

**Report of the Medical Officer of Health on the public health and sanitary circumstances of Johannesburg.**

**Contributors**

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CITY OF JOHANNESBURG

REPORT OF THE MEDICAL OFFICER OF HEALTH ON THE PUBLIC HEALTH  
AND SANITARY CIRCUMSTANCES AND HOUSING IN JOHANNESBURG DURING  
THE PERIOD 1ST JANUARY TO 31ST DECEMBER 1960.

J. W. SCOTT MILLAR, B.A., M.B., Ch.B., D.P.H.(Cape Town), D.T.M. and HY.(Rand), F.R.S.H.

Medical Officer of Health.

Consultant Medical Officer to the Rand Water Board.

Lecturer, Urban Health Administration, University of the Witwatersrand.



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*With the Compliments  
of the  
Medical Officer of Health*

CITY HEALTH DEPARTMENT,  
18 HOEK STREET, C/R. DE VILLIERS STREET,  
JOHANNESBURG.  
P.O. BOX 1477.

P.H.F. 101





*Met die komplimente  
van die  
Stadsgeneesheer*

STADSGESONDHEIDSAFDELING,  
HOEKSTRAAT 18, H/V DE VILLIERSSTRAAT,  
JOHANNESBURG.  
POSBUS 1477.

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## CITY HEALTH COMMITTEE

CONSULTANTS:  
 Pediatrics; Venereology; Medicine (and  
 Physician in Charge, Fever Hospital);  
 Otorhinolaryngology; Radiology; Physical  
 Medicine and Orthopedics.

## MEDICAL OFFICER OF HEALTH

Establishment Committee.  
 Special Sins at Committee.  
 Special Licensing Committee.  
 Non-European Affairs and Housing  
 Committee.

## DEPUTY MEDICAL OFFICER OF HEALTH

ADMINISTRATIVE  
OFFICERSANITATION BRANCH  
(CITY AREA)MEDICAL BRANCH  
(CITY AREA)LABORATORY  
BRANCHEUROPEAN HOUSING  
BRANCHASSISTANT MEDICAL  
OFFICER OF HEALTHVETERINARY  
OFFICERSASSISTANT MEDICAL  
OFFICER OF HEALTHASSISTANT MEDICAL  
OFFICER OF HEALTH

## CHIEF CHEMIST

## CHIEF CLERK

## HOUSING OFFICER

CHIEF HEALTH  
INSPECTOR

## NATIVE AREA

## CITY AREA

Tuberculosis Services -  
 Investigation of Notified  
 cases; Clinics;  
 Disinfectant treatment  
 of cases.  
 Control of infectious  
 diseases - investigation  
 of notified cases.  
 Venereal Disease Clinics  
 Child Welfare Services;  
 Immunisation; Disinfectant  
 Clinics; Infant  
 Day Nurseries;  
 Orthopaedic After-  
 Care.  
 Out-patient Services -  
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 Nursing).  
 District Midwifery Ser-  
 vices with allied ante-  
 natal and post-natal  
 clinics.  
 Ambulance Services -  
 for all types of cases.

Environmental  
 hygiene and  
 sanitation.  
 anti-Rodent  
 measures and  
 pest control.  
 Supervision of  
 the manufacture  
 and distribu-  
 tion of food  
 supplies.  
 Supervision of  
 milk supplies.

Environmental  
 hygiene  
 and San-  
 itation.  
 Supervision  
 of manu-  
 facture and distribu-  
 tion of  
 food  
 supplies.  
 Supervision  
 of first  
 aid  
 centres.  
 Supervision  
 of City  
 Dairies &  
 Milk depots  
 anti-Rodent  
 measures &  
 Pest Control.  
 Slums Clear-  
 ance.  
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 building  
 plans.  
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 of public

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 Native Regis-  
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 Health examina-  
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 paganda.  
 Supervision of  
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 Supervision of  
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Control of infec-  
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 investigation of  
 notified cases.  
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 Isolation Hospital  
 for Non-Europeans.  
 Disinfecting Sta-  
 tion.  
 Tuberculosis ser-  
 vices - investiga-  
 tion of notified  
 cases; Clinics  
 for Europeans and  
 Non-Europeans;  
 Disinfectant  
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 Venereal Disease  
 Clinics.  
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 Infant Clinics &  
 Disinfectant  
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 Day Nurseries.

Supervision of Chemical  
 and Biological  
 aspects of sewage  
 disposal plants.  
 Chemical services for  
 other municipal de-  
 partments including  
 Power Stations, Gas  
 Works, Refractory  
 Works, etc.  
 Brewery, Swimming  
 Baths, etc.  
 Laboratories at -  
 Cydus, Bruns, Deite,  
 Klippruit, Orland,  
 Kelyva, Cottelice  
 and Wanner.  
 Smoke Abatement.

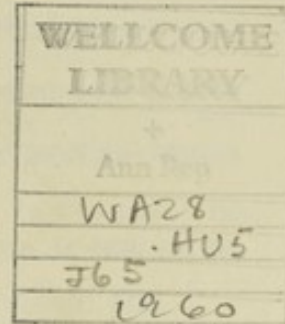
Records,  
 Statistics,  
 typing, pet-  
 trol, sup-  
 plies and gen-  
 eral, includ-  
 ing adminis-  
 tration of  
 public com-  
 munities.

Administration and  
 supervision of  
 housing schemes  
 at - Jan Hofmeyr,  
 Maurice Fresman,  
 Pinner, South  
 Hills, South  
 Hills, Easton  
 and Montclair.  
 Administration and  
 supervision of  
 Girls' Residen-  
 tial Club.  
 Land sales, plus  
 financial, assis-  
 tance schemes  
 at - Franklin  
 Roosevelt Park  
 and Extension  
 No. 1 Montco-  
 nery Park.  
 Dewetsburg.

Food Distribution  
 Service on a limi-  
 ted basis.

CITY OF JOHANNESBURG.CITY HEALTH COMMITTEE.COUNCILLORS:

MR. T. GLYN MORRIS - CHAIRMAN  
 DR. V.V. BOY, M.P.C. - VICE-CHAIRMAN  
 MRS. E.A. GROBBELAAR  
 MR. M. GOODMAN (from 4th November 1960)  
 MR. L.V. HURD, J.P.  
 MRS. M.K. MITCHELL  
 MRS. I.E. TURVEY (to 4th November 1960)  
 MR. H.M.J. VAN RENSBURG

ADMINISTRATIVE HEADS AND CONSULTANTS:

**MEDICAL OFFICER HEALTH** : J.W. SCOTT MILLAR  
 B.A., M.B., Ch.B., D.P.H., D.T.M. & Hy.,  
 F.R.S.H.

**DEPUTY MEDICAL OFFICER OF HEALTH** : B. MUNDEL  
 M.B., Ch.B., D.P.H., D.T.M. & Hy.

**ASSISTANT MEDICAL OFFICER OF HEALTH** : A.H. SMITH  
 M.B., Ch.B., D.P.H., D.T.M. & Hy.

**ASSISTANT MEDICAL OFFICER OF HEALTH** : M.L. FREEDMAN  
 O.B.E., M.B., Ch.B., D.P.H.

**ASSISTANT MEDICAL OFFICER OF HEALTH** : I.W.F. SPENCER  
 M.B., Ch.B., D.P.H., D.T.M. & Hy.

**ADMINISTRATIVE OFFICER** : E.M. COETZEE  
 A.M.I.P.H.E., R.S.H. Cert. for H.I.

**CHIEF CLERK** : C.J. MORSHEAD

CONSULTANTS:

**Pediatrics** : B.G. VON B. MELLE  
 M.B., Ch.B., F.R.C.S. Edin.

**Venereology** : B. SIEFF  
 M.B., B.Ch.

**\* Medicine** : A.L. JACKSON  
 B. Chir., M.B., M.R.C.P.

**Otorhinolaryngology** : D.R. HAYNES  
 M.B., B.Ch., D.O.L., R.C.P. & S. Eng.

**Radiology** : H.I. OSLER  
 M.B., Ch.B., D.M.R.E.

**Radiology** : M. HURWITZ  
 M.B., Ch.B., D.M.R.D., R.C.P. & S. Eng., M.D.

**Physical Medicine** : C. ADLER  
 M.B., B.Ch., D. Phys. Med.

**Orthopaedics** : C.M. SARKIN  
 M.B., B. Ch., F.R.C.S. Edin.

\* and Physician in Charge, Fever Hospital.



HEADS OF BRANCHES AND SECTIONS:

TUBERCULOSIS MEDICAL OFFICER.	: M.H. GOLDBERG - M.B., Ch.B.
CHILD WELFARE MEDICAL OFFICER	: O.I.B. KREHER - M.B., Ch.B.
MEDICAL SUPERINTENDENT, WATERVAL HOSPITAL	: G.B. MILLER - M.B., Ch.B.
MATRON, WATERVAL HOSPITAL	: M. MILLER - Reg. Nurse and Midwife, School Nsg. and San. Cert.
SENIOR MEDICAL OFFICERS	: E.N. ELLIS - M.B., Ch.B. : L. EISENBERG - M.B., B.Ch. : B. RICHARD - M.B., B.Ch. : H. TAYLOR - L.R.C.P. and S., L.R.F.P.S. : M. MER - M.B., B.Ch. : M.S. BROWN - M.B., Ch.B. : A.V. MC PHAIL - M.B., B.Ch.
SENIOR DENTAL OFFICER (ORLANDO)	: J.H.C. LAING - L.D.S., D.P.D.
CHIEF PHARMACIST	: S. GRINKER - Dip. Pharm.
CHIEF CHEMIST	: E.G. WHITE - M.Sc., Ph.D.(Wits), F. Inst S.P., F.R.I.C., M.(S.A.) Chem. I.
AIR POLLUTION CONTROL OFFICER	: L. TUCKER - B.Sc. (Eng. Chem.), M.(S.A.) Chem. I., A.M.I.S.P.
HOUSING OFFICER	: W.J. DUNCAN
HOUSING SUPERVISOR	: J.M.E. BUTLER - Housing Manager's Cert., R.S.H. Cert. for H.I., Primary Teachers' Higher Cert.
CHIEF HEALTH INSPECTOR	: I.J. DISTILLER - M.I.P.H.E., M.I.P.H.Hy. R.S.H. Certs. for H.I. and M. & O.F., F.
DIVISIONAL HEALTH INSPECTORS	: A.H. SPARGO - A.M.I.P.H.E., M.R.S.H., R. Certs. for H.I. and M. & O.F. : T. PATTERSON - R.S.H. Certs. for H.I. and M. & O.F. : W.G. HOWARTH - R.S.H. Certs. for H.I. and M. & O.F. : A.H. MAXWELL - A.M.I.P.H.E., R.S.H. Cert for H.I., M. & O.F., and Trop. Hy.
CHIEF HEALTH VISITOR	: M. BERGH - R.S.H. Cert. for H.V., Reg. N and Midwife.
SENIOR HEALTH VISITORS	: R.C.C. SANGERHAUS - R.S.H. Cert. for H.V Reg. Nurse and Midwife.

:- C.K. HAINS ...

	: C.K. HAINS - R.S.H. Cert. for H.V., Reg. Nurse and Midwife, Mothercraft Cert., Dipl. in Nsg. Admin. (Public Health) (Lond.)
	: M.H. RALPH - R.S.H. Cert. for H.V., Reg. Nurse and Midwife, Mothercraft Cert.
INSPECTRESS OF NURSERY SCHOOLS	: E.K.F. BROSIUS - Dipl. in Pre-School Educ.
SENIOR SUPERVISOR, NURSERY SCHOOLS (ACTING)	: A.M. VILJOEN - Nursery School Dipl.
SUPERINTENDENT, DISINFECTING STATION	: J.H. CUTTING - Qualified Fitter.

The full staff establishment is detailed in Annexure 1.



REPORT OF THE MEDICAL OFFICER OF HEALTH.CALENDAR YEAR 1960.

The Mayor and  
City Councillors of  
JOHANNESBURG.

Ladies and Gentlemen,

I have the honour to present my report for the calendar year 1960 on the work of the City Health Department, the vital and morbidity statistics of the City and the main features in regard to the health and sanitary circumstances of the community and also my report on overcrowding and bad or insufficient housing. These matters are dealt with in two separate Reports - A and B.

The general health of the citizens of Johannesburg is very satisfactory as will be seen from the lower death rate and the reduced incidence of infectious disease.

The vital statistics are based on population census figures as at 6th September 1960. There has always been some difficulty in arriving at an accurate estimation of the Native population. The Native population figures are based on available information as at 30th June each year.

The European birth rate is slightly below the average for previous years. The birth rate for Asiatics is appreciably lower in accordance with the progressive decline over many years. The Native rate is slightly lower. The rate for Coloureds is quite appreciably higher than the previous year and there is an increase in the percentage of illegitimate births.

The death rate for all persons is slightly lower as compared with the previous year but it is not the lowest on record. The drop is reflected in the figures for each race separately. The usual causes - heart disease, cancer, violence and pneumonia predominate for the older ages, with violence the main cause of death in Natives.

The infantile mortality rate is somewhat higher for Europeans and Coloured and lower for Asiatics. The substantial rise in the rate for Natives is difficult to explain except that the rate for 1959 was specially favourable.

The maternal mortality rates show no significant change although these are somewhat higher for the Non-Europeans. The rise in the Native rate may be significant but the number of deaths in the case of other races is too small to warrant precise conclusions.

The incidence of infectious disease continues to drop with a still further falling off in the use of accommodation at the Fever Hospital.

Poliomyelitis cases were slightly increased over 1959 but the incidence in that year was exceptionally low. The current year was noteworthy for the decision to use the oral (Sabine type) vaccine on a country wide scale for vaccination against poliomyelitis. The new Secretary for Health, Dr. B. Maule Clark, was faced with this decision soon after assuming office and is to be congratulated on his foresight for deciding to proceed.

:- Typhoid ...



Typhoid fever is substantially less than the previous year, no doubt as a result of the extensive immunisation campaign undertaken during the outbreak of typhoid fever in the Johannesburg gaol. There was an increase in the incidence of diphtheria among Natives otherwise the incidence is much the same as the previous year. There was a small outbreak of small-pox in Pimville; the cases were mild but advantage was taken of the situation to step up vaccination in the Native Townships.

A trachoma survey in the Native Townships revealed the presence of this disease on a fairly wide scale but in a mild form. The mildness of the condition was responsible for its remaining undiagnosed for so long but viral isolation confirmed the diagnosis beyond doubt.

Pulmonary tuberculosis showed the lowest incidence for all races for the last four years. If this trend continues it may represent the turn of the tide. Certainly the services have been progressively improved and the number of beds available for Non-European cases has increased so some effect on the incidence of the disease is to be expected. The lesser incidence is also to be attributed to improvement in the social conditions of Natives — better housing and a general tendency to increased earnings. It is gratifying to be able to report that most employers are willing to re-employ tuberculosics when their treatment has reached the stage where they are non-infective and that many employers make some allowance, or even pay full wages, when employees are off work during the initial stages of treatment. During the year a mass miniature X-ray survey of the residents of Orange Grove and the vicinity was organised by the Orange Grove Rotary Club. The results justified the efforts made in that 29 active cases were found and this indicates the need for similar surveys in other areas.

The rather unsatisfactory dispensary arrangements at the Disinfecting Station were superseded by a new dispensary at Westdene. This, together with the appointment of two additional pharmacists, has enabled the Department to place the dispensing services on a more satisfactory basis.

Waterval Hospital is to be closed not later than December 1963 on instructions from the Government Departments concerned. Other arrangements will have to be made for the patients now treated there.

A mobile child welfare clinic was put into operation during the year which enables the Department to serve isolated groups of Coloureds and Asiatics much more conveniently and satisfactorily.

Bruma and Sandringham Sewage Works were closed and the loads at Cydna and Delta were substantially reduced preparatory to closing these works in 1961 or 1962.

The appointment of an Air Pollution Control Officer, who was sent overseas to study conditions in Britain and Europe, is a major step towards intensifying action in tackling this important problem.

Concentrated efforts continue to be made to improve standards of food hygiene and to train operatives at all levels in better food handling methods. The new Public Health By-laws when they are eventually available will be of great assistance here.

Slums action has been carried on at a moderate scale during the year because of lack of alternative housing for Coloureds. Little progress has been made in Newclare for the same reason although the initial stages of slums action in this township has been completed.



Some of the sanitation problems in the older Native Townships have still to be solved but Pimville is the only area where gross slum conditions prevail. It is anticipated that authority to rebuild and extend this township will shortly be obtained. Shantytown and Moroka, the last of the squatter townships, have now been cleared.

The difficulty in providing housing for the R60 - R90 income group at rentals within their means and in a convenient situation is dealt with in some detail. This income group is undoubtedly in need of housing although they are not taking full advantage of the houses available at Montclare.

Stands in Montgomery Park were offered for sale towards the end of the year and this promises to be a very acceptable housing scheme which will serve a very useful purpose. In contrast to the other racial groups progress has been made with the provision of Native housing.

The Interim Report of the Borckenhagen Committee, dealing with the financial relations in respect of health services between the central government, the provinces and local authorities, was released early in 1960. The findings of the Committee have been considered by various bodies during the year but no decision has been taken by the Minister of Health in respect of them.

It gives me great pleasure to record that the work of all members of the staff - professional, technical and clerical - has been maintained at the high level expected of them and to acknowledge their very valuable assistance to me, both personally and officially, and their loyalty to the Council and myself.

I also desire to tender my thanks to His Worship the Mayor, and to the Chairman and Members of the City Health Committee during the year, all of whom have extended to me every courtesy. My thanks are also due to all the Heads and Sub-Heads of Departments for their willing co-operation to all times.

J.W. SCOTT MILLAR,  
MEDICAL OFFICER OF HEALTH.

February 1962.



## CITY OF JOHANNESBURG.

REPORT A.

1960.

### REPORT ON STATISTICAL RETURNS AND THE PUBLIC HEALTH AND SANITARY CIRCUMSTANCES OF JOHANNESBURG FOR THE CALENDAR YEAR 1960, IN TERMS OF SECTIONS 6 AND 13 OF THE PUBLIC HEALTH ACT, 1919, AS AMENDED.

#### I. NATURAL CONDITIONS.

Physical Geography - Johannesburg is situated in latitude 26 degrees 11 minutes south and longitude 28 degrees 4 minutes east, at a mean altitude of 5,850 feet above sea level and approximately 300 miles from the sea coast on the Indian Ocean. It is placed almost at the northern limit of the highveld area of the Transvaal Province and almost in the centre of the Witwatersrand Goldfields which extend roughly eastwards and westwards over a total distance of approximately 88 miles.

The city is on the crest of the Witwatersrand ridge which is one of the main watersheds of the country, all streams in the northern suburbs being tributaries of the Limpopo River, while those in the south make their way to the Orange River. The four highest points, all of approximately the same altitude (5,940 feet) are Observatory Hill, Aasvogelskop, a hill south west of the City and a hill south of Linmeyer. The last named is the highest by a few feet. The city centre is about 5,700 feet above sea level.

From the southern municipal boundary proceeding northwards, the land slopes gently downwards at first and then rises slowly to the foot of the ridge where it becomes steeper. From the crest of the ridge it falls away rather suddenly and then, having reached the lower level, it divides up into several flat valleys dropping gradually northwards. The major exception to this general description is in the Kensington - Bezuidenhout Valley area where outliers of the main ridge form somewhat deep valleys running to the east. This area and the northern suburbs are to a certain extent protected from the cold southern winter winds.

The meteorological and topographical features favour the dispersal of smog. Inversion is encountered but does not cause concern. On some days during the winter months smog tends to persist in the valleys but almost invariably disperses by 10 a.m.

The area of the city and its suburbs is 93.66 square miles which includes Pimville Township and the Rand Airport. The extreme length of the city and suburbs is  $11\frac{1}{2}$  miles and extreme width  $11\frac{1}{4}$  miles. In addition, the Council owns and controls an area of land which includes the Coloured township of Noordgesig and the Native townships which comprise the south western Native residential complex extending to the west and south of Orlando on the south western boundary of the city but not within the defined area of the municipality. This land is 25.5 square miles in extent. Other land owned by the Council outside its own boundaries and controlled in terms of Section 7 of the Local Government Ordinance, includes the sewage purification farms to the south, and the northern sewage purification works, Zuurbekom, Kelvin Power Station, Woodlands, Lombardy, Gillooly's Farm, Rietvlei East, Rietvlei West and several other farms with a total area of 52.71 square miles.

The climate of Johannesburg is essentially temperate, although the city is within 3 degrees of the Tropic of Capricorn. Generally the days are bright and warm and the nights cool. The humidity is low in winter and there is a marked diurnal variation in temperature. The average daily period of sunshine is 8.7 hours.

The rainfall has averaged 34.37 inches per annum over a period of 50 years and occurs mainly in the summer months (October to March) usually in the form of short thunderstorms. The total fall at Joubert Park in 1960 was 813.6 (32.03 inches) and rain fell on 93 days.

The hottest months are usually from December to March with an average maximum temperature over 15 years of  $31^{\circ}\text{C}$  and the highest recorded temperature of  $34.2^{\circ}\text{C}$ . The coldest months are usually in June and July with an average minimum temperature of  $2.05^{\circ}\text{C}$  over 15 years and the lowest recorded temperature of  $-6.2^{\circ}\text{C}$  on the 23rd July 1926.

Johannesburg is not a windy place; the only time when the wind calls for special comment is when cold winds blow from the south during August or September. The wind frequencies are shown diagrammatically in Annexure 2.



The following table reflects the averages of records of climatic conditions each month during 1960:-

JOUBERT PARK										JAN SMUTS AIRPORT					
TEMPERATURE								RAINFALL		RELATIVE HUMIDITY			SUNSHINE		
	Mean Daily Maximum	Highest Daily Maximum	Lowest Daily Maximum	Mean Daily Minimum	Highest Daily Minimum	Lowest Daily Minimum	Mean Daily	TOTAL	Number of Days With Rain	Mean Daily	Mean Daily Maximum	Mean Daily Minimum	Mean Daily Hours of Sunshine	Number of Days with less than 11% of possible	Number of Days with more than 89% of possible
JANUARY	25.2	30.1	16.5	14.3	18.4	8.7	19.7	64.5	11	61	89	37	8.91	1	7
FEBRUARY	24.6	29.2	19.5	14.7	17.4	11.0	19.7	95.1	8	67	93	42	8.02	2	5
MARCH	24.4	28.8	17.7	13.3	17.3	8.5	18.9	128.6	10	66	89	41	8.41	2	7
APRIL	20.0	26.2	11.0	10.5	14.5	5.1	15.3	88.8	11	64	89	42	7.30	5	8
MAY	18.5	22.6	10.6	6.9	10.4	1.0	12.7	1.9	2	50	73	30	9.59	0	24
JUNE	16.1	19.0	11.5	5.0	8.0	0.5	10.5	3.7	1	50	71	31	9.30	0	22
JULY	16.1	22.6	9.0	4.3	9.0	1.3	10.2	0.0	0	41	65	22	9.52	0	24
AUGUST	20.5	27.0	12.1	9.4	14.7	2.2	14.9	10.5	4	50	74	29	9.08	1	18
SEPTEMBER	22.7	28.0	11.0	10.0	15.0	3.0	16.3	3.2	3	53	86	28	9.48	1	17
OCTOBER	25.0	29.0	16.8	13.1	18.8	5.8	19.1	74.7	11	59	87	33	9.52	1	14
NOVEMBER	22.6	30.0	13.6	12.6	16.4	10.0	17.6	181.4	16	69	93	46	7.41	5	8
DECEMBER	24.1	30.5	13.7	13.7	17.6	6.5	18.9	161.2	16	71	93	46	8.62	2	2

The climatological data are based on records supplied by the Director of the Weather Bureau to whom thanks are here recorded.

:- VITAL ...



## II. VITAL STATISTICS.

The following table summarises the principal vital statistics for 1960:-

The statistical factors recorded below are referred to in more detail in the pages that follow.

	EUROPEANS:	COLOURED:	ASIATICS:	NATIVES:	ALL PERSONS:
Population	368,277	42,943	23,647	522,953	957,820
Births (number of)	8,808	1,677	698	15,829	27,012
Birth rate	23.92	39.05	29.52	32.07	28.20
Illegitimate Birth Rate %	3.03	20.16	2.58	40.56	26.08
Deaths (number of)	3,087	423	150	5,716	9,376
Death rate	8.38	9.85	6.34	10.93	9.79
Infantile Deaths	249	108	34	1,943	2,334
Infantile Mortality Rate	28.27	64.40	48.71	122.75	86.41
Maternal Deaths	2	3	1	38	44
Maternal Death Rate	0.22	1.77	1.40	2.35	1.60

The figures quoted in the tables are corrected for outward transfer only.

The Native population included 29,303 mine Natives among whom there were 95 deaths with a death rate of 3.24.

The 1959 population details recorded below are estimated figures as at 30th June of that year. With regard to 1960, in the case of Europeans, Coloureds and Asiatics, the population figures and vital statistics are based on the population figures determined by the census on 6th September 1960. The population details and vital statistics for natives are based on an estimate supplied by the Council's Non-European Affairs Department.

### 1. POPULATION.

	1959.	1960.
Europeans	372,000	368,277
Coloureds	37,600	42,943
Asiatics	27,000	23,647
Natives	502,423	522,953
	<u>939,023</u>	<u>957,820</u>

:- The ...

The figure for Natives is in accordance with the following estimates arrived at in consultation with the Manager, Non-European Affairs Department of the Council:-

PLACE:	NUMBER:
Orlando and Extension	66,128
Moroka	5
Mofolo	13,293
Jabavu	27,742
Dube	11,696
Pimville	33,561
Western Native Township	15,343
Eastern Native Township	3,699
Site and Service and Slum Clearance Schemes	180,344
Wemmer Native Men's Hostel	2,809
Wolhuter Native Men's Hostel	3,230
Denver Native Men's Hostel	3,336
Mai-Mai Native Men's Hostel	399
Jabulani Native Men's Hostel	2,434
Wolhuter Native Women's Hostel	135
Municipal Compounds	11,691
Sophiatown, Newclare, Martindale and Pageview	300
Nancefield Hostel	4,832
Dube Hostel	5,056
Commerce and Business	8,660
Hotels and Clubs	4,389
Schools, Hospitals and Churches	2,379
Domestic Servants in private dwellings	75,400
Licensed husbands of female domestics	317
Cleaners and domestic servants in flats	16,472
Mine Labourers	29,303
<b>TOTAL ESTIMATED NATIVE POPULATION</b>	<b>522,953</b>

The estimates of the total Native population show an increase of just over 20,000 on the estimates of the previous year. The main increases are reflected in Pimville and in the site and service and Slum Clearance areas and the main reduction in the Orlando complex.



## 2. BIRTHS.

The figures reflect a drop in the birth rate for all races except Coloureds where a fairly substantial rise is shown (from 39.40 to 42.46). There appears to have been an increase in the percentage of illegitimate births among Coloureds (from 17.53% to 20.16%).

## 3. DEATHS.

The death rates over a period of three years are shown in the following table (rates are corrected for outward transfers):-

YEAR	EUROPEANS	COLOURED	ASIATICS	NATIVES	ALL PERSONS
1958	8.43	11.20	7.47	12.49	10.70
1959	8.38	11.33	5.63	11.07	9.86
1960	8.38	9.85	6.34	10.93	9.79

The death rate for all persons and for each race separately shows a drop as compared with the previous year. The biggest drop is in respect of Natives and Coloureds.

At older ages the main individual cause of death is heart disease followed by cancer, violence and pneumonia. In Natives violence supersedes all other causes. At younger ages diarrhoea and enteritis and congenital malformations take a heavy toll in the Non-European races.

:- The ...

The principal causes of deaths for the periods ended 31st December 1958, 1959 and 1960 are given in the following table:-

	1958		1959		1960	
	DEATHS	RATES	DEATHS	RATES	DEATHS	RATES
<b><u>PNEUMONIA:</u></b>						
Europeans	76	0.21	84	0.23	89	0.24
Natives	534	1.06	426	0.83	492	0.94
Coloureds	38	1.03	20	0.53	40	0.93
Asiatics	14	0.54	8	0.30	12	0.51
All Persons	662	0.71	538	0.57	633	0.66
<b><u>DISEASES OF THE HEART:</u></b>						
Europeans	1,022	2.77	1,120	3.01	1,129	3.07
Natives	512	1.01	470	0.94	405	0.77
Coloureds	92	2.50	92	2.45	79	1.84
Asiatics	47	1.80	52	1.95	41	1.73
All Persons	1,673	1.79	1,734	1.85	1,654	1.73
<b><u>VIOLENT DEATHS:</u></b>						
Europeans	278	0.75	305	0.82	254	0.69
Natives	999	1.98	949	1.89	807	1.54
Coloureds	82	1.14	64	1.70	46	1.07
Asiatics	24	0.92	9	0.33	13	0.55
All Persons	1,383	1.44	1,327	1.41	1,120	1.17
<b><u>DIARRHOEA AND ENTERITIS:</u></b>						
Europeans	22	0.06	27	0.07	21	0.06
Natives	944	1.87	829	1.65	897	1.72
Coloureds	39	1.06	43	1.14	36	0.84
Asiatics	11	0.42	8	0.30	9	0.38
All Persons	1,016	1.09	907	0.97	963	1.01
<b><u>CONGENITAL MALFORMATIONS, PREMATURE AND EARLY INFANCY:</u></b>						
Europeans	197	0.53	191	0.51	200	0.54
Natives (Excl. Mine Natives)	811	1.72	658	1.31	762	1.46
Coloureds	42	1.14	45	1.20	50	1.16
Asiatics	28	1.07	27	1.00	23	0.97
All Persons	1,078	1.15	921	1.00	1,035	1.08
<b><u>CANCER:</u></b>						
Europeans	539	1.46	529	1.42	527	1.43
Natives	249	0.49	255	0.51	264	0.50
Coloureds	27	0.73	28	0.74	30	0.70
Asiatics	19	0.73	13	0.48	14	0.59
All Persons	834	0.89	825	0.88	835	0.87
<b><u>TUBERCULOSIS (ALL FORMS):</u></b>						
Europeans	38	0.10	32	0.09	25	0.07
Natives	404	0.80	341	0.68	294	0.56
Coloureds	28	0.76	23	0.61	18	0.42
Asiatics	6	0.23	3	0.11	3	0.13
All Persons	476	0.51	399	0.42	340	0.35
<b><u>TUBERCULOSIS OF THE LUNGS:</u></b>						
Europeans	25	0.07	15	0.04	17	0.05
Natives	279	0.55	249	0.50	185	0.35
Coloureds	22	0.60	16	0.43	10	0.23
Asiatics	4	0.15	1	0.04	2	0.08
All Persons	330	0.35	281	0.30	214	0.22
<b><u>NON-PULMONARY TUBERCULOSIS:</u></b>						
Europeans	13	0.04	17	0.05	8	0.02
Natives	125	0.25	92	0.18	109	0.21
Coloureds	6	0.16	7	0.19	8	0.19
Asiatics	2	0.08	2	0.07	1	0.04
All Persons	146	0.16	118	0.13	126	0.13

:- More ...



More details are available in respect of the foregoing and other causes of death and will be supplied to those who desire them.

#### 4. INFANTILE MORTALITY.

The rates for the years 1958 to 1960 inclusive, are shown on the following table:-

YEAR	EUROPEANS	COLOURED	ASIATICS	NATIVES	ALL RACES
1958	25.05	63.29	48.73	132.70	90.86
1959	25.29	61.79	51.61	104.98	75.80
1960	28.27	64.40	48.71	122.75	86.41

The infantile mortality rate (i.e. the deaths of infants under 1 year of age per 1,000 live births registered) is somewhat higher for Europeans and Coloureds and lower for Asiatics. The substantial rise in the rate for Natives is difficult to account for; 38% of the deaths continue to occur during the first month after birth and the percentage distribution during each three month period remains much the same.

YEAR AND RACE	UP TO 1 WEEK	1 WEEK TO 1 MONTH	TOTAL UNDER 1 MONTH		1 MONTH TO 3 MONTHS	4 MONTHS TO 6 MONTHS	7 MONTHS TO 9 MONTHS	10 MONTHS TO 12 MONTHS	TOTAL
			NO.	% OF TOTAL					
<u>EUROPEANS:</u>									
1958	158	21	179	80	20	11	11	3	224
1959	148	19	167	73	34	15	7	7	230
1960	156	31	187	75	32	19	3	8	249
<u>NATIVES:</u>									
1958	565	239	804	38	398	391	324	197	2,104
1959	454	189	643	37	366	317	281	138	1,745
1960	558	186	744	38	377	358	306	158	1,943
<u>COLOURED:</u>									
1958	28	10	38	45	18	13	7	9	85
1959	32	11	43	47	12	16	15	6	92
1960	38	12	50	46	15	23	14	6	108
<u>ASIATICS:</u>									
1958	18	8	26	59	5	8	5	-	44
1959	19	7	26	65	6	4	4	-	40
1960	13	7	20	59	9	2	2	1	34
<u>ALL RACES:</u>									
1958	769	278	1,047	43	431	423	347	209	2,457
1959	653	226	879	42	418	352	307	151	2,107
1960	765	236	1,001	43	433	402	325	173	2,334

### 5. MATERNAL MORTALITY.

Maternal mortality is measured by the number of maternal deaths per 1,000 births (including still births).

Details of the maternal mortality rates for the three years 1958 to 1960 inclusive are shown on the following table:-

YEAR	EUROPEANS	COLOURED	ASIATICS	NATIVES (EXCLUDING MINE NATIVES)	ALL RACES
1958	0.33	1.47	2.13	2.15	1.52
1959	0.22	2.64	1.25	1.70	1.26
1960	0.22	1.77	1.40	2.35	1.60

The slight fluctuations in the rates are not very significant because of the small numbers involved.

### III. INFECTIOUS, COMMUNICABLE AND PREVENTABLE DISEASES.

The investigation of infectious diseases is carried out by three Health Inspectors (2 European and 1 Native) and one Clerk with occasional assistance from District Health Inspectors in outlying districts. Cases of Puerperal Sepsis and Pemphigus Neonatorum are investigated by the Senior Health Visitor, (Nursing Homes and Midwives) and her assistants, and cases of Ophthalmia by Health Visitors. A special staff of Health Visitors assisted by Native Nurses is responsible for the investigation and follow-up of tuberculosis cases other than Mining Natives.

The diseases which are notifiable in Johannesburg are those specified in Section 18(1) of the Public Health Act and subsequent amendments.



# 1. NOTIFIED CASES OF INFECTIOUS DISEASES.

Details of the number of cases of infectious diseases notified during the year are given in the following table:-

	LOCAL CASES					IMPORTED CASES				
	E	C	A	N	TOTAL	E	C	A	N	TOTAL
Diphtheria	27	16	-	194	237	1	-	-	9	10
Scarlet Fever	511	2	1	7	521	3	-	-	-	3
Typhoid	3	8	-	37	48	3	-	-	9	12
Meningitis	11	3	-	35	49	-	-	-	-	-
Erysipelas	7	-	-	-	7	-	-	-	-	-
Puerperal Sepsis	9	4	-	78	91	-	-	-	-	-
Pemphigus	12	-	-	12	24	-	-	-	-	-
Ophthalmia Neonatorum	-	-	-	31	31	-	-	-	-	-
Poliomyelitis	41	3	3	52	99	-	-	-	-	-
Malaria	-	-	-	-	-	3	-	-	27	30
Leprosy	-	-	-	-	-	-	-	-	21	21
Encephalitis	36	2	-	7	45	-	-	-	-	-
Trachoma	-	-	-	-	-	-	-	-	7	7
Relapsing Fever	-	-	-	-	-	-	-	-	3	3
Insecticide Poisoning	-	-	-	1	1	-	-	-	-	-
Smallpox	-	-	-	6	6	-	-	-	-	-
TOTAL	657	38	4	460	1,159	10	-	-	76	86
<u>Tuberculosis:</u>										
Pulmonary	136	142	24	2,757	3,059	17	8	1	2,964	2,990
Other Forms	18	32	1	310	361	3	2	-	54	59
ALL DISEASES	811	212	29	3,527	4,579	30	10	1	3,094	3,135

The prevalence of infectious disease has been generally lower than the previous year, except for an increase in the incidence of poliomyelitis.

## Typhoid Fever.

The incidence of typhoid fever has shown a steady decline in the last ten years interrupted in the case of Europeans, by a rather high incidence (26 cases in 1959. In the current year there were 3 European cases (with 1 death), 5 Coloured cases (no deaths) and 37 Native cases (4 deaths). The extensive inoculation campaign following on the Johannesburg gaol outbreak in 1959 very likely has a bearing on this situation.



A small outbreak involved six Coloured school children with ages ranging from 6 to 12 years, the onsets occurring between 25th December 1959 and 12th February 1960. Although these children attended the same school the outbreak occurred during the summer holidays and the children were not intimately associated at this time. *Salmonella typhi* of an untypable phage type was isolated from five of the six cases, the diagnosis being confirmed on clinical and serological grounds. An interesting feature of this outbreak was the discovery that the brother of one of the cases was a phage type "C" carrier, a phage type common in many countries but only once before isolated in South Africa.

#### Scarlet Fever.

There was no appreciable change in the incidence of scarlet fever as compared with the previous year. This is still quite a prevalent disease but the cases tend to be mild.

#### Diphtheria.

There has been a general tendency for the incidence of diphtheria to decline during recent years; from 680 cases and 76 deaths among all races eleven years ago, the tally has dropped to 237 cases and 27 deaths in the current year.

Among Europeans the number of cases has dropped from 176 in 1956 to 27 in 1960; of these cases 19 have not been immunised, 1 had been partly immunised and in two instances, the history was unknown. It is thought that the continued incidence among Europeans may be due to the lack of booster doses and this is being followed up.

Among Non-Europeans the incidence was slightly higher than the previous year, 210 cases as compared with 188. Deaths occurred in 26 instances of which two were Coloured children and 24 Native. No precise details could be obtained regarding the immunisation histories of these cases.

#### Smallpox.

For the first time in recent years an outbreak of a mild form of smallpox, involving six cases, occurred in Pimville Native Township from February to April 1960. Investigations of these cases led to the discovery of two children who appeared to have had a mild infection of smallpox in circumstances suggesting a possible link between the first case in February and the second in March. Although no positive source of infection was determined it was considered highly probable that the infection had been introduced from the Native township of Evaton, where an outbreak had recently occurred.

#### Poliomyelitis.

There were 99 cases of poliomyelitis during the year of which 41 were Europeans and 58 Non-Europeans, representing an increase of 29 European and 12 Non-European cases over the previous year. The incidence in 1959 was, however, exceptionally low. The introduction of oral immunisation in November 1960, gives promise of great reductions in the incidence of this disease in future years.



Tuberculosis.

The annual incidences and deaths per 100,000 population from all forms of tuberculosis are shown in the following table:-

	PULMONARY				NON-PULMONARY				ALL FORMS			
	INCIDENCE		DEATHS		INCIDENCE		DEATHS		INCIDENCE		DEATHS	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
<u>1958</u>												
Europeans	172	47	14	4	50	14	13	4	222	60	27	7
Coloureds	277	753	22	60	39	106	6	16	316	859	28	76
Asiatics	38	146	4	15	12	46	2	8	50	192	6	23
Mining Natives	224	699	7	22	NIL	-	6	19	224	699	13	41
Non-Mining Natives	3288	696	217	46	595	126	119	25	3883	822	336	71
All Natives	3512	696	224	44	595	118	125	25	4107	814	349	69
All Persons	3999	429	264	28	696	75	146	16	4695	502	410	44
<u>1959</u>												
Europeans	188	51	15	4	11	3	17	5	199	53	32	9
Coloureds	161	428	16	43	104	277	7	19	265	705	23	61
Asiatics	31	115	1	4	3	11	2	7	34	126	3	11
Mining Natives	217	758	9	31	11	38	5	17	228	796	14	49
Non-Mining Natives	2988	631	240	51	468	99	87	18	3456	729	327	69
All Natives	3205	636	249	50	479	95	92	18	3684	733	341	68
All Persons	3585	382	281	30	597	64	118	13	4182	446	399	42
<u>1960</u>												
Europeans	136	37	17	5	18	5	8	2	154	42	25	7
Coloureds	142	331	10	23	32	75	8	19	174	405	18	42
Asiatics	24	101	2	8	1	4	1	4	25	106	3	13
Mining Natives	77	263	7	24	NIL	NIL	5	17	77	263	12	41
Non-Mining Natives	2680	543	178	36	310	63	104	21	2990	606	282	57
All Natives	2757	527	185	35	310	59	109	21	3067	586	294	56
All Persons	3059	319	214	22	361	38	126	13	3420	357	340	35

The figures quoted do not include imported cases infected elsewhere who are attracted to Johannesburg for treatment or in transit. In 1960, there were 2,990 imported cases of pulmonary tuberculosis of all races including 2,735 Mining Natives who spent a short period in mine hospitals pending transfer to their homes.

The following is an analysis of the notification rates and death rates (in brackets) from pulmonary tuberculosis:-

	1957		1958		1959		1960	
Europeans	49	(8)	47	(4)	51	(4)	37	(5)
Coloureds	433	(61)	753	(60)	428	(43)	331	(23)
Asiatics	156	(19)	146	(15)	115	(4)	101	(8)
Natives	564	(52)	696	(44)	636	(50)	527	(35)
All Races	348	(34)	429	(28)	382	(30)	319	(22)



The incidence rates in each category are the lowest for the whole four year period. There has been a general tendency for the rates to fall progressively but there was a rise in the incidence rate for Europeans in 1959, for Coloureds in 1958 and for Natives in 1958 and 1959. These rises are difficult to explain except on the basis of vagaries in the recording of statistics but if the downward trend continues in 1961 there is room for guarded hopes that the problem of tuberculosis is being mastered.

There is a similar downward trend in the death rates but, while the death rates for Coloureds and Natives and the overall death rate were substantially less, the rates for Europeans and Asiatics were slightly higher.

## 2. DISINFECTIONS AND REMOVALS.

The Disinfecting Station is situated at Vrededorp and is fully equipped for the effective disinfection and/or deverminisation of persons, and the disinfection and sterilisation of clothing, blankets, bedding and other infected articles. Disinfecting work is also carried out at a moderate charge for commercial firms, institutions and individuals who require bedding and wearing apparel, etc., to be disinfected.

A Nursing Sister is available for ambulance duty when a seriously ill patient or a young child is to be removed and may be called out for this purpose outside normal working hours. Her other duties include the treatment of scabies sufferers, delousing of verminous persons, superintending the disinfection of midwives and sterilising their equipment and clothing, and sterilising of dressing drums for midwives employed by the Council and others attached to certain hospitals and nursing homes.

The Station also constitutes the headquarters for the operation and maintenance of a fleet of 18 ambulances for the conveyance of infectious disease cases, and 37 other vehicles of various types in use for the transport of patients, personnel and stores, etc., associated with the Departments, medical and other services.

During the year 8 new vehicles were acquired of which 6 were for the replacement of others becoming unserviceable in the Pest Control, Housing and Nursery School Sections, 1 converted for use as a Child Welfare mobile clinic, a new innovation, and the other being a motor scooter carrier intended for light delivery purposes.

The distances covered by the different vehicle groups over the year was 74,819 miles by the seven City ambulances, 39,153 miles by the two Tuberculosis ambulances and 701,061 miles by the nine ambulances and eleven station wagons operating in the Native Townships on duties relating to the medical and midwifery services. The remaining 26 vehicles used in the Department's transport system and for specialised functioning covered 167,731 miles; giving a combined total of 982,764 miles for the entire fleet.

In the course of duties in the Metropolitan area the ambulances concerned removed 38 corpses from the Waterval and Fever hospitals. The Disinfecting Station contains many features of interest to Student Nurses, Health Inspectors and others concerned with infectious diseases and Public Health work; during the course of the year 803 students and other interested parties were conducted over the Station.

The Organisation and Methods Division investigated two aspects of the activities of the Disinfecting Station during the year.



The first concerned the amalgamation of the infectious disease ambulance service and the Native Township ambulance service, conducted by the City Health Department, with the service for non-infectious cases conducted by the Fire Department. It was recommended that all ambulance services be administered by the Fire Department and this was accepted by the Council on the 26th April 1960. This decision had not been implemented by the close of the year.

The second assignment was to investigate the transport arrangements and functioning of the disinfecting Station but this was not completed.

Statistics relating to the functioning of the Disinfecting Station are reflected in the following table:-

I T E M S	1959	1960
<b>VEHICLES.</b>		
City Ambulances ....	7	7
Non-European Ambulances ....	9	9
Station Wagons (Non-European Townships) ....	11	11
Tuberculosis Ambulances (City and Non-European Townships) ....	2	2
Pest Control ....	9	9
Stores Deliveries ....	5	4
Waterval Hospital (Staff Duty Bus) ....	1	1
Dairy Demonstration Caravan ....	1	1
Nursery Schools ....	1	1
Housing Branch ....	1	1
"TIFA" Fogging Machine (Mobile Disinfestation Service) ....	1	1
Laboratory Services ....	1	1
Workshop Breakdown Van ....	1	1
Food Distribution Services ....	4	4
Light Deliveries (Scooter Carrier) ....	-	1
Mobile Child Welfare Clinic ....	-	1
<b>ACTIVITIES.</b>		
Removals of Persons (Infectious Diseases including tuberculosis, excluding sitting cases) ....	*4,683	3,656
Removals of Persons (Tuberculosis cases for treatment and X-ray) ....	8,165	15,622
<b>Disinfections/Disinfestations:-</b>		
Persons (including Midwives and Ambulance Drivers - Central Ambulance Service) ....	123	90
Premises (Terminal Disinfections and Nursing Homes, etc.) ....	1,183	980
Vehicles (Central Ambulance Services (178) and Non-European Townships Fleet (64)) ....	246	242
<b>Steam Autoclave Disinfections:-</b>		
Blankets, Bedding and Clothing, etc. (ex Waterval Hospital, Private Residences and Nursing Homes, Central Ambulance Services, Government Prisons and Peri-Urban Areas Health Board) ....	6,901	3,624
Midwives Dressing Drums ....	15,669	13,826
<b>Formaline Chamber Disinfections:-</b>		
(For articles liable to damage by steam or heat)		
Miscellaneous Bundles (Commercial and Private) ....	270	389
Miscellaneous Articles, Books, etc. ....	83	1,395
Relief Parcels of Clothing for Overseas ....	37	42

\* Includes 34 cases removed on behalf of the Peri-Urban Areas Health Board (did own removals in 1960) and other Local Authorities.

φ Includes 2,141 bundles of bedding and clothing ex Waterval Hospital and 913 bundles cleaning cloths (36,520 lbs) imported ex Japan.



### 3. DISPENSARY.

The rather primitive and quite inadequate arrangements at the Disinfecting Station for the handling and distribution of drugs for Waterval Hospital and the Township and other clinics have now been superseded. The dispensary was moved to the Westdene Depot as from 30th May 1960, and two additional pharmacists were appointed.

The new depot provides adequate storage for all commodities and particularly potentially harmful drugs, poisons, etc. A bottle filling machine has been installed and mixing machine for ointments and emulsions. A decanting machine for milk powder has also been provided.

With these facilities and the appointment of additional staff it has been possible to manufacture mixtures, lotions, eye drops, ointments, etc., which should result in a saving of costs. The staff has also been able to keep better control of drugs and to undertake the dispensing at Waterval Hospital. The Chief Pharmacist performed a valuable service in diluting the concentrated oral vaccine for the poliomyelitis immunisation campaign.

### 4. HOSPITALISATION OF INFECTIOUS CASES.

European infectious cases are ordinarily admitted where necessary to the Fever Hospital and Non-European infectious cases to Waterval Hospital. Occasionally, for special reasons, infectious disease cases for which the Council is responsible are hospitalised elsewhere at the expense of the Council.

#### (i) Fever Hospital.

The Hospital is administered on behalf of the Council by the Johannesburg Hospital Board which is reimbursed by the Council each month for the expenditure incurred. The Physician-in-Charge and the Ear, Nose and Throat Surgeon are employed directly by the Council on a part-time basis. Admissions are arranged only through the City Health Department as part of its functions in carrying out the Council's statutory obligations in regard to the control and prevention of the spread of infectious disease.

The normal complement of this Hospital at the beginning of the year was 128. During the year ward 7, containing 23 beds, was occupied bringing the total complement to 151 and completing the occupation of the second half of a new ward block opened in March 1959.

The following details reflect the number and types of cases (according to diagnosis on admission) admitted during the years 1959 and 1960:-

	<u>1959</u>	<u>1960</u>		<u>1959</u>	<u>1960</u>
Diphtheria	136	153	Encephalitis	63	101
Scarlet Fever	153	120	Tuberculous Meningitis	1	2
Cerebro-Spinal					
Meningitis	68	75	Measles	39	206
Acute Poliomyelitis	85	134	Various Non-Notifiable		
			Infectious Diseases	204	207
Typhoid Fever	76	26			
Erysipelas	6	4			

:- The ...



The following report of the Physician-in-Charge (Dr. A.L. Jackson) gives an indication of the clinical activities at the Fever Hospital during the year:-

"A large outbreak of measles in Johannesburg contributed heavily to the number of seriously ill cases admitted. Many of these had acute lung complications due to staphylococcal infections and there were cases of severe meningo-encephalitis due to measles with two deaths.

My records show that 65 cases of poliomyelitis were confirmed and of these, 53 were paralytic. Virus isolations were positive in 34 of these paralytic cases and 12 non-paralytic cases. Type I virus was isolated from 22 cases of paralytic disease and 9 cases of non-paralytic disease. Only 3 isolations of Type I virus were made after July 1960.

Type III virus was isolated from 13 patients, 11 of whom were admitted after July 1960. 9 Of these isolations were from paralytic poliomyelitis.

6 Patients with paralytic poliomyelitis were 30 or more years of age. One fatal case was aged 51 years. 9 Deaths were due to poliomyelitis.

An outbreak of Coxsackie-B infection occurred in Johannesburg from late September 1960, onwards, abating in February 1961. 20 Cases of meningo-encephalitis were admitted after 25th September 1960, and Coxsackie B virus was isolated from 7 of these. 16 Cases of Bornholm disease were admitted during this period and Coxsackie B virus was isolated from 15 of them. The virus caused cases of myocarditis and pericarditis in adults, encephalitis, acute laryngo-tracheo-bronchitis and gastro intestinal upsets with meningism. Chronic pleurisy lasting for weeks, with little radiologic changes, was noted.

The diphtheria position continues to show great improvements and the disease caused only 2 deaths in the hospital.

The bed utilisation at the Fever Hospital continued at a low level. The incidence of infectious disease is still falling and the demands on the bed accommodation are naturally less."

(ii) Waterval Hospital (Non-European).

The normal complement of this hospital is 310 beds (including 12 extra cots for children); of this total 88 beds are allocated for infectious disease cases other than tuberculosis, 38 beds for medical and surgical cases occurring among Non-European employees of the Council and 184 beds for tuberculosis. In addition 32 ambulant male tuberculosis patients are accommodated in the "Resident Out-patient" Section of the hospital.

The reorganisation of staff arrangements implemented during May 1959, places the hospital entirely under the control of Native nursing staff at night, whilst by day the wards are in charge of Native sisters under the general supervision of the European staff. This arrangement has continued to work smoothly.

The hospital employs an occupational therapist who gives the adult patients instruction in leather work, basket work, shoe repairs, etc., which keeps them occupied and affords them an opportunity to earn a little money from the sale of made-up articles. A Nursery School Teacher is also employed to look after the children, including the older children who receive some elementary education.



The new X-ray unit, installed late in 1959, has continued to improve the range and number of Tuberculosis and general medical and surgical cases being dealt with; a record number of X'rays being taken over the year.

Notice has been received from the Department of Health and the Department of Bantu Administration and Development has intimated that Waterval Hospital is not correctly sited for Bantu and that steps are to be taken to provide alternative accommodation for Bantu patients before the 31st December 1963. Discussions will take place with the State Departments concerned in regard to other arrangements for the patients now treated at the hospital.

(iii) Treatment of Native Employees of the Council.

In addition to their other duties, the staff of Waterval Hospital is responsible for the treatment of Native employees of the Council, including those injured on duty and entitled to compensation under the Workmen's Compensation Act. The Natives may be admitted to one of the beds available for this purpose (38 beds) or may be treated as outpatients. If the latter live at some distance they may be admitted as "Resident Outpatients" - i.e. they are accommodated in a portion of the Hospital set aside for that purpose, and are fed from the hospital kitchen, but attend as out-patients without receiving nursing attention. Patients requiring major surgery or other special treatment are transferred to a provincial hospital.

In the course of the year the Outpatient Department treated 5,791 Non-Europeans employed by the Council for a total of 17,013 resident outpatient days and 7,292 casual outpatient attendances. These figures include 284 Tuberculosis patients (Council employees) who accounted for a combined total of 6,285 patient days (resident and casual).

738 Of the employees were admitted to the Medical and Surgical ward, 698 being discharged. There were 37 deaths resulting from various diseases or other conditions affecting the following systems:- respiratory system (11), cardio vascular system (19), digestive system (3), uro-genital system (2) and miscellaneous (2).

The following table reflects the activities of the hospital for the years 1960, and 1959, the latter being in brackets:-

	ADMISSIONS	DISCHARGES	DEATHS	PATIENT DAYS	*No. OF PATIENTS X'RAYED.
Tuberculosis	384 (409)	377 (411)	43 (26)	57803 (63770)	15871 (13315)
Infectious Fevers	1167 (1109)	1052 (1091)	102 (64)	25680 (18707)	3587 (2121)
Council Employees	738 (763)	701 (766)	37 (28)	11571 (11260)	
Other Cases	30 (53)	31 (54)	-	485 (1095)	
TOTALS	2319 (2334)	2161 (2322)	182 (118)	95539 (94832)	19458 (15436)

\* The number of patients X'rayed does not include the number of patients having miniature X'rays, totalling 4,860 in 1960 and 5,163 in 1959.



## 5. TUBERCULOSIS SERVICES.

The staff establishment of this section of the Department remained the same as for 1959. Of the 155 posts detailed in Annexure I, 41 posts were not filled. Of these 20 posts (5 European and 15 Non-European) were not filled pending the completion of the proposed master clinic at Moroka. A further 21 Non-European posts (9 Clerical and 12 Nursing positions) were held vacant to provide for the continued employment of personnel in the curative and midwifery services whose posts were to become redundant.

### Europeans.

European patients are supervised and treated in their homes, treated at the clinic or admitted to hospital where this is necessary and beds are available. The domiciliary treatment is supervised by the medical staff and health visitors, but injections are given by three full-time sisters forming part of the tuberculosis staff.

Clinic sessions are held twice weekly (on Mondays and Thursdays from 8 a.m. to 5 p.m.) at the Special Treatment Centre at the General Hospital. The attendance are reflected in the following table:-

	CASES	CONTACTS	SUSPECTS	TOTALS
First Visits	92	1,123	526	1,741
Re-visits	1,924	1,569	690	4,183

During 1960, 128 patients were put on treatment as outpatients and 190 were taken off treatment. 360 patients were receiving treatment as at 31st December 1960.

Hospital beds have been available at Rietfontein Hospital and Oaktree Chest Hospital and a few Johannesburg cases are treated in hospitals and sanatoria in other provinces.

Delays in admission to hospitals have been minimal; 95 patients were admitted to hospitals during the year and 99 were discharged in the same period; 35 were in hospital as at 31st December 1960.

These figures are all reduced as compared with the previous years in accordance with the reduced number of notifications (136 as compared with 188).

### Non-Europeans.

Service for Non-Europeans follow the same pattern as for Europeans but the numbers requiring treatment are much greater, hospital beds are relatively less available and co-operation by the patients cannot be relied on to the same extent.

Domiciliary treatment is given by Native nurses employed by the City Health Department and clinics are held twice weekly at each of the clinics in the Native townships. Treatment is also given at the head offices at 18 Hoek Street, mainly to patients who are working and who attend for injections before going to work, and also at the Medical Examination Centre attached to the Native Registration Depot. At the latter centre, cases found by clinical or X-ray examination are put on treatment or sent to hospital according to their needs.



The number of ambulatory patients receiving treatment at clinics or in their own homes is reflected in the following table:-

T O W N S H I P	NUMBER OF PATIENTS.			
	On Treatment as at 1.1.60	On Treatment during 1960	Taken off Treatment during 1960	On Treatment as at 31.12.60
18 Hoek Street -				
Factory Workers	364	89	44	409
Domestics	256	526	320	462
Eastern Native Township	81	29	70	40
Moroka	717	619	445	891
Jabavu	1,524	1,224	897	1,851
Noordgesig	245	53	201	97
Orlando	854	455	530	779
Shantytown	428	242	310	360
Pimville	420	324	283	461
Western Native Township,				
Sophiatown, Newclare	607	337	202	742
Waterval Hospital	164	238	98	304
Medical Exam. Centre	10	81	31	60
GRAND TOTAL	5,670	4,217	3,431	6,456

The number of cases on treatment at the end of the year is 786 more than at the beginning of the year although the number of notifications is 476 less.

The number of domicilliary visits, and the number of attendances at clinics (as reflected in the table below), has been appreciably reduced as compared with the previous years because patients requiring daily streptomycin are now admitted to hospital and patients with a negative sputum are no longer given streptomycin as a routine. Home visits are now reduced to three times a week and less frequent visits are necessary by patients with a negative sputum who are on tablet therapy.

C L I N I C	CASES		CONTACTS		SUSPECTS		TOTALS	
	1st Visit	Re- Visit	1st Visit	Re- Visit	1st Visit	Re- Visit	1st Visit	Re- Visit
City Areas	223	6,981	104	92	28	5	355	7,078
Orlando	88	4,026	36	10,570	21	32	145	14,628
Shantytown	106	16,283	6	39	2	-	114	16,322
Pimville	165	8,487	96	4,353	2	6	263	12,846
Jabavu	592	29,231	601	2,380	60	20	1,253	31,631
Western Native Township,								
Sophiatown, Newclare	382	10,466	203	1,081	42	16	627	11,563
Noordgesig	22	10,931	42	202	1	2	65	11,135
Eastern Native Township	11	801	15	4	2	-	28	805
Moroka	385	8,375	611	8,133	-	-	996	16,508
Waterval Hospital	164	5,977	25	5	63	14	252	5,996
18 Hoek Street	158	1,820	18	3	168	92	344	1,915
Medical Exam. Centre	440	420	-	-	1,162	36	1,602	456
GRAND TOTAL	2,736	103,798	1,757	26,862	1,551	223	6,044	130,883



Two vehicles are provided for the transport of patients and contacts from the Native townships to the Waterval Hospital Clinic for examination and/or treatment as they are not able to make the journey by public transport.

The number of patients treated in hospital during the year is reflected in the following table:-

H O S P I T A L	NUMBER OF PATIENTS			
	In Hospital as at 1.1.60	Admitted during 1960	Discharged during 1960	In Hospital as at 31.12.60
Knights Chest	151	251	258	144
Rose Chest	150	465	408	207
East Rand Chest	4	6	8	2
East Rand S.A.N.T.A.	33	11	26	18
Rietfontein	48	204	142	110
King George V	3	8	8	3
Waterval	167	384	419	132
Waverley Chest	137	275	228	184
Randfontein South	89	136	152	73
H.M. Wolfson	-	1	-	1
Meintjies Centre	5	8	6	7
Charles Hurwitz Centre	248	559	547	260
Sundry Hospitals	2	11	5	8
TOTALS	1,037	2,319	2,207	1,149

More beds were available for the treatment of Johannesburg cases during the year. The number of patients admitted to hospital increased by 330 and the number in hospital as at 31st December 1960 (1,149) was 112 more than at the beginning of the year.

Great difficulty is experienced in persuading parents to send their children to the Sunshine Home in Queenstown because of the distance. The projected new home for Johannesburg has not yet materialised.

#### Miniature X'rays.

The policy of the Department has been to X'ray contacts of known cases and all other suspected cases and thereafter groups of the population where most cases are likely to be found. It has not been the policy to X'ray the whole population or to make random surveys. That will find a place in the programme later when it comes to the point where it is a question of clearing up residual cases in the City. Meanwhile, anybody who has any suspicion that he is suffering from tuberculosis can readily obtain this service while the Department is concentrating on groups where most cases are likely to be found.

The services actually available for this purpose are as follows:-

- (a) A 70 m.m. miniature plant is available at Waterval Hospital which is used as a fixed plant for X'raying contacts and suspect cases. It is not used to any extent for survey work in the accepted sense of the term. 4,860 Miniatures were taken during the year.
- (b) Two 70 m.m. plants are installed at the Medical Examination Centre at the Native Registration Depot which are used mainly for the examination of Native males seeking work. There is also an attachment for taking large plates.

:- There ...



There were 91,679 persons miniature radiographed during the year of which 2,092 (2.28%) were referred for larger plates. Of this number 478 were notified as tuberculosis which is just over 0.521% of those X'rayed. As already stated a tuberculosis clinic is conducted at the Centre for the cases found and for patients working in the vicinity. The notified cases were sent to hospital or were treated while working, at the Centre or elsewhere.

This service is also available for Native women but few take advantage of it as the examination is purely voluntary. During the year approval was granted for the establishment of a section specifically for Native females. The necessary additions and alterations to the building and the installation of an X'ray unit and other equipment was put in hand and it was anticipated that this section would be functioning within the first half of 1961.

- (c) S.A.N.T.A. (Johannesburg) (which became the Johannesburg Association for Prevention of Tuberculosis - J.A.P.T. - as from 1st July 1960) continued to provide a miniature X'ray service during the year for which the Council paid a fee of ls. 6d. per film.

Europeans X'rayed totalled 26,500, of which 152 (0.57%) were sent for examination on large plates and 10 (0.037%) were found to be suffering from active tuberculosis.

Non-Europeans X-rayed totalled 35,699 of which 611 (1.71%) were sent for large plates and 162 (0.45%) had active tuberculosis.

A number of inactive cases were discovered in both racial groups. These will be kept under observation.

#### Special Surveys.

- (d) The Johannesburg Association for Prevention of Tuberculosis and the Orange Grove Rotary Club in conjunction with the City Health Department conducted a mass miniature survey of the adult inhabitants of Orange Grove, one of the City's suburbs occupied mainly by middle class families. The campaign was inaugurated by the Mayor. It was well organised and publicised and received good support from the local community. A total of 9,541 persons of all races were X'rayed. Thanks are recorded to all those who played a part in the survey and to Mr. K.G.F. Collender who was the prime mover and mainly responsible for the organisation.

The results of the survey are summarised in the following table:-

	EUROPEANS	NON-EUROPEANS	TOTAL
Number X'rayed	5,356	4,185	9,541
Active Tuberculosis	4	25	29
Percentage Active Cases	0.07%	0.60%	-
Non-Active Cases	14	12	26
Other Pathology Discovered	15	18	33



The active cases included Non-European domestic workers, some of them in quite advanced stages of the disease, who were coming in intimate contact with the families for whom they worked. The non-active cases were placed under observation. The other pathology discovered included one case of lung cancer, cardiac conditions, hydatid cysts, etc.

#### Sociological Aspects.

The work of the Welfare workers is greatly hampered by the inadequate financial and other assistance available. The increase in the staff has helped to produce better results particularly in the placement of patients with arrested tuberculosis. The co-operation of employers is being obtained to an increasing extent as they come to realise that such workers can and do give good service.

The feeding of patients on the established basis has been continued pending the institution of a new and expanded scheme.

#### B.C.G. Vaccination.

A B.C.G. vaccination programme approved by the Union Department of Health was commenced in October 1959 and has been continued during the year.

In so far as Europeans were concerned the vaccinations fall into three groups:-

- (a) Groups at professional risk - 8 medical students and 1 practitioner were vaccinated.
- (b) Family contacts - 145 were vaccinated. These fell into various age groups, mainly under the age of 15 years.
- (c) Contacts of domestic servants suffering from tuberculosis - 50 children were vaccinated in this group.

Some reactions were observed, including 6 cases of abscesses, 3 of ulceration and 2 of persistent induration at the site of injection and 1 case of regional adenopathy.

In regard to Natives, staff difficulties prevented the carrying out of a projected programme in the Child Welfare Clinics but a team completed 8,768 B.C.G. vaccinations in 41 schools. All these were negative reactors after "heaf" testing and were tested again six weeks after vaccination.

The staff of the Tuberculosis Branch played an active part in assisting voluntary organisations concerned with tuberculosis. Their health education activities are referred to elsewhere in this report.

#### 6. VENEREAL DISEASE SERVICES.

The Department conducts venereal disease clinics at a number of centres and at different times to ensure that treatment is available to all who need it. All examinations, treatments and investigations are free of charge.

For Europeans, clinics are conducted at the "Special Treatment Centre" at the General Hospital with four sessions per week.

:- For ...



For Non-Europeans, clinics are conducted at each of the seven poly-clinics in the Native locations, at the Medical Registration Branch (attached to the Employment Bureau of the Non-European Affairs Department); at the Non-European Hospital and at Coronation Hospital. The total number of sessions is 21 per week. In addition, the Department co-operates with the authorities in charge of Talitha Home (for delinquent Native females) in the conduct of clinics at these institutions.

Details of the staff employed in conducting the clinics outside the Native locations and Non-European townships are recorded in Annexure 1 under the heading 'Venereal Disease Services'. The staff employed on Medical Services in the Native locations (details also recorded on Annexure 1) include the personnel who conduct the venereal disease clinics thereat as part of their duties. Members of the nursing and auxiliary staff at the General, Non-European and Coronation Hospitals are seconded by those institutions for duty at the venereal disease clinic sessions.

The following table indicates the number of cases dealt with at the various treatment centres during the years 1958 to 1960, inclusive:-

TREATMENT CENTRE	1958		1959		1960	
	NEW CASES	TOTAL ATT.	NEW CASES	TOTAL ATT.	NEW CASES	TOTAL ATT.
Native locations and north eastern townships	1,536	14,496	1,819	14,508	1,946	16,294
Native Registration Services	1,078	1,836	633	1,213	465	1,424
Non-European Hospital	1,148	4,651	1,251	4,978	1,253	5,443
*Nokuphila Hospital	113	152	26	150	-	-
Princess Alice Hospital	69	251	-	-	-	-
Salvation Army Home	6	40	3	6	-	-
Coronation Hospital	446	1,508	482	1,348	508	2,273
Talitha Home	55	74	38	60	7	18
General Hospital (for Europeans)	4,451	23,008	4,252	22,263	4,179	25,452
	365	1,088	377	955	351	1,188
GRAND TOTALS	4,816	24,096	4,629	23,218	4,530	26,640

\* Ceased functioning from 31st October 1959.

Princess Alice Hospital Ceased functioning from 31st August 1958.

The new cases appearing for treatment are somewhat less than the previous year for both racial groups.

Cases of primary syphilis still appear among Europeans but are less frequently seen than among Non-Europeans.

Active cases of gonorrhoea are again becoming a problem here as well as elsewhere.



## 7. PLAGUE PREVENTION AND ANTI-RODENT CONTROL MEASURES.

This branch of the Department is controlled and developed as a sub-section of the general Sanitation Division. A Senior Health Inspector, a Pest Control Inspector and a staff of Pest Control Overseers work in close liaison with the general Sanitation Division in all matters concerned with pest control and anti-rodent activities.

The routine functions of the branch are as follows:-

- (a) The administration of the Government Rodent Regulations to ensure that rodents are 'built out' as far as possible.
- (b) The destruction of rodents in the City and adjacent areas by means of trapping, poisoning and gassing of premises.
- (c) Assistance and advice to owners of properties in regard to the trapping and destruction of rodents on their premises.
- (d) Regular inspection and trapping for rodents on all municipal property and any necessary anti-rodent measures.
- (e) Testing various types of manufactured boarding used for building purposes to determine their rodent proof qualities. This work is done in collaboration with the South African Bureau of Standards.
- (f) The field staff maintains as far as is practicable a rodent-free belt approximately three miles outwards from the City boundary. In the area to the south-west of the City, these activities are intensified and the belt is extended to five miles. The Native locations in that locality are regularly inspected and rodents are destroyed. Periodic inspections of the surrounding veld are undertaken to ensure that there is no undue infestation or rodent mortality outside the rodent free belts.
- (g) Specimens of rodents and fleas caught in the City and on the veld are regularly submitted to the Plague Research Laboratory for routine examination for plague.
- (h) Regular insecticidal work is carried out at Municipal compounds, stables, sewage disposal works and in sewers, etc., to prevent breeding and to destroy flies, cockroaches, bugs and mosquitoes by the use of a special insecticidal fog applicator machine. Mosquito surveys and regular routine spraying of all water courses and dams in the Municipal Area are also carried out.

No cases of human or rodent plague occurred during the year, and as a routine control measure during this period 1,127 rodents and 47 fleas, taken from various places in the City, veld and environs, were sent to the Plague Research Laboratory for examination for plague with negative results.

Tests were also made on 395 rodents submitted for the determination of Murine Typhus and Tick Bite Fever infection. In 33 instances possible signs of infection were indicated and precautionary steps were taken accordingly.

Other activities concerning rodent infestations throughout the year involved 5,467 inspections, re-inspections and interviews by Health Inspectors, and a combined total of 142,633 by Pest Control Overseers operating in the



City and contiguous country areas. Premises requiring trapping or other treatment for rodent infestation entailed 87,772 town and country visits; 28,221 separate premises received gassing treatment prior to demolition or in other appropriate circumstances. A total of 33,111 rodents, including 16,390 domestic rats, were known to have been destroyed but large numbers are also eliminated but not retrieved after gassing or poisoning. Batch specimens sent to the South African Institute for Medical Research comprised 1,524 rodents and 56 fleas.

#### Anti-Mosquito Measures.

All streams and dams likely to favour mosquito breeding in the Municipal Area are sprayed with suitable insecticides and specific complaints of the prevalence of mosquitoes are investigated and similarly dealt with where necessary.

#### Deverminisation of Municipal Properties, Sewers and Stormwater Drains.

By means of a mobile 'TIFA' fogging machine 102 properties, including Compounds, were treated, and the 'Fogging' of sewers to control cockroach infestation was done on 9 occasions at the request of the City Engineer's Department.

### IV. MATERNAL AND CHILD HEALTH SERVICES.

#### 1. MATERNAL HEALTH SERVICES.

The maternal services include the supervision of nursing homes (including those admitting medical and surgical cases), supervision of practising midwives, the investigation of maternal deaths and certain communicable diseases.

Supervision of Midwives. The Senior Health Visitor (Nursing Homes and Midwives) and her Assistants supervise the activities of midwives practising in the municipal area, and in so doing ensure compliance with the provisions of the regulations under the Public Health Act, which required that all practising midwives must be listed with the Department and that they submit their registers and equipment for regular inspection. The midwives on the list during the preceding and current years were as follows:-

R A C E	1959		1960	
	CERTIFICATED	UNCERTI-FICATED	CERTIFICATED	UNCERTI-FICATED
Europeans	174	7	169	7
Coloureds	20	1	23	1
Natives	262	1	285	1
Asiatics	7	-	8	-
TOTAL	463	9	485	9

For various reasons such as discontinuing practice, deaths, inability to trace etc., 59 midwives (all Europeans) were removed from the list.

:- Supervision ...



Supervision of Nursing Homes. The Senior Health Visitor (Nursing Homes and Midwives) and her staff carry out regular inspections of all private hospitals, nursing homes and maternity homes to ensure that they are conducted in a satisfactory manner and in connection with the licensing and registering of these institutions under the Public Health By-laws and with the Union Department of Health. There were 315 such visits during the year and 9 interviews with owners and architects.

The number of licensed nursing homes was reduced from 31 in 1959 to 30. The Little Marymount had previously been granted a temporary licence for 14 maternity beds; this Home was closed down on 31st January, 1960 when extensions to the main Marymount Maternity Home were completed and occupied. A good standard has been maintained in all of the licensed nursing homes.

Institutions for the accommodation of the aged, other than those registered as nursing homes, were inspected by this section during the year. There were 18 such institutions catering for some 940 elderly people, but there is a need for more accommodation of this type for old age pensioners; an improvement in the standards of some of these institutions is also required. The completion of sick bays being provided by the Queenshaven and Bramley Homes for the aged is likely to afford some relief in 1961.

#### Investigations Undertaken.

- (1) The following were notified to the Department during 1959 and 1960:-

	<u>1959</u>	<u>1960</u>
Maternal Deaths	36	44
Puerperal Sepsis	99	86
Pemphigus Neonatorum	31	21
Ophthalmia Neonatorum	60	44

All these reports were investigated by the Senior Health Visitor (Nursing Homes and Midwives) and her staff except the maternal deaths only 18 of which were investigated because they were not reported in time.

- (2) The staff, under the direction of the Assistant Medical Officer of Health (Sanitation), has continued to take what steps are possible to reduce staphylococcal contamination of nursing homes.

(3) There was an increased incidence of cocksackie B infection throughout the country during the year which had repercussions in the nursing homes. A neo-natal death due to this cause was reported from a provincial maternity hospital in November and subsequently three licensed maternity homes reported 8 cases of infection but no further deaths occurred. The Department instituted strict control measures and these may have averted extensive outbreaks.

(4) During this period a survey into the causation of B.B.A.s (births before arrival of midwife) occurring amongst booked midwifery cases in the townships was undertaken by members of the staff of this section working in conjunction with Health Visitors in charge of the Native Townships' Midwifery Service. The results are reported in the appropriate section of this report.

(5) The question of study days for Non-European Midwives was considered and discussions took place in January 1960 between the Senior Obstetrician and the Matron of the Maternity Section, Baragwanath Hospital and senior members of the Health Visiting Staff of this Department. The discussions were

:- initiated ...



initiated in an attempt to improve the knowledge of district midwifery staff which would be of benefit to patients, Baragwanath Hospital and the midwifery sections of the Clinic Services. It was hoped to arrange for clinic midwives to attend lectures and make observation visits to Baragwanath maternity section, and that Baragwanath midwives could make domiciliary visits with midwives of the clinic services.

It was mooted that a midwifery training centre was to be started at Baragwanath Hospital during 1960, and that once this centre was established the possibility of running study days might become practical. This centre is not yet in operation but a further approach will be made in this regard during 1961.

Visits to Maternity Sections, Native Townships - 51.

(6) Experiments were conducted at the Fever Hospital on the contamination of blankets. On instructions from and under the direction of the Assistant Medical Officer of Health (Sanitation), tests were carried out by members of the staff of this Section, assisted by a Health Inspector working in conjunction with the South African Institute for Medical Research to establish -

- (i) the effectiveness of bactericidal agencies for use in the disinfection of hospital blankets;
- (ii) to ascertain the degree of bacteriological contamination prevalent on woollen, as opposed to cotton blankets exposed under similar conditions to aerial and surface contamination in hospital wards.

These experiments were carried out in three stages and it was found that:-

STAGE 1. Established the effectiveness of the selected bactericidal solutions as bacteriostatic agencies.

STAGE 2. Established that cellular cotton blankets were more heavily contaminated than the woollen blankets when exposed to aerial and surface contamination in hospital wards under the same conditions. This stage of the experiment also indicated that blankets are undoubtedly an important source of cross infection in hospitals, acquiring as they do, a load of pathogenic micro-organisms and that regular sterilisation of blankets used in hospital wards is necessary.

STAGE 3. Showed the residual effects of the bactericidal solutions used and established the use of such bacteriostatic agencies as an important factor in reducing the count of pathogenic organisms particularly staphylococcus aureus on blankets.

Visits to Fever Hospital during the course of this project 21

Visits to South African Institute for Medical Research in connection with this project ..... 10



## 2. CHILD HEALTH SERVICES.

Child Welfare Clinics. As at 31st December 1960 the Department conducted 29 clinics on fixed premises in the city area, plus a fully equipped mobile clinic brought into use in October 1960. This service provided 24 clinics for Europeans, 2 for Coloureds, 1 for Asiatics and 2 for Natives in the central area; the mobile clinic serves six points for Coloureds and five for Asiatics. During the year 4 new clinics for Europeans were opened in Parkhurst, Brixton, Braamfontein and Doornfontein (the three latter in Community Centres run by the Parks and Recreation Department). A Coloured clinic, originally in Albertsville and later transferred to Waterval Hospital, was discontinued following the introduction of the mobile unit to serve this area.

The Mobile Clinic comprises a specially designed body on a low loading three ton chassis. It is well fitted out and provides all the necessary accommodation and fittings to conduct a child welfare clinic. Mothers wait in the open air or in available shelter according to the state of the weather.

It is driven by a clinic assistant who has a heavy duty driver's licence. She also assists the Health Visitor in running the clinic. Two health visitors have taken out a licence so that they can drive the vehicle if necessary. The points served are at Albertsville, Langlaagte Compound B, Denver, Cleveland, Doornfontein and Jeppe for Coloureds and Ophirton, Cleveland, Denver, Jeppe and Doornfontein for Asiatics. The clinic functioned for the last 2½ months of the year and dealt with 747 attendances and 351 immunisations.

The number of attendances at the clinics for 1959 and 1960 was as follows:-

	1959	1960
Europeans .....	62,543	60,481
Coloureds .....	11,067	11,428
Asiatics .....	3,754	3,177
Natives (Outside of Locations) .....	15,043	9,966
	<u>92,407</u>	<u>85,052</u>

The reduction in European attendances was due to the Medical Officers and Health Visitors being required to assist with the oral poliomyelitis campaign conducted during November when child welfare clinics were closed for two weeks. The marked fall in Native attendances was largely the result of the Western Areas clearance scheme.

Assistance is rendered to necessitous families by supplying infant foods and milk. A charge is made for these commodities according to the means of the individual families. The assessment of the charge is left to the discretion of the Health Visitor who is guided by a simple income formula. No infant foods or milk are issued to mothers who can afford to buy them in the ordinary way and no charge is made if the mother cannot afford to pay. Bookkeeping is reduced to basic essentials so as to avoid interfering with the professional aspects of the Health Visitors' work.

The primary responsibility for conducting these clinics rests with the Health Visitors who see and weigh all the babies and advise the mothers on the care and feeding of their babies in all ordinary cases. As far as

:- possible, ...



possible, all babies are referred to a Child Welfare Medical Officer for a routine check-up soon after the first appearance at the clinic and thereafter when any difficult dietetic or other problem arises.

The Child Welfare Medical Officers attend each clinic at a fixed time and see all babies referred to them by the Health Visitor. They keep a check on the physical growth, supervise the diet, and give advice on such matters as sleeping, feeding, bathing and clothing. They note any abnormal developmental tendencies and arrange for their investigation and treatment and also advise on habit formation and emotional control. Difficult dietetic and other problems are referred to the Pediatrician who consults weekly at the Central Child Welfare Clinic and also sees Municipal Nursery School children by arrangement.

The number of infants and children examined by the Child Welfare Medical Officers and the Pediatrician during 1960 and the preceding year was:-

	1959	1960
Clinics .....	9,582	8,593
Nursery Schools .....	2,181	1,137
Cases Referred to Pediatrician .....	56	13

Home Visiting. The Health Visitors visit the homes of infants after the births have been notified to the Department in terms of the relevant legislation. Every new birth so notified was visited.

At these visits the need for regular supervision of the infant by the family doctor or the Child Welfare Clinics and for timeous immunisation (against smallpox, diphtheria, poliomyelitis, whooping-cough and tetanus) is explained to the mother. Problems and abnormalities are noted and discussed and where help is needed the mother is referred to an appropriate agency. The facilities provided by the Department are explained and she is encouraged to make use of them. Where there is a family doctor the co-operation of the Health Visitor is offered if required.

Additional visits were made in some cases to improve contacts with the mothers, to obtain a better understanding of their circumstances and difficulties, to demonstrate the mixing of feeds and to supervise premature infants. Special visits were paid to investigate infant deaths and to report on "protected" infants placed for custody or adoption under the Children's Protection Act.

The number of births investigated as compared with the number of home visits during the year was as follows:-

	BIRTHS INVESTIGATED	HOME VISITS
Europeans	8,178	38,907
Coloureds	1,367	4,365
Asiatics	669	1,674
Natives (Central)	287	1,347
<b>TOTALS</b>	<b>10,501</b>	<b>46,293</b>

Health Visitors find it necessary to maintain personal contact with the Department of Social Welfare, welfare organisations, children's hospitals



and other bodies concerned with the welfare of infants and children and they are also encouraged to co-operate with private practitioners in their areas. The concept of health visiting is changing year by year and more stress is being laid on the broader scope of the duties in this field with the emphasis on mental health, care of the aged and related family problems.

The importance of mental health in the field of the Health Visitor has become increasingly evident and it is now recognised that emotional problems may play an important part in physical and mental development from early infancy.

A course of lectures, discussions and demonstrations, consisting of thirteen half-day sessions at weekly intervals, was arranged at Tara Hospital to train and orient Health Visitors in mental hygiene as it impinges on their work; 12 health visitors attended. Thanks are recorded to the Medical Superintendent of Tara Hospital and his staff for arranging and carrying out this course.

The Health Visitors continued to assist in the training of health visitors who were allocated to the City Health Department for practical experience as required by the syllabus governing their training.

The functions of the Child Welfare Medical Officers in regard to the medical examination of nursery school children have now, at the instigation of the Nursery School Association and the Medical Association, been extended beyond children attending Municipal nursery schools to those attending all non-profit making nursery schools in the City. A Medical Officer was appointed for this purpose in February 1958.

The five Municipal nursery schools were visited once a month and the children were seen 2 or 3 times during the year and more often where necessary. 38 Other nursery schools (including 4 Non-European Schools) were visited; 2,706 European and 1,000 Non-European children were examined. The appointment of an additional child welfare medical officer during the year has enabled more frequent visits to nursery schools.

All children in these nursery schools were patch-tested routinely and positive reactors were investigated and supervised.

#### Immunisation Services:

- (a) Facilities for Diphtheria Immunisation for Europeans are provided at a central point in the City, 18 Hoek Street, on three days per week. On the remaining two days the staff visits clinics, private institutions and nursery schools by special arrangement. The same staff immunises Coloureds and urban Natives at their own clinics or at institutions. Natives living in the Townships are immunised by the staff of the local clinics. Asiatics are immunised by the Indian Social Welfare Society.

Triple antigen is used practically as a routine on all infants under two years of age and Diphtheria/Tetanus or Plain Diphtheria Antigen on the older children.



The immunisations performed are reflected in the following table:-

	EUROPEANS	COLOURED	ASIATICS	NATIVES	TOTAL
Diphtheria (P.T.A.P.)	2,351	374	NIL	1,632	4,357
Triple Antigen (D/P/T)	2,807	586	NIL	4,162	7,555
Combined (Diph./Pert.)	177	NIL	NIL	23	200
Others (Tetanus, Pert.)	36	6	NIL	NIL	42
Boosters	4,120	36	7	523	4,686
Injections	18,194	3,000	7	18,647	39,848

Included in this section of the Immunisation Services was the carrying out of 5,447 Smallpox vaccinations done, and 1,903 vaccinations read among all races.

The number of immunisations and of booster doses is greater than the previous year but is still very unsatisfactory. In so far as Europeans are concerned the immunisations by the Department are substantially supplemented by those done by private practitioners, and this accounts for the reduced incidence of diphtheria among them.

The increased departmental figures are the result of a special campaign in the schools. With the co-operation of the school principals, lists of unimmunised children were compiled, the consent of the parents was obtained and a team visited the schools to immunise the children. 29 Schools were visited and 1,801 complete courses and 3,558 booster doses were given.

- (b) Poliomyelitis immunisation for Europeans with Salk type vaccine is available every week day at 18 Hoek Street. From March onwards the separate poliomyelitis clinic was discontinued and combined with the diphtheria clinic to enable all types of immunisation to be done concurrently. Coloured clinics in Ferreirastown, Albertsville and Coronationville are visited every six weeks but the response is poor in spite of waiving all charges. Various Coloured, Indian and European schools were visited by immunisation teams. Immunisation of Natives is undertaken as a routine at the clinics in the Native Townships. Booster or fourth injections were given as from the beginning of 1959.

The statistics for polio immunisation are as follows:-

	EUROPEANS:	COLOURED AND ASIATICS:	NATIVES:	TOTAL:
1st Injection	5,406	-	6,699	12,105
2nd Injection	4,767	-	5,203	9,970
3rd Injection	5,982	-	4,337	10,319
4th Injection	3,618	-	657	4,275



Vaccination with the oral (Sabine type) poliomyelitis vaccine was commenced in November 1960. The first "round" was designed to prevent cases during the summer months and was confined to Type I virus as this is the most prevalent local strain. The age groups treated were up to 16 years (or school-going age) for Natives, up to 30 years for other races, and all pregnant women irrespective of age or race, these being the most susceptible units of the population.

The campaign met with a good response from the public as will be seen from the following figures:-

<u>CITY AREA:</u>	Europeans	174,317
	Coloureds )	17,275
	Asiatics )	
	<u>TOTAL</u>	191,592
<u>NATIVE TOWNSHIPS:</u>	Natives	135,673
	<u>TOTAL</u>	327,265

The overall success rate, based on the estimated numbers in the treated groups, exceeded 80%. The poorest response was from Coloureds and Asiatics. This success augurs well for future campaigns when the other two types of virus are administered and for the ultimate eradication of poliomyelitis in our midst.

- (c) Nursery Schools and Day Nurseries: During 1960 the Department has conducted 5 nursery schools for European children at Fordsburg, Vrededorp, La Rochelle, Judith's Paarl and Newlands; and 2 day nurseries for 150 and 100 Native children at Chiawelo and Jabavu respectively.

In maintaining the nursery schools and day nurseries particular attention is given to the physical, mental and moral health of the children, to the promotion of normal habits and the correction of physical, psychological and moral defects. All the children have the benefit of regular medical examination, treatment of minor ailments, regular dental inspection and prophylactic treatment (by the Johannesburg Coronation Dental Infirmary); treatment of psychological defects, behaviour difficulties and abnormalities (by the Johannesburg Child Guidance Clinic); other specialist services and regular home visiting by the staff.

The diet of the children is supplemented by means of a prepared midday meal, additional milk and other protective foodstuffs.

An acute shortage of trained personnel for nursery school work continues to be an obstacle towards attaining maximum efficiency and in regard to the number of children enrolled. Three schools had to close for short periods during the year and the enrolment of all schools had to be reduced below the potential capacity.

Orthopaedic After-Care Services. The service for Europeans was handed over to the Province on the 1st January 1959, but so far no qualified staff has been employed by the Province to follow up patients in their homes.



The service for Non-Europeans continues on the basis of the Council employing a European Orthopaedic Health Visitor to supervise partly trained Non-European assistants employed by the Cripple Care Association. This staff attends the orthopaedic out-patient clinics at three Non-European hospitals once a week, follows up patients in their homes to ensure that treatment is continued and that appliances are properly used, follows up defaulters and refers patients back to the clinics for further advice and treatment when necessary. They also seek out untreated cripples and arrange for their treatment.

The following is a record of attendances and visits:-

	NON-EUROPEANS	
	1959	1960
Clinic Attendances	6,172	5,572
Home Visits	1,119	1,007
<b>TOTAL</b>	<b>7,291</b>	<b>6,579</b>

#### V. MEDICAL SERVICES IN NATIVE TOWNSHIPS.

The medical services have been maintained at eight polyclinics in the Council's Native Townships.

Clinic functions comprise an outpatient service with which is associated a home visiting service by doctors and nurses for patients unable to attend the clinic; a comprehensive district midwifery service with ante-natal clinics; a tuberculosis domiciliary and clinic service; a child welfare service and venereal disease clinics; a dental service in some areas.

The outpatient and midwifery services have been subsidised by the Provincial Administration since 1st April 1958, and are carried out by the Council on its behalf pending transfer of executive responsibility at some future date. These services operate in close liaison with the Baragwanath Hospital, a large provincial hospital.

The scheme introduced in Western Native Township in March 1959 whereby pupil midwives of the Bridgman Memorial Hospital deliver district cases and attend the ante-natal unit at Western Native Township clinic under the instruction of trained personnel of the Council service has continued to operate smoothly and efficiently during 1960. The arrangement has provided cases for pupil midwives, has improved the standard of midwifery service in the township due to the stimulus of teaching and helped with rapid transport and specialist hospital attention, both provided by the Bridgman Hospital for complicated cases.

All services were formerly free with the exception of a nominal charge of 1/- for initial home visits by doctors. In terms of the Hospitals Ordinance of 1958, charges were imposed as from 3rd August 1959 for outpatients and midwifery services on the basis of a complicated formula for assessing incomes



Most patients were still treated free, about 2% were required to pay 1/- per visit, and "private" patients 8/- per visit. There were few, if any, in the latter category. These charges had no effect on attendances. By an amendment of the Hospitals Ordinance the charges were revised as from 9th May 1960. This had the effect of increasing the charges for most patients, to 2/6d. per visit. The immediate effect was to reduce attendance of outpatients which ultimately stabilised at about 50% of the attendances prior to the increased charges. The falling off was related to minor ailments and there was little or no indication that more serious cases were staying away from the clinics. The effect on midwifery patients was to delay attendance at ante-natal clinics until the later stages of pregnancy. The Provincial Administration was approached to agree to a composite fee on a lower scale to cover all phases of pregnancy instead of a charge per attendance.

Medical Officers make routine examinations of children attending creches and nursery schools but there is no such service for school children. A proper school medical service is urgently required.

The immunisation of as many children as possible against diphtheria, whooping cough, tetanus, smallpox and poliomyelitis is a routine measure but special steps were taken during the year in respect of smallpox and poliomyelitis as noted below.

The establishment of the new dispensary at Westdene coincided with the revision of the procedures at the clinics to ensure full compliance with the Medical, Dental and Pharmacy Act.

The Tuberculosis Medical Officer and his staff conduct tuberculosis sessions in each clinic and supervise the treatment of cases in their own homes who receive streptomycin and other drugs. Food parcels are distributed to needy patients.

Child Welfare Medical Officers attend the infant clinics at Eastern and Western Native Township and at Shantytown, otherwise the Clinic Medical Officers see cases referred to them.

An ambulance and ancillary transport system for conveying nurses to and from district cases forms part of the service. There are nine ambulances for the removal of infectious and other cases and eleven station wagons for the transport of nurses and midwives. The service operates on a 24 hour basis with three eight-hour shifts.

Some difficulty has been experienced in coping with the increasing population and extending areas but efficiency has been improved by the addition of four station wagons, the installation of petrol bowlers and by stationing a mechanic at Jabavu Clinic during the day to do minor running repairs. These measures saved time and mileage to the Disinfecting Station to pick up petrol, etc. A bus ambulance was introduced on the 12th September to convey non-stretcher cases to and from the clinics and Baragwanath Hospital. Four rounds a day were completed on a fixed schedule.

During the year 92,479 cases were removed by ambulance: Of these 3,656 were removed by Disinfecting Station Ambulances and 15,622 by Tuberculosis Jeeps. Detailed statistics for the medical services are included in Annexure 3.

A dental service is provided at four of the township clinics, largely as a preventive service with emphasis on the dental care of school and pre-sch

:- children ...



children. The main dental clinic in Orlando is the largest and serves a wide and densely populated area. An extension of this service is provided at the Eastern and Western Native townships and at Pimville.

There has been a falling off of work done as compared with 1959, which is attributed mainly to the transfer of population from the Orlando area, particularly from Shantytown to the developing areas to the west. The need for extension of dental services to these areas is underlined.

The senior Dental Officer (Orlando) reports on the adverse effects of the change to urbanised diet on the dental health of Natives and supports the fluoridation of domestic water supplies as a supplement to other measures to protect their dentition.

The following table reflects the dental services during 1959 and 1960:-

TYPE OF TREATMENT	1959	1960
Anaesthetics	22	6
Fillings	8,419	3,479
Scalings	755	238
Extractions	68,234	31,962
No. of Patients	63,170	27,255

In general, the various services rendered at the clinics have been maintained at a satisfactory standard considering the many difficulties presented by periodic staff shortages, transport, communication and accommodation limitations. As the Council is now, in effect, conducting certain of the services as agents for the Provincial Administration, close co-operation between the officials of the two bodies has resulted. Liaison with the Baragwanath Hospital staff has been of a high order thus affording a mutual and valuable contribution towards the efficient functioning of the inter-related services. Through the courtesy of the Medical Superintendent and senior doctors of the hospital, arrangements were continued for conducting ward rounds for the clinic medical officers throughout the year. This facility has provided a most useful opportunity for obtaining exceptional clinical instruction and material.

Some items of special interest affecting the medical services are the following:-

1. Special efforts were made in regard to immunisation as follows:-

- (a) A feeding of Type I oral poliomyelitis vaccine was conducted during the period 21st November 1960 to 15th December 1960. The section of the population to be immunised fell within the age group four months to school leaving age. A total of 135,673 persons received the vaccine representing a success rate of 84.5%. The use of mobile teams operating on a street by street basis in addition to teams operating at fixed centres contributed to the success of the campaign.
- (b) A minor outbreak of smallpox occurred in Pimville. A vaccination campaign conducted for the first time on a school and house to house basis gave gratifying results. The six week drive was conducted by clinic staff in



addition to their routine clinic duties. A total of 114,851 persons were vaccinated, 25% of whom were found not to have been vaccinated previously.

2. Some special surveys were conducted during the year:-

- (a) A nutritional survey was made at all clinics. In May 1960 the National Nutritional Research Institute of the South African Council for Scientific and Industrial Research submitted a questionnaire on the incidence of nutritional disease to medical practitioners in private and other services in the Union. The clinics operated by the Council in the Native Areas compiled the required data. However, at one clinic (Moroka) a small scale dietetic survey was made simultaneously to indicate the dietary pattern of people living in the area served by the clinic.

Two hundred and forty-one families were investigated by Non-European Staff Nurses of the clinic service. The families were selected at random from all economic levels and were mainly detribalised Bantu of Nguni and Sotho extraction. The inclusion of brief details of home environments and breadwinners' occupations gave a more composite impression. The survey revealed nothing unexpected in the range and type of food. The following were points of interest:

- (i) The extensive use of amasi (sour milk) was not appreciated by the clinic service before the conduct of the survey. The lower income group in particular used it extensively in their diet, usually preferring it to fresh milk. Amasi is bought at 5 cents a pint.
- (ii) As was expected, the standard of living rose parallel with the income, the higher incomes being related to the more educated groups of the community.
- (iii) All groups used mealie-meal as the basis of their diet. It was eaten stiff, thin or sour, the texture and preparation varying with the tribal background. It was served plain, with gravy and meat or with amasi.
- (iv) Strangely, ignorance of food values was not found to be a significant factor. (The bread and cool drink lunch habit of the city industrial worker was not discussed).
- (v) Meat appeared to be purchased in 15 to 25 cent lots from the meat purveyor, mainly for stewing, with a peak demand at week-ends. Expensive meat or cuts were seldom asked for. Stew with thick gravy was the popular dish.
- (vi) Onions, potato, cabbage and tomato were favoured vegetables, white bread was preferred to brown and all types of obtainable fruit were bought subject to price and family income permitting.



- (b) Attention was drawn to the possibility that trachoma was prevalent among the Native population. A pilot survey of Bantu children and old age pensioners was undertaken in the Native areas in conjunction with a specialist ophthalmologist and with viral isolation and control studies by the Polio-myelitis Research Foundation. Six hundred and sixty-six subjects were examined with additional examinations of 222 control subjects and 180 suspect case contacts. Cases showed only mild conjunctivitis and negligible discomfort but there was a 10 - 20% incidence in the groups examined.

Investigations to determine the measures to be taken are proceeding.

- (c) The question of the effectiveness of inoculation against typhoid was brought to the fore by the typhoid outbreak in the Johannesburg Gaol in 1959.

An investigation was, therefore, undertaken in conjunction with the Serum Laboratories of the South African Institute for Medical Research with the following purpose:-

- (i) To investigate the extent to which endotoxoid stimulates antibody production, both agglutinin and protective and to find an optimal dose of endotoxoid, i.e. the smallest dose that will stimulate the production of an adequate amount of antibody.
- (ii) To compare the antigenic effectivity of endotoxoid and bacillary vaccine.

The results of the survey will be reported in the medical press in due course.

- (d) The large number of births occurring before the arrival of the midwife (B.B.A.s) was causing some concern and consequently a survey was undertaken to assess the cases of the unsatisfactory B.B.A. rate occurring amongst the 11,614 maternity cases booked for delivery during 1959.

Five hundred and forty-eight B.B.A.s were investigated over a six week period during February and March 1960. 20% were found to be due to causes attributable to defects in the clinic services and 80% to factors in the patient situation.

The 20% of cases due to defects in the clinic services were caused by:-

(a) Clinic operated transport	3%
(b) Communications	0.9%
(c) No midwife available	13%
(d) Change over of duties	2%
(e) Nurses' fault	2%

The 80% of cases due to factors in the patient situation were due to the following causes:-



- (a) Township transport and communication 44%
- (b) Tribal way of life (elected B.B.A.s) 32%
- (c) Other reasons 3%

A change in the system of allocation of the duties of midwives was tried out at Jabavu clinic for a period of five weeks, but while it had many advantages, it proved unworkable as the midwives were already carrying too heavy a load.

#### VI. MEDICAL EXAMINATION CENTRE.

On the 1st July 1953, the Council took over from the Government the registration of Native Service Contracts and this activity was combined with influx control of Natives, the operation of the Native Labour Employment Bureau (males and females) and the collection of the Native Services Levy.

The Medical Examination Centre was established to conduct all medical examinations associated with these activities and it absorbed the service previously established for the medical examination of females.

The Centre is also available for the examination of Natives in employment, particularly foodhandlers and those handling children, and for the medical examination of prospective Native employees of the Council for pension fund purposes. Treatment is given for venereal disease, tuberculosis and pediculosis, those suffering from other conditions requiring treatment being sent elsewhere for that purpose. Those with disabilities or sub-normal health are found employment appropriate to their physical condition where possible.

The following table records the work of the Centre at a glance:-

Workseekers Examined	Pension Fund Examinations	Foodhandlers Examined	Vaccinations Performed	Miniature X rays	Large Plates.
109,784	89	244	89,134	91,679	2,092

#### Venereal Disease Treated.

##### Syphilis.

847

##### Gonorrhoea.

247

The number of workseekers examined shows a steady increase year by year. The 1960 figure is 25% (19,950 examinations) more than in 1959 and 50% more than in 1957. The number may be partly due to an increase in the numbers passing through the Bureau but is also due to more meticulous referral.

Workseekers are submitted to a clinical examination and an X-ray of the chest and blood tests are performed, if indicated. They are also vaccinated,

-:- if ...



if not previously vaccinated or not vaccinated within 3 years. The majority of those examined are men but a few women are examined on a voluntary basis (240 during the year).

Exemptions from employment on medical grounds were granted to 1,197 Natives - 699 temporary exemptions and 498 permanent exemptions.

The temporary exemptions comprise Natives requiring further investigations or treatment, including those suffering from tuberculosis, mental disorders, fractures, cardiac disease, nutritional conditions, epilepsy, hernias etc. The necessary arrangements are made for these Natives with appropriate agencies. Cases requiring treatment at a general hospital are referred for treatment.

The permanent exemptions comprise Natives with gross physical or mental disabilities, including those suffering from blindness, gross cardiac disease, cirrhosis of liver with ascites, respiratory cripples, gross cripples, epileptics whose fits cannot be controlled, etc.

Food-handlers examined have shown a steady increase in numbers over the past years. It is evident that more use of this service is being made as a result of the intensive propaganda by the City Health Department regarding food handling. Examination is voluntary and by appointment. Blood tests for syphilis and the typhoid carrier state are a routine part of the examination. Positive results are followed up by stool and urine cultures. There were 19 positive Vi results during the year.

Venereal disease treatment is given daily at any time during working hours to suit the convenience of the Natives. 247 New cases of syphilis and 247 new cases of gonorrhoea were discovered during the year, in both cases less than the previous year.

Cases of tuberculosis are treated by the tuberculosis staff at the Centre or sent to hospital. The results of the X'ray examinations are reported in detail in the section dealing with tuberculosis. Of those X'rayed 0.52% were reported as tuberculosis, this percentage being slightly higher than that for the previous year (0.47%). 478 New cases of tuberculosis were discovered among apparently healthy work-seekers. In addition a number of cases previously notified but not under treatment were found.

A separate section for the examination of Native women was being prepared during the year. Alterations to the buildings, the installation of an X'ray unit and other facilities were put in hand with the expectation of this section being opened during the first half of 1961.

## VII. SANITATION AND FOOD SUPPLIES.

### 1. HEALTH INSPECTORATE STAFF.

The continued shortage of qualified Health Inspectors for meat inspection duties at the Abattoirs has made it necessary to continue seconding Health Inspectors from the City Health Department to the Abattoirs to relieve the shortage.

Members of the sanitation staff (comprising 37 Health Inspectors, 2 Learner Health Inspectors and 7 Pest Control Overseers) were withdrawn from their ordinary duties for 10 days to assist with the poliomyelitis immunisation campaign in the City area and all Non-European Health Inspectors



and a few other sanitation staff members assisted in the subsequent campaign in the Native townships. These withdrawals necessarily had an effect on the number of inspections made by the staff.

In other respects the Health Inspectorate staff has been particularly stable with only a few minor changes during 1960, in comparison with preceding years. Some changes were made in the disposition of the sanitation staff to provide for increased efficiency, more frequent visits to premises and greater overall supervision. The details are as follows:-

- (a) An increase in the districts in the General Sanitation Division from 30 to 34.
- (b) A decrease in the number of premises in the immediate central area to be worked by any one District Health Inspector.
- (c) The division of the General Sanitation Division into four quarters each under the control of a Senior Inspector - two Senior Inspectors under the Divisional Inspector (East) and two under the Divisional Inspector (West).
- (d) The amalgamation of the Plans Section and the Slums Section under one Senior Inspector, under the control of the Divisional Inspector, Sanitation West.

## 2. RECORDS OF INSPECTIONS.

The following table shows the number of inspections carried out by Health Inspectors during the past two years. These comprise matters of general sanitation and hygiene, routine investigations arising from complaints and inspections concerned with the licensing of various trades. Visits connected with plague prevention, the control of plague carrying rodents and inspections related to the demolition of premises are referred to elsewhere in this report.

A table reflecting the various types of inspections made is contained in Annexure 4.

HEALTH INSPECTORS : INSPECTIONS AND VISITS	
1 9 5 9	1 9 6 0
248,051	243,753

## 3. PROSECUTIONS.

A total of 668 persons were prosecuted during the year for various contraventions of the Public Health Act, the Food, Drugs and Disinfectants Act, the Council's Public Health By-laws and other public health legislation. The number of charges preferred was 916 resulting in an amount of £3,035.5.0d. being derived from fines imposed by the Courts or through the payment of Admissions of Guilt.



One rather unusual prosecution of a type which had not occurred for some years, involved a Native occupant of a dwelling in one of the Council's Native housing schemes who was fined £10.0.0d. for obstructing a Pest Control Overseer when carrying out his duties in clearing rodents from the yard of the defendant's dwelling. An analysis of the prosecutions instituted over the past two years is set out in Annexure 5.

#### 4. MILK SUPPLIES.

The City's main milk supply is derived from producing dairies in the southern Transvaal and northern Free State farming districts; the quantity produced in the City Area is a very small percentage of the total demand. The control of milk from outside sources is maintained through a permit system which empowers the Council to prohibit the introduction of milk and cream into the Municipal area unless its Dairy By-laws are complied with by the producing dairies concerned. During the year milk was introduced by 767 permitted suppliers, of whom 20 were Producer/Distributors delivering milk from their farm dairies direct to consumers.

The average daily consumption of fluid milk in the Municipal area (excluding that required for the manufacture of butter, ice cream etc.) ranged from 50,123 to 52,180 gallons throughout the year. Milk introduced from outside sources averaged 55,794 gallons daily, of which 1,160 gallons were supplied direct to consumers by producer/distributors, and 3,294 gallons to the Native townships.

In order to effect closer control of milk from outside sources in certain instances, the Council's Public Health By-laws were amended during the year -

- (a) to require outside suppliers to consign their milk to milk shops in the Municipal area licensed to themselves or to other licensees, and
- (b) to restrict the sale of milk from Tea Rooms, Restaurants, Fish Friers, etc., to milk in approved heat sealed cartons.

Control of Milk Supplies in the City. The control and supervision of milk supplies within the City is directed towards deliveries from outside producers to local distributors and thence to the consumer. During the various stages of the transport and handling of the milk, samples are regularly taken to determine compliance with defined standards of quality, purity and effective pasteurisation. Inspections of premises and vehicles, and observations on handling methods and equipment etc. form part of the regular control routine.

The samples taken during the year comprised 2,103 samples of raw milk; 1,602 of pasteurised milk; 54 of sterilised milk; 4 for butter fat content only and 17 for miscellaneous tests which included tests for sterility on empty milk bottles and cartons. In addition to normal laboratory tests, 746 field Phosphatase Tests were made at various milk shops and pasteurisation depots to determine pasteurisation efficacy. Sediment tests totalled 4,888 for the purpose of determining the standard of cleanliness maintained in the handling of milk at farm dairies and for bottles and cans used for transport and local distribution. A further 590 ice cream and 135 water sucker samples were submitted to the South African Institute for Medical Research for bacteriological examination, and samples taken by the Veterinary Section of the Abattoir gave the following results:-

Mastitis - 3,830 were tested of which  
516 (13.3%) were positive.

:- Tuberculosis ...



Tuberculosis Biological Tests - 2,091  
samples resulted in 5 (0.23%) being  
found positive.

Brucellosis Tests - 2,081 samples gave  
616 (27%) positive ring tests and 70  
(3.3%) positive Agglutination tests.

Antibiotics - 1,583 samples tested for  
the presence of antibiotics resulted  
in 21 (1.3%) being found positive for  
Penicillin.

The voluntary pasteurisation of milk within the City has been maintained at a reasonably good level; 85.14% of the daily supply being treated by this method during the year as against 82.82% in 1959. There are now 19 pasteurising depots established within the Johannesburg Municipal Area with one other situated outside the City boundary but under the control of the department in co-operation with the Peri-Urban Areas Health Board.

In general, the hygienic standard of premises concerned with the handling and distribution of milk in the City has been maintained at a satisfactory level, with the usual measure of new premises being constructed and others modified or renovated to comply with Council's requirements.

Control of Milk Supplies Outside of the City Area. A special section of the Inspectorate is responsible for the supervision and control of milk supplies from sources outside of the City limits. One of these Farm Dairy Inspectors is permanently resident in Standerton for the purpose of forming a decentralised control centre whereby a saving of time and mileage covered is effected in supervising a number of farm dairies in the Standerton/Volksrust districts. A Dairy Demonstration Van is an additional feature functioning in the farm dairy areas. This vehicle, operated by a qualified and experienced Dairy Inspector and a Native Assistant, is designed and equipped to tour farm dairies and to attend agricultural shows in the country districts with the object of giving on-the-spot and up-to-date demonstrations of hygienic milk production and handling, to take samples and make tests on the various aspects of milk production and to guide and advise farmers on matters relating to their dairy premises.

In addition to their normal duties the Inspectors are available to dairy farmers in an advisory capacity where improvements can be effected to the dairy premises and the ancillary requirements of proper housing, latrine and ablution facilities for their employees. Standard types of plans detailing the construction of cowsheds and related dairy buildings are made available to dairy farmers, by the Department, when the construction or modification of their premises is being considered.

The hygienic and economic advantages of the mechanical refrigeration of milk at the point of production are continually being stressed, and there is a gradual increase in the number of farm dairies having this facility installed. Up to the end of the year 478 (62.3%) of the supplying dairies had installed refrigeration plants, an increase of 6.1% over the figure for the preceding year.

The routine of regular inspections, interviews and tests has been maintained throughout the year with a total of 6,620 visits, 99 interviews, 1,031 sediment tests and 34 special water samples taken for bacteriological examination. The operation of the Dairy Demonstration Van, commencing on the 1st February 1960, reflected 203 practical demonstrations and a total of 10,083 tests of various kinds being made in connection with milk production.



Attendances at Agricultural shows covered a period of 22 days and many farmers have expressed their appreciation of this facility.

Four permits for the introduction of milk into the City were suspended on account of failure to comply with the Department's requirements. One of these suppliers was subsequently allowed to resume milk introduction following certain improvements to his dairy premises.

The Council's Veterinarians working in collaboration with the Farm Dairy Inspectors carried out regular examinations of bulk supplies. Positive Bovine Tuberculosis results were obtained in supplies from five different farm dairies and these were dealt with in terms of the Department's tuberculosis policy.

Investigations on ten reported outbreaks of infectious disease on farm dairies were carried out. Where necessary precautionary measures were taken to prevent any infection being conveyed into the City via the milk supplies.

Examinations of Dairy Herds. Two Veterinarians on the staff of the Abattoir and Livestock Market Department are seconded to the City Health Department. These officials work in close collaboration with the Farm Dairy Inspectors, their main function being the supervision of dairy herds.

During the year 1,022 herds (totalling 86,010 cattle) were inspected, of which 49 herds were reported not inoculated against Anthrax, and 261 herds not inoculated against Brucellosis. Notifications were sent to 579 producers regarding contamination of their milk supplies with Mastitis and Brucellosis, and 68 were informed that their herds were infected with Mange.

Details of the number of tests made for Mastitis, Brucellosis and Tuberculosis are given above under the heading 'Control of Milk Supplies in the City'. Complete details of inspections on dairy herds are recorded in the Annual Report of the Director, Abattoir and Livestock Market Department.

Laboratory Examinations. The Council's laboratory chemists undertake the examination of samples of milk and certain milk products throughout the year. Tests were made on a total of 3,780 milks of which 2,103 were raw milk, 1,602 pasteurised, 54 sterilised, 17 specials for coliform tests and 4 for butterfat only. In general, the examinations revealed a satisfactory standard in the pasteurised and sterilised milks with some seasonal fluctuations in the quality of the raw milks. As a check on butterfat content 13 ice cream samples were tested during the year. It is quite evident that the regular 'field' phosphatase tests undertaken by the Inspectorate and pasteurisation depot operators play an important part in maintaining an acceptable standard of milk pasteurisation.

Tests for milk-fat and solids-not-fat standards, specified by the Food and Drugs Act for milk, were also conducted on samples submitted to the Government Analyst. During the year 797 such samples were tested on behalf of this Department as a routine check on ordinary sales and deliveries in the City, and an additional 83 samples were taken on behalf of the Secretary for Public Health from bulk supplies arriving at various railway stations and pasteurisation depots in the Municipal Area. Of the former group 39 samples were found to be sub-standard or adulterated milk resulting in the institution of 37 prosecutions with an amount of £246.0.0d. being paid in fines. Of the remainder of the 797 samples, 5 were found to have a solid-not-fat content between 8.0% and 8.5% in which case prosecutions were



not instituted, in accordance with standing instructions from the Secretary for Health concerning milk slightly below the prescribed minimum. Of the 83 samples taken on behalf of the Secretary for Health from arriving bulk supplies, 3 were found to be sub-standard or adulterated resulting in one successful prosecution with an admission of guilt payment of £5.0.0. One other of these samples showed a solid-not-fat content slightly below standard and no action was taken.

#### 5. ABATTOIR AND MEAT INSPECTION.

The Council's Abattoir is equipped with all modern facilities and functions as a separate Department under the Director of the Abattoir and Livestock Market Department.

The Department's slaughtering and meat inspection activities during the year were as follows:-

##### Animals Slaughtered:

Cattle	314,124
Sheep	944,682
Calves	50,608
Equines	11,047
Pigs	150,155
<b>TOTAL</b>	<b>1,470,616</b>

##### Inspection of Imported Meat:

Beef	25,317,323 lbs.
Mutton	414,280 "
Veal	11,750 "
Pork	80 "
<b>TOTAL</b>	<b>25,743,433 lbs.</b>

The quantity of meat condemned was 1,692.969 tons.

The shortage of qualified Meat Inspectors continued as in recent years. To relieve this situation Health Inspectors appointed after 1st October 1956, may be seconded to the Abattoir for meat inspection duties for periods up to 6 months, in terms of resolutions adopted by the Council in October and December 1956. During the year four members of the Health Inspectorate were seconded to the Abattoir which created staff problems in this Department owing to the difficulty of obtaining suitable replacements.

#### 6. OTHER FOODSTUFFS.

##### (a) Municipal Market:

Early morning inspections of foodstuffs exposed for sale at the Municipal Market were maintained on all days that the market opened; all unsound foodstuffs were seized and destroyed. The District Inspector also makes inspections during the day in the course of his normal duties. The Market Master and the City Engineer's cleansing branch afforded the

: - fullest ...



fullest co-operation in ensuring a good standard of cleanliness in the market generally and in the numerous stalls handling and selling foodstuffs.

Dressed poultry is examined prior to being offered for sale by auction; 33,339 birds were inspected of which 1,074 (3.2%) were condemned and destroyed as being unfit for human consumption.

Furred and feathered game consigned to the market was also subjected to pre-sale inspections with the following results:-

<u>Type of Game:</u>	<u>No. Examined:</u>	<u>No. Condemned:</u>
Blesbok	919	NIL
Springbok	755	17
Takbok	4	NIL
Kudu	17	9
Wildebeeste	9	NIL
Impala	19	1
Bushbuck	1	NIL
Rabbits	151	NIL
Guinea Fowl	869	3
Partridges	24	NIL
<b>TOTALS</b>	<b>2,768</b>	<b>30</b>

(b) Business Premises:

The inspection routine covering wholesale and retail stores handling foodstuffs in the City resulted in 112,473 lbs, of various types of food being condemned during the year. Of this quantity 47.5% comprised canned foodstuffs, the remainder consisting of fresh and frozen fish, fresh and dried fruit, vegetables, liquid eggs, cheese and cherries.

(c) Food Hygiene Teams:

Two teams each comprising 1 European and 1 Non-European Health Inspector continued to give practical instructions and advice to the management and kitchen staffs of food premises and nursing homes. Lectures and demonstrations were given to the staffs of 33 hotels, 11 boarding houses, 44 restaurants and 2 nursing homes and these were supplemented on 17 occasions by lectures on food hygiene in the lecture room at 18 Hoek Street.

The teams also collaborated with the Senior Health Visitor (Nursing Homes and Midwives) in the anti-sepsis measures in nursing homes.

(d) Early Morning Inspections - Foodstuff Deliveries, etc.

Special early morning inspections were continued throughout the year to assess the hygienic condition of vehicles and personnel engaged in wholesale and retail trades distributing bread, fish, meat and other fresh foodstuffs. Warnings were given or prosecutions instituted, depending on the nature and degree of any offence observed.



(e) Food Sampling:

Samples of food other than milk are taken mainly where sub-standard conditions or adulteration in terms of the Food and Drugs Act are suspected; the samples are submitted to the Government Analyst. During the year 529 food samples were submitted for analysis on behalf of this Department. Adulterations were determined in 29 instances and 25 completed prosecutions resulted in fines totalling £139.0.0d.

(f) Tea and Coffee Vendors:

Some 1,200 Native tea and coffee vendors continue to operate in the streets from dilapidated semi-portable carts, usually under the most insanitary conditions. Although prosecutions have been instituted during the year for dirty carts and equipment and unhygienic food handling, there is little prospect of improvement whilst the Council lacks water-tight legal powers to prohibit or control this type of trade. The Traffic Department has been able to remove and impound 172 of these vehicles during the year on the grounds that they were causing obstruction on streets and pavements. However, the majority of these were believed to have been abandoned. Constant action along these lines is necessary to make any impression.

The whole question of street trading was dealt with in an interim report by the Assistant Medical Officer of Health (Sanitation) assisted by Health Inspector N.V. Heath.

(g) Street Mealie Vendors and Fruit Hawkers:

The sale of cooked mealies and fruit in the streets near Native bus termini and railway stations continues to be active when these commodities are in season. The preparation and handling of these foodstuffs is invariably of a poor standard with the additional nuisance caused by littering of the streets and pavements with mealie skins, cobs, fruit skins and pips. The Traffic Department has taken routine action, but this does not have any prolonged effect as the vendors persistently resume their trading soon after each raid.

7. OTHER MATTERS.

(a) Witwatersrand Agricultural Society's Annual Show:

This popular event was held from 4th to 23rd April 1960, including two preview days. The overall total attendance was 755,821 persons, the highest attendance on any one day being 108,169 persons.

Catering facilities in the main dining hall (cafeteria) and in the various food kiosks and kitchens were adequate and conducted in a satisfactory manner. Exhibitors food demonstrations and the issue of food samples were supervised for proper hygienic requirements.



Removal of refuse and manure from the animals' quarters and the grounds was supervised throughout the show period and was efficiently handled by the City Engineer's Cleansing Branch; rodent control was maintained by this Department's Pest Control section. The latrine facilities were adequate without any significant congestion being apparent during peak attendances.

(b) Controlled Tipping of Domestic Refuse:

Domestic refuse, amounting to some 1,855 tons daily, is disposed of by means of tipping sites in various parts of the Municipal Area under the control of the City Engineer's cleansing branch. Regular inspections of these sites were made during the year by this Department's Inspectorate to ensure a minimum of dust and smell nuisance and effective control of fly breeding and rodent harbourage. Monthly reports are submitted and in general the tipping is conducted in a satisfactory manner.

(c) Smoke Abatement:

Smoke abatement is involved with air pollution (smog) control measures referred to elsewhere in this report. Health Inspectors dealt with 220 smoke nuisance complaints during the year, but pending the introduction of appropriate legislation they were largely dependent on persuasion to secure abatement of the nuisances.

(d) Amendments to Public Health By-laws:

A considerable amount of time and concentrated effort was again put in by senior members of the Health Inspectorate staff, the Assistant Medical Officer of Health (Sanitation) and the Chief Health Inspector on proposed amendments to various Chapters of the Council's Public Health By-laws and innumerable meetings were held with Mr. R.C. Calburn of the Town Clerk's Department. It is hoped that several Chapters of the amended by-laws which are now in the hands of the Provincial Authorities, will be promulgated in 1961. The only Chapter to be promulgated in 1960 was that relating to Laundering and Dry-Cleaning (Administrator's Notice No. 310 of 20th April 1960).

(e) Food Poisoning:

Investigations were conducted in four instances of suspected food poisoning during the year. These involved 2 adult and 3 minor Europeans, and 9 adults and 6 minor Non-Europeans.

The death of a 12 year old female Asiatic child occurred in one family group, but an autopsy established the cause as being due to gastro enteritis. The death of an adult male Native in another group proved to be due to Bacillary Dysentery.

In three of the case groups concerned close investigation and various tests made on the persons concerned and the suspected material available did not clearly establish the cause of the illness as being directly due to food poisoning organisms. Chemical poisoning was considered a possibility in one case.



Tests carried out with the remaining case group, involving a European family, pointed strongly to *Staphylococcus aureus* as the cause; nasal swabs taken from a Native female cook, employed in the roadhouse where the suspect foodstuffs had been consumed, yielded abundant growths of the organism. Immediate measures were taken to prevent the cook from handling foodstuffs until the infection had been cleared by appropriate medical treatment.

As a counter to the constant risk and potential gravity of food poisoning, frequently due to ignorance and carelessness, the Department has constantly stressed the importance of health education propaganda in this field and the necessity for strict control and supervision of the production, storage, handling and sale of foodstuffs.

(f) Imported Smoked Saithe In Oil.

In May 1960, on instruction from the local office of the Union Health Department, all local stocks of imported smoked saithe, which were suspected of contamination, were detained.

It was noted that of the twenty-five wholesalers holding stocks, only fifteen were refrigerating the product in accordance with the instructions of the importers. A very small proportion of the tins were "flippers" or blown and a few jars showed discolouration of the contents and a little mould growth, otherwise both tins and jars were of normal outward appearance.

Samples were submitted to the South African Institute for Medical Research for bacteriological examination. The reports showed the presence of *Streptococcus faecalis*; *Staphylococcus aureus* (coagulase positive but not typable by phage typing); and *Clostridium welchii* (heat susceptible). These organisms were found in various combinations in both types of container, whether or not the product had been refrigerated, but the bacterial growth tended to be "scanty" or "moderate" where there had been refrigeration and "abundant" where there had not. No parasitic ova were detected and examination for poliomyelitis virus was negative.

These results were confirmed by the South African Bureau of Standards who took samples independently from the same consignments.

All the organisms isolated are possible pathogens but of doubtful pathogenicity and all are of possible faecal origin, either human or animal. The *Staphylococcus aureus* could also have been derived from a human carrier preparing the product. No cases of food poisoning were reported and volunteers who ate portions of the fish suffered no ill effects. The possibility of an outbreak of food poisoning had, however, to be eliminated.

No standards for "semi-preserves" have been laid down in the Foods, Drugs and Disinfectants Act or Regulations, nor has the South African Bureau of Standards adopted a specification.

After mature consideration, and after consulting the available experts all tins which were "flippers" or "blown" and all jars which showed discolouration of contents were condemned and the remaining stocks were released. Of 15,000 tins and 10,000 jars detained just over 14% were destroyed.



This incident was the cause of a good deal of inconvenience and some loss to importers and wholesalers and much worry to Medical Officers of Health all over the country. The sooner standards are laid down for "semi-preserves" the better.

(g) Trade Licensing:

The control of the sale and distribution of foodstuffs is greatly hampered by defects in the licensing legislation whereby in most cases where a licence has been issued, it is not renewable annually by the local authority unless the premises are materially altered or there is a change in the ownership or control of the business. If these conditions do not arise the trader can go on trading indefinitely however unsuitable his premises or methods may have become.

Most cases of contraventions of hygiene or good food handling practice can be dealt with by education or by action under the Public Health By-laws and in the last resort by prosecution; but the occasion does arise where premises have become quite unsuitable for the conduct of the particular business being carried on by virtue of expansion of trade or the addition of other commodities to the list of those sold and where the only remedy is the withdrawal of the licence to force the licensee to look for other or more suitable premises.

Even more difficult to deal with is the trader who has no idea whatever of the elements of hygiene and who does not respond to education, persuasion or more forcible methods. Fortunately such cases are not often met with but when they are there is virtually no remedy but to put them permanently out of business.

One such case which caused the Department a lot of trouble was a butcher and provision dealer in Newclare who was prosecuted 14 times on 33 counts over a period of years and paid fines totalling £220.0.0d. all of which made no impression on his methods or outlook. The charges included possession of unsound foodstuffs, exposure of food to contamination and dirty premises. Another such case has recently caused concern where a general dealer in Richmond was equally recalcitrant. He was indicted on eleven occasions in respect of twenty-four charges under the Public Health By-laws or the Public Health Act and paid fines totalling £204.0.0d. in a period of four years without any improvement in his methods. In both cases their shops were ultimately demolished by the owners and they were refused licences for new premises because of their bad records.

This matter first arose in 1939 when the new Local Government Ordinance put a stop to the system of dual licensing of business premises (i.e. government and municipal licences for the same trades). Efforts to secure annual renewal of government licences or renewal on demand by the local authority have been the subject of representation to the authorities concerned over a period of many years without producing any amendment of the legislation. It was hoped that the matter would be dealt with as a result of the interim report dealing with licensing, of the Local Government Commission of Enquiry into the System of Local Government in the Transvaal. Although the interim report was released in 1954 no results have yet eventuated. It is urgently necessary that all trading licences should be renewable annually and that local authorities should have powers to cancel trading licences when necessary to enable them to deal adequately with cases such as those referred to above.



## VIII. DISPOSAL OF WASTES.

The services referred to in this section of the report are provided by the Cleansing Branch of the City Engineer's Department.

### 1. REFUSE DISPOSAL.

In terms of the Council's By-laws, owners of premises are required to provide approved types of covered refuse receptacles for the storage of refuse pending its removal. Refuse collection is carried out mainly on a tri-weekly basis, but a daily service can be arranged in special circumstances.

The bulk of refuse is disposed of by controlled tipping (1,855 tons per day) and a small proportion by incineration (40 tons per day). The regular inspection of tipping sites is a routine procedure carried out by this Department's Health Inspectorate to ensure effective control of rodent harbourage, fly breeding and other nuisances.

The tipping system is an invaluable dual purpose disposal medium in that it provides disposal facilities, resulting in large areas of eroded or waste lands being converted for playing fields and parks, etc., with a limited amount of building being allowed thereon under prescribed health and structural conditions.

### 2. SEWAGE WASTES.

With the exception of certain outlying and newer townships, both residential and industrial, the greater part of the City Area is sewered. Some of the Native townships are sewered and some are on pail service but an extensive programme for providing water borne sewerage to all areas is now well under way.

Unsewered areas are served by a pail closet system as pit privies are not permitted in the Municipal Area. The night soil pail removal service functions normally on a tri-weekly basis; a nightly service may be rendered in special circumstances. The average number of pails removed nightly during the year was 3,021 in the City area and 5,318 in the Native townships.

Where sewers are not available conservancy tanks provide a useful alternative. This type of service is, however, restricted by the number of vacuum tankers available. As at the end of the year under review, 1,415 conservancy tanks were in operation.

Septic tank installations are not, as a rule, suitable for urban conditions, but they are permitted in certain instances where a sewer cannot be provided and if the tank can be situated at a suitable distance from the dwelling and the boundary of the property concerned.

The disposal of waste water in unsewered areas is usually carried out by means of 'French' drains or surface irrigation. The efficiency of these methods depends largely on the absorption qualities of the soil, and to some extent on the design and construction of drains for given demand. Nuisances frequently arise where the soil is of low absorbency, or where there is insufficient depth due to the presence of high level rock strata.

The layout of the Council's sewerage system provides for disposal plants situated in different sections of the system so as to ensure a maximum of gravity drainage thus avoiding expensive pumping. An

: - additional ...



additional and comparatively smaller works is situated near Sandringham to cater for a local section of the system. Near the Native occupied areas to the south west of the City an additional disposal works has been brought into operation at Olifantsvlei. This serves the twofold purpose of treating sewage from the Native townships now being sewered, and to relieve congestion at the older Klipspruit plant serving the southern sections of the City.

Over the past years the daily flow of sewage to these plants has been steadily increasing and they have been overtaxed beyond their designed capacity. Relief is now being afforded by the construction of extensive new works nearing completion on a large area of land to the north of the City. This plant, known as the Northern Sewage Disposal Works, is now treating a proportion of the sewage previously handled by the older existing plants and it will eventually cater for most of the northern section of the City plus adjoining sewered areas administered by the Peri-Urban Areas Health Board. The Bruma works was closed down by stages during the year and was completely closed, as was also Sandringham works, at the end of the year.

Cydna works dealt with about half the previous flow and will probably cease to function in 1961 when the Northern Works is able to take over.

Delta works passed the daily overflow on to the Northern Works. It will be the last of the smaller works to close down, probably in 1962.

The average flow of sewage received at the various purification works was as follows:-

Bruma .....	3,492,110 gallons per day (up to September 1960)
	1,000,000 gallons per day (from September 1960)
Cydna .....	2,202,750 gallons per day
Delta .....	4,391,500 gallons per day
Klipspruit .....	19,899,500 gallons per day
Sandringham .....	84,520 gallons per day
Olifantsvlei .....	5,628,100 gallons per day
Northern Sewage Works .....	6,200,000 gallons per day

The Laboratory Division of the City Health Department carries out all routine analysis at the disposal works and co-operates with the City Engineer's Department in research into the operation of the plants as well as investigations on extensions and modifications required to meet the increased loads. The Chief Chemist assists the Medical Officer of Health in carrying out his obligations under the Public Health Act, and acts in collaboration with the City Engineer and his staff in operating the disposal works. The City Engineer reports fully on the operation of the disposal works in his annual reports.

The control of industrial effluents discharging into the sewerage system is exercised by the Industrial Effluents Officer whose duties comprise the investigation and sampling of industrial effluents in collaboration with other members of the Laboratory Division staff. The chief purpose of this control policy is to prevent harmful effluents gaining access to the sewers and creating serious problems or damage at the disposal works. A revised



tariff of charges will be imposed for the conveyance and treatment of this type of effluent, in terms of amendments to the relevant By-laws awaiting promulgation. During the year 3,146 effluent samples were taken from 281 factories.

#### IX. WATER SUPPLIES.

The City's water supply is maintained by the Rand Water Board, the main source being the Vaal River. After treatment the water is delivered in bulk at an agreed rate to the Council's reservoirs and thence through the reticulation system also owned and controlled by the Council. The Council has 13 service reservoirs and nine water towers, two of each type being in the Native occupied areas; all are decked over.

The sale of the water to consumers is based on a metering system with charges being made at the rate of 2/11d per 1,000 gallons up to 100,000 in any one month, and 1/9d per 1,000 thereafter in any one month for domestic supplies. Charges at lower rates are allowed for charitable institutions and sporting bodies. During 1960, the amount of water purchased by the Council was 17,384,000,000 gallons with an average daily consumption of 47,416,000.

Throughout the year weekly water samples were taken by this Department's Health Inspectors at various points where the water passes into supply. The results have been generally satisfactory. A number of private boreholes are in use in the Municipal Area some of which are used for supplying large buildings such as flat blocks, and periodic samples are taken to assess purity and potability. Suitable action is taken, in consultation with the City Engineer where tests of City supplies indicate any unusual condition, and borehole supplies are restricted to non-potable usage where tests reveal sub-standard conditions.

NO. OF SAMPLES	SOURCE	TYPE OF EXAMINATION	LABORATORY CONDUCTING EXAMINATION	REMARKS
908	Municipal Reservoirs	Bacteriological	Cydna	Routine Council Tests
13	Boreholes	Chemical	Cydna	Private Owners
5	Boreholes	Bacteriological	Cydna	Private Owners
3	Boreholes	Bacteriological and Chemical	Cydna	Private Owners
285	Municipal Reservoirs	Chemical	Government	On behalf of Rand Water Board
11	Boreholes	Chemical	Government	Private Owners
1821	Municipal Reservoirs	Bacteriological	South African Institute for Medical Research	On behalf of Rand Water Board
43	Municipal Reservoirs	Bacteriological	South African Institute for Medical Research	On behalf of City Council
11	Boreholes	Bacteriological	South African Institute for Medical Research	Private Owners
5	Boreholes	Bacteriological	South African Institute for Medical Research	Repeat check samples



The Medical Officer of Health is Honorary Medical Officer to the Rand Water Board.

#### X. LABORATORY BRANCH.

The part played by the Laboratory Branch in the process of sewage disposal and items relating to milk and water supplies has already been referred to. The Branch also provides analytical and consulting services to all Departments of the Council on matters which may not necessarily be related to Public Health. Among the most important of these additional services are those concerned with the operation of the Gas Works, Power Stations, Swimming Baths and Kaffir Beer Breweries.

During the past few years the Laboratory Branch has been unable to maintain its full quota of qualified personnel. The distribution of a limited staff over the various plants and laboratories is, therefore, governed largely by the exigencies arising at these different points.

The actual and imminent closing down of the redundant sewage disposal works serving the northern sections of the City on which were established the main Cydna laboratory and other subsidiary laboratories, is likely to entail a reorganisation of these services in the near future.

Control of Sewage Effluents. One of the main functions of the Laboratory Branch is to advise the Medical Officer of Health in carrying out his statutory obligations in regard to the quality of the sewage effluent discharged from the sewage works. In so doing the Chief Chemist works in close collaboration with the City Engineer and his staff in routine and research work on various aspects of the treatment of sewage.

Details of the disposal of sewage wastes are included elsewhere in this report.

Gas Works. Apart from the usual routine work necessary to ensure the efficient operation of the gas producing plant and a satisfactory quality of its by-products, the Branch is continually carrying out research and experimental work on certain aspects of the functioning of the plant. During the year research work was required to endeavour to overcome defects in the dry purification plant apparently due to an unsatisfactory oxide mixture. Numerous tests were also carried out on the plant producing concentrated ammonia liquor, in order to achieve a higher standard of purity required by consumers; frequent tests were also made to reduce a persistent leakage in the crude ammonia liquor storage tank. These activities were carried out in close collaboration with the Manager and staff of the gas works.

Power Stations. The Branch has continued its routine and research work in the established laboratories at the Orlando and Kelvin stations, and a weekly visit has been made to the City generating station which is on part operation, being shut down at night and at week ends during the summer months.

At Orlando investigations were being carried out to determine the cause and prevention of evaporator heater tube corrosion. Failures in the electroplating section were investigated and found to be due to defective plating solution; the preparation of a new solution effected satisfactory results.

:- Investigations ...



Investigations at the Kelvin station were being carried out to determine concentrations of dissolved oxygen, ammonia, carbon dioxide, copper and iron at various points in feed system; the results confirm that copper corrosion is greatly influenced by non-pre-treatment of evaporator feed water. A survey of all drains from the station was undertaken to furnish information to the Council for Scientific and Industrial Research concerning the use of sewage effluent at Kelvin for cooling purposes. At the City generating station some lessening of oxygen corrosion was effected by treatment of the feed water with sodium sulphate and by banking all boilers off the main during shut-down periods.

Swimming Baths: Regular examinations of the water in the Council's 16 municipal swimming baths, including those at Kelvin, Orlando Power Station and Hillbrow reflected a consistently high quality. Tests of the water in children's paddling or swimming pools attached to some of the larger baths also gave satisfactory results.

Milk and Water: The Branch's laboratories continued to undertake routine tests of milk, certain milk products and water samples submitted in collaboration with the Department's Health Inspectorate. The number and type of these tests are referred to elsewhere in this report under the sections dealing with sanitation and food supplies, and under the heading 'Water Supplies' above.

Kaffir Beer Brewery. Most of the work of the Branch in this field comprised routine tests made in the course of the manufacture of the beer and on the materials involved. During the year tests were made on 307 samples of Kaffir beer, 3 Kaffir beer husks, 205 Kaffir corn malts and 16 other miscellaneous items. Tests were also carried out on 54 specimens of carcase meals and 15 blood meals on behalf of the Abattoir.

Industrial Effluents. The control of industrial effluents in relation to the Laboratory Branch is referred to in an earlier section of this report dealing with the disposal of wastes.

Atmospheric Pollution (Smog). A further stage in the Air Pollution Control section was reached during the year through the appointment of a Principal Chemist as Air Pollution Control Officer. This official spent 12 weeks in Britain and on the Continent and 1 week in Durban to study air pollution control methods. The section will operate initially with two smoke inspectors increasing later to include six non-European stoker demonstrators. A complete survey of all fuel burning appliances in the City will be conducted during which advice will be given as to future requirements considered necessary to combat pollution. The proposed formation of a Clean Air Consultative Committee consisting of representatives from the Council, commerce, industry, the South African Railways and hotels, etc., is expected to bring about a spirit of mutual good will and co-operation between the control authorities and fuel users.

National legislation for air pollution control is being prepared and it is anticipated that the promulgation of these laws may be made during 1961.

The measurement of air pollution at various points in the City area has continued in operation during the year. The results are shown graphically in Annexure 8.

## XI. PUBLIC CONVENIENCES.

The Department maintains and controls 37 public conveniences for Europeans and non-Europeans of both sexes in the City proper and in the suburbs where there



is a demand for these facilities which can be met. Additional conveniences are available to the public in various parks or premises controlled by other Departments.

A programme adopted by the Council in 1955, to increase the number of conveniences in the municipal area, is gradually being implemented. During the year the following four new conveniences were brought into use:-

Old Kazerne Parking Grounds (opened 14th March 1960, for Europeans and non-Europeans of both sexes).

Van der Byl Square - Southern Suburbs Bus Terminus and Underground Car Park (opened 20th July 1960, for Europeans and non-Europeans of both sexes).

Westgate Station (opened 3rd August 1960, for non-Europeans of both sexes).

Diagonal Street - adjoining Newtown Coloured School (opened 30th September 1960, for Natives and Coloureds of both sexes).

## XII. CREMATION OF DECEASED PERSONS.

Cremations in the Braamfontein Crematorium numbered 1,328 during the year. The By-laws relating to cremations promulgated during 1957, do not make any provision for special medical certificates other than is normally required for the burial of a body. There is the possibility that this procedure may be open to abuse but this is purely a medico-legal as opposed to a public health consideration.

## XIII. HEALTH EDUCATION, TRAINING AND PUBLIC RELATIONS.

All members of the field staff of the Department regard health education as an integral part of their duties and utilise every opportunity for imparting information on health matters in their daily contacts with the public.

Free use is made of printed material: the booklet "Care of Mother and Child" and leaflets and pamphlets on maternal and infant care, together with the publication "Feeding of the Young Child".

Booklets entitled "Calling all Dairy Farmers" and "Prevention of Rats and Mice" are also available. Eye catching coloured posters depicting the dangers of carbon monoxide poisoning in the official languages and in two Native languages and posters emphasising the importance of hygienic food handling have been widely distributed and displayed.

The Chief Tuberculosis Medical Officer as a member of the Health Education and Publicity Sub-Committee of S.A.N.T.A. (National), took an active part in the preparation of pamphlets and literature dealing especially with the public health aspects of tuberculosis.

The public health museum, established in 1958 in a section of the basement at 18 Hoek Street, has been improved by the addition of further displays and exhibits relating to the activities of various sections of the Department and continues to serve as a most useful ancillary to health propaganda campaigns in a manner which appeals to the public and those interested in public health work.

: - Visits ...



Visits were arranged by request for parties of students and others to visit the laboratories at sewage disposal works, the disinfecting station and other points of interest, and visitors to the city were shown over the polyclinics in the Native townships when occasion offered. There were 707 visitors to Cydna Sewage Disposal Works, to whom short explanatory talks were given on the sewage purification processes. Many of these visitors were university students or scholars, the latter also being conducted over the laboratory as part of their "careers guidance" training.

Members of the staff have given a number of formal talks and addresses to special groups and at conferences: these are listed in Annexure 6. A list of conferences and meetings attended by councillors and officials during the year is contained in the same annexure.

Food Hygiene: An intensive clean food campaign covering the Witwatersrand, Pretoria and other Transvaal towns during 1958/59 was fully reported upon in the Department's 1959 annual report. The Food Hygiene Health Education teams instituted as part of this campaign have continued to operate throughout the year as noted elsewhere in this report.

Health Education Lecture Room: During the year space made available on the ground floor at 18 Hoek Street was converted, equipped and brought into use for health education purposes as a lecture room with facilities for screening colour slides and cinematograph films associated with public health activities. The lecture room is proving to be a valuable adjunct to the Department's programmes for health education as applied to various appropriate sections of the community, and for the information and instruction of the staff. Films and colour slides were shown to various groups on 23 occasions in addition to the lectures by the Food Hygiene Teams.

Public Relations: The Medical Officer of Health and members of his staff have taken an active part in their own professional organisations and in welfare and other bodies actively associated with public health work. These activities are encouraged as a means of keeping their knowledge and enthusiasm up-to-date and in maintaining good public relations, while at the same time assisting organisations which directly and indirectly contribute a great deal to the health and welfare of the community. By resolution of the General Purposes Committee (12th January 1960) Heads of Departments are authorised to approve of officials in their departments serving on such committees during working hours and lists of officials so serving are reported to Standing Committees at the beginning of each year for information.

The Medical Officer of Health has maintained good relations with the Press which has been very helpful and ready to assist in many directions, an attitude which is much appreciated. Thanks are also recorded to the Public Relations Officer of the Town Clerk's Department who has assisted in maintaining good relations with the public and in publicising such matters as the poliomyelitis oral immunisation campaign.

The Witwatersrand and Pretoria Public Health Consultative Committee: This Committee was established many years ago as a plague committee and was revived on a broader basis in the post war period. It is sponsored by local authorities in the area who are represented by their Medical Officers, Veterinarians and Chief Health Officers. The Regional Health Officer, Chief Railway Health Officer and Professor of Public Health at the Witwatersrand University also serve as members. The Committee acts as a forum to discuss health matters of local interest, to draw up public health by-laws and to prepare and distribute material for health propaganda.

:- Training: ...



Training: In regard to more formal education, members of the staff assisted in the training of Health Inspectors and Health Visitors at the Technical College and other members acted as examiners for the examination of these students. The names of staff giving these lectures are included in Annexure 6.

Three European and three Non-European Student Health Inspectors each served a 62 day period of practical training in the Sanitation Division of the Department in terms of Section 3 (c) of the syllabus of the Joint Examination Board.

Practical training was undertaken by 5 European pupil Health Visitors and 24 Non-European Health Visitors in the Department's Child Welfare Section. Nurses taking a post graduate course in Pediatrics and the District Nursing course attended sessions at clinics and were shown the work of health visiting. Lectures and demonstrations on mothercraft were given to students of the Johannesburg Teachers' Training College for Home Economics by a Health Visitor.

The Senior Dental Officer is Honorary Lecturer in Public Health and Preventive Dentistry at the Witwatersrand University; demonstrations were given to final year dental students and pupil Health Visitors during tours of the Orlando dental clinic.

European and Non-European pupil Health Visitors were given demonstrations and lectures on administration and practical aspects of the Medical Services in the Native Areas.

Study: One Child Welfare Medical Officer and four Medical Officers at the Native township clinics attended a General Practitioners refresher course at the Witwatersrand University.

Groups of ten health visitors attended seminar discussions at the Child Guidance Clinic for four weekly sessions throughout the year.

Twelve Health Visitors attended a course on "Mental Health for Health Visitors" at Tara Hospital. Other courses attended by Health Visitors included four lectures sponsored by the Marriage Guidance Society and a further course of ten lectures on "The Emotional and Personality Development of the Child" given for Health Visitors at Tara Hospital.

Thirteen members of the Non-European Nursing Staff were granted study leave for a course of midwifery training: two obtained the qualification, the others are still completing the course. Of other members of the same group one attended a full time Health Visitors and School Nurses course at Kimberley and successfully passed the examination: thirteen attended a part-time course for Health Visitors and School Nurses at the Technical College and ten passed the examination: ten attended lectures on Mental and Social Health at Tara Hospital.

Grateful thanks are recorded to the Medical Superintendent and Matron of Tara Hospital and to the staff of the Child Guidance Clinic who arranged courses and lectures referred to in this section of the report.

#### XIV. FINANCE.

A schedule of the cost of the services rendered by the City Health Department for the financial year ended 30th June 1960, is included as Annexure 7.

: - Expenditure: ...



Expenditure. The expenditure figures for the various services operated by the Department are made up of Salaries, Wages and Allowances, Miscellaneous Expenses, Repairs and Maintenance, Loan Charges and Revenue Contributions to Capital Outlay.

The cost of those services provided for Non-Europeans, both in the Council's Native Locations and elsewhere, are passed on to the Non-European Affairs Department to be charged to the Native Revenue Account. The amount for 1959/60 was £899,

Income. The income detailed in the Financial Summary includes refunds totalling £456,494 from the State Department of Health under the Public Health Acts, and the subsidy of £229,953 received from the Transvaal Provincial Administration for Curative and Midwifery Services operated by the Council, on behalf of the Administration, in the Native Locations. The income relative to the services for Non-Europeans is paid over to the Non-European Affairs Department to be credited to the Native Revenue Account. The amount for 1959/60 was £604,733.

On 1st April 1958, the Transvaal Provincial Administration assumed financial responsibility for the Curative and Midwifery Services in the Native Locations. The Council is continuing to operate these services, pending the take-over by the Administration. For various reasons, the subsidy being received by the Council represents only approximately 83% of the cost involved. Representations are at present being made for the payment of full 100% subsidy.

The total cost of all the services for which the City Health Department is responsible increased by £128,419 and the net cost by £63,269 as compared with the previous financial year.

The most important increases were in respect of Food Distribution, Tuberculosis Services and Medical Services for Natives. The Food Distribution Service was taken over from the Council's Social Affairs Department on 1st July 1959 and represented a net increase in the expenditure by the Department of £8,470. The gross expenditure on Tuberculosis Services increased by £41,038 but the net expenditure actually decreased by £281.

The increased expenditure was largely due to an increase in the number of patients hospitalised, and to the expansion of the services as referred to earlier in this report. Most of this expenditure was eligible for the part-refund of 87½% by the Government; and additional income was received from hospital and clinic fees, also through the recovery of expenditure incurred in providing medical service for other organisations. Part of this income accrued from the previous year, hence the net decrease in expenditure.

The main increase in expenditure was a net increase of £46,833 on Medical Services in the Native locations, the principal items being additional activity resulting from the development of the 'site-and-service' schemes, the expansion of the tuberculosis services in the locations, and the expansion of the transport service for the district midwives in the south-western Native areas.

If and when the recommendations of the Borckenhagen Committee are accepted and implemented by amendments to the legislation it is estimated that the finances of the City Health Department would be improved to the extent of £287,749 per annum. No decisions on the findings of the Committee had been reached at the close of the year.

## H O U S I N G.

REPORT B. follows the annexures.



STAFF ESTABLISHMENT AS AT 31ST DECEMBER 1960.HEAD OFFICE ADMINISTRATION:

- 1 Medical Officer of Health
- 1 Deputy Medical Officer of Health
- 3 Assistant Medical Officers of Health
- 1 Administrative Officer
- 1 Chief Clerk
- 16 Clerks
- 7 Female Assistants
- 9 Shorthand Typists
- 2 Telephonists
- 12 Unskilled Labourers (Natives)

INFECTIOUS, COMMUNICABLE AND PREVENTABLE DISEASES:

- 1 Senior Infectious Disease Inspector
- 1 District Health Inspector
- 1 Female Assistant
- 1 Health Inspector (Native)

DISINFECTIONS AND REMOVALS:

- 1 Superintendent, Disinfecting Station
- 1 Senior Disinfecting Officer
- 1 Nursing Sister
- 7 Disinfecting Officers
- 1 Chargehand Mechanic
- 4 Mechanics
- 1 Clerk
- 1 Mobile Messenger (Native)
- 20 Unskilled Labourers (Natives)

FEVER HOSPITAL:

- 1 Physician-in-charge (Part-time)
- 1 Ear, Nose and Throat Surgeon (Part-time)

WATERVAL HOSPITAL:

- 1 Medical Superintendent
- 3 Medical Officers
- 1 Radiologist (Part-time)
- 1 Matron
- 4 Nursing Sisters
- 1 Dietitian
- 1 Food Supervisor
- 2 Radiographers
- 1 Specialist in Physical Medicine (Part-time)
- 1 Orthopaedic Surgeon (Part-time)
- 1 Physiotherapist (Part-time)
- 1 Occupational Therapist
- 1 Clerk-in-Charge
- 1 Female Assistant
- 1 Hygiene Officer/Handyman
- 1 Storeman
- 1 Night Superintendent (Female)(Native)
- 9 Sisters (Natives)
- 24 Nurses (Natives)
- 57 Nursing Assistants (Uncertificated)(Natives)
- 4 Orderlies (Natives)
- 4 Clerks (Natives)
- 2 Radiographer's Assistants (Female)(Natives)
- 1 Female Instructor (Native)
- 61 Unskilled Labourers (Natives)

TUBERCULOSIS SERVICES:

- 1 Chief Tuberculosis Medical Officer
- 5 Medical Officers
- 1 Consultant Thoracic Surgeon (Part-time) (A)
- 1 Radiologist (Part-time) (B)
- 1 Dental Officer (Part-time) (B)
- 1 Senior Health Visitor
- 16 Health Visitors (B)
- 6 Welfare Officers (C)
- 3 Nursing Sisters
- 2 Radiographers (B)
- 1 Technical Assistant
- 2 Clerks
- 4 Female Assistants
- 51 Nurses (Natives) (B)
- 14 Clerks (Natives) (B)
- 12 Clinic Assistants (Natives)
- 3 Transport Drivers (Natives) (B)
- 1 Orderly Clinic (Native) (B)
- 1 Radiographer (Native) (B)
- 2 Dark Room Assistants (Natives) (B)
- 1 Dentist's Assistant (Native) (B)
- 9 Welfare Assistants (Natives) (C)
- 17 Labourers (Natives) (B)

VENEREAL DISEASES SERVICES:

- 1 Consultant Venereologist (Part-time)
- 2 Medical Officers (Part-time)
- 2 Clinic Orderlies (Part-time)
- 1 Technical Assistant (Part-time)

MATERNAL AND CHILD HEALTH SERVICES:

- 1 Pediatric Officer (Part-time)
- 1 Chief Child Welfare Medical Officer
- 1 Assistant Chief Child Welfare Medical Officer
- 5 Child Welfare Medical Officers
- 2 Immunisation Officers
- 1 Chief Health Visitor
- 1 Senior Health Visitor (Health Education)
- 46 Health Visitors
- 3 Nursing Sisters
- 5 Clinic Attendants
- 4 Female Assistants
- 14 Health Visitors (Natives)
- 1 Unskilled Labourer (Native)

SUPERVISION OF NURSING HOMES AND MIDWIVES:

- 1 Senior Health Visitor
- 2 Health Visitors
- 1 Female Assistant

DISPENSARY:

- 1 Chief Pharmacist
- 2 Pharmacists
- 1 Clerk (Native)
- 8 Unskilled Labourers (Natives)



NURSERY SCHOOLS AND DAY NURSERIES:

- 1 Medical Officer
- 1 Inspectress of Nursery Schools
- 1 Senior Supervisor
- 6 Supervisors
- 15 Assistant Supervisors
- 6 Nursery Assistants
- 1 Driver/Handyman
- 1 Female Assistant
- 2 Senior Assistant Supervisors (Natives)
- 15 Assistant Supervisors (Natives)
- 4 Nursery School Helpers (Natives)
- 7 Cooks
- 11 Unskilled Labourers (Natives)

MEDICAL SERVICES IN NATIVE LOCATIONS:

- 6 Senior Medical Officers
- 24 Medical Officers
- 11 Medical Officers (Part-time)
- 1 Senior Dental Officer
- 5 Dental Officers
- 1 Senior Health Visitor
- 10 Health Visitors
- 1 Orthopaedic After-Care Sister
- 1 Clerk
- 1 Health Visitor (Native)
- 124 Nurses (Natives)
- 109 Midwives (Natives)
- 38 Orderlies (Natives)
- 25 Ambulance Drivers (Natives)
- 8 Dentists Assistants (Natives)
- 31 Drivers, Nurses Transport (Natives)
- 7 Clerks (Natives)
- 63 Unskilled Labourers (Natives)

SANITATION DIVISION:

- 1 Chief Health Inspector
- 4 Divisional Health Inspectors
- 11 Senior Health Inspectors
- 62 District Health Inspectors
- 3 Learner Health Inspectors
- 2 Veterinarians (D)
- 3 Clerks
- 2 Pest Control Inspectors
- 23 Pest Control Overseers
- 17 Health Inspectors (Natives)
- 53 Unskilled Labourers (Natives)

FOOD DISTRIBUTION SERVICES:

- 1 Food Distribution Officer
- 1 Assistant Food Distribution Officer
- 3 Driver Salesmen
- 1 Storeman
- 10 Unskilled Labourers (Natives)

LABORATORY DIVISION:

- 1 Chief Chemist
- 1 Assistant Chief Chemist
- 5 Principal Chemists
- 1 Air Pollution Officer
- 12 Chemists
- 1 Industrial Effluents Sampler
- 1 Bacteriologist
- 1 Laboratory Technician
- 4 Laboratory Assistants
- 1 Clerk
- 1 Typist
- 3 Chemical Engineering Students

MEDICAL EXAMINATION CENTRE : NATIVE  
REGISTRATION DEPOT:

- 1 Senior Medical Officer
- 3 Medical Officers (2 European or Non-European)
- 1 Radiologist (Part-time)
- 1 Technical Assistant (X'ray)
- 1 Medical Orderly
- 1 Radiographer (Native)
- 3 Orderlies (Medical)
- 2 Clinic Orderlies (Natives)
- 4 Orderlies (X'ray) (Natives)
- 1 Nurse (Native)
- 1 Nurse/Aide (Native)
- 2 Clinic Assistants (Natives)
- 1 Dark Room Assistant (Native)

EUROPEAN HOUSING:

- 1 Housing Officer
- 1 Assistant Housing Officer
- 1 Housing Supervisor
- 1 Senior Assistant Housing Supervisor
- 2 Housing Assistants
- 7 Assistant Housing Supervisors
- 2 Clerks
- 7 Caretaker/Handymen
- 1 Matron, Girls' Club
- 1 Assistant Matron, Girls' Club
- 1 Cook, Girls' Club
- 44 Unskilled Labourers (Natives)

PUBLIC CONVENIENCES:

- 2 Supervisors
- 46 Attendants
- 96 Unskilled Labourers (Natives)



-3-

- (A) Cases requiring surgical treatment are now referred to Rietfontein Hospital; this post has not been filled and may be abolished.
- (B) Appointments to the following 20 posts will only be made when the Moroka Clinic is completed:-

EUROPEANS:

1 Radiologist (Part-time)  
 1 Dental Officer (Part-time)  
 1 Health Visitor  
 2 Radiographers

NON-EUROPEANS:

2 Nurses  
 1 Orderly (Clinic)  
 1 Radiographer  
 2 Dark Room Assistants  
 1 Dentist's Assistant  
 3 Clerks  
 5 Labourers

- (C) Five Welfare Officers and nine Non-European Welfare Assistants seconded to City Health Department from Non-European Affairs Department for full time duties in Native Areas.
- (D) Seconded full-time from Abattoir and Livestock Market Department.

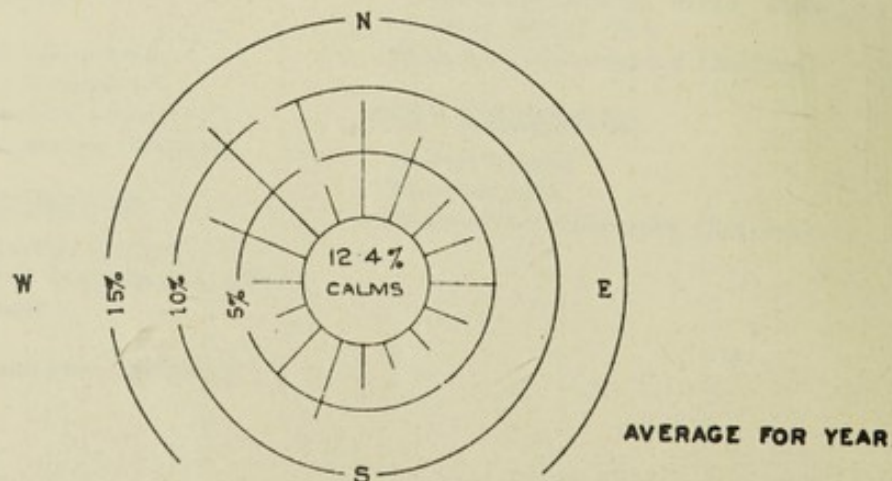
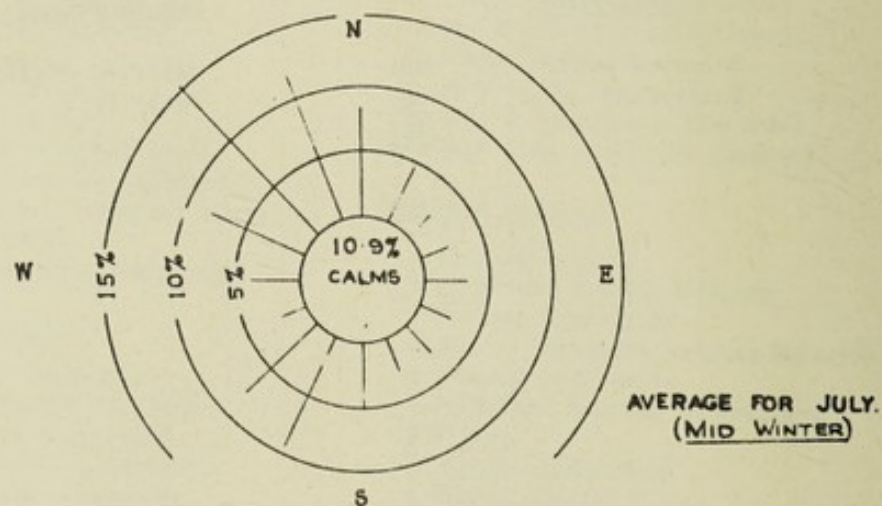
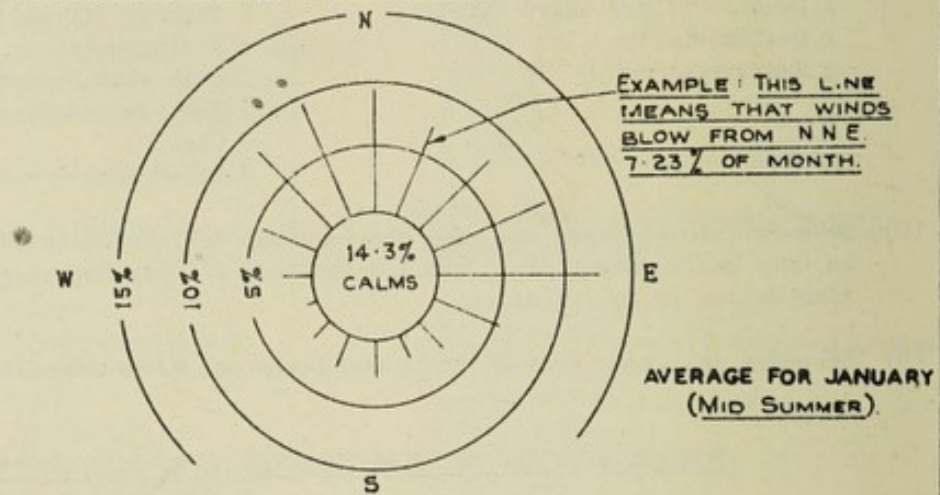
SUMMARY OF STAFF ACTUALLY EMPLOYED AS AT 31ST DECEMBER 1960.EUROPEANS:

Salaried Staff	401
Daily Paid	<u>56</u>
	<u>457</u>

NON-EUROPEANS:

Salaried Staff	521
Daily Paid	<u>437</u>
	<u>958</u>



WIND FREQUENCIES FOR CENTRAL WITWATERSRAND.INDICATING DIRECTIONS FROM WHICH THE WINDS BLOW,CALCULATED AS PERCENTAGES OF THE PERIOD GIVEN.PERCENTAGE CALMS ARE GIVEN WITHIN THE CIRCLE.(ARCS REPRESENT 5% INTERVALS.)

DATA ARE FOR JAN SMUTS AIRPORT, LAT  $26^{\circ} 08' S$ , LONG.  $28^{\circ} 14' E$ ,  
 AND ARE TAKEN FROM "CLIMATE OF SOUTH AFRICA: PART 6:  
 SURFACE WINDS", PUBLISHED BY THE WEATHER BUREAU, PRETORIA 1960



JANUARY - DECEMBER 1960.

MEDICAL SERVICES IN NATIVE TOWNSHIPS

CLINIC ATTENDANCES, ETC.

ANNEXURE 3.

	PIMVILLE	W.N.T.	E.N.T.	ORLANDO	NOORDGESIG	SEANTY-TOWN	JARAVU	MOROKA	TOTAL
Dispensary and Outpatient Clinics	77,728	11,297	12,001	69,738	17,170	44,929	133,474	111,718	478,055
Ante-Natal Clinics	5,658	2,036	1,065	10,176	1,430	5,676	22,794	15,615	64,450
Child Welfare Clinics	15,412	6,468	6,539	17,896	9,316	14,889	34,383	31,754	136,657
Tuberculosis Clinics	13,109	12,190	833	14,773	11,200	16,436	32,884	17,504	118,929
Venereal Disease Clinics	3,479	572	420	978	258	912	6,028	3,028	16,294
TOTAL ATTENDANCES	115,386	32,563	20,858	113,561	39,374	82,842	229,563	180,238	814,385
Home Visits by Medical Officers	505	435	179	387	807	732	1,650	1,851	6,546
Home Visits by Health Visitors	16	436	99	1,756	621	97	1,181	NIL	4,206
Home Visits by Native Nurses and Native Midwives	24,000	5,734	3,939	36,392	4,270	19,001	83,055	79,590	255,981
Home Visits by Clerk/Orderlies	171	NIL	164	NIL	NIL	NIL	NIL	NIL	335
TOTAL VISITS	24,692	6,605	4,381	38,535	5,698	19,830	85,886	81,441	267,068
No. of Confinements attended by District Midwives	774	191	86	836	176	532	2,016	1,699	6,310



## RECORD OF INSPECTIONS BY HEALTH INSPECTORS.

(THIS SCHEDULE INDICATES THE MASS ACTIVITIES OF THE HEALTH INSPECTORATE OF THE DEPARTMENT EXCLUDING THE PLAGUE PREVENTION AND PEST CONTROL SECTION).

1.	1959	1960	2.	1959	1960
<u>BUILDINGS:</u>			<u>LICENSED PREMISES: (CONTD)</u>		
Repairs	384	324	Hotel Dining Rooms	1,166	1,544
Illegal	10,479	1,858	Native Eating Houses	2,040	1,938
<u>CLOSETS AND URINALS:</u>			Laundries	816	1,670
Inspected	9,514	8,789	Milk Shops	8,302	5,925
Additional Provided	907	53	Noxious Trades	4,171	4,377
<u>VARIOUS PREMISES:</u>			Pedlars and Hawkers	2,310	2,175
Factories	7,185	8,196	Private Cows	219	297
Business Buildings	2,166	2,079	Restaurants	4,757	7,435
Dwellings - Routine Visits	30,034	31,538	Tea Rooms	3,695	4,630
Dwelling Survey	6,269	13,075	General Dealers	31,662	27,688
Interviews	12,719	24,112	Nursing Homes	133	275
Native Housing	661	625	Lodging Houses	88	152
<u>NUISANCES:</u>			Cowsheds	2,613	1,123
Service Complaints	624	794	<u>GENERAL:</u>		
Stormwater	89	100	Inspections - Food Handling	1,813	1,738
Fumigations	1,824	1,892	Sediment Tests Taken	5,406	6,397
Wells and Boreholes	3	68	Bacteriological Samples Taken	9,267	9,192
French Drains	767	513	Inspections - Milk		
Animals	784	340	Purveyors	230	414
Manure	550	384	Food Poisoning Investigations	242	122
Drainage	6,442	4,432	Food Samples Taken	1,970	2,223
Refuse	35,661	14,314	Water Samples Taken	355	1,095
Slopwater	462	725			
Stables	1,348	1,398	<b>TOTALS</b>	<b>248,051</b>	<b>243,753</b>
Fly	166	227			
Rats	3,372	15,289	<u>NOTICES SERVED ETC:</u>		
Poultry	8,776	7,297	COURT ATTENDANCE (HOURS)	1,505	1,372
Vermin	410	404	STATUTORY NOTICES	21,014	19,579
Smoke	403	447	OTHER NOTICES	3,862	5,386
Mosquitoes	89	131	REPORTS SUBMITTED	1,679	1,261
Unspecified	5,402	4,984	MARKET ATTENDANCE (HOURS)	429	509
<u>INFECTIOUS DISEASES:</u>					
Investigated					
(Isolation of Contacts)	389	62			
<u>LICENSED PREMISES:</u>					
Aerated Water and Ice					
Factories	378	178			
Asiatic Eating Houses	84	312			
Dairies	4,119	6,076			
Ice Creameries	296	252			
Bakeries	1,311	969			
Boarding Houses	830	1,194			
Barber Shops	2,243	1,925			
Bioscopes	336	329			
Butcheries	8,021	6,485			
Garages	1,299	1,183			



ANALYSIS OF PROSECUTIONS

TYPE OF OFFENCE	NO. OF CHARGES		GUILTY		NOT GUILTY		COURT ORDER GRANTED		WITHDRAWN OR STRUCK OFF	
	1959	1960	1959	1960	1959	1960	1959	1960	1959	1960
<b>SANITATION AND NUISANCES:</b>										
Dirty Premises, Closets etc.	164	113	153	103	-	4	-	-	11	6
Vermineous Premises	-	1	-	1	-	-	-	-	-	-
Refuse and Refuse Bins	28	10	23	7	-	1	-	-	5	2
Fly Breeding and Nuisance	7	9	7	8	-	1	-	-	-	-
Insufficient Sanitary Accommodation & Pail Service	43	23	39	23	-	-	-	-	4	-
Water Supply	-	1	-	1	-	-	-	-	-	-
Fumigations	1	1	1	1	-	-	-	-	-	-
Rodents and Rodent Harbourage	128	71	71	49	16	9	-	-	41	13
Waste Water	-	7	-	2	-	-	-	-	-	5
Unsatisfactory Storage	5	2	9	2	-	-	-	-	-	-
Court Orders for Structural Repairs	4	22	-	-	-	-	1	1	3	21
Poultry Nuisances	101	61	72	49	4	6	-	-	25	12
Keeping of Animals	-	10	-	9	-	1	-	-	-	-
Shacks and Garages	-	3	-	2	-	3	-	-	-	-
Other Prosecutions	21	18	19	17	-	-	-	-	6	1
<b>MILK AND ICECREAM:</b>										
Below Standard or Adulterated	55	45	50	44	-	1	-	-	5	-
Visible Dirt	4	29	4	28	-	-	-	-	-	1
Dirty Clothing or No Overalls	20	34	18	22	1	7	-	-	1	5
Dirty Premises or Equipment	10	10	9	6	-	4	-	-	1	-
Trading without a Licence	3	4	-	4	3	-	-	-	-	-
Milk Purveyor Selling in Bottles	-	11	-	11	-	-	-	-	-	-
No Card of Authority	-	9	-	7	-	-	-	-	-	2
Marks and Merchandise Act	-	1	-	1	-	-	-	-	-	-
Other Prosecutions	107	87	85	68	3	11	-	-	19	8
<b>MEAT:</b>										
Dirty Premises or Equipment	5	5	4	5	-	-	-	-	1	-
Unsound or Unstamped Meat	6	3	6	3	-	-	-	-	-	-
Dirty Clothing or Handling	1	1	1	-	-	-	-	-	-	1
Exposed to Contamination	17	3	15	2	-	-	-	-	2	1
Other Prosecutions	41	27	39	27	-	-	-	-	2	-
<b>OTHER FOODSTUFFS:</b>										
Below Standard or Adulterated	10	10	8	10	2	-	-	-	-	-
Exposed to Contamination	100	51	90	50	1	-	-	-	9	1
Dirty Premises or Equipment	197	171	182	166	2	1	-	-	13	4
Dirty Clothing or Handling	107	46	96	41	-	2	-	-	11	3
Unsound Foodstuffs	4	2	4	2	-	-	-	-	-	-
Other Prosecutions	50	15	39	15	1	-	-	-	10	-
<b>TOTALS</b>	<b>1,239</b>	<b>916</b>	<b>1,036</b>	<b>778</b>	<b>33</b>	<b>51</b>	<b>1</b>	<b>1</b>	<b>169</b>	<b>86</b>

\* INCLUDES 75 PROSECUTIONS ON THE HANDLING AND SALE OF BREAD.

**NOTE 1:-** The majority of cases having no conviction comprise court orders under the Public Health Act and others withdrawn when the department's requirements have been complied with in the interval between the issue of summons and the date set down for appearance in court.



CONFERENCES AND MEETINGS AT WHICH THE COUNCIL (AS SUCH)  
OR THE CITY HEALTH DEPARTMENT WAS REPRESENTED DURING  
THE YEAR.

1. Fourteenth Chemical Convention of the South African Chemical Institute, held in Cape Town from 8th to 12th February 1960; the Council's representative was the Chief Chemist (Dr. E.G. White).
2. Medical Conference on Bantu Medicine, held in Pietersburg on 5th and 6th April 1960; the Council's representative was the Medical Superintendent, Waterval Hospital (Dr. G.B. Miller).
3. Annual meeting of the Nursery School Association of South Africa, held in Durban from 5th to 7th July 1960; Council's representatives: Councillor T. Glyn Morris and Senior Child Welfare Medical Officer (Dr. O.I.B. Kreher).
4. Annual meeting of the National Council for Child Welfare, held in Cape Town from 12th to 16th September 1960; Council's representatives: Councillor T. Glyn Morris, the Medical Officer of Health (Dr. J.W. Scott Millar) and the Senior Child Welfare Medical Officer (Dr. O.I.B. Kreher).
5. Conference on Water Treatment, held in Pretoria from 12th to 17th September 1960; Council's representative, the Chief Chemist (Dr. E.G. White).
6. Annual meeting of the South African National Council for Mental Health, held in Johannesburg on 6th and 7th October 1960; Council's representatives: Councillor T. Glyn Morris and the Medical Officer of Health (Dr. J.W. Scott Millar).
7. The eighteenth Annual Congress of the Institute of Public Health, held in Bloemfontein from 11th to 14th October 1960; Council's representatives: Councillor (Mrs.) E.A. Grobbelaar, the Assistant Medical Officer of Health (Medical) (Dr. A.H. Smith), the Director, Abattoir and Livestock Market (Dr. P.J. Meara) and the Chief Health Inspector (Mr. I.J. Distiller).

Some members of the Department's staff attended as delegates or as office bearers of the South African Health Officials' Association.

8. Conference organised by the South African Council for the Welfare of the Aged, held in Cape Town on 9th and 10th November 1960; Council's representatives: Councillor T. Glyn Morris and the Assistant Medical Officer of Health (Sanitation) (Dr. M.L. Freedman).

The following is a list of addresses and publications by members of the staff:-

DR. J.W. SCOTT MILLAR:

- (a) Presidential Address.  
Annual General Meeting of National Council for Mental Health,  
Johannesburg, 12th October 1960.
- (b) "Investigation into Maternal Deaths".  
Opening Address at the Refresher Course for Health Visitors organised by the  
Health Visitors Discussion Group, Southern Transvaal Branch,  
Johannesburg, 27th October 1960.
- (c) "Some Health Aspects of Nutritional Problems".  
Opening Address to Nutrition Society of Southern Africa,  
Johannesburg, 7th November 1960.



-2-

DR. M.H. GOLDBERG:

- (a) As a member of S.A.N.T.A. (National), Health Education and Publications, Sub-Committee, Talks to:-

Brakpan Rotary, Randfontein Rotary and Lodge;  
 Parent Teachers Associations of Emmarentia School,  
 Roosevelt Park Primary, Rose Gordon Nursery School; and  
 Johannesburg Business Executive Association.

- (b) "Social Implications of Pulmonary Tuberculosis and Rehabilitation".  
 Address to Health Visitors Congress,  
 Johannesburg, December 1960.

DR. E.G. WHITE:

"The Industrial Effluent Policy of the Local Authority with Reference to the Control of Pollution".  
 A Lecture to the Scientific Council for Africa South of the Sahara Specialists Meeting on Water Treatment.  
 Pretoria, October 1960.

MR. D.W. OSBORN:

- (a) "My Visit Overseas in 1959 to Various Sewage Works".  
 An Illustrated Talk to the Council for Scientific and Industrial Research  
 July 1960.
- (b) "Activated Sludge".  
 A Paper to the Institute of Sewage Purification,  
 August 1960.

MR. N.V. HEATH:

"The Department's Activities in Hygiene and Health Education as Affecting the Hotel and Boarding House Trades in the City".  
 Address to the Hotel (Non Liquor) Association of the Transvaal,  
 Johannesburg, October 1960.

WITWATERSRAND TECHNICAL COLLEGE.

Lectures in their own subjects were given to trainee Health Inspectors and Health Visitors by Dr. I.W.F. Spencer, Dr. M.M. Greathead, Messrs. A.H. Spargo, A.H. Maxwell, N.V. Heath and J.S. Glover, Dr. O.I.B. Kreher, Misses M. Bergh and R.C.C. Sangerhaus, Dr. E.G. White, Messrs. D.W. Osborn, J.G. Mortimer and Miss E.S. Hogg.



## FINANCIAL SUMMARY CITY HEALTH DEPARTMENT.

DETAILS	1959 - 1960			* COST OF MEDICAL SERVICES IN LOCATIONS 1959 - 60	
	EXPENDITURE	INCOME	NET COST		
	£	£	£		£
Chemical Division	47,021	401	46,620	Outpatient Services - Clinic	151,284
Child Welfare	64,173	10,517	53,656	Outpatient Services - Domiciliary	16,796
Supervision of Nursing Homes and Midwives	4,022	1,184	2,838	District Midwifery Services	55,581
Nursery Schools	30,644	7,263	23,381	Ante-Natal and Post-Natal Clinics	13,601
Health Inspection	173,819	29,324	144,495	Dental Services	16,734
Disinfecting Stn.	7,778	57	7,721	Child Welfare - Clinics	58,830
Food Distribution	63,108	54,638	8,470	Child Welfare - Domiciliary	1,002
Immunisation Serv.	10,164	2,073	8,091	Tuberculosis - Clinics	25,675
Fever Hospital	82,007	59,033	22,974	Tuberculosis - Domiciliary	57,496
Waterval Hospital	122,867	91,407	31,460	Venereal Disease - Clinics	2,818
Tuberculosis (3)	306,147	245,442	62,705	Venereal Disease - Domiciliary	77
Venereal Disease (3)	5,886	715	5,171	Ambulance Services	26,082
Infectious Diseases (3)	15,414	1,959	13,455	Hospital Services	112
Pest Control	40,804	1,393	39,411	Midwifery Transport	29,638
Public Conveniences	54,601	3,948	50,653		
Medical Examination Centre at Native Registration Depot	12,021		12,021		455,726
Medical Services * in Native Locations	455,726	291,115	164,611	<u>INCOME</u>	
Sub Total	1,498,202	800,469	697,733	Recoveries under the Public Health Act	61,163
Head Office Building	(1) 1,191	(2) 16,959	CR 15,768	Subsidy from Transvaal Provincial Administration	229,952
Total as per Published Accounts	1,499,393	817,428	(4) 681,965		291,115

## NOTES

(1) Furniture and Equipment not distributed to the various services.

(2) Rents for Voortrekker Building not distributed to the various services.

(3) Excluding expenditure in the Council's Native Locations

(4) (a) NET expenditure charged to N.E.A.D. for services provided for

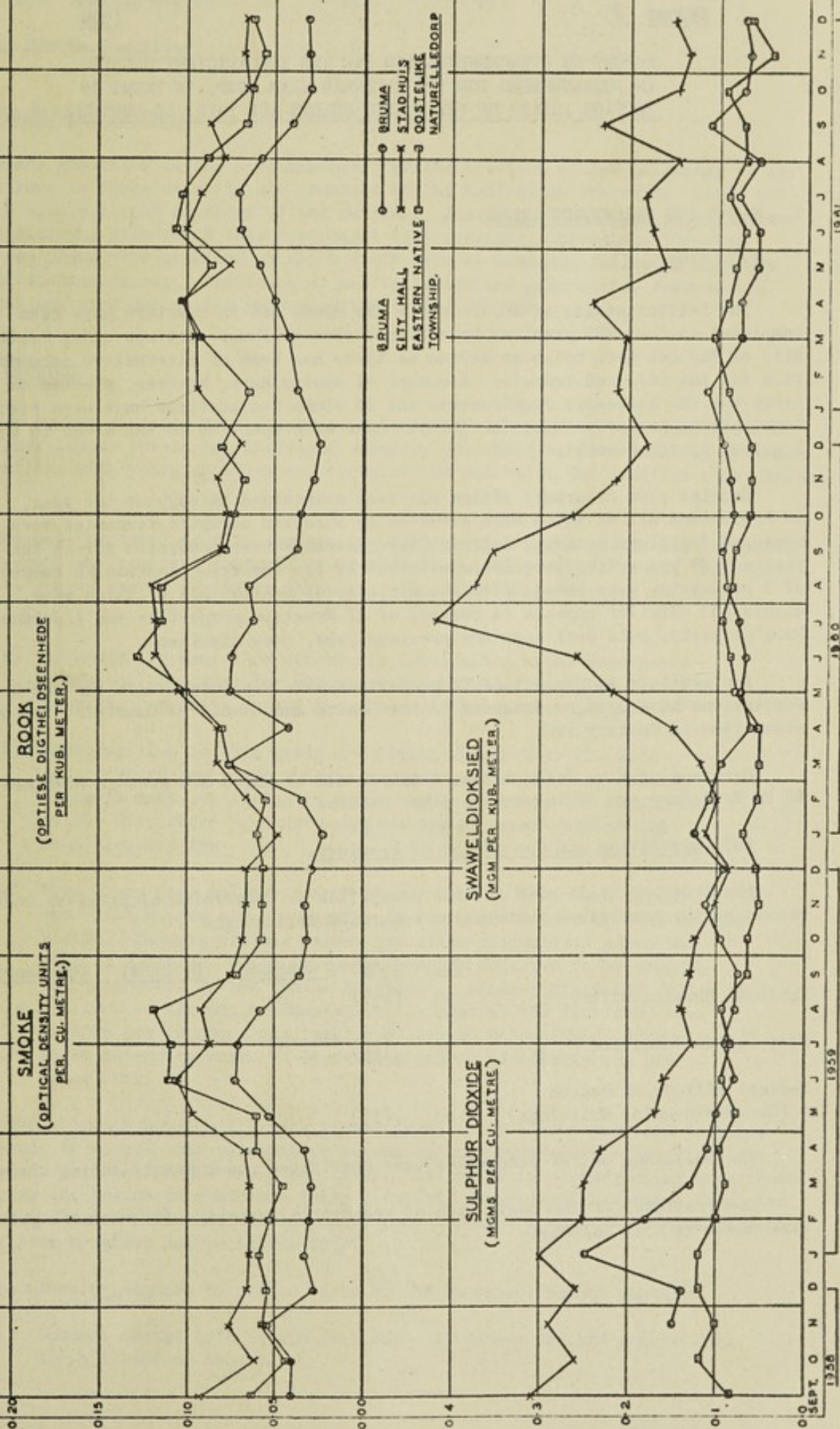
Non-Europeans ..... £295,189

(b) Charges made to other Departments for Chemical Services ..... £16,400

## EUROPEAN HOUSING 1959-60.

	£
<u>Expenditure</u>	198,750
<u>Income</u>	167,378
<u>Net Expenditure</u>	31,372







CITY OF JOHANNESBURG.

REPORT B.

1960

REPORT ON OVERCROWDING AND BAD AND INSUFFICIENT HOUSING  
IN JOHANNESBURG FOR THE CALENDAR YEAR 1960, IN TERMS OF  
SECTION 131(2) OF THE PUBLIC HEALTH ACT 1919, AS AMENDED.

I. SLUMS AND INSANITARY AREAS.

(a) Slums.

The initial stages of action under the Slums Act in Newclare have been completed in that 395 premises have been declared slums. Notices under Section 5(1) of the Act have not been served as there has been no alternative accommodation for the Coloured tenants. A number of owners have, however, elected to carry out the necessary requirements and 25 slums declarations have been rescinded. Negotiations are proceeding for the purchase of properties in the areas to be acquired by the Council.

Routine slum clearance action has been maintained throughout the year. 59 Properties all of which were situated in European occupied townships were measured for slums action. 4 Slums Court hearings were conducted during the year and 37 properties were declared slums by the Council. Appeals in respect of 3 properties were lodged with the Minister of Health, all of which were dismissed. Similar appeals in respect of 37 Newclare properties and 1 Johannesburg property, held over from the previous year, were dismissed.

Declarations in respect of 77 properties were rescinded and a further 6 rescissions have been recommended to the Health and Amenities Committee for consideration in January 1961.

Outstanding Slum Declarations totalled 444 of which 370 were in Newclare, 46 in Vrededorp and 28 in various other suburbs.

(b) Demolition and Conversion of Premises:

Applications dealt with for the demolition or conversion of premises under permit of the prescribed Authorities comprised following:-

	<u>1960:</u>	<u>1959:</u>	<u>Granted:</u>	<u>Refused:</u>	<u>Outstanding:</u>
National Housing Office ...	93	(117)	85	-	8
City Health Committee ...	40	(20)	37	2	1
Medical Officer of Health (Non-Residential Buildings)	63	(71)	63	-	-

The buildings on 187 properties were demolished under permit during the year.

Applications for the conversion of residential premises for business purposes were dealt with as follows:-

:- By ...



	<u>Received:</u>	<u>Granted:</u>	<u>Refused:</u>	<u>Undecided:</u>
By National Housing Office	22	19	2	1
By City Health Committee	1	1	-	-

## II. INSPECTION OF PLANS.

Plans submitted to the City Engineer for the erection of new buildings or for alterations to those existing are examined by the Sanitation Branch to ensure compliance with relevant sections of the Building, Drainage, Health and other By-laws and regulations with which this Department is concerned. Throughout the year 5,685 new plans were examined of which 4,020 were re-examined following requests for various amendments. The value of new buildings and alterations represented by plans approved during the year amounted to £17,815,455.

## III. HOUSING.

1. The number of flats provided by private enterprise for European families in the higher income levels has increased annually but these are not entirely suitable for families with young children and certainly do not cater for families of moderate means.

The most pressing need is for housing for families in the £30 - £45 per month income group who comprise the bulk of slum dwellers. Experience in the Montclare low-cost scheme over a period of three years has made three factors abundantly clear:

- (a) Although the Montclare houses are constructed at as reasonable a cost as any house for Europeans anywhere in the Union the economic rental is beyond the means of this income group.
- (b) Most families in this group are living fairly near the City centre where transport charges are reasonable and they refuse, although many are living in slums, to be moved to the outskirts of the City where transport charges are at least doubled and amenities are few.
- (c) This group will not pay a much higher rent to move to a scheme where the houses are necessarily austere and of more or less uniform design. Schemes of this nature are often stigmatised as in the case of Montclare which is quite commonly referred to by tenants and neighbours as the "White Location". Another deterring factor is the lack of servant accommodation, as most of the families, even in this low income group, employ a servant because many of the women go out to work. A surprising number of tenants own old motor cars.

The problem of housing this low income group is to find a solution to these factors and to ensure that alternative accommodation provided will be attractive and that it will in fact be accepted. Great difficulty is already being experienced in keeping the houses in Montclare fully occupied. Many families, moved from slum premises in Braamfontein and Paarlshoop in recent years, have left and are probably back in slum premises nearer to the City.

The measures adopted to reduce costs of the Montclare houses include:

- (i) Compact design (675 square feet for a 2 bedroom and 864 square feet for a 3 bedroom house).

:- (ii) ...



- (ii) Pre-cast hollow block construction instead of orthodox brick.
- (iii) Bag washed walls throughout instead of plastered walls.
- (iv) Small coal stove for cooking with no other heating facilities.
- (v) No verandahs.
- (vi) Out-buildings confined to a pre-cast storeroom 5ft. x 5ft. no servant's room or servant's lavatory.

There appears to be no way of further reducing costs as the standards are already barely acceptable or even unacceptable. The loan charges alone (for development, buildings and land) are £6.8.3. per month on a 2 bedroom house let at £8.0.0. per month, leaving £1.11.9. per month to meet maintenance charges, assessment rates, insurance refuse removal, administrative costs and a reserve for irrecoverable rents.

The cost of acquiring land close to the City is very high and would increase rentals considerably.

The rate interest on National Housing loans was increased on 1st January 1960 from  $4\frac{7}{8}\%$  to 5% and notice has been received that there will be a further increase to  $5\frac{1}{2}\%$  as from 1961.

When all these factors are considered the conclusion is inescapable that housing for the £30 - £45 per month income group cannot be provided on an economic basis and that some form of subsidy must be provided either by the Council or by higher authority. Unless this is done a vigorous slum clearance programme to clear the remaining slums occupied by Europeans cannot be undertaken without causing a great deal of hardship.

This slum clearance problem is closely linked to the town planning problem of blighted areas and the encroachment of industries into residential areas. Unless these areas are rezoned for industry or high density residential use, which is not possible in all cases, some form of subsidisation will be necessary to ensure satisfactory redevelopment. The Council is seeking powers to make "betterment" charges where areas are rezoned to the benefit of the owners. This may provide funds to redevelop other parts of these areas for low-cost housing.

2. The lack of alternative housing for Coloureds and Asiatics has held up slums clearance of premises and areas occupied by these races. The allocation of a site for Coloureds at Langlaagte in terms of the Group Areas Act is expected to be brought to finality in 1961.

3. The provision of Native housing and the clearance of slum squatter areas has continued to show satisfactory progress during the year.

The Western Areas clearance scheme involving the re-housing of the Native occupants elsewhere by the Natives' Resettlement Board is progressing satisfactorily. At the end of the year under review the Board had erected 15,344 houses including 167 under home ownership conditions; 15,292 of the houses were occupied. In addition, 133 Hostel units to accommodate 2,124 male Natives were completed and containing 1,696 inmates.



#### IV. HOUSING PROVIDED BY THE COUNCIL.

##### (a) European Housing.

No additional housing has been provided during the year but investigation of future housing sites and the preliminary planning of future housing projects were undertaken.

The details of existing housing schemes are given in Annexure A.

##### Sub-Economic Schemes.

The four sub-economic schemes of Jan Hofmeyr, Maurice Freeman and Extension and Pioneer continue to serve a very useful purpose in providing housing for the under £30 income group, albeit the bulk of families housed here consist of "broken family" units. The future housing of complete family units in these schemes is virtually a thing of the past in view of the unrealistic £30 per month income limit restriction. Whilst it cannot be denied that "broken families" require and deserve subsidised housing, the tragedy today is that the "complete" family unit, even where the husband is employed in the lowest paid avenues of European labour, cannot be offered subsidised housing as salaries rarely, if ever, fall below £30 per month and so, one of the primary objects of housing, to retain harmonious and healthy family units, is being defeated. Families just above the income limit have to pay rentals beyond their means for unsatisfactory hovels and this ultimately leads to frustration through debt, drunkenness, anti-social behaviour and desertion. Unfortunately assisted housing can only be offered after this process of family disintegration is completed, whereas the obvious answer to most social problems, in young and old, is to strive in every possible way to maintain the family unit.

The conversion of 20% of the houses in these sub-economic schemes to an economic basis was approved some years ago in an endeavour to assist the most desperate cases in the over £30 per month group and the 95 houses thus effected are always fully occupied and eagerly sought after by some rather desperate people on a fairly long waiting list. With little likelihood of relief for this group as referred to earlier in this report, it may be necessary for the Council to consider the conversion of a further 20% of these schemes although this would be rather a retrograde step as it will never be possible to replace these sub-economic houses in view of today's building costs.

##### Economic.

##### Montclare Estate Housing Scheme.

There is no evidence as yet that an extension of this scheme is warranted as it has become increasingly difficult during the past year to keep the 244 low cost houses in the scheme fully occupied. The austere design of the houses and high transport costs to the central city area still appear to outweigh the benefits of the scheme to the £30 to £45 or even the £40 to £60 income group. There is no doubt that the high transport costs play a vital part in their budgets and hence their reluctance to vacate even slum premises which are situated close to their place of employment or to the central area. The problem of providing acceptable housing for this group has already been mentioned.



South Hills - (Letting and Selling Project).

Of a total of 1317 houses and flats built in South Hills, Welfare Park and Extension 451 houses and 189 flats were letting units as at 31st December 1960. The houses in these townships are let to full capacity and are meeting a need for the lower middle income group. Adequate shopping facilities, Primary and Secondary Schools, and a good transport service cater for all needs and an additional amenity in the form of a Community Centre has been planned; building on this project is expected to commence early in the new year.

The letting of the 189 Flats continues to present a problem and at no time since their completion have all the flats been occupied. The bachelor flats have not proved popular and, in an effort to overcome this, an application has been made to the National Housing Office for the conversion of a portion of its loan in respect of the bachelor flats to a 15/-% loan. If this is approved the rentals can be lowered considerably and there is little doubt that the flats will then be occupied by old aged couples.

The number of houses sold in this scheme continues to maintain a fairly steady level, there being almost as many surrenders of purchase as there are new sales. The main reason for surrenders appears to be transfers to other centres, financial difficulties and deaths in the family.

Excluding sales cancelled by surrender or default, 459 houses had been sold to tenants privileged to make a £25 deposit, and 447 to other non-tenant purchasers.

Many of the purchasers in both categories have effected improvements to their properties at their own expense whilst others have obtained loans made available by the Council for providing servant's quarters and garages. In general, this scheme is showing a more pleasant aspect whilst fostering the sound principle of home ownership and providing accommodation at reasonable rent levels for the income group being catered for.

Bad Debts and Rent Arrears.

The following schedules reflect the extent of bad debts over past years, and legal action instituted for rent arrears during 1960, in all of the European schemes:-

Bad Debts.

SCHEME	PERIOD COVERED	TOTAL RENT ACCRUALS	TOTAL BAD DEBTS	RATIO OF BAD DEBTS TO ACCRUALS
South Hills and Ext.	1947/60	£913,020.14.3.	£8,426. 2.3.	.9229%
Jan Hofmeyr	1952/60	£ 65,603. 2.6.	£ 205.18.7.	.3139%
Maurice Freeman	1952/60	£ 62,781. 7.0.	£ 276.13.0.	.4407%
Pioneer	1952/60	£ 46,544.15.9.	£ 130. 8.7.	.2802%
Montclare	1958/59	£ 59,957.19.2.	£ 831. 0.9.	1.3860%

:- Rent ...



Rent Arrears (1960).

SCHEME	NEW CASES REFERRED TO THE COUNCIL'S SOLICITORS OR THE CITY TREASURER FOR COLLECTION OR LEGAL ACTION	CASES CLEARED	ABSCONDINGS	EJECTMENTS
South Hills & Ext.	107	60	32	3
Jan Hofmeyr	6	4	NIL	1
Maurice Freeman	3	1	NIL	NIL
Pioneer	4	2	2	NIL
Montclare	55	15	19	4

(b) Housing of the Aged.

Since this Department has been delegated the responsibility of housing the aged, following the dissolution of the Social Affairs Department, it is the intention initially to provide housing for this group in the form of cottages or suitable units for occupation by aged couples and single men and women who are able to care for themselves without providing board or specialised medical attention. Existing private organisations appear to be well able to cater for aged persons requiring close supervision and attention due to failing health and other disabilities.

Sites offering good possibilities for the erection of small groups of dwelling units suitable for aged people were found in the Jan Hofmeyr and Maurice Freeman Schemes wherein a total of 9 single and 7 double units could be erected to accommodate 92 persons at an estimated cost of £35,844. Applications for  $\frac{3}{4}\%$  loans for these two projects have been submitted to the National Housing Office. It has been recommended that the rentals be £3.10.0. per month for single units and £5.15.0. per month for the double flats, or one fifth of the assessed income of the prospective tenants whichever is the lesser.

Application has also been made for the conversion of the South Hills bachelor flats to the  $\frac{3}{4}\%$  rate, referred to earlier in this report, which will make available a further 18 units for aged couples at similar rent levels.

An additional site, owned by the Provincial Administration in the Pioneer Housing Scheme, is suitable for the erection of similar units; negotiations are in hand to acquire this land.

(c) Land Selling Schemes.

Details of these schemes are contained in Annexure B.

Montgomery Park.

The opening of this township and the offering for sale of the 421 residential stands therein was an important occasion in the Department's housing activities during the year. Apart from the lively public interest displayed in the methods, prices and conditions arranged for the disposal of the stands, the establishment of this township was particularly significant in that it marked the final stage of a very successful housing venture initiated by the Council shortly after the close of World War II. The entire scheme, the Roosevelt Park complex, comprises the three contiguous townships of Franklin Roosevelt Park and Extension No. 1 and Montgomery Park. The underlying purpose



of the project was to make available to families in the middle and lower middle-income groups, stands at a reasonable price to enable them to build their own homes. Over the years it has been necessary to increase the stand prices due to rising servicing costs; nevertheless, they have been maintained well below the level of stands of and equivalent size in the surrounding private townships. It has also been necessary from time to time to modify the conditions governing income-limits and the purchase and re-sale of stands for changing circumstances. The stands vary in size from one fifth to one third of an acre and the prices range from £400 to £700.

The Sale of the Montgomery Park stands was conducted by means of a public draw held to determine the order in which the approved applicants would have the choice of selecting any of the stands on offer. However, of the 520 applicants participating in the draw for the 421 stands, only 290 finally completed their purchases. Of the remaining 131 stands 48 had been sold out of hand by the end of the year. It is considered likely that the balance will be disposed of without difficulty.

Building commenced almost immediately after the sale and by 31st December two homes had already been completed and some fifteen others were in various stages of construction. Great building activity is expected early in the new year when the building trade resumes after the annual holiday.

#### De Wetshof Township.

The sale of 130 residential stands by public auction in February 1959 was also well received by the public and has resulted in the development of a pleasing and colourful suburb with some very attractive homes. At the end of the year 80 houses had already been built in this area.

#### (d) Lionel Leveson Girls' Residential Club.

This Residential Club for girls in the lower income bracket is serving a very useful purpose in that it provides full board and lodging at subsidised rates on a graduated scale from approximately £2.0.0. to £10.0.0. per month. The Club is situated in pleasant surroundings in Pioneer Housing Scheme and has accommodation for 50 girls.

#### (e) Future European Housing Projects.

##### De Wetshof Extension No. 1.

This scheme is planned as a layout of 202 residential stands of approximately one sixth to a quarter acre in area. The stands are to be offered for sale to approved applicants in the under £1,200 per annum income group under conditions similar to those applying to the Montgomery Park land selling scheme. No further progress could be made during the year as waterborne sewage disposal is not yet available in the area.

##### Jeppestown Redevelopment.

This project is designed to eliminate a blighted section of this congested

:- suburb ...



suburb and in its place to erect a modern housing scheme with economic rentals suitable for the relatively low-income families living in that area. Tentative planning and cost assessments have been put in hand but there are indications that high land expropriation costs and the achievement of an acceptable, if austere, standard of building and layout may require some form of subsidisation to keep the rentals at a reasonable level.

Bezuidenhout Valley.

This low-cost scheme is intended to be developed in conjunction with the Jeppestown project. The problems relating to costs and rentals have already been dealt with in general principle.

Westdene.

A scheme comprising some 170 dwellings on the letting/selling principle for families in the £60 to £80 per month income group is contemplated in this area following the clearance of Sophiatown which is virtually completed. Progress will depend on an assessment of the demand for a scheme of this kind in this vicinity.

Vrededorp and Paarlshoop.

Proposals for the redevelopment of these two townships for re-housing low-income families have been considered. Little progress can be made unless and until the obstacles presented by high expropriation and other costs can be overcome.

(f) Coloured and Asiatic Housing.

The general situation affecting the housing of Coloureds and Asiatics has not materially changed during the year, although the urgent need for more housing for Coloured families in the lower income groups has become more pressing.

Details of housing provided by the Council for Coloured people are contained in Annexure C.

The Council has not been in a position to consider the provision of housing for Asiatics as no group area suitable for this purpose has yet been proclaimed within the Municipality.

The determination of areas for the different racial groups in terms of the relevant Act has not yet been brought to finality; the Council is consequently unable to undertake positive planning for the provision of further housing for Coloureds or for Asiatics.

No accommodation specifically for aged persons in these racial groups has been established by the Council.

(g) Housing of Natives in Locations and Hostels.

The general administrative control of housing schemes for Natives and all other Non-European races is the responsibility of the Manager, Non-European Affairs Department. Technical services fall under the control of the Heads of the Departments concerned, whilst this Department is responsible for the proper control of sanitary conditions in the townships.

: - Throughout ...



Throughout the year steady progress has been continued with the erection of new houses, although at a relatively slower rate than has been maintained in previous years. Building operations have included the consolidation of existing established townships, initially functioning as 'site and service' schemes, through the erection of permanent dwellings in place of temporary shacks, and re-housing the remaining families occupying shacks and shelters in the Shantytown squatter camp which is now cleared of all buildings with the exception of a few used for trading purposes. In all, some 6,155 permanent dwellings were erected and approximately 5,140 site and service shacks and emergency slum shelters have been demolished.

The Natives Resettlement Board conducting the clearance scheme for the western areas has also made a valuable contribution to Native housing. At the end of the year the Board had completed the erection of 15,344 houses and 133 hostel units to accommodate 2,124 male Natives in the Meadowlands and Diepkloof areas.

#### Hostels.

For the purpose of providing housing for single Native men and women employed in the Municipal area and who are not accommodated by their employers, the Council has erected eight hostels with a total capacity of 24,398 beds. Five of these hostels are situated in the Municipal area but later additions were, in accordance with Government policy, erected in the Native Townships.

#### General.

Details of the housing provided by the Council for Natives in the various townships and locations are contained in Annexure D.

Notwithstanding the good progress made in Native housing development there is still much to be done. The re-housing of the residents of Pimville who are living under grossly insanitary conditions is a case in point. This is awaiting decisions as to whether the township is to be re-developed on the same site or moved elsewhere.

Effective Sanitary control of the extensive and densely populated Native townships already established or in the course of development necessitates a well organised Sanitation Division comprising 18 qualified European and Non-European Health Inspectors and a Pest Control section with a personnel of 8 European and 36 Non-European members.

On the whole, the standard of sanitary conditions in the township is reasonably good, but this is maintained only by close and constant attention. The sewerage reticulation programme has continued to make good progress. Some 308 miles of sewer had so far been laid and approximately 14,000 dwellings connected thereto with consequent discontinuance of an equivalent number of pail services. The sewer reticulation of Eastern Native Township was completed and it is anticipated that the installation of dwelling connections will be commenced early in 1961. Other developments, which have had some bearing on sanitation control measures during the year, were the completion of the rehousing of families from the Shantytown emergency camp and the demolition of the last of the insanitary residential shelters which had been in existence for several years; the construction of stormwater drains in



Orlando East and certain low-lying sections of Jabavu which have previously caused considerable nuisance through the constant stagnation of stormwater in the streets.

Other items which are involved with sanitation control and which require continuous supervision and attention are briefly referred to hereunder:-

#### Unauthorised Structures.

The erection of shacks, fowl houses, storerooms and garages and the closing in of verandahs without authority and without regard for hygienic requirements.

#### Junk in Yards.

The accumulation of building materials, old motor vehicles and other types of junk encouraging rodent harbourage and breeding.

#### Animals.

Wood and coal traders using horses or mules for drawing their vehicles stable their animals on residential sites in the older schemes where no other stabling facilities are provided. Fly breeding and other nuisances stem from the unsatisfactory methods adopted for manure and urine disposal.

The keeping of cows in insanitary conditions and the illicit sale of milk of dubious quality or cleanliness is a source of trouble in Pimville.

The stabling of goats in improvised stables, and the slaughtering of these animals ostensibly for ceremonial and ritual occasions has still continued on a large scale with little or no control, and to the detriment of meat sales by bona fide licensed traders.

Most of the townships have a large number of half-starved dogs perpetually raiding and upsetting refuse bins and scavenging in general; many others are chained up in backyards in a continuous state of captivity.

#### Unlicensed Trading.

Throughout the townships the unlicensed sale of fruit and other foodstuffs, the hawking of offal and milk usually from uncontrolled sources continues on quite an appreciable scale. Whilst it may be conceded that offal affords a comparatively cheap source of food with a high protein content, its unclean state at the time of sale and the unsatisfactory handling methods could not be condoned. Improvements have been effected by arranging for the suppliers to clean the offal before allowing it to be sold to hawkers; the control and licensing of these traders and the provision of suitable stalls for the display and sale of this commodity are matters being considered.

: - Trading ...



Trading Premises.

All of the townships are adequately provided with trading premises carrying a range of commodities to satisfy the normal needs of the residents. In the more recently developed areas the buildings and equipment are of a high standard, but in the older townships many of the buildings are old and dilapidated with outdated equipment; problems are frequently created through congested or defectively constructed food storage facilities.

All of the foodstuff trades require continuous and competent supervision of preparation, storage and display procedures to ensure freedom from contamination. During the year 46 traders were prosecuted for insanitary premises and 11 for exposing foodstuffs to contamination.

Hostels and Beerhalls.

A regular check on the male hostels is required to ensure general cleanliness and control of rodent and other vermin infestations. The proper functioning of the beerhalls and gardens in respect of cleanliness and maintenance entails similar inspections.



## COUNCIL EUROPEAN EXISTING SCHEME

SCHEME	DATE ESTABLISHED	TOTAL NO. OF DWELLINGS	TYPE OF SCHEME	TYPES						RANGE OF WEEKLY RENTALS INDEPENDENT OF INCOME SERVICES	APPROX. UNIT COST (EXCLUDING LAND) AND SERVICES	APPROX. AREA IN SQ. FEET	TOTAL CAPITAL COST	REMARKS
				2	3	4	1	2	3					
JAY RUNNER	1977	194 Houses	Sub-Economic Letting with graduated rentals up to economic.	(26 semi) 66	102					From 12/6 to 39/-	£378 (pair) £623 £590	600 to 709	£146,199	This scheme contains brick built detached and semi-detached cottages on 70' x 40' stands. A communal hall with nursery school and Child Welfare Clinic is provided.
MAURICE FREEMAN	1959	70 Houses 48 Flats	Sub-Economic Letting with graduated rentals up to economic.	30	40			36	12	From 15/6 to 46/-	£774 £876 £934 (Average per Flat)	802 to 990	£169,250	This scheme is similar to the above with an improved standard of cottage. A communal hall and nursery school are also provided.
MAURICE FREEMAN EXTENSION	1945	41 Houses	Sub-Economic Letting with graduated rentals up to economic.	18	19	4				From 15/6 to 46/-	£1,135 £1,270 £1,465	620 to 990	£ 59,676	Additional cottages forming part of the above original scheme.
PIONEER	1959	96 Houses 24 Flats	Sub-Economic Letting with graduated rentals up to economic.	43	53			18	6	From 15/6 to 46/-	£710 £836 £752 (Average per Flat)	620 to 990	£126,959	The units in this scheme are identical with those in Maurice Freeman with a communal hall but in addition a residential club is provided to accommodate 50 low-paid working girls.
WENTWORTH	1957/58	244 Houses	Economic Renting	63	181					WEEKLY RENTALS £1.17.0. £2.10.10. £3.04 (sema each).	£1,008.5.0. £1,089.5.0. £924 (sema each).	675 to 864	£257,332	This Pilot Scheme contains pre-cast hollow block constructed detached and semi-detached cottages of an austere design on 40' x 80' stands but accommodation and sizes of rooms is adequate for this low-cost type of scheme.
WILKINSON PARK (SCOTT HILLS AND EXTENSION)	1945 to 1947	939 Houses	Economic renting and selling	454	432	53				£2.8.0. to £3.0.0.	1945 1947 £1,206 £1,140 £1,336 £1,317 £1,475 £1,428	787 to 1301	£1,854,752	This scheme was originally built as a sub-economic project under the National Housing Formula. Since Dec. 1952 converted to an economic renting and selling status available for purchase by tenants and other on favourable terms. The cottages are well built detached types on stands averaging 60' x 80' or 50' x 100'.
- do -	1948/49	Shops	Economic Renting											This Scheme contains a shopping block erected through a Housing Loan of £20,242. The block comprises nine shops of various essential types leased to approved applicants at economic rentals. In addition there is a Municipal Branch Library, Child Welfare Clinic and a Post Office.
- do -	1956 to 1957	189 Houses	Economic Renting	30	150	9				£2.11.11 £2.6.57 £1.419 £3.10.5 £1,709	£2,111.11 £2,657 £1,419 £3,105	690 to 1040		The houses in this scheme are well built detached houses of either orthodox brick or "neofines" structure on 50' x 100' stands and for letting units only. Servants quarters are provided. There are nine blocks of flats comprising 21 flats each in three storeys. They are built by the hollow concrete panel method of construction.
GRAND TOTALS		1773 HOUSES 261 FLATS	Economic Renting	730	977	66	27	108	54	£1.18.0. to £2.17.8.	£745 £1,187 £1,687	278 to 606	£3,218,530	



## LAND SELLING SITES (RENTAL).

TOWNSHIP.	DATE OF DISPOSAL NO. OF RESIDENTIAL STANDS.	RENTAL SIZE OF STAND.	FACILITIES.	GENERAL REMARKS
Franklin Roosevelt Park.	1946	512	5 church sites. 2 Primary School sites (one built). Nursery School (built). Parks and open spaces. Fully constructed roads. All essential services. —oo— Business and Community Centre which will be developed now that the complex is complete by the disposal of Montgomery Park.	This township was restricted to returned soldiers and families with incomes below £1,200 p.a. It is situated in the north-western suburbs in ideal surroundings. It is a very popular suburb of Johannesburg and homes here are always in great demand.
Franklin Roosevelt Park Extension No. 1.	1955	264	1 Church site. High School (built). Nursery School site. Parks and open spaces. Fully constructed roads and all essential services.	An extension of and adjacent to the above township. The above remarks apply here too, but the income limit restriction was raised to £1,500 per annum.
Montgomery Park.	1960	421	Church site. School site. 12 large Flat or General Residential sites. Parks and open spaces. Roads will be fully constructed and all essential services are available.	This township is adjacent to the two townships above and completes what is known as the "Roosevelt Park complex". The township is well planned with somewhat smaller stands.
De Wetshof	1959	130	Flat site. Nursery School site - School site. Large parks and open spaces. Roads have been fully constructed and all essential services are provided.	This township, situated in the eastern suburbs adjacent to the townships of Cyrildene and Observatory Ext., is in a select area of the city. Adjoining the western boundary of the township is a large 100 acre park and a golf course. Indications are that this township will develop on the lines of Cyrildene which caters for the upper-middle income group.
De Wetshof Extension No. 1.	1961 Approx.	202	2 Church sites. 2 Business sites. Nursery School site. Parks and open spaces and all services will be fully constructed before the disposal of stands. Roads will be fully constructed.	Situate to the south of De Wetshof and adjacent to the lower-middle income group with a probable income limit restriction of £1,200 per annum. It is anticipated that it will prove a popular area and develop on the lines of Franklin Roosevelt Park. The plan and proposed Conditions of Establishment have been approved by the Townships Board but development cannot take place until the Council's new Northern Disposal Works have been completed.

TOTAL NUMBER OF RESIDENTIAL SITES 1529.



COUNCIL COLONISED HOUSING SCHEMES.

SCHEME	DATE ESTABLISHED	TOTAL NO. OF DWELLINGS	TYPE OF SCHEME.	TIMES								RANGE OF WEEKLY RENTALS DEFINED BY INCOME.	APPROX. UNIT COST (EXCLUDING LAND AND SERVICES)	APPROX. AREA IN SQ FEET	TOTAL CAPITAL COST.	REMARKS
				HOUSES				FLATS								
				1 BR	2 BR	3 BR	4 BR	1 BR	2 BR	3 BR	4 BR					
Coronationville (1st Section)	1936	250 Houses	Sub-economic Letting.	26	158	66	-	-	-	-	From 6/- to 12/- (according to type of house).	£814 average overall cost	722 average	-	All houses are of a good standard of construction in brick and iron.	
Coronationville (2nd Section)	1946	251 Houses	Sub-economic Letting	10	125	116	-	-	-	-	From 11/- to 27/- (according to type of house).	-	657 to 1606	£508,703	This scheme is well equipped with amenities comprising a community centre, library and recreational facilities. Sewerage is provided throughout.	
Coronationville (R.R. Reid Village).	1953	50 Flats	Minimal Economic Letting	-	-	-	-	-	50	-	£5. 12. 6. per month.	-	-	£59,964	Built by R.E.S.L. for Ex-Service-men, and administered by the Council.	
Noordgeest (1st Section)	1938	350 Houses	Sub-economic Letting	-	175	175	-	-	-	-	5/- to 6/6 (according to type of house)	£276 average overall.	635 average	£169,169	The 1st and 2nd Sections are constructed in brick and iron of a good standard, the remaining section being of an austere standard in concrete or brick and iron.	
Noordgeest (2nd Section)	1946/47	250 Houses	Sub-economic Letting	-	250	-	-	-	-	-	8/1d.	£746 average overall.	714 Average	£177,930	Amenities include a communal hall, recreational facilities and a child welfare and medical services clinic. Sewerage is provided to all units except 139 for which pumping facilities are required.	
Noordgeest (3rd Section)	1953	100 Houses (50 pairs semi.)	Economic Letting	-	100	-	-	-	-	-	23/1d.	£770 per pair.	1080 per pair	£50,830	* This section was developed in three successive stages with separate economic loans for 150, 70 and 139 houses.	
Noordgeest 4th, 5th & 6th Sections.	* 1954 to 1957	359 Houses	Economic Letting	-	359	-	-	-	-	-	18/6d.	£195 to £207	527	* £125,295		
GRAND TOTALS		1550 Houses 50 Flats		36	1167	357			50							



**NATIVE TOWNSHIPS - HOUSING AND POPULATION STATISTICS:**  
YEAR ENDED 31ST DECEMBER 1960.

(SUPPLIED BY RESEARCH BRANCH - NON-INDIGENOUS AFFAIRS DEPARTMENT - 21ST FEBRUARY 1962).

T O W N S H I P	POPULATION AS AT 30TH JUNE 1960	ETHNIC GROUP	DATE ESTABLISHED	TYPE OF SCHEME	TOTAL NO. OF SITES IN SCHEME	NO. OF HOUSES BUILT AND OCCUPIED	SITES AND SERVICE TRACKS	TOTAL	TOWNSHIP LAYOUT AND OCCUP.				OTHER SITES		
									DWELLING		BUSINESS			TRADING/RESIDENTIAL	
									LAYOUT	OCCUPIED	LAYOUT	OCCUPIED		LAYOUT	OCCUPIED
ORLANDO (ALL SECTIONS)	65,696	Mixed	1.11.34	Township	12,106	11,312	-	11,312	11,524	368	225	-	214		
FINVILLE	33,561	"	24.10.1905	"		133	1,137 (Not site & service)	1,270		UNAVAILABLE					
JABAU	27,742	"	19. 5.50	"	1,865	5,100	-	5,100	1,700	1,700	72	-	81		
DATE	11,696	"	4. 2.55	Village	2,221	1,948	-	1,948	1,948	27	25	-	246		
POPOLO CENTRAL	13,293	"	11. 2.55	"	2,480	2,330	-	2,330	2,369	50	38	-	61		
EASTERN NATIVE TOWNSHIP	3,699	"	19. 8.25	Township	639	627	-	627	627	6	6	-	6		
WESTERN NATIVE TOWNSHIP	15,343	"	15.12.39	"	2,297	2,278	-	2,278	2,278	19	19	-	-		
CENTRAL WESTERN JABAU	5,528	Sotho	11. 3.55	Site & Serv.	1,201	1,055	62	1,117	1,121	38	26	16	26		
CENTRAL WESTERN JABAU	1,994	Nguni	11. 3.55	"	344	269	52	321	328	10	9	-	6		
POPOLO NORTH	8,767	"	11. 2.55	"	1,673	1,452	47	1,499	1,575	45	41	17	34		
POPOLO SOUTH	4,152	"	11. 2.55	"	740	688	11	699	703	20	18	6	11		
MOLETSANE	7,086	Sotho	9.11.56	"	1,993	1,432	51	1,483	1,477	65	45	16	35		
MOLETSANE	9,461	"	9.11.56	"	2,110	1,998	72	2,030	2,033	34	30	8	35		
MOROKA NORTH	2,671	"	30. 4.54	"	483	437	22	459	472	8	8	-	3		
SEMOJANE	8,607	Nguni	7.11.58	"	1,930	1,474	35	1,909	1,517	35	23	20	398		
TLADI	8,857	Sotho	9.11.56	"	2,072	1,897	40	1,897	1,896	33	26	20	4		
DELAMALO	7,311	Others	25. 5.56	Site & Serv. Slum Clear.	1,450	1,126	7	1,133	1,134	25	20	18	3		
DELAMINI	9,052	Nguni	25. 5.56	"	1,801	1,417	10	1,427	1,424	44	22	3	330		
BOGEMI	10,407	"	7.11.58	"	2,748	719	1,595	2,304	2,467	66	26	165	7		
JABULANI	13,684	"	9.11.56	"	2,185	2,037	11	2,048	2,072	50	27	24	11		
VILEDI	20,077	Sotho	9.11.56	"	4,413	4,043	23	4,066	4,082	102	34	40	9		
LELA	31,199	Nguni	7.11.58	"	5,902	5,457	127	5,584	5,999	141	70	24	7		
IKHADI	7,949	"	25. 5.56	"	1,676	1,450	35	1,485	1,573	44	36	25	9		
CHLAVELLO EXTENSION NO.1	3,803	Others	25. 5.56	Slum Clear.	635	541	1	542	543	10	4	-	82		
MAFETLA	8,846	Sotho	9.11.56	"	1,664	1,503	9	1,512	1,539	52	28	18	7		
PHIPI	5,194	Nguni	9.11.56	"	942	862	5	867	862	29	19	16	5		
PHIPI	6,119	Sotho	9.11.56	"	1,865	1,028	-	1,028	1,028	22	16	-	15		
TOTALS	351,534	-	-	-	58,235	54,533	3,342	57,875	53,091	1,427	913	438	107		
													2,495		

**H O U S I N G**

		Unit Buildings		Beds		Sanitary Facilities		Population as at 31.12.60
		Double 32 Beds	Single 16 Beds	Total	Occupied	Abution Blocks	Latrine Blocks	
Dube Hostel	1956	129	64	5,152	5,033	16	59	5,033
Mancfield Hostel	1956/7	137	27	4,976	4,544	15	52	4,544
Jabulani	1958/9	104	64	4,352	2,490	13	51	2,490
TOTALS		370	155	14,480	12,067	44	162	



