

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

Contributors

Johannesburg (South Africa)

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M.O.H. REPORT
1964

CITY OF JOHANNESBURG



REPORT

ON THE HEALTH OF

JOHANNESBURG

IN

1964

A. H. SMITH

M.B., Ch.B., D.P.H., D.T.M. and Hy., F.R.S.H.

MEDICAL OFFICER OF HEALTH

RCB/19.19

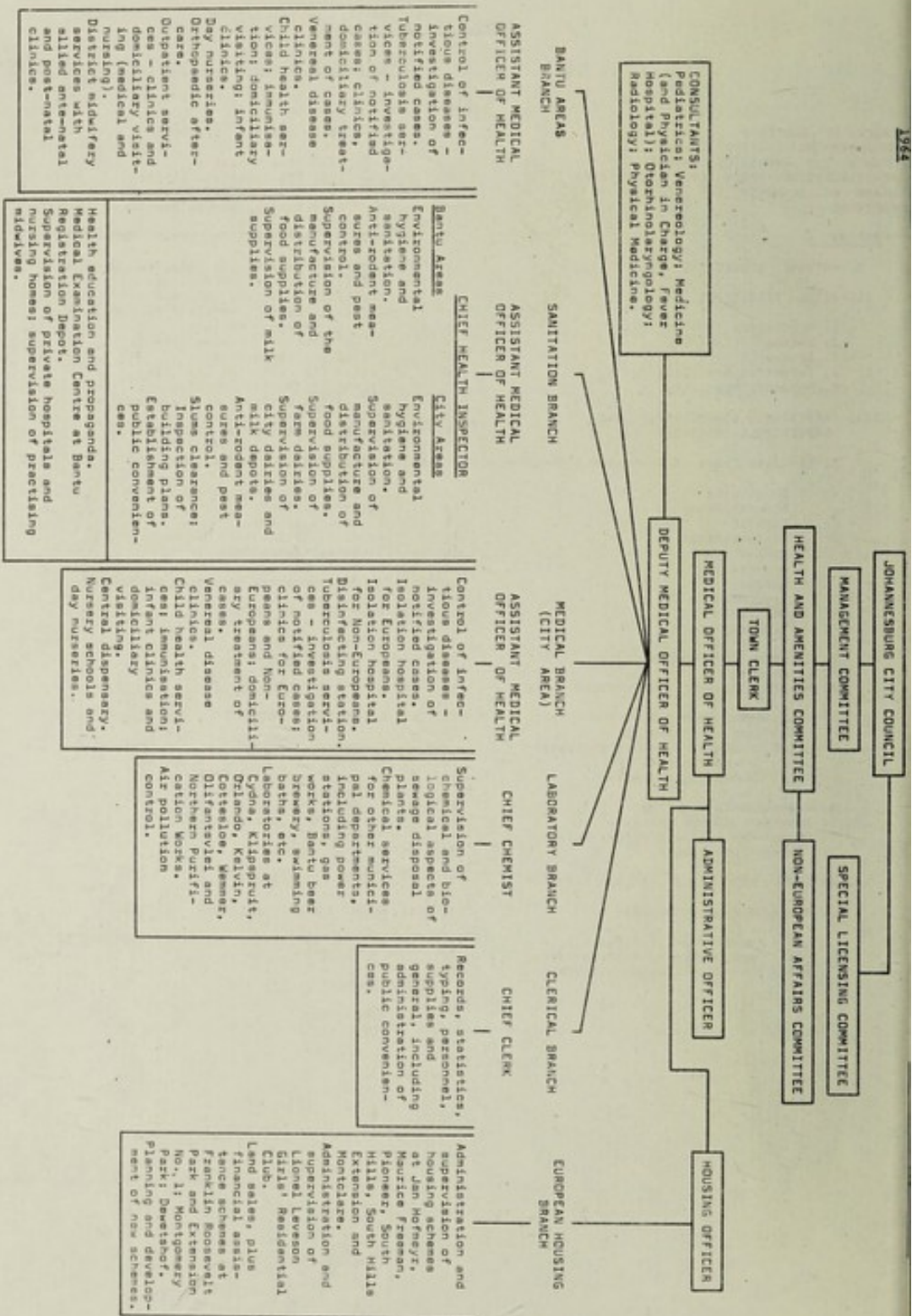


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CITY OF JOHANNESBURG
HEALTH AND AMENITIES COMMITTEE

To 11 March 1964

COUNCILLORS: MR. A.B. WIDMAN, M.P.C. - CHAIRMAN
DR. V.V. BOY, M.P.C.
MR. A.P.J. DE KLERK
MR. I. MYERS
DR. J.S. OTTO
MR. W.A. SAMMONS
MR. M. SKLAAR
MR. H.M. VAN RENSBURG
MR. M.J. POWELL
MR. H.F. DENNIS

ADMINISTRATIVE HEADS AND CONSULTANTS:

MEDICAL OFFICER OF HEALTH

DEPUTY MEDICAL OFFICER OF HEALTH

ASSISTANT MEDICAL OFFICER OF HEALTH

ASSISTANT MEDICAL OFFICER OF HEALTH

ASSISTANT MEDICAL OFFICER OF HEALTH

ASSISTANT MEDICAL OFFICER OF HEALTH

ADMINISTRATIVE OFFICER

CHIEF CLERK

CONSULTANTS:

Pediatrics

Venerology

* Medicine

Otorhinolaryngology

Radiology

Radiology

Physical Medicine

From 12 March 1964

MR. A.B. WIDMAN, M.P.C. - CHAIRMAN
DR. V.V. BOY, M.P.C.
MR. A.P.J. DE KLERK
MR. I. MYERS
DR. J.S. OTTO
MR. W.A. SAMMONS
MR. M. SKLAAR
MR. H.M. VAN RENSBURG
MR. M.J. POWELL
MR. A. MORRIS

J.W. SCOTT MILLAR (Retired 16.7.1964)
B.A., M.B., Ch.B., D.P.H., D.T.M. & Hy.,
F.R.S.H.

A.H. SMITH (From 17.7.1964)
M.B., Ch.B., D.P.H., D.T.M. & Hy., F.R.S.H.

B. MUNDEL
M.B., Ch.B., D.P.H., D.T.M. & Hy., F.R.S.H.

A.H. SMITH (To 16.7.1964)
M.B., Ch.B., D.P.H., D.T.M. & Hy., F.R.S.H.

M.L. FREEDMAN
D.B.E., M.B., Ch.B., D.P.H., D.T.M. & Hy., F.R.S.H.

I.W.F. SPENCER
M.B., B.Ch., D.P.H., D.T.M. & Hy.

H.S. HURWITZ (From 1.12.1964)
M.B., B.Ch., D.P.H.

E.M. COETZEE (To 31.7.1964)
A.M.I.P.H.E., R.S.H. Cert. for H.I.

N.J. SALMON (From 1.8.1964)

C.J. MORSHEAD

B.G. VON B. MELLE (To 30.6.1964)
M.B., Ch.B., F.R.C.S. (Edin.)

B. SIEFF
M.B., B.Ch.

A.L. JACKSON (To 31.1.64.)
B.Chir., M.B., M.R.C.P.

M. MALK (From 1.2.1964)
M.R.C.S. (Eng.), L.R.C.P. (London),
M.R.C.P. (London)

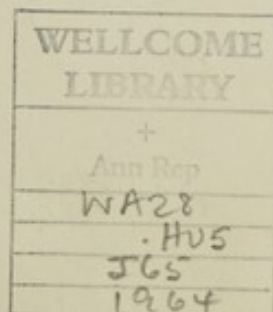
D.R. HAYNES
M.B., B.Ch., D.L.O., R.C.P. & S. (Eng.)

H.I. DSLER
M.B., Ch.B., D.M.R.E.

M. HURWITZ
M.B., Ch.B., D.M.R.D., R.C.P. & S. (Eng.), M.D.

C. ADLER
M.B., B.Ch., D. Phys. Med.

* and Physician in Charge, Fever Hospital.



HEADS OF BRANCHES AND SECTIONS:

CHIEF TUBERCULOSIS MEDICAL OFFICER	:	M.H. GOLDBERG - M.B., Ch.B.
CHIEF CHILD HEALTH MEDICAL OFFICER	:	G.I.B. KREHER - M.B., Ch.B.
MEDICAL SUPERINTENDENT, WATERVAL HOSPITAL	:	G.B. MILLER - M.B., B.Ch.
MATRON, WATERVAL HOSPITAL	:	M. MILLER - Reg. Nurse and Midwife, School Nog. and San. Cert. Deceased (31.1.1964)
	:	A.M. TAPPE - Reg. Nurse and Midwife (From 1.2.1964 to 2.3.1964 and from 1.8.1964 to 30.11.1964)
	:	A.C. Werdmuller - Reg. Nurse and Midwife (From 3.3.1964 to 31.7.1964)
SENIOR MEDICAL OFFICERS	:	E.N. ELLIS - M.B., Ch.B.
	:	L. EISENBERG - M.B., Ch.B.
	:	B. RICHARD - M.B., Ch.B., D.P.H.
	:	M. TAYLOR - L.R.C.P. and S., L.R.F.P.S. (To 4.7.1964)
	:	W.G. HEARN - M.B., Ch.B. (From 1.10.1964)
	:	M. MER - M.B., B.Ch.
	:	M.S. BROWN - M.B., Ch.B.
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., F. Inst., S.P., F.R.I.C., M.(S.A.) Chem. I. (To 29.2.1964)
	:	D.W. OSBORN - M.Sc. (Eng.), M.(S.A.) Chem. I., M. Inst. S.P. (From 1.6.1964)
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
ASSISTANT HOUSING OFFICER	:	W.M. McCONAGHY - M. Inst. P.H.
HOUSING SUPERVISOR	:	J.M.E. BUTLER - Housing Manager's Cert., R.S.H. Cert. for H.I., Primary Teacher's Higher Cert.
CHIEF HEALTH INSPECTOR	:	A.H. SPARGO - A.M.I.P.H.E., M.R.S.H., R.S.H. Certs. for H.I. and M. & D.F.
DIVISIONAL HEALTH INSPECTORS	:	T. PATTERSON - R.S.H. Certs. for H.I. and M. & D.F. (To 22.9.1964)
	:	J. LEDGETT - R.S.H. Certs. for H.I. and M. & D.F. (From 1.11.1964)
	:	A.H. MAXWELL - A.M.I.P.H.E., R.S.H. Certs. for H.I. and M. & D.F. and Trop. Hy.
	:	A.C. WALLACE - R.S.H. Certs. for H.I. and M. & D.F.
	:	C.M. HAGLEY - R.S.H. Certs. for H.I. and M. & D.F.

HEADS OF BRANCHES AND SECTIONS (CONTINUED)

CHIEF HEALTH VISITOR	:	M. BERGH - R.S.H. Cert. for H.V., Reg. Nurse and Midwife
SENIOR HEALTH VISITORS	:	R.C.C. SANGERHAUS - R.S.H. Cert. for H.V., Reg. Nurse and Midwife
	:	C.K. HAINS - R.S.H. Cert. for H.V., Reg. Nurse and Midwife, Mothercraft Cert., Dipl. in Neg. Admin. (P.H.) London
	:	M.H. RALPH - R.S.H. Cert. for H.V., Reg. Nurse and Midwife, Mothercraft Cert.
	:	J.M. MONNIK - R.S.H. Cert. for H.V., Reg. Nurse and Midwife, Dipl. in Neg.
INSPECTRESS OF NURSERY SCHOOLS	:	E.K.F. BROSIUS - Dipl. in Pre-School Educ. (to 3.11.1964)
	:	G. MURRAY - Nat. Teachers' Cert. in Nursery Educ. Dipl. in Social Studies (From 3.12.1964)
SENIOR SUPERVISOR, NURSERY SCHOOLS (ACTING)	:	A.M. VILJOEN - Nursery School Diploma
TRANSPORT AND DISINFECTING SUPERINTENDENT	:	J.H. CUTTING - Qualified Fitter

The full staff establishment is detailed in
Annexure 1.

REPORT OF THE MEDICAL OFFICER OF HEALTH

CALENDAR YEAR 1964

The Mayor and
City Councillors of
JOHANNESBURG.

Mr. Mayor, Gentlemen,

I have the honour to present my report for the calendar year 1964 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. My report on overcrowding and bad or insufficient housing is issued separately.

As Dr. J.W. Scott Millar, B.A., M.B., Ch.B., D.P.H., D.T.M. and H., F.R.S.H., retired as Medical Officer of Health on the 16th July 1964, after fifteen years of service as Medical Officer of Health of this city, I consider it appropriate to highlight a few of the many valuable contributions he made to the health and well being of our citizens. When he assumed office in June 1949, the death rate (all races) was 10.97 while in 1964 it was 10.33 per 1,000 of the population. The infantile mortality rate was 135.45 per 1,000 registered live births while now it is 63.09.

The expenditure per head of population on public health was approximately R1.00 while during 1964 it had risen to R3.49.

The typhoid fever incidence rate per 100,000 population (all races) fell from 36.0 to 3.5 and the diphtheria incidence rate from 46.0 to 3.9.

I have selected these indices of improving community health at random in an effort to illustrate the tremendous strides made by the Department during his term of office. Strides made under extreme difficulties in a largely transcultural society where any advance at all can be viewed with extreme gratification.

His dedication to the goal of better health for all the citizens recalls to mind the following passage:-

"Non est vivere, sed valere vita. The old adage 'out of sight, out of mind', is profoundly true and because public health is essentially a silent service, there may

be/...

be a tendency to forget that its silence is a function of its existence and efficient activity. There is plenty of noise when anything goes wrong, to be sure and the Medical Officer of Health must be understood as one whose aim is not to make history but to ensure that there shall be no history, the 'no history' that is characteristic of a happy people".

In his fifteen years as Medical Officer of Health Dr. Scott Millar ensured that there was "no history made" and there can be no finer testimonial to this man who was loved and respected by his Department and recognised throughout the Republic as a leader in the public health field.

Before commenting on some of the highlights of the year under review and as this is the first annual report of the activities of the Department under my control, I feel it my duty to comment on certain aspects connected with the publication of annual reports of this Department.

The annual report of the Medical Officer of Health of a large city such as this, apart from fulfilling the legal requirements of its publication, is a valuable document to other Medical Officers of Health in this country and in many other countries of the world. If, as has happened regularly in the past, the report should reach these interested people only four years after the year it sets out to review, it can serve but little purpose and will be fortunate if it is read by more than a handful of people.

Every effort should be made to ensure that future reports are published as soon as possible during the following year.

The continued growth of the city and the concomitant growth of the Health Department is illustrated by the following data:-

	<u>1963</u>	<u>1964</u>
Population (all races)	968,110	980,170
Valuation: Rateable Land	R428,721,872	R441,891,109
Improvements	R660,445,782	R691,019,060
Value of building plans passed	R 32,384,900	R 46,353,710
Water consumption (average daily-gallons)	59,813,508	61,717,859
Sewage treated (average daily-gallons)	49,000,000	53,769,000

Staff/...

(viii)

	<u>1963</u>	<u>1964</u>
Staff of City Health Department (all races)	1,458	1,478
Gross expenditure of City Health Department	R 3,289,326	R 3,424,640
Expenditure per head of population City Health Department	R3.39	R3.49
Total Expenditure of Council	R55,403,443	R57,948,321
Total Expenditure per head of population	R57.23	R59.12

In general the health of the citizens was maintained at a satisfactory level.

The following table contrasts the death rates (per 1,000 of the population):-

	<u>1963</u>	<u>1964</u>
European	9.02	10.57
Coloured	9.63	9.52
Asiatic	5.74	3.94
Bantu	10.24	10.57
All races	9.61	10.33

A disturbing feature during the year was the rise in crude death rate for all races from 9.61 to 10.33 per 1,000 of the population which was due solely to a rise in the European death rate from 9.02 to 10.57 while the rates for the other races fell or remained much the same.

This rise was due to a general increase in deaths from all classified causes more especially those due to diseases of the circulatory and respiratory systems and neoplasms.

The following table contrasts the infantile mortality rates (deaths under one year per 1,000 registered live births):-

	<u>1963</u>	<u>1964</u>
European	25.25	35.78
Coloured	48.07	46.47
Asiatic	55.47	46.38
Bantu	66.00	86.09
All races	51.73	63.09

Over/...

Over the years Johannesburg has prided itself in achieving a consistently steady fall in the infantile mortality rates for all races and this fall has been maintained in the case of Coloureds (from 48.07 to 46.47) and Asiatics (from 55.47 to 46.38). However, for European and Bantu, an entirely different picture is seen.

In the case of the Bantu where the rate for 1963 had been reduced to 66.00 there was an amazing rise to 86.09 which in the absence of a satisfactory explanation would give cause for grave concern.

Fortunately the reason for this exceptional rise is easily found and is outlined in some detail in order to stress the importance of recognising the unreliability of statistical details in relation to the Bantu in this country.

By law the Bantu infantile mortality rate is defined as the number of deaths under one year per 1,000 registered live births. These births are registered at the office of the Bantu Commissioner and during 1963 totalled 17,335 while in 1964 they were only 12,881. The actual infantile deaths during the two years were 1,144 and 1,109 respectively and the apparent rise in the rate was due to the fall in registered births in 1964.

In seeking a reason for this fall in registration of births one finds that up to and including 1963 considerable emphasis was placed on the necessity for registration, by the authorities and there were fears of repatriation for failure to do so.

The large hospital where most of the births occurred discontinued the practice of itself notifying a birth to the Commissioner and very soon after this a drop in registrations began.

If the infantile mortality rate is calculated on notified births and not registered births the rate would be 41.91.

In the case of Europeans the rate rose from 25.25 to 35.78 and this disquietening rise of over ten per 1,000 is by no means as easily explained. Brief analysis of the causes of infant deaths reveals an absolute increase of 100 from 231 in 1963 to 331 in 1964. There were 68 deaths from diseases caused by infections, an increase of 38 compared to the previous year. Deaths as a result of congenital malformation rose from 35 to 57. This rise could be ascribed to a prolonged epidemic of rubella, but the possible

tetragenic/...

tetragenic effects of various drugs cannot be ignored.

The number of neonatal deaths increased from 149 to 185.

In assessing the overall picture it is impossible to determine whether this increased rate is a coincidental peak or a more serious trend. Only careful observation and assessment of future rates can answer this question.

The total incidence of notifiable diseases fell slightly and is now well below the incidence of previous years. Significant reductions were in diphtheria from 93 cases to 39 cases (i.e. a rate fall from 10 to 3.9 per 100,000 of population) and clear evidence of the value of the intensive immunisation campaigns conducted by the Department during recent years. Poliomyelitis fell from 21 cases to 3 cases (1 Coloured and 2 Bantu) and cerebrospinal meningitis from 60 cases to 30 cases.

On the other hand, there was an appreciable rise in cases of ophthalmia neonatorum from 22 cases to 60 cases primarily among the Bantu which serves to illustrate the fact that gonorrhoea and other venereal diseases are rapidly resuming their role as an important public health problem.

The incidence rate for pulmonary tuberculosis again rose from 360 to 418 per 100,000 largely due to vastly improved and increased case finding techniques. Nevertheless this disease remains our greatest problem and a major challenge for the future.

The maternal and child health services continue on a satisfactory basis with home visits and clinic attendances remaining much the same and with an increased response to all immunisation procedures.

Routine medical services in the Bantu areas continued under increasing difficulties and it is hoped that the Provincial Administration, on whose behalf these curative and midwifery services are provided, will expedite its take over and assumption of executive functions in order that this Department may more adequately assume its proper role in the provision and expansion of the preventive and promotive services.

An event of major importance was the findings of the follow-up phase of the mass percutaneous B.C.G.

inoculation/....

inoculation campaign when of 124,997 persons aged from birth to twenty years who were vaccinated produced 1,856 persons requiring treatment. Of these 1,331 aged from birth to 4 years 11 months, were treated as cases but not notified as such and 525 confirmed cases aged from 4 years 11 months to 20 years.

The control of smog, although making slow progress under existing legislation, still lacks the full force of the law while we await the promised special legislative machinery.

The control of sanitation and food supplies was maintained at the usual high level as were the other services of the Department.

The need for additional housing has become one of the Council's most urgent problems for, although there were vacancies in our schemes up to early 1963, this situation changed dramatically with the influx of immigrants into the country from overseas and from states to the north. New housing schemes are under way in various stages of development and it is hoped that the dire shortage of accommodation will soon be relieved.

I wish to thank all members of my staff for their loyalty both personally and officially; the Town Clerk and all Heads of Departments and members of their staffs and the Staff Board for willing co-operation at all times.

I also desire to express my thanks to His Worship the Mayor and to the Chairman and Members of the Health and Amenities Committee who have extended to me every courtesy and assistance.

ALEXANDER H. SMITH

MEDICAL OFFICER OF HEALTH

Hon. Professor, Urban Health Administration,
University of the Witwatersrand.

REPORT A.

1964

C I T Y O F J O H A N N E S B U R G

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

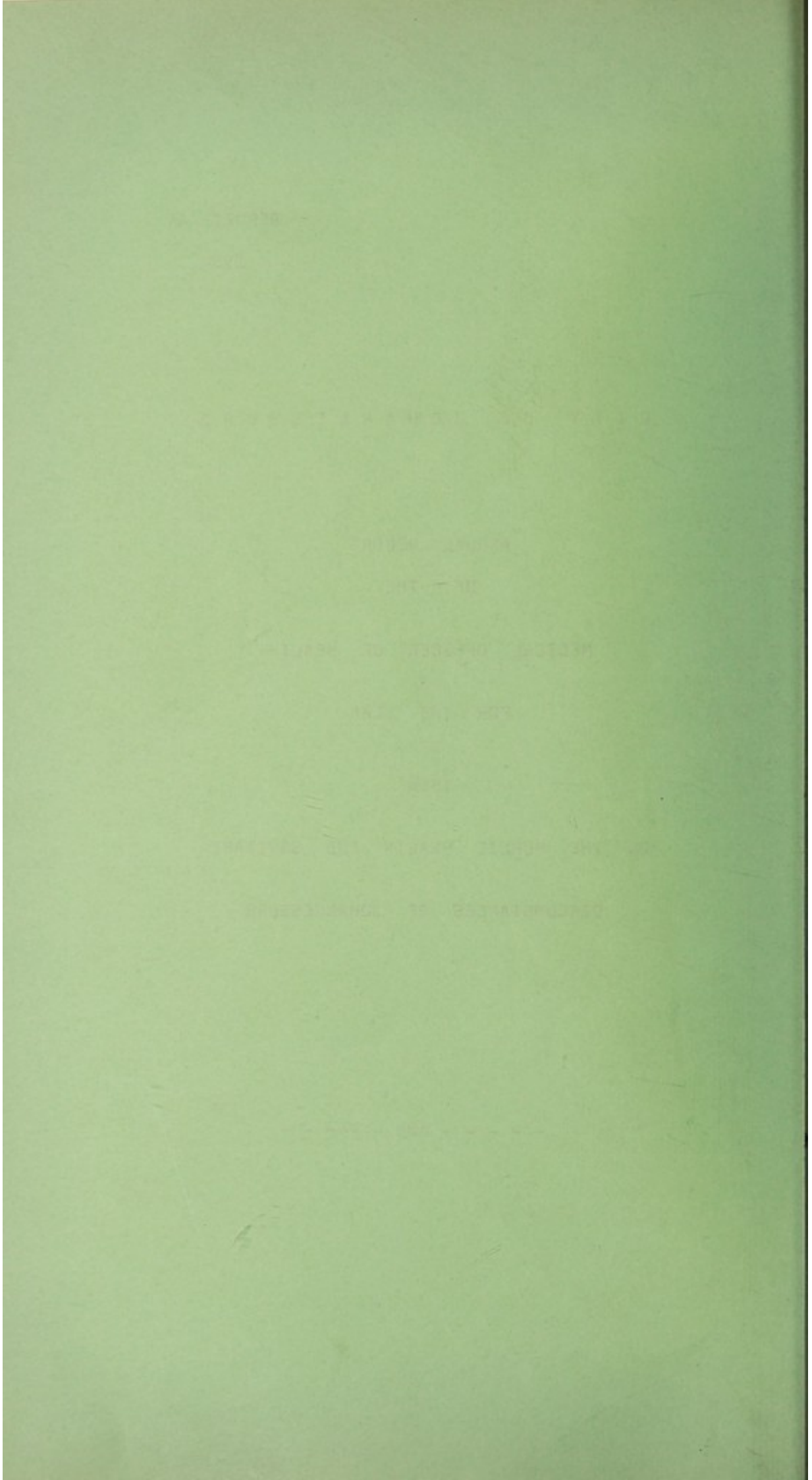
FOR THE YEAR

1964

ON THE PUBLIC HEALTH AND SANITARY

CIRCUMSTANCES OF JOHANNESBURG

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CITY OF JOHANNESBURG

REPORT A.

1964

REPORT ON THE PUBLIC HEALTH AND SANITARY
CIRCUMSTANCES OF JOHANNESBURG FOR THE
CALENDAR YEAR 1964, 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 highest four 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. In the Kensington - Bezuidenhout Valley area 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/...

disperses by 10 a.m.

The area of the city and its suburbs is 94.46 square miles which includes the Rand Airport. The extreme length of the city and suburbs is 11.7 miles and extreme width 11.4 miles. The Bantu Townships on the south-western boundary comprising Pimville and Soweto cover an area of 24.98 square miles, Pimville being included in the Municipal area and Soweto outside. A further 5.12 square miles owned and controlled by the Bantu Resettlement Board is part of the complex used for housing Bantu working in Johannesburg. The total area of the Bantu Townships is therefore 30.10 square miles.

Other land owned by the Council outside its own boundaries and controlled in terms of Section 7 of the Local Government Ordinance (Transvaal) 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 51.49 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 bright sunshine is 8.79 hours.

The rainfall has averaged 872.99 mms. (34.37 inches) per annum over a period of 50 years and occurs mainly in the summer months (October to March) often in the form of short thunderstorms. The total fall at Joubert Park in 1964 was 885.5 mms. (34.86 inches) and the rain fell on 95 days.

There was a snowfall of 2" on 18th June 1964.

The hottest months are usually from December to March with an average maximum temperature over 15 years of 31°C and the highest recorded temperature of 34.2°C. The coldest months are usually in June and July with an average minimum temperature of 2.05°C and the lowest recorded temperature of -6.2°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

monthly/...

monthly averages of rainfall, etc., are reflected in Annexure 3.

II. VITAL STATISTICS

The following table summarises the principal vital statistics for 1964:-

1964	Europeans	Coloureds	Asiatics	Bantu	All Persons
Population	379,600	51,976	26,896	521,698	980,170
Births (number of)	9,250	2,087	539	12,881	24,757
Birth Rate	24.36	40.15	20.04	25.78	25.83
Illegitimate Birth Rate %	3.55	20.89	2.41	37.52	22.66
Deaths (number of)	4,016	495	106	5,516	10,133
Death Rate	10.57	9.52	3.94	10.57	10.33
Infantile Deaths	331	97	25	1,109	1,562
Infantile Mortality Rate	35.78	46.47	46.38	86.09	63.09
Maternal Deaths	9	2	Nil	58	69
Maternal Death Rate	0.96	0.93	Nil	4.42	2.74

These figures exclude non-Johannesburg residents but do not include Johannesburg residents who were born or who died outside the Johannesburg municipality. The population recorded is based on estimates as at 30th June 1964 and the rates are calculated thereon.

The Bantu population included 22,064 mine Bantu among whom there were 92 deaths with a death rate of 4.16.

The statistical factors recorded above are referred to in more detail in the paragraphs which follow.

1. POPULATION

	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
Europeans	368,277	370,000	372,400	374,800	379,600
Coloureds	42,943	43,670	45,090	49,004	51,976
Asiatics	23,647	24,000	25,770	26,327	26,896
Bantu	522,953	532,677	515,804	517,979	521,698
	<u>957,820</u>	<u>970,347</u>	<u>959,064</u>	<u>968,110</u>	<u>980,170</u>

Details of the Bantu population by areas are given in Annexure 4.

2. BIRTHS

As compared with the previous year, the figures reflect a decrease in the European birth rate from 24.41 to 24.36; the rate for Coloureds has decreased from 41.18 to 40.15. The rates for Asiatics and Bantu have decreased from 25.34 to 20.04 and from 35.22 to 25.78 respectively. The overall birth rate for all races shows a decrease of 5.13.

There has been a progressive increase in the percentage of illegitimate births of Europeans, Coloureds and Asiatics over a period of many years, although the rates for the current year are lower for all races. The most noticeable drop is for Bantu. The complex marriage customs of Bantu make it difficult to arrive at a true assessment of illegitimacy and consequently no comment is made.

3. DEATHS

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

Year	Europeans	Coloureds	Asiatics	Bantu	All Persons
1960	8.38	9.85	6.34	10.93	9.79
1961	8.39	9.30	6.08	10.05	9.29
1962	8.31	10.89	5.16	10.19	9.36
1963	9.02	9.63	5.74	10.24	9.61
1964	10.57	9.52	3.94	10.57	10.33

The/...

The death rate for all races and for each race group separately remains fairly constant. The rate for Asiatics is quite substantially less than for the previous year while that for Europeans is considerably more.

The summary of causes of death classified according to race is listed in Annexure 5.

The causes of death classified in the main group causes, with comparative tables for 1962 and 1963, are listed in Annexure 6. The 5 most prominent causes of death are set out in graphical form overleaf.

An analysis of some of the main causes of death is recorded in the paragraphs which follow.

Diseases of the circulatory system cause the largest number of deaths, accounting for 21.83% of all deaths. It is also the major cause of death in Europeans (36.90%), Coloureds (17.78%) and Asiatics (26.42%) but not for Bantu in which case only 11.13% of deaths are due to this cause.

Alternative classification of accidents, poisoning and violence (external cause): This group causes 15.95% of all deaths. This is the most important "single" cause of death in Bantu (19.87%) and is high on the list for other races:- Coloureds (16.77%), Asiatics (16.98%) and Europeans (10.43%). In this group suicide accounts for most of the European deaths (118) followed by accidents (117) and motor traffic accidents (51). In Coloureds the major cause is homicide (33) followed by accidents (22) and motor traffic accidents (4). Homicide caused Bantu 535 deaths, accidents 190 deaths and motor traffic accidents 78 deaths. Suicide is a relatively minor cause of violent death in Non-Europeans, accounting for 24 deaths of which 19 were Bantu.

Symptoms, senility and ill defined conditions: 12.38% of all deaths are grouped together under this heading, being largely a reflection of the lack of clarity of death certificates. It is not surprising that the highest percentage in this group relate to Bantu and Coloureds.

Neoplasms: account for 10.47% of all deaths. This is the second largest cause of death for Europeans (17.21%). It is also an important cause for Coloureds (10.71%) and Asiatics (7.55%) and also causes 5.60% of Bantu deaths.

Diseases of the respiratory system cause 8.35% of all deaths. Asiatics (10.38%) and Bantu (10.03%) are the races most susceptible to death from this cause with Coloureds following closely at 9.29%.

Diseases of the digestive system account for 8.57% of all deaths, ranging from 5.23% in Europeans to 10.95% in Bantu.

Certain diseases of early infancy account for 4.37% of all deaths with percentages ranging from 3.44% for Bantu to 14.15% for Asiatics.

Infective and parasitic diseases cause 5.87% of all deaths - Europeans (2.56%), Bantu (8.27%), Coloureds (6.87) and Asiatics (1.89%). These diseases have been a major cause of death in past years but are progressively being brought under control.

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

4. INFANTILE MORTALITY

The rates for the years 1960 to 1964 inclusive, are shown on the following table:-

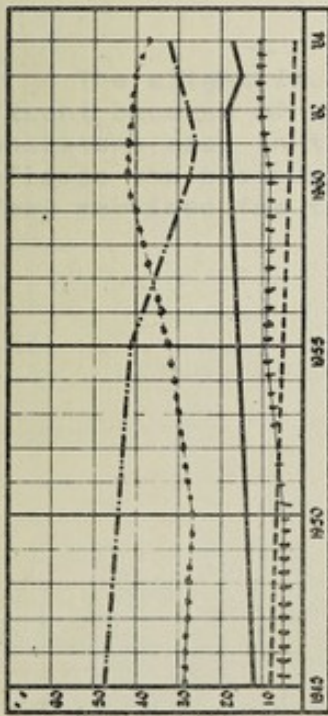
Year	Europeans	Coloureds	Asiatics	Bantu	All Races
1960	28.27	64.40	48.71	122.75	86.41
1961	25.66	38.44	40.33	91.78	66.40
1962	25.66	62.03	40.70	61.20	50.71
1963	25.25	48.07	55.47	66.00	51.73
1964	35.78	46.47	46.38	86.09	63.09

The overall infantile mortality rate (i.e. the deaths of infants under 1 year of age per 1,000 live births registered) for all races is considerably higher than in 1962 and 1963. In the case of Europeans there has been an increase compared with 1963 and in the case of Coloureds a small reduction (from 48.07 to 46.47). The Asiatic rate has substantially decreased. The Bantu rate is higher than in 1963 and the explanation for these increases is detailed in the introduction to this report.

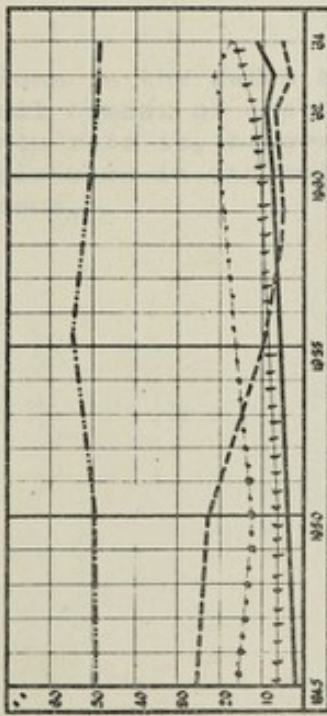
5. MATERNAL/...

Causes of Death

Europeans - Baktes



Coloureds - Kieurtlidge

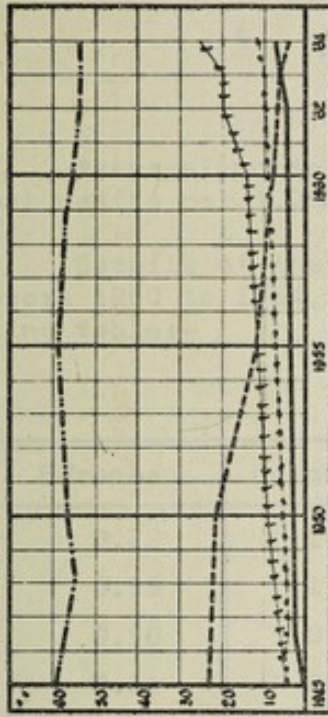


Key -

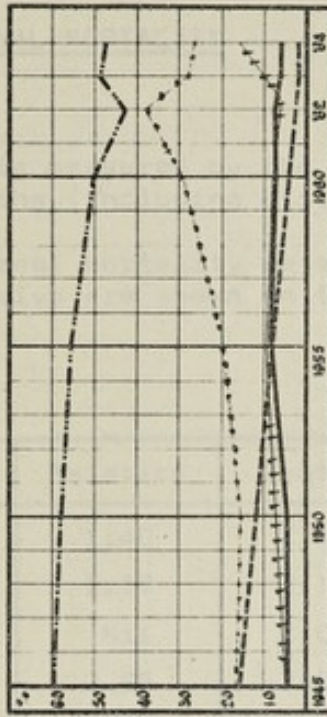
- group 1. infective & parasitic diseases
- group 2. protozoa
- - - - group 3. diseases of the circulatory system
- + + + + group 4. alternative classification of accidents, poisoning & violence
- other groups

Causes of Death

Baptu - Baptovs

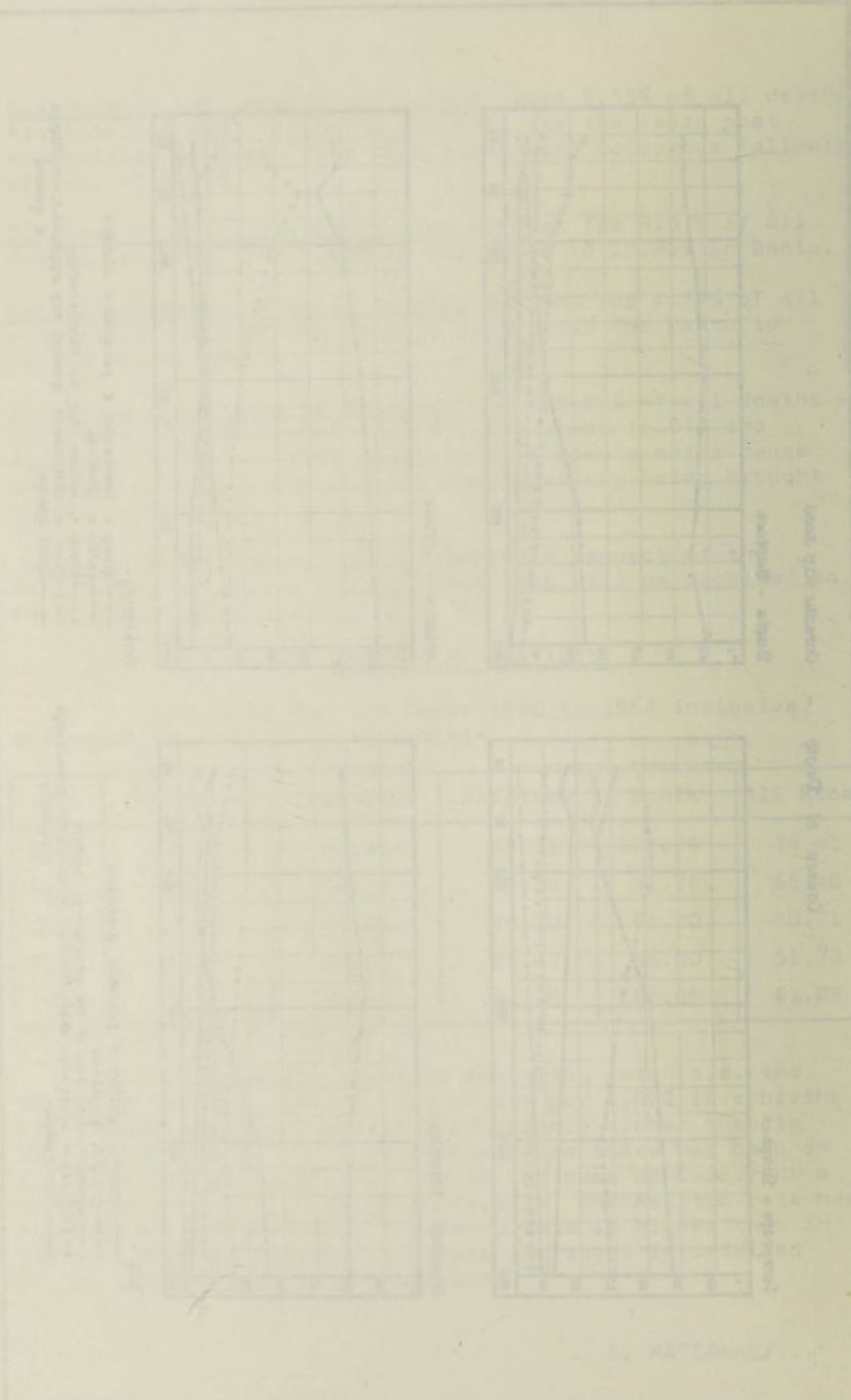


Asiatics - Asiate



Verklaring -

- groep 1. besmetlike & parasitêre siektes
- groep 2. gewasse
- - - - groep 3. siektes van die bloedsomloop
- + + + + groep 4. alternatiewe indeling van ongelukke, vergiftings & geweld
- ander groepe



S. KATRALU

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 five years 1960 to 1964 inclusive are shown on the following table:-

Year	Europeans	Coloureds	Asiatics	Bantu	All Races
1960	0.22	1.77	1.40	2.35	1.60
1961	0.56	1.13	1.37	2.13	1.56
1962	0.90	0.53	Nil	2.01	1.56
1963	0.11	2.44	2.95	3.58	2.40
1964	0.96	0.93	Nil	4.42	2.74

The slight fluctuations in the rates are not very significant because of the small number of deaths involved. The consistent rise in the Bantu rate is, however, disturbing and reflects the serious deficiencies in the ante-natal and midwifery services for this group.

III. INFECTIOUS, COMMUNICABLE AND PREVENTABLE DISEASES

1. NOTIFIED CASES OF PREVENTABLE DISEASES

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

1964	Local Cases					Imported Cases				
	E	C	B	A	Total	E	C	B	A	Total
Scarlet Fever	175				175	3				3
Diphtheria	7	1	31		39			1		1
Typhoid	5	2	28		35	1		14	1	16
Cerebrospinal meningitis	14	4	15	1	34		1			1
Poliomyelitis		1	2		3					
Puerperal Fever			45	1	46					
Ophthalmia Neonatorum	2	2	56		60					
Pemphigus Neonatorum	14		3		17					
Leprosy	1		6		7			17		17
Malaria						4		15		19
Relapsing Fever								1		1
Insecticide Poisoning	4				4					
Trypanosomiasis								2		2
Smallpox			7		7			1		1
Erysipelas	1				1					
Trachoma			2		2					
Lead Poisoning			21		21					
Anthrax			1		1					
Encephalitis	28	1	1		30					
	251	11	218	2	482	8	1	51	1	61
<u>Tuberculosis</u>										
Pulmonary	120	218	3,703	53	4,094	41	13	1,121	7	1,182
Other Forms	4	14	82	6	106	1	Nil	6	Nil	7
Total Tuberculosis	124	232	3,785	59	4,200	42	13	1,127	7	1,189
Total All Diseases	375	243	4,003	61	4,682	50	14	1,178	8	1,250

The investigation of infectious diseases is carried out, as in previous years, by a Senior Health Inspector and a Bantu Health Inspector, assisted, when necessary by the District Health Inspectors.

Tuberculosis is dealt with by a special staff, as are puerperal and infantile infections and kwashiorkor. Reports on these appear elsewhere.

The incidence of infectious diseases is still low, the most marked reduction being in the incidence of poliomyelitis - only three cases occurring during the year, two Bantu and one Coloured case.

Diphtheria

There were seven white cases, six between the ages of 4 and 9 years and one female adult. The state of immunisation of the adult was doubtful as was that of one of the children - the remaining five children had had no protection.

The 32 Non-European cases of this year compare very favourably with the 71 cases occurring last year - the dramatic drop in incidence among the Bantu being, of course, due to the large scale immunisation programme carried out in the Non-European township.

Scarlet Fever

The number of reported cases of scarlet fever continues at a low level - there were no Non-European cases reported during the year.

Typhoid

Four Europeans developed typhoid in Johannesburg; one male of 22 years was infected while away on holiday; a young man of 16 years living near one of the sewage disposal works developed typhoid after drinking what was probably sewage effluent while hiking; a woman of 28 years was infected by her native servant who was found to be a carrier of - a B.typhosus, phage type "28" was isolated from both persons. A young woman of 21 developed typhoid about three weeks after her fiancé had become ill - the source of the infection could not be traced: and one adult male visiting Johannesburg developed typhoid - he was infected at his home in the country. A woman of about 80, who was being surgically treated in one of the hospitals was found to be a typhoid

carrier/...

carrier - she was excreting B.typhosus, phage type "40". This type had not previously been reported from South Africa. She had been over 50 years in South Africa and had had typhoid here in 1913. The typhoid history of her family and circle of friends was negative.

45 Non-Europeans were found suffering from typhoid - 2 Coloured, 1 Asian and 42 Bantu, of these 14 of the Bantu and the Asian were infected outside the Municipal area. The cases were all sporadic no outbreak occurring during the year.

The phage types isolated were A, E1, 28, 40, 44 as well as untypable Vi and degraded Vi.

Poliomyelitis

Only three cases of poliomyelitis were reported during the year - two Bantu and one Coloured.

Rabies

No cases of rabies were reported during the year, but several incidents in which animal bites were concerned were followed up, as were all cases of dog bites reported from the Bantu Townships.

Anthrax

A case of anthrax occurred in a 6 year old Bantu male child. He was one of a very large family living in one of the Council's Bantu area houses. The father of the family bought sheep and goat skins from abattoirs or from farms in the neighbourhood. His three grown-up daughters were occupied in tanning these skins. In addition residents of the township would bring skins along to be dressed. The child was infected on the left hip and was brought to hospital seven days after the onset of the infection.

The source of the infected skin could not be traced. It is assumed that it may have been from one of the skins brought in by neighbours from a country district. The child recovered.

Leprosy/...

Leprosy

The number of cases of leprosy infected in Johannesburg has increased during this year. The only white case, a woman of 64 had been living in Johannesburg since 1920 having arrived here from Rhodesia.

Five of the Bantu cases were born and brought up in Johannesburg and one had been resident for 23 years.

Of the Bantu cases all except two were males.

Trypanosomiasis

The two cases of sleeping sickness reported were Bantu mine recruits. One had contracted the infection in Portuguese East Africa and the other in Bechuanaland.

Smallpox

Eight cases of smallpox occurred in the Bantu areas of Johannesburg during the year. There were "three" episodes -

The first was a group of 3 females aged 15, 25 and 30 years. These were all discovered within a day of each other, were related and probably contracted smallpox from a common source presumed to be a recent visitor from an endemic area.

The second was a group of four cases originating from a young boy of 5 years who had arrived from an endemic area. The first case was reported on 22nd June, the others, two boys of seven years and a baby of eighteen months were discovered on 4th and 6th July respectively. The third "episode" was a child of four years notified on 7th December. He had been in the area for four months prior to infection. His mother and his sister aged six months - both unvaccinated, were transferred to Rietfontein Hospital with him on 7th December where they developed smallpox on 14th and 15th December respectively.

All the cases were mild.

Tuberculosis/...

Tuberculosis

The annual incidence 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>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 Bantu	77	263	7	24	Nil	Nil	5	17	77	263	12	41
Non-Mining Bantu	2,680	543	178	36	310	63	104	21	2,990	606	282	57
All Bantu	2,757	527	185	35	310	59	109	21	3,067	586	294	56
All Persons	3,059	319	214	22	361	38	126	13	3,420	357	340	35
<u>1961</u>												
Europeans	137	37	13	4	13	4	18	5	150	41	31	8
Coloureds	196	449	8	18	20	46	6	14	216	495	14	32
Asiatics	38	158	6	25	4	17	Nil	Nil	42	175	6	25
Mining Bantu	237	878	2	7	2	7	2	7	239	885	4	15
Non-Mining Bantu	2,499	494	181	36	213	42	115	23	2,712	536	296	59
All Bantu	2,736	514	183	34	215	40	117	22	2,951	554	300	56
All Persons	3,107	320	210	22	252	26	141	15	3,359	346	351	36
<u>1962</u>												
Europeans	142	38	15	4	15	4	28	8	157	42	43	12
Coloureds	236	523	20	44	18	40	5	11	254	563	25	55
Asiatics	60	233	1	4	1	4	1	4	61	237	2	8
Mining Bantu	242	938	1	4	1	4	3	12	243	942	4	16
Non-Mining Bantu	2,807	573	154	30	195	40	104	21	3,002	613	258	53
All Bantu	3,049	591	155	30	196	38	107	21	3,245	629	262	51
All Persons	3,487	364	191	20	230	24	141	15	3,717	388	332	35
<u>1963</u>												
Europeans	125	33	13	3	10	3	10	3	135	36	23	6
Coloureds	199	406	15	31	6	12	3	6	205	418	18	37
Asiatics	25	95	3	11	6	23	Nil	Nil	31	118	3	11
Mining Bantu	180	698	2	8	Nil	Nil	7	27	180	698	9	35
Non-Mining Bantu	2,957	601	169	34	143	29	67	14	3,100	630	236	48
All Bantu	3,137	606	171	33	143	28	74	14	3,280	633	245	47
All Persons	3,486	360	202	21	165	17	87	9	3,651	377	289	30
<u>1964</u>												
Europeans	120	32	10	2	4	1	14	3	124	33	24	6
Coloureds	218	419	14	27	14	27	6	12	232	446	20	38
Asiatics	53	197	1	4	6	22	Nil	Nil	59	219	1	4
Mining Bantu	90	408	2	9	Nil	Nil	4	18	90	408	6	27
Non-Mining Bantu	3,613	723	170	34	82	16	109	22	3,695	740	279	56
All Bantu	3,703	710	172	33	82	16	113	22	3,785	726	285	55
All Persons	4,094	418	197	20	106	11	133	14	4,200	428	330	34

The/...

The figures quoted do not include imported cases infected elsewhere who are attracted to Johannesburg for treatment, or in transit. In 1964 there were 1,175 imported cases of pulmonary tuberculosis of all races including 180 mining Bantu 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 per 100,000 population from pulmonary tuberculosis:-

The death rates are shown in brackets.

	1960	1961	1962	1963	1964
Europeans	37 (5)	37 (4)	38 (4)	33 (3)	32 (2)
Coloureds	331 (23)	449 (18)	523 (44)	406 (31)	419 (27)
Asiatics	101 (8)	158 (25)	233 (4)	95 (11)	197 (4)
Bantu	527 (35)	514 (34)	591 (30)	606 (33)	710 (33)
All Races	319 (22)	320 (22)	364 (20)	360 (21)	418 (20)

The incidence rate of pulmonary tuberculosis among Europeans has varied very little during the last five years but there is an improvement in the current year together with a drop in the death rate.

Notifications of local cases of pulmonary tuberculosis amongst Coloureds and Asiatics have increased this year as compared with 1963.

The following are the relevant details:-

	<u>1963</u>	<u>1964</u>
Coloureds	199	218
Asiatics	25	53

This represents 9.5 per cent increase in Coloureds and 118 per cent increase in Asiatics. This is principally due to the fact that B.C.G. campaigns were conducted in the Coloured areas, particularly Riverlea, and in the Coloured and Asiatic schools. Only four schools were X-rayed, the balance to be completed next year.

The/...

The following schools were X-rayed:-

Krause Coloured School:	Of the twenty-two positive B.C.G. reactors investigated, sixteen cases were notified.
Albertville Coloured School:	Of the 157 positive B.C.G. reactors nine cases were notified.
Johannesburg Indian Girls' School:	Of the sixteen positive B.C.G. reactors ten cases were notified.
Vrededorp Asiatic School:	Of the 52 positive B.C.G. reactors two cases were notified.

All these cases presented with radiological evidence of hilar adenopathy.

Taking Non-Europeans as a whole the number of new cases was greater in the current year than in 1963 but the number of deaths did not increase proportionately. The increase among Bantu was largely due to the considerable number of cases discovered during the mass B.C.G. campaign.

2. DISINFECTIONS AND REMOVALS

The Disinfecting Station is situated at Vrededorp and is fully equipped for the effective disinfection and degerminisation of persons, and the disinfection and sterilisation of clothing, blankets, bedding and other infected articles. There is also a well equipped workshop for the maintenance and repair of vehicles and garages to accommodate them.

The activities at the Disinfecting Station include the following:-

1. The disinfection, where necessary, of premises in the city area where infectious cases have been accommodated and of their bedding, wearing apparel and belongings and also of ambulances and ambulance personnel after removal of an infectious case. Bedding and clothing from Waterval Hospital is transported direct to the Fever Hospital for disinfection.

2. The/...

2. The disinfection of bedding, clothing and other commodities for commercial firms, institutions and individuals is undertaken at a moderate charge.
3. The transport of dead bodies from Waterval and Fever Hospitals.
4. The treatment of scabies sufferers and delousing by a health visitor of verminous persons.
5. Arranging for the disinfecting of midwives by qualified health visitors, after the midwives have attended infectious cases. Sterilising dressing drums in an electric autoclave for midwives employed by the Council or by certain nursing homes and for private duty midwives.
6. The transport of staff to and from Waterval Hospital, including Bantu staff for the night shift, for security reasons.
7. General supervision of drivers and vehicles for the transport of midwives, nurses and other staff in the Bantu townships. Bantu with drivers' licences are recruited as labourers and trained and the best are selected to fill vacancies as drivers.
8. The transport of stores and commodities to hospitals, clinics and nursery schools under the control of the Department.
9. The maintenance and repair of all vehicles under the control of the Department and supervision of the drivers.
10. The Disinfecting Station has 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 185 probationer nurses from Baragwanath Hospital were conducted over the Station.

General renovation work to the boiler house auto-claving sections and all bathrooms comprising this block was completed by the Building Workshops Branch of the City Engineer's Department. All four old-fashioned baths in the bathrooms provided exclusively for the use of European males and females requiring decontamination treatments, were replaced with a more modern type and the exposed under-sides were completely boxed in and tiled. All external and internal

interleading/...

interleading doors were replaced with modern full panel type doors. The renovations and alterations made a vast improvement to the general appearance of this very old building.

Five new vehicles were acquired during 1964. Three of these vehicles were for the midwifery services in Soweto and 1 each for the workshops breakdown service and the Tuberculosis/Domiciliary Services. Five obsolete vehicles were sold during the year and one was scrapped.

There were 49 vehicles under the control of the Department as at 31st December 1964 as follows:-

Ambulances:

Sitting-type Tuberculosis Domiciliary Services	1
--	---

Bus 20-Seater:

Tuberculosis Domiciliary Services	1
	-
	2

Station Wagons:

South Western Bantu Areas Midwifery Services	14
Conveyance Part-time Medical Officers	1
Conveyance Radiographer	1
Cydna Laboratory	1
	-
	17

Special Vehicles:

T.I.F.A. Fogging Machine	1
Farm Dairy Demonstration Caravan	1
Mobile Child Health Clinic	1
Mobile X-ray Unit	1
Waternal Hospital European Staff Duty Bus	1
Waternal Hospital European Staff Auxiliary Van	1
Waternal Hospital Non-European Staff Light Duty Bus	1
	-
Carried Forward	7

Vans/...

Brought Forward 7

Vans and Trucks:

Pest Control	9	
General Transport - Disinfecting Station	4	
Stores Delivery	3	
Transport and Disinfecting Superintendent's Transport	1	
Air Pollution Control	1	
Housing Division	1	
Nursery Schools	1	
Workshop Breakdown Truck	1	
	<hr/>	21

Motor Tricycles:

Housing Division	1	
Mobile Messenger	1	
	<hr/>	2
		<hr/>
		49
		<hr/>
		==

The distance covered by the different vehicle groups over the five years are shown in the following table:-

	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
Ambulances	74,819	44,532	-	-	-
Tuberculosis Ambulances	39,153	32,367	31,086	33,898	33,692
Medical and Midwifery Services	701,061	413,258	411,848	450,711	424,797
Other Vehicles	167,731	231,097	201,294	195,209	244,018
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	982,764	721,254	644,228	679,818	702,507
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

The activities of the Disinfecting Station regarding disinfections and disinfestation of persons, premises, vehicles, etc., are summarised as follows:-

In the city area, 30 premises were disinfected, 18 persons attended the Disinfecting Station for de-verminising

and/...

and Scabies treatment, 3,072 ambulance drivers and assistants from the Fire Department were dealt with and 1,586 Fire Department ambulances were disinfected. Vehicles operated by the Disinfecting Station were disinfected on 240 occasions. The method of disinfecting ambulances was changed from formalin applied with a stirrup pump to Anabac applied with a microjet fog applicator. 8,053 items consisting of miscellaneous bundles of clothing, coats of ambulance drivers and attendants, Fire Department ambulance blankets, bedding from nursing homes, etc., received formalin treatment and steam autoclaving. 13,937 dressing drums and 116 dressing packs received steam autoclaving in the small capacity Butterworth Electric Autoclave. The Butterworth small capacity electrically operated steam steriliser was in operation for 2,425 hours at 20 lbs. per square inch during the period under review. European and Bantu staff were conveyed to Waterval Hospital. 104 dental patients were conveyed from Waterval to Orlando Dental Clinic for treatment.

3. DISPENSARY

The Dispensary is situated at Westdene. The decanting and manufacturing of dispensary products continues and the output has been substantially increased at the expense of manufactured products.

The following statistics reflect the activities:-

<u>Manufacture:</u>	<u>1964</u>	<u>1963</u>
(i) Liquids	6,476 gallons	6,494 gallons
(ii) Ointments	4,618 lbs.	4,785 jars

<u>Dispensing:</u>	<u>1964</u>	<u>1963</u>
(i) Liquids	561,106 bottles	537,056 bottles
(ii) Ointments	38,621 jars	35,839 jars
(iii) Tablets	16,146,030 tablets	15,083,800 tablets

Issues of dispensed products from Westdene Store to the Department's various services:

SERVICE	LIQUIDS	TABLETS	ointments	SKIMMED MILK POWDER	FULL-CREAM MILK POWDER
Curative	286,754	4,488,400	30,223		
Midwifery	28,645	724,800			
Tuberculosis	157,808	10,238,050 *8,055,600	5,000	189,458	10,715
Child Health	92,975	742,100	3,724	237,916	259,447
TOTAL	566,182	24,248,950	38,947	427,374	270,162

* P.A.S. tablets in ready dispensed form.

Oral Poliomyelitis Vaccine: A total of 159,690 doses of oral poliomyelitis vaccine were issued as follows:

	<u>1964</u>	<u>1963</u>
18 Hoek Street	52,400	36,750
Bantu Townships	89,760	57,000
Asiatic and Coloured	4,750	3,640
Private Practitioners	12,780	7,680
Total	<u>159,690</u>	<u>105,070</u>

Milk Powder:

The milk powder decanting machine continues to operate satisfactorily. During the year an agreement was concluded whereby the Council would supply Government subsidised skimmed milk powder to the African Children's Feeding Scheme. The Chief Pharmacist is handling this arrangement from the Central Dispensary. During the two months that this has been in operation, 12,300 lbs. of milk has been supplied.

4. HOSPITALISATION OF INFECTIOUS CASES

European infectious cases are 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/...

(i) Fever Hospital

The hospital is administered on behalf of the Council by the Johannesburg Hospital Board which is reimbursed by the Council 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 function in carrying out the Council's statutory obligations in regard to the control and prevention of the spread of infectious disease.

The full bed complement of the hospital, including the new ward block completed in March 1959, is 151 beds. Because of the low demand for beds, Wards 1, 2 and 3 were not opened during the year and Ward 4 was closed in October. The number of beds immediately available being 65. The total number of patient days was 11,237. The occupancy of beds has been steadily reduced during the last ten years owing to the progressive reduction in the incidence of infectious disease.

The number of patients admitted during the year was 864. There were 18 deaths and 2 operations (1 tracheotomy 1 foreign body removed from the arm).

(ii) Waterval Hospital (Non-European)

The normal complement of this hospital is 310 beds (including 12 extra 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 outpatient" section of the hospital.

The hospital is entirely under the control of Bantu nursing staff at night. By day the wards are in the charge of Bantu sisters under the general supervision of the matron and two European sister-supervisors.

The hospital employs an occupational therapist who gives the adult patients instruction in subjects including leather work, basket work, shoe repairs, 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/...

the older children who receive some elementary education.

The following table reflects the activities of the hospital for the years 1964 and 1963:-

	Admissions		Discharges		Deaths		Patient Days		No. of Patients X-rayed	
	1964	1963	1964	1963	1964	1963	1964	1963	1964	1963
Tuberculosis	342	400	323	397	25	30	54,037	61,436	2,548	5,076
Infectious Fevers	1,036	982	963	960	85	73	21,411	23,745		
Council Employees	629	674	568	671	23	20	11,182	11,143		
Other Cases	-	5	-	7	-	-	-	1180	3,696	4,489
TOTAL	2,007	2,061	1,854	2,035	133	123	86,630	96,442	6,244	9,565

The number of patients treated shows a slight decrease over the previous year. The number of deaths from infectious fevers was slightly higher.

Only 18 cases of diphtheria from the Johannesburg Municipal area were admitted to the hospital. A further 5 cases were admitted as carriers. There was one death amongst these cases.

This shows a further sharp drop as compared with last year when 83 cases were admitted from the Johannesburg area.

(iii) Treatment of Bantu Employees of the Council:

In addition to their other duties, the staff of Waterval Hospital is responsible for the treatment of Bantu employees of the Council, including those injured on duty and entitled to compensation under the Workmen's Compensation Act. The employees may be admitted to one of the 38 beds available for this purpose 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 outpatients without receiving nursing attention. Patients requiring major surgery or other special treatment are transferred to a provincial hospital.

Non-European/...

Non-European employees received treatment in the Outpatient Department for a total of 26,308 patient days. This total includes 7,114 casual visits, of which 1,206 were tuberculosis patients and 1,638 resident patient days made by 64 patients.

627 of the employees were admitted to the medical and surgical ward, 604 being discharged. There were 23 deaths resulting from various diseases or other conditions affecting the following systems:- respiratory system (8), cardio vascular system (5), digestive system (6) and miscellaneous (4).

A nutritional survey of Municipal employees was started during the year. Preliminary results of the survey appear to confirm the impression obtained from hospital patients that general malnutrition and avitaminosis is common. The survey has for the present time been confined to general labourers between the ages of 40 and 60 from Waterval Compound. Further studies are at present being undertaken and the scope will be widened to include other compounds as well as employees not living in compounds.

(iv) Laboratory Services

The State Department of Health provides free laboratory services (in terms of Government Notice No. 1073 of 1956) for the diagnosis and public health control of specified infectious diseases, the diagnosis of neo-natal haemolytic disease and tests reasonably required for the diagnosis and treatment of patients at detached outpatient clinics. Other tests such as the bacteriological examination of domestic water supplies, dairy products and sewage effluents may be carried out at reduced charges by arrangement. The tests are performed by Government laboratories or are delegated to laboratories of the South African Institute for Medical Research in certain centres, including Johannesburg.

Full advantage is taken of the free tests by the Department, specimens being sent mainly from Fever Hospital, Waterval Hospital and the Bantu outpatient clinics, tuberculosis clinics and the Medical Examination Centre.

There are a number of tests not on the free list including certain biological tests, water and milk samples, food and dejecta in cases of suspected food poisoning, etc. The Council pays the South African Institute for Medical Research a composite fee of R20,000 per annum for the performance of these investigations.

The/...

The bacteriological examination of water and milk samples is shared between the South African Institute for Medical Research and the Department's own laboratory at Cydna; 1,002 samples of water were submitted to the Institute for bacteriological examination on behalf of the Rand Water Board plus samples from city taps and from borehole and other domestic and commercial sources. Details of tests of food, milk and water samples are indicated on Annexure 7.

5. TUBERCULOSIS SERVICES

The staff establishment as at 31st December 1964 was 169 as detailed in Annexure 1.

Europeans

European patients are supervised and treated in their homes, treated at the clinic or admitted to hospital where this is necessary and when 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 attendances are reflected in the following table:-

1964	Cases	Contacts	Suspects	Total
First Visits	141	1,015	585	1,741
Re-Visits	3,014	3,138	1,173	7,325

During 1964, 130 patients were put on treatment as outpatients and 99 were taken off treatment. 644 patients were receiving treatment as at 31st December 1964.

Hospital beds are 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. 112 patients were admitted to hospitals during the year and 107 were discharged. 39 were in hospital as at 31st December 1964. The number of cases treated in hospital is somewhat smaller than in 1963.

The/...

The sociological and X-ray services for Europeans and B.C.G. vaccination are dealt with later in this section of the report.

Non-Europeans

Services for Non-Europeans follow the same pattern as for Europeans but the number requiring treatment is much greater, and co-operation by the patients cannot be relied on to the same extent.

Domiciliary treatment is given by Bantu nurses employed by the City Health Department and clinics are held twice weekly at each of the clinics in the Bantu 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 Bantu 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:-

Township	Number of Patients			
	On Treatment as at 1.1.1964	Put on Treatment During 1964	Taken Off Treatment During 1964	On Treatment as at 31.12.1964.
18 Hoek Street:				
Factory Workers	510	380	300	590
Domestics	815	430	411	834
Medical Examination Centre	Nil	Nil	Nil	Nil
Waterval Hospital	264	94	55	303
Noordgesig	169	104	85	188
Riverlea	12	70	9	73
Western Township	318	132	72	378
Eastern Bantu Township	306	192	44	454
Jabavu	1,652	1,289	2,192	749
Mofolo South	85	86	79	92
Moroka	1,685	1,204	814	2,075
Orlando	839	560	441	958
Pimville	598	518	280	836
Shantytown	393	509	259	643
Tladi	1,000	418	308	1,110
TOTAL	8,646	5,986	5,349	9,283

Patients/...

Patients requiring daily streptomycin are admitted to hospital. Patients with minimal or limited disease and a negative sputum are treated at work. Home visits are made three times a week and less frequent visits are necessary by patients with a negative sputum who are on tablet therapy.

Clinic Attendances:

Clinic	Cases		Contacts		Suspects		Totals	
	1st Visit	Re-Visit	1st Visit	Re-Visit	1st Visit	Re-Visit	1st Visit	Re-Visit
18 Hoek Street:								
Factory Workers	341	20,331	7	9	89	321	437	20,661
Domestics	473	18,019	433	216	179	110	1,085	18,345
Medical Examination Centre	540	610	Nil	Nil	793	26	1,333	636
Waterval Hospital	107	5,984	148	251	78	156	333	6,391
Noordgesig	54	7,299	175	1,247	42	69	271	8,619
Riverlea	54	1,289	105	113	241	61	400	1,463
Western Township	122	12,814	643	399	108	2	873	13,215
Eastern Bantu Township	167	9,292	278	244	285	73	730	9,609
Jabavu	981	31,731	1,420	11,045	363	281	2,764	43,057
Mofolo South	30	845	100	102	2	Nil	132	947
Moroka	612	46,808	1,941	1,742	1,116	182	3,669	48,732
Orlando	376	22,499	82	5,432	1,165	362	1,623	28,293
Pimville	359	15,041	482	728	1,173	176	2,014	15,945
Shantytown	436	14,816	122	2,440	272	1,963	830	19,219
Iladi	98	4,436	395	1,118	5	4	498	5,558
TOTAL	4,750	211,814	6,331	25,086	5,911	3,786	16,992	240,686

Two jeeps are provided for the transport of patients and contacts to Waterval Hospital for X-ray examination and/or treatment and for the transport of tuberculosis cases to the Disinfecting Station for onward transport to other tuberculosis hospitals. The number of persons so transported during 1962 was 5,332 but this was increased to 5,873 in 1963 and to 5,846 for 1964. The mileage covered was 33,692 miles. 45 Patients were transported to Hospital.

The jeeps are now also used to transport nurses checking defaulters and to supplement the clinic services. 2,043 such visits were made. The jeeps are stationed three times a week at vantage points in the outlying townships while a Bantu nurse gives streptomycin injections to patients on this treatment. This has had a good effect in reducing defaulters.

The/...

The home visits by tuberculosis staff are reflected in the following table:-

Clinic	Health Visitors	Domiciliary Staff
18 Hoek Street:		
Factory Workers	179	Nil
Domestics	2,362	513
Medical Examination Centre	Nil	Nil
Waternal Hospital	5	56
Noordgesig	198	1,347
Riverlea	203	939
Western Township	85	888
Eastern Bantu Township	453	872
Jabavu	1,114	4,796
Mofolo South	193	37
Moroka	1,437	9,927
Orlando	740	4,326
Pimville	518	3,316
Shantytown	401	4,268
Tladi	147	665
TOTAL	8,035	31,980

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

Hospital	Number of Patients			
	In Hospital as at 1.1.1964	Admitted During 1964	Discharged During 1964	In Hospital as at 31.12.1964
Knights Chest	158	192	205	145
Rose Chest	211	497	513	195
Waverley Chest	163	283	275	171
Randfontein South Chest	116	156	195	77
East Rand Chest	1	1	-	2
King George V	2	4	3	3
Waternal	164	265	339	90
East Rand South African National Tuberculosis Association Centre	2	14	8	8
Alexandra South African National Tuberculosis Association	5	1	4	2
Charles Hurwitz	300	489	479	310
Rietfontein	67	169	156	80
D.P. Marais South African National Tuberculosis Association	1	1	1	1
Tshepong	2		2	
H.M. Wolfsohn	1		1	
Philadelphia	1	1	1	1
Zonderwater	1		1	
Dannhauser	1			1
TOTAL	1,196	2,073	2,183	1,086

The number of patients treated in hospital has decreased slightly as compared with the previous year. Suitable hospital accommodation for Bantu is reasonably adequate but this is not the case in regard to Coloureds and Asiatics.

The following X-ray plants are available:-

(a) At Waterval Hospital there is a machine for taking large plates and another for 70 mm. pictures which is also capable of taking large plates. The use of the mobile 100 mm. unit has greatly reduced the use of these plants.

6,244 patients were X-rayed on large plates of which 2,548 were tuberculosis patients and no miniatures were taken.

(b) At the Medical Examination Centre for males there are two 70 mm. units with an attachment for taking large plates and there is an additional 70 mm. plant at the centre for females. These installations are used mainly for the examination of Bantu seeking work.

Miniature X-rays totalled 88,083 males and 10,590 females and large plates 1,878 males and 151 females. Of the males 0.57% and of the females 0.48% were positive.

(c) The mobile 100 mm. unit serves the clinics in the Bantu townships, the Charles Hurwitz Centre and at 18 Hoek Street. It is used for the routine X-ray of older children and adults who are cases or contacts. The total number X-rayed was 25,850. The mileage covered was 3,436 miles.

The South African National Tuberculosis Association (Johannesburg) undertakes miniature radiography on behalf of the City Health Department by means of two mobile 70 mm. units. The Association collects contributions from those willing to pay and the Council pays for the balance at the rate of 15 cents per miniature. The units visit employers' premises by arrangement where the numbers warrant it and they are stationed periodically at strategic points in the streets. Non-European suspects are referred to 18 Hoek Street and X-rayed by the 100 mm. mobile unit and Europeans are referred to the Municipal Chest Clinic.

The statistics are as follows:-

	<u>European</u>	<u>Non-European</u>	<u>Total</u>
Miniatures taken	22,243	51,357	73,600
Referred for large plates	344	1,480	1,824
Active cases found	4	127	131
Inactive cases found	7	117	124

The percentage of active cases found among Non-Europeans in this group was 0.05%.

(e) At/...

(e) At the Municipal Chest Clinic for Europeans, the X-ray Department of the General Hospital provides a satisfactory service at agreed rates. A fluoroscopic screen has been installed at the Clinic.

(f) Special X-ray Surveys:-

Surveys of garment workers in the Reef and Pretoria area have been organised annually for the last seven years by the Transvaal Clothing Industry Medical Aid Society and conducted by the South African National Tuberculosis Association. The Society has a very generous aid scheme for tuberculosis cases that must be hospitalised. The City Health Department pays for the X-rays of workers resident in Johannesburg. The X-rays are included in the table in paragraph (d) above.

The following is a brief summary of the details of the survey as from 1957:-

Total Persons X-rayed by the South African National Tuberculosis Association	Notified Cases of Pulmonary Tuberculosis
1957 20,197	92 (0.45%)
1958 17,529	28 (0.15%)
1959/60 17,457	59 (0.33%)
1961 17,648	57 (0.32%)
1962 17,974	93 (0.51%)
1963 21,535	87 (0.40%)
1964 23,645	71 (0.30%)

The reasons for the increase in the number of cases discovered in 1962 were because the miniature films were read independently by a consultant radiologist and the Chief Tuberculosis Medical Officer, thereby reducing the margin of 'reading' error, and because stricter criteria were applied to borderline cases which could be classified either as active or inactive disease.

Sociological Aspects

Welfare workers attached to the staff of the Department investigate all reported cases of tuberculosis and obtain for them any assistance they require within the limits of what is available. Every effort is made to

persuade/...

persuade employers to keep jobs open for their employees and to find employment for patients with arrested disease. Employers are co-operating well and some pay wages during absence from work although not obliged to do so.

During the year under review, the Department spent R55,036 on feeding tuberculosis patients, who are either treated at home or have returned from Hospital but are not quite fit to return to work. R1,113-36 was spent on Europeans and the balance on Non-Europeans. This expenditure is subsidised by the State Department of Health.

European patients receive pasteurised milk. Non-Europeans receive supplementary foodstuffs such as powdered protein foodstuffs, kaffircorn meal, peanut butter and skimmed milk powder. The following total quantities were issued during the year under review:-

Europeans	- Pasteurised Milk	25,199 pints
Non-Europeans	- Peanut Butter	180,092 lbs.
	Skimmed Milk	185,061 lbs.
	Soup Powder	43,824 lbs.
	Kaffircorn Meal	285,420 lbs.
	Full Cream Powdered Milk	5,110 lbs.

The local branch of the South African National Tuberculosis Association assists the families of tuberculous patients in hospital or on domiciliary treatment by distributing high protein foods and blankets and making cash grants for rent, fuel and other necessities, mainly to Non-Europeans whose need is greatest, but also to Europeans. The Association also assists in the rehabilitation of patients by finding employment and in other ways. The Council makes a grant of R30,000 per annum towards this work.

The Council spends considerable sums in providing and subsidising European and Bantu housing and is actively building houses for Coloureds. Consideration is readily given by the Council to the remission or part remission of rentals where the bread-winner of a family is unemployed for any reasons, including tuberculosis. Bad housing still plays a considerable part in the spread of tuberculosis, particularly among Coloureds and Asiatics, through unavoidable delays in providing satisfactory housing.

B.C.G. Vaccination

The use of B.C.G. vaccine should be determined on the basis of the need for it in given individuals, or

particular/...

particular population groups, and under circumstances in which exposure to tuberculosis infection cannot be avoided, or the risk of the disease is high.

This would appear to apply to a very large extent in our Bantu townships but in respect of the European population B.C.G. inoculation does not appear to be as urgent a problem. All persons with known communicable tuberculosis are under treatment either in hospital or at home under supervision. These measures are usually adequate to protect the remaining members of the family from the disease. The contacts are X-rayed at regular intervals and initially tuberculin tested and all negative reactors receive B.C.G.

B.C.G. Follow-up Campaign

The B.C.G. Follow-up Campaign occupied the first half of the year. The follow-up of positive reactors was completed between the scheduled dates 1st February - 30th June 1964. Of a total of 12,311 positive reactors 9,655 (78.4%) were traced and 8,694 (70.6%) were investigated and placed on therapy where necessary.

0 - 4 years 11 months	1,495 children were traced 1,331 children were notified as tuberculous
5 -10 years	3,287 children were traced 2,840 were investigated
11 -20 years	4,873 were traced 4,385 were investigated
20 years	Only 332 vaccinees presented for X-ray examination out of a total of 35,321.

Of the 0- 4 years 11 months group, 1,331 were notified on the grounds of positive hypersensitivity alone. Of the above notification, 382 had positive X-ray findings.

An overall figure of notification of new cases of tuberculosis was 1,856 of which 1,626 were notified as a result of tracing and investigation of positive reactors. A further 230 were discovered as contacts of newly notified cases.

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 Non-Europeans, cases of venereal disease are treated at each of the seven poly-clinics in the Bantu townships, at the Medical Examination Centre, (attached to the Employment Bureau of the Non-European Affairs Department); at the Non-European Hospital and at Coronation Hospital. The tendency is to avoid set times for clinics and to treat cases as they appear.

The following table indicates the number of cases dealt with at the various treatment centres during the years 1963 and 1964 inclusive:-

Treatment Centre	1963		1964	
	New Cases	Total Att.	New Cases	Total Att.
Bantu townships and North Eastern Townships	2,427	15,551	2,321	16,920
Medical Examination Centre	1,046	2,741	1,639	5,058
Non-European Hosp.	1,639	4,466	1,152	3,624
Coronation Hospital	522	1,443	461	1,318
	5,634	24,201	5,573	26,920
General Hospital (for Europeans)	559	1,300	526	1,409
TOTAL	6,193	25,501	6,099	28,329

The statistics reflect a decrease in the number of new cases at the European and Bantu clinics.

The attendances at clinics are not a true reflection of the incidence of the disease. Many patients receive

treatment/...

treatment at outpatient departments of hospitals but the numbers are not recorded. Many others are treated by their private doctors who are under no obligation to notify cases and in fact do not do so. Any estimate of the incidence of venereal disease or of variations in the incidence must be based on personal evaluations. There is, however, a consensus of opinion that venereal disease, specially gonorrhoea, is on the increase.

An increase of extra-marital sexuality, pre-marital sexuality and sexual promiscuity generally, as reflected in a progressive increase in the percentage of illegitimate births, may be a factor.

7. PLAGUE PREVENTION AND ANTI-RODENT CONTROL MEASURES

These activities are controlled and developed as a section of the Sanitation Branch working in close liaison with other sections in all matters concerned with the control of rodents and other pests.

The routine anti-rodent functions 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) Maintaining/..

- (f) Maintaining 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 Bantu townships 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) Regular submission of specimens of rodents and fleas caught in the city and on the veld to the Plague Research Laboratory of the South African Institute for Medical Research for routine examination for plague.

No cases of human or rodent plague occurred during the year, and as a routine control measure 358 rodents 6 special rodents and 30 batches of 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 126 rodents submitted for the determination of murine typhus and tick bite fever infection. In 10 instances possible signs of infection were found and precautionary steps were taken accordingly.

Other activities concerning rodent infestations throughout the year involved 2,319 inspections, re-inspections and interviews by health inspectors, and a combined total of 147,632 visits by pest control overseers operating in the city and contiguous country areas. Premises requiring trapping or other treatment for rodent infestation entailed 45,713 town and country visits. 30,644 separate premises received gassing treatment prior to demolition or in other appropriate circumstances. A total of 26,191 rodents, including 9,720 domestic rats, were known to have been destroyed.

Anti-coagulant poison bait is the main method of destruction as it reduces the visits from daily to once a week as compared with trapping but it results in fewer rodents being recovered.

The total number of rodents destroyed as a result of large scale gassing of rodent burrows on the veld and of the use of P3 (poison traps) elsewhere is far in excess of the figures quoted as so many dead rodents are not retrieved.

Stringent/...

Stringent precautionary measures against rodents have been maintained throughout the Bantu townships and around the boundaries. Gerbille infestation occurred in some areas but as a result of the constant use of three carbon monoxide gassing machines most areas have been cleared. Heavy Gerbille infestation was found in Bosmont extending into Newlands and Newclare. Periodic infestations of this type act as a warning that constant surveillance and destruction of gerbilles is necessary in enzootic plague areas. Batch specimens sent to the South African Institute for Medical Research comprised 541 rodents and 30 batches of fleas.

The activities of the Department in regard to other pests are recorded later in this report.

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 of certain communicable diseases. The supervision of nursing homes is reported under this section as the checking of nursing care, particularly the care of mothers and infants, is an important aspect of the service.

(i) 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 require that all practising midwives must be listed with local authorities 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:-

Race	1964		1963	
	Certifi- cated	Uncer- tified	Certifi- cated	Uncer- tified
Europeans	107	1	153	3
Coloureds	16	-	20	-
Bantu	264	-	291	-
Asiatics	7	-	8	-
TOTAL	394	1	472	3

For various reasons such as deaths, discontinuing practice, inability to trace, etc., the names of 147 trained midwives were removed from the list of practising midwives and 69 were added. The names of 2 untrained European midwives were deleted at their own request.

The bags and registers of midwives are inspected quarterly and where necessary, midwives are visited in their homes. There were 268 bag inspections, 729 inspections of registers and 93 visits were paid to the midwives in their homes.

(ii) 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 in the city area to ensure that they are conducted in a satisfactory manner and in connection with the licensing of these institutions under the Public Health By-laws and registering with the State Department of Health. There were 632 visits during the year and 56 interviews with owners and architects.

The number of licensed nursing homes at the end of the year was 27. There was much activity during the year to effect structural improvements and to provide additional accommodation and most of the nursing homes now comply with the Nursing Home By-laws promulgated on the 12th April 1961, or will do so when work planned or in progress is completed.

Numerous bacteriological investigations were carried out by members of this section assisted by a member of the

health/...

health inspectorate staff, in both general nursing and maternity homes, in respect of the control of infection in nursing homes. In addition, a series of investigations were carried out in connection with theatre disinfection and the disinfection of bedding.

A good deal of health education has been effected at individual level based on preventive techniques with stress on the sterilisation of syringes and equipment, the use of disposable equipment and the storage and transportation of sterile packs; the disposal and incineration of soiled dressings and ward refuse; and hand washing and the use of barrier creams by nurses doing dressings and midwives handling infants.

Institutions for the accommodation of the aged, other than those registered as nursing homes, were inspected by this section during the year. A general improvement in the standards of these institutions has been achieved, but there are some homes which cause the Department concern and which require constant supervision.

(iii) Investigations undertaken

(1) The following were notified to the Department during 1963 and 1964:-

	<u>1964</u>	<u>1963</u>
Maternal Deaths	49	40
Puerperal Sepsis	46	37
Pemphigus Neonatorum	17	9
Ophthalmia Neonatorum	60	22

All these reports were investigated by the Senior Health Visitor (Nursing Homes and Midwives).

(2) Of the 386 illegitimate births notified to the section 31 were imported. Of the local cases 12 died, 133 were kept by their mothers and 4 were still born. The remaining 233 babies were placed for adoption through registered adoption societies. 4 adoptions were arranged privately.

2. CHILD HEALTH SERVICES

(i) Home Visiting

This important aspect of community health work continued to provide the backbone of the service. Entry of the health visitor into the home was gained on notification of a birth. This entry provided the health visitor with the opportunity to supervise the health and progress of the infant as well as all other members of the family. Health education and advice on nutrition was given and a check on the immunisation state of the children made at regular intervals. Problems and abnormalities which fall outside the scope of the health visitor were referred to suitable sources for early correction and treatment.

Home visits paid:-

Race	Births Investigated	Home Visits
Europeans	9,424	49,636
Coloureds	1,931	10,415
Asiatics	408	3,719
Bantu (Central)	873	2,070
TOTAL	12,636	65,840

The visiting of geriatric and mental cases in their homes has become an established service and during the year health visitors looked in on old age pensioners whenever possible and at Christmas time assisted in delivering parcels of food from the "Rand Daily Mail" Fund to the aged in their areas.

Monthly reports were submitted to the Commissioner for Child Welfare on 77 protected infants.

For educational and statistical reasons health visitors investigate all infant deaths. 338 such investigations were conducted and although this forms the most unpopular part of the health visitors' work, it is felt that the importance of the results does not justify the discontinuing of these investigations at present.

Kwashiorkor/...

Kwashiorkor notifications in the central areas were referred to health visitors and were investigated wherever possible. Many cases were not traced owing to false addresses being given, patients having moved or returned to a "farm" or outside area from which they come to seek medical aid. Where the case was traced the health visitor offered advice and assistance in the form of skimmed milk and persuaded the mother to attend the nearest clinic for supervision.

Kwashiorkor cases notified for the central areas:-

European	-
Coloured	1
Asiatic	-
Bantu	97
	<hr/>
Total	98
	<hr/>

Traced and advice given	38
Died in hospital	4

The deaf screening for infants and pre-school children was continued during the year. Unfortunately one of the two health visitors who received a special training overseas in this work resigned during the year, so that the number of cases tested was drastically reduced.

97 Children were screened in the special sound-proofed room. Of these 15 were found to have some hearing defect. 12 cases were booked for re-testing as the loss of hearing was thought to be due to heavy colds, inflammation of the ear drum or inability to concentrate. 3 children were found to have very low mental capacity and one of these has subsequently been institutionalised.

During the year a screening audiometer was purchased and some trials of deaf screening with this audiometer were carried out at several nursery schools. It is hoped to expand this important aspect of medical examination soon.

The cases showing abnormality of hearing were referred to general practitioners or to the Children's Hospital for further investigation and treatment.

(ii) Child/...

(ii) Child Health Clinics

Child Health Clinics were distributed as follows:-

- 26 for Europeans providing 33 sessions.
- 4 for Coloureds providing 6 sessions.
- 1 for Asiatics providing 1 session.
- 1 for "central area" Bantu providing 3 sessions for the first half of the year.
- 1 Mobile Clinic providing 5 sessions for Coloureds, 1 for Asiatics and 1 for Bantu in the "central area".

This provides a total of 43 child health clinics conducted weekly and the mobile van providing 2 all-day and 6 half-day clinics for Non-Europeans.

With the development of the Coloured areas better facilities for child health have been sought. With the co-operation of the Division for Coloured and Asiatic Affairs a clinic was established in the Administrative Building in Riverlea until a permanent clinic can be erected in the area. This released the mobile clinic formerly functioning in Riverlea so that it could be transferred to Bosmont where the services were urgently needed.

Asiatic attendances have been decreasing as these people were moved out of the central areas and one session of the mobile clinic formerly for Asiatics was utilised for the Bantu clinic.

Attendances at clinics were:-

	<u>1962</u>	<u>1963</u>	<u>1964</u>
European	81,158	87,333	86,482
Coloured	12,557	36,351	35,703
Asiatic	5,602	8,329	6,813
Bantu - central areas	11,716	7,347	7,248
Total	<u>111,033</u>	<u>139,360</u>	<u>136,246</u>

Of the total figure 18,460 consisted of Coloured, Asiatic and Bantu attendances at the mobile clinic.

Medical officers attended sessions at all the child health clinics, medically examining all new attendances and re-examining them whenever necessary. Only a small number of the total pre-school age group were examined as facilities do not exist for all. Only children attending

subsidised/...

subsidised nursery schools were examined at their schools regularly.

Infant examinations were:-

	<u>1964</u>
European	8,996
Coloured	3,029
Asiatic	814
Bantu - central areas	335
	<hr/>
Total	13,174
	<hr/>

Pre-school examinations 5,693

These totals compared with 12,974 and 5,631 for 1963.

The child health medical officers supervised the issues at the clinics of subsidised skimmed milk powder to infants showing signs of malnutrition or failure to thrive.

(iii) Immunisation Services : City Area

Immunisation of the public against preventable diseases continued steadily throughout the year. European clinics were conducted in the city clinic on three days every week and at two outlying points, namely South Hills and Newlands every sixth week. The Coloured community was catered for by two clinic sessions conducted six-weekly and by the mobile van where immunisation was incorporated with the child health clinics every week at Albertville, Riverlea and Western Coloured Township. Oral poliomyelitis immunisation was given weekly at the Indian clinic in Fordsburg and for the central Bantu at the Avenue clinic and mobile van session at the Von Wielligh Street point.

Immunisation was offered against poliomyelitis, diphtheria, whooping cough, tetanus and smallpox.

Immunisation of school children in Provincial schools has become an accepted and regular service and the co-operation of the principals and staff of schools has been excellent. Whereas previously the team visiting schools concentrated on diphtheria immunisation only requiring two visits to complete the course, during 1964 it was decided to offer all available types of immunisation

to the/...

to the pupils. This required more time on the clerical side, to sort the children into the necessary categories, and more visits per school to complete all the procedures. Fewer schools were visited but a total of many more actual immunisations were given. 13 schools were visited for general immunisation - one Coloured school with an enrolment of 2,678 pupils necessitated 14 visits to complete the immunisation. Vaccination against smallpox was performed in 41 schools, 3 orphanages, 1 crèche and the school for cerebral palsied children. Poliomyelitis immunisation only was done at 2 schools making a total of 46 schools.

Immunisations Carried Out During the Year 1964.

Type	European	Coloured	Asiatic	Bantu	Total
Diphtheria/whooping cough/tetanus	5,496	1,832	112	307	7,747
Diphtheria/tetanus	2,229	2,446	-	21	4,696
Diphtheria	24	3	-	-	27
Boosters	4,815	1,367	-	1	6,183
Tetanus and other	1,202	756	-	4	1,962
Total No. of injections	33,394	16,769	112	1,454	51,729
Vaccinations	56,549	5,053	-	992	62,594
<u>Oral Poliomyelitis Feeds</u>					
No. 1	12,800	5,467	606	665	19,538
2	11,921	4,734	618	517	17,790
3	12,031	4,775	580	361	17,747
Total Poliomyelitis Feeds	36,752	14,976	1,804	1,543	55,075

The immunisation of new-born infants and immigrants with oral poliomyelitis vaccine has been very well maintained. Regulations making poliomyelitis immunisation compulsory for children up to 16 years and immigrants up to 40 years were gazetted on 27th December 1963.

(iv) Nursery School Service

This service comprises three components which are dealt with in the following paragraphs.

The future of the European nursery schools conducted by the Council is still very uncertain. The Director of Local Government has instructed the Council to find

voluntary/...

voluntary welfare organisations to take them over. Letters were sent to eligible organisations and some have asked for further information. Negotiations are proceeding in respect of the La Rochelle Nursery School.

(a) Nursery School Medical Services

During the year there were three medical officers available for medical supervision of nursery school children. The service is provided at the 7 municipal nursery schools (5 European and 2 Bantu) and at 41 non-profit-making nursery schools (39 European and 2 Coloured). The examinations totalled 5,693 (5,132 European and 561 Non-European) of which 1,895 were first examinations.

The physical, mental, emotional and social problems were assessed. The parents were required to fill in a form giving basic medical data on admission of the child. The parents were also interviewed where possible to impart basic health education.

Stress was laid on the prevention of diseases in the children and a check made to ensure that every child was immunised against smallpox, diphtheria, whooping cough, tetanus and poliomyelitis. A form was sent to every child leaving nursery school reminding parents of the necessity for receiving booster injections for diphtheria and tetanus.

Each child was fully examined at least twice a year and the findings recorded on a medical card kept at the nursery school. Height and weight were measured at least 4 times a year and charted.

Visual screening was done by the supervisors with simple apparatus after being trained in the methods used. Doubtful cases are referred to the medical officers who referred some of them to ophthalmologists.

Any child suspected of being hard of hearing was referred to the special screening clinic at 18 Hoek Street for screening.

Every child was tuberculin tested, the Heaf test replacing the patch test. Children with positive results were referred to their own doctors or to the Municipal Chest Clinic.

Routine stool testing was done at the municipal

nursery/...

nursery schools and simple treatment given where necessary or children were referred for treatment.

Dental services are provided for pre-school children by the Johannesburg Coronation Dental Infirmary. The children are examined twice a year. This institution is supported by the Johannesburg City Council, the Transvaal Provincial Administration and the State Department of Health and is conducted by a Board comprising representatives of these bodies and the Dental Association of South Africa. Services are also provided for indigent and semi-indigent school children and for mothers in the ante-natal and post-natal period.

The records of pre-school children who have been medically supervised during their attendance at nursery schools are handed over to the school authorities when they enter primary schools, as school medical services are provided by the Hospital Services Branch of the Transvaal Provincial Administration and not by the City Health Department. The Medical Officer of Health does, however, supervise infectious diseases among school children and their exclusion from school where necessary, in terms of regulations promulgated under Section 138 of the Public Health Act.

(b) Supervision of Nursery Schools

This includes all pre-school institutions conducted privately.

Control is exercised under the Town Planning Scheme and the Public Health and Building By-laws and by means of a certificate which is required by the Social Welfare Department from Council's officials in terms of Section 4(2) of the Regulations under the Children's Act, 1960, (Proclamation No. 524 of 30th March 1961). The certificate applies only to pre-school institutions registrable by the Social Welfare Department in terms of Section 42 of the Children's Act and this does not include nursery schools.

Control is usually triggered off by an application for permission for change of use under the Town Planning Scheme but once the new use is established transfer may take place without the Department being notified.

Standards for the building and for facilities for the preparation of food can be controlled under existing by-laws but other important matters can only be dealt with by persuasive methods. These include the control of indoor and outdoor space per child, furniture and equipment required, the conduct of the nursery school, keeping of records and registers, safety measures, staffing standards and medical supervision. Special by-laws are required to control these aspects but cannot be promulgated until the necessary powers are written into the Local Government Ordinance. Application has been made for such powers but without success.

There are 56 nursery schools that receive a token grant from the Council which qualifies them for a subsidy from the Transvaal Education Department. They cater for approximately 3,036 children. Of these 44 take advantage of the Department's Medical Service.

There are 46 private pre-school institutions registered under the Children's Act, catering for 1,270 children and conducted for profit.

There are approximately 35 nursery schools for Bantu, the majority (\pm 30) of which are conducted by the African Self-Help Association.

The Inspectress of Nursery Schools keeps all these institutions (profit-making and non-profit-making) under observation and handles applications for the establishment of proposed new pre-school institutions. This entails discussions of plans with applicants and their architects, visiting proposed sites, advising regarding standards and by-laws applicable to the buildings.

(c) Municipal Nursery Schools and Day Nurseries

The City Health Department conducts five nursery schools for Europeans and two day nurseries for Bantu.

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, treatment of psychological defects, behaviour difficulties and abnormalities (by the Johannesburg Child Guidance Clinic - for Europeans only), other specialist services and regular home visiting

by the/...

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

The average enrolment at the European schools was as follows:-

La Rochelle Nursery School	58
Judith's Paarl Nursery School	58
Vrededorp Nursery School	33
Fordsburg Nursery School	42
Newlands Nursery School	31

The La Rochelle building was specially erected as a nursery school and the Judith's Paarl building is also owned by the Council. These schools are well supported and have long waiting lists.

A new building for the Newlands Nursery School was erected in 1964. There is a long waiting list for this nursery school.

The Fordsburg Nursery School is conducted in rented premises at the Octavia Hill Flats. Of the 45 children enrolled only 5 live in the Flats. The balance come from Mayfair.

The two Bantu nursery schools are conducted at Chiawelo and Jabavu and have an enrolment of 114 and 134 respectively. A building has been adapted and altered to provide new premises for the Jabavu Nursery School but will only accommodate 80 children.

V. MEDICAL SERVICES IN BANTU TOWNSHIPS

Comprehensive medical services, comprising curative and preventive aspects, have been maintained in the Council's Bantu Townships and are centred on 6 polyclinics plus a clinic for tuberculosis patients.

(i) Outpatient and Midwifery Services

These are grouped together as they are carried out by the Council on behalf of the Transvaal Provincial Administration which has subsidised them since 1st April 1958, pending the taking over of executive responsibility at some future date.

A five year plan for the progressive transfer of these services has been approved by the Provincial Administration

and by/...

and by the City Council. The existing and proposed distribution of clinics is shown in Annexure 9 (A and B). The clinic at Moroka will be replaced by a new clinic at Senoane, a new clinic building will be provided at Pimville on a more central site and the clinics at Shantytown and Noordgesig will eventually be closed. New buildings will be provided adjacent to the clinics for preventive and promotive services. The implementation of the transfer has been the subject of correspondence and interviews and will be further pressed in the forthcoming year.

The curative and midwifery services were maintained at an efficient level during the year and no special problems were encountered. The Provincial Administration is now committed to take over progressively the executive control of the curative and midwifery services by one geographical zone after another, over a period of 5 years, enabling the Council to give full attention to the conduct of the remaining promotive and preventive services which are its only rightful responsibility. During the transition period, the erection of preventive health clinics will be required at Tladi, Senoane, Jabavu, Orlando and Pimville. Two Provincial clinics will be erected by the Council at Senoane and Pimville and let to the Province at economic rentals.

Detailed statistics for the medical services are included in Annexure 8. All the clinics are linked with each other and with Baragwanath Hospital by radio communication. The ambulances also carry two-way sets. The walkie-talkie sets issued to midwives on night duty are of great assistance in view of the almost complete absence of telephones, but in some areas their operation is somewhat unreliable for technical reasons.

An ambulance service is conducted by the Fire Department which removed 72,340 patients during the year. This is supplemented by a bus ambulance for non-stretcher cases operated by the Province. A bus does a circular tour between all clinics and Baragwanath Hospital twice daily. A further 5,899 patients (mainly tuberculars) were transported by the City Health Department which also provided a transport service for nurses and midwives to assist them with their district work.

There is a close association between the clinic services and Baragwanath Hospital and the staff of the clinics and that of the hospital co-operate very satisfactorily.

(ii) Child Health/...

(ii) Child Health Services

The basis of the reorganised service is domiciliary health visiting, serving the family as a unit and with records kept in a family folder. The health visitors now deal with all preventive health matters affecting the family, including child health immunisation procedures, follow up of malnutrition cases discharged from hospital, mental health and social problems and any other factors bearing on the health of the family. Problems outside the scope of the service are referred to the appropriate agency. The link between the home visiting and the clinics is maintained by organising sessions by areas so that the health visitor for the area will attend her own mothers.

This service has promoted close contact and cordial relations between health visitors and the families for whom they are responsible. Each Bantu health visitor is allocated 3,200 families - a somewhat high case load which will be eased when circumstances permit but this figure in some areas is as high as 4,200 to 4,300 homes. The heavy immunisation programme was a further drain on their resources. Wasted visits are a constant problem but no immediate solution can be found.

In spite of the difficulties so far encountered good results have been achieved and these may be expected to build up as the staff gain experience and the case load is eased through completion of the initial immunisation programmes and in other ways.

(iii) Immunisation Services

Routine immunisation by the clinics and the health visitor service was continued against diphtheria, whooping cough and tetanus (D.W.T.) and against poliomyelitis and smallpox.

The schedule of child immunisation applied in the Bantu areas is as follows:-

<u>Age</u>	<u>Inoculation</u>
0 - 3 months	Percutaneous B.C.G. Vaccination.
2 months	Smallpox Vaccination.
3 months	1st Diphtheria and whooping cough/tetanus dose. 1st oral poliomyelitis dose. Vaccination or re-vaccination where necessary.
4 months	2nd D.W.T. 2nd oral poliomyelitis dose. Vaccination or re-vaccination where necessary.
	5 months/...

<u>Age</u>	<u>Inoculation</u>
5 months	3rd D.W.T. 3rd oral poliomyelitis dose. Vaccination or re-vaccination where necessary.

If the child is 3 years and over, diphtheria/tetanus (D.T.) antigen is used and pertussis omitted in view of possible untoward reaction. Where infants or children present for the first time, later than in the first months of life, diphtheria, whooping cough and tetanus antigens and oral poliomyelitis vaccine are also given, concurrently at intervals of not less than 4 weeks together with smallpox vaccination where necessary. Combined immunisation procedure has been entirely satisfactory.

There has been a phenomenal increase of routine attendances for immunisation purposes stimulated by orientation and participation of the community in the many extensive mass immunisation campaigns against various diseases conducted in these areas during recent years, and by the work of the domiciliary health visitor service.

The following table summarises the immunisation of all types in the Bantu areas for the year ended 31st December 1964:-

IMMUNISATION SYSTEM	POLIO	D.W.T.	D.T.	SMALLPOX	B.C.G.	OTHER
Routine Immunisation at Clinics	65,077	37,775	4,169	30,170	9,562	7,710
Health Visitor Services Immunisations at Clinics	5,864	4,974		3,085		
Health Visitor Services Immunisations at Home	17,258	6	15	3,706	12,814	
Health Visitor Services Immunisations, Crèche or School	878	210	53	696		
TOTAL IMMUNISATIONS	89,077	42,965	4,237	37,657	22,376	7,710

(iv) Surveys Controlled Studies and Research Projects

1. Tuberculosis Control Programme: An assignment to trace, investigate and treat persons who presented 24 hour positive hypersensitivity skin reactions to percutaneous B.C.G. freeze-dried vaccine, inoculated in the mass immunisation campaign at the end of the previous year in which 160, 298 were vaccinated, was completed by the routine Tuberculosis Services in the Bantu areas.

Of/...

Of the 12,311 positive reactors resident in the areas 9,655 (78.4%) were traced and 8,694 (70.6%) were investigated and placed on treatment where necessary. In vaccinees aged 0 - 4 years 11 months, 1,495 children were traced and 1,469 placed on treatment. In the age group 5 - 10 years, 3,287 children were traced and 2,840 were investigated and placed on treatment where necessary. In support of our prior contention, despite every effort, only 323 vaccinees over 20 years of age came forward for X-ray examination. It was especially significant as 35,321 persons in this age group were vaccinated in the mass campaign.

Conclusions reached after completion of the mass campaign and follow up phase were that percutaneous vaccination of freeze-dried vaccine inoculated with Heaf's apparatus with reading of 24 hour sensitivity reaction was very suitable for mass rapid field application; absence of local or general complication was a significant advance; that the loss of the tuberculin test as a result of mass vaccination campaign in communities of high incidence of tuberculosis is far outweighed by the protection offered to the community; and that routine percutaneous B.C.G. vaccination of the newborn is essential to maintain and extend epidemiological advantage gained by mass immunisation campaigns.

2. Trachoma: Following isolation of trachoma virus in these areas, a total of 58,310 persons were examined in 1962 and 3,000 suspects detected and treated being 5% of the total examined in the campaign. As isolation of the virus was impracticable for diagnostic confirmation the 3,000 suspects consisted of all types of conjunctivitis including the actual trachomatous infections which may have been amongst them. It was intended that in 1963 new entrants to schools would be examined and treated if suspect and previously suspect cases would be checked and treated if resistant to initial therapy. We in the Bantu areas contend that, though the trachoma virus may have been isolated here, the complications and advanced lesions of trachoma are not seen, and nothing more than low-grade preliminary invasive phases of palpebral conjunctivitis will ever be seen unless existing sociological and environmental circumstances deteriorate, when general lack of hygiene would permit eventual development of the classical and serious complications of trachoma. We maintain that under existing circumstances it is not an epidemiological threat. Accordingly greater priority was given to tuberculosis, measles, diphtheria, whooping cough, tetanus and smallpox control programmes and the trachoma follow-up was not recommenced until the latter half of 1964.

In this/...

In this follow-up phase 38,710 children in 75 schools were examined and 383 suspects treated being 1% of the total examined. A total of 260 houses were visited where 590 contacts of suspect cases were examined. Amongst these 57 suspect cases were discovered being 9.66% of this group thus reflecting a much higher incidence of non-specific conjunctivitis amongst contacts than the original 5% detected in the general population. It was also significant that the figure of 5% in the original campaign fell to 1% in the follow-up campaign in the schools suggesting an improvement in the amount of conjunctivitis found in these institutions.

3. Johannesburg Bantu Beer Research Project: This extensive undertaking was completed in May 1963 and the final edited report from the Council for Scientific and Industrial Research submitted to the Johannesburg City Council during 1964

4. Menarche Survey: Other workers have established a relationship between the average age of onset of menstruation and the nutritional status of a community. A field survey has been completed and interrogation data submitted to Dr. A.G. Oetlé of the South African Institute for Medical Research for evaluation. Detailed questionnaires were prepared and 34 schools were visited by the same doctor and a staff nurse. A total of 4,815 girls between the ages of 10 and 18 years were interviewed individually. To test the veracity of replies, 203 girls interviewed were re-questioned by a health visitor 3 weeks after interview. The replies of 9 girls differed. Of a further group of 103 who were re-interviewed after one week, 9 differed in their replies from those given at their original interviews. Based on these samples an average error of approximately 6% was shown.

5. Efficacy of Smallpox Vaccine: At the request of the Regional Director, State Health Services, a survey of 1,000 primary vaccinations was completed to test the efficacy of smallpox lymph. The data submitted to the Regional Director are summarised in Tables 1 and 2. The subjects were all infants and children. All vaccinations were performed and read by a medical officer. The figures for re-vaccinations reflect the results of re-vaccination of cases of failure of primary vaccination. Because of the relatively high success rate for primary vaccinations the sample for study of re-vaccinations was necessarily small.

PRIMARY/...

PRIMARY VACCINATION - TABLE 1.

BATCH NUMBER	NUMBER OF VACCINATIONS PERFORMED AND SUBSEQUENTLY INSPECTED	NUMBER SUCCESSFULLY VACCINATED	NUMBER UNSUCCESSFULLY VACCINATED	PERCENTAGE SUCCESS
G	370	310	60	83.78%
H	570	514	56	90.17%
A	60	57	3	95.00%
TOTAL	1,000	881	119	88.10%

RE-VACCINATION - TABLE 2.

BATCH NUMBER	NUMBER OF RE-VACCINATIONS PERFORMED AND SUBSEQUENTLY INSPECTED	NUMBER SUCCESSFULLY RE-VACCINATED	NUMBER UNSUCCESSFULLY RE-VACCINATED	PERCENTAGE SUCCESS
G	89	82	7	92.13%
H	67	63	4	94.02%
A	10	8	2	80.00%
TOTAL	166	153	13	92.18%

6. Kwashiorkor Survey: In the last annual report attention was drawn to the apparent unreliability of statistics obtained since kwashiorkor was made a notifiable disease, an experience paralleled by the unsuccessful attempt to obtain accurate data regarding measles cases, after the measles immunisation campaign. As large numbers of patients report to clinics in the first instance, as these clinic medical officers are well schooled in the criteria and diagnosis of kwashiorkor and as our medical organisation conducts a more extensive domiciliary service than others, it was surprising to find in a sample of 1,921 local cases notified that 1,639 (85.32%) were notified by Baragwanath Hospital, 206 (10.72%) by private practitioners in the area and 51 (2.65) by our medical services. Following a suggestion by Dr. Albert Sabin when he visited these areas that the true position in these situations can only be found by large-scale studies of controlled population sampling, study groups have completed during the last few months of 1964 the detailed structure of a field survey to determine more accurately the prevalence of kwashiorkor in Soweto. The project is scheduled for 1965. After a further

recent/...

recent appeal to Baragwanath Hospital to ensure that only true cases of kwashiorkor be notified and that other malnutritional states may be separately listed for the additional feeding and care by the Health Visitor Service of this Department, which is given to notified cases of kwashiorkor, and following awareness of the pending survey, there has been a drop in the notification of kwashiorkor by the hospital.

7. Mental Health Survey: A controlled study attempting to meet the difficult challenge of assessing the mental health pattern in these areas was commenced during the year. Bantu health visitors report cases of aberrant mental attitude encountered during routine domiciliary work and submit personal details of the case, tribe, religion, total family income, occupation, period resident in an urban area, relationship to family, occupation of breadwinner, whether the aberration was observed by the health visitor and its description, and a report of any aberration described by the family of any member of that family who is away from home, e.g. institutionalised, returned to homelands, etc. An assessment is then made by group study whether the aberration reported is in fact considered as such by the Bantu family, the Bantu neighbourhood, the Bantu community or the European community. Evaluated data will be submitted to a screening team. It is hoped to publish a paper in due course.

8. Nutritional Survey: A survey was undertaken on behalf of the Personnel Branch of the Staff Board of the City Council by the Health Visitor Service. The Personnel Branch gave the addresses of 100 Bantu municipal employees residing in Soweto together with an interrogation form to be completed in respect of each home. In only 41 (41%) could the information for completion of the forms be obtained. Two families refused to give details, 15 were wrong addresses, 1 had left the Council service, 5 were unable to give the information required and 36 homes were locked during the daylight hours of operation of the Health Visitor Service. Broadly this supports the generally unsatisfactory nature of any survey in Bantu areas based on a questionnaire system not only because of these factors but because of the notoriously inaccurate information frequently given more in the cause of pleasing the interrogator than on a basis of accuracy. (It is to be noted that in our surveys and controlled studies where data forms have to be completed, great caution regarding accuracy is taken. For example, in the Mental Health Survey there is no exactly similar completion of a routine questionnaire - the health visitor is mainly concerned with the recording of her own observations as in a clinical case card and is only concerned

with/...

with answers given in respect of personal details or where answers are stimulated to observe resultant behaviour patterns).

9. Psychiatric Survey: The services co-operated in a survey undertaken by Professor Hurst of the University of the Witwatersrand at Baragwanath Hospital by referring selected cases to the Psychiatric Outpatients Department.

(v) Venereal Disease Service

Separate clinics for the treatment of venereal disease in the Bantu townships have been discontinued in favour of treating patients at the outpatient and ante-natal clinics as they are diagnosed. Comments and statistics on the prevalence of venereal disease are reported elsewhere.

(vi) Dental Service

A dental service is provided at Orlando, Pimville, Mofolo South and Eastern Bantu Township. The most comprehensive service is at Orlando but none of the newer townships in that area have dental clinics. The Orlando Clinic treated a large proportion of cases from these other townships and also patients in Waterval Hospital.

The dental service at Mofolo South Tuberculosis Master Clinic was started in April and is operated in conjunction with a limited dental service at the Moroka Clinic. One dentist attends to both.

The services include a school dental service, mainly for Orlando and conservative treatment for mothers attending ante-natal clinics and tuberculotics. Casual service to control pain and sepsis is available to those who apply for it.

The number of clinics and the staff establishment are quite inadequate to cover the dental needs of the large Bantu population. The staff is overloaded by those who come forward for treatment without taking account of the many others who should also be treated.

At Orlando the number of patients seen increased from 35,473 in 1963 to 39,093. The number of extractions rose from 27,934 to 29,822. Fillings showed an insignificant drop of 10 in spite of the opening of 3 junior primary schools. Other figures except those shown under the heading of schools remain fairly static. At Pimville all figures are lower than the previous year; attendance fell by nearly 2,000. Ante-natal attendances fell by 300. There were 3,229 school inspections.

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The Mofolo South Tuberculosis Clinic is now well established: during 1964, 3,726 patients were seen, 948 were treated, 1,348 teeth were extracted and 201 fillings made. At Moroka the general clinic is now very busy: school children inspected numbered 1,659 of whom 192 were treated, 652 crèche children were inspected of whom 203 were treated. 5,688 patients were seen.

A large increase in the number of pupils examined at schools and of pupils treated has been recorded. The number of scholars inspected rose from 2,168 to a total of 11,686. 5,339 parental consents were received. This is an indication of the good work done by the individual operators in previous years. The good relations with school principals continued.

The following table reflects the work done during the years 1960 - 1964:-

Type of Treatment	1960	1961	1962	1963	1964
Anaesthetics	6	Nil	4	Nil	-
Fillings	3,479	4,062	2,944	2,750	2,890
Scalings	238	180	285	148	151
Extractions	31,962	43,610	42,850	40,488	47,629
No. of patients	27,255	35,782	34,894	33,860	37,936

(vii) Environmental Services

The routine environmental services, including the maintenance of a rodent-free belt round the city, are reported elsewhere in this report.

(viii) Pre-School Institutions

The Crèche Medical Inspection Service was extended to crèches operated by private organisations and has been extended into Dube. The areas of Orlando serviced by the Shantytown unit will begin in 1965. The medical inspection service is much appreciated by the voluntary bodies running these institutions. The two Municipal day nurseries run by the City Health Department in Chiawelo and Jabavu are visited by a child health medical officer each fortnight. 380 examinations were carried out in 1964. In addition to medical inspections, the medical officers effect immunisation where found necessary.

The/...

The following table shows the number of inspections of pre-school institutions carried out by the Child Health Medical Officers:-

	Number of Institutions Visited	First Examinations	Re-Examinations	Total Examinations	D.W.T./D.T.	Smallpox Vaccinations	Oral Polio-myelitis Feeds
Total 1.7.64. to 31.12.64.	21	800	304	1,104	280	82	270
Total 1964	42	1,050	627	2,477	280	182	400
Total 1963	28	-	-	1,829	-	205	710

D.W.T./D.T. Diphtheria/Whooping Cough/Tetanus/Diphtheria/Tetanus

(ix) Malnutrition and Kwashiorkor

The standard of nutrition of children attending child health clinics from an early age is good but in general the number of malnourished children especially those showing signs of protein deficiency is considerable. The majority show mild or early signs but there is a general undercurrent of malnutrition among pre-school children and especially in infants who are wholly artificially fed. The health visitors have done a great deal to better the nutritional habits and standards of many families.

All notified cases of kwashiorkor have been investigated in their homes by the Health Visitor Service and supplementary feeding and care maintained to prevent relapse.

The following table shows the kwashiorkor notifications in the Bantu areas and in the adjacent Coloured area of Noordgesig which falls under this Section. The figures for 1964 cannot be taken as finally accurate due to late arrivals of notifications and inevitable duplicate notifications in some instances.

Period	Race	Total Cases	Cases Investigated	Cases Pending Investigation	Responsibility		
					Local	Imported	Unknown
14.9.62. to 31.12.62.	Bantu Coloured	976) 1) 977	977	-	530	43	404
1963	Bantu Coloured	1744) 5) 1,749	1,749	-	969	120	660
1964	Bantu Coloured	1327) 1) 1,328	1,283	45	766	80	437

Supplementary/...

Supplementary foodstuffs in the form of skim milk powder, full-cream milk powder, peanut butter and kaffircorn meal were issued at the clinics. The cost to the Council for the fiscal year 1963/64 was R100,181. The issue of these foodstuffs undoubtedly helps to lower the incidence of malnutrition and kwashiorkor but the position is far from satisfactory. The State Department of Health agreed to subsidise skimmed milk powder at the rate of 5 cents per lb. (full costs 15 cents) as from the 1st October 1963.

VI. MEDICAL EXAMINATION CENTRE

This Centre was established to conduct all medical examinations associated with the Bantu Labour Employment Bureau (for males and females) conducted by the Non-European Affairs Department at 80 Albert Street. A bureau for females was opened at 1 Polly Street and separate medical facilities were provided by the City Health Department as from 1st April 1961.

A Senior Medical Officer is in charge of both centres the female unit being staffed by Non-European females, with a Non-European female medical officer in attendance.

The functions of the Centre, including the subsidiary centre for women, are as follows:-

- (i) Workseekers are submitted to a clinical examination and an X-ray of the chest. Blood tests are performed if indicated. All are vaccinated if not previously vaccinated or not within three years. Women are submitted to the additional tests for foodhandlers.
- (ii) Foodhandlers are submitted to additional examination (such as for sores on hands or elsewhere, discharges or sore throats) and the blood is tested for syphilis and the typhoid carrier state. If the Vi test is positive stools and urine are cultured.

The bulk of those sent for examination were dairy and ice cream factory workers, nursing home staff, domestic servants, teamakers, etc. Employers were encouraged to make special appointments for dairy and nursing home employees. The total number of foodhandlers examined was 670, an increase of 209 over the 1963 figure.

- (iii) Bantu in employment are examined at their own request or at the request of employers. Special appointments may be made by telephone. Employers are encouraged to send foodhandlers and nurse-maids for examination.

(iv) Municipal

- (iv) Municipal employees or prospective employees are examined for the pension fund and applicants for the municipal police force are submitted to a comparable examination.

Prospective daily paid employees are subjected to a thorough physical examination to determine whether they are fit for heavy or light manual labour and to reduce subsequent absenteeism. This includes a blood pressure reading, testing of vision and hearing and urine analysis.

A full medical history is taken.

The numbers average 21 per day but there may be as many as 75. This duty occupies much of the time of the medical staff. The number examined increased by 712 during 1963 to a total of 5,760 in 1964.

- (v) Treatment is provided for certain cases only. Pediculosis disinfection is carried out where necessary. Venereal disease is treated at the Centre at any time during working hours to suit the patients.

Tuberculosis cases found are treated at the Centre at daily clinics conducted by the senior medical officer with the assistance of a tuberculosis health visitor and two Bantu nurses from 18 Hoek Street or they are sent to a hospital, if this is necessary.

Bantu who are suffering from any other conditions requiring treatment are persuaded to accept treatment if this is necessary in the interest of their health and are referred to the appropriate agency.

The following table records the work of the Centre during the year:-

Sex	Work Seekers Examined	Food Handlers Examined	Municipal Pension Fund and Police	Employees Other	Medically Unfit		Vaccinations
					Temporary	Permanent	
Males	120,771	670	128	5,760	820	839	89,307
Females	14,531	21	64	142	5	41	12,286
Total	135,302	691	192	5,902	825	880	101,593

To obtain the full number of foodhandlers examined, all females examined (14,531) must be added.

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The number of male workseekers examined shows a small increase (2.30%) over the previous year but the total increase (including females) is 2.7%. Females are subjected to a full medical examination in the privacy of a cubicle.

Exemptions from employment on medical grounds were granted to 1,705 Bantu - 825 temporary exemptions and 880 permanent exemptions.

The temporary exemptions comprise Bantu 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 Bantu with appropriate agencies or at a general hospital.

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

Every endeavour is made by the Employment Officer of the Labour Bureau to find employment suitable to their disability for handicapped persons but lack of educational standards for occupations other than manual labour is a limiting factor. More success is achieved with selected tuberculosis cases who are clinically well and non-infectious. (See Annexure 12).

Workseekers who are medically unfit for any employment are given permanent exemption certificates. The number was greater than the previous year. The welfare section of the Labour Bureau arranges temporary assistance or invalidity or old age pensions for such cases according to their needs.

Pediculosis is not a problem. No cases were found among females and 6 in males, compared with 5 in 1963.

Venereal/...

Venereal Disease Attendances:

	1962		1963		1964	
	Males	Females	Males	Females	Males	Females
Gonorrhoea	248	1	216	-	231	30
Syphilis (all cases)	1,074	636	819	1,657	917	3,834
Venereal Disease						
Warts	114	2	49	-	34	12

Pulmonary Tuberculosis:

Sex	Miniature X-rays	Large X-rays	Cases Discovered	%
Males	88,083	1,878	507	0.57
Females	10,590	151	51	0.48
Total	98,673	2,029	558	-

The cases discovered were new cases; and the numbers noted in the table do not include the many cases detected which were subsequently found to be old notified cases, either on treatment at a clinic or absconders or defaulters from treatment.

The occupational distribution of male notifications was approximately as follows:-

	<u>1963</u>	<u>1964</u>
Flat cleaners in employment	16	34
Flat cleaners returning from home leave (usually one month or more)	26	13
Domestic servants and foodhandlers in general (excluding dairies)	48	17
Dairy employees	12	3
Pensioners (old age, disability, etc.)	9	20
Self employed individuals	3	3
Clerks	1	13
Labourers in employment	478	386
Labourers returning from home leave	26	18
	<u> </u>	<u> </u>
Total	619	507
	<u> </u>	<u> </u>

The/...

The age group distribution of notified pulmonary tuberculosis was as follows:-

Age in Years	1963		1964	
	Number of Cases	Percentage of Total	Number of Cases	Percentage of Total
16 years - 20 years	30	4.8	25	4.93
21 years - 25 years	68	11.0	48	9.47
26 years - 30 years	68	11.0	60	11.83
31 years - 35 years	74	12.0	62	12.23
36 years - 40 years	100	16.2	85	16.77
41 years - 45 years	97	15.8	65	12.82
46 years - 50 years	100	16.2	70	13.81
51 years - 55 years	28	4.6	26	5.13
56 years - 60 years	21	3.4	15	2.96
61 years - 65 years	18	2.6	22	4.34
66 years - 70 years	10	1.6	13	2.56
71 years - 75 years	3	0.5	3	.59
76 years - 80 years	2	0.3	-	-
81 years and over	-	0.0	2	.39
Age unrecorded			11	2.17
Total	619	100.0	507	100.00

From the above figures the age groups 21 - 50 appear to be the most vulnerable to tuberculosis.

VII. SANITATION AND FOOD SUPPLIES

1. RECORDS OF INSPECTIONS

The following table shows the number of routine inspections by health inspectors during the past two years, including inspections for the supervision of general sanitation and hygiene, investigations arising from complaints, inspections concerned with licensing, taking of samples, but does not include inspections related to the demolition of premises or the control of rodents and other pests which accounted for many additional inspections.

Health/...

Health Inspectors	Inspections and Visits
1964	1963
383,816	319,792

A table reflecting the various types of inspections made is contained in Annexure 13. (See also Annexure 10).

2. PROSECUTIONS

Prosecutions 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 involved a total of 994 persons. The number of charges preferred was 1,209 and fines (or "admission of guilt") of R8,969 were imposed. An analysis of the prosecutions is set out in Annexure 14.

3. 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 introduction of milk and cream from outside sources is controlled by the issue of permits which are granted only if the producer complies with the Council's dairy by-laws. During the year 979 permits were approved (an 8.5% increase on the previous year).

Milk introduced into the city from outside sources (excluding industrial milk) averaged 66,334 gallons daily, of which 225 gallons were supplied direct to consumers by 5 producer/distributors. This apparent increase in the daily consumption is due to action taken by the Milk Board who stopped supplies being hawked from Bantu areas. The supplies were replaced with bottled milk emanating from pasteurisation plants within the Municipal area. The average daily consumption in Johannesburg ranged from 60,210 to 66,334 gallons throughout the year.

Control of Milk Supplies in the City

The control and supervision of milk supplies within the city covers deliveries from outside producers to

local/...

local distributors and thence to the consumer; inspections of premises and vehicles and observations on handling methods and equipment. Samples are taken and field tests are performed at all stages of transport and handling to determine quality, purity and effective pasteurisation.

Samples taken are submitted to bacteriological, chemical or biological examination at one or other of the laboratories at the disposal of the Department. The field tests include phosphatase and sedimentation tests by means of which a close watch is kept on the effectiveness of pasteurisation and the standard of cleanliness of the milk. Of the tests performed at the Abattoir Laboratory 360 were biological tests; 2,136 tests were for brucellosis by the ring test and 2 were positive by the agglutination test. The presence of penicillin was revealed in 30 of the 1,555 samples tested. The number of tests performed is recorded in Annexure 7.

The pasteurisation of milk within the city, although not compulsory, has been maintained at a reasonably good level 89.39% of the daily supply being pasteurised during the year as against 86.75% in 1962. There are now 19 pasteurising depots established within the city area.

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.

Control of Milk Supplies Outside of the City Area

The supervision and control of milk supplies from sources outside of the city limits is the responsibility of the Farm Dairy Section. One inspector is permanently resident in Standerton to save time and mileage covered in supervising a number of farm dairies in the Standerton/Volksrust districts. Periodic visits are paid to ensure that hygienic conditions are maintained. It was necessary to stop the milk from 4 suppliers during the year because of the unhygienic conditions obtaining on the farms.

New Milk By-laws which vitally concern this Section were promulgated on the 4th March 1964. These by-laws have been applied in the case of applications for milk introduction permits received after the date of promulgation, and an effort has been made to persuade farmers already in possession of permits on this date to comply with the new requirements.

A dairy demonstration van, operated by a qualified and experienced dairy inspector and a Bantu assistant, is desi

and/...

ERRATA : - Page 62, 2nd Paragraph, 8th line, between the words Biological tests ..
..... and samples tested, insert :-

2,136 biological tests were performed for tuberculosis and brucellosis.
Two tests were positive for tuberculosis. Of the 737 samples which reacted
to the ring test for brucellosis, 116 were positive for viable brucella
organisms by the serum agglutination test.

RESULTS: The results of the tests are given in Table I. The results show that the tests were performed for the purpose of the investigation.

The tests were performed for the purpose of the investigation. The results show that the tests were performed for the purpose of the investigation. The results show that the tests were performed for the purpose of the investigation.

and equipped to tour farm dairies and to attend agricultural shows in the country districts to give on-the-spot 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.

The farm dairy inspectors are available to farmers to advise on improvements to dairy premises and on proper housing, latrine and ablution facilities for their employees. Standard types of plans are made available for the construction or modification of their premises.

The hygienic and economic advantages of the mechanical refrigeration of milk at the point of production are continually being stressed. Up to the end of the year 74% of the supplying dairies had installed refrigeration plants, an increase of 5% 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 5,051 visits, 940 milk sediment tests and 1 special water sample taken for bacteriological examination. The staff of the dairy demonstration van made 407 practical demonstrations and performed 14,351 tests of various kinds in connection with milk production. These included strip-cup tests for mastitis, acidity tests, butterfat tests and sedimentation tests. 116 farms were visited.

The Council's veterinarians working in collaboration with the dairy inspectors carried out regular examinations of bulk supplies. Positive results for bovine tuberculosis were obtained in supplies from 2 farm dairies and these were dealt with in terms of the Department's tuberculosis policy.

One case of smallpox and one of diphtheria occurred among personnel on farms during the year and a twelve year old girl, the daughter of a supplier, was removed to an institution suffering from leprosy. These cases were investigated and the necessary action taken.

Examination 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/...

During the year 541 herds (totalling 52,668 cattle) were inspected. Notifications were sent to 538 producers regarding contamination of their milk supplies with mastitis and brucellosis. 13.4% of samples tested showed mastitis contamination.

Details of the number of tests made for mastitis, brucellosis and tuberculosis are given in Annexure 7. Fuller details of inspections on dairy herds are recorded in the annual report of the Director of the Abattoir and Livestock Market Department.

Laboratory Examinations

The Council's chemists undertake the examination of samples of milk and certain milk products throughout the year. (See Annexure 7). 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. The regular 'field' phosphatase tests undertaken by inspectors and pasteurisation depot operators play an important part in maintaining an acceptable standard of milk pasteurisation.

Samples are also taken for submission to the Government Analyst for tests for milk fat and solids - non-fats in terms of standards for milk specified by the Food, Drugs and Disinfectants Act, 1929.

As a routine check on sales and deliveries in the city 709 such samples were tested and 59 were found to be sub-standard or adulterated milk. These resulted in 136 prosecutions with R647 being paid in fines, 9 cases pending and 4 cases no service of summons, and 15 samples of milk were submitted on behalf of the Secretary for Health.

4. ABATTOIR AND MEAT INSPECTION.

The Abattoir is controlled by the Director of the Abattoir and Livestock Market Department which functions as a separate Department. The distribution and sale of meat in the city is controlled by the City Health Department.

Slaughtering and meat inspection activities during the year were as follows:-

Number of Animals Slaughtered

Cattle	375,639
Sheep	1,059,019
Calves	58,260
Equines	12,172
Pigs	180,790

Inspection/...

Inspection of Imported Meat

Meat	21,809,063 lbs.
Offal	2,024,553 lbs.

In addition the following viscera were also inspected:-

Ox Tongues	42,232
Oxtails	54,554
Ox Kidneys	9,467
Ox Hearts	42,454
Ox Livers	58,197

The number of carcasses condemned and processed in the by-product plant included 6,097 cattle and 5,662 pigs. Cysticercosis was the main cause of condemnation in each case. 2,715.014 tons of meat were condemned.

The principal diseases and conditions causing condemnation of meat, were:-

<u>Cattle:</u>	Cysticercosis	0.59%
	Pleurisy and peritonitis	0.31%
	Gangrene	0.19%
	Extensive Bruising	0.10%
	Pneumonia	0.08%
<u>Sheep:</u>	Fever	0.09%
	Pneumonia	0.02%
	Emaciation	0.02%
	Icterus	0.01%
	Caseous lymphadenitis	0.007%
<u>Pigs:</u>	Cysticercosis	2.00%
	Gangrene	0.22%
	Tuberculosis	0.20%
	Pleurisy and peritonitis	0.19%
	Scrotal Sepsis	0.18%

5. OTHER FOODSTUFFS

(a) Control of Food Premises and Distribution of Food

The normal routine inspections of food premises continued during the year as a major activity of the Department. Increased attention was paid to these aspects of

the/...

the new foodhandling by-laws promulgated in December 1962 which were more specific than those stipulated in the earlier by-laws. After a period of latitude to enable traders to become acquainted with the new by-laws, enforcement by means of verbal instructions, statutory notices and, where necessary, by prosecutions, was resorted to.

A major obstacle in attaining the desired standard of hygiene in many foodhandling premises is the large number of persons of foreign origin, who are acquiring such businesses without the necessary knowledge of English or Afrikaans, thus making it extremely difficult for the health inspectorate staff to convey their requirements to these traders who comprise mainly fresh produce dealers (fruit and vegetables) and fish friers. An interpreter has been engaged to assist the health inspectors when required.

The inspection routine covering wholesale and retail stores handling foodstuffs in the city resulted in 61,039 lbs. of various types of food being condemned during the year. Of this quantity 22,349 lbs. comprised canned foodstuffs, the remainder consisting of fresh and frozen fish, fresh and dried fruit, vegetables, mealie meal, apples and cabbages.

(b) Early Morning Inspections - Foodstuff Deliveries

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 and appropriate action was taken where malpractices were observed.

(c) Food Sampling

Samples of food are taken mainly for the purpose of checking on possible adulteration in terms of the Food, Drugs and Disinfectants Act. The samples are submitted to the Government Analyst in Pretoria on behalf of the City Health Department and the Secretary for Health.

Government Notice No. 911 of 16th May 1930, as amended, vests the Johannesburg City Council with authority to take food samples in its area of jurisdiction. The annual quota of samples for free examination is 1,848.

The samples taken are recorded in Annexure 7. There were 41 successful prosecutions for adulteration of milk, 59

for/...

for adulteration of meat and 4 for adulteration of honey.

(d) Display of Foodstuffs on Pavements and in Shop Entrances.

During the past few months the application of the by-law preventing shopkeepers from displaying their foods beyond the precincts of their premises has been rigidly enforced with almost 100% success. However, the shop owners are now drawing attention to the increasing volume of illegal trading taking place on sidewalks, from motor lorries, vans and unauthorised stalls. These illegal traders have been particularly active in the Hillbrow shopping area and the parking areas of the Rosebank shopping centre. Although the full co-operation of the Traffic Department in an effort to curb this type of trading has been given, it still persists and, like the tea and coffee carts, remains a major problem.

(e) Food Hygiene Section

Two teams each comprising 1 European and 1 Non-European health inspector under the supervision of a senior health inspector continue to give practical instruction and advice to the management and kitchen staff of food premises and nursing homes. One team worked in the eastern half of the city and the other the western half.

The teams visited food premises and gave instruction to staff and management in personal hygiene and the hygienic maintenance of premises and equipment to ensure the production of clean food. These visits were invariably followed by an organised lecture and film show, either at the premises of the licensee or at this Department's lecture theatre. During 1964 the following visits were made:-

Hotels and boarding houses 1,604; restaurants and tea rooms 2,235; fish friers 284; food factories 133; Non-European restaurants 82; nursing and old aged homes 97; sports clubs 7; schools 1.

The number of organised film shows and lectures totalled 30 with an attendance of 612 persons.

All firms within the Municipal area which manufacture kitchen equipment were offered advice in connection with modifications to equipment to facilitate easy cleansing.

The Health Education theatre was used on 57 occasions for the projection of films.

In/...

In the course of these inspections bacteriological sampling was undertaken and subsequent to the promulgation of the new Food Handling By-laws on 12th December 1962, eating utensils in food establishments were swabbed. A total of 1931 swabs and specimens taken from eating utensils was submitted to the South African Institute for Medical Research for analysis. The number of bacteria on a majority of the articles swabbed was well below the 100 permitted by the by-laws. In these instances the licensees of the premises were notified and advice was given in improving their cleansing technique.

At first, the method of sampling stipulated in the by-laws was adopted, but negative results were obtained. On the recommendation of the South African Institute for Medical Research, the method was modified by using 10 ml. of Ringers solution and larger wooden sticked swabs, instead of 2 ml. of normal saline and ordinary wire swabs. This resulted in more realistic counts being obtained. An amendment to the by-laws to include this modified method is to be recommended.

The teams co-operated with the Senior Health Visitor (Nursing Homes and Midwives) in the control of nursing homes and homes for the aged. Assistance and advice was given in planning new premises especially in regard to kitchens, laundries and air conditioning and in conducting bacteriological surveys in nursing homes. In all 1,450 swabs, agar plates and other specimens were submitted to the South African Institute for Medical Research during 1964.

Advice and assistance was given to industrialists in establishing canteens in their factories. Liaison was established with "Kupugani" which is also encouraging this development. The elimination of tea and coffee carts depends largely on the establishment of satisfactory alternative feeding arrangements.

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

Dressed/...

Dressed poultry is examined prior to being offered for sale by auction. 42,610 birds were inspected of which 663 (0.64%) were condemned and destroyed as being unfit for human consumption.

The dressed birds consisted of 41,290 fowls, 606 ducks, 211 geese and 503 turkeys.

In addition 294,456 live birds were offered for auction. This figure comprised 263,133 fowls, 4,739 chickens, 323 bantams, 148 guinea fowl, 13 pea fowl, 9,337 turkeys, 2,279 geese, 6,799 ducks and 7,685 pigeons.

Game animals and birds consigned to the market were also subjected to pre-sale inspections with the following results:-

<u>Type of Game</u>	<u>No. Examined</u>	<u>No. Condemned</u>
Blesbok	705	4
Impala	150	4½
Kudu	32	-
Rheebok	1	-
Springbok	496	1
Warthog	5	-
Waterbuck	4	-
	<hr/>	<hr/>
Total	1,393	9½
	<hr/>	<hr/>
<u>Game Birds</u>		
Guinea Fowl	1,151	9
Pheasant	93	2
	<hr/>	<hr/>
Total	1,244	11
	<hr/>	<hr/>

6. OTHER MATTERS

(a) Witwatersrand Agricultural Society's Annual Show

The overall attendance was 627,623 persons, the highest attendance on any one day being 123,274 persons.

Many improvements to restaurants and food stalls were made in consultation with the Department and hygienic conditions were observed in the handling of food which was kept under surveillance by health inspectors seconded for the purpose.

The/...

The removal of refuse and manure and rodent and fly control and the maintenance of latrines were satisfactory. The Non-European latrines were, however, inadequate and difficulties were experienced with blockages.

(b) Dumping on Vacant Sites

The illegal dumping of builders' rubble, garden refuse and miscellaneous debris on vacant sites, necessitated the serving of numerous notices. This remains one of the major problems confronting district health inspectors. State, Provincial and Council owned sites are cleaned after notification, although here, too, there have been instances of considerable delay in giving effect to the Department's requests.

(c) Controlled Tipping of Refuse

All refuse tips on which controlled tipping is carried out by the City Engineer's Department were inspected at frequent intervals during the year. With few exceptions, these tips were well maintained. Where there were public health deficiencies, these were rectified.

(d) Amendments to Public Health By-laws

Chapter 21, the Milk By-laws, (Dairies, Milkshops, Purveyors of Milk and Cowsheds; and Pasteurised, Sterilised and Certified Milk) was promulgated during the year. Correction notices and amendments were promulgated in respect of Chapters 3 and 8.

(e) Pest Control

The staff which is responsible for anti-rodent measures (referred to in the section dealing with plague control) is also responsible for the control of other pests.

Regular insecticidal work is carried out at Municipal compounds, stables, sewage disposal works and in sewers 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.

All streams and dams and marshes likely to favour mosquito breeding were treated with suitable insecticides and larvicidal oils during the rainy season. Specific complaints of the prevalence of mosquitoes were investigated and dealt

with/...

with where necessary. During the rainy season improved illustrated pamphlets were issued to householders in the areas particularly affected, advising them how to destroy mosquitoes and how to ensure that mosquito breeding is avoided on their premises.

By means of a mobile 'TIFA' fogging machine 155 properties, including compounds, were treated for bugs and sewers were "fogged" to control cockroach infestation on 8 occasions at the request of the City Engineer's Department. Fogging of sewers is confined to Sundays to ensure that members of the public are not exposed to any inconvenience or possible danger.

The staff constantly experiments with different products to overcome resistance problem and to find cheaper and longer lasting insecticides. Some success has attended these efforts. Tests are made by the South African Bureau of Standards with various products on specific batches of insects supplied by the Department.

(f) Provision of Closet Facilities on Building Sites

As water-borne sewerage is now available to practically the whole Johannesburg area the City Engineer notified builders that pail removal service would not be available at building sites except where it was proved that a sewer connection could not be provided and that builders must apply for a sewer connection before commencing building. Some difficulty was experienced in enforcing this directive and prosecutions have had to be instituted where toilet facilities had been provided or for insanitary pit latrines.

(g) Smoke Abatement

All smoke complaints are dealt with by the Air Pollution Control Section and close liaison exists between it and the Sanitation Branch, especially in regard to joint inspections and endorsements on licence certificates in respect of premises where smoke nuisances exist or are likely to exist.

(h) Water Sampling

Weekly water sampling was carried out at the municipal reservoirs and at points on distribution mains. 816 water samples from these points were submitted to the Department's Cydna Laboratory for bacteriological analysis. 143 water samples were submitted to the same Laboratory for

chemical/...

chemical analysis on behalf of the Rand Water Board. 83 applications were received for the testing of private borehole water. A fee of R10.50 was charged for each full analysis which included both bacteriological and chemical tests. A total amount of R871.50 was received for this service. Water from 58 of these boreholes was found to be suitable for potable purposes at the first test. Water from the remaining 25 boreholes was found to be unsuitable initially. These boreholes were re-checked and with the exception of 8 were, after remedial measures had been taken, found to be satisfactory. In the case of the 8 borehole supplies which remained unsatisfactory, the owners were warned to cease using this water for human consumption.

7. ENVIRONMENTAL SERVICES, BANTU AREAS

The staff dealing with the environmental services of the Bantu areas is attached to the Sanitation Division but comes under the general direction of the Assistant Medical Officer of Health (Bantu Areas).

The anti-plague and pest control measures reported in other sections of this report are the responsibility of the staff of this section. Other activities include:-

- (i) Routine inspections were made of each dwelling three or four times during the year by the health inspectors and infringements of the legislation were dealt with when found.
- (ii) Numerous statutory notices were served on householders for junk and debris found in their premises affording cover and harbour for rodents.
- (iii) The elimination of unauthorised structures was pursued and a constant watch kept for illegal erections.
- (iv) Constant surveillance was also maintained for trading and the keeping of draught animals and bovines on dwelling sites.
- (v) Pressure was maintained on owners of dwellings, private schools and churches to connect these premises with drainage to the municipal sewer, with excellent results.

(vi) The/...

- (vi) The numerous milk hawkers were eliminated by confining the sale of milk in the townships to sale in sealed bottles or cartons.
- (vii) Routine inspections were made of the municipal fruit and vegetable stalls and all trading premises.
- (viii) Action was taken against unlicensed business premises and a continuous struggle waged against the numerous illegal hawkers of foodstuffs.
- (ix) Raids were periodically carried out on butcheries for the sale of unstamped butchers' meat.
- (x) Routine inspections were carried out on stables for the maintenance of cleanliness and prevention of fly breeding.
- (xi) Some 5,007 building plans for new buildings or for additions and alterations to buildings were examined of which 4,642 were approved. The value of plans approved was R46,353,710.
- (xii) Everything possible was done to prevent the conditions in Pimville from deteriorating still further pending the removal and rebuilding of the Township. Court action was taken to prevent the keeping of cattle and the number of cattle was thereby reduced.
- (xiii) The inspections made by health inspectors are recorded in Annexures 10 and 11.

VIII. DISPOSAL OF WASTES

The services referred to in this section of the report are provided by the City Engineer's Department. The City Engineer has appointed a Joint Technical Staff Committee which is a standing committee comprising members of his own staff and of the City Health Department. Matters affecting the disposal of wastes and other matters of mutual interest to both departments are investigated.

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/...

Refuse collection is carried out mainly on a tri-weekly basis for domestic premises and on a daily basis (6 days) for business premises. Mechanisation of the collection service was completed in 1962 and all mules, horses and animal drawn vehicles were disposed of by auction. Vrededorp Compound was closed.

The bulk of refuse is disposed of by controlled-tipping (1,350 tons per day) and a small proportion by incineration (2 tons per day). The regular inspection of tipping sites by health inspectors is a routine procedure to ensure effective control of rodent harbourage, fly breeding and other nuisances.

The tipping system is invaluable to provide disposal facilities and at the same time to convert large areas of eroded or waste lands for playing fields and parks, with a limited amount of building being allowed thereon under prescribed health and structural conditions.

2. Sewage Wastes

The city area and the Bantu townships (except Pimville) are almost completely sewered. The average number of pails is 902. Service is nightly or triweekly depending on circumstances.

Conservancy tank service is restricted by the number of vacuum tanks available - 100 tanks are being serviced

Pit privies are not permitted in the Municipal area. Septic tank installations are permitted but only 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 layout of the Council's sewerage system provides for disposal plants so situated as to ensure a maximum of gravity drainage to avoid pumping. The additional disposal works of Olifantsvlei serves the Bantu townships and relieves congestion at the older Klipspruit plant serving some of these townships and the southern sections of the city.

The Northern Sewage Disposal Works serves the northern section of the city plus adjoining sewered areas administered by the Peri-Urban Areas Health Board. It replaces the works at Bruma, Cydna and Sandringham and Delta which were closed down during 1961 and 1963.

The/...

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

Klipspruit	25,000,000 gallons per day
Olifantsvlei	11,000,000 gallons per day
Northern Sewage Works	16,000,000 gallons per day
	<hr/>
	52,000,000
	<hr/>

The part played by the City Health Department in assisting the City Engineer to comply with the standards laid down in the Water Act (No. 54 of 1956) and the regulations framed thereunder and with the requirements of the Public Health Act, is detailed in the section dealing with the Laboratory Branch.

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 14 service reservoirs and nine water towers, including two of each type in the Bantu occupied areas. All are decked over.

The sale of the water to consumers in the European areas is based on a metering system with charges for domestic supplies at the rate of 29²/12 c. per 1,000 gallons up to 100,000 in any one month and 17⁵/12 c. per 1,000 thereafter. Lower rates are charged for charitable institutions and sporting bodies. During 1964 the amount of water purchased by the Council was 22,890,269.000 gallons with an average daily consumption of 61,717,859, a substantial increase on the previous year.

Throughout the year weekly water samples were taken by health inspectors at various points where the water passes into supply. A number of private boreholes are in use in the Municipal area some of which are used for supplying large buildings such as blocks of flats, and periodic samples are taken to assess purity and potability. Suitable action is taken where tests of the city's supplies indicate any unusual condition. Borehole supplies are restricted to non-potable usage where tests reveal sub-standard conditions. The number of tests is recorded in Annexure 7.

X. LABORATORY/...

X. LABORATORY BRANCH

The main laboratory of the Branch is at Cydna with subsidiary laboratories at the various sewage purification works (Northern, Klipspruit and Olifantsvlei) and at the Bantu Beer Brewery, the power stations (Orlando and Kelvin) and the Gas Works.

Most of the general analytical and bacteriological work is done at the Cydna Laboratory but some is delegated to the other laboratories apart from their more specialised work.

The functions of the Branch are outlined in the following paragraphs:-

1. Sewage Treatment

The primary function of the Chief Chemist and his staff is to advise the Medical Officer of Health and the City Engineer in carrying out their statutory obligations in regard to the quality of the effluent discharged from the Council's sewage works. Other duties have been added from time to time.

The first appointment of a biochemist was made in 1931 as a result of complaints of smell from the Bruma Works, recently closed down, and one of his first tasks was to investigate improved methods of purification. Various types of experimental activated sludge plants were installed and as a result the works were re-designed.

The biochemical staff keeps a constant check on the operation of the sewage works by means of routine chemical analysis to maintain efficient operation and to ensure that the bacteriological and chemical requirements laid down by the Water Act are met so that the final effluents will not endanger health in any way.

In addition research work is undertaken to improve operation and to ensure that extensions to existing works and construction of new works will give optimum results for the expenditure incurred. This research is carried out by a committee of chemists and engineers appointed for the purpose. Officials of the City Health and City Engineer's Departments meet monthly to discuss problems of sewage purification, water supply and other matters of mutual interest.

A possible new purification works at Liefde en Vrede was under discussion, and much of the sewerage reticulation has been completed or designed. Alternative plans were considered to send this sewage up the Klip River

valley/...

Valley for treatment at Olifantsvlei, or possibly to construct a large regional works further down the valley below Liefde en Vrede. This scheme was abandoned in favour of carrying the outfall sewer through the existing Olifantsvlei works.

The standard of effluents has been satisfactory. A table showing the average annual analysis for all the works is given in Annexure 15. A full report on the operation of the works is issued by the City Engineer.

The Klipspruit Purification Works:

Recent increases in the flow to the works have resulted in the sedimentation tanks originally designed for 16 m.g.d. being greatly overloaded with the present average load of 27.61 m.g.d. Plans are now being made to construct further tanks and virtually provide double the present capacity.

Experiments have been carried out in collaboration with the City Engineer's Planning Branch in which modifications have been made to the existing tanks with a view to improving their efficiency. To date very little success has been achieved but further modifications and experiments are planned. The effect of using the Chemical Oxygen Demand as a yardstick of sedimentation tank performance is being investigated.

Additions to the main biological purification plant are still proceeding with a view to improving the effluent quality in conformance with the requirements of the Water Act. Six of the new primary biological filters have been completed and are operating satisfactorily. A further 6 twelve foot secondary filters and associated humus tanks are nearing completion.

In the field of sludge digestion, investigations have been carried out into the more effective use of heat available from the Klipspruit Cyanide Works and it has been shown that with certain modification to the existing plant, sterilisation of the digested sludge in regard to ascaris ova could be achieved. Conditioning tanks are now under construction for the further purification of digester supernatant liquor, which it has now been decided to pump back to the head of the works. It has also been agreed to provide additional lagoons for further dewatering of digested sludge.

The long term experiment with motor driven filter distributor arms at varying speeds is continuing but it is becoming apparent that the beneficial results obtained overseas are not going to be forthcoming.

Studies/...

Studies of the heat losses from the digesters have been initiated but will have to proceed over a long time to reach conclusive results.

The laboratory carries out at the works a considerable amount of paint testing (295 samples during the year) and putty testing for the Buyer, and control analyses on Abattoir by-products. Some industrial effluent samples were analysed for the Randfontein municipality. Lime slurry and effluent samples from the cyanide factory were analysed to keep a check on the cyanide content.

Olifantsvlei Purification Works:

The laboratory at these works is now in use.

The flow to the works is over 10 million gallons a day. The sewage is almost entirely from Non-European areas, and is weaker than was anticipated - in other words water use per capita is higher than was expected. The final effluent is either irrigated on land, or passed through maturation ponds.

The flow being handled by these works is now beyond its design capacity and consideration has been given to the design of further extensions. These will probably take the form of an activated sludge plant. During the inevitable delay between the design and the construction it is proposed to make certain minor modifications to the works to enable it to treat 15 m.g.d. It is proposed to remove the plastic inserts in the distributor arms of one group of filters to enable a greater hydraulic flow to be treated and should the resultant performance be acceptable, this principle will be extended to the entire works.

Northern Purification Works:

The laboratory at the Northern works is fully occupied. Unexpected increases in bacteriological and chemical work have necessitated a request for increased laboratory accommodation, now being dealt with by the City Engineer.

One experiment to which a large amount of time was devoted and which is of considerable national importance was the testing of the locally produced biologically "soft" synthetic detergent. In a series of different experiments a total of 9 tons of alkyl sulphonate, the active ingredient of many packaged detergents was added systematically to the

biological/...

biological filter beds, part of the maturation pond system and to a lengthy irrigation furrow. In all a series of 22,000 analytical determinations were made during the series of tests. Results were gratifying, showing that the new material was almost completely broken down by conventional purification processes. This is in strong contrast to the 16.6% removal of present hard detergents across the filter beds.

2. Industrial Effluents Control

Supervision of industrial plants is maintained to ensure that effluents discharged into the sewer will not be a danger to the health of sewer maintenance personnel or operators at the sewage works, that they are amenable to treatment and that they will not have any deleterious effects on stormwater drains, sewers or disposal works. Plants and processes are studied and the volume and strength of effluents are assessed, plans for new factories and alterations are scrutinised and owners are required to make modifications where necessary. Charges are adjusted according to the nature and strength of the effluents accepted.

The number of samples collected and analysed during the year totalled 4,434. The present number of factories assessed is 386. This is an increase of 52 new factories. The factory investigations, sampling and advisory service cover the areas of Johannesburg, Bedfordview, Peri-Urban Areas, Edenvale and Roodepoort.

Considerable difficulty has been experienced with industrialists discharging effluent into stormwater drains. This discharge is usually made during the night or over weekends. With assistance from the sewer maintenance branch considerable success has been achieved in eliminating these contraventions. The staff is carrying out its duties as provided for in the Drainage and Plumbing by-laws, and at the same time assisting manufacturers with their effluent problems.

3. Bacteriological Work

This is centred on the Cydna Laboratory where a bacteriologist organises and carries out bacteriological tests on various products and commodities. These include milk and milk products, drinking waters, swimming bath water, sewage, materials bought on contract by Municipal Departments such as antiseptics and disinfectants, Bantu beer, etc. Details of samples examined are included in Annexure 7.

Milk: Samples of raw, pasteurised and sterilised milk are collected by health inspectors and submitted for bacteriological tests/...

tests and for the phosphatase test where appropriate samples of dried milk and ice cream are also examined occasionally. The total number of milk samples examined was 3,553.

Water: Samples of domestic water supplies derived from various sources were examined, including samples from reservoirs, distribution points and boreholes. The samples of reticulated water were on some occasions unsatisfactory in regard to total counts and the presence of presumptive coli organisms. The causes are under investigation. Water samples were also analysed chemically.

Swimming Bath Water: Regular examinations of the water in the Council's Municipal Swimming Baths, including those at Hillbrow and at Kelvin and Orlando Power Stations, 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.

4. Bantu Beer Control

A chemist is responsible for routine day to day control of the beer to ensure reliable standards. Research is undertaken into brewing materials, brewery plant and methods of brewing, improvement in the keeping qualities and other matters.

The recent trend in packaging Bantu beer has not been without its difficulties, one of which has been for the beer to go sour on storage. Using paper chromatographic techniques it was shown that in addition to lactic acid, small amounts of pyruvic citric, tartaric, glyco-phosphoric, maleic, uric and ascorbic acids were present. The effectiveness of ascorbic acid as a preservative was investigated but was found to taint the beer.

Optimum growth of bacteria in all stages of the process is dependent on the presence of amino-acids which generally enter the process via the malt. Thin layer chromatographic analysis was therefore used in an attempt to isolate some of these acids and to date some 12 different amino-acids have been identified.

5. Analytical Work

This is centred on the Cydna Laboratory but is also undertaken at other laboratories in addition to their special activities, where this is convenient. The Buying Branch relies on the results of analysis in the purchase of some two million rand worth of materials and equipment per annum.

Routine/...

Routine analyses and investigations include analysis of oil, coal, paints, constructional stone and sand, cleaning materials, kaffir corn meal and malts, pharmaceuticals, food-stuffs, etc., analysis of municipal and non-municipal waters, testing and treating of municipal swimming pool waters, analysis and checking of blood meal and carcase meal sold at the Abattoirs. Analysis of foodstuffs for pesticides, poisoned waters, preservatives in food and milk, the use of molybdenum disulphide in lubricating greases (the cause of sludging in bus engines) cumulative arsenicals in human hair and urine and many others.

The routine work is combined with practical research such as the determination and attempted breakdown of troublesome synthetic detergents, the follow up of paint work in various departments, improvements in filtration procedures at swimming baths, etc.

6. Air Pollution Control

The Atmospheric Pollution Prevention Bill was again modified during the year to include sections enabling control to be exercised over vehicle smoke. It is hoped that this legislation will receive Parliamentary approval during 1965. During the interim period it has been found necessary to exercise control in terms of the Public Health By-laws which prohibit nuisances caused by the emission of smoke, ash, grit and soot which are offensive, injurious or dangerous to health. To date all statutory notices have been complied with and no prosecutions have been necessary.

In terms of the draft Bill smoke control regulations may be formulated by individual local authorities. A draft of the proposed Johannesburg regulations has been prepared by the Section and forwarded to the Town Clerk for comment. It has also been circulated to other Transvaal Municipalities with the objective of achieving a uniform set of regulations for the Province. This is of particular importance in the Reef-Pretoria-Vereeniging complex where many local authorities have built-up areas bordering on one another.

Before serious consideration can be given to the creation of smokeless zones an adequate supply of smokeless fuels must be available. Research into the manufacture of a solid smokeless fuel is being undertaken by the Gas Department.

Certain propaganda to use "off-peak" electricity for the warming of bulk water supplies has resulted in a wider acceptance of this ideal means of heating.

The survey of existing fuel burning appliances is continuing, the densely populated central area having been

completed/...

completed. To date there are 2,012 premises on record of which 427 are industrial and 1,505 are buildings such as flats, hotel office blocks.

A total of 85 plans of new buildings in which fuel burning appliances are to be installed have been scrutinised and advice and information given to owners as to the most suitable means of preventing the emission of pollutants.

Complaints investigated have numbered 337 of which 239 have been brought to satisfactory conclusions. It is noteworthy that in this connection a reputation for tact, diplomacy and know-how has been built up by the staff. Several letters of thanks have been received by the Department indicating that as a result of implementing advice given, considerable economic savings have been achieved.

A limited campaign has been carried out by the Traffic Department against smoking diesel engines. Due to staff limitations it has only been practical to carry out the drive for 4 hours per day once per week and it has therefore not met with any marked success.

A survey carried out by the Air Pollution Section has shown that at least 50% of the diesel road engines in Johannesburg are emitting excessive smoke. More suitable control measures are obviously required to reduce this alarming high figure.

Routine monitoring of the smoke and sulphur dioxide content of atmospheric air at 11 different points in the city has continued and the results are depicted diagrammatically in the attached graphs. Composite samples are now taken weekly instead of thrice weekly. Some time must elapse before the significance of this change can be estimated.

The establishment of training courses for boiler attendants was the subject of a resolution from a recent conference on air pollution in Durban, organised by the Council for Scientific and Industrial Research which resolution was submitted to the Minister for Education, Arts and Science. Further representations have been made to the Council for Scientific and Industrial Research asking that efforts be made to establish two courses, one for European supervisory staff and one for Non-European boiler operators.

No meeting of the Clean Air Consultative Committee was convened. This was due largely to the shelving of the Atmospheric Pollution Prevention Bill.

7. Gas Works

Routine sampling and analysis assist in satisfactory process control in the manufacture of gas and by-products to required specifications. Special investigations are made from time to time. The by-products produced include coke, ammonia and tar. Control is also aimed at regulating the effluents discharged into the sewers and the prevention of air pollution. Experiments are proceeding in the production of solid smokeless fuel.

8. Power Stations

The Branch continued with routine and research work at the power stations which involves such matters as the examination and testing of boiler waters, make up and cooling waters; analysis of oils and other lubricants; prevention of corrosion or scaling throughout the plant; rebuilding by electroplating of worn shafts; prevention of corrosion of concrete cooling towers.

The City Generating station remains closed. Monthly visits are paid to sample boiler and economiser waters from the boilers wet-stored with hydrazine.

XI. PUBLIC CONVENIENCES

The Department maintains and controls 103 public conveniences for all races of both sexes. These figures relate to conveniences only, irrespective of whether these are contained in one building or not.

Provision for public conveniences for the use of European males and females was made in the plans for the Jack Mincer Parking Garage at the Union Grounds. When the garage was finally opened during the year, the Department assumed responsibility for the administration of these conveniences. Similar arrangements are being made at the new Von Brandis Parking Garage for the Non-Europeans in the area.

In terms of an agreement with the Government, the public conveniences situated in Von Brandis Square were taken over by the Government and have since been demolished. A new underground convenience was built at Government expense near the corner of Pritchard and Von Brandis Streets and was handed over to the City Council in June of this year.

During the year new conveniences for the use of all races of both sexes were provided at the Parktown North bus stop. Plans were drawn for the provision of additional latrines at the Melville Swimming Baths.

More/...

More public conveniences are required in the city area. Land for this purpose is unobtainable.

XII. CREMATION OF DECEASED PERSONS

Cremations in the Braamfontein Crematorium numbered 1,697 during the year, an increase of 50 over the previous year. The By-laws relating to burials and cremations promulgated during 1957, do not make any provision for special medical certificates for cremation other than those normally required for the burial of a body. There is the possibility that this procedure may be open to abuse but this is a medico-legal as opposed to a public health consideration. Improved control of cremations is under consideration by the Transvaal Provincial Administration, but no special regulations have yet been promulgated.

XIII. HEALTH EDUCATION, TRAINING AND-PUBLIC RELATIONS

The Senior Health Visitor (Health Education) gave a number of lectures to the staff of the Department, mothers, student health visitors and other groups, arranged for other talks and demonstrations and assisted in the preparation of material for broadcasting to Bantu audiences.

The lecture room on the ground floor at 18 Hoek Street and the facilities for screening colour slides and cinematograph films were available to all members of the staff and full use was made of them. Good progress was made with the building up of public health models and exhibits in the adjoining basement but the work was not completed.

All members of the staff played an active part in the education of the public in health matters in the course of their routine duties and otherwise. Formal talks were given to special groups and at conferences. These are listed in Annexure 17. The food hygiene health education teams continued with their practical demonstrations, lectures and training of food handlers.

Visits were arranged by request for parties of students and others to visit the laboratories at sewage purification works, the Disinfecting Station and other points of interest, and visitors to the city were shown over the polyclinics in the Bantu townships. Nurses and other persons visited the Klipspruit Works for instructional purposes. 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.

The/...

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 list is quite a formidable one as there are so many organisations doing worth while work in the public health field. Members of the staff devote much of their spare time to serving on these committees which meet mostly outside office hours and take up a minimum of official time.

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 matters of special topical interest.

The Witwatersrand and Pretoria Public Health Consultative Committee continues to function. It is sponsored by local authorities in the area and further afield which are represented by the Medical Officers of Health, Veterinarians and Chief Health Inspectors. 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.

The Research Co-ordinating Sub-Committee of the Joint Technical Staff Committee comprises members of the staff of the City Health and City Engineer's Departments and co-ordinates experimental and research work, mainly on sewage purification and related problems.

The City Council was represented officially at a number of conferences and annual general meetings of national bodies. The names of the delegates are included in the following list.

Meetings of the National Executive and of the
National Council of the South African National

Tuberculosis/...

Tuberculosis Association at Port Elizabeth on
28th and 29th September : Dr. M. Goldberg.

The Annual General Meetings of the Nursery School
Association of South Africa in July and of the
National Council for Child Welfare in September,
both at East London. Attended monthly meetings
of the Child Welfare Society, the Nursery school
Association, the Child Guidance Clinic and the
Johannesburg Nursery School Society : Dr. O.I.B. Krehe

At the Council for Scientific and Industrial Research
two symposia on topics relating to the brewing of
Bantu beer:- Symposium on Bantu Beer in June and
on Malting of Kaffircorn in October : Messrs.
D. Meltzer, J.A. Mortimer, D.W. Osborn, W. Potgieter
and J.A. Westhof.

At the South African Chemical Institute Conference
at Pretoria in July : Messrs. D. Meltzer,
J.A. Mortimer, D.W. Osborn, L.E. Tucker and
Miss S.M. Walker.

At the 22nd Annual Health Congress of the Institute
of Public Health at Pretoria from 26th to 30th
October : Councillor A.B. Widman, M.P.C.,
Dr. M.L. Freedman, Dr. A.H. Smith, Messrs.
J.S. Glover, W.M. McConaghy and A.H. Spargo.

At the Standing Committee of Contributors to Air
Pollution Research Fund at Durban on 30th September :
Dr. A.H. Smith and Mr. L.E. Tucker.

At the South African National Council for the
Welfare of the Aged at Durban from the 2nd to
6th November : Dr. M.L. Freedman.

Formal Education: The Medical Officer of Health is Hon. Professor
of Urban Health Administration at the University of the
Witwatersrand and, with other members of the staff, assists
with the teaching of undergraduate and postgraduate medical
students. The Senior Dental Officer (Orlando) is Honorary
Lecturer in Public Health and Preventive Dentistry and gave
demonstrations at the Orlando Dental Clinic to final year
dental students and pupil health visitors.

Members of the staff assist the Witwatersrand
Technical College with the theoretical and practical training
of health visitors and health inspectors and also conduct
oral examinations on behalf of the examining body. Practical

demonstrations/...

demonstrations are given to pupil nursery school teachers and students for Diploma in Pediatric Nursing.

XIV. FINANCE

A schedule of income and expenditure for the services rendered by the City Health Department for the year ended 30th June 1964, is shown on Annexure 19.

Expenditure

The expenditure on the various services is made up of Salaries, Wages and Allowances, Miscellaneous Expenses, Loan Charges and Revenue Contributions to Capital Outlay. Expenditure on those services provided for Non-Europeans, amounting to R2,073,609, was passed on to the Non-European Affairs Department to be charged to the Bantu Revenue Account.

Income

Income detailed on the financial schedule includes refunds of expenditure totalling R1,106,547 from the State Department of Health in terms of the Public Health Act and a subsidy of R452,746 from the Transvaal Provincial Administration for Curative and Midwifery Services in the Bantu Townships. The subsidy referred to represents only approximately 77% of the cost to the Council of the curative and midwifery services, due to the non-acceptance by the Administration of certain items of expenditure.

The net cost of the services administered by the City Health Department decreased by R6,123 as compared with the previous financial year. Expenditure increased by R135,314, but on the other hand income increased by R141,437, as compared with 1962/63.

The rise in expenditure is attributed mainly to increases in Salaries, Wages and Allowances, due to increments and filling of vacancies (R84,000); increased costs of drugs and medicines (R17,000) and increased Hospital and Sanatorium Charges (R37,000).

With regard to the increase in income, the main reasons were: increase in refunds from the State Department of Health, incidental to increased expenditure on refundable services (R122,000), and an increase in the Provincial subsidy, incidental to the increased cost of operating the curative and midwifery services in the Bantu Townships (R19,000).

Demographic information is provided in the following table:

Category	Value
Population	1,234,567
Area	56,789 sq. miles
Income	\$12,345,678,900

The following table shows the distribution of income by state:

State	Income
California	\$1,234,567,890
Texas	\$987,654,321
New York	\$765,432,109
Florida	\$543,210,987
Illinois	\$432,109,876

The following table shows the distribution of income by age group:

Age Group	Income
0-17	\$123,456,789
18-24	\$234,567,890
25-34	\$345,678,901
35-44	\$456,789,012
45-54	\$567,890,123
55-64	\$678,901,234
65-74	\$789,012,345
75+	\$890,123,456

The following table shows the distribution of income by education level:

Education Level	Income
Less than High School	\$123,456,789
High School Graduate	\$234,567,890
Some College	\$345,678,901
Bachelor's Degree	\$456,789,012
Master's Degree	\$567,890,123
Ph.D.	\$678,901,234

ANNEXURE 1.

STAFF ESTABLISHMENT AS AT 31 DECEMBER 1964

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
1 Refunds Officer
15 Clerks
10 Women Assistants
10 Shorthand Typists
2 Telephonists
11 Unskilled Labourers (Bantu)

INFECTIOUS, COMMUNICABLE AND PREVENTABLE DISEASES:

1 Senior Infectious Diseases Inspector
1 Woman Assistant
1 Health Inspector (Bantu)

DISINFECTIONS AND REMOVALS:

1 Transport and Disinfecting Superintendent
1 Asst. Transport and Disinfecting Superintendent
4 Disinfecting Officers
1 Recorder
1 Chargehand Mechanic
3 Mechanics
1 Mobile Messenger (Bantu)
15 Unskilled Labourers (Bantu)

FEVER HOSPITAL:

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

MATERNAL HOSPITAL:

1 Medical Superintendent
3 Medical Officers
1 Radiologist (Part-time)
1 Matron
2 Nursing Sisters
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 Woman Assistant
1 Hygiene Officer/Handyman
1 Night Superintendent (Female) (Bantu)
9 Sisters (Bantu)
24 Nurses (Bantu)
58 Nursing Assistants (Uncertificated) (Bantu)
4 Orderlies (Bantu)
4 Clerks (Bantu)
1 Darkroom Assistant (Female) (Bantu)
1 Male Instructor (Bantu)
1 Female Instructor (Bantu)
61 Unskilled Labourers (Bantu)

TUBERCULOSIS SERVICES:

1 Chief Tuberculosis Medical Officer
1 Asst. Chief Tuberculosis Medical Officer
4 Medical Officers
1 Radiologist (Part-time)
1 Senior Health Visitor
10 Health Visitors (A)
8 Welfare Officers (A) and (B)
4 Nursing Sisters

TUBERCULOSIS SERVICES: (Contd)

2 Radiographers
2 Technical Assistants (A)
1 Clerk
3 Women Assistants
57 Nurses (Bantu) (A)
17 Clerks (Bantu) (A)
14 Clinic Assistants (Female) (Bantu) (A)
3 Transport Drivers (Bantu)
1 Radiographer (Bantu)
3 Darkroom Assistants (Bantu) (A)
9 Welfare Assistants (Bantu) (B)
19 Labourers (Bantu) (A)

VENEREAL DISEASES SERVICES:

1 Consultant Veneriologist (Part-time)
2 Medical Officers (Part-time)
2 Clinic Orderlies (Part-time)
1 Orderly (Clinic) (Bantu)

MATERNAL AND CHILD HEALTH SERVICES:

1 Chief Child Health Medical Officer
1 Asst. Chief Child Health Medical Officer
14 Child Health Medical Officers
1 Chief Health Visitor
1 Senior Health Visitor (Health Education)
41 Health Visitors (A)
3 Nursing Sisters
5 Clinic Attendants
1 Mobile Clinic Attendant
4 Women Assistants
27 Health Visitors (Bantu)
6 Clerks (Bantu)
2 Clinic Assistants (Bantu) (A)
3 Labourers (Bantu)

SUPERVISION OF NURSING HOMES AND MIDWIVES:

1 Senior Health Visitor
3 Health Visitors
1 Woman Assistant

DISPENSARY:

1 Chief Pharmacist
2 Pharmacists
11 Unskilled Labourers (Bantu)

PUBLIC CONVENIENCES:

2 Supervisors
49 Attendants
113 Unskilled Labourers (Bantu)

NURSERY SCHOOLS AND DAY NURSERIES:

1 Medical Officer
2 Inspectresses of Pre-School Institutions
1 Senior Supervisor
6 Supervisors
15 Assistant Supervisors
6 Nursery Assistants
1 Driver/Handyman
1 Woman Assistant
2 Senior Assistant Supervisors (Bantu)
11 Assistant Supervisors (Bantu)
7 Cooks (Bantu)
13 Unskilled Labourers (Bantu)

MEDICAL SERVICES IN BANTU TOWNSHIPS:

5 Senior Medical Officers
10 Medical Officers
1 Medical Officer (Part-time)

MEDICAL SERVICES IN BANTU TOWNSHIPS: (Contd)

1 Senior Dental Officer
 5 Dental Officers
 1 Senior Health Visitor
 9 Health Visitors
 1 Orthopaedic After-Care Sister
 1 Clerk
 1 Women Assistant
 1 Health Visitor (Bantu)
 4 Senior Nurses (Bantu)
 2 Senior Midwives (Bantu)
 79 Nurses (Bantu)
 132 Midwives (Bantu)
 29 Clerks (Bantu)
 31 Clinic Assistants (Female) (Bantu)
 8 Dentists' Assistants (Bantu)
 4 Clinic Assistants (Part-time) (Bantu)
 31 Jeep Drivers (Bantu)
 47 Unskilled Labourers

SANITATION DIVISION:

1 Chief Health Inspector
 4 Divisional Health Inspectors
 13 Senior Health Inspectors
 61 District Health Inspectors
 3 Learner Health Inspectors
 2 Veterinarians (C)
 3 Clerks
 2 Pest Control Inspectors
 21 Pest Control Overseers
 2 Supervising Health Inspectors (Bantu)
 1 Health Inspector (Coloured)
 15 Health Inspectors (Bantu)
 59 Unskilled Labourers (Bantu)

LABORATORY DIVISION:

1 Chief Chemist
 1 Assistant Chief Chemist
 7 Principal Chemists
 9 Chemists
 6 Inspectors (Air Pollution Control)

LABORATORY DIVISION: (Contd)

1 Industrial Effluents Inspector
 1 Industrial Effluents Sampler
 1 Bacteriologist
 1 Laboratory Technician
 12 Chemical Assistants
 2 Clerks
 1 Typist
 3 Chemical Engineering Students
 13 Unskilled Labourers (Bantu)

MEDICAL EXAMINATION CENTRE: BANTUREGISTRATION DEPT:

1 Senior Medical Officer
 3 Medical Officers (European or Non-European)
 1 Radiologist (Part-time)
 1 Technical Assistant (X-ray)
 1 Medical Orderly
 1 Radiographer (Bantu)
 4 Orderlies (Medical) (Bantu)
 2 Clinic Orderlies (Bantu)
 4 Orderlies (X-ray) (Bantu)
 2 Nurses (Bantu)
 2 Clinic Assistants (Bantu)
 1 Darkroom Assistant (Bantu)
 1 Messenger (Bantu)

EUROPEAN HOUSING:

1 Housing Officer
 2 Assistant Housing Officers
 1 Maintenance Supervisor
 1 Housing Supervisor
 1 Senior Assistant Housing Supervisor
 2 Housing Assistants
 9 Assistant Housing Supervisors
 2 Women Assistants
 7 Caretaker/Handymen
 1 Matron, Girls' Club
 1 Assistant Matron, Girls' Club
 53 Unskilled Labourers (Bantu)

- (A) Appointments to the following 22 posts which were created for preventive Health Services for the Coloured Community, will only be made when the Riverlea Clinic is completed:

EUROPEANS: 4 Health Visitors
 2 Welfare Officers
 1 Technical Assistant

NON-EUROPEANS: 6 Nurses
 2 Clerks
 4 Clinic Assistants
 1 Darkroom Assistant
 2 Labourers

In the meantime 2 Coloured Health Visitors are employed and held against 2 of the European Health Visitor's posts.

- (B) Five Welfare Officers and nine Bantu Welfare Assistants seconded to City Health Department from Non-European Affairs Department for full-time duties in Bantu areas.

- (C) Seconded full-time from Abattoir and Livestock Market Department.

SUMMARY OF STAFF ACTUALLY EMPLOYED AS AT 31 DECEMBER 1964

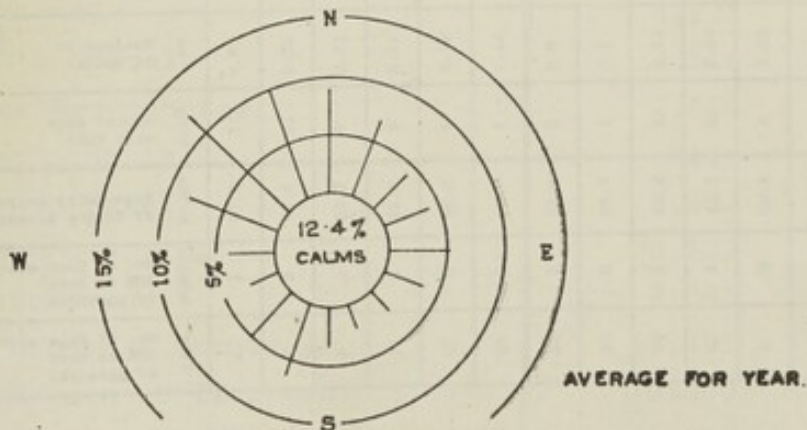
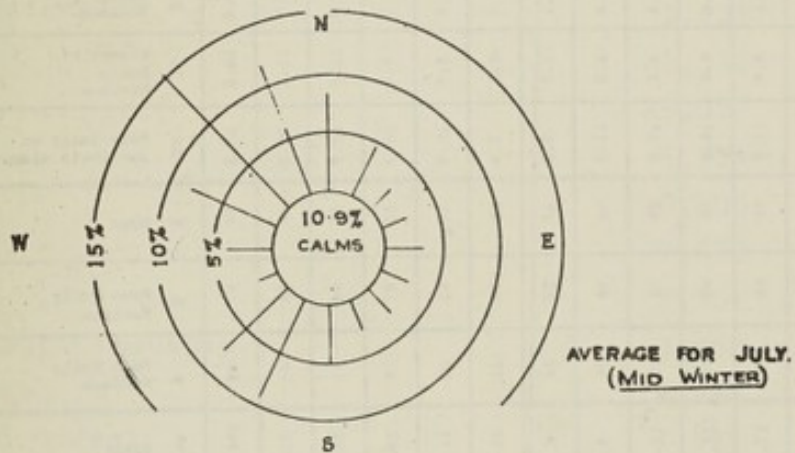
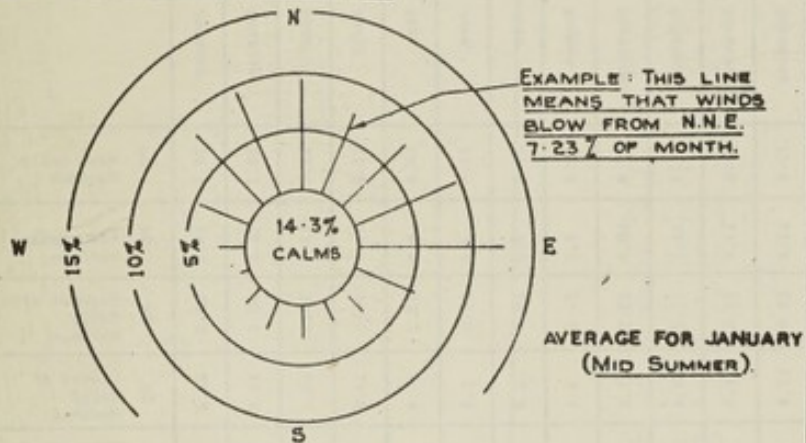
<u>EUROPEANS:</u>		<u>NON-EUROPEANS:</u>	
Salaried Staff	424	Salaried Staff	564
Daily Paid	52	Daily Paid	438
	<u>476</u>		<u>1,002</u>

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 RECORDED AT JAN SMUTS AIRPORT, LAT. 26° 08' S, LONG. 28° 14' E,
AND TAKEN FROM "CLIMATE OF SOUTH AFRICA: PART 6"
SURFACE WINDS, PUBLISHED BY THE WEATHER BUREAU, PRETORIA, 1960.

The following table reflects the averages of records of climatic conditions each month during the year 1964:-

	TEMPERATURE						RELATIVE HUMIDITY			RAINFALL			BRIGHT SUNSHINE			
	Mean Daily Maximum °C	Mean Daily Minimum °C	Highest of Daily Maximum °C	Lowest of Daily Maximum °C	Highest of Daily Minimum °C	Lowest of Daily Minimum °C	Mean Daily at Jan Smuts Airport °C	Mean %	Mean Daily Maximum %	Mean Daily Minimum %	Total mm.	Maximum in 24 hours mm.	No. of Days with Rain Days	Mean Daily Hours of Bright Sunshine Hours	No. of Days with 10% or less of possible Days	No. of Days with 90% or more of possible Days
January	25.1	14.5	29.5	22.0	19.6	10.6	18.5	74	97	48	194.8	29.0	17	8.08	1	1
February	26.7	16.0	30.2	19.0	20.5	11.6	20.0	68	94	43	85.7	20.0	12	9.19	0	3
March	25.8	15.2	28.2	20.2	18.7	11.5	19.6	66	94	41	54.5	16.5	8	9.03	1	4
April	21.6	11.3	27.0	13.0	17.2	5.4	15.3	62	87	39	58.0	42.0	8	8.32	2	10
May	18.8	8.4	22.3	15.5	11.8	4.6	12.5	55	83	33	12.0	12.0	1	9.36	0	20
June	13.8	3.4	19.0	1.1	9.6	-2.6	7.4	52	73	31	33.6	11.5	5	8.66	2	20
July	15.4	3.6	20.5	6.8	6.1	-2.5	8.2	47	73	26	0.0	0.0	0	9.58	0	24
August	18.3	6.6	24.6	9.5	12.6	-2.0	11.3	50	78	29	3.0	3.0	1	9.92	0	24
September	22.9	10.9	27.5	17.2	16.8	4.2	15.9	45	75	25	16.2	16.0	2	9.66	0	18
October	21.2	11.7	27.0	14.2	15.6	6.8	15.4	70	92	47	224.5	46.0	15	7.11	5	2
November	23.6	13.8	29.4	18.0	18.1	5.8	17.9	59	89	35	57.5	25.5	8	9.01	0	3
December	23.4	13.4	28.6	17.8	17.8	9.4	17.4	71	96	45	158.7	33.5	18	7.51	0	2
Year	21.4	10.7	30.2	11.1	20.5	-2.6	14.9	60	86	37	898.5	46.0	95	8.79	11	131

The data on maximum and minimum air temperatures and rainfall are for Johannesburg and the remaining data for Jan Smuts Airport.

BANTU POPULATION

The following estimates were arrived at in consultation with the Manager, Non-European Affairs Department of the Council:-

PLACE	1964
Central Western Jabavu	8,689
Jabavu	25,468
Chiawelo	20,152
Dhlamini	9,015
Dube	12,727
Emdeni	11,680
Jabulani	11,724
Mapetla	11,476
Mofolo	28,284
Molapo	8,188
Moletsane	10,360
Moroka	15,207
Naledi	19,923
Orlando	59,662
Orlando Extension	5,831
Phiri	11,332
Pimville	29,088
Senaoane	8,732
Tladi	10,000
Zola	30,630
Zondi	8,861
Eastern Bantu Township	3,968
Dube Hostel	4,994
Nancefield Hostel	4,578
Jabulani Hostel	4,175
Denver Men's Hostel	3,336
George Goch Men's Hostel	2,950
Mai-Mai Men's Hostel	Nil
Wemmer Men's Hostel	2,807
Wolhuter Men's Hostel	3,123
Municipal Compounds	9,093
Privately Housed (Licensed)	33,458
Privately Housed (Unlicensed)	70,000
Wolhuter Women's Hostel	126
Mine Bantu	22,064
TOTAL ESTIMATED BANTU POPULATION	521,698

STATUS CLASSIFIED FOR CAUSES AND RACE, 1964
AGGREGATED LIST OF 50 CAUSES OF DEATH

ANNEXURE 5.

International Code No.	Cause of Death	Europeans	Bantu	Mixed Bantu	Coloureds	Asiatics	All Races
001 - 008	Tuberculosis, Respiratory System	16	178	2	14	1	211
010 - 019	Tuberculosis, Other Forms	8	101	4	6	1	119
020 - 029	Syphilis	23	26	2	2	1	54
040	Typhoid	1	3	-	1	-	5
045 - 048	Dysentery	1	21	-	1	-	22
055	Diphtheria	1	2	-	1	-	4
056	Whooping Cough	2	13	-	2	-	16
057	Meningococcal Infections	1	6	-	1	-	8
080	Acute Poliomyelitis	6	4	1	2	-	11
085 - 086	Other Diseases Classified as Infective and Parasitic	-	-	-	-	-	-
140 - 205	Malignant Neoplasms	43	39	-	5	-	46
210 - 239	Benign Neoplasms	666	283	-	4	-	103
260	Diabetes Mellitus	25	17	9	51	0	1,017
290 - 293	Asaemia	83	55	-	8	3	44
330 - 334	Vascular Lesions Affecting Central Nervous System	10	10	-	0	-	20
340	Non-Meningococcal Infections	196	126	1	14	3	340
400 - 402	Rheumatic Fever	7	4	-	1	1	56
410 - 416	Chronic Rheumatic Heart Disease	66	76	-	13	1	11
420 - 422	Arteriosclerotic and Degenerating Heart Disease	846	59	-	29	17	146
430 - 434	Other Diseases of the Heart	135	208	2	12	2	360
440 - 443	Hypertension with Heart Disease	27	22	-	1	-	31
444 - 447	Hypertension without Mention of Heart Disease	123	100	-	24	5	243
450 - 456	Disease of Arteries	229	40	-	9	-	278
480 - 483	Influenza	2	16	-	1	-	19
490 - 493, 763	Pneumonia	143	448	2	31	10	634
500 - 502	Bronchitis	46	47	-	14	2	109
540 - 541	Ulcer of Stomach and Duodenum	43	4	-	1	-	50
550 - 553	Appendicitis	1	8	-	1	-	9
560, 561, 570	Intestinal Obstruction and Hernia	30	15	-	8	2	55
571, 764	Gastro-Enteritis	38	487	1	21	5	552
581	Cirrhosis of Liver	37	58	2	9	1	107
590 - 594	Hepatitis and Nephrosis	127	41	-	6	-	174
610	Hyperplasia of Prostate	10	4	-	-	-	14
640 - 652	Complications of Pregnancy and Childbirth	9	-	-	2	-	65
670 - 689	Congenital Malformations	70	43	-	9	-	123
750 - 759	Birth Injuries and Post-Natal Asphyxia	11	26	-	-	-	44
760 - 762	Other Infant Diseases and Immaturity	122	100	-	29	1	254
765 - 776	Senility and Ill-Defined Conditions	133	1,079	2	39	3	1,294
780 - 795	Motor Vehicle Accidents	50	75	3	4	2	134
810 - 835	All Other Accidents	-	-	-	-	-	-
840 - 862	Suicide	208	425	36	42	7	721
840 - 965	Homicide	116	18	1	4	1	142
970 - 979	Other Causes	43	522	13	33	8	619
980 - 999	Other Causes	335	374	7	48	15	779
	TOTAL	4,016	5,424	92	495	106	10,133

CORRECTED FOR OUTWARD TRANSFER.

**SUMMARY OF DETAILED LIST OF DISEASES, INJURIES AND
CAUSES OF DEATH 1962 - 1964**

Cause of Death	1962			1963			1964		
	Deaths	Rate	% of Total	Deaths	Rate	% of Total	Deaths	Rate	% of Total
I. <u>Infective and Parasitic Diseases</u>									
Europeans	100	0.27	3.23	86	0.22	2.54	103	0.27	2.56
Bantu	465	0.90	8.85	396	0.76	7.46	456	0.87	8.27
Coloureds	42	0.93	8.55	26	0.53	5.50	34	0.65	6.87
Asiatics	3	0.15	2.26	4	0.15	2.64	2	0.07	1.89
All Persons	610	0.64	6.80	512	0.52	5.50	595	0.61	5.87
II. <u>Neoplasms</u>									
Europeans	546	1.47	17.64	554	1.47	16.39	691	1.82	17.21
Bantu	299	0.59	5.69	327	0.63	6.16	309	0.59	5.60
Coloureds	40	0.89	8.15	33	0.67	6.99	53	1.02	10.71
Asiatics	10	0.39	7.52	11	0.41	7.28	8	0.30	7.55
All Persons	895	0.93	9.97	925	0.95	9.94	1,061	1.08	10.47
III. <u>Allergic, Endocrine System, Metabolic and Nutritional Diseases</u>									
Europeans	63	0.17	2.03	77	0.20	2.27	128	0.34	3.19
Bantu	162	0.31	3.08	147	0.28	2.77	181	0.35	3.28
Coloureds	16	0.35	3.26	18	0.36	3.81	14	0.27	2.83
Asiatics	8	0.31	6.02	11	0.41	7.28	4	0.15	3.77
All Persons	249	0.26	2.77	253	0.26	2.71	327	0.33	3.23
IV. <u>Diseases of the Blood and Blood-Forming Organs</u>									
Europeans	20	0.05	0.65	14	0.03	0.41	14	0.04	0.35
Bantu	21	0.04	0.40	17	0.03	0.32	13	0.02	0.24
Coloureds	5	0.11	1.02	1	0.02	0.21	Nil	Nil	Nil
Asiatics	Nil	Nil	Nil	1	0.03	0.66	Nil	Nil	Nil
All Persons	46	0.05	0.51	33	0.03	0.35	27	0.03	0.27
V. <u>Mental, Psychoneurotic and Personality Disorders</u>									
Europeans	6	0.02	0.19	8	0.02	0.23	1	0.002	0.02
Bantu	7	0.01	0.13	2	0.003	0.03	7	0.01	0.13
Coloureds	1	0.02	0.20	Nil	Nil	Nil	1	0.02	0.20
Asiatics	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
All Persons	14	0.01	0.16	10	0.01	0.10	9	0.009	0.09
VI. <u>Diseases of the Nervous System and Sense Organs</u>									
Europeans	166	0.45	5.36	185	0.49	5.47	250	0.66	16.23
Bantu	225	0.44	4.28	261	0.50	4.92	222	0.43	4.02
Coloureds	19	0.42	3.87	32	0.65	6.77	23	0.44	4.65
Asiatics	5	0.19	3.76	11	0.41	7.28	6	0.22	5.66
All Persons	415	0.43	4.62	489	0.50	5.25	501	0.51	4.94
VII. <u>Diseases of the Circulatory System</u>									
Europeans	1,213	3.26	39.18	1,362	3.63	40.29	1,482	3.90	36.90
Bantu	510	0.99	9.71	564	1.08	10.63	614	1.18	11.13
Coloureds	101	2.24	20.57	109	2.22	23.09	88	1.69	17.78
Asiatics	53	2.06	39.85	43	1.63	28.47	28	1.04	26.42
All Persons	1,877	1.96	20.91	2,078	2.14	22.33	2,212	2.26	21.83
VIII. <u>Diseases of the Respiratory System</u>									
Europeans	163	0.44	5.26	192	0.51	5.68	236	0.62	5.88
Bantu	611	1.18	11.63	574	1.10	10.82	553	1.06	10.03
Coloureds	49	1.09	9.98	56	1.14	11.86	46	0.89	9.29
Asiatics	13	0.50	9.77	9	0.34	5.96	11	0.41	10.38
All Persons	836	0.67	9.31	831	0.44	4.63	846	0.86	8.35

IX. Diseases/.....

Cause of Death	1962			1963			1964		
	Deaths	Rate	% of Total	Deaths	Rate	% of Total	Deaths	Rate	% of Total
IX. Diseases of the Digestive System									
Europeans	142	0.38	4.59	131	0.34	3.87	210	0.55	5.2
Bantu	617	1.20	11.74	574	1.10	10.82	604	1.16	10.9
Coloureds	43	0.95	8.76	36	0.73	7.62	45	0.87	9.0
Asiatics	5	0.19	3.76	5	0.18	3.31	9	0.33	8.4
All Persons	807	0.84	8.99	746	0.77	8.01	868	0.89	8.5
X. Diseases of the Genito-Urinary System									
Europeans	57	0.15	1.84	84	0.22	2.48	72	0.19	1.75
Bantu	100	0.19	1.90	88	0.16	1.65	77	0.15	1.40
Coloureds	7	0.16	1.43	2	0.04	0.42	6	0.12	1.23
Asiatics	2	0.08	1.50	7	0.26	4.63	2	0.07	1.85
All Persons	166	0.17	1.85	181	0.18	1.94	157	0.16	1.55
XI. Diseases and Complications of Pregnancy, Childbirth and the Puerperium									
Europeans	8	0.02	0.26	1	0.002	0.02	9	0.02	0.22
Bantu	40	0.08	0.76	63	0.12	1.18	58	0.11	1.06
Coloureds	1	0.02	0.20	5	0.10	1.05	2	0.04	0.40
Asiatics	Nil	Nil	Nil	2	0.26	1.32	Nil	Nil	Nil
All Persons	49	0.05	0.55	71	0.07	0.76	69	0.07	0.68
XII. Diseases of the Skin and Cellular Issues									
Europeans	Nil	Nil	Nil	4	0.01	0.11	2	0.005	0.05
Bantu	5	0.009	0.10	4	0.007	0.07	5	0.009	0.09
Coloureds	Nil	Nil	Nil	2	0.04	0.42	Nil	Nil	Nil
Asiatics	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
All Persons	5	0.005	0.06	10	0.01	0.10	7	0.007	0.07
XIII. Diseases of the Bones and Organs of Movement									
Europeans	12	0.03	0.39	8	0.02	0.23	11	0.03	0.27
Bantu	4	0.007	0.08	7	0.01	0.13	5	0.009	0.09
Coloureds	Nil	Nil	Nil	2	0.04	0.42	2	0.04	0.40
Asiatics	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
All Persons	16	0.02	0.18	17	0.01	0.18	18	0.02	0.18
XIV. Congenital Malformations									
Europeans	37	0.10	1.20	45	0.12	1.33	70	0.18	1.74
Bantu	37	0.07	0.70	41	0.07	0.77	45	0.09	0.82
Coloureds	5	0.11	1.02	6	0.12	1.27	6	0.12	1.21
Asiatics	3	0.12	2.26	2	0.07	1.32	2	0.07	1.89
All Persons	82	0.09	0.91	94	0.09	1.01	123	0.13	1.21
XV. Certain Diseases of Early Infancy									
Europeans	147	0.39	4.75	149	0.39	4.40	185	0.49	4.61
Bantu	216	0.42	4.11	292	0.56	5.50	190	0.36	3.44
Coloureds	57	1.26	11.61	51	1.04	10.80	53	1.02	10.71
Asiatics	16	0.62	12.03	28	1.06	18.54	15	0.56	14.15
All Persons	436	0.45	4.86	520	0.53	5.58	443	0.45	4.37
XVI. Symptoms, Senility and Ill-Defined Conditions									
Europeans	102	0.27	3.29	137	0.36	4.05	133	0.35	3.31
Bantu	916	1.78	17.43	882	1.70	16.63	1,081	2.07	19.60
Coloureds	42	0.93	8.55	24	0.48	5.08	39	0.75	7.88
Asiatics	4	0.16	3.01	1	0.03	0.66	1	0.04	0.94
All Persons	1,064	1.11	11.86	1,044	1.07	11.21	1,254	1.28	12.38
XVII. Alternative Classifications of Accidents, Poisonings and Violence (External Cause)									
Europeans	314	0.84	10.14	343	0.91	10.14	419	1.10	10.43
Bantu	1,020	1.98	19.41	1,063	2.05	20.04	1,096	2.10	19.87
Coloureds	63	1.40	12.83	69	1.40	14.61	83	1.60	16.77
Asiatics	11	0.43	8.27	16	0.60	10.59	18	0.67	16.98
All Persons	1,408	1.47	15.69	1,491	1.54	16.02	1,616	1.65	15.95

CORRECTED FOR OUTWARD TRANSFER.

SAMPLES SUBMITTED FOR TESTING

Details of Tests	S.A.I.M.R.	Abattoirs Labora- tory	Council Labora- tories	Government Chemical Labora- tories	Staff of C.H.D. (Field Tests)
BACTERIOLOGICAL, PATHOLOGICAL, ETC.					
1. Tuberculosis					
Sputum (direct)	43,007				
Culture	844				
Sensitivity	159				
Biological (guinea pig inoculation)	13				
Other	107				
2. Serological					
Syphilis	24,402				
Rh Factor	16,442				
T.M.X. (complement)	53				
C.C. Complement Fixation	6				
Bilharzial Complement	2				
Viral and Rickettsial	11				
Toxoplasmin and Leptospiral	6				
Other	11,520				
W.R.	5,129				
3. Bacteriological Counts					
Water (Municipal supply)	45				
Water (Private boreholes)	75				
Milk or Milk Products	12				
Ice Cream	891				
Water Ices	185				
Food Handling Equipment and Eating Utensils	1,939				
4. Bacteriological Examinations					
Blood Culture	Bacteriological	69			
Sputum and Exudates (culture)	Bacteriological	82			
Antibiotic Sensitivity	Bacteriological	31			
Scarlet Fever and Diphtheria Contacts	Bacteriological	214			
Typhoid Stools and Urine	Bacteriological	1,109			
Swabs for K.L.B.	Bacteriological	2,024			
Swabs for H.S.	Bacteriological	1,029			
Hospital Hygiene	Bacteriological	1,278			
Food Specimens (suspected food poisoning)	Bacteriological	3			
Food Specimens (not for food poisoning)	Bacteriological	48			
Vomit	Bacteriological	1			
Stools and Urine	Bacteriological	65			
Swabs from Persons	Bacteriological	209			
Swabs from Food Utensils or Equipment	Bacteriological	3			
Other	Bacteriological	533			
5. Parasitological					
Blood (Malaria, etc.)	Parasitological	3			
Stools Amoeba	Parasitological	44			
Stools Bilharzia	Parasitological	22			
Urine Bilharzia	Parasitological	28			
Urine Microscopic	Parasitological	8			
Other	Parasitological	65			
6. Rodents and Fleas					
Rodents (Plague)		354			
Rodents (Rickettsia)		208			
Fleas (P. Pestis)		31			
7. Chemical					
Blood	Chemical	584			
Urine	Chemical	187			
C.S.F.	Chemical	95			
Other	Chemical	138			
8. Cell Counts					
C.S.F.	Cell Counts	73			
Blood	Cell Counts	510			
Other	Cell Counts	56			

9. Immunity/.....

Details of Tests		S.A.I.M.R.	Abattoirs Laboratory	Council Labora- tories	Government Chemical Labora- tories	St C. (F Te
9. Immunity Tests						
	Polioyelitis	Immunity Tests	24			
	Diphtheria	Immunity Tests	21			
	Other	Immunity Tests	5			
10. Virus Culture						
	Stool	Virus Culture	120			
11. Histopathology						
			2			
12. Pregnancy Tests						
			74			
13. Insects, Snails, etc.						
			3			
14. Other						
			61			
B. FOOD AND WATER SUPPLIES						
15. Milk						
	Pasteurised	Bacteriological		1,544		
	Raw Milk	Bacteriological		2,009		
	Powdered Milk	Bacteriological		81		
	Milk	For Secretary for Health			15	
	Milk Fat and Solid not Fat Standards				709	
16. City Milk Supplies						
		Bacteriological and Biological Tests	7,900			
		Mastitis		3,235		
		Biological Tests for Tuberculosis		2,136		
		Brucellosis Tests		2,136		
		Antibiotics		1,550		
17. Farm Dairy Demonstration Van						
		Mastitis tests by means of strip cup				10
		Microscopic Examination of milk				
		Acidity Tests				
		Butter Fats				
		Sediment Tests				2
18. All Producing Dairies						
		Sediment Tests				
		Special Water Samples				
19. Milk Samples						
		Field Phosphatase Tests				
		Sediment Tests				3
20. Food Samples						
	Miscellaneous	Bacteriological			6	
	Meat	Bacteriological			717	
	Honey	Bacteriological			9	
	Bread	Bacteriological			1	
	Milk Powder	Bacteriological			2	
21. Water Supplies						
	Municipal Reservoirs	Bacteriological	124	1,095		
	Boreholes	Bacteriological and Chemical		24		
		Bacteriological	75	33		

Details of Tests	S.A.I.M.R.	Abattoirs Laboratory	Council Laboratories	Government Chemical Laboratories	Staff of C.H.D. (Field Tests)
22. <u>Bantu Beer</u> Corn Malts Bantu Beer Husks Iron Content of Beer				186 612 8 2	
C. <u>MISCELLANEOUS</u>					
23. <u>Air Pollution Control</u> Smog				1,820	
24. <u>Sewage Samples</u> Northern Works Klipspruit Olifantevlei				3,000 4,440 825	
25. <u>Water</u> Swimming Bath Waters Sewage Effluent and Rivers Miscellaneous Factory Effluents Borehole Waters Rivers, Seepage and Other Waters Transformer Oils Carcase and Blood Meals Soil Samples Flammable Materials Pharmaceuticals Tenders and Contracts Paints Miscellaneous				398 1,364 151 4,534 93 37 21 100 62 9 9 190 295 77	

MEDICAL SERVICES IN BANTU TOWNSHIPS
CLINIC ATTENDANCES, ETC.

JANUARY - DECEMBER 1964

	Pinville	Western Township	Eastern Bantu Township	Orlando	Noordgesig	Shantytown	Jabavu	Moroka	Total
Dispensary and Outpatient Clinics	41,167	Nil	8,114	85,191	18,919	52,321	117,656	151,029	474,397
Ante-Natal Clinics	5,781	Nil	1,509	6,618	1,660	6,188	26,278	19,754	67,708
Child Health Clinics	18,985	Nil	4,334	26,120	11,302	15,237	47,195	42,169	165,422
Tuberculosis Clinics	17,959	14,088	10,339	29,916	8,885	20,049	45,821	52,401	199,459
Veneral Disease Clinics	3,148	Nil	311	2,314	252	852	6,684	3,356	16,917
TOTAL ATTENDANCES	87,040	14,088	24,607	150,159	41,099	94,647	243,634	268,709	923,983
Home Visits by Medical Officers	1,399	Nil	101	59	826	62	530	269	3,246
Home Visits by Health Visitors	2,353	Nil	440	162	476	3,227	23,435	10,040	40,133
Home Visits by Bantu Nurses and Midwives	25,117	207	4,364	41,677	4,653	27,611	104,955	96,196	304,780
TOTAL VISITS	28,869	207	4,905	41,896	5,955	30,900	128,920	106,505	348,159
No. of Confinements and B.B.A.'s Attended by District Midwives	1,136	Nil	84	1,230	151	620	5,294	3,772	12,287

PLACING OF PHYSICALLY HANDICAPPED PERSONS IN EMPLOYMENT

The Medical Section does not contact employers or potential employers directly, as a rule, in trying to find employment for the Physically Handicapped. This is done in co-operation with the Employment Officer and the Welfare Officer. Recommendations are made by the Medical Officer on the Non-European Affairs Department record card as to the physical and mental capabilities of the individual and the Employment Officer and/or Welfare Officer makes approaches to firms where they feel such an individual could be reasonably employed.

The disabilities can be divided into two broad groups - Tuberculosis and "Other". The "Other" group includes medical disabilities which are controlled by suitable therapy, such as congestive cardiac failures, epileptics, whose seizures are under control, emphysemas who can manage light work, ex mental cases, such as schizophrenia, who have been suitably treated, diabetics under control, mentally defective individuals, limb cripples - some without an arm or leg, defective eyesight, ex lepers, hernias, hydrocoelae who refuse treatment, hemiplegias and a host of other conditions which appear from time to time.

The Medical Section keeps no record of those recommended for suitable employment, although an endorsement is made on the Non-European Affairs Department record card. Unfortunately, the Employment Officer also finds it almost impossible to keep statistics of those placed in employment, although notes are made by him on the same Non-European Affairs Department record card, which is filed along with the rest of the cards in circulation. No special filing system can be kept, as all the record cards are filed in numerical order, according to the Identity Number. It may take months to place one disabled individual in employment. He may appear at the Non-European Affairs Department offices on numerous occasions and be sent to potential employers for consideration, but it may take months before he is finally accepted by an employer.

The Welfare Section is in a similar position, and has also no accurate records available of the "Other" group. A reasonable estimate given me by the Welfare Officer is that 15 persons out of 100 were successfully placed in employment in 1961. The reason submitted for this apparently low figure is that in most cases the individuals lack education, and also that they lack the physical ability for heavy manual labour, which is the commonest form of labour available.

As regards the Tuberculosis cases, more accurate records are available from the Welfare Officer. A special Section of Welfare is devoted solely to tuberculosis cases. In the year 1961, 309 out of 834 cases were successfully placed in employment. These were tuberculosis cases who had had fairly extensive treatment and were clinically well, radiologically improved and non-infectious. Many had been patients in chest hospitals. In most cases they were being reinstated and engaged in work similar to that which they were doing before their Tuberculosis was discovered.

All cases of disability are tidied over socio-economically by the Welfare Section until employment is found.

In general, where an individual is assessed as being completely and totally medically unfit for work, and where his condition will not improve under any further treatment, a permanent exemption is recommended and the Welfare Section will then be asked to take over the case and apply for an invalidity pension.

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.	1964	1963	2.	1964	1963
<u>BUILDINGS</u>			<u>LICENSED PREMISES (contd)</u>		
Repairs	178	423	Garages	1,292	1,506
Illegal	883	136	Hotel Dining Rooms	2,648	2,455
			Bantu Eating Houses	1,073	1,746
<u>CLOSETS AND URINALS</u>			Laundries	1,400	1,079
Inspected	8,242	9,878	Milkshops	6,490	5,146
Additional Provided	44	44	Noxious Trades	8,591	5,722
			Pedlars and Hawkers	1,321	694
<u>VARIOUS PREMISES</u>			Private Cows	45	60
Factories	4,409	4,763	Restaurants	9,354	6,572
Business Buildings	2,303	1,600	Tea Rooms	4,273	3,917
Dwellings - Routine Visits	10,870	6,001	General Dealers	42,258	31,170
Dwellings - Survey	164,050	133,778	Nursing Homes	91	108
Interviews	29,371	23,947	Lodging Houses	56	54
Bantu Housing	351	524	Cowsheds	72	119
			<u>GENERAL</u>		
<u>NUISANCES</u>			Phosphatase Tests	373	-
Service Complaints	621	550	Inspections - Food Handling	954	895
Stormwater	90	46	Sediment Tests Taken	4,321	5,425
Fumigations	1,145	1,843	Bacteriological Samples Taken	9,054	9,370
Wells	17	31	Inspections - Milk Purveyors	9	55
French Drains	17	51	Food Poisoning Investigations	9	38
Animals	852	693	Water Samples Taken	1,022	1,104
Manure	305	243	Food Samples Taken	3,897	1,841
Drainage	3,602	4,337			
Refuse	17,350	16,113	TOTAL (A)	383,816	319,792
Wastewater	469	443			
Stables	75	466	<u>NOTICES, ETC.</u>		
Fly	82	120			
Rats	9,815	7,699	COURT HOURS	2,227	1,873
Poultry	3,647	2,333	STATUTORY NOTICES	22,261	24,185
Unspecified	4,443	4,559	OTHER NOTICES	2,696	3,215
Vermin	654	717	REPORTS	1,388	1,469
Smoke	65	64	MARKET HOURS	336	350
Mosquitoes	72	436	LICENSING COURT HOURS	-	34
<u>INFECTIOUS DISEASES</u>			<u>SUMMARY</u>		
Investigated	9	44	TOTAL VISITS (A)	383,816	319,792
Isolation of Contacts	4	287	DEMOLITIONS AND CONVERSIONS	258	150
			PEST CONTROL OVERSEERS VISITS	147,632	124,652
<u>LICENSED PREMISES</u>					
Asiatic Eating Houses	48	-	TOTAL	531,706	444,594
Aerated Water and Ice Factories	329	359			
Dairies	5,060	6,788			
Ice Cream Factories	919	707			
Bakeries	1,258	1,414			
Boarding Houses	1,159	1,509			
Barber Shops	1,983	1,745			
Bioscopes	441	383			
Butcheries	9,981	5,642			

DETAILS OF PROSECUTIONS INSTITUTED : YEAR 1964 COMPARED WITH 1963

DETAILS OF OFFENCE	NO. OF CHARGES		GUILTY		NOT GUILTY		COURT ORDER GRANTED		WITHDRAWN OR STRUCK OFF		FINES IMPOSED	
	1964	1963	1964	1963	1964	1963	1964	1963	1964	1963	1964	1963
SAUNITATION AND NUISANCES:												
Dirty Premises, Closets, etc.	95	105	73	73	1	2			21	30	662	1,071
Venous Premises	4	18	2	11		2			2	5	16	63
Refuse and Refuse Bins	6	5	3	5					3	3	30	32
Insufficient Sanitary Accommodation	50	17	43	12					7	5	466	93
Water Supply	1	1		1								8
Fumigations	4	3	4	3							16	30
Rodents or Harborage	206	126	104	73	8	10			94	43	905	326
Waste, Water	2	1							2	1	10	5
Unsatisfactory Storage	1	1	1	1							45	50
Court Orders - Structural Repairs	38	12	3	10		3	6	2	29	10	2	48
Poultry Nuisances	23	15	11	10					12	2	66	1
Keeping of Animals	30	3	16	1	1	4			14	2	253	331
Other Prosecutions	71	96	47	59	1	2			23	33	162	20
Shacks and Garages	45	6	25	3	1				19	1		
Fly Breeding in Manure	2								2			
MILK AND ICE CREAM:												
Below Standard or Adulterated	36	54	32	43	1	2			4	11	549	415
Visible Dirt	66	93	61	91					4	4	994	1,404
Dirty Clothing or No Overalls	5	18	3	13					2	5	28	50
Dirty Premises or Equipment	3	5	2	4					1	31	20	31
Milk Purveyor Selling in Bottles	9	2	9	2							40	16
Trading without a Licence	20	44	17	31		4			3	9	91	181
No Card of Authority	2	10	1	7		1			1	2	10	21
Other Prosecutions	29	26	25	20	2	3			2	3	231	105
Meats and Merchandise Act	2	2	2	2							24	6
MEAT:												
Dirty Premises or Equipment	7	6	7	6							84	72
Unsound or Unstamped	21	40	18	38		1			3	1	232	666
Dirty Clothing or Handling	2	3	2	2						3	15	12
Exposed to Contamination	6	3	6	2		1					56	171
Other Prosecutions	45	17	42	17					3		495	
BREAD:												
Exposed to Contamination	20	1	13	1					7	1	123	10
Dirty Clothing or Handling	5	1	4	1					1	1	22	8
Dirty Vehicles		2		1								
Other Prosecutions	6		4						2		42	
OTHER FOODSTUFFS:												
Below Standard or Adulterated	5	4	4	3							59	21
Exposed to Contamination	78	19	66	18					1	1	591	124
Dirty Premises or Equipment	130	87	117	82					12	1	1,322	857
Dirty Clothing or Handling	45	26	39	24					6	2	277	119
Other Prosecutions	87	27	77	26					10	1	500	123
Unsound Foodstuffs	3	6	2	4		1			1	1	20	20
TOTAL	1,209	905	885	687	14	36	6	2	304	160	8,504	6,470

SUMMARY: TOTAL NUMBER OF PERSONS PROSECUTED 994
 TOTAL NUMBER OF CHARGES 1,209
 TOTAL FINES IMPOSED 8,504

NOTE: Most of the 304 charges withdrawn or struck off are because of non-service of summons documents due to fictitious names and addresses before furnished and also because of non-attendance of accused persons.

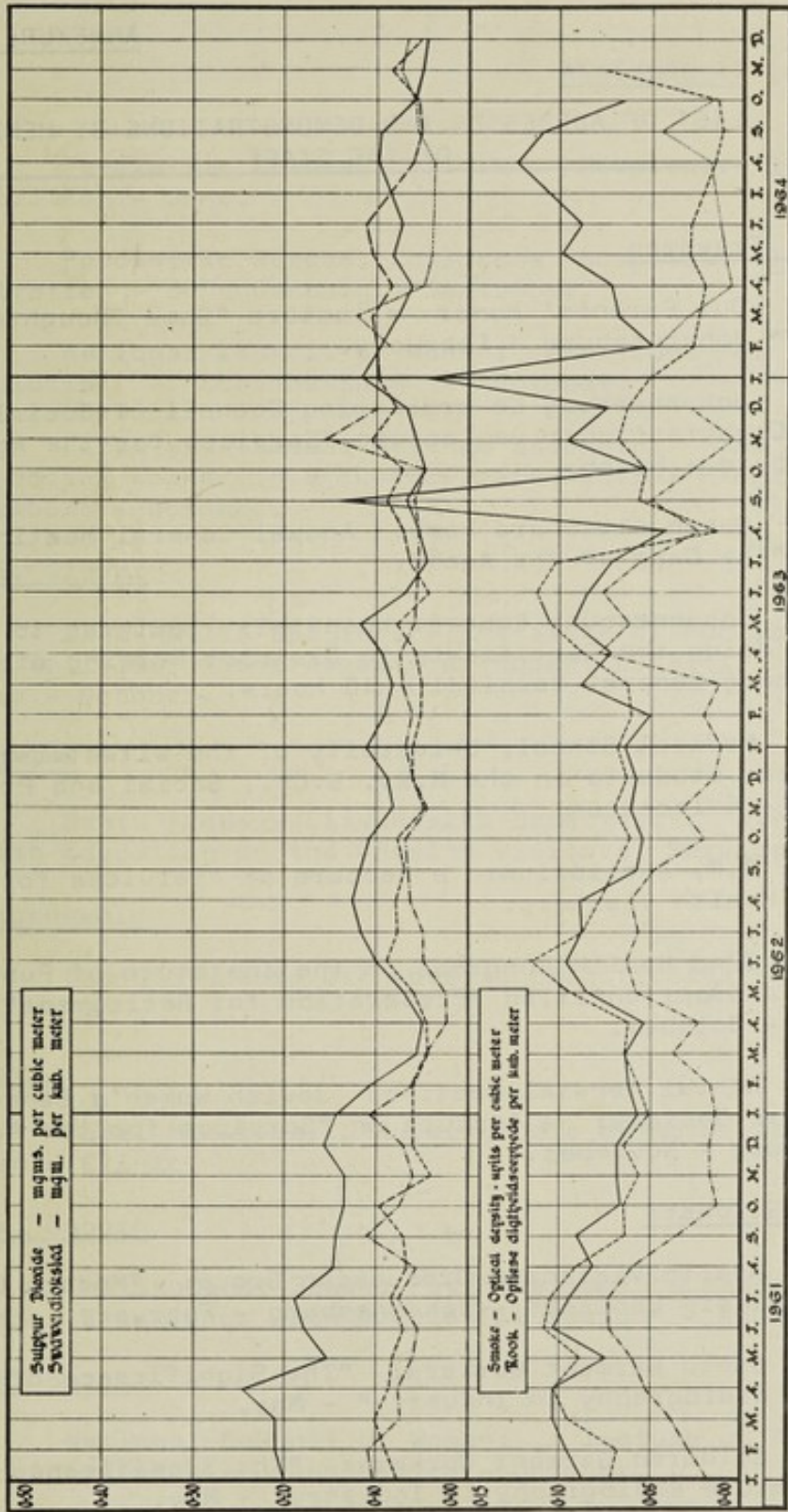
ANALYTICAL DATA : ANNUAL AVERAGES 1 JANUARY TO 31 DECEMBER 1992

Samples	Average Daily Flow Treated (gallons)	Settleable Solids	Suspended Solids	Total Dissolved Solids	Permanganate Value 4 Hours (Btish)	Permanganate Value 4 Hours (S.A.B.S.)	B.O.D.	C.O.D.	Nitrogen as				Alkalinity as CaCO ₃	Chlorine	Phosphates as PO ₄	Sodium as Na	Antonie Detergents as Menoxol	pH	Faecal coli per 100 ml.
									Parts per million										
									Free and Saline Ammonia	Albuminoid Ammonia	Organic (Kj)	Nitrate							
KLIPSPRUIT WORKS																			
Composite Samples Taken Hourly from 8 a.m. to 7 a.m. the following day.	27,610,000	9.0 1.1			79.9 65.6		248	764 477	35.5 34.5	9.1 6.2		227 226	90 96	16.4		8.8 8.3	7.2 7.3		
Unit I:																			
Primary Humus Tank Effluent		0.7			27.0		28	205	23.3	3.6	3.7	190	98			8.4	7.6		
Influent to Secondary Filters		0.4			30.2		14	117	11.3	1.9	18.5	208	95			5.9	7.6		
Secondary Humus Tank Effluent			20		28.8		7	93	11.7	1.8	16.1	111	99	14.2	93	5.6	7.5	817,000	
Sand Filter Effluent			4	588	18.2	14.5													
Unit II:																			
Primary Humus Tank Effluent		1.8			34.5		28	224	23.3	4.3	2.1	228	94				7.6		
Influent to Secondary Filters		1.1			50.3		43	203	23.8	3.3	1.9	231	98				7.6		
Secondary Filter Effluent			19		32		8				2.1	207	165	5.5			7.8		
Irrigation Run-off					20		8				11.9	291	159	10			7.7		
Honestead Farm																			
Harrington Spruit																			
OLIFANTSVLEI WORKS																			
Untreated Sewage	10,759,000	6.4			42.5				40.5	9.5		213	61			9.7	7.1		
Influent to Sedimentation Tanks		9.8			56.3		634	45.8	12.6			229	62			14.6	7.1		
Settled Sewage		0.3			30.6		187	299	38.9	6.9		227	61			9.3	7.2		
Primary Humus Tank Effluent		trace			14.8		28	123	24.9	2.8	6.7	180	61			8.8	7.4		
Secondary Humus Tank Effluent		trace	14.3	505	10.6	9.4	16	85	10.6	1.7	26	65	62	20.4	64	7.9	7.2	500,000	
plus Maturation Pond Effluent																			
Maturation Ponds																			
Effluent		trace			7.6	6.9	5		8.6	1.1	23	73	62	19.7		6.0	7.7	8,000	
Klip River																			
Above Works			1,570			1.6	0.4	22	0.7	0.1	6.8	23	79	0.5	99		5.7	100	
Below Works at Jackson's Draft			853		2.9	2.9	0.9	27	0.1	0.2	14.2	104	87	2.4	76		7.4	1,000	

Samples/.....

Samples Composite Samples Taken Hourly from 8 a.m. to 7 a.m. the following day.	Average Daily Flow Treated (gallons)	Settleable Solids	Suspended Solids	Total Dissolved Solids	Permanganate Value 4 Hours (British)	Permanganate Value 4 Hours (S.A.B.S.)	B.O.D.	C.O.D.	Parts per million					Alkalinity as CaCO ₃	Chlorine	Phosphates as PO ₄	Sodium as Na	Antonie Detergents as Mankrol	pH	Faecal coli per 100 ml.	
									Free and Saline Ammonia	Ammonia	Ammonia	Organic (Kj)	Nitrogen								Nitrates
NORTHERN WORKS	15,400,000	10.8			55.0				30.1			21.9	231	73	25		16.2	7.1			
Untreated Sewage																					
South Unit																					
Influent to Sedimentation Tanks		15.4			68.8				31.9			29.4	243	71	24		19.0	7.7			
Settled Sewage		trace			30.7		225		32.0			11.6	241	70	23		15.5	7.3			
Primary Humus Tank Effluent					17.5		39		25.6			6.5	198	67	21		12.9	7.4			
Secondary Humus Tank Effluent					12.6				4.2			3.4	29	67	20						
Sand Filter Effluent					11.8	10.3		92	3.2			3.7	27	69	20		10.9	6.7	298,000		
North Unit																					
Influent to Sedimentation Tanks		14.0			73.3				33.0			25.2	245	70	23		19.2	7.2			
Settled Sewage		trace			31.0		182		32.5			11.8	242	71	22		15.3	7.3			
Primary Humus Tank Effluent					16.8		46		24.4			5.6	190	70	21		13.4	7.6			
Secondary Humus Tank Effluent					11.8		16		4.5			3.1	34	68	22		11.1	7.0			
Maturation Ponds																					
Start of irrigation furrow		trace			12.6		164		5.3			3.4	40	68	21		12.6	7.1	1,118,000		
End of irrigation furrow					9.9		98		4.0			2.4	52	67	20		7.8	6.9	53,000		
Final dam outlet to river					8.6	7.4	7.0	61	1.3			2.2	20.1	61	17		5.3	7.8	130		
Jukkei River																					
Before entry of effluent									1.9			1.8	30	71	6		3.4	7.4	20,700		
After entry of effluent					7.4		50		0.7			2.0	55	67	11		70	3.6	7.5	9,500	

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Air Pollution Measurement - 1963 - 64
 Lugbesoedellingsgewere - 1963 - 64

Bruma
 City Hall - Stadsaal
 Eastern Dapru Township - Oostelike Natuureledorp
 Rosebank

LIST OF ADDRESSES AND DEMONSTRATIONS BY MEMBERS
OF THE STAFF

Dr. M.L. Freedman

Our Parents' Home: a lecture "Some Thoughts for the Aged" Johannesburg - February.

Johannesburg Co-ordinating Council of Social Welfare Organisations: a lecture "Services for the Aged" - Johannesburg - March.

Queen Alexandra Home: Annual General Meeting: a talk on "The Care of the Aged".

Johannesburg General Hospital: lectures to trainees doing the Certificate in District Nursing at the Johannesburg General Hospital - 40 hours.

Medical School, University of the Witwatersrand: to 4th year students in the M.B., B.Ch., Social and Preventive Medicine - 6 lectures.

B.P. Auditorium: a lecture on "Services for the Aged" to Health Visitors.

22nd Health Congress of the Institute of Public Health: a paper entitled "Preparation for Retirement" - Pretoria - October.

Annual General Meeting: Jewish Women's Benevolent and Welfare Society: a lecture on "Services for the Aged" - Johannesburg - November.

Dr. M.H. Goldberg

Health Visitors' Discussion Group: "Modern Concept of Tuberculosis Control" - Johannesburg - February.

Bantu Garment Workers: "The Significance of Mass Miniature Radiography in Industry" - May.

Coloured Garment Workers: "The Significance of Mass Miniature Radiography in Industry" - May.

Toc-H: "Role of Voluntary Organisations in a Tuberculosis Control Programme" - May.

Paediatric/...

ANNEXURE 17 (CONTD.)

Paediatric Nurses, Children's Hospital: lecture/
demonstration - June.

Paediatric Nurses, Children's Hospital: lecture/
demonstration - Johannesburg - September.

National Council of Women; "No Truce for
Tuberculosis" - Johannesburg - October.

First-year Social Science Students: "The Role
of the Social Worker in a Tuberculosis Control Programme" -
Johannesburg - October.

Mr. J.S. Glover

22nd Health Congress - Institute of Public Health:
a paper entitled "Some Aspects of Rodent Control" -
Pretoria - October.

Miss McMinn

Bantu Areas - City Health Department: symposium
on Health Education on the "Health Visitors' Service" - June.

Miss Groenewald

Bantu Students Orthopaedic Certificate: "Orthopaedic
After Care".

Miss Hart

Pupil Midwives: "Nursing Care of Mother and Baby"
at Orlando Clinic.

Mr. D.W. Osborn

Institute of Sewage Purification: a paper entitled
"Operating Experience with Double Filtration" - August.

Dr. A.H. Smith

National Council of Women: a lecture on "Road
Traffic Accidents" - Johannesburg - October.

Dr. I.W.F. Spencer/...

Dr. I.W.F. Spencer

S.A.I.M.R., Scientific Society at the S.A. Institute for Medical Research: a lecture on "Mass Immunisation Procedure" - August.

Post-Graduate Students: Diploma in Hospital Administration, Pretoria College of Nursing: a lecture on "Bantu Custom and Hospital Administration" - October.

Women's Association: a lecture on "Bantu Medical Services" in the St. Mark's Hall, Johannesburg - November.

Mr. L. Tucker

Conference organised by C.S.I.R. in Durban: presented a paper entitled "Progress of Johannesburg's Clean Air Campaign, 1964" - September.

Miss S.M. Walker

Institute of Sewage Purification: a paper entitled "Synthetic Detergents - a Review of the Present Conditions in the U.S.A." - March.

FINANCIAL SUMMARY : CITY HEALTH DEPARTMENT : 1963 - 1964

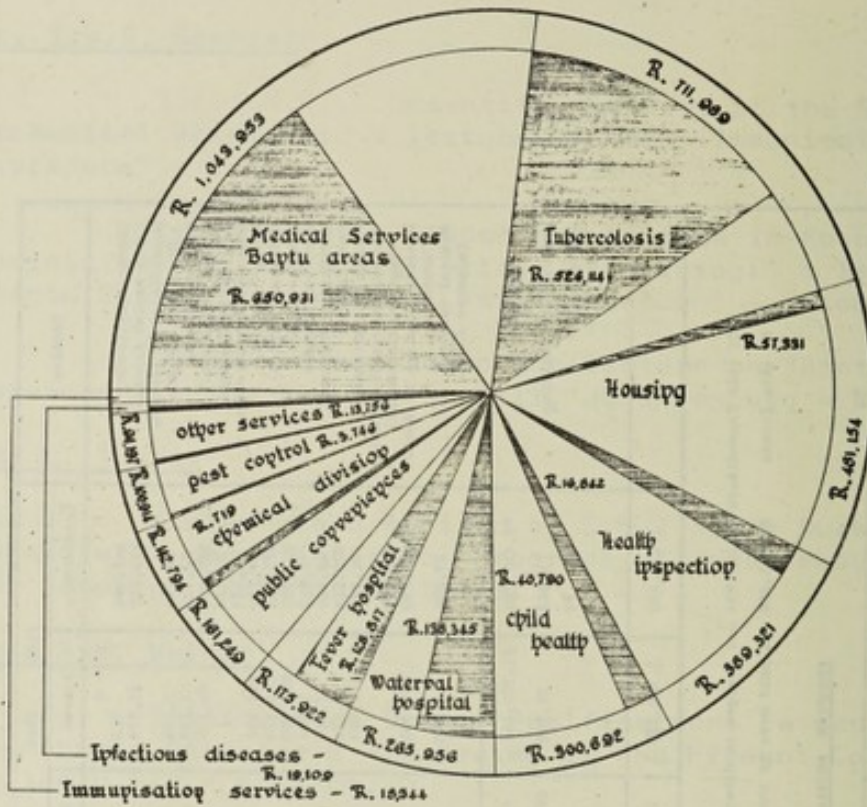
ANNEXURE 19

Service	1963 - 1964			Service	Cost
	Expenditure	Income	Net Cost		
Chemical Division	R 142,794	R 719	R 142,075	Immunisation	R 10,208
Child Health Clinics	192,329	33,278	159,051	Outpatient Services Clinic	296,714
Supervision of Nursing	16,157	3,135	13,022	Outpatient Services - Domiciliary	17,729
Homes and Midwives	92,206	14,129	78,077	District Midwifery Services	159,271
Nursery Schools	389,321	66,578	322,743	Ante-Natal and Post-Natal Clinics	31,506
Health Inspection	22,724	-	22,724	Dental Services	44,293
Disinfecting Station	18,444	-	18,444	Child Health Clinics	171,272
Immunisation Services	173,922	157,492	16,430	Child Health - Domiciliary	15,592
Fever Hospital	265,956	216,726	49,230	Tuberculosis Clinics	105,566
Maternal Hospital	711,989	536,800	175,189	Tuberculosis - Domiciliary	128,110
Tuberculosis	5,822	1,514	4,308	Ambulance Services	527
Venerereal Diseases	19,109	7,045	12,064	Midwifery Transport	63,285
Post Control	100,914	3,746	97,168		
Public Conveniences	161,249	9,023	152,226		
Medical Examination Centre (Registration Depot)	36,480	-	36,480		
Medical Services in Bantu Townships	1,043,953	650,931	393,022		
Medical Services - Coloured Areas	27,236	4,340	22,896		
				TOTAL EXPENDITURE	R1,043,953
Sub-Total	*3,422,705	#1,705,456	1,717,249		
Head Office Building	1,842	34,569	CR. 32,727	I N C O M E	
Dispensary	93	-	93	Recoveries under the Public Health Act	198,185
				Subsidy from Transvaal Provincial Administration	452,746
	3,424,640	1,740,025	1,684,615	TOTAL INCOME	R650,931

* Of this Expenditure R2,109,804 was charged to Other Departments.
 # Of this Income R1,351,650 was paid over to the Non-European Affairs Department.

EUROPEAN HOUSING 1963 - 1964

Expenditure	Income	Net Cost
R 481,154	R 406,800	R 74,354



Gross Expenditure of various Health Services

Shaded areas represent subsidies and part refunds received from Provincial & Central Government

Financial Year 1963-64

REPORT B.

1964

C I T Y O F J O H A N N E S B U R G

A N N U A L R E P O R T

O F T H E

M E D I C A L O F F I C E R O F H E A L T H

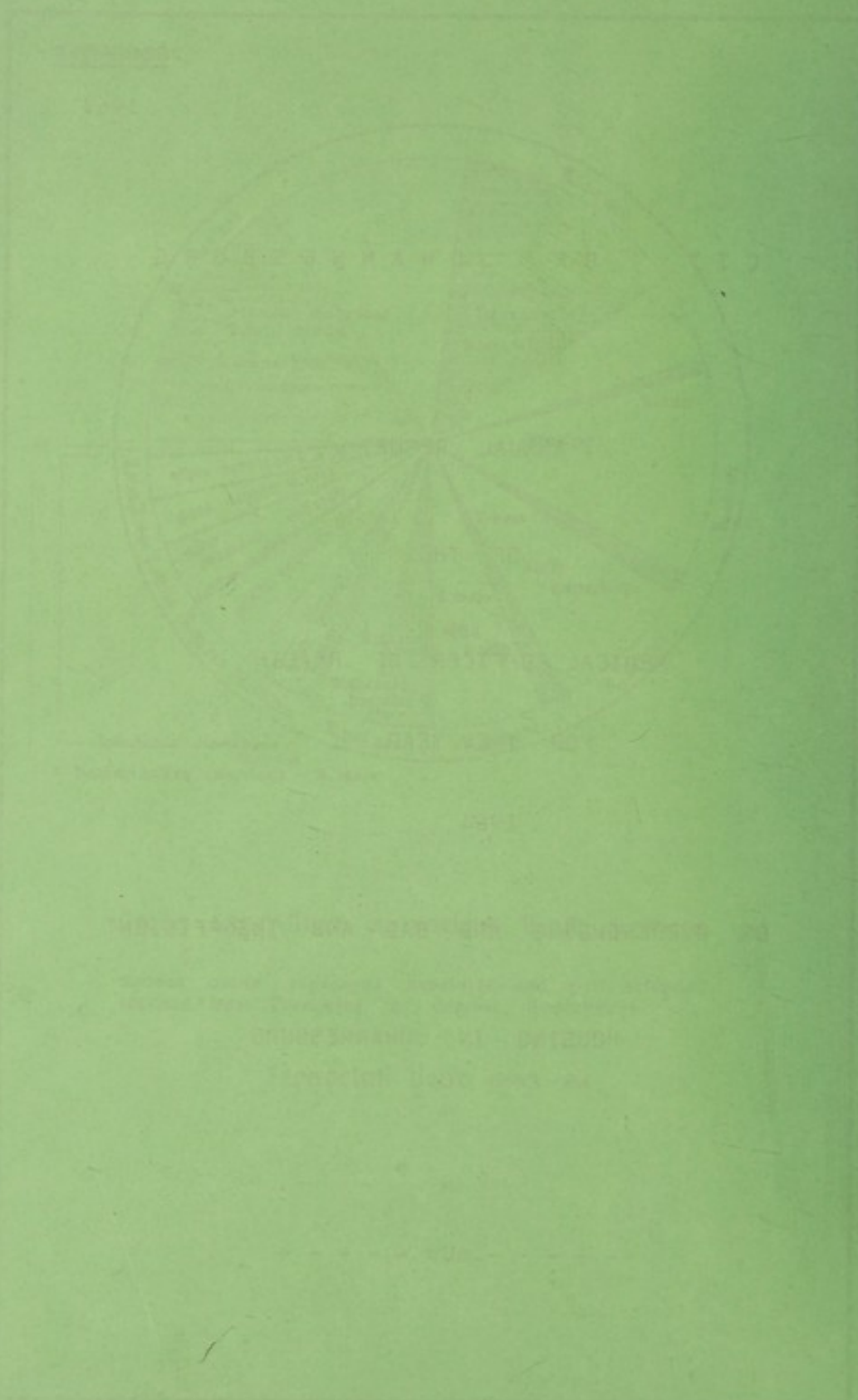
F O R T H E Y E A R

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O N O V E R C R O W D I N G A N D B A D A N D I N S U F F I C I E N T

H O U S I N G I N J O H A N N E S B U R G

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1964

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH1964ON OVERCROWDING AND BAD AND INSUFFICIENT HOUSINGIN JOHANNESBURGTABLE OF CONTENTS

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This report will deal primarily with the calendar year 1958 but will also cover the period 1957-1958. The report is intended to provide a general overview of the housing situation in the City of Johannesburg and to highlight the main trends and developments in the housing sector. It is intended to provide a general overview of the housing situation in the City of Johannesburg and to highlight the main trends and developments in the housing sector. It is intended to provide a general overview of the housing situation in the City of Johannesburg and to highlight the main trends and developments in the housing sector.

The report is divided into two main parts. The first part deals with the general housing situation in the City of Johannesburg, and the second part deals with the projected housing schemes for the Bantu population. The first part is divided into three sections: (i) the general housing situation, (ii) the housing situation in the different areas of the City, and (iii) the housing situation in the different racial groups. The second part deals with the projected housing schemes for the Bantu population, and is divided into two sections: (i) the projected housing schemes for the Bantu population, and (ii) the projected housing schemes for the Bantu population in the different areas of the City.

The report is based on the information provided by the various departments and agencies concerned with housing in the City of Johannesburg. It is intended to provide a general overview of the housing situation in the City of Johannesburg and to highlight the main trends and developments in the housing sector. It is intended to provide a general overview of the housing situation in the City of Johannesburg and to highlight the main trends and developments in the housing sector.

CITY OF JOHANNESBURG

REPORT B

1964

REPORT ON OVERCROWDING AND BAD AND INSUFFICIENT
HOUSING IN JOHANNESBURG FOR THE CALENDAR YEAR
1964, IN TERMS OF SECTION 131(2) OF THE PUBLIC
HEALTH ACT, 1919, AS AMENDED.

To the Mayor and
City Councillors of
JOHANNESBURG.

Mr. Mayor, Gentlemen,

I have the honour to submit my report on Housing
for the period ended 31st December 1964.

I. INTRODUCTION

This report will deal primarily with the calendar
year 1964 but will also constitute a review of the 5 year
period commencing 1st January 1960.

In terms of Section 131 of the Public Health Act,
the State Department of Health is required to collect,
investigate and consider facts relating to overcrowding and
bad or insufficient housing in urban districts; to enquire
into the best methods of dealing with such conditions and to
make any recommendations that may seem necessary. To enable
this function to be carried out Medical Officers of Health of
urban local authorities must report annually on these matters
to the Chief Health Officer.

Local authorities are required by Section 162(3)
of the Local Government Ordinance (Transvaal) to transmit a
copy of the report of the Medical Officer of Health to the
Administrator.

The multi-racial set up in Johannesburg, combined
with administrative convenience, has led to the division of
responsibility for the initiation and administration of Council
housing schemes between two municipal departments. European
housing is the direct responsibility of the City Health
Department while housing for all non-white races - Coloureds,
Asiatics and Bantu - falls under the control of the Coloured
and Asiatic Division and the Non-European Affairs Department.
This arrangement does not interfere with the functions of the
City Engineer, who plans and supervises all technical details

or/...

or with the traditional and legal obligations of the Medical Officer of Health.

The Slums Amendment Act (No. 55 of 1963) was promulgated during the year 1963 to come into force on the 1st January 1964. The effect of the amendments is to alter the administrative procedure for action in regard to slums. The amended Act provides for the appointment by the Minister of Housing of slums clearance courts, under the chairmanship of a magistrate or retired magistrate, which take the place of the slums courts which were previously appointed by local authorities from among their own members. The new procedure is for the Medical Officer of Health to report a nuisance in terms of the Act to his local authority which is required to transmit copies of his report to the secretary of the slums clearance court. The court is then responsible for hearing evidence, declaration and rescission of slums, service of notices, etc. Officials of the local authority will still initiate action and give evidence to the slums clearance courts but the powers of the local authority may be transferred to the Secretary for Housing if the Minister feels that the former is not carrying out its duty under the Act.

The Secretary for Housing has announced that an amendment of the Housing Act will be put forward to provide for loans to local authorities to purchase improved properties. This will be of great assistance in implementing urban renewal schemes. Officials of the Council have drafted proposals for amendments to the relevant ordinances to confer additional powers on local authorities to enable them to deal effectively with urban renewal and these proposals have been forwarded to the authorities for consideration. An amendment to Building By-law No. 34 on the 24th December 1963, was designed to deal effectively with unsafe, dangerous, dilapidated or unsightly buildings and other structures permitting the Council to force the owner to reconstruct the building and if this is not done in time to authorise the Council to make the necessary alterations at the owner's expense.

Population

The estimated population of Johannesburg as at 30th June 1964 was as follows:-

Europeans	379,600
Coloureds	51,976
Asiatics	26,896
Bantu	521,698
Total	<u>980,170</u>

Staff/...

Staff

The Housing Branch of the City Health Department is under the immediate control of the Housing Officer (Mr. W.J. Duncan) and the staff as at 31st December 1964 comprised 1 Housing Officer, 1 Assistant Housing Officer (Administration), 1 Maintenance Supervisor, 1 Housing Supervisor, 2 Housing Assistants, 1 Senior Assistant Housing Supervisor, 9 Assistant Housing Supervisors, 2 Woman Assistants, 1 Matron, 1 Assistant Matron, 7 Caretaker/Handymen, 48 unskilled labourers and 5 Office Messengers.

The creation of the post of Maintenance Supervisor has fully justified itself. Apart from relieving the Assistant Housing Officer of the direct responsibility for the maintenance of buildings, the incumbent has been able to improve the appearance of the Council's townships by planning and co-ordinating the services affecting pavements, parks, trees and fencing.

II. CONTROL OF BUILDINGS AND SLUM CLEARANCE

(i) Inspection of Plans

Plans submitted to the City Engineer for the erection of new buildings and alterations to existing buildings are examined by the Sanitation Branch to ensure compliance with the relevant sections of the Building, Drainage, Health and other by-laws and regulations with which this Department is concerned.

Cordial relations have been maintained between the officials of the Department and those of other municipal and related Government Departments. Many architects and members of the building trades discuss their problems with the staff.

The number and value of building plans received and dealt with during the last 5 year period were as follows:-

	Number of Plans	Value
1960	5685	R 17,815,455
1961	5218	26,671,510
1962	4678	20,131,450
1963	4848	32,384,900
1964	5007	46,353,710
Total	25436	R143,357,025

After/...

After a drop in 1962 the number and value of plans showed a substantial increase in 1963 and 1964.

* In the Bantu townships 605 plans were dealt with during the period in respect of additions and alterations to existing buildings. Unauthorised structures for habitable purposes still continue to be erected in Pimville but as this township has been built wholly of uncontrolled and unauthorised buildings, no good purpose would be served in taking action in this regard as this township will be disestablished in the very near future.

(ii) Control of Occupation and Demolition of Premises

The new Housing Act (No. 10 of 1957) incorporated previous powers for local authorities to control demolition of buildings and the conversion of residential premises for other uses. The National Housing Commission continues to have the final responsibility in respect of applications for demolition or conversion of "dwellings" as defined in the Act but applications are first submitted to the local authority for a recommendation. Local authorities deal directly with buildings erected and used for residential purposes prior to 20th August 1920 and with all non-residential buildings.

Applications to demolish premises or to convert dwellings to other uses were dealt with as follows:-

	1960	1961	1962	1963	1964	Total
Conversion:						
residential to business	20	16	16	20	8	80
Demolitions:						
residential premises	133	75	64	70	140	482
Demolitions:						
non-residential premises	71	50	55	50	92	318
Premises actually demolished	187	125	119	86	128	645
Demolished under courtesy notice		21	32	47	44	144

The conversion of premises from residential to business use involves a net loss of residential accommodation. While the same applies in the case of demolition of residential

premises/...

premises the buildings demolished are usually old and substandard or actual slum and, moreover, are for the most part replaced by flats providing a larger number of dwelling units. The buildings demolished under "courtesy" notices are slums where action under the Slums Act is contemplated but the owners are warned in advance to give them an opportunity of avoiding such action by demolishing the premises. Where owners do not do so formal action is taken under the Slums Act.

(iii) Action under the Slums Act

Prior to 1959 action under the Slums Act was taken in various suburbs. In the western sector of the city, the area south of 22nd Street in Pageview was cleared of major slums occupied by Bantu and major slums in Sophiatown were also dealt with. Action was started in Newclare in 1958 where there were 183 slums declarations. The outstanding slums declarations as at 31st December 1958 numbered 272.

The number of properties declared slums during the 6 years prior to 31st December 1964 was 456 and there were 397 rescissions. The details for the various townships are given in Annexure A.

Four schedules comprising 66 properties were prepared for report to the Council and were dealt with by the slums clearance courts.

As at 31st December 1964 there were 233 slums declarations outstanding - 165 in Newclare, 38 in Vrededorp and 30 in sundry townships.

(iv) Supplementary Slum Clearance

Formal action under the Slums Act was supplemented, in so far as the clearance of slums was concerned, by the demolition of insanitary properties to make way for new buildings and by demolition in response to "courtesy notices". Block B Compound (Langlaagte) was cleared by agreement with the owners and Sophiatown was cleared by the Bantu Resettlement Board. Shantytown and Moroka were demolished when the occupants were re-housed.

III. THE EXISTING HOUSING SITUATION

The action taken under the Slums Act supplemented by other action, as outlined in the preceding section of this report has shown appreciable results, but much remains to be done.

The/...

The Coloured and Asiatic population generally, other than those housed in Coronationville, Noordgesig and Lenasia, are living under grossly insanitary conditions in the para-central areas of the city such as Pageview, Burghersdorp, Fordsburg, Ferreirastown, Booyens, portions of Jeppe and Doornfontein and, further afield, in Newclare. Because of the lack of alternative accommodation, arising mainly out of delays in setting aside group areas for these races it has not been possible to take intensive action under the Slums Act, except in Newclare. Even where properties were declared slums the declarations could not be enforced without causing extreme hardship to displaced tenants. Owners who submitted plans to reconstruct their slum properties had sometimes to be persuaded to hold up the work until their tenants could be accommodated elsewhere. Although systematic action under the Slums Act was taken in Newclare in 1958 there are still 200 declared slums in the township, besides other insanitary properties in the expropriation area.

Pageview is a congested, overcrowded township occupied by Coloureds, Asiatics and Bantu. The number of slum properties has dropped from 255 in 1963 to 231 in 1964, of this number 101 are major slums, 49 are minor slums and 2 blighted properties. There are 2,333 Asiatics, 973 Coloureds and 56 Bantu living in Pageview. The total number of Non-European families is 660. The township is a slum and it is proposed to redevelop it in conjunction with the European township of Vrededorp where similar conditions exist, as well as in conjunction with a scheme to build a new business area for Indians in Fordsburg.

The Bantu population in the city area is not a problem from the aspect of the occupation of slum premises as there are few Bantu families living in the areas formerly occupied by them. There is some illegal occupation of servants' quarters of houses and flats. In Soweto some site and service shacks remain but the main problem is Pimville. Here the insanitary conditions include gross overcrowding of the buildings added to the crowding on site; the stand pipe system with the nuisance arising aggravated by the unmade roads and lack of drainage; the lack of waterborne sewerage; the insanitary conditions and in some cases the dangerous structural state of the buildings owned by the stand-holders; the keeping of cows under grossly unsuitable conditions; and the inadequate buildings in which trading is conducted. The sanitation staff of the City Health Department has taken all possible steps to improve conditions but has been precluded from taking drastic action which is the only possible way of getting adequate results. The whole township will be uprooted and rebuilt in the near future.

The/...

The housing problem of the European population was until recently basically one of urban renewal, the clearing of slum areas and blighted areas as a whole rather than the elimination or reconstruction of individual slums. The areas most affected are near the centre of the city to the east (Doornfontein, Jeppe and adjacent areas), to the west Vrededorp and Pageview, Fordsburg and Ferreiras and to the south Booysens and La Rochelle.

The basic problem has been overshadowed, if not completely changed, during recent months. The Government-sponsored immigration policy and the influx of families from areas to the north of the Republic resulting from political changes in these territories, coupled with the general wave of prosperity which has attracted population to the larger cities, has changed the situation from an excess of dwelling units during 1962 to a serious shortage towards the end of 1964. The position is further aggravated by the influx during recent years of Coloureds into houses previously occupied by Europeans in certain areas and by the increasingly urgent need for undertaking urban renewal schemes in suburbs near the centre of the city.

The situation in regard to pressing on with new schemes has now changed and a sub-committee of the Technical Committee comprising officials of all the departments concerned to investigate and report on urban renewal in Johannesburg has been constituted.

The sub-committee instituted a number of surveys, the first of which was a survey of slum and blighted properties. The survey covered 35 suburbs and it was found that there were 1,798 slum or blighted properties housing 2,370 families totalling 11,537 persons of all races.

The preliminary survey also included the preparation of maps showing the topography, classified roads, zoning plan, existing land use map, non-conforming uses, slums survey map and overlay, condition of buildings, social facilities and an analysis overlay.

The suburbs were grouped into 6 complexes, 2 each in the Eastern, Western and Southern areas. The survey reveals that the largest number of slum and blighted areas are in the Eastern area where there is also the highest incidence of non-white occupation of slums. Vrededorp/Pageview was not included in the survey; this area constitutes a 7th complex.

Further detailed surveys are planned to give more information about the suburbs and the people living in them.

In/...

In general the conclusion is reached that there are many families of all races living under slum conditions in the city in blighted areas and in frankly slum areas. Slum clearance must go hand in hand with urban renewal and must await the provision of adequate alternative accommodation before it can be completed.

IV. HOUSING PROVIDED

The City Council of Johannesburg has made a major contribution to the housing of its citizens (European and Non-European) but it is not the only body active in this field. In this section of the report a brief description is given of assisted housing for all races, i.e. housing provided wholly or partly out of public funds. No account is taken of houses built independently by owners for their own use, in some cases financed by the scheme whereby the Department of Housing guarantees portions of loans to enable building societies to provide funds up to a maximum of 90% of the full value of house and stand; this has enabled many people of moderate means to build their own homes. The contribution made by private enterprise in building flats and houses for the income groups that do not require any special assistance is also not recorded as the information available is incomplete.

1. EUROPEAN HOUSING

A. HOUSING PROVIDED BY THE COUNCIL

The details of housing schemes for Europeans administered by the City Health Department are given in Annexure B.

(i) Sub-Economic Schemes

(a) Schemes erected prior to 1964

The four sub-economic schemes - Jan Hofmeyr, Maurice Freeman and Extension and Pioneer Township - provide 401 houses, 72 flats and a hostel for 50 working women. The amenities include a communal hall, child health clinic and recreation facilities in each centre. A new building combining administrative offices with a child health clinic was completed in Jan Hofmeyr Township in October 1962.

In 1957, 20% of the accommodation was converted to an economic basis at an additional loss to the Council with the object of overcoming the difficulties arising out of the low family income limit for admission to these schemes.

(c) Old/...

(b) Old-Aged Cottage Units erected in 1964

The only housing schemes completed during the year 1964 were the one-bedroomed units intended primarily for the aged. They are situated at the Maurice Freeman Housing Scheme (Park Cottages) and at Jan Hofmeyr Housing Scheme (Radio Cottages). They were occupied on 1st December 1964.

The official opening of both schemes was performed by Councillor A.B. Widman, M.P.C., Chairman of the Health and Amenities Committee, on 26th November 1964. The garden layout, fencing and security lighting will be completed early in 1965.

The combined schemes provide accommodation for 92 persons, mainly persons whose only source of income is the old-aged, veteran or disability pension. The 36 single units are let at R4-80 per month and the 28 double units at R5-40 per month. These low rentals have been made possible by a generous subsidy from the Council. The schemes were erected by means of a National Housing Loan at 3/4% interest.

All the tenants are happy in their new surroundings and have expressed their gratitude to the Council for the facilities provided at such low rentals. It is of interest to quote from an article which appeared in the local press shortly after the cottages were occupied. The press report described the plight of old-aged pensioners living in small, dreary rooms in Johannesburg and having to pay high rentals from their meagre incomes. The report contains the following paragraph:-

"The Johannesburg City Council has built two charming units for old people, and the rents are low. They are welcome drops of comfort and cleanliness in the ocean of insecurity which surrounds the aged."

(c) Residential Club for Girls

The Lionel Leveson Girls' Residential Club provides full board and lodging for 50 girls with low incomes at subsidised rates from R4 to R20 per month. The Council incurred a loss of R5,067 during the year 1963/64 in spite of a subsidy of R329 from the Department of Social Welfare and Pensions.

The question has arisen as to whether or not the Council has the right to conduct such a hostel as the Provincial authorities/...

authorities consider that local authorities should not carry out social welfare functions. The Council has, therefore, endeavoured to dispose of this Club (it is actually a hostel) to some private welfare organisation, but without success. The point has recently been made that if the Council had the right under the Housing Act to erect such a hostel, as was the case, it can be inferred that it also has the right to administer it. This aspect is being investigated by Town Clerk's Department.

(ii) Economic Schemes

The raising in 1963 of the economic family income limit to R180 per month is a substantial improvement but the advantage has been partly offset by the sharp increase in building costs. It has proved difficult to provide acceptable dwellings within the means of this income group, particularly the lower ranges of the group. The Department of Housing has agreed to permit local authorities to subsidise schemes from their own funds to avoid the stark austerity that would otherwise be necessary, provided the rents are not thereby increased.

South Hills and Extension

These townships now cater for the income group up to R180 per month.

There are 1,317 dwellings for letting and selling. The original 939 houses are of substantial face brick - these are offered for sale as and when they are vacated by tenants. During the year 45 houses were sold and 15 sales were cancelled. As at 31st December 1964, 734 houses had been sold. The letting units comprise 189 flats and 189 houses built in 1957/1958 on austerity lines. Less difficulty has been experienced in letting these units during the year.

Constant vigilance is required to prevent the erection of illegal structures and purchasers are encouraged to apply for loans to erect garages and servants' quarters. Sixty loans were granted during the year.

The amenities provided include good shopping facilities, adequate primary and secondary schools, play grounds and a good, if somewhat costly, transport service. The Community Centre opened in 1961 is proving popular and providing educational and recreational facilities for the residents. Nearly all the roads are tarmacadamised. The garage and cinema sites and the other business sites remain unsold. A swimming bath is still awaited.

Montclare/...

Montclare Estate

This scheme, completed in 1958, comprises 244 houses of two and three bedrooms let at rentals of R16 to R21-25 per month. Although, it is an economic housing scheme for families earning up to R180 per month, the Department has tried to place as many families as possible in the income group, R81 to R150 per month on this scheme. Montclare is situated near the municipal boundary, seven miles from the centre of the city.

The austerity of the scheme with the psychological implications arising therefrom, the lack of local amenities and the distance from the amenities of the city, the high transport costs, the difficulty of keeping out of debt and other factors - have all combined to make this more of a transit than a permanent housing scheme. Many tenants return to poorer accommodation nearer the city, reduce costs by sharing premises, cause overcrowding and thus create new slums. The turnover of tenants has been greatly reduced by the housing shortage and all the houses were occupied as at 31st December 1964.

Bad Debts : Legal Action for Rent Arrears

The following details record the bad debts incurred by the Council and legal action taken in the various housing schemes:-

Scheme	Period	Total Rent Accrued	Total Bad Debts	Ratio of Bad Debts to Accruals
South Hills and Extension	1947/64	R2,531,673-08	R21,196-53	.837%
Jan Hofmeyr	1952/64	212,055-43	738-76	.348%
Maurice Freeman	1952/64	197,136-22	667-38	.339%
Pioneer	1952/64	153,018-96	343-69	.225%
Montclare	1958/64	354,548-82	4,637-50	1.308%

Statistics of action taken in connection with tenants in arrears in the various schemes during 1964:-

Scheme	No. of cases referred for legal action	No. of cases cleared	Number absconded	No. of ejections
South Hills and Extension	27	17	9	5
Jan Hofmeyr	2	-	-	-
Maurice Freeman	-	-	-	-
Pioneer	-	-	-	-
Montclare	18	6	12	3

(iii) Land Selling Schemes

The details of the townships laid out by the Council are reflected in Annexure C. With the exception of Dewetshof the stands were sold at cost price to assist families in the lower-middle income groups to build homes to their own design.

The Roosevelt Park complex comprises Franklin Roosevelt Park (established in 1948) and Extension No. 1 (established in 1955) and Montgomery Park which was sold in 1961.

The first two townships to be established have long been built up. All stands in Montgomery Park have been sold with the exception of 22 waterlogged sites. Although the stands are only 1/5th acre in extent the variety and quality of the houses and the attractive gardens give the whole township a very pleasing appearance.

The community centre built in 1961 and serving the whole complex is well patronised. Plans have been prepared for a modern shopping centre and work on the provision of essential services for this Centre is in progress.

Dewetshof

This township comprises 130 stands and was sold by public auction in 1959. Dewetshof serves the higher-middle income group and is now virtually fully developed with beautiful homes and well planned gardens.

(iv) Future Land Selling Scheme

Dewetshof Extension No. 1

The approval of the Hon. the Administrator to the sale of 202 residential stands in the Council-owned township of Dewetshof Extension No. 1 was received in December 1964. Eight stands in this township and 2 large dwellings thereon were leased by the Council for five years at a nominal rental of R2-00 per annum to the Flower Foundation Residential Clubs to provide accommodation for aged persons. The cottages in this scheme were occupied in December 1964.

Of the remaining 194 residential stands in Dewetshof Extension No. 1, 43 are to be sold to the highest bidder by public auction early in 1965 and 151 at fixed prices well below the current market value. The sale of the 151 stands is likely to be delayed because the Transvaal Provincial Administration desires to acquire some of these stands for

the/...

the erection of a new school.

B. HOUSING PROVIDED BY GOVERNMENT AGENCIES

The details of letting and selling schemes provided by the Department of Housing and the South African Railways and Harbours are listed in Annexure D.

The redevelopment of Sophiatown and Martindale for Europeans entails some rezoning and replanning but the basic layout remains the same. Provision is made for a few flat sites, a general business area, a site for a supermarket with parking provision, more open space, enlargement of a school site and a general industrial area in Martindale. The area has been renamed Triomf.

C. HOUSING PROVIDED BY PRIVATE ORGANISATIONS

The contributions of private organisations to the housing of Europeans has been considerable as will be seen from Annexure E. In some cases loans from national housing funds have been sponsored by the City Council, in others the funds have been collected from the public. In all cases the units are administered entirely by the organisations concerned.

Family housing has been provided at the Octavia Hill Flats, Africa Star Flats and one or two smaller organisations. Accommodation for old people has been provided by a number of public spirited bodies but still falls far short of the needs. Hostels have been provided for special groups. A number of nursing homes and boarding houses cater for old people on a profit making basis but these have not been included in the schedule.

Rentals for homes are often fixed in proportion to the old age pensions paid by the Government. The proposed increase in pensions will cause adjustments to the scales of charges by the institutions concerned and the rentals shown in Annexure E are therefore subject to alteration.

Many of these homes are visited by our health visitors who give advice where necessary and generally assist the organisers with public health and other problems.

2. COLOURED HOUSING

The conditions under which the Coloured population are living in the city are noted elsewhere in this report. Expansion of existing schemes is urgently necessary and is in progress. The Department of Housing has agreed, with effect from 1st July 1963, to raise the sub-economic family income

limit/...

limit for Coloureds and Asiatics from R40 to R50 per month and the economic limit from R140 to R180 per month. As the Council has already been operating on a sub-economic limit of R50 per month and bearing additional losses itself the effect of the new limit will be to reduce the Council's losses by R16,000 per annum.

A. HOUSING PROVIDED BY THE COUNCIL

A separate Coloured and Asiatic Division under the direction of the Non-European Affairs Department has been created by the Council to enable more specialised attention to be paid to the needs of the Coloured and Asiatic communities in Johannesburg. It came into operation in the early part of 1963. An important function of this Division will be to initiate and administer housing schemes for Coloureds. Details of the housing provided to date are given in Annexure F.

(i) Coronationville

This was originally established in 1936 and, with extensions from time to time, now comprises 501 houses and 110 flats. No further ground is available for expansion. It adjoins Newclare and Western Township and will form part of the large Coloured housing complex in that area.

(ii) Noordgesig

This township was opened up in 1938. It comprises 1,063 houses and is now fully built up. The area will eventually be converted for occupation by Bantu, but only after adequate alternative accommodation is provided elsewhere for the Coloured families to be displaced.

(iii) Riverlea

The land was purchased by the Council in 1960. Levelling of the ground and the installation of services was commenced immediately and a loan for the building of 646 houses (but not for services) was granted by the National Housing Commission during 1961. The building of houses commenced on the 6th December 1961; by the end of 1962, 623 houses and the necessary services were completed. An administrative block was built during 1963 and plans for a preventive health clinic (for tuberculosis and child health services) were approved by the Council and are now awaiting the approval of the State Department of Health.

A new sub-economic housing scheme has been completed at Riverlea Extension No. 1 comprising a total of 731, two - three - and four-roomed houses, of an austere type in

compliance/...

compliance with prescribed restrictions imposed by the Department of Community Development in accordance with its established policy regarding sub-economic housing.

Despite these and other structural deficiencies, this scheme has met with fairly general favour amongst tenants occupying these houses. Many of the latter had formerly occupied slums, overcrowded dwellings or rooms, wood and iron shacks or outbuildings previously at rentals in excess of that which they have to pay for their present houses.

One of the main defects in this scheme stems from the fact that no ablution facilities have been permitted and no wash-up sinks have been installed. Pot-washing is undertaken over a dished-gully in the yard.

Eight timber framed economic houses were built as an experiment in Riverlea. These have now been completed and sold. Good progress is being made with the erection of another 100 of these houses as part of a proposed scheme to build 200 such houses for home-ownership purposes.

Planning is also well advanced for the establishment of Riverlea Extension No. 3 where it is envisaged that approximately 625 housing units will be erected within the next year or so.

In addition to the above, a national housing loan for the erection of 134 economic flats in Riverlea township proper is being applied for by the Council.

(iv) Western Township

The Bantu residents were evacuated in 1962 and 2,192 houses and 36 single rooms were made available for Coloureds.

The first phase of the redevelopment of the South Western portion of this township has commenced and it is envisaged that on completion of this first project 174 economic flats and 146 sub-economic houses will have been built.

A State committee under the Chairmanship of the Secretary for Housing (Mr. I.D. Niemand) was appointed by the Minister of Coloured Affairs, Community Development and Housing during 1963 to assist the Council in clearing and redeveloping Newclare, Western Township and Pageview. This Committee should be of great assistance in resolving the difficulties hitherto experienced by the Council and it is likely that the Department of Housing will expropriate these areas and transfer them to the Council for re-development.

B. HOUSING/...

B. HOUSING PROVIDED BY GOVERNMENT DEPARTMENTS

Government Departments have provided housing for Coloureds at Bosmont and on the land formerly used for the Diepkloof Reformatory.

(i) Bosmont Township

On 13th November 1959, the townships of Bosmont and New Monteleo in the Roodepoort-Maraisburg municipal area, were declared a group area for Coloured occupation and the responsibility for their development was assumed by the Group Areas Development Board. The complex was later renamed Bosmont and the development was allocated to the Department of Community Development. The Council undertook the reticulation of the township for municipal services and on the 28th February 1962 the Administrator approved the extension of the Johannesburg municipal boundaries to include Bosmont. Negotiations for the purchase of the township by the Council have not been concluded.

The township is 166 morgen in extent, divided into 1,427 stands and will provide for an estimated 1,350 families in addition to business sites, churches, parks, etc. Of these stands 351 have been allotted for development by owner builders and on the remaining stands economic houses will be built by the Department of Community Development for re-sale at prices ranging from R2,210 to R3,100. Families from Albertville will be given priority.

As at 31st December 1964, 96 houses had been completed by contractors for private owners and 599 houses had been completed by the Department.

(ii) Olifantsvlei

The City Council proposes to develop a portion of land owned by it outside the municipal boundary at Olifantsvlei (Klipriviersoog) for Coloured housing purposes and the City Engineer anticipates that approximately 1,000 housing units could be built in this area.

Applications have been made to the relevant Government department to have this area proclaimed a group area for Coloured occupation and ownership, as well as for a provisional permit authorising the Council to develop this portion of land in terms of the aforementioned proposals.

(iii) Diepkloof Reformatory Site

Because of the great need for Coloured housing the

Department/...

Department of Community Development took over the old building of the Reformatory for the temporary housing of Coloureds. The buildings were repaired and 130 families were moved in from January 1961 onwards. It is not intended that this should be a Coloured Group Area. The housing of Coloureds in this area must only be regarded as a very temporary measure. Coloured families are being removed steadily and at present only 73 families remain. This property is required by the Department of Defence.

C. HOUSING PROVIDED BY PRIVATE ORGANISATIONS

Jordan House in Newlands provides accommodation for 50 aged Coloureds who pay a maximum of R7-75 per month. The City Council makes an annual grant-in-aid and subsidies are paid by the Government to the extent of R5 for bedridden inmates and R2-25 for ambulant residents.

The Rand Aid Association which runs this establishment has now applied for a one-twentieth sub-economic housing loan to extend the premises by the erection of a sick bay. This should represent an important improvement of facilities at this institution.

3. ASIATIC HOUSING

The Council has not provided houses for Asiatics as no land has been set aside as a Group Area for them in the municipal area. Proposals by the Council to establish group areas for Asiatics in Burghersdorp, Fordsburg, Pageview and elsewhere have not been accepted.

Lenasia

This township is situated 19 miles from the City Hall and was proclaimed a group area for Indians on the 16th November 1956. As at 31st December 1963 there were at Lenasia No. 1, 2,329 residential stands either for sale to private individuals or for development by the State for home ownership purposes; 240 economic houses have already been built by the State and sold; 268 houses are in the process of being built by the Bantu Resettlement Board (82 completed) and approval has been granted for an additional 418 houses to be built. Eight of the above stands are for the erection of flats and 725 of these stands have been sold to private owners who have already erected 44 houses. At Lenasia Extension No. 2, 1,331 residential stands are available for development for letting purposes and upon which 400 economic houses have been built by the State. One hundred sub-economic houses were built by the Bantu Resettlement Board and 368 sub-economic

cottages/...

cottages. In addition, 52 families are accommodated in the old military huts.

Ginsberg Section

This is the old section which was originally developed by the Lenz Township Company and which has now been taken over by the State: 86 houses have been erected in this area either by the Township Company or by private individuals. Fifty-eight building plans were passed for Indians who intended building homes of their own design and 598 erven were sold to Indians who wished to build their own homes.

4. BANTU HOUSING

The combined efforts of the City Council and the Bantu Resettlement Board during the last decade and more have made a great impression on the housing needs of the Bantu.

An application has been made by the Council for the increase of the sub-economic family income limit for Bantu from R30 to R40 per month but no decision has been reached by the Bantu Housing Board.

A. HOUSING PROVIDED BY THE COUNCIL

Details of the housing provided by the Council for Bantu in the various townships (administered by the Manager of the Non-European Affairs Department) are contained in Annexure G.

Western Bantu Township was disestablished as a Bantu township in 1962 after the Bantu residents were transferred to Soweto. The area was re-occupied by Coloureds and re-named Western Township.

A Law Court was erected at Orlando East adjacent to the Police Station and was officially opened in December 1963.

The townships are laid out and developed on modern town planning principles and main arterial and secondary roads are macadamised. The streets are lit by electricity and, in some areas, electricity is available for lighting and power. Excluding Pimville, there is waterborne sewerage provided to all sites with the exception of a few shops, schools and trading/residential sites. A constant water supply and a mechanised refuse removal service is available to all premises.

Adequate open spaces have been provided for parks, sports fields, stadiums and for future public buildings. An

area/...

area has been reserved for a civic centre. Trading and industrial sites are available. There are clinics at vantage positions throughout the area and hospitals in the near vicinity. Educational facilities include crèches, primary and secondary schools and a vocational training centre for building trade apprentices.

A hostel for 3,000 Bantu males, adjacent to Eastern Bantu Township was completed at the end of 1961 and was fully occupied during 1962. The facilities include large well-equipped communal kitchens, a large restaurant and a number of smaller shops for letting to private enterprise.

There has been a reduction in the number of site and service shacks but 65 remain scattered throughout the area. Some of these have existed for over six years and it seems that the owners will not build unless pressure is brought to bear on them.

The control of general sanitation was made more difficult by a degree of overcrowding in dwellings in some areas; unauthorised additions to dwellings including enclosing of verandahs and building of back yard rooms; accumulation of junk in yards; keeping of horses and, in Pimville, cows under unsuitable conditions; and unlicensed trading, particularly the hawking of foodstuffs. Constant vigilance was exercised to minimise these abuses and with the assistance of the staff of the Non-European Affairs Department these nuisances were kept within bounds. In Pimville, however, it has been impossible to maintain even reasonable sanitary conditions and urgent action is necessary.

B. HOUSING PROVIDED BY GOVERNMENT DEPARTMENTS

The Bantu Resettlement Board was created by the Natives Resettlement Act (No. 19 of 1954), its primary purpose being the removal of Bantu from the western area of the city and their rehousing in the south-western area. This task was completed when all Bantu were evacuated from Sophiatown, Pageview and Newclare and the Board then undertook the removal and rehousing of Bantu living in Alexandra Township and working in Johannesburg. The displaced Bantu were rehoused in Meadowlands East and West and Diepkloof. The services in these townships were installed by the City Engineer but the houses and other buildings were built by the Board. The administration of these townships is vested in the Board and medical services are provided by the Transvaal Provincial Administration and the Peri-Urban Areas Health Board. It has been accepted in principle that the City Council will eventually take over the administration and the preventive health

services/...

services as they are geographically part of the area which comprises Soweto.

The following table which has been supplied by the Bantu Resettlement Board shows the progress made by that body in the resettlement of the Bantu in Soweto:-

	Sites for Letting Scheme	Houses Planned	Houses Completed	Houses Completed by owners	Houses Occupied	Persons Accommodated
<u>Progress as at 31st December 1964</u>						
Meadowlands, East and West		12,066	12,066		12,038	61,513
Diepkloof East, West and South, Letting Scheme		10,454	10,054		10,093	50,242
House Ownership Scheme		421	182	6		993
Meadowlands West II Approved but not yet started	3,000					
Hostels						
	Dwelling Units Planned	Inmates	Dwelling Units Completed	Inmates Occupied		
<u>Progress as at 31st December 1964</u>	278	4,448	166	2,652	2,277	

Services and amenities have been provided in these townships on a similar scale to those provided in the area under the control of the Council but details are not available.

C. HOUSING PROVIDED BY PRIVATE ORGANISATIONS

A Bantu home for the aged was provided for Bantu men and women in Orlando in February 1963. This is a single storey building adapted from the old Mtutuzeli Home for Bantu unmarried mothers. The fees consist of the inmate's old aged pension which is R7-05 every two months of which R2-00 is returned for clothes and pocket money. Food is supplied to the inmates. The maximum accommodation is for 25 men and women which includes accommodation for several married couples. At present one married couple is accommodated. The home is

under/...

under the direction of an advisory committee consisting of European women who are members of the National Council of Women. The Matron is a Bantu teacher.

V. CONCLUSIONS

A. EUROPEAN HOUSING

(i) The Housing Shortage in Johannesburg

As stated in last year's annual report, the housing position in Johannesburg changed radically from a state of affairs where in 1962 the Council was virtually able to supply housing to all eligible applicants earning less than R180 per month, to the position that at the end of 1963 there was already a serious shortage. This shortage was accentuated in 1964 and the number of applications on our waiting list as at 31st December 1964 had mounted to the formidable total of approximately 1,200 families.

Whereas in 1962, there were times when the Department was perturbed because it was not possible to let quite a number of its houses, in the short period of 1½ to 2 years, the Council was faced with a rapidly growing shortage of houses. It was for this reason that the Council formed a Special Housing Section in the City Engineer's Department.

The complete change in the position can be attributed to the large-scale influx of immigrants from overseas and from the territories north of the Republic. It is worthy of note, however, to state that the Housing Branch of the Department has had relatively few applications from immigrant families, possibly because most of the bread-winners of these families have come to skilled posts where their income exceeds R180 per month. It is, however, probable that these immigrants, especially those of more affluent means, have purchased or are renting dwelling units, which would otherwise have become available for families in the up to R180 per month income group. It has been stated by the Minister of Immigration that approximately 41,000 immigrants entered South Africa during 1964 (of which approximately 12,000 were from territories to the north of the Republic). However, there is no known means of establishing how many of these 41,000 immigrants have settled in Johannesburg.

(ii) Proposed Survey of the Housing Demand in Johannesburg

To avoid under-planning or over-planning it is essential for the Department and, in particular, the Special

Housing/...

Housing Section of the City Engineer's Department, to have some reasonably accurate assessment of the housing needs in Johannesburg as applicable to the income group covered by National Housing loan stipulations, i.e. those where the head of the family earns not more than R180 per month.

The Department's waiting list is not an accurate guide to the number of housing units required at any given time. Many families whose housing needs are immediate do not apply because they know that it will be months or years before they can be offered accommodation.

Others apply but fail to notify the Department when they subsequently obtain housing in the private sector and others again are lost trace of when they fail to notify a change of address. Others still, are on several waiting lists (Municipal, State and private estate agents).

The Council cannot place any reliance on statements from various sources which quote figures as being the number of housing units required. The figures, often at variance with each other over short periods of time, seem to have no basis of fact. One reason for this can be that the figures quoted are rough guesses by the person concerned which might be near to or far from the true position. These statements usually give a globular figure for the whole of the Republic or for specified areas. They probably embrace the overall shortage in all income groups, whereas the Council's present obligation to provide housing is only for those earning less than R180 per month.

For these reasons, it is proposed early in 1965 to revise the Department's waiting list to ascertain the number of families housed elsewhere since originally applying and those who do not reply to written enquiries as to whether or not they still require housing accommodation.

It is also proposed to recommend to the Council that an extensive advertising campaign in the press, on the radio, on cinema slides and on posters to be displayed in the Council's omnibuses be embarked upon. Thereafter, it may be possible to arrive at a more accurate assessment of the number of housing units required in the group earning less than R180 per month.

(iii) Creation of Special Housing Section in the City Engineer's Department

Perhaps the most important single step towards a solution of the present shortage of housing for Europeans

in/...

in Johannesburg in 1964 was the establishment of the Special Housing Section in the City Engineer's Department.

This Section, which was established on 1st October 1964, is under the control of the Assistant City Engineer (Mr. J.W. Hooper) with the City Health Department's Housing Officer (Mr. W.J. Duncan) being seconded full-time to the Section, because of his previous efforts in initiating new housing schemes and also because of his intimate knowledge of sociological aspects of housing and the various procedures and rulings regarding administration of the requirements governing National Housing loans.

The main object of establishing this Section was to expedite schemes previously submitted by the City Health Department, investigating and expediting new schemes, including urban renewal and the correlation of the efforts of all other members of the Council's staff concerned in the provision of new housing units. In the functioning of this Section, its officials are alive to the need for investigation of all types of building construction not only the conventional but also the newer types such as timber houses, brick veneer timber-framed houses, aluminium clad houses and other units involving industrialised building methods. Higher density housing such as flats, duplex flats, and row houses set in garden layouts are likely to be the pattern of the immediate future, rather than the former schemes comprising rows of stereotyped single dwellings each on its own fenced plot and in a straight street. From its inception, the Special Housing Section proceeded with a "crash" programme for the erection of approximately 4,000 houses over a five-year period. The acquisition of land and attendant legal formalities, the preparation and approval of detailed layout plans, working drawings, bills of quantity and estimates, the lodging of applications for the necessary National Housing loans from the State Department of Community Development, and the calling for tenders for the new units has been expedited.

New housing schemes actively pursued by the Special Housing Section during the first few months of its existence were:-

- | | |
|------------------------------------|---|
| <u>South Hills Reserves</u> | 98 housing units (row houses and duplex flats) and 48 old-aged cottages. |
| <u>West Turffontein and Haddon</u> | 386 housing units (flats, duplex flats, row houses and detached houses) and 30 old-aged cottages. |

Bezuidenhout/...

<u>Bezuidenhout Valley</u> (Old Chinese Garden Site)	70 housing units (duplex flats and detached cottages).
<u>Claremont</u>	442 housing units (flats and detached houses) and 30 old-aged cottages.

Extensions to the existing old-aged cottage scheme at Jan Hofmeyr and the provision of 20 old-aged cottages at Pioneer Housing Scheme were also under consideration.

In co-operation with the Town Clerk's Department, negotiations were commenced to acquire further large tracts of land on which approximately 2,077 housing units could be erected.

The possible take-over from the State of a large number of properties and vacant stands in a portion of the township of Albertville as an urban renewal project was still the subject of negotiations between the Council and the Department of Community Development at the close of the year. In the portion of this township covered by the negotiations approximately 100 houses will require renovation and adaptation to serve the housing requirements of Whites and approximately 100 additional housing units will be built on the vacant stands. Amendments to the existing layout will tend to improve the grid-iron layout and will provide further amenities for the area.

(iv) Westdene Buffer Strip

The Council owns a number of stands between Westdene and Triomf (Sophiatown). Consideration is being given to developing this area with pre-fabricated units interspersed with duplex flats.

(v) Vrededorp/Pageview Complex

Vrededorp is a congested township with 50' x 50' stands and narrow streets, occupied by Europeans. Pageview is of similar layout but with a number of larger buildings. It is occupied by Asiatics and Coloureds but is zoned for occupation by Europeans. In both townships there are numbers of slum premises. Vrededorp compound has been reserved for European housing when vacated by the City Engineer in the near future. This is a very suitable area near the centre of the city for high density housing. Plans for the re-development of this area will be submitted by the Departments concerned.

Stands owned by Council and not required for other purposes are being investigated for the building of housing units.

(vi) Roosevelt/...

(vi) Roosevelt Park Shopping Centre

Steps are being taken to sell or lease the stands set aside for this purpose for development as a shopping centre to serve the whole complex. When the surveys of slums and blighted areas now being undertaken are completed, the Council Departments concerned will submit a considered report on proposals for urban renewal spread over a suitable period.

B. PROJECTED HOUSING SCHEMES FOR COLOUREDS

It is estimated that some 12,000 houses are required to house the whole Coloured population in proclaimed areas. The following have been provided:-

Coronationville	611 units
Noordgesig	1,063 units
Western Township	2,100 units
Riverlea	1,350 units

A further 7,475 units are required but the dwellings in Western Township and later in Noordgesig when the township is converted for Bantu will have to be replaced. More land than is at present available will be required to house Coloureds and to provide for the natural increase estimated at 400 families per year.

The following programme of development has been evolved for early application, but as no finality has been reached in this regard, the proposals made can only be regarded as tentative at this stage.

(i) Newclare:

The redevelopment of a portion of Newclare to permit the building of ... 808 flats

(ii) Western Township:

The complete redevelopment of this township which will entail the demolition of existing dwellings and the building of multi-storey buildings and individual houses to provide for a total of 1300 housing units

(iii) Claremont:

Representations to be made for the proclamation of portion of Claremont

as/...

as a group area for Coloured ownership and occupation. The area involved would permit the building of approximately 650 houses

(iv) Klipriviersoog 299, East of Nancefield:

The erection of economic houses on this portion of land which is already owned by the Council and in respect of which application would have to be made for its proclamation as a group area for Coloureds 900 houses

(v) Riverlea:

The building of economic houses for home ownership purposes on 222 stands 222 houses

(vi) Riverlea Extension No. 1:

The building of 788 sub-economic houses in the manner already described 788 houses

(vii) Riverlea Extension No. 2:

The building of multi-storey blocks of flats to cater for 300 families 300 flats

C. ASIATIC HOUSING

The Indian population in the city area is badly housed. The rehousing of this group depends on the expansion of Lenasia. The Council is planning a new shopping centre in the city area to provide alternative facilities for traders displaced from other areas.

D. PROJECTED HOUSING SCHEMES FOR BANTU

Additional houses and hostel beds are required to rehouse Bantu on the waiting list (including sub-tenants) and to provide for the natural increase of the population. Above all there is an urgent need to rehouse the whole population of Pimville, which will require approximately 7,000 houses. Plans are afoot to rehouse the Pimville residents in grounds south of Orlando, including the existing township of Pimville,

where/...

where the houses will be totally demolished. The remaining housing requirements will be taken care of by a planned housing programme on existing land and land to be purchased in the Soweto complex. The total immediate need is considered to be between 10,000 and 15,000 houses.

VI. ACKNOWLEDGEMENTS

The City Council is fully aware of the nature and urgency of the problems inherent in providing proper housing for the less privileged sections of the population of the city. Much progress has been made but much still remains to be done and I am grateful to the Chairman and members of the Health and Amenities Committee for their continued interest in this matter.

I am indebted to the Housing Officer and his staff and members of other sections of the staff of the City Health Department for the consistently high standard of their work and for their assistance and co-operation at all times. The Town Clerk, the Heads of Council Departments and members of their staffs have consistently offered full co-operation in their own fields for which I am grateful. Much of the information contained in this report has been obtained from these sources.

The Heads of Government Departments and members of their staffs have been very helpful and encouraging in many ways and I appreciate their assistance. There is a new spirit abroad and an increasing realisation that the housing needs of the Republic can only be met by close liaison and joint action between local authorities and the State.

A.H. SMITH

M.B., Ch.B., D.P.H., D.T.M. & Hy., F.R.S.H.

MEDICAL OFFICER OF HEALTH.

ANNEXURE "A"

Slums Declarations by Townships:

	1959	1960	1961	1962	1963	1964	Total
Argyle		3					3
Bellevue East						1	1
Bellevue				4			4
Berea		2		2		2	6
Bertrams		4				1	5
Sezuidenhout Valley		2					2
Booysems				1		16	17
Brixton				1			1
Charlton Terrace		1					1
City and Suburban						2	2
Clevedon				4			4
Craighall Park				1			1
Doornfontein		1				1	2
Fairview		1					1
Farm Langlaagte 224						1	1
Farm Doornfontein 92				6			6
Farm Turffontein 100		1				1	2
Farm Waterval				1			1
Ferreiras				4			4
Forest Hill						1	1
Greymont						1	1
Jeppestown	1			12		3	16
Johannesburg	9	21		21		2	53
Kenilworth		1					1
La Rochelle		2					2
Lakeview						7	7
Lorentzville		4		1			5
Malvern						1	1
Malvern Extension No. 1				1			1
Melville				1			1
Newclare	237						237
New Doornfontein				1			1
Newlands	3			3		1	7
Norwood				1			1
Ophirton						32	32
Pageview						1	1
Parkhurst				1			1
Paarlshoop						17	17
Regents Park		2					2
Richmond		2		2			4
Rosettenville						1	1
Sunnyside	8						8
Triof						1	1
Turffontein		4				3	7
Wanderers View				10		2	12
Westdene				2			2
West Turffontein						3	3
Yeoville		1		3		2	6
TOTAL	258	52	Nil	83	Nil	103	496

COUNCIL EUROPEAN HOUSING SCHEMES AS AT 31 DECEMBER 1964

SCHEME	DATE ESTABLISHED	TOTAL NO. OF DWELLINGS	TYPE OF SCHEME	TYPES							RANGE OF RENTALS DEPENDENT ON INCOME	APPROX. UNIT COST (EXCLUDING LAND AND SERVICES)	APPROX. AREA IN SQUARE FEET	TOTAL CAPITAL COST	REMARKS	
				HOUSES				FLATS								OLD AGED COTTAGES
				2 BR.	3 BR.	4 BR.	SACH-ELOR	1 BR.	2 BR.	3 BR.						
JAN HOFMEYR	1937	194 Houses	Sub-economic Letting with graduated rentals up to economic.		102									R292,398	This scheme contains brick built detached and semi-detached houses on 78' x 40' stands. A communal hall and Child Health Clinic is provided.	
JAN HOFMEYR OLD-AGED COTTAGES (RADIO COTTAGES)	1964	36 Cottages	Sub-economic Letting with Council Subsidy						20	16				Single R34,367 Double R29,993	This scheme, primarily for the aged, affords accommodation for 52 persons. Bed/Sitting rooms with communal toilet and ablution facilities are provided. Bantu cleaners' quarters (R900), garden layout and fencing (R3070) were provided after the scheme was completed.	
MAURICE FREEMAN	1939	70 Houses 48 Flats	Sub-economic Letting with graduated rentals up to economic		40						36	12		R338,500	This scheme is similar to Jan Hofmeyr with an improved standard of house. A communal hall is also provided.	
MAURICE FREEMAN EXTENSION	1945	41 Houses	Sub-economic Letting with graduated rentals up to economic		18									R119,352	Additional houses forming part of the above original scheme.	
MAURICE FREEMAN OLD-AGED COTTAGES (PARK COTTAGES)	1964	28 Cottages	Sub-economic Letting with Council Subsidy							12				Single R27,494 Double R22,496	This scheme, primarily for the aged, affords accommodation for 40 persons. Bed/Sitting rooms with communal toilet and ablution facilities are provided. Bantu cleaners' quarters (R900), garden layout and fencing (R2330) were provided after the scheme was completed.	
PIONEER	1939	96 Houses 24 Flats	Sub-economic Letting with graduated rentals up to economic		53						18	6		R253,918	The units in this scheme are identical to those in Maurice Freeman with a communal hall but in addition a residential club is provided to accommodate 50 low-paid working girls.	
MONTCLEARE	1957 and 1958	244 Houses	Economic Renting		63									RS14,644	This scheme contains pre-cast hollow block constructed detached and semi-detached houses of an austere design on 40' x 80' stands but accommodation and size of rooms is adequate for this low-cost type of scheme.	

SCHEME	DATE ESTABLISHED	TOTAL NO. OF DWELLINGS	TYPE OF SCHEME	TYPES							RANGE OF RENTALS DEPENDENT ON INCOME	APPROX. UNIT COST (EXCLUDING LAND AND SERVICES)	APPROX. AREA IN SQUARE FEET	TOTAL CAPITAL COST	REMARKS		
				HOUSES		FLATS			OLD AGED COTTAGES								
				2 BR.	3 BR.	4 BR.	BACH-ELOR	1 BR.	2 BR.	3 BR.	SINGLE DOUBLE						
WELFARE PARK (SOUTH HILLS AND EXTENSION)	1945 to 1947	939 Houses	Economic renting and selling	454	432	432	53					R4-80 to R5-00	1945 R2412 1947 R2280 R2672 R2634 R2950 R2856	787 to 1301	R3,705,504	This scheme was originally built as a sub-economic project under the National Housing Formula. Since December 1952 converted to an economic renting and selling status available for purchase by tenants and others on favourable terms. The houses are well built detached types on stands averaging 60' x 80' or 50' x 100'. An attractive Community Centre in this township has been provided.	
-do-	1948 and 1949	Shops	Economic Renting													This scheme contains a shopping block erected through a Housing Loan of R40,484. 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 Health Clinic and a Post Office.	
-do-	1961															Two smaller blocks of shops have been provided by private enterprise on ground sold by the Council.	
-do-	1956 and 1957	189 Houses	Economic Renting	30	150	9						R5-19 to R7-04	1956 and 1957 R2839 R3418	690 to 1040	R1,172,260	The houses in this scheme are well built detached houses of either orthodox brick or "no-fines" structure on 50' x 100' stands and are letting units only. Servants quarters are provided. There are nine three-storey blocks of flats comprising 21 flats each. They are built by the Hollow concrete panel method of construction.	
	1957 and 1958	189 Flats	Economic Renting			27	108	54				R3-80 to R5-60	R1490 R2374 R3374	278 to 606			
GRAND TOTAL		1773 Houses 261 Flats		730	977	66	27	108	108	18	36	28				R6,551,410	

ANNEXURE C

LAND SELLING SCHEMES (EUROPEAN) AS AT 31 DECEMBER 1964

TOWNSHIP	DATE OF DISPOSAL OF STANDS	NO. OF RESIDENTIAL STANDS	RULING SIZE OF STAND	FACILITIES	GENERAL REMARKS
FRANKLIN ROOSEVELT PARK	1946	512	1/4 acre	5 Church sites, 2 Primary School sites (one built), Nursery School (built), Parks and open spaces. Fully constructed roads. All essential services. ----- 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 R2,400 p.a. It is situated in the north-western suburbs in ideal surroundings. It is a very popular suburb of Johannesburg and houses here are always in great demand.
FRANKLIN ROOSEVELT PARK EXTENSION NO. 1	1955 1961	264	1/4 acre	1 Church site, High School (built), Nursery School site, Parks and open spaces. Fully constructed roads and all essential services. On 28 October 1961 a Community Centre was opened by the Mayor on Stand 865.	An extension of and adjacent to the above township. The above remarks apply here too, but the income limit restriction was raised to R3,000 per annum.
MONTGOMERY PARK	1960	441	1/5th acre	2 Church sites, School sites, 12 large flat or General Residential sites, Parks and open spaces. Roads are fully constructed and all essential services are provided.	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 but delightful homes have been erected in keeping with the two townships referred to above.
DEWETSHOF	1959	130	1/4 acre	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 Cyrildene and Observatory Extension, 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. This township has developed on the lines of Cyrildene which caters for the upper-middle income group.
DEWETSHOF EXTENSION NO. 1		202	1/6th to 1/4 acre	2 Church sites, 2 Business sites, Nursery school site, Parks and open spaces and all services will be available before the disposal of stands. Roads will be fully constructed.	Situated to the south of Dewetshof and adjacent to Kensington. This proposed township will cater for the lower-middle income group with a probable income limit restriction. It is anticipated that it will prove a popular area and develop on the lines of Franklin Roosevelt Park. It is hoped to sell the stands during 1965.

TOTAL NUMBER OF RESIDENTIAL SITES | 1549.

HOUSING PROVIDED BY GOVERNMENT AGENCIES(A) National Housing Schemes

<u>Date Established</u>	<u>Scheme</u>	<u>Rate %</u>	<u>Dwelling Units in scheme</u>		<u>Total Value of Scheme</u>
			<u>Houses</u>	<u>Flats</u>	
1946	Parkhurst	3½%	61	-	R312,924
1948	Lindbergh Park	3½%	-	138	R520,630
1950	Crown Gardens	∅ 3½%	232	356	R2,649,480
1963-65	Triomf	x 5%	343	-	-
1963	Vrededorp	5%	10	-	-

∅ R200 deposit, balance of repayments over 30 years.

x Approximately 1,200 houses planned plus a number of blocks of flats. No information of final number of buildings is available yet nor of the value of houses erected.

(B) S.A.R. Schemes.

The following information has been supplied by the General Manager of the South African Railways:-

The South African Railways administration operates 3 schemes to assist Railway servants to acquire their own homes.

- (a) The oldest of their schemes is the House Ownership scheme which has been in existence since 1937. The fundamental object is to supply financial assistance to individual members of the Railway staff to purchase or erect their own homes by means of loans advanced by the Administration and repayable on the instalment system. Eight hundred and fifty-three homes have been made available under this scheme. The initial cash deposit is nil, and the rate of interest is 3½% per annum. If the price of the property is, however, more than the valuation thereof or if the maximum loan is less than the cost of the property, the difference must be deposited in cash. Maximum redemption tables have been amended to provide for servants retiring at 63 or 58 years of age. The total repayments of capital and interest and insurance are not to exceed 25% of the maximum consolidated salary/wage.

(b) Under/.....

ANNEXURE D (CONTD.)

- (b) Under the assisted 10% Ownership Scheme, the Administration makes an advance in favour of a servant up to the amount contributed by him to the Pension Fund (which is security for the advance) to enable him to obtain a 90% loan from a building society, a local authority, a local authority, the National Housing and Planning Commission or other approved undertaking. This scheme was started in 1954. The interest charged is 3½%. The period of redemption of the loan is 30 years which corresponds with the loan repayment period of the main 90% loan.
- (c) The sale of Departmental houses to occupants under the house ownership scheme is a facility introduced only recently which is available to the occupant of a Departmental house to purchase such house if he so desires under the house ownership scheme.
- (d) Departmental housing is a facility which has been in existence for many years in order to provide housing for Railway staff at reasonable rentals, particularly for those whose duties necessitate their residing within convenient reach of their places of employment. Six hundred and fifteen of these houses are situated within the Johannesburg Municipal area and 613 have been let. The basic rentals of the various types and sizes of houses are calculated on the floor area subject to certain maxima but the rents vary from R9-35 to R22-10 per month. One hundred and twenty-eight of these houses were sold to employees under the house ownership scheme. The facility to purchase Departmental houses was withdrawn in December 1963. One block of flats in Johannesburg is owned by the Administration but only a portion, i.e. 11 flats, is available for accommodation.
- (e) The Louw Geldenhuys Tehuis at Langlaagte is operated for the purpose of supplying accommodation at a reasonable charge for junior staff recruited from the country districts, who are unable to afford the high tariffs demanded by the better class boarding establishments. The tariff of charges varies from R16-03 per month to R19-42 per month.

ASSIGNED SCHEDULE OF ACCOMMODATION SUPPLIED BY VARIOUS ORGANIZATIONS (FOR PROGRAMS).

ANNEXURE I

SCHEMES	TYPE OF SCHEMES	NUMBER OF PERSONS FOR WHOM ACCOMMODATION IS SUPPLIED IN:-			BASIS OF RENT OR MONTHLY EXPENDITURE	OCCUPIED BY	DETAILS OF FINANCIAL ASSISTANCE	REMARKS
		ROOMS	COTTAGES OR HOUSES	FLOTS				
African Star Flats	Family Units			8 Single 50 - 4 Rooms	R20.00 per month R22.00 " " R30.50 " " R35.00 " "	Ex Service Men	1/2 and 1/4 National Housing Loans	Resonable
Johannesburg Housing Utility Co. Oysteria Hill Flats	Family Units Single Flats			60 - 3 Rooms 36 - 4 Rooms 30	R3.00 per week R4.10 per week R1.00 per week R1.50 per week	Lower Income Groups Pensioners	1/2 and 1/4 National Housing Loans 1/2 and 1/4 National Housing Loans	Resonable
Old Aged Dwelling Units and Homes.								
Mathew Barron	Single Rooms			20	R7 for V and L which is R2 per month	Aged and Totally Deaf Ex Service Women	1/2 National Housing Loans	Sub-Resonable
Johannesburg Coronation Foundation (Joesabarran)	Rooms			200	1/10 of Income	Aged with Income under R40.00 per month	1/2 and 1/4 National Housing Loans	Sub-Resonable
North House	Rooms			50	1/10 of Income	Chronically Sick and Frail Aged	1/2 National Housing Loans	Sub-Resonable
Randjeslaagte - Jubilee Memorial	Flats and Rooms and Communal Hall			54	Aged - R1.00 p.m. Single Quarters. R2.00 p.m. for Married Quarters. R1.25 p.m. for 20 rooms.	Old Aged	1/2 and 1/4 National Housing Loans	Sub-Resonable
Wanda Clyde Benvenuto Steels (Gerald Fitzpatrick House)	Rooms			110	R3.00 per month	Indigent Elderly Women	1/2 National Housing Loans	Sub-Resonable
Bramley Cottage Scheme	Cottages			42	R4.20 per month	Tenants not less than 60 years of age. Income not to exceed R20 per month	National Housing Loans	Sub-Resonable
Old Aged Homes, Hostels and Shelters	Home			18	10c per month for lodging and R4.20 for 1 meal daily	Balanced Nurses		
S. L. Nurses Trust Fund War Memorial Home	Home			8	Up to R12 per month	Aged Men		
Old Aged Bollenko Home	Home			13	Free to what they can afford.	Aged (Free Men)		
Bosilia Park	Home			6	R19 - R22 per month	Aged		
German Old Aged Lutheran Congregation				36				

SOURCE	TYPE OF SCHEME	NUMBER OF PERSONS FOR WHOM ACCOMMODATION IS SUPPLIED IN-			RANGE OF WEEKLY RENT OR MONTHLY RENTALS	OCCUPIED BY	DETAILS OF FINANCIAL ASSISTANCE	REMARKS
		ROOMS	COTTAGES OR HOUSES	FLOORS				
S.A. Young Federate	Home (British)	61			R17 per month	Men and women over 60 years of age or totally unfit for work	5% National Housing Loans	Sub-Economic
Breakley House for Aged	Hostel	37			R18 - R21 per month	Tenants over 60 years of age. No income to exceed R20 per month	5% National Housing Loans	Sub-Economic
Breakley House for Aged (Latin House)	Hostel	61			R20 per month	- do -		Sub-Economic
Salvation Army	Hostel	50				Tenants to be over 60 years and totally physically unfit. Income not to exceed old age or war veterans pensions	5% Loan	Sub-Economic
(Gods Prevalence Roman) Oratory House	Shelter Home	32			R14.70 per month 7 of income free	Old aged pensioners. Aged women in lower income group.	-	-
Our Parents Home Queen Alexandra Home. Wolverhampton Old Aged Home	Home Home Home	165 23 87			Free to R10 per mth. R16 per month. R16-R18-R24 per mth.	Old aged men and women Aged women. Income $\frac{1}{10}$ of R10 p.m. Old aged men and women.	- - -	- - -
Saskatchewan Pioneer House	Home Home	77 37			Free-R15-R20 p.m. $\frac{1}{10}$ of income	Aged men and women. Elderly persons of the lower income group.	- -	- -
Old Tule	Home	85			R16 per month single R26 per month double Free	Old aged War veterans and pensioners	- -	- -
7:30 AM N.O.T.R. Memorial House			32		Free			
Hostels and Shelters Armstrong Villittale Kathology	Back Youth Hostel (Males)	126			Salary Scale R10-R10 pay from R15 to R21,40 per month. From R40 pay R24 per month	Working male youth	5% National Housing Loans	Sub-Economic
S.A. Young Federate	Hostel (Seniors)	36			R17 per month. R18 per month to persons whose incomes exceed R46 per month	For old people and people who pay disability pensions	5% National Housing Commission Loans	Economic
S.A. Young Federate	Home Room	87			R20 per month	Working girls and students	-	-
The Deans Shelter (Deans Gate)	Rooms and Dormitories	42				Temporary unemployed and handicapped males	-	-

COUNCIL COLOURED HOUSING SCHEMES

SCHEME	DATE OF ESTABLISHMENT	TOTAL NUMBER OF DWELLINGS	TYPE OF SCHEME	HOUSES				TYPES			RANGE OF MONTHLY OR WEEKLY RENTALS	APPROX. UNIT COST AND SERVICES (EXCLUDING LAND)	APPROX. AREA IN SQUARE FEET	TOTAL CAPITAL COST	REMARKS		
				SINGLE ROOMS		2 BR.		3 BR.		FLATS							
				1	2	1	2	3	1	2						3	
Coronationville (1st Section)	1936	230 houses	Sub-economic Letting and Selling		26	158	66				R1,628	722		These houses are of an austere type for occupation by sub-economic tenants.			
Coronationville (2nd Section)	1946	251 houses	Sub-economic Letting and Selling	10	125	116					Average	657 to 1,606	R1,177,406	This scheme is well equipped with amenities comprising a community centre, library and recreational facilities. Sewerage is provided throughout			
Coronationville B.K. Field Village	1953	50 flats	Economic Letting						50	R12-30 per month			R115,928	Built by S.F.S.L. for Ex-Servicemen, and administered by the Council.			
Coronationville Council Flats	1959	60 flats	Economic Letting				15	45		R17-00 to R23 per month	R2,380 R2,470	786	R146,850	Built by Private Contract and administered by the Council.			
Noordgesig (1st Section)	1938	300 houses	Sub-economic Letting		175			175		R3-10 to R8-75 per month R4-60 to R10 per month	R552 Average	635 Average	R378,338	The 1st and 2nd Sections are constructed in brick and iron of a good standard, the remaining sections being of an austere standard in concrete or brick and iron.			
Noordgesig (2nd Section)	1946/1947	100 houses (50 pairs Semi)	Sub-economic Letting		250					R4 to R9-75 per month	R1,492 Average	714 Average	R355,860	Amenities include a communal hall, recreational facilities, a child health and medical services clinic, and library.			
Noordgesig (3rd Section)	1953	100 houses (50 pairs Semi)	Economic Letting		100					R2-31 per week	R1,540 per pair	1,080 per pair	R101,660	Sewerage is provided to all units except 6 units which are provided with the pail service.			
*Noordgesig (4th, 5th and 6th Sections)	1954 to 1957	359 houses	Economic Letting		359					R1-85 per week	R390 to R474	527	R250,590	*This section was developed in three successive stages with separate economic loans for 150, 70 and 139 houses.			
Noordgesig Experimental Houses	1961	4 houses	Experimental Scheme		3			1		R13-50 to R17 per month R17 per month	R1,700 to R1,910 R2,200	2,679	R7,600				
Riverlea	1962	623 houses	Economic Letting/Selling		623					R13-25 to R18 per month	R340-00	93,6006 margin	R550,116	All houses are of a good standard of construction in brick and iron. Provision has been made for all amenities and services.			
Riverlea	1964	8 houses	Experimental Economic Selling Scheme					8			R5,000		R40,000 Approx.	Timber-framed, brick, veneered houses of excellent construction and appearance. A house ownership scheme.			
Riverlea Extension 1	1963	719 houses	Sub-economic Letting		432	136	151			R5-25 to R7 per month		59.4	R510,223	All houses are of a good standard of construction in brick and iron.			
Western Township	1920	2,059 houses	Low rental letting scheme (formerly Bantu township)		1737	295	31			R2 to R7 per month		80,130 margin	R770,887	All houses are of a good standard of construction in brick and iron. This scheme is well equipped with amenities comprising a community centre, library and recreational facilities. Sewerage is provided throughout.			
GRAND TOTAL :		3,913 houses, 310 flats			2205	2224	548	15	95								

HOUSING STATISTICS 1 BANTU TOWNSHIPS 1 SOMETO AND EASTERN BANTU TOWNSHIP 1 AS AT 30 JUNE 1964

SUPPLIED BY RESEARCH BRANCH 1, NON-EUROPEAN AFFAIRS DEPARTMENT

TOWNSHIPS	BUILT BY MUNICIPALITY HOUSING FUNDS		BUILT BY MUNICIPALITY SELF-BUILDERS LOAN FUNDS	BUILT BY PRIVATE PERSONS SELF-BUILDERS LOAN FUNDS	BUILT BY PRIVATE PERSONS OWN FUND	TOTAL NO. OF HOUSES
	LEASED	SOLD				
CENTRAL WESTERN JABAVU	963	292	79	38	60	1,432
CHIAMELO	3,074	76	28	-	9	3,989
DHLAMINI	1,218	191	-	-	13	1,422
DUBE	-	1,444	100	319	93	1,956
EMBENI	2,298	-	-	-	-	2,298
JABAVU	5,100	-	-	-	-	5,100
JABULANI	1,749	288	-	-	2	2,039
MAPETLA	1,754	323	26	-	2	2,105
MOFDLO	1,914	2,387	93	100	49	4,543
MOLAPO	1,169	182	41	31	43	1,466
MOLETSANE	1,636	246	63	7	10	1,962
MOROKA	2,326	74	250	6	37	2,693
NALEDI	4,034	8	-	-	1	4,043
ORLANDO EAST	5,892	-	-	-	1	5,893
ORLANDO WEST	4,421	-	-	-	-	4,421
ORLANDO WEST EXTENSION	155	845	-	-	-	1,000
PHIRI	2,167	23	-	-	-	2,190
PIRVILLE	132	-	-	-	1,100	1,232
SENAGANE	1,379	88	29	-	15	1,511
TLADI	1,616	207	28	4	5	1,860
ZOLA	5,488	84	-	-	-	5,572
ZONDI	1,105	283	135	-	25	1,548
TOTAL: SOMETO EASTERN BANTU TOWNSHIP	50,390	7,043	872	505	1,465	60,275
GRAND TOTAL	51,017	7,043	872	505	1,465	60,902

