as the "Number Three" on the staff, and was mainly responsible for providing medical cover to the Fire Brigade and Traffic Department, as well as being responsible for Infectious Diseases.

In 1940 he proceeded on Active Service with the S.A. Medical Corps and saw service in East Africa. He returned to his old post in the Department in 1946 and was appointed as Deputy Medical Officer in 1952.

Dr. Stewart endeared himself to all members of the staff, both medical and lay, and proved to be one of the most loyal persons that I have ever had the privilege of working with. His example and demeanour was an inspiration to all the younger members of the staff. His place will be exceedingly difficult to fill. We wish him and Mrs. Stewart many years of good health and a happy retirement.

PROPORTIONS OF DEATHS FROM
PRINCIPAL CAUSES TO TOTAL DEATHS.

1963



The total number of deaths was 5,913

The total death rate from all causes was 10.35

TABLE A. CAUSES OF DEATH REGISTERED IN 1963

Corrected.

E.-EUROPEAN.

O.-OTHER, or NON-EUROPEAN.

CAUSE OF DEATH	Race	AGE-GROUPS																TOTALS						Deaths in Cape Town of Non-Residents (excluding foreign columns)										
		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 and upwards unknown		TOTALS		Bantu Townships		Deaths in Cape Town of Non-Residents (excluding foreign columns)		
		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 ...	E.O.E.O.E.O.	30	30	24	27	18	16	73	73	5	4	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
II.-Neoplasms ...	E.O.E.O.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	
III.-Allergic, endocrine system, metabolic, and nutritional diseases ...	E.O.E.O.E.O.	5	6	19	26	6	6	30	38	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
IV.-Diseases of the blood & blood-forming organs ...	E.O.E.O.E.O.	3	3	1	1	1	1	3	2	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.-Mental, psychoneurotic, and personality disorders ...	E.O.E.O.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	
VI.-Diseases of the nervous system & sense organs ...	E.O.E.O.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	
VII.-Diseases of the circulatory system ...	E.O.E.O.E.O.	15	12	6	5	1	3	22	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
VIII.-Diseases of the respiratory system (not infectious) ...	E.O.E.O.E.O.	73	81	21	32	12	13	106	126	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.E.O.E.O.	180	151	41	45	12	13	233	209	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
X.-Diseases of the genitourinary system ...	E.O.E.O.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	
XI.-Deliveries & complications of pregnancy, childbirth & puerperium ...	E.O.E.O.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	
XII.-Diseases of the skin and cellular tissue ...	E.O.E.O.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	
XIII.-Diseases of the bones & organs of movement ...	E.O.E.O.E.O.	7	12	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.E.O.E.O.	37	16	1	2	2	1	8	3	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.-Certain diseases of early infancy ...	E.O.E.O.E.O.	39	20	1	1	1	1	30	18	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.-Symptoms, senility and ill-defined conditions ...	E.O.E.O.E.O.	265	185	1	1	1	1	265	186	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
(E)XVII.-Accidents, poisonings and violence (external cause) ...	E.O.E.O.E.O.	52	36	10	12	6	7	68	55	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.	52	32	7	2	65	69	849	746	29	20	19	13	68	36	134	67	171	89	250	78	220	145	246	250	202	103	156	1,058	969	2,027	273	217	
All Races *	E.O.	653	521	131	156	65	69	849	746	29	20	19	13	68	36	134	67	171	89	250	132	314	202	217	182	94	181	28	61	2,174	1,709	3,883	476	357
		705	553	138	158	65	72	908	783	34	24	19	18	94	40	157	79	216	113	379	208	534	347	463	438	296	411	131	217	3,232	2,678	5,913	749	574

*Including 3 of unknown race

TABLE B. Deaths Classified for Causes and Race, 1963.
(Corrected)

International Code No.	CAUSE OF DEATH	European	Coloured	Bantu	Asiatic	Non-European	All Races
001-008	Tuberculosis, respiratory system	22	137	31	-	168	190
010-019	Tuberculosis, other forms	-	20	5	-	25	25
020-029	Syphilis	-	12	3	-	15	15
040	Typhoid fever	-	-	-	-	-	-
045-048	Dysentery	-	3	1	-	4	4
055	Diphtheria	-	2	1	-	3	3
056	Whooping cough	-	7	1	-	8	8
057	Meningococcal infections	1	1	-	-	1	2
080	Acute poliomyelitis	-	-	-	-	-	-
085-086	Measles	2	68	17	-	85	87
140-205	Other diseases classified as infective and parasitic	6	16	7	2	31	51
210-239	Malignant neoplasms	314	241	45	4	290	604
260	Benign neoplasms	13	-	2	-	2	15
290-293	Diabetes mellitus	24	26	3	1	30	54
330-334	Anaemias	7	8	2	-	10	17
340	Vascular lesions affecting central nervous system	231	312	35	6	353	584
400-402	Non-meningococcal infections	3	23	11	-	34	37
410-416	Rheumatic fever	12	25	6	1	32	44
420-422	Chronic rheumatic heart disease	530	260	14	7	281	811
430-434	Arteriosclerotic and degenerative heart disease	81	94	18	-	112	193
440-443	Other diseases of heart	42	139	11	3	153	195
444-447	Hypertension with heart disease	5	16	2	-	18	23
450-456	Hypertension without mention of heart	49	38	4	1	92	135
480-483	Diseases of the arteries	6	8	1	-	9	15
490-500	Influenza	38	248	57	3	308	346
500-502	Pneumonia	11	43	9	2	54	68
540-541	Ulcer of stomach and duodenum	8	10	-	-	10	18
550-553	Appendicitis	1	-	-	-	-	1
560, 561, 570	Intestinal obstruction and hernia	16	5	2	-	7	23
571, 764	Gastro enteritis	8	332	128	1	461	469
581	Cirrhosis of liver	11	12	5	1	18	29
590-594	Nephritis and nephrosis	22	29	7	-	36	58
610	Hyperplasia of prostate	2	2	-	-	2	4
640-652	Complications of pregnancy and childbirth	-	15	7	-	22	22
670-689	Congenital malformations	11	39	8	2	49	60
750-759	Birth injuries and post-natal asphyxia	10	74	15	2	91	101
760-762	Other infant diseases and immaturity	41	257	59	2	318	359
765-776	Senility and ill defined	309	243	64	4	311	620
780-795	Motor vehicle accidents	37	75	26	4	105	142
810-835	All other accidents	39	57	23	-	80	119
840-965	Suicide	26	17	3	-	20	46
970-979	Homicide	6	33	19	-	52	58
980-999	Other causes	83	180	53	4	237	320
	Total *	2,027	3,128	705	50	3,883	5,913

* Including 3 of unknown race.

TABLE C. Deaths by Cause and Month of Registration, 1962.

(Corrected for Outward Transfers.)

International Code No.	Disease	Race	January	February	March	April	May	June	July	August	September	October	November	December	Year
001-008	Tuberculosis of respiratory system	Eur.	-	5	1	-	-	2	-	3	4	2	4	1	22
		Non-E.	17	14	10	17	6	10	15	13	12	11	7	13	145
010-019	Tuberculosis, other forms	Eur.	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non-E.	2	2	2	2	-	1	-	2	3	2	4	2	22
020-029	Syphilis and its sequelae	Eur.	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non-E.	-	1	-	3	2	-	-	1	5	1	1	-	14
040-041	Typhoid fever	Eur.	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non-E.	-	-	-	-	-	-	-	-	-	-	-	-	-
055	Diphtheria	Eur.	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non-E.	-	-	-	-	1	-	-	-	2	-	-	-	3
056	Whooping cough	Eur.	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non-E.	-	1	1	-	1	-	2	1	1	-	1	-	8
057	Meningococcal infections	Eur.	1	-	-	-	-	-	-	-	-	-	-	-	1
		Non-E.	-	-	-	-	1	-	-	-	-	-	-	-	1
080	Acute poliomyelitis	Eur.	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non-E.	-	-	-	-	-	-	-	-	-	-	-	-	-
085-086	Measles and rubella	Eur.	-	-	-	-	-	-	1	-	-	1	-	-	2
		Non-E.	4	3	2	5	6	10	8	17	6	10	5	6	82
140-205	Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues	Eur.	23	23	21	26	35	25	18	29	26	20	20	18	284
		Non-E.	24	30	19	19	27	15	36	23	17	19	20	17	266
260	Diabetes	Eur.	4	1	3	1	3	1	3	2	1	1	4	-	24
		Non-E.	3	3	2	-	4	3	4	1	1	4	3	-	28
330-334	Vascular lesions affecting central nervous system	Eur.	18	13	19	20	18	20	16	22	20	20	15	14	215
		Non-E.	27	17	25	19	30	39	41	31	24	27	23	15	318
400-402	Rheumatic fever	Eur.	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non-E.	-	1	-	-	-	-	-	-	-	-	-	-	1
410-416	Cardiovascular diseases	Eur.	49	40	42	39	51	50	54	64	74	49	47	43	602
		Non-E.	26	23	19	26	34	33	43	62	45	33	35	30	409
430-434															
440-447	Hypertensive diseases	Eur.	6	-	5	1	3	1	3	6	6	9	2	2	44
		Non-E.	11	13	12	8	15	15	19	21	21	13	13	7	168
450-456	Diseases of the arteries	Eur.	2	2	10	4	5	4	2	7	3	1	4	2	46
		Non-E.	2	3	2	2	1	2	4	5	4	5	7	2	39
480-483	Influenza	Eur.	-	-	-	-	-	-	1	1	4	-	-	-	6
		Non-E.	-	-	-	-	-	-	-	4	5	-	-	-	9
490-493	Pneumonia (including pneumonia of the new born)	Eur.	3	2	2	1	-	3	3	8	4	3	5	3	37
763		Non-E.	19	11	19	17	18	21	35	48	41	19	17	27	292
500-502	Bronchitis	Eur.	1	-	1	-	1	-	1	2	2	2	-	1	11
		Non-E.	7	1	-	-	5	10	6	9	7	1	4	1	51
571, 764	Gastro-enteritis and colitis (including diarrhoea of the new born)	Eur.	-	-	1	1	3	1	1	-	-	-	-	1	8
		Non-E.	76	68	70	31	20	15	22	19	16	26	28	48	439
590-594	Nephritis	Eur.	2	1	-	1	1	2	-	4	3	5	2	1	22
		Non-E.	1	2	3	-	3	2	3	5	3	6	4	1	33
640-652	Complications of pregnancy, childbirth and the puerperium ..	Eur.	-	-	-	-	-	-	-	-	-	-	-	-	-
		Non-E.	3	1	-	4	3	-	1	-	3	2	3	2	22
750-759	Congenital malformations	Eur.	1	2	1	1	1	1	1	1	1	-	1	-	11
		Non-E.	4	1	1	3	4	9	4	5	3	7	4	3	48
760-762	Birth injuries, post-natal asphyxia and atelectasis	Eur.	4	1	2	2	-	-	-	1	-	-	-	-	10
		Non-E.	10	9	6	10	6	6	5	11	9	5	8	6	91
765-776	Other diseases peculiar to early infancy and immaturity unqualified	Eur.	7	2	2	5	1	5	3	5	2	5	2	2	41
		Non-E.	38	23	25	18	23	25	26	41	27	32	20	16	314
780-795	Senility and ill-defined diseases	Eur.	27	21	16	13	30	28	18	34	43	27	21	19	297
		Non-E.	31	15	19	16	22	27	32	32	34	34	17	20	299
E810-E835	Motor vehicle accidents	Eur.	1	1	2	-	3	2	3	5	5	5	5	3	35
		Non-E.	5	8	11	-	7	5	14	11	12	13	6	8	100
E800-E802	All other accidents	Eur.	2	1	3	4	2	8	-	3	5	2	4	2	36
E840-E965		Non-E.	3	5	7	13	5	3	4	13	5	6	7	5	76
E970-E979	Suicide	Eur.	3	1	2	4	2	2	3	1	2	1	1	1	23
		Non-E.	-	-	1	2	2	3	1	4	1	2	3	-	19
E980-E985	Homicide	Eur.	2	-	1	-	-	-	1	-	1	1	-	-	6
		Non-E.	3	2	3	5	2	5	3	7	3	5	8	5	51
-	All causes	Eur.	167	128	146	129	174	174	146	210	221	167	147	119	1,928
		Non-E.	345	282	287	247	278	288	358	412	333	310	272	257	3,669

TABLE D. Death Rates per 1,000 Population for 1963 and Ten Previous Years by Causes and Race.
(Corrected for Outward Transfers.)

Disease	Race	1952 1953	1953 1954	1954 1955	1956	1957	1958	1959	1960	1961	1962	Mean for 10 years	1963
Enteric fever	Eur. Non-E.	0.01	0.01	0.02	—	0.00	0.01	0.00	—	—	—	0.00	—
Measles	Eur. Non-E.	0.07	0.06	0.08	0.01	0.09	0.02	0.04	0.10	0.01	0.01	0.00	0.01
Scarlet fever	Eur. Non-E.	—	—	—	—	—	—	0.00	0.01	—	—	0.00	—
Whooping cough	Eur. Non-E.	0.07	0.03	0.08	0.00	0.06	0.02	0.02	0.02	0.03	0.03	0.04	0.02
Diphtheria	Eur. Non-E.	0.02	—	0.01	—	0.01	0.01	0.01	0.02	0.01	—	0.01	—
Influenza	Eur. Non-E.	0.02	0.03	0.02	0.01	0.02	0.02	0.02	0.02	0.03	0.01	0.02	0.03
Purulent infection — septicaemia, and erysipelas (non- <i>puerperal</i>)	Eur. Non-E.	0.01	0.01	—	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.03
Acute anterior poliomyelitis and polio- encephalitis	Eur. Non-E.	0.02	0.03	—	0.02	0.05	0.01	0.01	0.01	—	—	0.01	—
Acute infectious encephalitis	Eur. Non-E.	—	0.003	—	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Meningococcal cerebrospinal meningitis	Eur. Non-E.	0.04	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.00	0.01	0.00	0.01
Tuberculosis, respiratory system	Eur. Non-E.	0.17	0.20	0.14	0.11	0.13	0.17	0.16	0.13	0.12	0.09	0.14	0.11
Tuberculosis, other forms	Eur. Non-E.	0.04	0.04	0.02	0.03	0.02	0.01	0.01	0.02	0.01	0.01	0.02	0.07
Syphilis	Eur. Non-E.	0.01	0.08	0.04	0.01	0.03	0.02	0.04	0.02	0.01	0.03	0.00	0.02
General paralysis of the insane: tabes dorsalis	Eur. Non-E.	0.01	0.03	0.01	0.03	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Aneurysm of the aorta	Eur. Non-E.	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.00
Cancer *	Eur. Non-E.	1.46	1.62	1.55	1.61	1.74	1.56	1.70	1.69	1.77	1.62	1.63	1.60
		0.75	0.79	0.71	0.73	0.62	0.62	0.61	0.73	0.89	0.84	0.72	0.77

TABLE D - Continued.

Disease	Race	1952 — 1953	1953 — 1954	1954 — 1955	1956	1957	1958	1959	1960	1961	1962	Mean for 10 years	1963
Acute rheumatic fever	Eur. Non-E.	0.01 0.03	0.01 0.04	0.01 0.02	0.01 0.01	0.01 0.01	0.01 0.00	0.01 0.00	0.01 0.01	0.02 0.02	0.01 0.00	0.01 0.01	— 0.00
Diabetes	Eur. Non-E.	0.19 0.14	0.22 0.10	0.14 0.13	0.04 0.03	0.04 0.06	0.06 0.06	0.10 0.08	0.17 0.13	0.14 0.11	0.20 0.14	0.13 0.09	0.12 0.08
Intracranial lesions of vascular origin	Eur. Non-E.	1.24 0.85	1.06 0.71	1.19 0.84	1.63 0.86	1.33 0.82	1.48 0.91	1.51 0.78	1.76 1.05	1.67 1.05	1.19 1.03	1.67 1.00	1.18 0.94
Arterio-sclerosis	Eur. Non-E.	0.36 0.20	0.33 0.15	0.29 0.16	0.23 0.08	0.30 0.11	0.30 0.08	0.22 0.10	0.23 0.12	0.23 0.07	0.17 0.05	1.00 0.07	0.15 0.07
Cardiac diseases	Eur. Non-E.	2.75 1.34	2.78 1.30	2.98 1.38	3.58 1.66	3.58 1.87	3.59 1.58	3.62 1.51	4.15 1.98	3.58 1.92	3.48 1.73	3.40 1.63	3.39 1.54
Bronchitis and pneumonia (including pneumonia of the newborn)	Eur. Non-E.	0.29 1.12	0.43 0.91	0.40 0.98	0.36 0.98	0.32 1.03	0.32 0.93	0.36 0.71	0.32 1.05	0.34 0.97	0.37 0.92	0.35 0.95	0.25 0.96
Gastro-enteritis and colitis, except ulcerative (including diarrhoea of the newborn)	Eur. Non-E.	0.07 2.41	0.05 2.27	0.08 2.46	0.09 1.99	0.09 1.73	0.05 1.81	0.04 1.31	0.06 1.64	0.05 1.49	0.05 1.20	0.06 1.81	0.04 1.23
Nephritis	Eur. Non-E.	0.16 0.24	0.16 0.16	0.13 0.16	0.13 0.13	0.16 0.09	0.16 0.14	0.17 0.10	0.11 0.15	0.16 0.16	0.16 0.13	0.15 0.15	0.11 0.10
Puerperal sepsis	Eur. Non-E.	— 0.01	0.01 0.03	0.01 0.01	0.01 0.01	— 0.02	— 0.01	— 0.02	— 0.04	0.01 0.02	0.01 0.01	0.00 0.02	— 0.04
Other diseases of pregnancy, childbirth, and puerperal state	Eur. Non-E.	0.01 0.06	0.02 0.04	0.02 0.07	— 0.04	0.01 0.06	— 0.03	0.01 0.02	— 0.03	— 0.03	0.01 0.03	0.01 0.04	— 0.02
Congenital malformations and diseases of early infancy	Eur. Non-E.	0.30 1.26	0.44 1.26	0.19 0.92	0.36 1.22	0.35 1.13	0.32 1.25	0.29 1.06	0.37 1.25	0.32 1.47	0.34 1.25	0.34 1.22	0.32 1.22
Senility	Eur. Non-E.	0.15 0.02	0.18 0.06	0.12 0.03	0.14 0.02	0.16 0.02	0.09 0.02	0.12 0.02	0.19 0.04	0.21 0.11	0.23 0.30	0.26 0.06	1.34 0.23
Accidents, poisonings and violence (external cause)	Eur. Non-E.	0.40 0.57	0.41 0.62	0.37 0.57	0.42 0.60	0.53 0.65	0.44 0.65	0.45 0.60	0.53 0.83	0.53 0.86	0.61 0.76	0.47 0.67	0.55 0.68
Other causes	Eur. Non-E.	1.64 1.70	1.35 1.79	1.44 1.57	1.19 1.09	1.22 1.19	1.02 1.01	1.11 0.95	1.24 1.26	1.12 1.10	1.11 1.19	1.23 1.25	1.11 1.58
Total	Eur. Non-E.	9.33 13.12	9.37 12.25	9.15 11.52	10.00 10.34	9.96 10.60	9.65 9.93	9.96 8.58	11.04 11.11	10.33 11.19	10.67 10.35	9.95 10.80	10.34 10.34

† There has been some variation in the allocation of deaths as between these two causes for the years 1944-45 - 1952-53.

* Including deaths from Hodgkin's disease, leukaemia and aleukaemia in the year 1953-54, in accordance with the new International Classification List of Causes of Death.

TABLE E1. Deaths of Infants under 1 Year of Age, Classified by Cause and Month of Registration, 1963

(Corrected for Outward Transfers.)

International Code No.	DISEASE	RACE	January	February	March	First Quarter	April	May	June	Second Quarter	July	August	September	Third Quarter	October	November	December	Fourth Quarter	YEAR	Percentage Total deaths	Rate per 1,000 live births	
010	Tuberculosis, meningel ...	Eur. Non-E.	1	—	—	1	—	—	—	—	—	—	1	1	1	1	1	3	5	0.4	0.4	
011	Tuberculosis, abdominal ...	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
001-008 012-019	Tuberculosis, other forms ...	Eur. Non-E.	—	—	—	—	—	—	1	1	1	—	—	1	—	—	—	—	2	0.2	0.1	
020	Syphilis, congenital ...	Eur. Non-E.	—	—	—	—	1	1	—	2	—	1	2	3	1	—	—	1	6	0.3	0.4	
055	Diphtheria ...	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	1	0.1	0.1	
056	Whooping cough ...	Eur. Non-E.	—	—	—	—	—	1	—	1	1	1	1	3	—	—	—	4	4	0.4	0.3	
085-088	Measles and rubella ...	Eur. Non-E.	2	—	1	3	2	1	4	7	2	4	4	10	5	—	3	8	1	12	0.3	
050	Scarlet fever ...	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
283	Rickets ...	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	0.1	0.1	
340	Simple meningitis ...	Eur. Non-E.	1	—	—	1	1	1	2	4	1	1	2	3	2	2	2	6	1	1.2	0.3	
500-502	Bronchitis ...	Eur. Non-E.	2	—	—	2	—	3	4	7	3	4	1	8	1	—	1	2	19	1.7	1.4	
490-493 763	Pneumonia (all forms) ...	Eur. Non-E.	11	7	11	29	13	13	10	36	19	21	14	54	6	1	15	32	159	13.1	11.7	
571, 764	Diarrhoea and enteritis ...	Eur. Non-E.	58	59	52	169	22	15	10	47	18	11	9	38	18	21	35	74	328	28.8	24.1	
750-759	Congenital malformations ...	Eur. Non-E.	4	3	1	6	3	4	8	13	4	4	3	11	5	1	2	10	42	10.7	3.1	
760-761	Injury at birth ...	Eur. Non-E.	3	1	3	18	2	6	5	19	4	8	6	18	5	5	6	16	71	10.7	3.2	
774-776	Immaturity ...	Eur. Non-E.	22	16	16	54	12	17	4	8	1	4	1	6	2	16	8	48	25	29.8	15.8	
762 765-773	Other diseases peculiar to early infancy ...	Eur. Non-E.	3	1	1	5	2	6	1	3	2	1	1	4	3	2	8	23	17	20.2	4.7	
E924- E925	Accidental mechanical suffoca- tion ...	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
E926	Lack of care ...	Eur. Non-E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	Other and ill-defined or unknown causes ...	Eur. Non-E.	4	1	1	6	—	1	1	2	1	7	1	2	1	1	—	2	12	14.3	3.3	
16		Eur. Non-E.	16	8	7	31	11	13	14	38	13	7	10	30	17	9	8	34	133	11.7	9.7	
143		Eur. Non-E.	143	107	6	29	9	4	7	20	4	9	6	22	8	5	3	16	84	100	23.2	23.2
	Totals*	All Races	159	114	109	382	89	85	91	265	97	114	90	301	104	77	93	274	1,224	100	83.5	71.0

*Including 2 of unknown race

TABLE F. Deaths of Infants under 1 Year of Age, Classified by Legitimacy, 1963
(Corrected for outward transfers)

	Place of Death	All infants						Legitimate						Illegitimate						No statement	
		Neo-natal			Post neo-natal			Neo-natal			Post neo-natal			Neo-natal			Post neo-natal			Neo-natal	Post neo-natal
		M.		F.	M.		F.	M.		F.	M.		F.	M.		F.	M.		F.		
European	Hospital	40	24	—	7	6	36	23	6	6	—	—	—	4	1	1	—	—	—	—	—
	Domiciliary	1	—	—	4	2	1	—	4	2	—	—	—	—	—	—	—	—	—	—	—
Coloured	Hospital	186	125	98	98	95	142	84	61	57	39	37	35	31	9	9	—	—	—	—	—
	Domiciliary	45	35	162	130	29	24	98	75	15	10	55	49	2	15	—	—	—	—	—	—
Bantu	Hospital	46	28	25	25	26	20	13	22	9	22	8	3	12	11	5	—	—	—	—	—
	Domiciliary	6	3	59	57	3	3	1	37	30	2	—	20	18	3	11	—	—	—	—	—
Asiatic	Hospital	3	2	2	2	2	3	2	2	2	—	—	—	—	—	—	—	—	—	—	—
	Domiciliary	1	—	1	1	1	1	—	—	1	—	—	1	—	—	—	—	—	—	—	—
Non-European	Hospital	235	155	125	125	123	165	99	85	68	61	45	38	43	20	14	—	—	—	—	—
	Domiciliary	52	38	222	188	33	25	135	106	17	10	76	67	5	26	—	—	—	—	—	—
All races	Hospital	275	179	132	129	190	201	122	91	74	65	46	39	43	20	14	—	—	—	—	—
	Domiciliary	53	38	226	190	34	34	25	139	108	17	10	76	67	5	26	—	—	—	—	—

TABLE G. Registered Births and Still-Births for the year 1963, classified in wards as to Race, Legitimacy and Percentage of Total Births in Institutions
(Corrected.)

Wards	EUROPEAN						NON-EUROPEAN						T O T A L S				STILL-BIRTHS				Percentage of total births, occurring in institutions	
	Legitimate			Illegitimate			Legitimate			Illegitimate			Total		European		Non-European					
	Males	Fe-males	Total	Males	Fe-males	Total	Males	Fe-males	Total	Males	Fe-males	Total	Eur.	Non-Eur.	Total	Legit	Illegit	Legit	Illegit	Total still-births		
1.	120	106	1	—	121	106	227	7	3	15	9	22	12	34	227	34	261	—	1	1	—	2
2.	161	147	7	3	168	150	318	2	5	10	15	12	20	32	318	32	350	4	—	1	—	5
3.	26	29	1	1	27	30	57	173	165	63	66	236	231	467	57	467	524	1	—	8	5	14
4.	132	140	15	7	147	147	294	159	151	58	62	217	213	430	294	430	724	2	—	3	4	9
5.	151	128	16	6	167	134	301	304	293	117	102	421	395	816	301	816	1,117	3	2	18	7	30
6.	78	63	6	6	84	69	153	539	472	144	152	683	624	1,307	153	1,307	1,460	3	—	18	5	26
7.	153	157	19	20	172	177	349	60	67	24	14	84	81	165	349	165	514	1	—	3	—	4
8.	187	148	3	8	190	156	346	670	662	306	276	976	938	1,914	346	1,914	2,260	4	—	37	19	60
9.	115	104	3	1	118	105	223	130	122	32	29	162	151	313	223	313	536	2	—	6	3	11
10.	17	17	1	1	18	18	36	1 947	1 979	464	496	2 411	2 475	4 886	36	4 886	4 922	—	—	116	38	154
11.	121	106	4	2	125	108	233	39	29	17	9	56	38	94	233	94	327	7	—	1	1	9
12.	101	120	4	4	105	124	229	194	175	65	45	259	220	479	229	479	708	6	—	3	6	15
13.	139	136	15	7	154	143	297	70	54	17	23	87	77	164	297	164	461	2	—	2	3	7
14.	164	171	5	1	169	172	341	231	216	75	87	306	303	609	341	609	950	1	—	7	9	17
15.	103	105	3	—	106	105	211	691	725	273	231	964	956	1 920	211	1 920	2 131	5	—	47	17	69
Not allocated (un-ascertained addresses)	—	—	—	1	—	1	1	—	—	3	4	3	4	7	1	7	8	—	—	—	—	—
Total*	1 768	1 677	103	68	1 871	1 745	3 616	5 216	5 118	1 683	1 620	6 899	6 738	13 637	3 616	13 637	17 255	41	3	271	117	432
Births in Cape Town which did not belong thereto	762	660	70	73	832	733	1 565	353	356	301	296	654	652	1 306	1 565	1 306	2 871	24	—	29	21	74
Langa Bantu Township	—	—	—	—	—	—	—	76	76	56	48	132	124	256	—	—	256	—	—	4	2	6
Gugulethu Township	—	—	—	—	—	—	—	315	295	108	105	423	400	823	—	—	823	—	—	23	12	35

* Including 2 of unknown race

TABLE H. Births in Institutions, 1962.

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	1	3,042	1	2,721	—	321
Somerset Hospital	—	2,394	—	1,964	—	430
St. Joseph's Sanatorium	1,843	4	1,057	3	786	1
Salvation Army Maternity Home	—	1,489	—	1,225	—	264
Mowbray Maternity Hospital	1,022	2	776	1	246	1
St. Monica's Home	—	1,099	—	934	—	165
Groote Schuur Hospital	676	103	595	88	81	15
Kingsbury Nursing Home	498	—	319	—	179	—
Delherbe Nursing Home	435	—	373	—	62	—
Military Hospital	235	—	138	—	97	—
Booth Memorial Hospital	69	—	55	—	14	—
Magdalena Huis	109	—	15	—	94	—
House of Correction	—	7	—	4	—	3
Other institutions	2	7	—	6	2	1
Total	4,890	8,147	3,329	6,946	1,561	1,201

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.
Peninsula Maternity Hospital	—	130	—	101	—	29
Somerset Hospital	—	99	—	80	—	19
St. Joseph's Sanatorium	10	—	10	—	—	—
Salvation Army Maternity Home	—	21	—	21	—	—
Mowbray Maternity Hospital	13	—	8	—	5	—
St. Monica's Home	—	24	—	23	—	1
Groote Schuur Hospital	18	9	12	9	6	—
Kingsbury Nursing Home	7	—	7	—	—	—
Delherbe Nursing Home	2	—	2	—	—	—
Military Hospital	5	—	—	—	5	—
House of Correction	—	1	—	1	—	—
Total	55	284	39	235	16	49

TABLE I - Discontinued

TABLE J Births, Deaths, Natural Increase, and Infant Deaths, and corresponding rates, for the year 1963.

Race	Births		Deaths		Natural increase		Deaths under one year old	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Europeans:								
uncorrected	5,181	26.4	2,418	12.3	-	-	147	28
corrected for outward transfers	3,616	18.4	1,928	9.8	-	-	84	23
corrected for outward and inward transfers	3,616	18.4	2,027	10.3	1,589	8.1	84	23
Coloured:								
uncorrected	13,987	44.4	3,623	12.3	-	-	1,143	87
corrected for outward transfers	12,767	41.0	2,991	10.2	-	-	876	73
corrected for outward and inward transfers	12,076	41.0	3,128	10.6	8,948	30.4	891	74
Bantu:								
uncorrected	1,580	21.5	825	11.2	-	-	329	208
corrected for outward transfers	1,305	17.8	628	8.5	-	-	250	192
corrected for outward and inward transfers	1,305	17.8	705	9.6	600	8.2	271	208
Asiatics:								
uncorrected	267	36.3	54	7.3	-	-	13	49
corrected for outward transfers	256	34.8	50	6.8	-	-	12	47
corrected for outward and inward transfers	256	34.8	50	6.8	206	28.0	12	47
All non-Europeans:								
uncorrected	14,934	39.8	4,502	12.0	-	-	1,485	99
corrected for outward transfers	13,628	36.3	3,669	9.8	-	-	1,138	84
corrected for outward and inward transfers	13,637	36.3	3,883	10.3	9,754	26.0	1,174	86
All races: *								
uncorrected	20,117	35.2	6,923	12.1	-	-	1,634	81
corrected for outward transfers	17,246	30.2	5,600	9.8	-	-	1,224	71
corrected for outward and inward transfers	17,255	30.2	5,913	10.3	11,342	19.8	1,260	73
Bantu resident at Langa Township	256	9.6	184	6.9	72	2.7	42	164
Bantu resident at Guguletu Township	823	32.0	348	13.5	475	18.5	165	200

*Including 2 of unknown race.

All rates are per 1,000 population except the infant mortality rate, which is expressed per 1,000 live-births.

TABLE K. — Infant Mortality Rates per 1,000 Births by Causes.
(Corrected)

INFANTS UNDER ONE YEAR OF AGE.

Period	Common infectious diseases		Tuberculous diseases		Syphilis		Bronchitis and pneumonia		Diarrhoea and enteritis		Develop- mental diseases		Miscellaneous diseases (residual)		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.
Quinquennium 1916-1917 to ...																
1916-1917 to ...	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
1918-1919 to ...	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
1920-1921 to ...	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
1922-1923 to ...	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
1924-1925 to ...	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
1926-1927 to ...	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	87.9	130.7
1928-1929 to ...	0.5	2.8	0.8	8.7	—	2.5	2.8	22.5	3.8	30.5	15.8	28.9	5.9	13.2	29.6	109.1
1931-1932 to ...	0.1	1.0	0.2	4.2	—	0.5	2.3	15.1	2.3	42.0	15.0	25.8	5.1	14.2	25.6	103.6
1934-1935 to ...	—	1.4	—	1.3	—	0.2	2.4	13.2	1.0	31.6	13.5	23.4	5.0	14.9	21.6	85.9
1937-1938 to ...																
Year 1932-1933 ...	—	1.1	0.6	4.8	—	0.7	1.4	13.3	2.0	41.9	13.6	26.1	3.7	13.5	21.3	101.4
1933-1934 ...	—	0.8	0.3	4.3	—	0.3	4.9	13.6	1.7	41.6	13.9	22.5	3.5	12.5	20.4	100.5
1934-1935 ...	—	1.6	0.3	3.3	—	0.3	1.5	15.5	1.8	45.4	14.0	22.3	3.9	12.4	21.5	100.8
1935-1936 ...	—	0.2	—	2.6	—	0.2	1.1	15.1	3.1	42.2	14.8	22.2	3.6	13.8	24.5	103.0
1936-1937 ...	—	2.1	—	2.7	—	0.4	2.0	15.1	1.4	35.1	14.0	24.5	5.6	15.4	23.5	95.3
1937-1938 ...	—	1.0	—	0.9	—	0.1	4.4	13.7	0.3	38.8	13.9	19.7	4.6	16.7	23.1	97.6
1938-1939 ...	—	0.9	—	1.1	—	0.2	2.7	11.7	0.3	28.8	10.9	24.3	3.7	17.9	17.5	80.2
1939-1940 ...	—	1.6	—	1.0	—	0.2	1.7	12.6	1.1	29.1	14.6	23.7	7.9	17.8	25.3	91.0
1940-1941 ...	—	1.4	—	0.6	—	0.2	1.1	10.8	1.1	26.1	14.6	23.7	7.9	17.8	20.1	75.9
1941-1942 ...	—	1.3	—	0.2	—	0.1	2.9	12.3	1.3	21.3	14.2	24.7	3.2	9.8	21.7	69.8
1942-1943 ...	—	0.6	—	0.6	—	0.4	1.6	13.0	1.1	25.1	13.8	24.7	6.1	18.9	23.2	80.1

* 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.

TABLE K. — Continued.

INFANTS FROM 1 TO 2 YEARS OF AGE. *

Period	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.
Quinquennium																
1926-1927 to	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
1928-1929 to	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
1930-1931 to	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
1932-1933 to	0.9	3.9	0.9	14.1	—	0.9	0.9	19.8	1.6	20.9	0.2	0.4	1.3	5.7	5.8	65.2
1934-1935 to	0.3	3.0	0.7	12.7	—	0.6	0.6	9.6	0.6	13.3	—	0.1	0.8	4.1	8.0	44.0
1936-1937 to	0.4	1.1	0.5	6.1	—	0.1	0.4	4.6	0.6	17.3	0.2	0.2	1.1	4.3	3.1	33.8
1938-1939 to	0.1	1.3	—	1.8	—	0.0	0.5	4.3	0.2	9.4	0.2	0.6	1.3	5.0	2.3	22.5
1940-1941 to	0.1	1.3	—	1.8	—	0.0	0.5	4.3	0.2	9.4	0.2	0.6	1.3	5.0	2.3	22.5
Year																
1952-1953	0.6	1.6	0.6	6.3	—	—	0.6	4.7	0.6	19.3	0.3	—	0.6	4.6	8.3	55.5
1954-1955	0.3	1.0	1.2	5.8	—	—	0.3	3.3	0.3	10.1	—	0.3	1.2	3.1	3.0	50.1
1956-1957	—	0.3	—	3.5	—	0.1	—	4.6	0.3	11.4	0.6	0.3	0.3	4.6	1.2	26.7
1958-1959	0.3	1.7	—	3.2	—	—	—	5.9	0.6	11.2	0.9	0.4	0.3	4.6	1.2	26.7
1960-1961	—	1.0	—	2.9	—	0.1	0.9	3.9	0.3	9.0	—	0.2	1.4	5.5	3.1	26.9
1962-1963	—	1.2	—	1.1	—	—	0.6	3.7	0.8	8.2	0.3	0.6	0.8	5.5	0.8	20.0
1964-1965	—	1.8	—	0.7	—	—	—	3.9	—	7.3	0.3	1.5	1.4	5.5	1.7	20.3
1966-1967	—	1.6	—	0.8	—	—	0.6	2.8	—	5.3	0.3	0.3	1.1	4.9	1.9	15.9
1968-1969	0.3	3.3	—	0.8	—	—	—	4.0	0.3	6.8	0.3	0.3	1.6	8.0	2.5	23.2

* The rate for the year is calculated on the births (less the deaths under one year) in the previous year.

TABLE L. — Estimated Populations and Vital Statistic Rates since 1913.

Periods	Estimated Populations			Birth rates			Illegitimate births 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 inward and 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	Eur.	Non-Eur.	Total	Eur.	Non-Eur.	Total	Eur.	Non-Eur.	Total				
2 Years and 296 days	—	—	—	28.97	47.23	37.85	6.99	25.83	18.41	12.04	27.15	19.39	15.34	18.67	16.96	95.07	218.61	170.18	—	—	—	0.19	0.32	0.25	1.04	4.69	2.82	—	—	—	
Quinquennium	—	—	—	26.71	47.54	36.33	6.52	25.12	17.77	11.95	29.54	20.07	12.74	16.04	14.26	90.84	211.71	164.02	—	—	—	0.23	0.47	0.34	0.88	4.47	2.53	—	—	—	
"	—	—	—	21.49	49.59	34.23	5.35	24.76	18.12	10.11	26.67	17.62	11.38	22.92	16.61	71.91	181.58	144.15	—	—	—	0.13	0.28	0.20	0.79	4.09	2.28	—	—	—	
"	—	—	—	21.43	50.21	34.93	5.50	23.10	17.37	10.52	26.17	17.86	10.91	24.04	17.07	62.77	169.35	134.67	—	—	—	0.08	0.21	0.14	0.74	4.75	2.62	—	—	—	
"	—	—	—	18.17	48.90	32.84	4.96	22.55	17.47	10.31	23.95	16.82	7.86	24.95	16.02	49.64	147.16	119.01	—	—	—	0.04	0.08	0.06	0.84	4.99	2.82	—	—	—	
"	—	—	—	18.72	46.91	32.63	4.93	21.86	16.93	10.07	21.25	15.58	8.65	25.66	17.05	41.25	122.89	98.17	—	—	—	0.01	0.05	0.03	0.76	4.55	2.62	—	—	—	
"	—	—	—	20.82	43.51	32.44	3.82	22.96	17.04	10.25	22.47	16.52	10.57	21.04	15.92	37.87	130.68	102.08	—	—	—	0.02	0.07	0.04	0.72	6.06	3.45	—	—	—	
"	—	—	—	19.92	43.26	32.60	2.95	23.65	17.91	9.76	17.20	13.82	10.16	26.06	18.78	29.59	109.12	87.34	—	—	—	0.01	0.05	0.03	0.57	4.50	2.71	—	—	—	
"	—	—	—	18.2	37.8	29.8	3.2	24.5	19.2	9.6	12.3	11.2	8.6	25.5	18.6	25.3	102.4	83.5	—	—	—	—	0.0	0.0	0.2	1.7	1.1	—	—	—	
"	—	—	—	19.1	42.5	33.2	3.9	23.7	19.2	10.3	11.5	11.0	8.8	31.0	22.1	21.8	85.9	71.5	—	—	—	—	0.0	0.0	0.2	0.7	0.5	—	—	—	
Year	39,070	125,620	264,690	20.62	50.92	35.00	4.86	23.04	17.42	10.76	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	20.84	11.00	9.84	66.78	0.09	0.19	0.14	0.80	5.48	3.02	5.48	2.82	3.02
"	44,320	132,410	276,730	17.93	48.16	32.80	4.40	22.44	17.21	9.96	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	18.03	10.33	9.44	65.93	0.02	0.04	0.03	0.80	5.15	2.96	5.15	2.96	2.96
"	47,610	136,340	283,950	16.09	46.03	31.56	3.92	21.91	16.94	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	17.17	10.33	9.44	65.93	0.01	0.04	0.03	0.80	5.15	2.96	5.15	2.96	2.96
"	50,610	139,300	290,000	15.73	45.52	31.13	3.72	21.49	16.77	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	16.53	10.33	9.44	65.93	0.04	0.07	0.05	0.80	4.66	2.66	4.66	2.66	2.66
"	53,300	142,200	295,500	15.32	44.63	30.68	3.52	20.77	16.47	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	15.83	10.33	9.44	65.93	0.02	0.04	0.03	0.80	4.45	2.55	4.45	2.55	2.55
"	55,300	145,000	300,300	14.97	43.77	30.24	3.32	20.44	16.21	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	15.13	10.33	9.44	65.93	0.01	0.03	0.02	0.80	4.25	2.48	4.25	2.48	2.48
"	57,300	147,800	305,100	14.60	42.91	29.81	3.12	20.11	15.94	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	14.41	10.33	9.44	65.93	0.01	0.03	0.02	0.80	4.05	2.41	4.05	2.41	2.41
"	59,300	150,600	309,900	14.23	42.05	29.38	2.92	19.78	15.67	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	13.73	10.33	9.44	65.93	0.01	0.03	0.02	0.80	3.85	2.34	3.85	2.34	2.34
"	61,300	153,400	314,700	13.86	41.19	28.95	2.72	19.45	15.40	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	13.04	10.33	9.44	65.93	0.01	0.03	0.02	0.80	3.65	2.27	3.65	2.27	2.27
"	63,300	156,200	319,500	13.49	40.33	28.52	2.52	19.12	15.13	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	12.35	10.33	9.44	65.93	0.01	0.03	0.02	0.80	3.45	2.20	3.45	2.20	2.20
"	65,300	159,000	324,300	13.12	39.47	28.09	2.32	18.79	14.86	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	11.66	10.33	9.44	65.93	0.01	0.03	0.02	0.80	3.25	2.13	3.25	2.13	2.13
"	67,300	161,800	329,100	12.75	38.61	27.66	2.12	18.46	14.59	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	10.97	10.33	9.44	65.93	0.01	0.03	0.02	0.80	3.05	2.06	3.05	2.06	2.06
"	69,300	164,600	333,900	12.38	37.75	27.23	1.92	18.13	14.32	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	10.28	10.33	9.44	65.93	0.01	0.03	0.02	0.80	2.85	1.99	2.85	1.99	1.99
"	71,300	167,400	338,700	12.01	36.89	26.80	1.72	17.80	14.05	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	9.59	10.33	9.44	65.93	0.01	0.03	0.02	0.80	2.65	1.92	2.65	1.92	1.92
"	73,300	170,200	343,500	11.64	36.03	26.37	1.52	17.47	13.78	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	8.90	10.33	9.44	65.93	0.01	0.03	0.02	0.80	2.45	1.85	2.45	1.85	1.85
"	75,300	173,000	348,300	11.27	35.17	25.94	1.32	17.14	13.51	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	8.21	10.33	9.44	65.93	0.01	0.03	0.02	0.80	2.25	1.78	2.25	1.78	1.78
"	77,300	175,800	353,100	10.90	34.31	25.51	1.12	16.81	13.24	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	7.52	10.33	9.44	65.93	0.01	0.03	0.02	0.80	2.05	1.71	2.05	1.71	1.71
"	79,300	178,600	357,900	10.53	33.45	25.08	0.92	16.48	12.97	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	6.83	10.33	9.44	65.93	0.01	0.03	0.02	0.80	1.85	1.64	1.85	1.64	1.64
"	81,300	181,400	362,700	10.16	32.59	24.65	0.72	16.15	12.70	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	6.14	10.33	9.44	65.93	0.01	0.03	0.02	0.80	1.65	1.57	1.65	1.57	1.57
"	83,300	184,200	367,500	9.79	31.73	24.22	0.52	15.82	12.43	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	5.45	10.33	9.44	65.93	0.01	0.03	0.02	0.80	1.45	1.50	1.45	1.50	1.50
"	85,300	187,000	372,300	9.42	30.87	23.79	0.32	15.49	12.16	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	4.76	10.33	9.44	65.93	0.01	0.03	0.02	0.80	1.25	1.43	1.25	1.43	1.43
"	87,300	189,800	377,100	9.05	29.99	23.36	0.12	15.16	11.89	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	4.07	10.33	9.44	65.93	0.01	0.03	0.02	0.80	1.05	1.40	1.05	1.40	1.40
"	89,300	192,600	381,900	8.68	29.13	22.93	0.00	14.83	11.62	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	3.38	10.33	9.44	65.93	0.01	0.03	0.02	0.80	0.85	1.37	0.85	1.37	1.37
"	91,300	195,400	386,700	8.31	28.27	22.50	0.00	14.50	11.35	9.82	26.33	18.15	9.86	24.59	16.85	67.13	167.74	136.59	2.69	10.33	9.44	65.93	0.01	0.03	0.02	0.80	0.65	1.34	0.65	1.34	

TABLE M. Vital Statistic Rates for Various Centres

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
Cape Town ...	18.4	17.8	34.8	41.0	36.3	10.3	9.6	6.8	10.6	10.3	23	208	47	74	86	0.11	0.49
Kimberley ...	28.1	49.1	39.8	55.2		8.4	16.7	10.2	16.0		38	112	23	90		0.08	0.75
King William's Town	16.9	21.3	41.4	68.7		7.2	9.2		19.6		9	224		93			0.92
Port Elizabeth ...	26.9	43.6	24.3	61.5		8.0	16.9	4.6	14.9		21	181	30	74		0.09	1.45
Springs ...	24.7	15.5	33.7	42.1		6.6	8.8	3.7	16.4		35	189	50	167		0.03	
Benoni ...	26.7	36.7	29.1	42.3	37.9	5.6	16.8	6.7	19.4	16.1	21	204	112	205	203	0.03	0.59
Durban ...	19.7	33.4	29.3	40.6		9.4	18.2	7.4	9.1		15	246	59	51			
Bloemfontein ...	23.7	35.3		41.7		6.2	21.9		23.3		24	229		215			
Vereeniging ...	28.4	24.1	31.9	14.8		9.3	9.7	4.7	16.7		39	195	37	375		0.04	0.33
Pietermaritzburg	20.4	25.1	36.1	42.0	31.1	8.5	4.6	6.3	5.8	5.4	15	81	35	29		0.02	0.1
Rodepoort-Maraisburg ...	24.0	30.8	21.6	36.8		6.0	10.2	3.2	12.1		11	97	74	19			0.37
Pretoria ...	25.4	45.4	25.3	35.3		7.2	12.6	5.8	12.4		28	92	66	52		0.01	0.26
Johannesburg ...	24.0	33.5	30.0	39.9		8.4	10.1	6.1	9.3		26	92	40	38		0.08	0.56
England and Wales	18.0					11.9					22					0.07	
County of London	19.6					12.0					21						

TABLE N. Notification of Infectious Disease Classified for Month of Notification, 1963

E.—European O.—Non-European.

Period	Tuberculosis respiratory			Tuberculosis other forms			Enteric			Diphtheria			Scarlet Fever			Erysipelas			Cerebrospinal fever			Infective encephalitis		
	E.	O.	Total	E.	O.	Total	E.	O.	Total	E.	O.	Total	E.	O.	Total	E.	O.	Total	E.	O.	Total	E.	O.	Total
January ...	6	14	20	3	3	6	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
February ...	9	14	23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
March ...	13	148	161	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
April ...	4	120	124	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May ...	8	11	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
June ...	7	11	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
July ...	8	49	57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
August ...	10	25	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
September ...	10	25	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
October ...	10	25	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
November ...	10	25	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
December ...	10	25	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Year ...	112	1,560	1,672	6	91	97	—	32	32	6	27	33	36	13	49	5	8	3	15	18	1	3	4	

Period	Acute poliomyelitis			Ophthalmia			Puerperal fever			Anthrax			Leprosy			Whooping Cough			Lead poisoning			Kwashiorkor		
	E.	O.	Total	E.	O.	Total	E.	O.	Total	E.	O.	Total	E.	O.	Total	E.	O.	Total	E.	O.	Total	E.	O.	Total
January ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
February ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
March ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
April ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
June ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
July ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
August ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
September ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
October ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
November ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
December ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Year ...	—	18	18	52	259	311	—	2	2	1	1	1	1	1	1	20	60	80	—	1	1	—	384	384

TABLE P. Notification of Infectious Disease Classified for Wards, etc., 1963

E. — European.

O. - Non-European.

[illegible][illegible]

INDEX

	Page		Page
A			
Abattoirs	11, 79	Deaths Coloured	91
Accidents, deaths	22	" institutions	19
" home	20	" maternal	27
Admissions, hospital	60, 66, 68	" occupation	20
Adoption of children	39	" perinatal	26
Air pollution	79	" principal causes	16
Altitude	9	" rates	22, 93, 100
Ambulance	69	" seasonal	18, 26, 92
Ante-natal clinics	33	" sex	19
Antibiotics in milk	81	" suicide	21
Anthrax	48, 80	Delinquency	10
Apothecary	77	Dental care	39
Area	9	" clinics	40
Asiatics	10	" survey	41
Attendances, child welfare	30	Depressed classes	10
" day nurseries	38	Diarrhoea	46
" dental	40	Diphtheria	42
" school clinics	37	Disablement, orthopaedic	37
" tuberculosis	57	Disinfection	69
" venereal disease	63	District visiting	32, 74
B			
Bacterial testing	80	Drainage	10, 85
Bakers	77	Dried milk	32
Bantu	10, 11	Dysentery	46
" Townships	14	E	
Barbers	76	Eating houses	76
Baths	78	Encephalitis	44
B.coli tests	80	Enteric fever	42
B.C.G. vaccination	37	Enteritis	46
Births	14, 98	Environmental sanitation	70
" illegitimate	14	Expectant mothers	33
" institutions	15, 99	Experimentation	73
" multiple	15	F	
" non-registration	14	Family planning	34
" notification	34	Feeding supplementary	32
" rates	16, 100	Fluoridation	39
" still	15, 99	Food, Drugs & Disinfectants Act	72
Black rats	72	Food condemned	77
Bloemhof nursery	38	" contamination	77
Blood grouping	33	" poisoning	48
" tests	33, 65, 81	" samples	72
Board of Aid	85	Fresh produce dealers	77
Boarding houses	76	Fumigation	85
Bokmakirie creche	38	G	
Boundary adjustment	9	Garden cities	84
Breed smears	80	Gastro enteritis	46
Bronchitis	44	General dealers	77
Brooklyn Chest Hospital	67	General mortality	16, 90
Brown rats	72	Geography	9
Brucellosis	81	Gerbilles	72
Building plans	74	Gonorrhoea	63
Burials	85	Guguletu Township	14
Butchers	77	" Nursery	38
C			
Cafda	84	Gynaecology	34
Cafes	76	H	
Cancer	34, 49	Hairdressers	76
Cape Coloured	10	Hawkers	76
Cape Flats	9	Health indicators	12
Carriers	42	" inspection	74
Causes of death	17, 23, 90, 91	" visitors	32
Cerebrospinal fever	43, 105	Home accidents	20
Child Welfare	30	Hospitals	66
" centres	31	Housing	83
" sessions	30	Hyman Liberman Nursery	38
Citizens Housing League	84	I	
City Hospital	66	Ice cream	80
Cleansing station	70	Illegitimacy	14, 27, 97
Climate	9	Immunisation, B.C.G.	37
Cockroaches	73	" Diphtheria	36
Contaminated foodstuffs	77	" Poliomyelitis	36
Contrasts	17	" Whooping cough	36
Corrections	11	" tetanus	36
Cream	80	Impetigo	70
Creches	38	Indigency	9
Cytology	34	Infant mortality	22, 95
D			
Dairy farms	80	" causes	23, 101
Day nurseries	38	" legitimacy	27
Deaths	16, 90	" neonatal	23, 26
" accidental	22	" perinatal	26
" age groups	18, 90	" Post neonatal	23, 26
" Asiatic	91	" rates	24, 27
" infants	22, 95	" seasonal	26
" Bantu	91		

Infectious diseases ...	41, 105	Resident nursery ...	38
" " Hospital ...	66	Restaurants ...	76
Influenza ...	44	Ringworm ...	70
Inspections ...	74	Rodents ...	72
Institutions ...	15, 19, 99	Rounding ...	11
K		S	
Kew Town nursery ...	38	Sampling ...	72, 81
Kwashiorkor ...	48, 105	Sanitary defects ...	75
L		Scabies ...	70
Laboratory ...	81	Scarlet fever ...	43, 105
Lady Buxton Home ...	32	Scavenging ...	86
Langa nursery ...	38	School clinics ...	31, 37
" Township ...	14	Segregation ...	10
Laundries ...	76, 68	Serological tests ...	33, 65
Latitude ...	9	Servitas ...	84
Lead poisoning ...	48, 105	Sessions ...	38, 40, 45, 46, 51, 78, 88
Leading statistics ...	8	Sewerage ...	10, 86
Leading proceedings ...	75	Sewage works ...	10
Leprosy ...	45	Shelley Street nursery ...	38
Lieberman Institute ...	38	Slum clearance ...	84
Lice ...	70	Smog ...	79
Livestock dealers ...	77	Social conditions ...	10
Longitude ...	9	" welfare ...	39
M		Staff ...	41, 50, 96, 112, 123
Malays ...	10	Still births ...	15, 99
Malnutrition ...	48	Stormwater ...	85
Markets ...	10	Suburbs ...	9
Mass radiography ...	61	Suicide ...	21
Mastitis ...	80	Sunshine ...	9
Maternal deaths ...	27	Supplementary feeding ...	32
Maternal welfare ...	30	Surgery ...	67, 69
Mattress makers ...	76	Sweet curdling ...	81
Measles ...	45	Syphilis ...	-63
Meat condemned ...	79	T	
Medical Aid ...	35, 85	Tea shops ...	76
Meteorology ...	8	Teenagers ...	64
Midwifery ...	35	Temperature ...	8, 10, 64
Milk ...	80	Test feeds ...	32
" gallonage ...	80	Testing materials ...	73
" free distribution ...	32	Tetanus immunising ...	36
Mineral water dealers ...	77	Trade licences ...	75
Mosquitoes ...	73	Transfers ...	11
Motor garages ...	77	Triplets ...	15
Mountains ...	9	Tropical diseases ...	9
Municipal nurseries ...	38	Tuberculosis ...	50, 105
" wards ...	11	" age groups	106
Multiple births ...	15	" ambulatory	
N		" treatment	58
Natural increase ...	100	" attendances	57
Neonatal deaths ...	23, 26	" clinics	57
New clinics ...	30	" contacts	58
Neoplasms ...	34, 49	" deaths	51, 51
Non support ...	39	" hospitalisation	60
Notices ...	75	" imported cases	60
Nuisances ...	75	" mass radiography	61
Nurseries ...	38	" meningitis	55
O		" non attendance	60
Obituary ...	5	" non pulmonary	54, 105
Offences, convictions ...	72, 75	" notifications	50
Operating theatres ...	67, 69	" positive sputum	60
Ophthalmia ...	35, 105	" rates	55
Orthopaedic clinics ...	37	" register	61
Overcrowding ...	10, 84	" screenings	59
P		" sessions	57
Pailclosets ...	86	" sources of notification	59
Pasteurisation ...	80	" suspects	58
Pauper burials ...	85	Typhoid ...	42, 105
Pediculosis ...	70	Twins ...	15
Pedlars ...	76	U	
Peninsula ...	9	Unauthorised hawking ...	76
Perinatal deaths ...	26	Unmarried mothers ...	39
Pest control ...	72	Upholsterers ...	76
Phosphatase tests ...	80	Urban redevelopment ...	84
Pneumonia ...	44	V	
Poor relief ...	35, 85	Venereal disease..	62
Population ...	11	" attendances	63
Poliomyelitis ...	43, 105	" centres	64
" immunisation	36	" teenagers	64
Postnatal clinics ...	34	Verminous persons	70
Powdered milk ...	32	Veterinary officer	80
Prenatal clinics ...	33	Visiting infants ...	32
Principal causes of death	16	Vital statistics ...	11, 103, 104
Protected infants ...	39	Vi-tests ...	80
Puerperal fever ...	35, 105	W	
R		Wards ...	11
Rainfall ...	8	Washhouses ...	78
Raw milk ...	80	Water supply ...	10
Reclamation ...	9	Whooping cough ...	45, 105
Reservoirs ...	10	" immunisation	36
Refuse Removals ...	86	Wind ...	9
		X	
		X-rays ...	58, 66, 69

