Annual report of the Medical Officer of Health / City Council of Pretoria.

CITY COUNCIL OF PRETORIA

FORTY-SIXTH

Annual Report

OF THE

Medical Officer of Health

FOR THE

YEAR 1949-1950

WALLACHS' PTA.—1547—5/2/51

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INDEX.

INTRODUDTORY LETTER

YOUR WORSHIP THE MAYOR,
and MEMBERS OF THE CITY COUNCIL, PRETORIA.

I have the honour to present to you the Forty-sixth Annual Report of the Pretoria City Health Department for the year ending 30th June, 1950.

In my introductory letter last year I made the following remarks:—

> "On 1st May, 1949, the adjoining Municipality of Hercules with a population of 12,000 Europeans and 38,000 non-Europeans was incorporated. The vital statistics of this area have not been included in this report. Conditions in Hercules, where there is an inadequate water supply and no water-borne sewerage, are not conducive to good health and it would not be surprising if, in the course of the next few years, we find an increase in the incidence of infectious diseases and a higher infantile mortality rate for the whole of Pretoria, as a result of the rates existing in Hercules. However, as one of the primary objects of the Council in incorporating Hercules was to improve health conditions in that area, it is hoped that everything possible will be done to raise its standard of hygiene to the same level as Pretoria."

Since the incorporation of Hercules the Pretoria Municipality has laid down 65 miles of water-piping and have connected 727 houses to the water mains in the European area. In the non-European area nothing has been done except the provision of a few standpipes. It is hoped however that by next year the whole of the European area will be supplied with a good water supply and that the whole of the Native area will be reticulated with stand-pipes at every alternate corner and with laid-on water for those Natives who can afford it.

This Council has done a great deal in short time, but a tremendous task still lies ahead.
As I predicted, incorporation of this area has resulted in a general lowering of health conditions as reflected in the vital statistics for the whole of this new Pretoria area, with the exception of an apparent increase in the non-European birth rate, which is not due to improved social or health conditions, but is attributable to better registration and notification of births, particularly as many natives from old Pretoria area were confined at the Little Flower Mission Maternity Hospital which is situated in Hercules area. Before incorporation, very few registrations of Pretoria births which took place at this Hospital were supplied to this Department for inclusion in our statistics. Since incorporation however we have had more accurate returns.

Apart from this, however, the influx of natives into Lady Selborne has been uncontrolled, unlike Pretoria, and large numbers of native women have been coming from country areas to Lady Selborne with the result that there is a very much larger female than male population. There are also a large number of single natives working in Pretoria who are resident in Lady Selborne. These two factors are responsible for the large number of births, particularly illegitimate which have been recorded from this area and is responsible for the higher rate.

Incorporation of Hercules offers an object lesson in regard to the effect of environment on health. There is no difference between the economic position of the natives living in Lady Selborne and those living in Pretoria. In Pretoria most of the natives are accommodated in good houses. At the Atteridgeville Native Location, which is in old Pretoria and where most of the native population resides, there is a pure piped water supply connected to each house and each house has a water closet. There are social services provided by the Council through qualified Social workers. The Council spends £20,000 annually on recreation facilities, like physical training, rugby, soccer and tennis, and there are adequate sports grounds. In fact, Pretoria this year won the South African Bantu Native Athletic Championship. There are boys and girls clubs and clubs for working men and women. There are adequate Ante-Natal, Post-Natal, Child Welfare, Out-Patient, Tuberculosis and Venereal Diseases Clinics.

In Hercules we are only beginning to provide these services for the natives and it will take some time before we can bring an adequate water supply and water-borne sewerage to Lady Selborne, and before we will be in a position to give them all the other services.

The result of this difference in health conditions in these two places is that there is a much higher infantile mortality rate in Lady Selborne than in Pretoria, even though it is not so apparent from figures, and the death rates amongst the natives in Lady Selborne is 16·96 as compared to 6·92 in the Pretoria area, and the tuberculosis rate for natives in Hercules is 1·19 as compared with 0·83 in Pretoria.

We have a similar set of conditions existing in old Pretoria as well. As pointed out Atteridgeville location is a first class native area, but in Bantule and Marabastad native locations, where we have not yet been able to provide good housing, water-borne sewerage and an adequate water supply, although the other social services exist, somewhat similar conditions exist. In the Marabastad and Bantule native locations the infantile mortality rate is about 256 per 1,000 live births, at Atteridgeville it is 127.

In regard to the European population, conditions have remained satisfactory.

There is a great deal of work still to be done in the City and financial stringencies are holding back progress. It must however be recorded that the City Council of Pretoria is always prepared to support any health project within its means, and I am confident that when the financial position becomes easier, we shall again be able to carry on with the expansion of our services as we have in the past.

I am grateful to your Worship and all the Councillors, for the sympathetic consideration which we have always received and for the support which has been given to the Health Department.

I am particularly thankful to our Chairman, Mrs. M. M. Curson, who has helped us in every way through a difficult time. I am grateful to the members of the staff for their loyalty and enthusiasm in their work. I appreciate the assistance which has been given to the Department by the Public of Pretoria, and I also wish to record my thanks to the heads of sub-heads of their Departments for their co-operation.

Once more I want to stress how grateful I am to the Press for the manner in which they have again helped us by bringing to the notice of the public all important health matters. They have assisted us in bringing health propaganda to the public in very many ways.

H. NELSON,
Medical Officer of Health.

PUBLIC HEALTH COMMITTEE.

Councillor Mrs. M. M. Curson, M.P.C. (Chairman).
Councillor J. P. Coetser (Vice-Chairman).
Councillor Mrs. B. J. Alfonso.
Councillor S. le Roux Koch.
Councillor J. P. C. M. van Zyl.

STAFF OF THE PUBLIC HEALTH DEPARTMENT AS AT 30th JUNE, 1950.

H. NELSON, M.A., M.D., ChB., B.A.O., D.P.H., D.T.M., F.R. S. I.	Medical Officer of Health.
T. LÖTTER, M.B., Ch.B., L.R.C.P. & S., L.R.F.P.S., D.P.H.	Deputy Medical Officer of Health.
A. PIJPER, M.D., D.Sc.	Pathologist (Part-time).
R. E. W. DICKS, M.B., Ch.B., D.P.H.	Assistant Medical Officer of Health (Communicable Diseases).
S. BEHR, M.A., M.B., Ch.B., B.A.O.	Venereologist.
A. T. B. H. BODENSTAB, M.B., Ch.B., D.P.H., D.T.M. & H.	Assistant Medical Officer of Health (Non-Personal Health Services).
M. VERA BUHRMANN, M.B., Ch.B., D.P.H.	Assistant Medical Officer of Health (Child and Maternal Health).
R. BUCHAN, M.B., Ch.B., D.P.H.	Assistant Medical Officer of Health (Non-European Health Services).
D. B. LEWIS, B.A., M.B., Ch.B.	Medical Officer Influx Control.
A. STRATING, M.B., Ch.B.	Medical Officer Influx Control.
W. G. VAN ASWEGEN, B.Sc., B.V.Sc. ..	Veterinary Officer.
W. J. WHEELER, B.V.Sc.	Assistant Veterinary Officer.
F. T. E. NICHOLSON, Cert. R.S.I., Cert. Meat and Other Foods, Cert. of Agric. Dairying Natal	Chief Health Inspector.
L. E. THOMAS, Cert. R.S.I., Cert. Meat and Other Foods, Cert. Trop. Hyg., Adv., Knowledge, San. Eng. Building Construction and Drawing (Adv.)	Assistant Chief Health Inspector.
W. G. FUNSTON, Cert. R.S.I., Cert. Meat and other Foods, Trop. Hyg.	Assistant Chief Health Inspector.
*H. M. DE VAAL, B.Sc. (Appl. and Industr. Chem.), M.S.A. Chem. I., M. Inst. S.P...	Chief Chemist and Analyst.
*P. R. LOEWENSTEIN, B.Sc. (Eng.), M.S.A. Chem. I., A.M. Inst. S.P.	Assistant Chemist and Analyst.
*A. L. GOLDBERG, B.Sc. (Eng.), M.S.A. Chem. I., A.M. Inst. S.P., M.R.S.I.	Chemist, Grade II.
*N. P. LE M. NICOLLE, B.Sc., M.S.A. Chem. I., A.M. Inst. S.P.	Chemist, Grade II.
*W. A. LOMBARD, M.Sc., M.S.A. Chem. I ..	Chemist, Grade II.
*R. E. SKINNER	Laboratory Assistant.

These officials are employed part of their time by the Health Dept. the remainder of the time they carry out duties for the City Engineer's Dept.

SUPERVISING HEALTH INSPECTORS.

K. C. J. LUCOUW, Cert. R.S.I.
A. VELTHUYSEN, Cert. R.S.I.
J. L. COETZEE, Cert. Meat and Other Foods.
F.B. TAIT, Cert. R.S.I., Meat and Other Foods, Trop. Hyg. Adv. Knowledge San. Science.
E. J. JAMMINE, Cert. R.S.I., Meat and Other Foods, Adv. Knowledge, Trop. Hyg.
J. S. R. MARAIS, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.

SENIOR HEALTH INSPECTORS.

N. VORSTER, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.
D. W. BURGESS, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.
W. SCOTT, Cert. R.S.I., Meat and Other Foods.
R. G. SIEBERT, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.
J. L. PARKIN, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.
F. J. H. STOCKWELL, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.

HEALTH INSPECTORS.

O. A. BERGMAN, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.
R. M. DU TOIT, Cert. R.S.I., Meat and Other Foods.
T. B. NOTHNAGEL, Cert. R.S.I., Meat and Other Foods, Adv. Knowledge, Trop. Hyg.
S. M. SCOTT, Cert. R.S.I., Meat and Other Foods.

M. D. NEL, Cert. R.S.I., Meat and Other Foods.
J. C. THERON, Cert. R.S.I., Meat and Other Foods.
P. R. Q. WILBRAHAM, Cert. R.S.I., Meat and Other Foods, San. Science, Trop. Hyg.
P. T. FURSTENBURG, Cert. R.S.I., Meat and Other Foods, Adv. Knowledge, Trop. Hyg.
S. P. G. WILSON, Cert. R.S.I., Meat and Other Foods.
A. DE LA H. SERFONTEIN, Cert. R.S.I., Meat and Other Foods.
T. J. VAN DER HEEVER, Cert. R.S.I., Trop. Hyg., Meat and Other Foods.
J. T. GORDON, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.
H. L. NEETHLING, Cert. R.S.I., Trop. Hyg., Meat and Other Foods.
G. M. DU TOIT, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.
D. S. VAN COLLER, Cert. R.S.I., Meat and Other Foods.
D. S. KOCKS, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.
C. M. TALJAARD, B.Sc. Hygiene.
M. J. C. RAUTENBACH, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.
P. L. R. VAN HEERDEN, Cert. R.S.I., Meat and Other Foods.
J. J. PIENAAR, Cert. R.S.I., Meat and Other Foods.
A. J. COETZEE, Cert. R.S.I., Meat and Other Foods.
C. P. LEACH, Cert. R.S.I.
J. H. LEACH, Cert. R.S.I.
J. KRUGER, Cert. R.S.I.

CLERICAL STAFF.

Administrative Officer:
R. BLOEMINK, Cert. R.S.I., Meat and Other Foods, Trop. Hyg., Adv. Knowledge.

Chief Clerk:
R. O. R. CARRUTHERS, Cert. R.S.I., Meat and Other Foods, Trop. Hyg.

Senior Clerk:
G. W. CLUBB, Cert. R.S.I., Meat and Other Foods.

Record Clerks:
I. M. MALLETT (Miss), C. J. FOURIE (Miss).

Junior Clerks:
B. VLOK, E. C. KUNITZ, F. K. VERDOORN, H. N. PIETERSE.

Typistes:
K. J. HAUPT, D. R. WELTHAGEN, M. E. J. THOMSON, S. A. FLEMMING, M. S. RAUTENBACH.

SUB-ECONOMIC SCHEMES.

Woman Housing Manager: K. S. MARTIN, Dip. Public Health, Cert. Gen. Nursing and Midwif.
Assistant Manageress: G. F. PIENAAR, Lower Secondary Teacher's Cert. Univ. of Cape Town.
A.R.S.I. Assoc. Soc. of Women Housing Managers, Octavia Hill Training.
Assistant Manageress: J. B. COLMAN, R.S.I. Health Inspector, Octavia Hill Training.
Clerk: A. E. DENNER (Miss).
Typists: E. J. VILJOEN (Mrs.).
Handymen: P. J. CRONJE, G. M. J. DE KOCK and J. H. KIRSTEN.

LABORATORY ASSISTANT.

P. A. BARNARD.

DISINFECTING OFFICER.

V. J. BESTER.

RODENT AND MOSQUITO ERADICATORS.

J. P. SCHOLTZ, A. J. VLOK, B. HATTINGH, J. B. VAN WEZEL, H. C. A. DE BEER.

HEALTH VISITORS.

G. S. J. PRETORIUS, Cert. S.A. Medical Council (Gen. and Midwif.); Cert. R.S.I. Health Visitor and School Nurse; Mothercraft.
E. W. MURRAY, Cert. S.A. Medical Council (Gen. and Midwif.); Cert. R.S.I. Health Inspector; Cert. R.S.I. Health Visitor and School Nurse; Mothercraft.
B. M. SCHOLTZ, Cert. S.A. Medical Council (Gen. and Midwif.); Cert. R.S.I. Health Visitor and School Nurse; Mothercraft.
A. S. SCHULTZ, Cert. S.A. Medical Council (Gen. and Midwif.); Cert. R.S.I. Health Visitor and School Nurse.
D. H. BRONKHORST, Cert. S.A. Medical Council (Gen. and Midwif.); Cert. R.S.I. Health Visitor and School Nurse; Mothercraft.
A. C. M. VAN DER WESTHUIZEN, Cert. S.A. Medical Council (Gen. and Midwif.); Cert. R.S.I. Health Visitor and School Nurse; Mothercraft.
I. L. KOCKOTT, Cert. S.A. Medical Council (Gen. and Midwif.); Cert. R.S.I. Health Visitor and School Nurse; Mothercraft.
J. WINKEL, Gen. Nursing, Health Visiting, Maternity Nursing, Tuberculosis Home Visiting.
D. G. MORGAN, Cert. S.A. Medical Council (Gen. and Midwif.); Mothercraft; Cert. R.S.I. Health Visitor and School Nurse.
S. TENNANT, Cert. S.A. Medical Council (Gen. and Midwif.); Mothercraft.
S. PIENAAR, Cert. S.A. Medical Council (Gen. and Midwif.); Cert. R.S.I. Health Visitor and School Nurse; Mothercraft.

TEMPORARY STAFF.

S. M. PRUNS, Cert. S.A. Medical Council (Gen. and Midwif.); Cert. R.S.I. Health Visitor and School Nurse; Mothercraft.
A. M. PRINS, Cert. S.A. Medical Council (Gen. and Midwif.); Cert. R.S.I. Health Visitor and School Nurse.
H. M. E. VAN DER MERWE, Midwifery Cert.; Mothercraft Cert.
H. C. FICK, Cert. S.A. Medical Council (Gen. and Midwif.); Florence Nightingale Foundation Council Diploma for Public Health Social Services and Hospital and Training School Administration; Infectious Diseases; Mothercraft.
W. J. VOLSCHENK, Cert. S.A. Medical Council (Gen.); Cert. R.S.I. Health Visitor and School Nurse.

NON-EUROPEAN NURSES.

SALMINA HUMA, Cert. S.A. Council Council (Gen. and Midwif.).
ANNA NTJA, Cert. Midwife.
JOHANNA PAUL, Cert. Midwife.
GRACE PHOOKO, Cert. Midwife.
GLADYS BIKITSHA, Cert. S.A. Medical Council (Gen. and Midwif.).
GLORIA MOGAIE, Cert. Midwifery.
DEBORAH RAMSKIN, Cert. Midwifery.
EUPHEN NDUNA, Cert. S.A. Medical Council (Gen. and Midwif.).
GRACE MSIMANG, Cert. Midwife.
REBECCA SETLOGO, Cert. S.A. Medical Council (Gen. and Midwif.); Cert. R.S.I. Health Visitor and School Nurse.

CLINIC ASSISTANT.

C. J. DREYER.

NON-EUROPEAN CLINIC ORDERLIES.

JACOB MOHOHLO.
JOSEPH MONTOEDI.
WALTER MATABOGE.
HENRY SETHEKGE.
DANIEL MARABA.

PUBLIC CONVENIENCE ATTENDANTS.

TEN EUROPEANS.
FOUR NON-EUROPEANS.

POUNDMASTERS.

L. J. BOTHA.
C. W. SHORT.

CARETAKER.

J. HINDLEY.

ADDITIONAL MEDICAL STAFF (ISOLATION WARDS).

PART-TIME STAFF.

DR. E. A. GRUNBERGER .. .. } Ear, Nose and Throat Specialists.
DR. J. H. W. CASEWELL .. .. }

DR. H. J. BESSELAAR .. .. } Surgeon Specialists.
DR. G. VAN DYK .. .. }

CITY COUNCIL OF PRETORIA

FORTY-SIX ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH

CLIMATIC DATA.

Latitude: 25 degrees, 44 minutes, 3 second South.

Longitude: 1 hours, 52 minutes, 48 seconds East.

Mean Altitude: 4,480 feet.

Temperature: (Statistics kindly supplied by the Chief Meteorologist, Pretoria).

	Mean Max.	Mean Min.	Highest Reading	Lowest Reading	Mean Relative Humidity at 8 a.m. %	Mean Relative Humidity at 2 p.m. %	Rainfall Inches	Rainfall Days
1949:								
July	67·7	36·5	72	32	70	33	0·06	2
August	71·3	41·3	81	31	66	31	0·00	—
September	80·5	50·5	89	42	56	29	0·06	1
October	81·1	55·4	90	42	66	39	3·40	9
November	78·3	56·8	89	47	69	47	9·10	17
December	80·6	59·3	89	52	56	48	5·83	13
1950:								
January	81·6	59·4	90	55	66	45	2·38	13
February	84·0	60·9	90	51	65	44	1·93	8
March	80·4	60·4	85	53	79	55	4·41	9
April	73·7	53·4	81	37	84	56	2·46	8
May	67·7	41·9	74	29	80	46	1·66	7
June	67·6	37·7	74	33	82	40	0·17	1

AREA OF MUNICIPALITY.

The area of Pretoria and suburbs, inclusive of Town Lands, is 70·73 square miles. The Town is built on and between three parallel ranges of quartzite hills running East and West, the soil in the valleys being largely shale.

CORRECTION:

ANNUAL RATEABLE VALUES.

	1949/50.
Land	£19,818,085
Buildings	42,957,625
	£62,775,710

The values of unrateable land and buildings were £6,261,053 and £9,499,415 respectively.

The total values therefore were :-

	1949/50.
Land	£26,079,138
Buildings	52,457,040
	£78,536,178

For the year under review the rates imposed were 7d. per £ on land and 1½d. per £ on buildings.

POPULATION.

European	132,000
Native	100,300
Asiatic	5,600
Eurafrican	4,100

These figures have again been kindly supplied by the Director of Census, Pretoria, and are an estimate as at 30th June, 1950.

The Principal Vital Statistics for the year under review corrected for outward transfers are:—

	European.	*Native.*	*Asiatic.*	*Eur-African.*	*Total Non-Europeans.*	*All Races.*
Population	132,000	100,300	5,600	4,100	110,000	242,000
Birth Rates	25·53	23·56	47·32	42·93	25·49	25·51
Death Rates	5·80	10·71	9·29	17·07	10·87	8·10
Infantile Mortality per 1,000 live births	32·34	181·97	75·47	85·23	165·83	92·97
Percentage of Illegitimate to live births	0·92	43·58	1·89	37·50	39·27	18·33
Death rate from Tuberculosis, all forms, per 1,000 population	0·14	0·97	1·43	3·90	1·10	0·58

BIRTHS.

The following births were registered in Pretoria during the year (figures for 1948–1949 in brackets):—

	European.	*Native.*	*Asiatic.*	*Eur-African.*	*Total Non-Europeans.*	*All Races.*
Local births	3370 (2942)	2363 (458)	265 (194)	176 (80)	2804 (732)	6174 (3674)
Births where mothers not residents of Pretoria	1927 (978)	—	—	—	605 (209)	1532 (1187)
Illegitimate births (included in local births)	31 (17)	1030 (244)	5 (2)	66 (24)	1101 (270)	1132 (287)
Stillbirths	39 (34)	—	—	—	119 (50)	158 (84)

BIRTH RATES.

European	25·53 (25·25)
Native	23·56 (7·58)
Asiatic	47·32 (42·17)
Eurafrican	42·93 (29·63)
All Non-European	25·49 (10·81)
All Races	25·51 (19·95)

Rates of natural increase, being the excess of births over deaths in proportion to population are as follows:—

European	19·73 (19·60) per 1,000
Asiatic	38·04 (29·13) per 1,000
Eurafrican	25·85 (10·37) per 1,000

Europeans:

The birth rate for Europeans remained practically the same as last year.

Non-Europeans:

Although notification of native births is not accurate (the reasons and results of this has been fully discussed in previous annual reports) the birth rate appears to indicate a marked increase in natives, the rate for this year being 23·56 as against 7·58 for last year.

For Eurafricans the rate was 42·93 this year and 29·63 last year, but this fluctuation is of no great significance as the total Eurafrican population is very small and a slight increase in the total number of births is exaggerated when the "rate figure" is given. This increased figure is due to the inclusion of Hercules Births, particularly Lady Selborne, and notification of births from the Little Flower Mission, Lady Selborne, as mentioned in the introductory letter.

DEATHS.

(Figures for 1948–49 in brackets.)

	European.	*Native.*	*Asiatic.*	*Eur-African.*	*Total Non-Europeans.*	*All Races.*
Local deaths (all ages)	765 (659)	1074 (378)	52 (60)	70 (52)	1196 (490)	1961 (1149)
Deaths of persons not being local residents	359 (383)	—	—	—	609 (628)	968 (1011)
Total deaths ..	1124 (1042)	—	—	—	1805 (1118)	2929 (2160)

The "non-local" deaths occured at:—

	Pretoria and other Hospitals.	*Mental Hospital.*	*Leper Asylum.*	*Prisons.*	*Visitors.*
Europeans	310 (296)	30 (57)	4 (2)	1 (6)	14 (15)
Non-Europeans	474 (497)	50 (47)	31 (21)	29 (42)	25 (21)

DEATH RATES.

European	5·80 (5·66)
Native	10·71 (6·26)
Asiatic	9·29 (13·04)
Eurafrican	17·07 (19·26)
All Non-European	10·87 (7·24)
Total all races	8·10 (6·24)

Europeans:

The death rate for Europeans which shows a slight increase, is still, however, the second lowest record.

Non-Europeans:

The death rate for natives, 10·71, has shown a definite increase over last year's, 6·26. This is attributable to the inclusion of Lady Selborne figures. The death rate for Asiatics of 9·29 is the lowest ever recorded.

The death rate for Eurafricans of 17·07 shows a decrease. The total non-European death rate of 10·87 shows an increase as compared with last year's 7·24.

The Asiatic and Eurafrican rates may show great fluctuations on account of the small populations of these two groups, but this was predicted in my last annual report and can be ascribed to the higher rates occurring in the newly incorporated Hercules area where the Lady Selborne location is situated about which mention is made in the introductory letter.

INFANTILE MORTALITY.

(Figures for 1948–49 in brackets.)

	European.	*Native.*	*Asiatic.*	*Eur-African.*	*Total Non-Europeans.*	*All Races.*
Local deaths	109 (99)	430 (93)	20 (16)	15 (16)	465 (125)	574 (224)
Deaths of infants whose mothers had come to the city for confinement, or infants who were brought in suffering from the illness which caused death..	48 (51)	—	—	—	127 (96)	175 (147)
Total infant deaths ..	157 (150)	—	—	—	592 (221)	749 (371)

INFANTILE MORTALITY RATES.

European	32·34 (33·65)
Native	181·97 (203·06)
Asiatic	75·47 (82·47)
Eurafrican	85·23 (200·00)
All non-European	165·83 (170·77)
All races	92·97 (60·97)

INFANTILE MORTALITY RATES.

The causes of infantile deaths in Europeans were as follows:—

	1949–50.	1948–49.
Congenital causes	8 (Rate 2·37)	8 (Rate 2·72)
Diarrhoeal diseases	13 (,, 3·86)	9 (,, 3·06)
Bronchitis and Pneumonia	18 (,, 5·34)	16 (,, 5·44)
Infectious diseases	1 (,, 0·30)	1 (,, 0·34)
Other causes	19 (,, 5·64)	16 (,, 5·44)
Prematurity	35 (,, 10·39)	35 (,, 11·90)
Injury at birth	15 (,, 4·45)	14 (,, 4·76)
TOTAL INFANT DEATHS	109	99

The causes of infantile deaths in non-Europeans were as follows:—

	1949–50.	1948–49.
Congenital causes	49	2
Diarrhoeal diseases	124	32
Bronchitis and Pneumonia	117	37
Infectious diseases	14	3
Other causes	46	15
Prematurity	87	29
Injury at birth	28	7
TOTAL NON-EUROPEAN INFANT DEATHS	465	125

TABLE OF INFANTILE MORTALITY RATE FOR ALL RACES SINCE 1926–27.

Year.	*European.*	*Native.*	*Asiatics.*	*Eur-African.*	*All Non-Europeans.*	*Total for all Races.*
1926–27	48·48	385·51	101·26	246·37	315·31	137·49
1927–28	61·30	483·51	166·67	163·26	256·04	153·79
1928–29	57·85	451·12	140·19	168·83	328·88	143·86
1929–30	51·77	422·48	88·80	141·17	297·92	126·94
1930–31	68·33	573·68	142·86	222·23	362·07	148·42
1931–32	59·41	794·87	112·00	179·48	459·80	153·48
1932–33	68·44	742·42	158·54	123·08	429·27	157·99
1933–34	68·13	621·40	121·74	244·68	415·93	152·60
1934–35	51·26	347·00	62·50	122·64	222·00	95·91
1935–36	77·67	585·94	152·67	140·19	374·49	149·58
1936–37	52·66	450·24	107·38	112·36	269·49	99·42
1937–38	63·57	457·14	105·26	209·88	303·35	116·21
1938–39	50·95	348·53	86·85	118·18	230·24	93·94
1939–40	43·84	349·67	136·90	146·34	255·39	88·92
1940–41	62·60	376·34	93·48	121·95	245·32	96·84
1941–42	53·30	353·84	86·42	264·70	253·06	96·10
1942–43	47·34	329·48	81·97	101·12	223·30	80·07
1943–44	47·94	304·99	70·71	204·08	216·64	77·80
1944–45	33·98	289·69	86·49	105·26	206·45	63·50
1945–46	34·02	215·24	25·77	115·39	159·35	61·17
1946–47	25·90	235·16	54·73	161·29	178·27	53·78
1947–48	33·16	138·78	61·80	224·14	127·30	52·78
1948–49	33·65	203·06	82·47	200·00	170·77	60·97
1949–50	32·34	181·97	75·47	85·23	165·83	92·97

The table given hereunder indicates the number of non-European births and infant deaths during the Year under review in the various non-European residential areas.

Natives:

Marabas Location.		*Bantule Location.*		*Atterdigeville Location.*		*Hercules Area.*		*Town.*	
Births.	*Deaths.*	*Births.*	*Deaths.*	*Births.*	*Deaths.*	*Births.*	*Deaths.*	*Births.*	*Deaths.*
39	10	166	42	298	38	1561	289	299	51

Asiatics:

Asiatic Location.		*Hercules.*		*Town.*	
Births.	*Deaths.*	*Births.*	*Deaths.*	*Births.*	*Deaths.*
144	15	52	2	69	3

Eurafrican:

Cape Location.		*Hercules.*		*Town.*	
Births.	*Deaths.*	*Births.*	*Deaths.*	*Births.*	*Deaths.*
74	6	86	8	16	1

CAUSES OF DEATHS AT AGE 1 AND UNDER 5 YEARS FOR VARIOUS RACES.

Europeans:

27 Deaths were recorded under this age group:—

Cerebro Spinal Meningococcal Meningitis	1
Diphtheria	1
Tuberculosis	1
Septicaemia	1
Measles	2
Tumours	2
Diseases of the Blood	3
Pneumococcal Meningitis	1
Diseases of the Nasal Fossae and Annexa	1
Broncho Pneumonia	4
Diarrhoea and Enteritis	3
Chronic Nephritis	1
Congenital Hydrocephalus	1
Motor Accidents	1
Accidental Burns	1
,, Drowning	1
,, Crushing	1
Unknown or Unspecified Causes	1
TOTAL	27

Natives:

213 Deaths were recorded under this group:—

Diphtheria	1
Tuberculosis	10
Septicaemia	1
Congenital Syphilis	1
Measles	1
Malnutrition	45
Pellagra	8
Agranulocytosis	1
Convulsions	1
Encephalitis	1
Diseases of the Ear and Mastoid Process	1
Heart Disease (Rheumatic Fever)	1
Gangrene	1
Bronchitis	4
Pneumonia Broncho	62
Pneumonia unspecified	1
Diarrhoea and Enteritis	63
Nephritis	2
Monstrosities	1
Accidental Burns	2
,, Drowning	2
Unknown or Unspecified Causes	3
TOTAL	213

Asiatic:

5 Deaths were recorded under this group:—

Tuberculosis	2
Diarrhoea and Enteritis	1
Lobar Pneumonia	1
Malnutrition	1
TOTAL	5

Eurafrican:

13 Deaths were recorded under this group:—

Tuberculosis	3
Pneumonia unspecified	1
Diarrhoea and Enteritis	2
Pneumonia Broncho	2
Tumours	1
Pellagra	1
Malnutrition	2
Measles	1
TOTAL	13

PRINCIPAL CAUSES OF DEATH IN PERSONS OF 5 YEARS AND OVER.

The principal causes of death were:—

	Europeans.		*Non-Europeans.*	
	1949–50.	*Yearly Average for 5 Years.*	1949–50.	*Yearly Average for 5 Years.*
Cancer	110	90·2	17	13·2
Heart disease	141	145·2	43	30·8
Bronchitis and Pneumonia, (all forms)	38	45·0	102	79·6
Influenza	1	0·4	2	0·6
Typhoid Fever	—	1·0	3	4·2
Appendicitis	4	2·0	—	0·8
Tuberculosis (Pulmonary)	15	12·2	81	64·6
Diabetis	9	6·6	1	0·6
Apoplexy	68	47·2	17	10·4
Disease of Kidneys	35	33·4	26	17·2
Disease of Arteries	13	17·2	31	7·8
Disease of Liver and Gall-bladder	11	11·6	3	3·4
Puerperal disease	—	1·0	1	1·4
Old Age	27	18·4	11	6·4
Suicide	11	10·6	3	2·6
Accidents	40	35·6	50	41·4
Other infectious diseases	8	—	36	—
Other causes	98	—	73	—

DETAILS OF CAUSES OF DEATH—5 YEARS AND OVER.

(In all the following tables the figures for 1948–49 are shown in brackets.)

1. CANCER:

Europeans: 111. Death rate 0·83 per 1,000 population.

Site of disease:—

Buccal cavity and pharynx	3	(3)
Digestive organs and peritoneum	60	(43)
Respiratory tract	5	(6)
Uterus	5	(9)
Other female genital organs	4	(2)
Breast	10	(6)
Male genital organs	8	(4)
Male and female urinary organs	3	(9)
Brain and other parts of the nervous system	1	(1)
Skin	1	(1)
Bones	3	(—)
Other and unspecified organs	7	(7)
TOTAL	110	(91)

Death Age:

Under 40 *Years.*	40–50.	50–60.	60–70.	70–80.	Over 80.	*Total.*
7 (7)	10 (9)	21 (22)	29 (22)	33 (23)	10 (8)	110 (91)

Non-Europeans:

Site of disease:—

Natives:

Buccal cavity and pharynx	—	(—)
Digestive organs and peritoneum	10	(4)
Respiratory tract	1	(1)
Uterus	—	(1)
Breast	—	(—)
Male and female urinary organs	3	(—)
Other and unspecified organs	—	(1)

Asiatics:

Buccal cavity and pharynx	2	(—)
Digestive organs and peritoneum	—	(1)
Male genital organs	—	(2)

Eurafricans:

Digestive organs and peritoneum	—	(1)
Skin	1	(—)
TOTAL	17	(11)

2. **DISEASES OF THE HEART**: Death rate per 1,000 European population. 1·07 (1·19)
Europeans: 141 (139).
Non-Europeans: 43 (26). Natives, 32. Asiatics, 5. Eurafrican, 6.

3. **BRONCHITIS, AND PNEUMONIA**:
Europeans: 38 (47).
Non-Europeans: 102 (58). Natives, 95. Asiatics, 3. Eurafricans, 4.

4. **INFLUENZA**:
Europeans: 1 (—).
Non-Europeans: 2 (1). Natives, 2.

5. **TYPHOID FEVER**:
Europeans: — (—).
Non-Europeans: 3 (4). Natives, 3.

6. **APPENDICITIS**:
Europeans: 4 (1).
Non-Europeans: — (2).

7. **TUBERCULOSIS** (Pulmonary):
Europeans: 15 (10).
Non-Europeans: 81 (56). Natives, 68. Asiatic, 3. Eurafrican, 10.

8. **DIABETES**:
Europeans: 9 (2).
Non-Europeans: 1 (1). Native, 1.

9. **APOPLEXY**:
Europeans: 68 (49).
Non-Europeans: 17 (10). Natives, 12. Asiatics, 3. Eurafricans, 2.

10. **DISEASES OF THE KIDNEYS**:
Europeans: 35 (31).
Non-Europeans: 26 (12). Natives, 24. Asiatic, 1. Eurafrican, 1.

11. **DISEASES OF ARTERIES**:
Europeans: 13 (19).
Non-Europeans: 31 (—). Natives, 29. Eurafricans, 23.

12. **DISEASES OF THE LIVER AND GALL BLADDER**:
Europeans: 11 (9).
Non-Europeans: 3 (6). Natives, 2. Asiatic, 1.

13. **PUERPERAL DISEASES**:
Europeans: — (—).
Non-Europeans: 1 (—). Native, 1.

14. **OLD AGE**:
Europeans: 27 (16).
Non-Europeans: 11 (6). Natives, 9. Asiatic, 1. Eurafrican, 1.

15. **SUICIDE**:
Europeans: 11 (14).
Non-Europeans: 3 (1). Native, 2. Eurafrican, 1.

16. **HOMICIDE**:

	Europeans.	*Natives.*	*Asiatics.*	*Eurafricans.*
By firearms	1	3	—	—
By cutting or piercing instruments	—	7	—	—
By other unspecified means	—	1	—	—

17. **ACCIDENT**:
Europeans: 40 (25).
Natives: 50 (33).

	Europeans.		Natives.		Asiatics.		Eurafricans.	
	1949–50.	1948–49.	1949–50.	1948–49.	1949–50.	1948–49.	1949–50.	1948–49.
On Railways	2	(—)	6	(3)	—	(—)	—	(—)
By Motor, road vehicles (excluding motor cycles)	19	(3)	20	(9)	1	(1)	2	(1)
,, motor cycles	4	(4)	1	(—)	—	(—)	—	(—)
,, Road Transport (not motor)	1	(1)	3	(4)	—	(—)	—	(—)
,, machinery (not transport or agricultural)	—	(1)	—	(—)	—	(—)	—	(—)
,, farm machinery	—	(—)	—	(—)	—	(—)	—	(—)
,, burns (not conflagration)	1	(—)	3	(1)	—	(—)	—	(—)
,, electric current	2	(1)	—	(—)	—	(—)	—	(—)
,, mechanical suffocation	—	(—)	—	(—)	—	(—)	—	(—)
,, drowning	—	(—)	1	(1)	—	(—)	—	(—)
,, firearms	3	(1)	—	(2)	—	(—)	—	(—)
,, injury by cutting or piercing instruments	—	(—)	—	(—)	—	(—)	—	(—)
,, fall	3	(3)	1	(3)	—	(—)	—	(—)
,, crushing	1	(—)	2	(—)	—	(—)	—	(—)
,, anaesthetic	1	(—)	2	(—)	—	(—)	—	(—)
,, poisonous gases	2	(—)	5	(4)	—	(—)	—	(—)
,, poisoning (not by gas)	—	(—)	—	(2)	—	(—)	—	(—)
,, other and unspecified accidents	1	(—)	2	(5)	—	(—)	1	(—)
TOTAL	40	(25)	46	(34)	1	(1)	3	(1)

DETAILS OF INFECTIOUS DISEASES NOTIFIED DURING THE YEAR.

NOTE.—All figures for 1948–49 are shown in brackets. For tables showing district distribution, age incidence and seasonal distribution, see pages at end of report. This report should be read in conjunction with the section dealing with the Isolation Hospital.

TYPHOID FEVER:

	Europeans.		Non-Europeans.	
Local cases	13	(18)	20	(8)
Imported cases	21	(30)	85	(76)
Deaths in local cases	0	(0)	0	(2)
Attack rate	0·109	(0·155)	0·286	(0·111)
Death rate	0	(0)	0	(0·030)

Local Cases:

The total incidence is higher than the previous year — 33 cases as against 26 — due to an increase amongst non-Europeans. There were no deaths.

Thirty-two cases were treated in hospital. One European child was treated at home. There was no major or milk-borne outbreak. Two intestinal carriers were discovered.

Tracing Sources of Infection:

1. Part of the investigation consists of taking blood specimens for the Vi test from suspect carriers connected with a case. Fifty-six such suspects were tested, 46 were negative, 10 (5 Europeans and 5 non-Europeans) were positive for Vi agglutination tests. Further stool and urine examinations were done on all the 10 positives and from one of the Europeans typhoid bacilli were recovered from the stools. This carrier infected another member of his family. He gave a history of having had typhoid fever 7 years previously. He now complains of cholecystitis. Two natives employed at the same place as this carrier also contracted typhoid during the same month. It could not be established whether this carrier was the source of their infection.

2. There were two secondary cases. One where a mother infected her child, and the other where a child infected her mother.

3. One non-European nurse contracted the infection whilst nursing typhoid cases.

4. Four cases were Indian children from the same family. They all took ill about the same time which points to a common infection, but the source could not be determined.

5. One European case occurred in a locality where two cases had been found during the previous year. Fortunately, we were able to get a phage-type from all 3 cases. They were of the same type — pointing to a common source. Twenty-four suspects were blood tested, 2 Europeans and one native cook-boy gave positive Vi results, but all further stool and urine tests were negative.

6. One European case was reported from a boarding house, and the entire staff was Vi tested. The blood from 2 non-Europeans was positive. A series of stool and urine examinations was negative for bacillus typhosus.

7. One native cook-boy at a market gardener's farm where one of the labourers contracted typhoid, was found to have a Vi positive blood. He was removed to the Carrier Camp for further investigation. All stool and urine examinations were negative.

8. Two cases obtained their milk from the same dairy. The milk was not pasteurized and used by the patients unboiled. This dairy had not submitted its staff for typhoid testing for some time. The owner was instructed to have his staff tested and two of the dairy boys were found to be Vi-positive. They were detained in the carrier camp where further stool and urine examinations were found to be negative.

Phage Typing:

We have been trying to get a phage type of all the local cases notified.

The following were the results obtained during the past year:—

Type Di	2
,, A	5
,, Ei	3
Untyped strains	9
No. of cases from which organisms were not isolated	14

Convalescent Carriers:

One European and one Native were proved to be still excreting typhoid bacilli on discharge from hospital.

The European who had typhoid during February, 1949, had since developed cholecystitis and had to be removed to hospital for cholecystectomy. On bacteriological examination of her stools, she was found to be a carrier. Ten days after the operation, B. typhosus was still grown from the stools, but subsequent examinations were all negative. Her blood, however, still gave a positive Vi aggulitnation.

Tests Carried out for Positive Typhoid Carrier State:

	No. of Persons Vi-tested.	*Blood Found Vi-positive.*	*Stool or Urine Found Positive.*
Typhoid fever investigations	56	10	1 European stool (+)
Prospective employees at dairies	810	86	1 Native stool (+)
Prospective employees at Rietvlei Municipal waterworks	9	0	0
Prospective employees at Pretoria Hospital	Unknown	37	0

For Dairy Typhoid Testing: See under Section dealing with control of dairies and milk supplies.

Typhoid Carrier Camp:

Number of inmates on 1/7/1949	4
Number admitted during year	59
	63
Number discharged during year	51
Still in camp on 30/6/1950	12

Of these 12 natives still in camp, two were intestinal carriers and one was a urinary carrier. They are all still under observation after having had treatment. The remaining nine are Vi (+) cases still being investigated.

During routine examination of prospective employees for dairies, a native was found to have a Vi positive blood in November, 1946. He was admitted to the Typhoid Carrier Camp for further investigation, where he was found to be a Urinary Carrier. As has been done with all proven carriers, a photograph of him was taken for record purposes. Since then, repeated specimens of his urine contained typhoid bacilli.

From the 18th to the 25th October, 1948, he was treated in the Isolation Hospital with massive doses of penicillin and sulphathiazole (half a million units of penicillin four-hourly — total 21 million units, 2 tablets sulphathiazole four-hourly — total 43 grams). From the 20th October, 1948, while still under treatment, daily specimens of urine were examined, but no tyhpoid organisms could be found. On the 12th November, 1948, his urine again showed typhoid organisms.

At about this time, he was put in goal for a period of six months, for a major offence. Whilst in gaol, officials of this Department took regular specimens of urine at fortnightly intervals, and all these were positive.

After release from goal, he was re-admitted to the Carrier Camp from where he absconded in August, 1949.

As this native was known to be of a tribe foreign to the Union of South Africa, all natives of this tribe reporting at this Department for typhoid testing were shown his photograph and questioned as to any knowledge of his whereabouts. Eventually he was recognised by a fellow tribesman.

An Inspector of this Department, accompanied by the native who recognised the carrier, travelled many miles to about 19 different farms in the vicinity of Pretoria until, on the 24th January, 1950, he was located. He would probably never have been traced as these natives are very loyal to one and other, but for the fact that he caused domestic trouble amongst his tribesmen wherever he went. When eventually found, he was living under an assumed name with a tribesman's wife, whom he had enticed away, and was working on a dairy farm delivering unpasteurized milk to the City.

This shows how important it is to follow up every clue and to leave no stone unturned in following carriers.

He was removed to the Isolation Hospital on the 24th January, 1950, where he was treated with large doses of chloromycetin (16 capsules at once, then six twice daily for three days, then two twice daily for 35 days, a total of 192 capsules or 48 grams).

Immediately before this treatment was started, both his Vi test and urine were positive. Since treatment, however, repeated specimens of urine were negative, although his blood continued to be Vi-positive.

We are busy treating other carriers with chloromycetin and so far it seems to clear their stools and urine of typhoid bacilli, but we will have to follow up the patients for at least a year or more before we can make more definite comments.

Imported Cases:

Of the imported cases, four Europeans and six Natives were Pretoria residents who contracted the disease outside the municipal area. Two of the Natives died.

All the other imported cases were persons admitted to the Isolation wards or the General Hospital from areas beyond the municipal boundary.

TUBERCULOSIS:

	Europeans.	*Non-Europeans.*
Local cases	32 (19)	94 (76)
Imported cases	33 (40)	59 (106)

The various forms in which the disease occurred:—

	Pulmonary.	*Meningitic.*	*Miliary.*	*Glandular.*	*Pericarditic.*	*Generalised.*	*Bones and Joints.*	*Total.*
Europeans	26	2	1	1	1	—	1	32
Non-Europeans	81	5	4	1	1	1	1	94
TOTAL	107	7	5	2	2	1	2	126

Of the 126 local cases 60 died during the year. Fifty-six (8 Europeans, 5 Eurafricans, 4 Asiatics and 39 Bantus) died in Pretoria and 4 Bantus had left Pretoria and died outside. Six Europeans and 33 non-Europeans were notified only at death. Two Europeans and 13 non-Europeans died within three months and 6 non-Europeans within 6 months of notification.

Seven Europeans and 19 non-Europeans gave a familial history.

Five non-Europeans gave histories of being contacts of known cases.
Three Europeans and 2 non-Europeans had been employed on the Rand mines years ago.

How Notified:

Twenty-eight notifications were received from the Pretoria General and the Isolation Hospital, 32 were from the weekly returns of the Registrar of Births and Deaths, 13 were notified by private practitioners, 50 by the Municipal tuberculosis and other Clinics and 3 from other sources.

Several of the cases were first seen by private practitioners and referred by them to the General Hospital or the Municipal Tuberculosis Clinics for further X-ray and sputum examinations.

Sanatorium Treatment:

Six cases were sent to the following institutions:—

Springkell	4
Rietfontein Tuberculosis Hospital	1
King George V Tuberculosis Hospital, Durban	1
TOTAL	6

Imported Cases:

The majority of cases classified under this heading are patients admitted to the Pretoria General Hospital from outside the Municipal boundaries.

Forty-four (23 Europeans and 21 non-Europeans) are cases who had contracted the disease prior to coming to live in Pretoria. Of these two Europeans and 12 non-Europeans have since died.

A further eight of the imported cases were non-Europeans notified from the Mental Hospital, which is a Government Institution. Six have since died.

One European and one Bantu were notified from the local gaol.

Since the formation of the South African National Tuberculosis Association it has been gratifying to notice the increasing interest in tuberculosis, which is probably the biggest health problem facing South Africa to-day. Pretoria has not lacked behind and the Pretoria and District Anti-Tuberculosis Association, which is affiliated to the National Organization has been formed. This local association is enthusiastically guided by civic-minded citizens and officials of this Department.

NOTE.—This section on Tuberculosis should be read in conjunction with the report on the Special Diseases Clinic — Tuberculosis section.

SCARLET FEVER:

	Europeans.	*Non-Europeans.*
Local cases	215 (168)	1 (2)
Imported cases	10 (24)	0 (1)

The non-European case was a Malay adult.

An analysis of the notifications shows that there were:—

9 Cases in adults.
99 Cases in children of school-going age.
108 Cases in children under school-going age.

Seventy-one of the patients were removed to the isolation wards, ten to the Military Hospital at Voortrekkerhoogte and 135 were treated at home.

There were nineteen secondary cases and nine return cases.

DIPHTHERIA:

	Europeans.	*Non-Europeans.*
Local cases	48 (57)	17 (7)
Imported cases	37 (55)	27 (34)

There were two local deaths in European children (female seven and male two) who had never been immunised.

The non-European cases were: Two Eurafricans, seven Asiatics and eight Bantus.

Nine of the cases were adults.

Twenty-two were children of school-going age.

Thirty-four were children under school-going age.

Fifty-seven of the cases were removed to the Isolation wards, one to the Military Hospital at Voortrekkerhoogte and seven were treated at home. There were six secondary cases.

Fifty-two of the cases had never been immunised.

Thirteen had previously been immunised, but as only two of this group were inoculated by this Department it is impossible to be sure about whether the other eleven had really been immunised and if so whether it was correctly done. Parents so often bring children for the first injection, and then neglect to bring them for the subsequent ones.

SMALLPOX:

	Europeans.	*Non-Europeans.*
Local cases	7 (5)	13 (33)
Imported cases	0 (0)	13 (16)
Deaths in local cases	2 (2)	4 (12)
Deaths in imported cases	0 (0)	3 (3)

The cases reported during the year were the tail-end cases of the previous year's outbreak. The last case occurred during November, 1949.

There were three secondary cases — one European and two non-Europeans.

Two of the European cases were in the same family with onset of illness on the same day. Six Europeans and four non-Europeans had never been vaccinated. One European and nine non-Europeans were vaccinated in infancy. Some gave a history of having been re-vaccinated.

Deaths from Smallpox:

The two Europeans deaths were: One in an infant of nine months and the other in a child of four years. Both had never been vaccinated.

The four deaths in non-Europeans occured in an infant of nine months who had never been vaccinated and three adults who had only been vaccinated in childhood.

The usual precautionary measures were taken. All the patients were removed to the Government Isolation Hospital at Rietfontein, and the contacts were vaccinated and kept in quarantine. The necessary disinfections were carried out.

Imported Cases:

These thirteen non-European cases contracted the infection outside the city. They had either just moved into the Municipal area or had been visiting relatives outside the Municipal area where cases of smallpox had occurred.

They were all removed to Rietfontein. Three of them died.

POLIOMYELITIS:

	Europeans.	*Non-Europeans.*
Local cases	9 (3)	— (—)
Imported cases	5 (10)	— (4)

Local Cases:

Three had abortive attacks and five had mild attacks. Eight made a complete recovery, and one a mild attack with a slight residual paralysis.

MENINGOCOCCAL MENINGITIS:

	Europeans.	*Non-Europeans.*
Local cases	8 (3)	9 (—)
Imported cases	9 (10)	15 (4)

There were two deaths among the local cases, one European (female three), and one non-European (male twelve).

MALARIA:

	Europeans.	*Non-Europeans.*
Local cases	— (—)	— (—)
Imported cases	5 (5)	— (6)

No locally infected cases were reported. Of the imported cases, three Europeans were Pretoria residents who contracted the infection outside the Municipal area.

For comments on anti-malarial measures, see Section dealing with pest control.

The following is a list of the other infectious diseases notified during the year:—

	Europeans.		*Non-Europeans.*	
	Local.	*Imported.*	*Local.*	*Imported.*
Encephalitis	3	—	1	—
Undulant fever	1	1	—	—
Erysipelas	6	4	—	2
Trachoma	—	—	6	6
Gonorrhoeal Opthalmia	—	—	1	—
Opthalmia Neonatorum	—	—	2	—
Puerperal fever	—	1	—	2

HERCULES AREA.

TYPHOID FEVER:

	Europeans.	*Non-Europeans.*
Local cases	3	25
Imported cases	1	6
Deaths in local cases	0	0
Attack rate	0·2400	0·6234
Death rate	0	0

Local Cases:

Twenty cases were removed to hospital and two were treated at home. There were no deaths.

In two of the cases, one European and one native, the most likely source of infection was the water supply from shallow wells adjoining an irrigation furrow.

Distribution of Cases:

	Europeans.	*Non-Europeans.*
Native location area of Lady Selborne and Claremont	0	22
Private Native Compound	0	2
Daspoort Estate	1	1
Remainder of Hercules	2	0

As the above table shows, the majority of cases occurred in the native locations. Five cases, all in native children, occurred on the same premises. The first case was never notified to this Department. In the second case a wrong address was given on notification and the patient was only discovered when the other three cases were reported.

This area of Hercules was only incorporated into Pretoria one year ago, and as pointed out in last year's report, the inadequate supply of wholesome water for domestic use as well as the general insanitary conditions here are all favouring the spread of diseases particularly intestinal infections.

We have brought this to the notice of the Council and it is receiving urgent attention, but it will take many years before this area can be brought up the standards existing elsewhere in Pretoria.

Phage Typing:

The following types were found in Hercules area—

Type A	10
Type Ei	1
Untyped strains	2
No culture obtained	12
Typing not done	3

Tests Carried out for Possible Carrier State:

Only three persons were tested. Two natives gave a negative Vi test and one European was positive. Phage-typing in a native patient showed the strain to be Ei. As this is an uncommon strain of typhoid bacillus amongst natives, further investigation brought to light that her European employer had had typhoid fever 16 years ago. A blood test on the European was the positive mentioned above. Stool and urine examination of this suspect European carrier was however negative.

Imported Cases:

Six natives and one European normally resident in this area contracted their infection outside the Municipal area.

TUBERCULOSIS:

	Europeans.	*Non-Europeans.*
Local cases	5	74
Imported cases	0	24

The Various Forms in which the Disease Occurred:

	Pulmonary.	*Miliary.*	*Generalised.*	*Meningitic.*	*Total.*
Europeans	4	—	—	1	5
Non-Europeans	62	6	2	4	74
TOTAL	66	6	2	5	79

All the non-Europeans were resident in the location. Of the 79 local cases 39 died during the year, 35 (one European and thrity-four non-Europeans) died in Pretoria and four non-Europeans had left Pretoria and died elsewhere.

Twenty non-Europeans were only notified on death.

One European and fourteen non-Europeans died within three months and three non-Europeans within six months and one non-European within nine months of notification.

Thirteen of the non-Europeans gave a familial history.

How Notified:

By Lady Selborne Health Centre	26
By Tuberculosis and other Clinics	21
By Registrar of Births and Deaths returns	15
By private practitioners	9
By Pretoria Hospital and Isolation Wards	7
By other means	1
TOTAL	79

Sanatorium Treatment:

Two non-Europeans were sent to Rietfontein Tuberculosis Hospital.

Imported Cases: —

Twenty-four non-Europeans who took up residence at the Location area had contracted the disease prior to coming to live here. Eleven of these have since died.

SCARLET FEVER:

	Europeans.	*Non-Europeans.*
Local cases	12	0
Imported cases	1	0

Six of the cases were school going children and the other six were children of under school-going age.

Eleven of the patients were isolated at home, one was removed to the Isolation wards.

There was one secondary case.

DIPHTHERIA:

	Europeans.	*Non-Europeans.*
Local cases	10	22
Imported cases	1	0

Three of the non-European cases died (female 6 years old, female one year old, female 8 months old).

They had never been immunised.

The non-European cases (two Eurafricans and twenty Bantus) were all from the Location area.

Two of the cases were adults.

Seven were children of school-going age.

Twenty-three were children under school-going age.

The ten European cases were removed to the Isolation wards. Of the non-European cases fourteen were removed to the Isolation wards. There were two secondary cases. One a European and one a Bantu. Three of the Bantu cases occurred in the same house but in different families.

Twenty-seven had never been immunised.

Three Europeans and two Bantus gave a history of having been immunised, but this was very vague.

SMALLPOX:

	Europeans.	*Non-Europeans.*
Local cases	1	8
Imported cases	—	5
Deaths in local cases	—	3
Deaths in imported cases	—	2

The European case was an adult who had a mild modified attack. He was last vaccinated ten years ago.

The Non-European Cases:

One was an adult last vaccinated in infancy. The seven other cases were in children, four of whom had never been vaccinated and three gave a history of unsuccessful vaccination. Three of the cases were in the same family — two were secondary cases.

One case was secondary to an imported case.

Another two cases were in the same family with a simultaneous onset. Two other cases were mother and child. The onset was about the same time.

Deaths from Smallpox:

One was an adult last vaccinated in infancy. Two were children aged one and two years, who had never been vaccinated.

Imported Cases:

The five non-European cases contracted their infection outside the Municipal area. Two died. One was a child of 2½ years who had been unsuccessfully vaccinated a month before onset and the other an adult vaccinated in infancy only. Of the three cases who recovered, two had never been vaccinated. The third had a mild modified attack. It is not known whether he had ever been vaccinated.

POLIOMYELITIS:

	Europeans.	*Non-Europeans.*
Local cases	2	0

One was a very mild case and the other had a severe bulbar attack. Both made complete recoveries.

MENINGOCOCCAL MENINGITIS:

	Europeans.	*Non-Europeans.*
Local cases	1	13
Imported cases	0	0

There were two non-European deaths (male 8 and female 22).

MALARIA:

	Europeans.	*Non-Europeans.*
Local cases	—	—
Imported cases	1	2

The three imported cases were residents who had contracted the infection outside the Municipal area.

The following is a list of the other infectious diseases notified during the year:—

	Europeans.		*Non-Europeans.*	
	Local.	*Imported.*	*Local.*	*Imported.*
Leprosy	—	—	1	—
Erysipelas	2	—	—	—
Trachoma	—	—	2	—
Gonorrhoeal Ophthalmia	—	—	—	1
Ophthalmia Neonatorum	—	—	1	—
Puerperal fever	—	—	1	—

INFECTIOUS DISEASES HOSPITAL.

The Infectious Diseases Hospital, situated within the boundaries of the Pretoria General Hospital, is the property of the Pretoria City Council. It has a bed accommodation of 70 which can be increased to a little over a 100 in an emergency.

Of the 70 beds, 50 are in the two European sections and 20 in the non-European section. The total number of cases treated this year, both European and non-European, was 792. Reference to last year's figures (928) shows that admissions to hospital have decreased by 136. What would appear to be a matter for congratulation, however, is exactly the reverse, because in spite of fewer admissions the number of patients accommodated on any one day grossly exceeds the normal complement of 70.

The reason for this is the greater number of beds set aside for cases of pulmonary tuberculosis, the demand for which is steadily increasing. This demand is at present being met, but only at the expense of patients suffering from acute infectious diseases.

Tuberculosis patients may have to remain in hospital for periods varying from six months to two years or more. For this reason the turnover in beds is slow and a point of saturation will be reached where bed waiting lists will become necessary.

At present one entire European section comprising half of the total bed capacity is used for cases of pulmonary tuberculosis.

The accommodation of so many tuberculotics means that only major acute infectious diseases cases can be admitted to hospital while minor cases are only admitted when there is absolutely no alternative.

There are no wards for non-Europeans suffering from pulmonary tuberculosis. They are nursed on two covered stoeps adjacent to the typhoid wards.

This creates a serious problem to which the attention of the Union Health Department has been drawn.

INFECTIOUS DISEASES HOSPITAL STATISTICS.

Total Admissions:

792, of whom 513 were Europeans and 279 non-Europeans.
The area distribution was:—

Pretoria Municipality.		**Outside Areas.**	
Europeans.	*Non-Europeans.*	*Europeans.*	*Non-Europeans.*
375	155	138	124

PULMONARY TUBERCULOSIS:

83 Patients were admitted.

Of these 73 were Pretoria residents and 10 were living outside the Municipal area.

Pretoria.	*Other Areas.*
47 Europeans	9 Europeans
26 non-Europeans	1 non-European

Eight of the European and nine of the non-European patients died.

European case fatality rate, 17·8 per cent.

Non-European case fatality rate, 33 per cent.

Pneumothorax Refills:

These are given on two days a week at the Infectious Diseases Hospital or by appointment at times to suit the patients' convenience.

During the year 447 pneumothorax refills and 124 pneumoperitoneum refills were given—a total of 571 refills.

DIPHTHERIA:

160 Patients and four carriers were treated during the year. All the carrier cases were Europeans, three being resident in Pretoria.

Pretoria.	*Hercules and Lady Selborne.*	*Other Areas.*
66	29	69

Of the total of 164 cases 98 were Europeans and 66 non-Europeans, by far the greater number of non-Europeans came from outside the Municipal area.

Fourteen deaths occurred including two children from Pretoria. As happened last year there was a marked difference between the case fatality rate of local patients and those who came from outside, the reasons for deaths again being delay in obtaining medical advice and the long distances to be travelled before the patient reaches hospital.

Case Fatality Rate:

	%
Pretoria	2·1
Outside areas	17·3
All cases	8·5

TYPHOID FEVER:

The total number of cases treated was 137 together with two local typhoid carriers. Of the patients 33 were Europeans, none of whom died and 104 non-Europeans of whom 6 died.

Pretoria.	*Hercules and Lady Selborne.*	*Other Areas.*
32	29	76

There were no serious complications in the European group and only one patient suffered a relapse, but in the non-European group two bowel perforations occurred, necessitating operation. One of these patients recovered. Five patients entered hospital with pneumonia complications.

Of the six non-European deaths, four were due to severe toxaemia with resultant myocardial failure, one to perforation and one to concurrent pneumonia.

Of the whole group of cases some thirty Europeans and non-Europeans received Chloromycetin in standard dosage. All the patients so treated had normal temperatures in about 4 days time and were well enough to go home in about two weeks after commencement of treatment. There were no complications, no relapses and no deaths.

Case Fatality Rate:

	%
European	Nil
Non-European	5·7
Combined	4·3

SCARLET FEVER:

The total number of patients treated was 86 all of whom were European.

Pretoria.	*Hercules and Lady Selborne.*	*Other Areas.*
77	1	8

Twenty-four patients were between one and five years of age and thirty-nine between the ages of 5 and 10 years.

Complications: 1 otitis media, 1 acute nephritis and 1 lobar pneumonia.

There were no deaths.

MEASLES:

108 Cases were admitted and it is gratifying to be able to report that in spite of the fact that a number of the cases were complicated by pneumonia, no deaths occurred.

Pretoria.	*Hercules and Lady Selborne.*	*Other Areas.*
50 Europeans	14 Europeans	16 Europeans
15 Non-Europeans	2 Non-Europeans	11 Non-Europeans

Twelve patients were student nurses.

Complications: Bronco pneumonia, 10; acute mastoiditis, 1; acute retention of urine, 2.
Case Fatality Rate: Nil.

MENINGOCOCCAL MENINGITIS:

Far fewer cases were admitted during the year under review than last year.

1948–49	80 cases
1949–50	27 cases

Pretoria.	*Hercules and Lady Selborne.*	*Other Areas.*
5 Europeans	1 European	5 Europeans
5 non-Europeans	4 non-Europeans	7 non-Europeans

The eleven European patients included a child with meningococcal septicaemia and Waterhouse Friedrichson syndrome who recovered.

Two of the non-European patients died, one while being admitted and one forty minutes after admission.

Case Fatality Rate:

	%
Europeans	Nil
Non-Europeans	12·5
Combined	7·4

POLIOMYELITIS:

Only 14 cases were admitted, all of whom were Europeans.

Pretoria.	*Hercules.*	*Other Areas.*
9	2	3

One child of 11 years died of respiratory failure central in origin. The oldest patient was 16 years of age, the average age range being between five and ten years.

Of the thirteen patients who survived, eight recovered completely and five were transferred to the Orthopaedic Hospital.

Case Fatality Rate: 7·1 %.

GERMAN MEASLES:

Six local cases were admitted, three of whom were nurses and the other three hotel or hostel residents. There were no complications and no deaths.

WHOOPING COUGH:

Seventeen European and 3 non-European children were admitted. Of the twenty patients no less than thirteen were suffering from broncho-pneumonia on admission. Two of the patients died.

Pretoria.	*Hercules and Lady Selborne.*	*Other Areas.*
7	2	11

Most of the bronco-pneumonia cases were infants in arms.

Case Fatality Rate: 10%.

MUMPS:

Nine patients were admitted, all except one were Pretoria residents. Three were adolescent males who were admitted because of the complication of Orchitis.

There were no deaths.

ERYSIPELAS:

Thirteen European and 2 patients of mixed races were admitted. With one exception the face was attacked in all cases.

Pretoria.	*Hercules and Lady Selborne.*	*Other Areas.*
9	2	4

All but three of the patients were over 50 years of age. There were no deaths.

VENEREAL DISEASES:

Twentr-three cases needed admission, of whom two were natives.

Pretoria.	*Lady Selborne.*	*Other Areas.*
15	5	3

The types of venereal disease admitted were as follows:—

Syphilis	5
Gonorrhoea	5
Gonococcal Vulvo-vaginitis	10
Gonoccoccal Epididymo-orchitis	1
Gonococcal teno-synovitis	1
Reiters Syndrome	1
TOTAL	23

The cases of vulvo-vaginitis were new arrivals at orphanages and places of safety for children. They were discovered during the routine examinations which are carried out at all such institutions within the Municipal boundaries before new comers are allowed to mix with the other children.

CHICKEN-POX:

Ten Europeans and 15 non-Europeans were admitted.

Pretoria.	*Hercules and Lady Selborne.*	*Other Areas.*
15	4	6

There were no deaths.

SMALL-POX:

One European and four natives were transferred from Isolation Hospital to Rietfontein. Of these three were local and two were from outside areas.

ENCEPHALITIS:

Three cases, all from Pretoria were admitted. In one case the origin of the encephalitis could not be determined; the other two cases followed measles and mumps respectively.

The post-measles encephalitis patient died.

PUERPERAL SEPSIS:

One European from an outside area and one non-European from Lady Selborne, were admitted. Both recovered.

LESS COMMON DISEASES:

These included two cases of influenzal meningitis, bacterial poisoning 3, leprosy 2, malta fever 1 and trichomonas infection 1. Total, 9 cases.

OBSERVATION CASES:

Forty-nine cases admitted during the year were found not to be suffering from a disease necessitating admission to an Isolation Hospital. They consisted of:—

Acute Tonsillitis provisionally diagnosed as diphtheria	17
Broncho-pneumonia provisionally diagnosed as diphtheria	1
Acute Laryngitis provisionally diagnosed as diphtheria	1
Acute Enteritis provisionally diagnosed as typhoid	4
Influenza provisionally diagnosed as typhoid	4
Tick-bite fever provisionally diagnosed as typhoid	1
Chronic retinitis and Sinusitis provisionally diagnosed as typhoid	1
Lobar pneumonia provisionally diagnosed as typhoid	1
Prostatic hypertrophy provisionally diagnosed as typhoid	1
Acute Pyelitis provisionally diagnosed as typhoid	1
Influenza provisionally diagnosed as meningitis	3
Acute tonsillitis provisionally diagnosed as meningitis	3
Pyelocystitis provisionally diagnosed as meningitis	1
Cerebral-haemorrhage provisionally diagnosed as meningitis	1
Tetanus provisionally diagnosed as meningitis	1
Tonsillitis provisionally diagnosed as poliomyelitis	1
Influenza provisionally diagnosed as poliomyelitis	1
Infective hepatitis provisionally diagnosed as poliomyelitis	1
Lobar pneumonia provisionally diagnosed as poliomyelitis	1
Acute tonsillitis provisionally diagnosed as scarlet fever	1

Broncho-pneumonia provisionally diagnosed as scarlet fever	1
Asthma provisionally diagnosed as pulmonary tuberculosis	1
Silicosis provisionally diagnosed as pulmonary tuberculosis	1
Onyalai provisionally diagnosed as measles	1
Tonsillitis provisionally diagnosed as encephalitis	1
TOTAL	49

TABLE "A".

The work done during the year is summarised in the following tables:—

Type of Disease.	*Europeans.*		*Non-Europeans.*	
	Local.	*Imported.*	*Local.*	*Imported.*
Scarlet fever	78	8	0	0
Diphtheria	61	37	34	32
Typhoid fever	14	19	47	57
Pulmonary tuberculosis	47	9	26	1
Measles	64	16	17	11
Meningococcal meningitis	6	5	9	7
Acute anterior poliomyelitis	11	3	0	0
Erysipleas	10	3	1	1
Chicken-pox	10	0	9	6
Encephalitis	3	0	0	0
Mumps	8	1	0	0
Whooping cough	8	9	1	2
German measles	6	0	0	0
Small-pox	1	0	2	2
Puerperal sepsis	0	1	1	0
Venereal diseases	18	3	2	0
Unusual cases	3	6	0	0
Non-infectious cases	26	17	3	3
Lodgers	1	1	3	2
TOTALS	375	138	155	124

TABLE "B".

Type of Disease.	*Pretoria Municipal Area.*	*All Other Cases.*	*Total.*	*Deaths.*
Scarlet fever	78	8	86	0
Diphtheria	95	69	164	14
Typhoid fever	61	76	137	6
Pulmonary tuberculosis	73	10	83	17
Measles	81	27	108	0
Meningococcal meningitis	15	12	27	2
Acute anterior poliomyelitis	11	3	14	1
Erysipelas	11	4	15	0
Chicken-pox	19	6	25	0
Encephalitis	3	0	3	1
Mumps	8	1	9	0
Whooping cough	9	11	20	2
German measles	6	0	6	0
Small-pox	3	2	5	0
Puerperal sepsis	1	1	2	0
Venereal diseases	20	3	23	0
Unusual cases	3	6	9	0
Non-infectious cases	29	20	49	2
Lodgers	4	3	7	0
TOTALS	530	262	792	45

Totals cases treated (excluding lodgers)	785
Total deaths	45
Mortality rate	5·7%

INSPECTION OF NURSING HOMES AND HOSPITALS.

All nursing homes and hospitals other than the Pretoria General Hospital were inspected by the Municipal Health Department on behalf of the Secretary for Health. A detailed report regarding these institutions was submitted to the Secretary for Health.

All these establishments were generally satisfactory. No further nursing homes have been established during the year. There are two hospitals, four nursing homes and one convalescent home in the city.

One hospital (85 beds) and two nursing homes (35 and 9 beds respectively) are purely for maternity cases. There is still an absolute deficiency of maternity beds especially is this the case for the non-Europeans, among whom confinements are often conducted under deplorable conditions in overcrowded homes.

For non-Europeans there are twelve beds in the maternity section of the Pretoria General Hospital.

Arrangements have been made with the Holy Cross Nursing Home, Hercules, to undertake confinements of domestic servants and other native women residing in the Pretoria Municipal area. The City Council pays the Holy Cross Nursing Home a fixed grant for these services.

Those in charge of the hospitals and homes have been most co-operative and have as during previous years readily brought about such changes and improvements as were found necessary.

CHILD WELFARE ACTIVITIES.

The staff consists of one full-time medical officer and three physicians giving part-time service, 15 European health visitors and 11 non-European nurses.

With the incorporation of Hercules the work has increased considerably. It has brought with it many pressing problems chiefly of a social and economic nature. Many of the basic principles of health have to be taught laboriously and it requires much understanding, patience and time.

The scope of this section is not meeting the demands or needs of the public. Due to staff shortages, especially medical, the number of cases which can be seen by the doctor at some of the clinics has to be strictly limited and the time given to each consultation is often far too brief.

An increasing number of mothers is seeking advice on behaviour problems, as they are becoming more aware of the significance of minor behaviour deviations in their children or because this type of problem is actually on the increase. The latter is probably the real reason, and it is partly due to the increased urbanization and complexity of modern society, which is by no means a healthy atmosphere for a child. We must therefor face the fact that in the near future the facilities will have to be expanded both in scope and in the type of services offered.

Much more group educational work is also a necessity but again facilities are lacking because of limited space and shortage of staff at the clinics. A start with this type of work will be made at Hercules in the near future.

We are still working in close co-operation with the Pretoria Branch of the Child Welfare Society because so many of our families present serious socio-economic problems. The need of a full-time social worker is very urgent.

EUROPEAN CHILD WELFARE.

The number of Child Welfare Clinics in Pretoria inclusive of Hercules is now 28.

At 11 of these a doctor is always available for consultation. A special clinic session is held once a week where patients can be referred to clinics where a doctor is not attending regularly. As can be seen from the clinic returns there is a steady increase in the work.

Some of the clinic premises are far from satisfactory, there has been an appreciable improvement over the last few years.

At 24th Avenue, Villieria, we now have the use of a church hall, two small rooms and a kitchen.

ATTENDANCES AT CLINICS.

	First Attendances.	*Re-Attendances.*	*Total Attendances.*	*Seen by Doctor.*
1948–49	1,311	14,972	16,283	804
1949–50	1,817	20,740	22,557	1,834

DETAILED ATTENDANCES.

	First Attendances.		Re-Attendances.		Total Attendances.		Seen by Doctor.	
	1949–50.	1948–49.	1949–50.	1948–49.	1949–50.	1948–49.	1949–50.	1948–49.
Central (Tuesday)	69	67	651	641	720	708	369	306
Central (Wednesday)	46	23	561	226	607	249	85	8
Central (Friday)	63	64	727	582	790	646	214	37
Bloed Street	72	49	585	753	657	802	—	—
West End	131	98	1,230	1,080	1,361	1,178	124	—
Proclamation Hill	42	24	498	455	540	479	48	22
Iscor	45	33	512	577	557	610	—	—
Gezina	71	94	1,013	998	1,084	1,092	69	80
Villiera, 24th Avenue	106	114	841	937	947	1,051	117	94
Villieria, 30th Avenue	91	—	616	—	707	—	—	—
Wonderboom South	87	54	984	720	1,071	774	73	2
Mayville	88	109	755	656	843	765	4	55
Capital Park	83	81	877	688	960	769	—	—
Hatfield	68	90	884	881	952	971	—	—
New Muckleneuk	97	45	1,070	499	1,167	544	—	—
Sunnyside	134	116	1,029	1,275	1,163	1,391	—	—
Riviera	37	41	586	594	623	635	42	—
Salvokop	70	27	486	456	556	483	—	—
Danville	27	61	718	1,003	745	1,064	152	113
Defence Reserve	27	10	327	289	354	299	—	—
Armstrong Berning	29	30	399	681	428	711	65	59
Corrylyn Creche	24	2	133	151	157	153	48	13
Arcadia	34	57	623	577	657	634	—	—
Beatrix Street	13	—	206	—	219	—	—	—
Showgrounds	8	22	235	253	243	275	—	5
Hercules	156	—	3,021	—	3,177	—	424	—
Booysens	53	—	553	—	606	—	—	—
Mountain View	46	—	620	—	666	—	—	—
TOTAL	1,817	1,311	20,740	14,972	22,559	16,283	1,834	804

HOME VISITS BY HEALTH VISITORS.

	First Visits.	Subsequent Visits.	Number of Sick Children Visited.	Total Visits.
1948–49	2,757	5,089	2,317	10,161
1949–50	3,209	7,439	2,641	13,484

EUROPEAN ANTE-NATAL CLINICS.

	Central.		Proclamation Hill.		Danville.		Hercules.		Total.	
	1949–50.	1948–49.	1949–50.	1948–49.	1949–50.	1948–49.	1949–50.	1948–49.	1949–50.	1948–49.
No. of new cases	274	246	8	10	62	47	145	—	489	303
Total attendances	1,196	1,075	41	94	308	269	466	—	2,011	1,438

The Ante-Natal Clinic at Proclamation Hill was closed down because of the small numbers attending. The attendance at the Central Clinic is very good and the only regret is that lack of space prevents giving better service. The exercise class is conducted in the physicians office and there are no facilities for showing much needed educational films.

Routine Rh. factor testing of the blood of all pregnant women has been done during the past year. Although a fair number of Rh. negative wives have been found with Rh. positive husbands we have had no single case where atypical anti-bodies have developed.

The co-operation with the private midwives whose patients we see at the Ante-Natal clinic has been most satisfactory.

I also wish to comment on our very pleasant relationship with the Moedersbond Hospital where most of our free or partial free patients go for confinements.

EUROPEAN IMMUNIZATION CLINICS.

One immunization clinic per week is conducted at the Health Department clinic. In addition injections are given at the ordinary Child Welfare clinics at the following centres: Riviera, Villieria, Proclamation Hill, Danville, Hercules, Kleinspan, Armstrong Berning and Corrylyn Creche.

Injections were given at New Muckleneuk school during the year, 101 children were immunized against Diphtheria.

CLINIC RETURNS.

No. of cases immunized against Diphtheria	1,636
No. of cases immunized against Whooping Cough	1,077

It seems as though the publicity given in the lay press to the possible association between Poliomyelitis and immunization has affected the attendance very much during the last three months.

MIDWIFERY SUPERVISION.

There are 28 qualified and 3 unqualified European midwives on the register and 5 qualified and 2 unqualified non-Europeans.

During the course of the year it became necessary to remove the name of one unqualified non-European midwife from the register. Due to old age and infirmity she was no longer able to perform her duties in a satisfactory way.

The routine inspections of maternity bags were carried out three monthly.

The inspections of maternity homes were done regularly and also whenever for a special reason it seemed desirable.

No. of midwifery bags inspected	156
Special visits to midwives	67
Visits to midwifery cases	24
Visits to maternity homes	43

At the request of the Union Department of Health the inspectors of midwives of this Department accompanied them on several visits outside the Municipal area. In this way 16 visits were paid to midwives, 16 bags were inspected and 2 midwifery cases were specially visited.

NON-EUROPEAN CHILD WELFARE.

There has been no increase in staff during the past two years and the work has not expanded. There are now very few native residents at Marabastad as most of them have been transferred to Atteridgeville. A large proportion of the natives attending at the Compound came from the Peri-Urban areas.

The non-European work remains difficult and to some extent unsatisfactory. The migratory habits of the natives make proper health supervision and control impossible. Children are often "taken to the Farms" for prolonged periods and are not brought back to the clinics until they are seriously ill or malnourished, and often when it is too late. Very often mothers come to the locations as visitors from the farms to seek medical aid for their children. These are usually acutely ill children who often die in the urban area and increase our Infantile Mortality Rates.

The Infantile Mortality in Atteridgeville and Marabastad seems to be unduly high. Whether this is real or apparent is not quite clear because native statistics are so unreliable. The matter is however being throughly investigated.

ATTENDANCES AT CLINICS.

	Natives.	*Compound, Eurafricans.*	*Asiatics.*	*Atteridge-ville.*	*Bantule.*	*Railway Compound.*
First attendances—						
1949–50	620	151	110	315	182	17
1948–49	385	116	100	321	231	10
Re-attendances—						
1949–50	2,513	2,473	1,509	6,648	5,331	381
1948–49	2,721	2,423	1,862	6,206	6,108	441
Seen by Doctor—						
1949–50	417	399	275	1,952	571	—
1948–49	287	321	195	1,800	498	—

HOME VISITS.

	Natives.	*Asiatics.*	*Eurafricans.*
First visits to newly born infants—			
1949–50	774	245	91
1948–49	760	241	105
Subsequent visits—			
1949–50	9,378	2,112	1,382
1948–49	8,358	1,619	719
Visits to sick children—			
1949–50	818	69	52
1948–49	656	76	76
No. of sick children visited—			
1949–50	479	38	31
1948–49	356	63	54

NON-EUROPEAN ANTE-NATAL CLINICS.

	Natives.		*Compound, Eurafricans and Asiatics.*		*Atteridgeville.*		*Bantule.*		*Total.*	
	1948–49.	1949–50.	1948–49.	1949–50.	1948–49.	1949–50.	1948–49.	1949–50.	1948–49.	1949–50.
No. of cases reporting at Clinic	490	624	67	120	353	385	232	185	1,142	1,314
No. of all attendances	2,222	2,775	398	739	1,626	1,816	1,333	934	5,579	6,264

Four non-European Ante-Natal Clinics are being conducted. One at Bantule, one at Atteridgeville and two at the Compound one for natives and one for Coloureds and Asiatics.

There is a steady increase in attendance at nearly all the clinics. Venereal Disease treatment of pregnant women is done at the Ante-Natal Clinic to save the trouble of attending an additional clinic. They attend fairly regularly.

The number of native patients making use of trained help at their confinements shows a gratifying increase. This is especially true at Atteridgeville where 83 per cent. of all deliveries which came to our notice were conducted by trained personnel. The available help consists of the four midwives on our staff, the Little Flower Mission Hospital, and for primipara or complicated cases, the General Hospital. We have come to an arrangement with the General Hospital whereby they send the cases home on the 2nd or 3rd day if the delivery was uncomplicated and we undertake the after-care. A scheme of this nature has great possibilities where there is a shortage of hospital accommodation.

NON-EUROPEAN IMMUNIZATION.

Immunization facilities are available at all the non-European Child Welfare Clinics. The figures are however low because the natives, especially, are not keen.

CLINIC RETURNS.

No. of cases immunized against Diphtheria	282
No. of cases immunized against Whooping Cough	277

FEEDING SCHEMES.

The Infant Feeding Scheme at Bantule cannot cope with the demand. Because lack of facilities has hampered the expansion very much the Native and Asiatic Affairs Department has offered to build a small kitchen next to the shelter where the food is issued. This will be a very great help. For 2½d. these children receive more than half of their daily requirements of the essential nutrients.

The school feeding scheme has gone through a very difficult year. The Department of Native Education reduced the grant per child from 2d. to 1·2d. and only children under 14 years may partake. It is obvious that with increased cost of food there will be still further malnutrition amongst this already badly fed group.

NURSERY SCHOOLS.

Six nursery schools were regularly visited by health visitors, and three of these as well as one creche, are regularly visited by a medical officer.

DENTAL SERVICES.

The Pretoria Dental Clinic has expanded its services. They now give dental attention to expectant mothers and pre-school children. Patients referred to them from our clinics get free attention. This fills a very urgent need.

Negotiations with various public bodies for better clinic premises have broken down due to economies which had to be brought about by the Council and the Central Government.

Talks Given during the Year:

1. Importance of Healthy Maternal Child Relationship.
2. The Basic Needs of the Child.
3. Die Fondamentele Behoeftes van die Kind.
4. Modern Trends in Medical-social Work.

PRETORIA DENTAL CLINIC.

The Pretoria Dental Clinic is controlled by a Board, the members of which represent the Transvaal Provincial Administration, the City Council of Pretoria, the Northern Transvaal Branch of the Dental Association of South Africa and the Union Department of Health.

It is financed by grants-in-aid received from the Transvaal Provincial Administration, the City Council of Pretoria and the Union Department of Health.

During the period under review amendments were made to the Constitution to provide for representation on the Board of Control of the Union Department of Health, a new subscriber to the clinic funds since March, 1949. From July, 1949, until February, 1950, when the amended Constitution was ratified by all Contributing Bodies the representatives of the above-mentioned Department, Mr. Reeler and Dr. Ockerse, attended Board Meetings as guests of the Board in an assisting and advisory capacity.

HONORARY VISITING DENTAL SURGEONS: PART-TIME ASSISTANT DENTAL SURGEONS.

The members of these staffs have again rendered valuable services for indigent adults. On the whole the appointments were well kept.

STATISTICAL RECORDS.

School Children:

No. of schools at which examinations were conducted	38
No. attending schools	20,841
No. examined	19,241
No. examined requiring treatment	13,893
No. of indigents	11,764
No. of indigents requiring treatment	9,092
No. of indigents requiring no treatment	2,672

Sub-Clinics:

No. of schools at which Sub-clinics were held	19
No. of children treated	1,437
No. of teeth extracted	2,103

Morning Clinics:

No. of clinics held	34
No. of children treated	8,168
No. of teeth extracted	1,664

Meerhof Chronic Sick Home:

No. of visits	5
No. of children treated	69
No. of teeth extracted	29
No. of teeth filled	38

FIVE-YEAR PERIOD: COMPARATIVE TABLE.

No. of children examined	17,193	11,911	18,278	18,253	19,241
No. of new patients treated	4,215	3,055	4,671	5,275	10,983
No. of re-visits	—	2,769	8,055	5,371	6,733
No. discharged — treatment completed	1,211	292	788	1,179	1,810
No. of fillings done	5,347	2,044	7,903	6,382	11,970
No. of teeth extracted	5,673	3,343	7,315	6,360	10,885
No. root therapy and prophylaxis	—	—	—	482	604
No. casuals treated—work completed	—	—	976	497	670
No. total operations—children	15,499	7,235	20,169	17,814	29,084
No. total operations—all departments	26,210	18,904	32,494	27,155	42,278

These figures show that the number of children requiring treatment is steadily increasing every year—only a fraction of those requiring conservative treatment have been able to receive any treatment at all and a very substantial increase in full-time operators is indicated.

DENTAL INSPECTION AT SCHOOLS.

Owing to the alteration made in the Clinic's financial year an additional five months have been brought into review in this report. During this period most of the schools received two visits and additional morning and sub-clinics have been held. There are now fifty-two primary, junior high and high schools on the clinic register. Unfortunately, owing to staff difficulties it has been impossible to arrange for inspections of nursery schools for some time. It is hoped that this will soon be remedied.

THE MOBILE DENTAL UNIT.

The Mobile Unit has been used at Sub-clinics (extraction services) at the schools during the mornings, making thirty-six trips in all. When possible it has been used for conservative clinics at the more distant schools. Unfortunately the latter services have been interrupted for long periods at a stretch when the Unit has been in the workshops undergoing repairs. The existing Unit is most useful for extraction services at the outlying schools, but the electrical system, essential for conservative treatment, has been causing endless trouble. Although repaired and overhauled at frequent intervals, it has been the cause of the latter clinics being, at best, interrupted services — wasting valuable time of operators, nurses and the drivers of the vehicles as breakdowns invariably occur while operations are in progress at the schools.

The solution appears to be the supply of more and new units for conservative work or the provision of facilities for this service at the schools themselves.

The Unit visited Meerhof Chronic Sick Home on five occasions and ninety-four trips were taken to schools for conservative treatment, when 1,184 children received treatment, 871 teeth were filled and 519 teeth were extracted. The results of the Sub-clinic and Meerhof visits appear under "Statistical Records" and are not included in these figures.

PRE-SCHOOL CHILDREN.

Shortage in operating staff has been the main cause of the Clinic's inability to provide a limited amount of conservative treatment for this group. Extraction services have been provided on a fairly large scale.

The Board has now made provision for additional operating staff and this group will receive special attention in the very near future.

NON-EUROPEAN DEPARTMENT.

The existing clinics for emergency treatments are very well attended. There was a slight increase in the number of attendances and a fair increase in the number of teeth extracted.

ORTHODONTIC SERVICE.

Drs. Fouche and Allen are still running this Department. The demand for this service is increasing rather rapidly. Seventy-nine appliances were completed for school children during the period under review.

SPECIAL DISEASES CLINICS.

TUBERCULOSIS SECTION:

Five Tuberculosis clinics were conducted weekly. The clinics for Europeans are held at the Municipal Clinic situated in the Pretoria Hospital grounds. The non-European clinics are held at the following centres:—

(*a*) **Tuesdays**: 2–4 p.m. . . . . At the Municipal Clinic, situated within the Pretoria General Hospital grounds.

(*b*) **Wednesdays**: 2–4 p.m. . . . . } In an adapted building situated in the Atteridgeville Location.
Fridays: 11 a.m.–1 p.m. . . . . }

(*c*) **Thursdays**: 2–4 p.m. . . . . In a section of the Administration building in Bantule Location.

It will be noted from the accompanying table that there is a slight decrease in the number of notifications among Europeans as compared with the previous year. Among non-Europeans the number of notifications has markedly increased. This does not necessarily mean an increase in the incidence of the disease. It is largely due to earlier diagnosis.

The patients have become keener to attend the clinics and the general practitioners are more alive to the Tuberculosis problem.

The method of case finding has improved, especially so in the Lady Selborne Location where the doctors in charge of the Government Health Centre attend to persons seeking medical advice daily.

The majority of the non-European cases notified are from the Lady Selborne Location where there is overcrowing and bad health conditions generally.

A number of cases was notified through Private Medical Practitioners, the Out-Patient Department Pretoria Hospital, and the non-European Influx Control Section of the Municipality.

The majority of native cases are in an advanced stage of the disease before they seek medical advice. So many of them are afraid that if labelled as suffering from Tuberculosis they will probably lose their work and will stand little chance of getting new employment.

A great deal of good preventive work was done during the year. In many instances we were able to improve conditions at the homes of patients, apart from treating the disease.

Every case notified was carefully investigated. All cases who were not in need of Sanatorium Treatment or who could not be admitted were visited regularly at their homes by the Tuberculosis Health Visitor. Printed instructions were issued to patients regarding the nature of the disease and methods of prevention.

Sputum and X-ray examinations of all cases, and where necessary of all contacts, were done at regular intervals. All suspicious cases were kept under constant and careful supervision.

In regard to the investigation of work contacts, employees have co-operated willingly in allowing their employees to attend the clinics.

Free conveyance to the clinics was provided for poorer patients from the outlying areas of the city and from the surrounding areas.

Where persons suffering from the disease in an infectious form could receive no further benefit from Sanatorium treatment, or where the homes were overcrowded and conditions unsuitable, portable Tuberculosis huts were supplied wherever possible. These huts are collapsible and can be erected in the yard.

Essential foodstuffs, such as milk, meat, butter, vegetables, meal, clothing and blankets were given free of charge wherever possible. A great deal more could be done in this direction, but our funds are very limited.

Financial assistance was obtained through the Government's scheme for all indigent persons suffering from Tuberculosis, especially where the patient is the bread-winner.

A branch of the South African National Tuberculosis Association named "The Pretoria and District Anti-Tuberculosis Association" has been formed in the City. The objects of the Association are to help in the prevention, treatment, care of Tuberculosis sufferers and their families, the administration of state and other grants, and the establishment of after-care services.

RETURN OF TUBERCULOSIS PATIENTS FOR THE YEAR JULY, 1949, TO JUNE, 1950.

	European.		*Non-European.*		*Total.*	
	1949–50.	1948–49.	1949–50.	1948–49.	1949–50.	1948–49.
Number of new cases coming under treatment during the year	31	38	154	126	185	164
Total number of attendances	706	602	2,425	1,768	3,131	2,370
Number of home visits paid by Health Visitors ..	3,748	3,641	8,245	6,555	11,193	10,196

VENEREAL DISEASES SERVICES.

Staff:

A specialist venereologist is in charge and has a staff of one full-time and one part-time sister, a clinic clerk, a clinic orderly, a non-European female nurse and three non-European male orderlies. Assistant Medical Officers help at the non-European clinics.

Accommodation:

(*a*) **Central Clinics:** These are held in the Special Diseases Clinic building situated in the grounds of the General Hospital.

(*b*) **Atteridgeville Clinic:** Until such time as the Poly-clinic is ready, this continues to be held in a small cottage on the outskirts of the village.

(*c*) **Bantule Clinic:** This is held in a section of the administration buildings in Bantule.

Clinic Hours:

Mondays: 11 a.m. to 1 p.m. and 2 to 4.30 p.m. — non-European mixed.
Tuesdays: 8.30 to 10 a.m. — European males. 11 a.m. to 12.30 p.m. — non-European mixed (Bantule). 2 to 4.30 p.m. — European females and children.
Wednesdays: 9 to 10 a.m. — European females and children. 4.15 to 7 p.m. — non-European males.
Thursdays: 10.30 a.m. to 1 p.m. — non-European mixed (Atteridgeville). 2 to 4.30 p.m.— non-European mixed. 4.45 to 5.30 p.m. — European females.
Fridays: 9 to 10 a.m. — Consultations. 5 to 6.30 p.m. — European males.

The hours are staggered so as to cater for shift-workers.

Private patients are given free consultations at the request of their doctors.

Lady Selborne:

In view of the fact that the Government Health Centre at Lady Selborne gives all-week facilities for Venereal Disease treatment, it was felt that there would be considerable overlapping and unnecessary expenditure if the Municipal Clinic was to continue. Discussions were therefore initiated with the Union Health authorities, and it was decided to close the Municipal Clinic down. The Municipal Venereologist was requested to act as consultant at the Health Centre, and he attends that Centre every Friday morning from 11 a.m. to 12.30 p.m.

Non-European Services:

Attendances remain good. It will be seen that there has been an increase both in the numbers of new patients examined and in the total attendances. More citizens are availing themselves of the facilities offered for the routine examination of their non-European servants.

The position of Venereal Diseases among the natives living in the peri-urban areas around Pretoria remains as bad as ever. It is understood that the Peri-Urban Health Authorities intend arranging for clinic facilities at some future date. This subject concerns us because these peri-urban locations form the reservoir from which we draw so many of our domestic and industrial helps.

In last year's Report we drew attention to the fact that an analysis of our statistics showed that the percentage of new cases reporting with early acquired lesions was much lower in the Atteridgeville and Bantule patients than in those attending the Central Clinics. From this we reduced that there was more promiscuity and thus more infectious Venereal Diseases in the town natives than those living normal family lives in the municipal locations.

The figures for the year have been analysed as follows:—

New Cases.	*Atteridgeville Location.*		*Bantule Location.*		*Central Clinics.*	
Early infectious Syphilis	34	(24·6%)	10	(22·2%)	848	(36%)
Gonorrhoea	7	(5%)	2	(4·4%)	628	(26·6%)
Late and Congenital Syphilis	97	(70·4%)	33	(73·4%)	880	(37·4%)

These figures show a similar trend to those of last year and emphasise the importance of satisfactory housing and normal family life as a major factor in reducing the incidence of Venereal Diseases.

A factor of interest is the large number of natives attending our clinics with so-called non-specific urethritis found to be attributable to bilharzhia. We feel that attention should be drawn to this as it is often overlooked.

European Services:

There was a slight increase both in the number of new cases presenting themselves for examination and in the total attendances.

Routine Examination for Venereal Diseases Amongst Inmates of Institutions:

It has been our policy in keeping with the stress we lay on preventive health measures, to recommend that all new admissions to institutions should be examined for Venereal Disease. The institutions which have co-operated by sending all new inmates for check-up fall into two categories:—

(1) Orphanages and Places of Safety (under the control of the Child Welfare Society) in which children of both sexes up to the age of 16 are accepted.
(2) Hostels for delinquent girls and unmarried mothers from the age of 13 upwards.

The figures given below are the results of an analysis of new cases seen during the period under review and should be studied in conjunction with the analysis shown in last year's report. Cases reported as positive syphilis either have definite clinical signs or stigmata of congenital syphilis or have had two or more positive serological tests for syphilis. Cases reported as having gonorrhoea are diagnosed on smears alone, as no facilities are available for making cultures. In children the smear was vaginal and in adults they were taken from the cervix and urethra.

GROUP I: Children from Orphanages and Places of Safety (Europeans only).

	Syphilis.	*Gonorrhoea.*	*Negative.*	*Total Cases Seen.*
Males	11 (10·5%)	—	93 (89·5%)	104
Females	10 (21·7%)	5 (10·5%) (Vulvovaginitis)	32 (67·5%)	46 (one child had a double infection).
TOTAL	21 (14%)	5 (3·3%)	125 (82·7%)	150

GROUP II: Delinquent Older Girls and Unmarried Mothers (Europeans only).

	Syphilis.	*Gonorrhoea.*	*Negative.*	*Total Cases Seen.*
Females	8 (10·1%)	6 (7·6%)	66 (82·3%)	79 (one girl had a double infection).

These figures once again show the importance of such examinations.

	Atteridgeville. Non-European.		Bantule. Non-European.		Central Clinics. Non-European.		Totals. Non-European.			Central Clinics. European.		
	M.	F.	M.	F.	M.	F.	M.	F.	Total.	M.	F.	Total.
No. of new cases	56 (39)	150 (129)	10 (13)	55 (75)	2,114 (1,999)	982 (993)	2,180 (2,051)	1,187 (1,197)	3,367 (3,248)	170 (116)	302 (309)	472 (425)
Total number of attendances	877 (688)	2,385 (2,434)	173 (276)	1,288 (1,121)	19,517 (15,761)	11,068 (10,319)	20,567 (16,725)	14,741 (13,874)	35,308 (30,599)	1,162 (1,137)	2,198 (2,047)	3,360 (3,184)
Numbers discharged as "cured"	9 (12)	43 (37)	5 (5)	29 (4)	515 (266)	142 (122)	529 (283)	214 (163)	743 (446)	40 (52)	35 (79)	75 (131)
Numbers discharged as "defaulters — unable to trace	13 (9)	30 (31)	12 (11)	42 (30)	784 (462)	460 (271)	809 (482)	532 (332)	1,341 (814)	22 (29)	16 (12)	38 (41)
Numbers of "Resident Magistrate" warnings and "Note A's" sent to irregular attenders	128 (197)	528 (504)	43 (20)	112 (52)	1,288 (589)	767 (407)	1,459 (806)	1,407 (963)	2,866 (1,769)	97 (64)	48 (28)	145 (92)
Numbers of visits paid by clinic staff to defaulters and contacts	149 (267)	700 (677)	43 (43)	117 (103)	1,237 (849)	926 (599)	1,429 (1,159)	1,743 (1,379)	3,172 (2,538)	131 (135)	235 (153)	366 (288)

ANALYSIS OF NEW CASES.

	M.	F.	M.	F.	M.	F.	M.	F.	Total.	M.	F.	Total.
Primary and Secondary Syphilis	17 (11)	17 (16)	1 (2)	9 (9)	554 (611)	294 (271)	572 (624)	320 (296)	892 (920)	9 (11)	4 (9)	13 (20)
Congenital Syphilis	17 (10)	29 (24)	3 (4)	10 (18)	44 (49)	147 (141)	64 (63)	186 (183)	250 (246)	3 (2)	18 (17)	21 (19)
Late and Latent Syphilis	12 (16)	85 (74)	4 (5)	29 (40)	505 (398)	375 (379)	521 (419)	489 (493)	1,010 (912)	8 (13)	11 (14)	19 (27)
Gonorrhoea	3 (1)	4 (1)	— (—)	2 (1)	598 (538)	30 (26)	601 (538)	36 (28)	637 (567)	52 (37)	18 (29)	70 (66)
Others	7 (1)	15 (10)	2 (2)	5 (7)	413 (263)	136 (128)	422 (266)	156 (145)	578 (411)	98 (53)	251 (240)	349 (293)
Totals	56 (39)	150 (125)	10 (13)	55 (75)	2,114 (1,859)	982 (945)	2,180 (1,911)	1,187 (1,145)	3,367 (3,056)	170 (116)	302 (309)	472 (425)

REPORT BY THE CHAIRMAN OF THE PRETORIA NURSERY SCHOOL SOCIETY FOR THE YEAR 1949–50.

It is encouraging to report that the Nursery School Movement is making steady progress in Pretoria. In addition to the increase of school population, better teaching facilities and more substantial financial support by sympathetic bodies and individuals, there is definitely a greater moral support and the old prejudices have in great measure been broken down.

I. NUMBER OF SCHOOLS AND PUPILS.

The following is a list of the Nursery Schools in Pretoria showing the number of children enrolled and the bodies responsible for running the schools:—

European:

	No. of Children.	*Responsible Body.*
1. Good Hope	30	West End Nursery Schools Board.
2. West End	45	West End Nursery Schools Board.
3. Riviera–Rietondale	36	Parents' Association.
4. Eastern Suburbs	85	Eastern Suburbs Nursery School Board.
5. Eudora Hauptfleisch	45	S.A. Vroue Federasie.
6. Saamstaan	24	S.A. Vroue Federasie.
7. Sunnyside	45	Parents Association.
8. Rachel Spero	33	Rachel Spero Nursery Schools Board.
9. Hendrik Potgieter, Capital Park	24	Hervormde Kerk.
	367	

Non-European:

Aga Khan	35	H.R.H. The Aga Khan's Provincial Education Board.

Of these, the first six receive municipal grants-in-aid of varying amounts. The European schools in the list receive a per capita subsidy of £10 per year and the Indian School £8 per year from the Provincial Administration. This is a recognition that they have been accepted as complying with Nursery School standards as regards accommodation, equipment, staffing and programmes as drawn up by the Nursery School Association of South Africa.

Institutions catering for residential pre-school children in Pretoria are being subsidised by the Social Welfare Department.

II. THE PERSONNEL.

All the principals of nursery schools are fully qualified teachers. There are 19 qualified, 3 partly qualified and 4 unqualified European teachers and also two unqualified Indian teachers employed in nursery schools.

III. SCHOOL FEES.

Fees range from 10s. to £6 per child per term.

IV. SPECIAL EFFORTS.

All nursery schools are obliged to make special efforts to supplement their meagre funds. The enthusiasm with which additional sums are collected deserves special mention and praise.

V. SERVICES OF THE NURSERY SCHOOLS.

Through the Nursery School the children are privileged, for they receive individual attention by professional people who render free services regularly to the institutions.

1. Public Health:

All Nursery Schools have the personal services of at least one medical officer. The municipal medical staff and the senior nurse are also in attendance when required. Through regular dental inspection children are referred to the Dental Clinic or their own dentists.

2. Psychological Services:

The Nursery School teachers are trained in child growth and development. Children who show signs of retardation, maladjustment or mental and emotional defects are sent to the Child Guidance Clinic for diagnosis and treatment.

3. Home and School Co-operation:

Since the nursery school is a continuation of the experiences of the home, the co-operation between parents and teachers is absolutely essential. Through regular visits, discussions and meetings parents and teachers are kept in touch with the development of the children at home and in school.

4. Special Services:

(*a*) Six of the Nursery Schools — Good Hope, West End, Eastern Suburbs, Eudora Hauptfleisch, Hendrik Potgieter and the Aga Khan School — provide a hot midday meal and afternoon sleep as part of the daily programme. The other nursery schools run in the mornings only and serve a light mid-morning lunch of fruit or milk. Those schools giving a complete meal receive from the Provincial Administration a feeding grant of 6d. (sixpence) per child per day. Nursery Schools doing only supplementary feeding receive a feeding grant of 3d. (threepence) per child per day.

(*b*) **Educational Services at the Hospital:** The Children's Section of the Orthopaedic Hospital makes use of the services of student teachers taking the Nursery Diploma at the University of Pretoria. One room has been transformed into a nursery school. In this way the students receive training experience and the children are provided with healthy play activities and in spite of their physical handicaps they are enabled to develop intellectually, physically and socially. This service is unique and has proved a great success. There is an average of 15 children.

CRÊCHES.

Besides the ten nursery schools in Pretoria there are two crêches:—

	No. of Children.	*Responsible Body.*
European:		
Corrylyn Crêche	72	Younger Set Social Welfare Organization.
Non-European:		
Coloured Child Care Centre	55	Coloured Child Care Centre.
TOTAL	127	

These crêches both receive grants-in-aid from the municipality, and a per capita subsidy from the Union Department of Social Welfare of 1s. per day per European child and 9d. per day per non-European child. They cater for children of working mothers and have an all-day programme, including three meals per day.

In the case of the European crêche the staff consists of a matron with Buxton Mothercraft Diploma, one trained nursery school teacher, and six untrained assistants.

The non-European crêche has a trained European nursery school teacher as principal and one qualified and three unqualified non-European assistants.

VI. TRAINING COURSES.

Nursery School teachers are trained at the University of Pretoria. The course offers a three-year post-matriculation training which leads to a diploma in Nursery School Education. A four-year course leading to the B.A. degree in Social Science as well as the Nursery School qualifications is about to be started. For practical training, use is made of all 14 existing nursery schools.

The Pretoria Technical College also offers a course for training Indian girls as nursery helpers, making use of the Aga Khan nursery school as practice centre.

THE PRETORIA NURSERY SCHOOL SOCIETY, affiliated to the Nursery School Association of South Africa, endeavours to co-ordinate the work of the various nursery schools in the city. The initiative of the nursery school movement is left to voluntary effort.

HEALTH PROPAGANDA.

The dissemination of propaganda and health education have continued to receive attention. Due to financial stringencies however we have been forced to a slower pace.

A variety of filmlets are still being shown in some of the cinemas.

The display of the very large posters has been curtailed owing to the difficulty in obtaining supplies.

A large number of lectures and talks on various health subjects were given to the general public and to different organizations.

The Press have continued to be helpful and have given all health matters brought to their attention the fullest publicity. We are indeed grateful for this assistance and support.

MEDICAL EXAMINATIONS CONDUCTED BY MEDICAL OFFICERS IN THE HEALTH DEPARTMENT FOR THE PERIOD 1st JULY, 1949 to 30th JUNE, 1950.

A total of 428 such medical examinations were conducted. This figure includes medical examinations of persons entering the Municipal Service, special medical examinations under the Workmen's Compensation Act or for Pension Fund purposes or for any other reason.

ABATTOIRS AND MEAT SUPPLIES.

The improvement in meat supplies noted last year was not maintained. Supplies of cattle and sheep declined, and there were shortages during the months of November and December, 1949, and during April and June, 1950. The numbers of carcases imported from other centres were not sufficient to affect supplies materially, indicating that the shortage was general. Pretoria and Reef centres, to judge from the Livestock and Meat Industries Control Board's bulletins and newspaper reports, were far better supplied than Natal and Cape Province centres.

Judging by the numbers of cattle condemned for emaciation the general quality of the cattle received also declined materially. Condemnation for emaciation increased from 116 carcases last year to 182. A special premium was paid during the year for cattle in the better grades who were under certain age, and several stock owners appeared to avail themselves of this offer. In spite of occasional small consignments of these high grade cattle the general quality level appeared to be lower.

The supply of pigs still far exceeds the demand and considerable difficulties are experienced by producers to obtain permits to market their stock. During the latter part of the year applications to supply bacon pigs were mostly referred to Johannesburg. The incidence of Cysticercosis declined still further, an indication that more pigs are being derived from properly conducted pig farms, and fewer supplies are being obtained from speculators.

On the other hand the incidence of Cysticercosis in cattle increases steadily year by year. There is a growing tendency for cattle farmers to relinquish cattle breeding and to become graziers, who buy young stock during times of plentiful supply, and keep them for fattening or for higher seasonal prices. The end result of this will be that stock breeding will become the function of native trust areas, with detrimental effect on the quality of beef produced, and on the incidence of Cysticercosis, and other diseases. The Union Department of Agriculture is well aware of it, but seems powerless to evolve any scheme that will effectively counteract this tendency.

MEAT CONTROL POLICY.

The Manager of the Abattoirs has been appointed a member of the Technical Committee of the Livestock and Meat Industires Control Board. This committee has been set the task of drawing up specifications and model plans for abattoirs for all population groups, and to advise local authorities on abattoir planning.

During the financial year the Minister of Agriculture announced that the present Meat Directorate would be absorbed by the Livestock and Meat Industries Control Board as from 1st September, 1950, in accordance with the recommendations of the Departmental Committee set up to enquire into the administration of the Marketing Act. This decision has been welcomed by most of the bodies concerned, and has been advocated on numerous occasions by this Department.

SLAUGHTERING STATISTICS FOR THE YEAR:

Animals Killed:

Oxen.	*Cows.*	*Bulls.*	*Calves.*	*Sheep.*	*Goats.*	*Pigs.*	*Total.*
50,883	13,385	623	4,027	27,433	1,630	33,096	131,016

	1949–50.	1948–49.
Total Cattle	64,891	67,355
Total Calves	4,027	4,375
Total Sheep and Goats	29,063	46,812
Total Pigs	33,096	28,987
TOTAL ANIMALS SLAUGHTERED	131,077	147,529

Carcases, Organs, etc., Condemned:

	Cattle.	*Calves.*	*Sheep and Goats.*	*Pigs.*
Carcases	2,211	177	63	1,533
Quarters	35	—	11	—
Livers	8,727	—	3,174	—
Lungs	2,728	—	69	—
Plucks	1,022	—	129	2,283
Heads	2,289	—	—	327
Tongues	153	—	—	327
Hearts	55	—	—	—
Kidneys	25	—	—	—
Tripes	2,089	—	—	1,860
Intestines	2,162	—	2,952	1,860
Tails	116	—	—	—
Udders	52	—	—	—
Viscerae	5,035	—	—	—
Spleens	2,077	—	—	—

Imported Meat Examined:

Beef.		*Calves.*	*Sheep.*		*Pork.*
Carcases.	*Quarters.*		*Carcases.*	*Quarters.*	
2,690	17	110	11,570	2	348

Imported Meat Condemned:

	Beef Carcases.	*Lbs.*	*Mutton Carcases.*
Decomposition	1	—	6½
Emphysema	—	29	—
Measles	2	—	—
Soiled	—	—	11½

Imported Meat for Cold Storage Treatment:

	Carcases.
Beef	54½

Percentage of Animals Condemned for All Diseases:

	1949–50.	1948–49.
Cattle	3·408%	2·581%
Calves	4·395%	3·108%
Sheep and Goats	0·217%	0·021%
Pigs	4·632%	5·671%

Weights of Meat Condemned:

Beef	621·285 tons.
Veal	3·837 tons.
Mutton	0·924 tons.
Pork	94·012 tons.

DISEASES ENCOUNTERED.

Cysticercosis:

	Total No.	*Incidence.*	*Condemned.*	*Detained.*
Cattle	6,053	9·327%	1·829%	7·498%
Calves	1	0·024%	0·024%	—
Pigs	1,706	5·154%	3·840%	1·314%

Organs from Cysticercosis Affected Cattle Detained for Cold Storage Treatment:

	Tongues.	*Tails.*	*Livers.*	*Hearts.*
Beef	2,096	2,095	1,766	1,965

Tuberculosis:

	Total Incidence.	*Generalised No. of Carcases Condemned.*	*Localized.*
Cattle	107 or 0·165%	0·126%	0·039%
Calves	2 or 0·050%	0·050%	—
Pigs	387 or 1·169%	0·184%	0·985%

CONDEMNATIONS OTHER THAN FOR MEASLES AND TUBERCULOSIS.

Diseases.	*Cattle.*	*Quarters.*	*Calves.*	*Sheep Quarters. Lbs.*	*Goats.*	*Pigs.*
Actinomycosis	1	64 Localised	—	—	—	—
Abscesses with Peritonitis	1	—	—	—	—	—
Anaemia	1	—	—	—	—	1
Ascites with Peritonitis	1	—	—	—	—	—
Botriomycosis	—	—	—	—	—	2
Caseous Lymphadenitis	1	—	—	11 Lbs.	—	—
	—	—	—	11 Qrts.	—	—
	—	—	—	354 Affected	—	—
Defective Bleeding	6	—	—	14	1	—
Decomposition	—	—	—	26	—	—
Dermatitis	1	—	—	—	—	2
Dropsy	—	—	—	—	—	1
Emaciation	182	—	22	—	—	72
Emphysema	19	7	—	—	—	—
Erysipelas	—	—	—	—	—	7
Extensive Bruising	77	18	—	—	—	30
	—	14,899 lbs.	—	5 lbs.	—	—

Diseases.	Cattle.	Quarters.	Calves.	Sheep Quarters. Lbs.	Goats.	Pigs.
Fevered	2	—	—	—	—	—
Follicular Mange	—	—	—	—	—	13
Gangrene	28	2	—	—	—	8
Gangreneous Mastitis	2	—	—	—	—	—
General Fatty Necrosis	1	—	—	—	—	—
Hepatitis	2	—	—	—	—	—
Immaturity	—	—	31	—	—	—
Iodoform Taint	—	—	1	—	—	—
Jaundice	16	—	7	—	—	12
Joint Ill	—	—	1	—	—	—
Haemorrhages	—	—	—	—	—	2
Malignant New Growths	7	—	—	—	—	—
Mange	—	—	—	—	—	1
Melanosis	—	—	—	—	—	1
Moribund	10	—	1	2	—	—
Multiple Abscesses	30	4	1	1	—	9
Navel Ill	—	—	101	—	—	—
Nephritis	4	—	—	—	—	—
Paratyphoid	—	—	1	—	—	—
Peritonitis	71	—	2	1	—	4
Pleuritis	18	—	—	—	1	10
Pleuritis and Peritonitis	260	—	1	—	—	2
Pyaemia	5	—	2	—	—	—
Sarcosporidia	2	—	—	—	—	—
Septic Mastitis	61	—	—	—	—	1
Septic Metritis	47	—	—	1	—	—
Septic Nephritis	11	—	—	—	—	—
Septic Pericarditis	6	—	—	—	—	1
Septic Peritonitis	1	—	—	—	—	—
Septic Pleurisy	4	—	—	—	—	—
Septic Orchitis	—	—	—	—	—	18
Septic Pneumonia	62	—	3	3	2	1
Skin Papillomata	—	—	—	—	—	1
Uraemia	2	—	—	—	—	—
Urticaria	—	—	—	—	—	2

All cold storage, wholesale and retail butchershops were inspected by the Senior Meat Inspector as a follow up inspection and check on imported meat being submitted for inspection and stamping at the City Abattoir.

OUTBREAK OF NEWCASTLE DISEASE IN POULTRY.

During the early part of 1950 outbreaks of Newcastle disease occurred in various parts of the country. The Government Veterinary Department immediately took steps to control traffic in poultry to stop the spread of this menace to the whole poultry industry.

One of the measures adopted was to establish quarantine markets for live poultry, and centralized poultry abattoirs. The Council was asked to provide facilities for the killing and dressing of poultry under its control. This was agreed to, and it was decided to convert the fodder market shed at the abattoir into a poultry abattoir. The work was taken in hand immediately, but due to unforeseen delays had not been completed when the financial year ended. It is expected to be in operation soon.

While the quaratine measures against Newcastle Disease are in operation, it will be compulsory for all poulterers to have their poultry killed and dressed at this abattoir.

This department has long advocated the establishment of a municipal abattoir for poultry, as the conditions under which this important food product has been prepared in the past, left much to be desired. Under the conditions which obtained, it was impossible to provide adequate inspection services either, for cleanliness or the presence of communicable disease.

The "illwind" of this outbreak of Newcastle Disease will have done Pretoria some good if a centralized, properly controlled poultry abattoir becomes a permanent feature of its health services, but when the compulsion due to the presence of this infectious disease no longer applies, it may become necessary to apply other legislative compulsion to prevent backsliding to the former haphazard and unhygienic methods of preparation and sale of dressed poultry.

CONTROL OF DAIRIES AND MILK SUPPLIES.

DAIRY LICENCES:

294 Applications for dairy licences and one for a tea room were approved for the year under review. Forty-four new licences were issued, 40 existing licences were surrendered and 2 were refused. Transfers of existing licences to new owners numbered 29. One new tea room licence was issued.

Details of the licences dealth with are:—

	New Licences.	*Licences Surrendered.*	*Licences Refused.*	*Licences Transferred.*	*Increase or Decrease.*
Producers	28	28	2	12	—
Producer-Distributors	3	1	—	1	+2
Distributors	13	11	—	16	+2
TOTAL	44	40	2	29	+4
Tea room	1	—	—	—	+1

Situation of Premises:

The situation of 294 licensed dairy premises is as follows:—

Type of Licence.	*Urban.*	*Within 20 Miles.*	*Between 20 and 30 Miles.*	*Beyond 30 Miles.*	*Total.*
Producers	3	77	28	90	198
Producer-Distributors	10	7	—	—	17
Distributors	79	—	—	—	79
TOTAL	92	82	28	90	294
Tea rooms	1	—	—	—	1

It will be seen that 45 per cent. of the producers are beyond the 30-mile zone and the tendency for dairy farms to be established further from the city continues. The high price of cattle feed as well as the labour problem are mainly responsible for this. It appears that more use will be made by the distributors in future of depots in rural areas for collecting, cooling and despatching of milk, like at Carolina. It is of interest to note, however, that some of the producers furtherest from Pretoria, supply milk with a low bacterial count, through strict adherence to hygienic principles.

MILK SUPPLIES:

No. of premises where milk is produced	215
Approximate No. of cows kept (in milk and dry)	12,572
Approximate average No. in milk	8,719
Approximate No. of gallons of milk produced	17,039

TOTAL GALLONAGE ESTIMATED AS AT 30/6/50 (DAILY):

Producers	16,208 gallons.
Producer-Distributors	831 ,,
Introduced	694 ,,
TOTAL	17,733 ,,

Of the 17,733 gallons consumed daily, 9,662 are pasteurized at the five pasteurizing plants under control of this Department, i.e. 56·7 per cent. of the local supply is pasteurized. As some of the introduced milk was pasteurized as well, the percentage of pasteurized milk consumed was 58·4 per cent. This figure is practically the same as last year.

About 1,800 less cows were kept than during the previous year, while the milk consumption dropped by approximately 2,000 gallons daily. This is due to the spread of contagious sterility to herds even far removed from the city. Many sterile cows were disposed of. Quite a number of the larger dairies disposed of their weaker producers. These factors account for the reduction in total number of cows. The most important cause for the drop in milk production is due to a severe midsummer drought after a promising spring. This drought was so severe throughout the country that the Johannesburg Surplus Milk Pool could not supply Pretoria's wants and the introduction of pasteurized milk from Bloemfontein and Klerksdorp had to be resorted to.

The Pretoria Milk Producers Association undertook to find means of contacting producers speedily when a milk shortage threatens so as to tap extra supplies and prevent the introduction of milk from outside sources. It is hoped that this object will be achieved as this sort of introduction of milk has been found to be unsatisfactory.

Further pressure was brought to bear on the Education Department in respect of the unsatisfactory control of milk supplied to school children, and we are beginning to see a more hopeful conclusion of all our correspondence and interviews.

The question of compulsory pasteurization of Pretoria's milk supplies is also being held up and from time to time submitted for discussion to some other body. We have, however, still hopes that the by-laws now lying with the Provincial Administration for over a year will eventually be approved.

PERSONNEL EMPLOYED IN THE MILK TRADE:

Employed by:	*Europeans.*	*Natives.*	*Total.*
(*a*) Producers	229	1,039	1,268
(*b*) Producer-Distributors	17	71	88
(*c*) Distributors	175	418	593
TOTAL	421	1,528	1,949

TYPHOID TESTING OF DAIRY EMPLOYEES:

The voluntary free typhoid testing scheme for dairy employees continues. During the year 810 persons were tested for the carrier state as compared to 816 for the previous year. The percentage of Vi positives showed a marked increase both for Europeans and non-Europeans. The former rose from 3·45 per cent. to 11·27 per cent. and the latter from 6·11 per cent. to 10·48 per cent. We cannot explain this.

The number of employees tested since the inception of this scheme is now 7,603. The details for the year under review are:—

	Producers.	*Producer-Distributors.*	*Distributors.*	*Total.*
No. of dairies submitted employees	51	11	45	109
No. of dairy employees tested	298	85	419	810
No. of European employees tested	26	6	101	133
No. of non-European employees tested	272	79	318	677
No. of Europeans VI positive	1	—	14	15
No. of non-Europeans VI positive	31	10	29	71
Percentage Europeans VI positive				11·27
Percentage non-Europeans VI positive				10·48

Of the 13 Europeans showing a positive reaction, 2 refused to submit to stool and urine examinations. The remaining 11 had three consecutive negative stools and urines.

Of the 71 VI positive natives, 49 were admitted to the carrier camp, 48 were stool and urine negative and in one, typhoid bacilli were found in the stool. In four further VI positive stool and urine specimens taken by outside sources proved to be negative. One native was positive on a previous routine test; five positives either absconded or were discharged by their employers. The remaining 12 reactors were so far from Pretoria that we could not get them to the camp. Instructions were given not to employ them in dairy work.

DAIRY INSPECTIONS:

Routine inspection of producers and producer-distributors premises were undertaken by two Veterinary Officers and three Dairy Inspectors while inspections of dairies and milk shops in the urban area were undertaken by both the dairy staff and District Health Inspectors. Milk production is supervised by the dairy staff and includes all measures such as inspection of premises, advice, control of hygienic production and handling of milk and inspection of animals.

The staff assisted the Bureau of Standards in drawing up proposed uniform standards for dairy buildings.

The following are the particulars of inspections during the year:—

Inspection of Dairies (Producers and Producer-Distributors):

(*a*) During day milking	225
(*b*) During early morning milking	42
(*c*) At other periods	1,566
Contraventions dealt with	744

Inspection of Milk Depots:

(*a*) During day	1,229
(*b*) During early morning	83
Contraventions dealt with	370

Distribution Street Inspections, etc.:

(*a*) During day	368
(*b*) During early morning	373
Contraventions dealt with	176
Other inspections or enquiries	163
Complaints dealt with	48
Written notices served	221

MILK SAMPLING FOR TESTS AND ANALYSIS:

For the taking of milk samples a full time health inspector is employed.

Details of the samples taken and the various tests undertaken are as follows:—

1. BACTERIOLOGICAL EXAMINATION:

(*a*) **Plate Counts** (samples taken under Dairy By-Laws: Standard not more than 200,000 micro-organisms per millilitre of fresh milk and no B. coli in 0·01 millilitre fresh milk):—

No. of samples taken		392
No. conforming to legal standard		242
No. containing excess micro-organisms (warnings issued)		96
No. containing excess micro-organisms (prosecuted)		4
No. containing excess B. coli (warning issued)		21
No. containing excess B. coli (prosecuted)		—
No. containing excess micro-organisms and B. coli (warnings issued)		23
No. containing excess micro-organisms and B. coli (prosecuted)		6
Total No. of warnings issued		140
Total No. of prosecutions		10
(*b*) **Breed Smear Counts:**		
No. of milk samples examined		26,288
The above were classified as follows:—		
Very good	12,800	
Good	2,671	
Fair	3,939	
Unsatisfactory	6,878	
	——	26,288

These counts were found of particular value in obtaining quick bacterial counts in fresh milk. As daily counts are undertaken, a better assessment of a producer's milk can be obtained than by occasional plate counts. The presence of mastitis organisms in bulked milk can also readily be ascertained. In pasteurized milk this method shows up development of organisms in the machinery. In one such case during the year warning of the excess development of a thermophilic organism preceeded complaints by the public.

(*c*) **Presumptive Coliform Tests**: 3199 Samples of pasteurized milk were tested for the presence of coliform organisms in one millilitre. Of these 1,873 were negative and 1,326 positive.

(*d*) **Microscopic Mastitis Tests**: Where owners were desirous of eliminating mastitis from their herds, microscopic examinations of the milk from each animal were undertaken at intervals and the owner was advised as to treatment. It would appear, from some tests over an extended period, that the elimination of this disease by the intramammary injection of penicillin is not as easy as it seemed at first. From 577 cows 2,036 milk specimens were examined.

2. CHEMICAL ANALYSIS (samples taken under the Foods, Drugs and Disinfectants Act No. 13 of 1929):

As in the past, the number of unsatisfactory samples arose mainly from the falling off of the solids-not-fat to below the required 8·5 per cent.

The University of Pretoria is undertaking a survey of the milk throughout the country with a view to supplying concrete data and advising, if necessary, adjustments to present standards. We are of the opinion that 8·5 per cent. solids-not-fat is too high a standard under South African conditions.

The details of the analysis undertaken are as follows:—

No. of samples taken	564
No. of samples satisfactory	179
No. of samples which were unsatisfactory and where warnings were issued, deficient in solids-not-fat and fat	4
Deficient in fat	13
Deficient in solids-not-fat	327
No. of samples which were bad and where owners were prosecuted	41
Deficient in milk fat and solids-not-fat	4
Deficient in milk fat	10
Deficient in milk solids-not-fat	2
Adulterated (added water)	25

3. DISC SEDIMENT TEST FOR VISIBLE DIRT:

No. of specimens tested	949
No. satisfactory	639
No. not quite satisfactory where warnings were issued	252
Very unsatisfactory samples	58
Severe warnings issued	30
Final warnings issued	20
Prosecutions	8

4. PHOSPHATASE TEST FOR PASTEURIZED MILK:

No. of samples tested	2,421
No. satisfactorily pasteurized	2,137
No. slightly under-pasteurized	180
No. grossly under-pasteurized	104

Daily samples of pasteurized milk were taken from the five pasteurizing plants supplying Pretoria. These samples were subjected to the presumptive coliform and phosphatase tests. Unsatisfactory results lead to the rapid tracing of plant defects. Inefficient pasteurization arose mainly from the mixing of fresh and pasteurized milk where both types of milk were handled in the same dairy.

5. BIOLOGICAL TESTS OF MILK:

During the year 13 guinea pigs were inoculated with suspected milk at Onderstepoort. None was positive for tubercle bacilli and one showed the presence of organisms of contagious abortion.

ANIMAL POUNDS AND DIPPING TANKS.

The supervision of dipping tanks and the treatment and advertising of impounded animals fall under this Department. To reduce expenditure the Mayville and Hatfield Pound and dipping tanks were closed down during the year. This leaves only the West End and Hercules Pounds with a dipping tank at Hercules.

Details are as follows:—

	No. of Animals Impounded.	*Poundfees and Sales.*	*Dipping Fees.*	*No. of Animals Dipped.*
Hercules	990	£340 16 9	£7 15 8	787
Hatfield	71	17 1 8	—	—
West End	1,427	258 19 8	—	—
Mayville	59	31 18 10	—	—
TOTAL	2,547	£648 16 11	£7 15 8	787

RECORD OF THE WORK OF THE HEALTH INSPECTORS.

The inspectorial staff is still five short of the full complement of 43. It was decided not to fill all the vacancies, but to provide inspectors with locomotion facilities to enable them to cover greater distances with the minimum loss of time. We are watching this experiment to see whether it is better to have a smaller but more mobile staff.

The Hercules area was incorporated just over a year ago. Progress has been made in our educational campaign on matters of general hygiene in this area. The public are becoming more health conscious and this is especially noticeable in business premises where considerable improvements have already been effected.

A Municipal piped water supply is gradually replacing the shallow wells from which practically the whole domestic water supply of the area was derived.

The high standard of hygiene throughout the City has been maintained. We have introduced a new scheme of "concentrating inspections" as a result of which further improvements are already noticeable in certain directions. Under this new scheme we carry out intensive inspections and education campaigns in regard to particular businesses for certain periods. In this way we concentrated on restaurants for one month, butcheries another month and then hotels and boarding houses for the next month and so on. A uniform standard of inspection is laid down and departmental lectures and discussions lead to a planned campaign for each separate business.

The following are the details of the work carried out by the inspectors during the year under review:—

Total inspections made	56,194
Nuisances dealt with	17,522
Nuisances abated (this includes unabated nuisances carried over from previous year)	15,428

Complaints dealt with	2,831
Licences approved	3,351
Licences refused	79
Samples of water taken	376
Samples of foodstuffs taken	639
Visits of enquiry *re* infectious diseases	3,681

Nuisances Detected and Referred to other Departments:

Chief Licence Officer	67
Chief Traffic Officer	12
City Electrical Engineer	8
City Engineer	359
Director of Parks	62
Fire Master	3
Market Master	1
Native and Asiatic Administration Department	90
Town Clerk	7

Prosecutions:

Prosecutions for contraventions of the Food, Drugs and Disinfectants Act and the Municipal By-laws were undertaken. Ninety-six of the accused were found guilty. Fines amounting to £499 0.s 0d. were imposed.

SUMMARY OF THE HEALTH MEASURES UNDERTAKEN BY THIS DEPARTMENT IN CONNECTION WITH THE VOORTREKKER MONUMENT CELEBRATIONS, DECEMBER, 1949.

In making preliminary arrangements in connection with the Voortrekker Monument Celebrations held in December, 1949, it was generally anticipated by the Inauguration Committee of the Voortrkker Monument, that a much greater number of people would attend these celebrations than during the previous celebrations connected with the laying of the foundation stone in 1938.

In order to ensure full co-operation, the City Council of Pretoria resolved that the Medical Officer of Health should act as its official representative on the Inauguration Committee of the Voortrekker Monument in regard to all health measures.

It was anticipated that there would be an average daily attendance of over 100,000 people during the whole week of the celebrations and that there would be at least 30,000 campers accommodated in the area round the Monument. This required elaborate arrangements from a health point of view, for which the Medical Officer of Health and his staff were made responsible.

Accommodation for campers at the Monument was provided in the form of bell tents set out neatly in rows and situated on plots measuring approximately 600 square feet.

Food premises of suitable design and according to specifications laid down by this Department, were erected by the traders out of materials comprising split-poles, wood and iron, hardboard. In some cases marquee tents were erected.

Latrines, urinals, ablution blocks, wash-places and communal kitchens, although of a temporary nature were constructed of suitable materials and design. These were provided at convenient points. Collapsible box-type of latrine seats were obtained from the Department of Defence.

A safe water supply for the camp was provided from the City mains to various points in the camp.

There were 896 latrines. All latrines and urinals were continually serviced in regard to cleansing and clearance of pails.

Latrine blocks were sprayed immediately after erection and whenever considered necessary thereafter with D.D.T. and B.H.C. in paraffin. In addition, Bexadust was used under the seats of all latrines and areas on which refuse bins were placed.

All refreshment and food premises and tents occupied by campers were sprayed with D.D.T. by the Department beforehand and thereafter when necessary.

The success of these measures was evidenced by the absence of flies, although the celebrations were held in mid-summer.

Prior to the celebrations the area of the camp was surveyed for rodent burrows, and poison bait and gas were used to eradicate rodents where necessary.

Although suitable recommendations were made regarding the disposal of waste water throughout the camp, french drains were erected against our advice at various points. We did not approve of french drains because of the unsuitability of the soil, and because they would be overtaxed with the large volume of waste water to be dealt with. These drains proved most

unsatisfactory and we had to institute special additional measures such as treating nuisance points with chloride of lime and D.D.T. and providing temporary receptacles for waste water, which had to be emptied continually.

Special health regulations were compiled beforehand, and these were circulated to all campers, traders and visitors beforehand. These "health regulations" were embodied in the forms of application for camping or business sites.

Only authorised traders, who had to apply for special trading licences beforehand, were permitted on the site. These trading licences required the prior approval of the Health Department. Approval was not granted to traders until they had complied with the minimum health requirements.

During the celebrations, the staff undertook regular inspections of the whole camp area, paying particular attention to the sale of foodstuffs from unauthorised sources and also to the protection of all foodstuffs from contamination through improper handling, dust, dirt or flies. Inspectors were available on the site day and night.

Only one milk depot was provided and only pasteurized milk was sold.

Suitable refuse bins were provided at convenient points and cleared very frequently. In all 1,295 bins were in use.

There were no outbreaks of infectious diseases during the celebrations, and there were no subsequent outbreaks of infectious diseases attributable to attendance at the celebrations.

SUPERVISION OF FOODSTUFFS.

Regular inspections of all food factories, stores and premises where foodstuffs are prepared, stored or kept for sale were carried out. Special attention was paid to such premises as tea rooms, restaurants, food sections of the larger departmental stores, confectioners and bakers and advice was given in regard to methods of handling and protecting foodstuffs.

The following is a list of all the licensed premises dealing with foodstuffs in Pretoria, excluding dairies. All these places were regularly inspected:—

	City.	*Non-European Locations.*	*Total.*
Bakers and Confectioners	28	5	33
Butchers	95	31	126
Restaurants	187	19	206
Hotels	17	—	17
Tea Rooms	67	44	111
Native Eating Houses	7	6	13
Food Purveyors	254	217	471
Fish Mongers	10	—	10
Fruiterers	333	141	474
Bioscope Tea Rooms	1	—	1
Hawkers and Pedlars	39	151	210
Mineral Water Factories	5	2	7
Grain Millers	3	—	3
Market Stalls	58	—	58
Poulterers	26	—	26
	1,150	616	1,766

In the enforcement of the Food, Drugs and Disinfectants Act and other legislation pertaining to food for human consumption four prosecutions were instigated and 81 written warnings were issued.

359 Consignments of unsound foodstuffs were seized or surrendered and the following quantities were condemned as unfit for human consumption:—

Jam	4,582 lbs.	Pickles, Sauces, Mayonnaise	672 bottles.
Confectionary	379 ,,		
Meat (fresh)	732 ,,		
Cereals	1,083 ,,		
Fish (fresh)	2,718 ,,	Meat, Fruit, Vegetables, Fish, Milk	8,951 tins.
Soup concentrates	164 ,,		
Dried fruits	610 ,,		
Margerine	25 ,,		
Dressed poultry	199 ,,		

Daily inspections of all produce on the early morning Municipal market were carried out and the following quantities of vegetables and fruit were condemned:—

Trays	5,709
Bags	1,572
Pockets	11,897
Punnets	41
Crates	462
Bundles	82
Boxes	3,889
Carriers	866
Baskets	11
TOTAL	24,529

This is 5,809 lots more than the previous year. In addition there were also 44 dozen eggs, 1,204 watermelons and 82 pumpkins, seized and condemned as unfit for human consumption.

Inspection of live and dressed poultry and game on the Produce Market:—

(1) **Live Poultry:**

No. examined	110,478
No. condemned	313
Percentage condemned	2·8

(2) **Dressed Poultry:**

No. examined	3,715
No. condemned	147
Percentage condemned	3·96

The number of live and dressed poultry examined in comparison with last year shows a decrease of 21,268 and 4,388 respectively. This decrease is probably due to the epidemic of Newcastle Disease which occurred during the year in many places in South Africa. This disease became so serious that through Government intervention it has become necessary to establish a special poultry abattoir under Municipal control. This is discussed under the section dealing with abattoirs.

(3) **Game:**

Buck—

No. examined	114
No. condemned	9
Percentage condemned	7·01

Guinea Fowl, Pheasant, etc.—

No. examined	443
No. condemned	27
Percentage condemned	6·09

(4) **Guinea Pigs:**

No. examined	25
No. condemned	2
Percentage condemned	8·00

Eight springhares consigned to the Produce Market, during the year were seized and destroyed in terms of Government Notice 1308 of 28th July, 1936, dealing with prevention of plague.

The following samples were taken for chemical and bacteriological examination (last year's figures are shown in brackets):—

(1) **Chemical:**

Article.	*No. of Samples.*	*Satisfactory.*	*Unsatisfactory.*
Boerwors	164	155	9
Mince meat	35	34	1
Sago	6	6	—
Cream cheese	1	1	—
Skim milk cheese	6	6	—
Cinnamon	1	1	—
Ground ginger	2	2	—
Mealie meal	6	6	—
Boer meal	1	1	—
Pork sausages	6	6	—
Mixed spices	5	5	—
Black pepper	2	2	—
Mustard	1	1	—
Dried fruit	7	7	—

Article.	*No. of Samples.*	*Satisfactory.*	*Unsatisfactory.*
Cheddar cheese	3	3	—
Sweet milk cheese	2	2	—
Beef sausages	1	1	—
Dripping	1	1	—
Polony	2	2	—
Sugar	3	3	—
Candy peel	1	1	—
Flour	1	1	—
Mixed coffee	1	—	1
Honey	1	1	—
Icing sugar	1	1	—
Tapioca	1	1	—
Confectionery	1	1	—
Bread	1	1	—
Water	101	101	—
Ice cream	178	166	12
TOTAL	542 (343)	519	23

Total number of chemical samples of foodstuffs taken under the Food and Drugs Act	441
No. of warnings issued	20
No. of prosecutions	3

(2) **Bateriological:**

Article.	*No. of Samples.*	*Satisfactory.*	*Unsatis-factory.*	*Warnings Issued.*
Frosted milk	1	1	—	—
Malted milk	1	1	—	—
Ice cream	196	159	37	37
TOTAL	198 (147)	161	37	37

The water samples, as set out below, include those taken from the City's water supplies at various points and at the Municipal swimming bath:—

No. of Samples.	*Satisfactory.*	*Unsatisfactory.*	*Not Satisfactory for Use unless Chlorinated.*
275 (257)	147	98	30

REPORT ON PEST CONTROL SECTION FOR THE YEAR ENDED 30th JUNE, 1950.

Anti-Mosquito Control Measures:

During the period under review, as in the past, anti-mosquito measures consisted of a combination of swamp drainage, furrow straightening, — levelling and spraying.

As a long-term policy, stress is laid more on proper drainage of swampy areas than on spraying, with the object of eventually bringing the spraying down to a minimum.

In the Hercules area preliminary surveys of the area were carried out. Spot spraying and spraying of confined swampy areas were undertaken. Of necessity, similar limited control measures will be continued until such time as the necessary funds become available to enable a more comprehensive scheme to be undertaken.

The government Fisheries Officer has been approached with a view to obtaining larvae destroying fish for placing in dams and furrows. He is at present investigating which fish would be suitable for this purpose.

None of the anopheles mosquitoes indentified during the year was found to be a malaria vector.

Rodent Control and Eeradication:

Control of rodents on Municipal premises was maintained by the usual methods of trapping, gassing and poisoning. Where these means were impracticable "tanglefoot bait traps" were used.

Rodent-free Certificates:

Sixty-six rodent-free certificates were issued to owners of buildings prior to demolition. This measure has again proved excellent in the prevention of migration of rodents from demolished buildings into premises in the vicinity.

Cockroach Control in Sewers:

Preliminary spraying of sewer manholes with D. and B. solution for cockroach control has been carried out and at present a comprehensive scheme for the entire sewered area of Pretoria is being worked out.

General:

Wherever complaints about cockroaches, ticks, ants and bugs were received, advice and, where necessary, assistance was given.

D. and B. solution continues to play a most effective part as an insecticide and it has taken the place of D.D.T. solution in pest control.

Mole Control:

Owing to the very effective mole control campaign of the previous year in Municipal parks and nurseries, this nuisance is practically eliminated.

Experimental Work:

The usual experimental work with poisons, insecticides and anti-larvicides was carried out during the year.

SUMMARY OF INSPECTIONS, NOTICES AND ACTION TAKEN IN CONNECTION WITH EXTERMINATION OF RODENTS.

Dwellings: Foundations repaired, floor gratings replaced or rat holes stopped	700
Rat-proof animal food bins provided at private stables, etc.	150
Notices or intimations to owners or occupiers of premises	3,201
Approximate number of rats destoryed in private premises (excluding Government properties)	16,723
Number of rodents destroyed on Municipal premises	1,518
Number of prosecutions for failure to comply with regulations	1
Matters referred to Pest Control Section	115
Premises inspected and contraventions dealt with	409
Contraventions abated	415
Premises re-inspected	4,588
Complaints dealt with and advice given	835
New impervious floors laid in grain, flour and forage stores	—
Floors repaired or walls or roofs made ratproof in flour, grain or forage stores	1
Non-ratproof grain, forage or other stores demolished	—
Accumulation of rubbish or lumber likely to harbour rats cleaned up or removed	2,641
Poison baits set on townlands	4,541
Number of baits taken	1,801
Rat-holes on townlands, etc., gassed	1,639
Premises in town gassed	100
Number of animals found under suspicious circumstances and sent for bacteriological examination	19
Miscellaneous inspections	2,551
Night inspections	1
Early moning inspections	—
TOTAL INSPECTIONS	18,717

SUMMARY OF INSPECTIONS, NOTICES AND ACTION TAKEN IN CONNECTION WITH MOSQUITO ERADICATION.

Premises inspected and contraventions dealt with	462
Contraventions abated	506
Notices served	2
Intimations given	460
Premises re-inspected	239
Complaints dealt with and advice given	82
Check up of dams cleared of weeds	1,293
Check up of dams sprayed	1,124
Check up on irrigation furrows cleared	1,610
Check up on irrigation furrows sprayed	1,340
Check up on drainage of swampy areas	295
Check up on spraying of swampy areas	207
Holes and depressions filled in	134
Houses sprayed for mosquito control	12
Number of specimens identified	3

Special investigations carried out for indentification of mosquito	—
Inspections carried out in connection with malaria notification	29
Miscellaneous inspections	1,332
Night inspections	—
Early morning inspections	43
TOTAL INSPECTIONS	7,743

WATER SUPPLIES.

As previously stated the demand for water has increased tremendously year by year as the table set out hereunder shows:—

1929–30	4·2 million gallons daily.
1934–35	7·4 " "
1939–40	8·78 " "
1945–46	13·8 " "
1946–47	14·2 " "
1947–48	14·52 " "
1948–49	15·254 " "
1949–50	15·963 " "

The water is drawn from five sources: three direct from dolomitic springs and the balance from Rietvlei and the Rand Water Board. During the period under review the following quantities of water were drawn from these sources:—

Rand Water Board	2,180·4
Springs (Fountains)	1,675·7
Sterkfontein Springs	524·0
Rietvlei Springs	598·2
Rietvlei Filters	872·0

21·3 Million gallons were consumed on a peak day, during December.

SANITARY AND RUBBISH SERVICES.

The following quantities of refuse, etc., have been removed:—

Bin services	204,726 cub. yards.
Special and coupon services	19,404 cub. yards.
Sanitary pail service	6,264,300 gallons.
Vacuum tanks	9,232,000 gallons.

SLUM CLEARANCE, HOUSING AND REHABILITATION REPORT FOR THE YEAR ENDING 30th JUNE, 1950.

Although five years have lapsed since the cessation of hostilities in 1945, great difficulty is still being experienced in housing many families living under unsatisfactory conditions such as in garages, storerooms, stables and slum dwellings.

The provision of new houses is progressing very slowly because of high cost of building due to increased costs of materials and higher wages.

Nevertheless the number of families living in unsatisfactory premises have decreased in the past year, mainly because many families have been rehoused in one or other of the Municipal Housing Schemes.

We were also assisted by the Controller of Letting who granted priority consideration in the allocation of accommodation to applicants who could produce a certificate from us stating that their present accommodation was unsuitable from a health point of view.

Unfortunately the control of letting of houses was lifted a few months ago and the people of the lower income group are now experiencing difficulty in finding suitable accommodation on their own account.

The following is a list of European houses in the Municipal Housing Scheme:—

	Pretoria.	*Hercules.*
Sub-economic houses	825	57
Cottages for the old aged	—	12
National houses (rented)	—	4
Economic flats (Showgrounds)	99	—
Sundry Municipal properties	34	—
	958	73

Total: 1,031 dwellings.

Under Construction:

Flats for old aged (Showgrounds)	30	
Economic flats (Showgrounds)	8	
Economic flats, Danville	18	
	56	dwellings.
Shops at Danville	8	

Sub-economic rents remain as reported in previous years. The rents of the economic flats at the Showgrounds have been raised by 15s. per month. This increase had to be levied because of an under estimation of the expenditure in costs and maintenance. The maintenance costs have risen a great deal because of wanton destruction and watefulness on the part of some of the tenants and their children.

The rentals are now fixed at £4 12s. 6d., £5 10s. 0d. and £6 5s. 0d. per month for one- two- and three-bedroomed flats. The eight new flats now under construction will consist of three bedrooms each.

The rentals of Hercules houses are as follows:—

Old aged pension cottages	£1 15s. 0d. per month.
Sub-economic houses between	£1 3s. 4d. to £3 7s. 6d. per month.
National houses	£7 10s. 0d. per month.

The rentals of sundry Municipal properties are based on 8 per cent. for land value and 6 per cent. for improvements (buildings).

Sundry Municipal properties require a word of explanation. From time to time the Council has found it necessary to purchase certain properties privately owned with a view to demolishing the existing buildings and utilizing the ground for other purposes such as widening of streets or providing additional buildings for Municipal purposes. Until such time as the conversion takes place these buildings, if habitable, are handed over to the Health Department for letting purposes.

The Council's policy in general is to house only families with children or young parents expecting a child. This is hard on newly married couples who are eager to start life together in their own home. At present young couples often find themselves forced to live with parents-in-law. This is not desirable as interference often causes unhappiness, particularly so at a time when the young people are just learning to adjust themselves to each other. It is hoped that when the housing position is easier the Council will be able to alter its policy and make provision for young couples.

The thirty flats, at the Showgrounds, which are now under construction for the old aged pensioners, who have no children living with them, consist of a living room, kitchen, bedroom and W.C. with a wash-handbasin installed in the W.C. apartment. The kitchen is fitted out with shelves for the storage of cooking utensils and crockery. The bathing and washing facilities will be in a separate communal ablution block. The rental of these flats will be between £2 10s. 0d. and £3 10s. 0d. per month. Only those applicants who have a combined income of not more than £16 per month will be taken into consideration in the allocation of these flats. This is in accordance with the Government regulations governing the 1s. per £100 loan rate under which these flats were erected.

The Housing Manageress and her staff continued with the house to house rent collections. It has been found that by collecting rents in this way the Housing Manageress and her staff have been able to get to know the tenants more intimately and so are in a better position to help them in their difficulties. Most tenants appreciate the good housing provided for them and look after the property very well and are keen on gardening. Some tenants have gardens which are outstanding for their originality and beauty. On the other hand there are always those few who are neglectful and destructive and who make no effort at gradening or improving the property in spite of encouragement given by the Housing Staff.

The economy and market division still sends a mobile market to the larger townships twice per week. These mobile markets are fairly well patronized.

Eight shops are now under construction at Danville. This is welcomed by all the inhabitants as they have had to walk a few miles in the past to do their purchases.

We still carry on with the policy of combining social work and rehabilitation with re-housing. We feel that it is most important that the new tenants should be able to consult freely with the members of the housing staff about their domestic problems. In some cases the process of rehabilitation is difficult and slow, but if we look back on what has been accomplished at some of our older housing schemes like Proclamation Hill we can realise how worthwhile this type of social welfare work has been.

Most of the domestic problems are caused by the abuse of alcohol, through difficulties which arise as a result of buying goods on hire purchase, financial difficulties brought about by mismanagement of income and the ever rising high cost of living. Many tenants are easily per-

suaded to buy articles on hire purchase, forgetting that once an article is purchased it has to be paid for and becomes a liability, particularly so if the breadwinner becomes ill or has his wages reduced. Efforts are continually being made to persuade tenants to open post office savings accounts, so as to inculcate a desire to save and also to give them some sense of security should some unexpected misfortune overtake them.

Transfers within the housing schemes are effected for a number of reasons. Families are transferred to bigger or smaller houses according to the size of the family. This is not always easy as families do not like the idea of moving to smaller houses. However, with patience and tact these transfers are usually brought about amicably. Young couples with two children are transferred from a one-bedroom to a two-bedroom house as soon as possible, especially when the husband is doing shift work. The second bedroom enables him to enjoy his period of rest at all times, and especially when the children happen to be ill and are fractious or noisy.

Some families prefer certain areas to others, and if it is possible to transfer them where they will be more happy this is done. Another important reason for transferring is to move the wage earner nearer to his place of employment. Occasionally tenants have to be moved because of quarreling amongst neighbours, but an effort is always made first to help tenants to adjust themselves to their surroundings, as it is more than likely that the same people will develope the same problem wherever they go.

Tenants who vacated houses did so for the following reasons:—

(*a*) Transfer to other centres.
(*b*) Purchase of their own houses.
(*c*) Desire to go farming.
(*d*) Debt. In this group is included tenants who are in arrears with their rents. The Council has now resolved that any tenant owing more than two months rent has to be given notice to vacate the house unless the Medical Officer of Health is satisfied that unavoidable circumstances such as illness, has prevented the regular payment of the rent. This decision of the Council has helped considerably where there are families who can only be made to pay rent regularly by this threat. During the year the Council also resolved that all tenants must pay a deposit of £5 on being granted a house. This had to be resorted to as many people leave the houses without paying rent or damage the property.

Since the incorporation of the Hercules Municipality in May, 1949, slum and housing problems have been greatly increased. A great number of the houses both European and non-European are very old and in many instances dilapidated. This area now constitutes one of Pretoria's greatest slum problems. Most of the inhabitants derive their water supplies from wells, the majority of which are not suitably protected. A piped safe water supply is, however, being brought to this area, and it is hoped that the reticulation will soon cover the whole area.

Non-European Housing:

This constitutes a very serious problem. The Council has provided a native housing scheme at Atteridgeville Location and this greatly assisted in removing slums in the Marabastad Native Location.

Most unsatisfactory conditions still exist in Lady Selborne, Bantule Location and the remaining portion of the Marabastad Location. The extension of a suitable native housing scheme is a matter of utmost importance.

The Asiatic and Coloured communities live under extremely unsatisfactory conditions and are a danger to themselves as well as to the Europeans. I have repeatedly reported this matter to the Council, and I must again emphasize that it is absolutely essential to embark on a suitable housing scheme for these people and that unless this matter is given urgent attention, serious results can be expected.

REHOUSING STATISTICS IN RESPECT OF SLUM ELIMINATION PROGRAMME ONLY — YEAR ENDED 30th JUNE, 1950.

Number of Applicants Brought before Housing Sub-Committee for Rehousing.

Number of Cases Dealt with during Period.					Number of Cases Rehoused for Public Health Reasons.		Further Action Taken where Families have been Rehoused.			
Total.	Approved.		Refused.		Families.	Persons.	Letters Sent.		Referred to other Departments.	Referred to District Inspector for Attention.
	Families.	Persons.	Families.	Persons.			Prohibiting Re-occupation of Slum Dwelling.	Prohibiting Over-crowding.		
197	179	778	18	66	83	379	38	31	7	5

Premises Dealt with in Terms of Slums Act.

Demolitions.	*Declared Slums.*	*Undeclared Slums.*
Dwellings	1	39
Apartments	5	151

Families and persons displaced by demolitions during period: Families, 43; Persons, 196.

Applications to the Chairman, National Housing and Planning Commission.

	Approved.	*Refused.*	*Still under Consideration.*
Demolition Permits	64	8	2
Conversion permits	17	3	2

Table I gives the following particulars:—

(*a*) Daily average sewage flow.
(*b*) Screenings removed from 1 inch mechanically raked bar screens — disposed of by burial.
(*c*) Grit removed from grit channels, mechanical detritor, screen chambers, sumps and meter channels — disposed of by dumping.
(*d*) Stream water measured over the Daspoort Weir, consisting of Aapies Stream, Steenhoven and Skinners Spruits, plus settled filter bed effluent.
(*e*) Ratio of dilution of effluent to stream water.
(*f*) Rainfall as measured at the sewage works.

Sewage Flow:

A slight increase is recorded in the daily average sewage flow for the year. This figure, viz. 6·8 million gallons per day, already exceeds the designed capacity of the works by 13 per cent. As the design and construction of extensions to the work usually takes a considerable time, this matter is of very great urgency and equires immediate attention.

Sewage Purification:

(1) **Two-stage Filtration:** The results of investigations carried out on fixed and alternating two-stage filtration with 12 feet deep filters over a period of two years are given in Tables II and III. These results indicate that, for the loadings applied, there is no significant difference between the two methods of operation.

(2) **Filtration with Recirculation:** During 1949 an extra foot of filter media, making the total depth 5 feet, was added to the Jenks bio-filter, in order to improve its performance. This high rate filter operates with a recirculation ration of 3 to 1 at a constant rate of pumping. Its comparative performance, treating the same sewage as ordinary 6 feet deep open filters, is being ascertained during 1950.

Use of Effluent as Cooling Water:

With the large extensions being made to the Power Station, more cooling water will be required. To supply this need, 2 million gallons per day of sand filtered effluent is to be pumped to the Power Station by 1951. This will necessitate the construction of sand filters and the installation of pumping plant at the Works.

Experiments are being carried out by the staff of the City Engineer's Department, in conjunction with the chemical laboratory staff, on rapid gravity and pressure filtration of humus tank effluent through sand. In addition, investigations are being carried out on chemical flocculation and on the use of "micro-mesh", which is a new metal micro-straining fabric, with apertures of about one-thousandth of an inch in size. When these experiments have been completed, the plant filters will be designed on the results obtained.

Sludge Digestion.

The digestion of raw sludge and humus takes place in 90 feet diameter Dorr digestors and in the old circular digestors. The primary Dorr unit is mechanically stirred and maintained at 85–90°F. by means of hot water circulation. The hot water boiler is heated by sludge gas, which is also used in the new laboratories after the necessary purification.

Month.	Sewage Flow.	Screenings.	Grit.	Daspoort Weir.	Ratio of Dilution Effluent to Stream Water.	Rainfall at Sewage Works Inches.
	Daily Average Gallons.	Cubic Feet per Million Gallons.	Cubic Feet per Million Gallons.	Daily Average Gallons.		
1949—						
July	6,139,000	16·8	2·9	7,968,000	1 : 0·30	0·08
August	6,288,000	18·1	3·1	8,095,000	1 : 0£29	0·00
September	6,407,000	21·7	4·2	7,285,000	1 : 0·14	0·03
October	6,515,000	21·1	3·7	10,580,000	1 : 0·62	3·38
November	7,717,000	18·4	3·7	25,583,000	1 : 2·32	7·83
December	7,667,000	16·7	4·0	23,868,000	1 : 2·11	7·48
1950—						
January	7,291,000	18·3	2·8	10,785,000	1 : 0·48	2·02
February	6,666,000	18·9	4·1	13,447,000	1 : 1·02	3·18
March	7,121,000	19·6	4·1	14,928,000	1 : 1·10	3·51
April	6,608,000	21·9	3·4	10,561,000	1 : 0·60	2·15
May	6,762,000	22·7	3·8	11,291,000	1 : 0·67	1·74
June	6,373,000	24·3	3·6	8,441,000	1 : 0·32	0·18
Year 1949–50	6,796,000	19·9	3·6	12,730,000	1 : 0·83	31·58

Table II.

COMPARATIVE RESULTS FOR ALTERNATING AND FIXED TWO-STAGE OPERATION ON 12-FT. FILTERS AT PRETORIA, 1948.

Results in Parts per 100,000.			Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Averages. Jan.–April.	Averages. May–Aug.	Averages. Sept.–Dec.	Year.
Dosage: Galls./Cub. Yds./Day			266	265	303	319	287	292	277	292	288	300	280	306	288	287	294	290
Loading: (4 Hours × Dosage)			1,060	990	1,260	1,240	1,185	1,390	1,370	1,285	1,395	1,330	1,070	1,345	1,140	1,310	1,285	1,245
Loading: ("Strength" × Dosage) 100's			159	159	190	207	194	227	215	205	222	216	183	219	179	210	210	200
Mean Air Temp. during Sampling °F.			69	70	69	64	56	51	49	55	65	65	68	74	68	54	68	63
4 Hours Permanganate	Settled Sewage		4·00	3·75	3·85	3·90	4·15	4·80	4·95	4·40	4·85	4·45	3·80	4·40	3·90	4·60	4·40	4·30
	H.T.E.	A.P.	1·30	1·40	1·50	1·60	1·65	1·85	1·80	1·75	2·10	1·95	1·60	2·00	1·45	1·75	1·90	1·70
		F.P.	1·45	1·45	1·65	1·55	1·55	1·85	1·70	1·75	2·10	1·90	1·65	2·00	1·55	1·70	1·90	1·70
		A.S.	1·10	1·05	1·20	1·20	1·25	1·45	1·40	1·30	1·55	1·40	1·35	1·50	1·15	1·35	1·45	1·30
		F.S.	1·00	1·00	1·15	1·10	1·15	1·40	1·45	1·35	1·65	1·30	1·25	1·45	1·05	1·35	1·40	1·25
	E.F.	F.P.	1·00	0·95	1·10	1·05	1·05	1·25	1·20	1·20	1·40	1·25	1·15	1·30	1·05	1·20	1·30	1·20
		A.S.	0·85	0·85	0·90	0·85	0·95	1·05	1·05	1·00	1·20	1·10	0·95	1·10	0·85	1·00	1·10	1·00
		F.S.	0·85	0·75	0·90	0·85	0·85	1·00	1·05	1·00	1·20	1·05	0·90	1·10	0·85	1·00	1·05	0·95
"Strength" (McGowan)	Settled Sewage		61	60	63	65	68	78	78	71	77	72	65	72	62	74	72	69
	H.T.E.	A.P.	24	24	30	30	33	37	35	34	41	38	31	38	27	35	37	33
		F.P.	26	27	31	34	35	42	39	39	44	40	36	42	30	39	41	37
		A.S.	15	15	21	21	22	26	25	24	28	27	24	26	18	24	26	23
		F.S.	14	14	17	18	20	26	26	22	27	21	19	24	16	24	23	21
	E.F.	F.P.	21	22	24	25	27	36	31	31	36	33	30	34	23	31	33	29
		A.S.	13	13	17	16	18	22	21	20	24	22	18	21	15	20	21	19
		F.S.	12	12	15	14	16	21	21	17	22	17	16	20	13	19	19	17
5 Day B.O.D.	Settled Sewage		36·5	29·0	40·0	32·0	28·0	34·5	30·5	27·0	35·5	33·0	28·5	27·5	34·5	30·0	31·0	32·0
	H.T.E.	A.P.	6·15	4·35	7·30	4·50	5·75	5·90	5·40	7·25	8·20	8·90	5·80	4·90	5·60	6·10	6·95	6·20
		F.P.	6·85	3·20	5·90	4·05	4·60	5·20	4·65	4·95	6·00	7·40	2·85	5·40	5·00	4·85	5·40	5·10
		A.S.	4·50	2·70	4·50	2·55	3·35	5·55	4·35	4·60	6·05	7·40	2·20	3·20	3·55	4·45	4·70	4·25
		F.S.	4·10	2·00	3·90	2·70	3·10	7·10	5·70	6·05	6·95	6·20	3·00	5·10	3·20	5·50	5·30	4·65
	E.F.	A.P.	1·35	1·05	1·25	0·80	1·25	1·65	1·30	1·20	1·35	1·25	0·90	1·30	1·10	1·35	1·15	1·20
		A.S.	1·25	0·85	0·80	0·50	0·90	0·85	0·75	0·75	0·95	1·05	0·55	0·55	0·85	0·80	0·80	0·80
		F.S.	0·90	0·60	0·70	0·60	0·80	1·05	1·45	1·05	0·95	0·80	0·65	0·70	0·70	1·10	0·80	0·85

NOTE.—H.T.E. = HUMUS TANK EFFLUENT. E.F. = EFFLUENT FILTERED IN LAB.
A.P. = ALTERNATING PRIMARY. A.S. = ALTERNATING SECONDARY.
F.P. = FIXED PRIMARY. F.S. = FIXED SECONDARY.

Table II—(*Continued*).

COMPARATIVE RESULTS FOR ALTERNATING AND FIXED TWO-STAGE OPERATION ON 12-FT. FILTERS AT PRETORIA, 1948—(*Continued*).

Results in Parts per 100,000.			Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Averages.			Year.
															Jan.–April.	May–Aug.	Sept.–Dec.	
Ammoniacal Nitrogen	Settled Sewage		3·50	3·75	4·25	3·90	4·15	4·80	4·95	4·75	5·00	5·00	5·00	5·00	3·85	4·65	5·00	4·50
	H.T.E.	A.P.	2·00	2·00	2·90	2·60	2·90	3·65	3·15	3·15	3·75	3·65	2·75	3·40	2·40	3·20	3·40	3·00
		F.P.	2·25	2·50	2·75	3·40	3·90	4·65	4·25	4·15	4·50	4·15	4·00	4·40	2·75	4·25	4·25	3·75
		A.S.	0·75	0·75	1·45	1·60	1·75	2·25	2·00	2·00	2·40	2·40	2·00	2·05	1·15	2·00	2·20	1·70
		S.F.	0·75	0·75	1·00	1·25	1·40	2·20	2·05	1·45	1·95	1·50	1·25	1·80	0·95	1·80	1·65	1·50
Nitrogen	E.F.	F.P.	2·25	2·50	2·50	3·00	3·25	4·65	3·85	3·85	4·50	4·15	4·00	4·25	2·55	3·90	4·25	2·70
		A.S.	0·90	0·75	1·45	1·50	1·75	2·30	2·00	2·00	2·40	2·25	1·75	2·50	1·15	2·00	2·25	1·80
		F.S.	0·75	0·75	1·00	1·20	1·50	2·15	2·05	1·40	1·90	1·25	1·25	1·90	0·90	1·80	1·60	1·45
Albumenoid Nitrogen	Settled Sewage		0·70	0·70	0·65	0·75	0·75	0·85	0·90	0·80	0·95	0·80	0·70	0·80	0·70	0·85	0·80	0·80
	H.T.E.	A.P.	0·30	0·25	0·28	0·30	0·48	0·36	0·34	0·36	0·40	0·33	0·30	0·37	0·28	0·37	0·35	0·33
		F.P.	0·35	0·25	0·27	0·27	0·30	0·37	0·35	0·33	0·38	0·30	0·25	0·35	0·29	0·34	0·32	0·32
		A.S.	0·18	0·20	0·21	0·19	0·21	0·24	0·25	0·24	0·25	0·24	0·28	0·23	0·20	0·24	0·25	0·23
		F.S.	0·14	0·14	0·15	0·17	0·18	0·25	0·23	0·22	0·20	0·21	0·18	0·21	0·15	0·22	0·20	0·19
Nitrogen	E.F.	F.P.	0·14	0·14	0·15	0·14	0·15	0·19	0·21	0·20	0·20	0·18	0·16	0·20	0·14	0·19	0·19	0·17
		A.S.	0·09	0·10	0·12	0·12	0·14	0·16	0·18	0·16	0·17	0·14	0·14	0·15	0·11	0·16	0·15	0·14
		F.S.	0·09	0·10	0·10	0·11	0·12	0·14	0·16	0·13	0·14	0·11	0·12	0·13	0·10	0·14	0·13	0·12
Nitrite Nitrogen	A.P.		0·06	0·06	0·06	0·11	0·11	0·09	0·09	0·10	0·08	0·05	0·08	0·10	0·07	0·10	0·08	0·08
	F.P.		0·05	0·05	0·13	0·10	0·07	0·05	0·07	0·09	0·05	0·07	0·10	0·09	0·08	0·07	0·08	0·08
	A.S.		0·05	0·05	0·13	0·13	0·12	0·15	0·12	0·16	0·14	0·12	0·12	0·10	0·09	0·14	0·12	0·12
	F.S.		0·04	0·04	0·12	0·11	0·09	0·10	0·10	0·11	0·13	0·10	0·08	0·10	0·08	0·10	0·10	0·09
Nitrate Nitrogen	A.P.		0·30	0·55	0·10	0·30	0·35	0·25	0·65	0·40	0·20	0·10	0·40	0·20	0·30	0·40	0·25	0·30
	F.P.		0·70	0·70	0·35	0·40	0·20	0·15	0·15	0·25	0·20	0·25	0·35	0·15	0·55	0·20	0·25	0·35
	A.S.		1·10	1·20	0·80	1·10	1·05	0·75	1·15	0·95	0·80	0·70	1·05	1·10	1·05	0·95	0·90	0·95
	F.S.		1·20	1·60	1·15	1·85	2·05	2·05	1·90	2·50	2·05	1·95	3·40	2·30	1·45	2·15	2·45	2·00
Relative Stability (Methylene Blue) Per cent.	H.T.E.	A.P.	84	100	64	72	83	78	90	80	45	49	92	41	80	83	57	73
		F.P.	100	100	99	99	88	80	78	74	49	83	100	37	99	80	62	80
		A.S.	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
		F.S.	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	E.F.	F.P.	100	100	100	100	—	—	—	100	90	100	100	100	100	—	98	—
		A.S.	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
		F.S.	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Suspended Solids	H.T.E.	A.P.	4·8	4·0	3·3	4·5	5·5	6·4	6·3	5·4	7·8	7·8	6·8	6·1	4·2	5·9	7·1	5·7
		F.P.	4·9	4·8	4·9	5·3	4·9	6·8	6·5	6·2	8·4	6·0	6·0	7·2	5·0	6·1	6·9	6·0
		A.S.	3·1	3·8	2·8	3·1	3·3	3·9	4·0	3·0	4·4	3·6	4·7	4·3	3·2	3·6	4·3	3·7
		F.S.	2·8	2·7	3·0	2·8	3·3	4·2	4·5	3·3	4·2	3·7	3·5	3·6	2·8	3·8	3·8	3·5

NOTE.—H.T.E. = HUMUS TANK EFFLUENT. E.F. = EFFLUENT FILTERED IN LAB.
A.P. = ALTERNATING PRIMARY. A.S. = ALTERNATING SECONDARY.
F.P. = FIXED PRIMARY. F.S. = FIXED SECONDARY.

Table III.

COMPARATIVE RESULTS FOR ALTERNATING AND FIXED TWO-STAGE OPERATION ON 12-FT. FILTERS AT PRETORIA, 1949.

Results in Parts per 100,000.			Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Averages. Jan.–April.	Averages. May–Aug.	Averages. Sept.–Dec.	Year.
Dosage: Galls./Cub. Yds./Day			265	280	300	300	273	279	268	295	303	297	257	294	286	280	288	285
Loading: (4 Hours × Dosage)			1,100	1,190	1,140	1,350	1,190	1,400	1,250	1,580	1,440	1,370	1,160	1,190	1,200	1,360	1,290	1,280
Loading: ("Strength" × Dosage) 100's			180	196	195	225	199	229	194	250	227	219	200	200	199	218	212	210
Mean Air Temp. during Sampling °F.			71	72	69	62	60	52	50	53	59	71	68	68	69	54	67	63
4 Hours	Settled Sewage		4·15	4·25	3·80	4·50	4·30	5·00	4·65	5·35	4·75	4·60	4·50	4·05	4·20	4·85	4·50	4·50
Permanganate	H.T.E.	A.P.	1·65	1·80	1·75	2·20	1·85	2·15	1·80	2·00	2·40	2·00	2·10	1·80	1·85	1·95	2·10	1·95
		F.P.	1·95	1·95	1·80	2·10	1·85	2·10	1·85	2·10	2·25	2·00	1·95	1·75	1·95	2·00	2·00	2·00
		A.S.	1·25	1·35	1·30	1·60	1·50	1·60	1·40	1·50	1·75	1·65	1·55	1·50	1·40	1·50	1·60	1·50
		F.S.	1·35	1·30	1·25	1·40	1·40	1·40	1·35	1·50	1·75	1·45	1·25	1·15	1·35	1·40	1·40	1·40
	E.F.	F.P.	1·25	1·25	1·25	1·45	1·30	1·40	1·25	1·45	1·50	1·45	1·30	1·15	1·30	1·35	1·35	1·35
		A.S.	0·95	0·95	1·00	1·15	1·10	1·15	1·05	1·15	1·25	1·20	1·10	0·95	1·00	1·10	1·15	1·10
		F.S.	1·05	1·05	0·95	1·05	0·95	1·05	1·00	1·15	1·20	1·10	0·95	0·80	1·00	1·05	1·00	1·00
"Strength"	Settled Sewage		68	70	65	75	73	82	80	85	75	74	78	68	70	80	74	75
(McGowan)	H.T.E.	A.P.	31	35	35	43	42	40	36	41	42	39	36	34	37	40	38	38
		F.P.	38	39	36	43	41	44	35	46	48	44	38	36	39	42	42	41
		A.S.	22	26	26	34	28	30	29	29	32	30	23	27	27	29	28	28
		F.S.	22	22	20	26	24	25	22	28	30	28	18	20	23	25	24	24
	E.F.	F.P.	29	30	30	36	33	36	28	39	39	37	30	28	31	34	34	33
		A.S.	19	22	23	29	25	24	25	25	25	25	19	21	23	25	23	24
		F.S.	18	19	16	21	19	21	17	24	23	24	15	16	19	20	20	20
5 Day	Settled Sewage		32·0	30·0	25·0	27·5	30·0	26·5	28·5	33·0	29·0	33·5	31·0	34·9	28·5	29·5	32·1	30·0
B.O.D.	H.T.E.	A.P.	5·95	8·20	4·55	8·05	6·45	5·80	5·15	5·60	6·35	15·45	4·60	5·30	6·70	5·75	5·45	5·95
		F.P.	7·50	8·50	4·85	6·45	5·45	4·15	3·40	3·95	3·70	3·05	3·45	4·65	6·85	4·25	3·70	4·95
		A.S.	3·95	5·85	4·00	4·20	5·30	2·00	2·25	2·20	2·55	2·75	2·10	2·40	4·50	2·95	2·45	3·30
		F.S.	5·30	6·65	3·95	6·00	5·20	2·60	1·80	3·20	2·30	2·80	1·45	2·50	5·50	3·20	2·25	3·65
	E.F.	F.P.	1·50	1·65	1·35	1·90	2·20	1·75	1·35	1·75	1·35	1·15	1·10	1·90	1·60	1·75	1·40	1·60
		A.S.	0·80	0·95	0·75	1·00	1·20	0·90	0·75	0·70	0·75	0·60	0·85	0·80	0·90	0·85	0·75	0·85
		F.S.	1·00	0·95	0·65	1·25	1·10	0·90	0·80	0·80	0·65	0·65	0·60	0·65	0·95	0·90	0·65	0·85

NOTE.—H.T.E. = HUMUS TANK EFFLUENT. E.F. = EFFLUENT FILTERED IN LAB.
A.P. = ALTERNATING PRIMARY. A.S. = ALTERNATING SECONDARY.
F.P. = FIXED PRIMARY. F.S. = FIXED SECONDARY.

Table III—(*Continued*).

COMPARATIVE RESULTS FOR ALTERNATING AND FIXED TWO-STAGE OPERATION ON 12-FT. FILTERS AT PRETORIA, 1949—(*Continued*)

Results in Parts per 100,000.			Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Averages. Jan.–April.	Averages. May–Aug.	Averages. Sept.–Dec.	Year.
Ammoniacal	Settled Sewage		4·75	5·00	4·75	5·50	5·75	5·50	4·65	5·35	5·75	4·60	6·00	5·00	5·00	5·30	5·35	5·20
	H.T.E.	A.P. ..	2·65	3·25	3·15	4·00	4·50	3·75	3·50	4·00	3·25	3·50	2·75	3·00	3·25	3·95	3·15	3·45
		F.P. ..	3·50	3·75	3·65	4·50	4·75	4·50	3·15	5·00	5·00	4·75	3·50	3·75	3·85	4·35	4·25	4·15
		A.S. ..	1·90	2·30	2·50	3·50	2·55	2·75	3·00	2·75	2·50	2·50	1·50	2·25	2·55	2·80	2·20	2·50
		F.S. ..	1·40	1·55	1·30	2·40	2·00	2·00	1·50	2·50	2·25	2·50	1·00	1·50	1·65	2·00	1·80	1·80
Nitrogen	E.F.	F.P. ..	3·50	3·75	3·50	4·40	4·00	4·50	3·15	5·00	5·00	4·75	3·50	3·50	3·80	4·40	4·20	4·15
		A.S. ..	1·90	2·30	2·60	3·50	2·75	2·50	3·00	2·75	2·50	2·50	1·50	2·25	2·60	2·75	2·20	2·50
		F.S. ..	1·30	1·55	1·30	2·15	2·00	2·00	1·50	2·50	2·25	2·50	1·00	1·50	1·60	2·00	1·80	1·80
Albumenoid	Settled Sewage		0·75	0·80	0·75	0·85	0·80	1·00	1·00	1·00	0·80	0·80	0·90	0·70	0·80	0·95	0·80	0·85
	H.T.E.	A.P. ..	0·32	0·33	0·35	0·43	0·60	0·48	0·35	0·50	0·40	0·45	0·45	0·35	0·36	0·48	0·41	0·42
		F.P. ..	0·37	0·29	0·23	0·31	0·34	0·40	0·25	0·43	0·43	0·36	0·35	0·30	0·30	0·36	0·38	0·35
		A.S. ..	0·20	0·20	0·22	0·35	0·25	0·28	0·30	0·24	0·25	0·25	0·28	0·25	0·24	0·27	0·26	0·26
		F.S. ..	0·19	0·19	0·18	0·22	0·22	0·24	0·22	0·24	0·24	0·22	0·20	0·20	0·19	0·23	0·22	0·21
Nitrogen	E.F.	F.P. ..	0·16	0·16	0·20	0·23	0·18	0·24	0·18	0·23	0·22	0·18	0·18	0·18	0·19	0·21	0·19	0·20
		A.S. ..	0·13	0·15	0·14	0·18	0·14	0·16	0·14	0·14	0·16	0·16	0·14	0·15	0·15	0·15	0·15	0·15
		F.S. ..	0·11	0·12	0·11	0·15	0·13	0·15	0·15	0·16	0·13	0·13	0·13	0·15	0·12	0·14	0·14	0·13
Nitrite Nitrogen ..	A.P.		0·08	0·05	0·01	0·03	0·11	0·10	0·08	0·08	0·11	0·16	0·18	0·13	0·04	0·09	0·15	0·09
	F.P.		0·10	0·09	0·11	0·11	0·07	0·05	0·08	0·04	0·04	0·09	0·14	0·09	0·10	0·06	0·09	0·08
	A.S.		0·08	0·08	0·07	0·09	0·10	0·11	0·13	0·10	0·12	0·14	0·12	0·12	0·08	0·11	0·13	0·11
	F.S.		0·12	0·13	0·10	0·11	0·07	0·06	0·06	0·08	0·11	0·07	0·06	0·05	0·12	0·07	0·07	0·09
Nitrate Nitrogen ..	A.P.		0·20	0·10	0·10	0·20	0·15	0·30	0·40	0·10	0·30	0·25	0·50	0·10	0·15	0·25	0·30	0·35
	F.P.		0·30	0·25	0·20	0·30	0·10	0·30	0·20	0·00	0·15	0·20	0·40	0·10	0·25	0·15	0·20	0·20
	A.S.		0·75	0·50	0·30	0·65	0·80	1·15	1·10	0·30	0·35	1·10	1·50	0·50	0·55	0·85	0·85	0·75
	F.S.		1·70	1·50	1·80	1·70	1·55	1·55	2·30	0·90	2·15	1·95	2·45	0·85	1·70	1·60	1·85	1·70
Relative Stability .. (Methylene Blue) .. Per cent.	H.T.E.	A.P. ..	37	24	16	24	60	55	90	68	55	55	57	50	25	63	54	47
		F.P. ..	62	65	74	76	69	55	90	68	50	80	65	50	70	65	60	68
		A.S. ..	100	100	98	100	100	100	100	100	100	100	100	100	100	100	100	100
		F.S. ..	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	E.F.	F.P. ..	96	100	100	100	94	100	100	92	100	100	100	100	99	97	100	99
		A.S. ..	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
		F.S. ..	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Suspended Solids ..	H.T.E.	A.P. ..	5·4	7·7	6·3	9·3	6·4	8·6	5·9	7·2	7·4	6·7	7·3	5·4	7·2	7·0	6·7	7·0
		F.P. ..	7·4	6·1	5·3	8·5	5·6	6·8	5·4	8·5	7·4	7·3	7·0	7·5	6·8	6·6	7·3	6·9
		A.S. ..	3·0	3·8	3·1	5·4	3·1	4·4	3·1	3·5	5·2	4·1	5·5	4·5	3·8	3·5	4·8	4·0
		F.S. ..	3·3	4·1	2·9	5·2	4·4	4·4	3·1	4·3	5·5	3·5	3·5	3·1	3·9	4·1	3·9	4·0

NOTE.—H.T.E. = HUMUS TANK EFFLUENT. E.F. = EFFLUENT FILTERED IN LAB.
A.P. = ALTERNATING PRIMARY. A.S. = ALTERNATING SECONDARY.
F.P. = FIXED PRIMARY. F.S. = FIXED SECONDARY.

During the year 4,790 cubic yards of digested sludge were removed from the drying beds.

Laboratory Services:

Besides the analysis of samples taken under the Food, Drugs and Disinfectants Act No. 13 of 1929, analytical work and investigations are carried out for the Sewage Works, Waterworks, Power Station, Roads, Stores, Abattoir, Bus Garage and Workshops, Parks and the Building Office. The total number of samples analysed during the year amounted to 2,373.

The chemical laboratory staff consists of five chemists and one laboratory assistant, and the roads laboratory staff of one engineer with special qualifications in roads engineering, and one laboratory assistant.

NON-EUROPEAN MEDICAL SERVICES.

A. Report on Clinic Services for non-Europeans.

B. Report on Native Influx Control.

(i) Urban Services.
(ii) Peri-urban Services.

A. CLINIC SERVICES:

The following clinics are conducted exclusively for urban and peri-urban non-Europeans at various centres in the City.

	Compound Clinic.	*Bantule Clinic.*	*Atteridgeville Clinic.*	*Special Diseases Clinic, Out-patients Department, Pretoria Hospital.*
No. of Child Welfare Clinics per week	3	2	4	—
No. of Venereal Diseases Clinics per week	—	1	1	4
No. of Ante-natal Clinics per week	2	1	1	—
No. of Post-natal clinics per week (held on the same day as the Ante-natal clinics)	2	1	1	—
No. of Tuberculosis Clinics per week	—	1	2	1
No. of General Out-patients clinics per week (including Atteridgeville School Clinic)	3	2	8	—

As in previous reports details regarding Child Welfare, Venereal Diseases, Tuberculosis and Ante-natal and Post-natal clinics appear elsewhere under the respective headings.

OUT-PATIENT RETURNS FOR THE YEAR (in column showing "Total", last years figures where available are shown in brackets):

	Compound.	*Atteridgeville.*	*Bantule.*	*Total, 1949–50.*	
1. No. of new cases seen	1,235	2,400	766	4,401	(4,358)
2. No. of repeat attendances	205	937	448	1,590	(1,782)
3. No. of Wasserman tests done	18	213	57	288	(274)
4. No. of Wasserman reactions positive	6	64	19	89	(80)
5. No. of eye smears taken	—	13	—	13	(25)
6. No. of eye smears revealing gonococci	—	—	—	—	(3)
7. No. of Urethral and Cervical smears taken	2	4	4	10	(28)
8. No. of Urethral and Cervical smears revealing gonococci	—	2	—	2	(3)
9. No. of cases dressed by orderlies	93	3,198	1,028	4,319	(4,446)
10. No. of dressings done by orderlies	373	8,681	5,372	14,426	(11,841)
11. No. of cases referred to Ante-Natal Clinics	16	18	14	48	

12. No. of cases referred to Dental Clinics	13 from Compound 15 from Bantule	31	See Compound	59
13. No. of cases referred to Venereal Diseases Clinics..	31	64	19	114
14. No. of cases referred for X-ray Examination	4	22	2	28
15. No. of cases referred to Tuberculosis Clinics	2	4	6	12
16. No. of Ou-patients from Mooiplaas seen at Atteridgeville:—				
(*a*) New cases		556		556
(*b*) Repeat cases		178		178

Among these cases a high incidence of malnutrition and Gynaecological complaints (including venereal disease) was noted.

Atteridgeville figures include those of the schools out-patient clinics.

It will be seen from the above figures that items 2, 3, 4, 9 and 10 are very much lower in the case of the Compound clinic than of the clinics at Atteridgeville and Bantule. This is because patients attending the Atteridgeville and Bantule clinics come chiefly from the two locations served by their respective clinics, whereas those attending the Compound clinic come from all parts of the City and from some peri-urban areas and have not such ready access to clinic facilities as patients from Atteridgeville and Bantule. The Compound clinic, unlike the other two clinics, does not cater for cases suffering from venereal diseases.

SCHOOL HEALTH SERVICES AT ATTERIDGEVILLE LOCATION:

The work of the non-European Health Visitor at Atteridgeville schools has been continued during 1950. This has proved to be a valuable adjunct to the locations' nursing services. As mentioned in a previous report these services are especially valuable for children whose parents are away from the location all day at work, as these children, if ailing, are brought to the clinic by the school health visitor for the necessary medical attention. Children absent from school for health reasons are seen at their homes by the health visitor and brought to the clinic. Her work, has from the commencement, been supervised by officials of the City Council Health Department. It is recommended that such services be extended to other locations within the Municipal area.

The following is a list of illnesses and injuries discovered on medical examination of school children from July 1st, 1949, to June 30th, 1950. The prevention and treatment of many of these ailments where possible at an early age very definitely has a beneficial effect on the progress and future of the school-going child.

INCIDENCE OF DISEASES, ETC., AMONG SCHOOL CHILDREN: 1st JULY, 1949, TO 30th JUNE, 1950:

	No. of Cases.	*Approximate Percentage of Total Diseases.*
1. **Respiratory Diseases:**		
Lobar pneumonia	2	
Bronchial Catarrh	50	
Bronchitis	26	
Influenza	11	
Laryngitis	5	17·7
Whooping Cough	10	
Broncho Pneumonia	1	
Pulmonary Tuberculosis (including contacts with pulmonary physical signs)	11	
Minor respiratory ailments	94	
2. **Skin Diseases,** including impetigo contagiosa, ringworm, furunculosis, warts, veld sores, acne vulgaris, seborrhoea and pityriasis of scalp, scabies, pruritis, dermatitis (chiefly infective) urticaria, herpes zoster	169	14·2

3. **Ear, Nose and Throat Infections:**			
Tonsilitis (acute, subacute and chronic)	147	}	22·9
Otitis media (acute and chronic)	46		
Other conditions referable to ear, nose and throat)	79		
4. **Eye Infections and Visual Defects:**			
Conjunctivitis (acute and chronic)	81	}	10·3
Defective sight and other ailments	41		
5. **Gastro-intestinal Ailments:**			
Diarrhoea (including enteritis and dysentery)	42	}	10·9
Constipation (chiefly due to faulty diet)	68		
Other conditions (chiefly helminthic infections)	19		
6. **Injuries**	69		5·8
7. **Deficiency Diseases** (as main feature) including vitamin deficiencies, other forms of malnutrition, anaemias. (These have shown a fairly marked increase during the last year.) Many other cases showed signs of malnutrition	83		7
8. **Nervous Diseases** (including epilepsy and paralysis due to poliomyelitis)	13		1·1
9. **Heart Disease** (chiefly manifestations of early rheumatic fever)	7		0·6
10. **Rheumatism**	28		2·4
11. **Dental Caries (marked)**	20		1·7
12. **Acute Infectious Fevers**	17		1·4
13. **Abscesses**	15		1·3
14. **Venereal Diseases**	13		1·1
15. **Urinary Disorders**	6		0·5
16. **Menstrual Disorders**	15		1·3
17. **Inflamed Lymph Glands** (acute and chronic)	25	These conditions occurred along with some of the above diseases.	

As in former years clinics for all non-European Municipal employees have been held every morning (except Sundays and Public Holidays) at the Municipal Compound Clinic.

Records kept at these clinics show the following:—

	1949–50.	1948–49.	1947–48.
No. of non-Europeans injured on duty and treated at the Compound Clinic	696	691	778
No. of non-Europeans injured on duty and sent to General Hospital	73	60	48
No. of non-Europeans injured off duty and treated at the Compound Clinic	861	921	721
No. of non-Europeans injured off duty and sent to General Hospital	157	124	148
No. of sick non-Europeans treated at Compound Clinic	2,782	2,352	2,171
No. of sick non-Europeans referred to General Hospital	120	97	143
Total number of non-Europeans seen by doctor at Compound Clinic	4,339	4,283	3,786
Total number of attendances at Compound Clinic	14,095	14,212	12,989

B. REPORT ON NATIVE INFLUX CONTROL:

(i) Urban Services:

		1949.
Number of new native males examined	21,231	
Number of return cases examined	31,116	
TOTAL	52,347	46,911
Total number of native males vaccinated	11,249	3,520
Total number infected with lice	6,756	4,580
(*a*) Head and body lice	2,980	1,560
(*b*) Crab lice	3,776	3,020
Number found temporarily unfit for employment	1,446	793

Reasons for Unfitness—

1. Venereal Diseases:—		
(*a*) Gonorrhoea	358	457
(*b*) Primary Syphilis	62	57
(*c*) Secondary Syphilis	61	88
(*d*) Tertiary Syphilis	43	31
TOTAL	524	633
2. Simple Balanitis	10	6
3. Phimosis	2	—
4. Traumatic Ulcer of Prepuce	1	—
5. Simple Papillomata of Penis	2	—
6. Dental Decay	863	78
7. Tapeworms	10	16
8. Bilharzia	2	—
9. Inguinal Hernias	7	14
10. Hydrocele of Testis	2	4
11. Scabies	6	4
12. Inflammatory conditions	8	10
13. Traumatic conditions	2	10
14. Cataract of the eye	1	—
15. Simple Tumors such as Cysts, etc.	4	—
16. Haemorrhoids	1	—
17. Hepatomegaly	1	—
Number found permanently unfit for heavy work and fit for light or domestic duties only	458	40

Reasons for Permanent Unfitness for Heavy Work:—

1. Senility	285	5
2. Senility with Debility	3	1
3. Senility with Obesity	10	2
4. Obesity	49	10
5. Poor Physique	2	—
6. Defective Vision	2	—
7. Chronic Belpharitis	1	—
8. Pituitary Deficiency	1	—
9. Cardiac Arrythmias	2	4
10. Valvular Disease of the Heart	17	8
11. Varicose Veins	6	1
12. Hepatomegaly with enlarged veins of upper abdomen, lower chest, scrotum and legs	1	—
13. Elephantiasis of leg	1	—
14. Deficiency Oedema of both legs	1	—
15. Bilateral Chronic hydroceles of testes	1	—
16. Old Elbo injuries	2	—
17. Ankylosis of right knee	3	1
18. Ankylosis of hip joint	2	—
19. Old hip disease	1	—
20. Deformities of chest	4	1
21. Deformities of spine	5	1
22. Deformities of upper and lower limbs	57	4
23. Residual effects of old polio	2	4

(ii) Peri-Urban Services:

Government Proclamation No. 126 of 1949 has made influx control, as provided for by Section 23 of the Native (Urban Areas) Consolidation Act 1945, as amended, applicable to the Peri-Urban area of Pretoria, since 1st June, 1949.

This Peri-Urban area was defined in last year's report.

From a health point of view this proclamation means that every native male in this area has to be medically examined before his service contract can be registered. As the Peri-Urban area is an extensive one, registration offices with facilities for medical examination have been erected at eight different points conveniently situated in the Peri-Urban area. These offices are regularly visited by the medical officer. Some of these offices are improvised temporary structures and should be improved as soon as possible.

Wherever there are large congregations of industrial or farm native labour in the Peri-Urban area, special arrangements have been made to carry out the medical examination and registration "on the spot", by appointment.

The figures given below analysing the result of these medical examinations only reflect the figures for the period 3rd January, 1950, to 30th June, 1950, as it is only since then that the work has been done regularly by a full-time departmental medical officer.

No. of native males examined	4,432
No. of native males vaccinated	2,474
No. of native males infected with lice	149
(*a*) Head or body lice	40
(*b*) Crab lice	109

Venereal Diseases:

(*a*) Urethral discharge	40
(*b*) Syphilis	36
(i) Primary Syphilis	20
(ii) Secondary Syphilis	12
(iii) Tertiary Syphilis	4

NOTE:

The above figures for venereal diseases only reflect the number of cases diagnosed clinically without the aid of any laboratory examinations.

Scabies	12
Pulmonary Tuberculosis	1
Tuberculosis of Bone	1
Leprosy	2
Mumps	4

A number of natives found to be suffering from a variety of curable conditions were directed to the right channels to receive such treatment. The number so dealt with is not reflected in the above report.

BIRTHS (ALL RACES) FOR THE YEAR ENDED 30th JUNE, 1950.

Table No. 1

	EUROPEAN.				NATIVE.				ASIATIC.				EURAFRICAN.			
	Legitimate.		Illegitimate.		Legitimate.		Illegitimate.		Legitimate.		Illegitimate.		Legitimate.		Illegitimate.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
July	111	112	1	2	50	50	42	44	6	10	2	—	8	5	1	5
August	152	148	4	3	51	47	53	48	11	14	1	—	3	4	1	3
September ..	135	141	—	1	45	55	43	46	10	10	1	—	6	7	5	2
October ..	124	130	1	3	53	59	42	53	7	8	—	—	6	1	2	1
November ..	153	153	1	—	66	46	46	49	12	15	—	—	5	6	—	2
December ..	105	106	—	—	35	50	26	36	8	12	—	—	2	4	2	1
January	158	143	1	1	60	68	39	42	13	13	—	—	6	4	3	4
February ..	109	111	1	—	32	37	27	22	14	8	—	—	1	4	4	2
March	168	151	3	3	65	62	44	37	9	8	—	1	6	6	4	4
April	139	130	3	1	49	61	51	45	16	13	—	—	6	4	—	7
May	150	182	—	—	66	60	38	35	6	13	—	—	2	5	5	1
June	163	165	—	2	77	89	63	59	8	16	—	—	4	5	6	1
TOTALS ..	1,667	1,672	15	16	649	684	514	516	120	140	4	1	55	55	33	33

STILLBIRTHS (LOCAL RESIDENTS).

	EUROPEAN.		NON-EUROPEAN.	
	Male.	Female.	Male.	Female.
July	2	2	5	4
August	4	5	11	6
September ..	2	—	1	2
October ..	3	1	6	6
November ..	2	—	5	13
December ..	—	—	1	3
January	—	2	5	5
February ..	2	3	3	1
March	2	1	1	3
April	4	3	10	8
May	1	—	6	3
June	—	—	9	2
TOTALS ..	22	17	63	56

BIRTHS TO NON-RESIDENTS.

	EUROPEAN.		NON-EUROPEAN.	
	Male.	Female.	Male.	Female.
July	18	18	22	28
August	34	39	19	23
September ..	27	42	21	29
October ..	39	35	25	22
November ..	42	42	24	18
December ..	32	38	15	20
January	57	43	53	28
February ..	32	41	22	22
March	41	38	24	17
April	36	27	35	29
May	58	52	20	22
June	56	40	36	31
TOTALS ..	472	455	316	289

Table No. 2.

DEATHS OF EUROPEAN CHILDREN UNDER 5 YEARS OF AGE FOR THE YEAR ENDED 30th JUNE, 1950.

	24 Hours and under.		Over 24 hours to 1 week.		Over 1 week to 1 month.		Over 1 month to 3 months.		Over 3 months to 6 months.		Over 6 months, under 12 months.		Total infantile mortality.		1 Year to 2 years.		Over 2 years to 3 years.		Over 3 years to 4 years.		Over 4 years to 5 years.		Total under 5 years.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Cerebro-spinal Meningococcal Meningitis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—
Tuberculosis (Central Nervous System) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—
Purulent Infection and Septicaemia (Non-Puerperal)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	1	1
Cancer and other Tumors (other and Unspecified Organs)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—
Tumors of undetermined nature	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Malnutrition	—	—	—	—	—	—	1	—	—	1	—	1	1	2	—	—	—	—	—	—	—	—	1	2
Other and unspecified Anaemias	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Leukaemia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	2	—
Other Diseases of Blood	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—
Pneumococcal Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Meningitis — other forms	—	—	—	—	1	—	—	—	—	—	—	1	1	1	—	—	—	—	—	—	—	—	1	1
Convulsions	—	—	—	—	—	—	1	—	—	—	1	—	2	—	—	—	—	—	—	—	—	—	2	—
Acute Myocarditis ..	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	1	—
Diseases of the Nasal Fossae and Annexa..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Broncho Pneumonia ..	—	—	—	1	1	—	2	2	4	1	3	2	10	5	2	—	—	2	—	—	—	—	12	7
Lobar Pneumonia ..	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	—	—	2
Pneumonia Unspecified	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	1

	24 Hours and under.		Over 24 hours to 1 week.		Over 1 week to 1 month.		Over 1 month to 3 months.		Over 3 months to 6 months.		Over 6 months, under 12 months.		Total infantile mortality.		1 Year to 2 years.		Over 2 years to 3 years.		Over 3 years to 4 years.		Over 4 years to 5 years.		Total under 5 years.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Diarrhoea and Enteritis	—	—	—	—	2	1	—	—	3	2	4	1	9	4	3	—	—	—	—	—	—	—	12	4
Chronic Nephritis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Congenital Hydrocephalus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Spina Bifida and Meningocele	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Congenital Malformation of Heart ..	—	—	1	—	1	—	—	—	2	1	—	1	4	2	—	—	—	—	—	—	—	—	4	2
Cleft Palate and Hairlip	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	1	—
Other stated Congenital Malformations ..	—	2	—	—	—	—	—	—	—	—	1	—	1	2	—	—	—	—	—	—	—	—	1	2
Premature Birth	16	4	10	2	3	—	—	—	—	—	—	—	29	6	—	—	—	—	—	—	—	—	29	6
Injuries at Birth	2	—	3	5	1	2	—	—	—	—	—	—	6	7	—	—	—	—	—	—	—	—	6	7
Atelectasis	1	—	3	1	1	—	—	—	—	—	—	—	5	1	—	—	—	—	—	—	—	—	5	1
Infectious of New Born —Non-syphilitic ..	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Other Diseases — first year of life	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Accidents (motor vehicles)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Accidental burns ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Accidental drowning ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Accidental crushing ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Unknown causes ..	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	1	—	—	—	—	—	1	1
TOTAL	19	7	20	9	10	3	4	3	9	5	11	9	73	36	7	5	3	3	4	1	4	—	91	45

Table No. 3

DEATHS OF NON-EUROPEAN CHILDREN UNDER 5 YEARS OF AGE FOR THE YEAR ENDED 30th JUNE, 1950.

	24 Hours and under.		Over 24 hours to 1 week.		Over 1 week to 1 month.		Over 1 month to 3 months.		Over 3 months to 6 months.		Over 6 months, under 12 months.		Total infantile mortality.		1 Year to 2 years.		Over 2 years to 3 years.		Over 3 years to 4 years.		Over 4 years to 5 years.		Total under 5 years.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
NATIVES.																								
Whooping Cough ..	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	1
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Tetanus	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Tuberculosis Respiratory System	—	—	—	—	—	—	—	—	—	—	—	2	—	2	2	2	—	—	1	1	—	—	3	5
Tuberculosis (Central Nervous System) ..	—	—	—	—	—	—	—	—	—	1	2	—	2	1	—	2	—	—	—	—	—	—	2	3
Tuberculosis (Acute Miliary)	—	—	—	—	—	—	—	—	—	—	1	2	1	2	2	—	—	—	—	—	—	—	3	2
Purulent Infection and Septicaemia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—
Bacillary Dysentery ..	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Congenital Syphilis ..	1	1	8	3	10	7	3	6	—	5	—	1	22	23	—	1	—	—	—	—	—	—	22	24
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Malnutrition	—	—	—	—	—	1	2	1	3	3	7	5	12	10	16	17	3	7	1	—	—	1	32	35
Pellagra	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	2	—	—	—	2	—	—	4	4
Other vitamin deficiency diseases	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	1	—
Agranulocytosis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Encephalitis (not epidemic)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Meningitis (Non-meningococcal) ..	—	—	—	—	1	—	1	—	1	—	—	—	3	—	—	—	—	—	—	—	—	—	3	—
Convulsions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Diseases of the Ear and the Mastoid Process	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Valvular Disease specified as Sequelae of Rheumatic Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—

	24 Hours and under.		Over 24 hours to 1 week.		Over 1 week to 1 month.		Over 1 month to 3 months.		Over 3 months to 6 months.		Over 6 months, under 12 months.		Total infantile mortality.		1 Year to 2 years.		Over 2 years to 3 years.		Over 3 years to 4 years.		Over 4 years to 5 years.		Total under 5 years.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Gangrene	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Acute Bronchitis	—	—	—	—	—	—	1	—	2	—	3	—	6	—	2	—	—	—	—	1	—	—	8	1
Chronic Bronchitis	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	1	—	—	—	—	—	—	1	1
Bronco Pneumonia	—	—	—	—	5	13	6	5	15	8	22	14	48	40	18	23	3	4	3	6	2	2	74	75
Lobar Pneumonia	—	—	—	—	1	1	—	—	—	1	4	2	5	4	—	—	—	—	—	—	—	—	5	4
Pneumonia, unspecified	—	—	—	—	—	—	—	1	2	—	—	1	2	2	—	1	—	—	—	—	—	—	2	3
Diarrhoea and Enteritis	—	—	—	—	9	3	14	7	13	11	31	25	67	46	26	23	6	7	—	1	1	—	100	77
Acute Nephritis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Pyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Spina Bifida and Meningocele	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Monstrosities	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Congenital Debility	—	—	—	1	1	3	—	—	—	—	—	1	1	5	—	—	—	—	—	—	—	—	1	5
Premature Birth	12	10	22	11	6	14	3	1	—	—	—	—	43	36	—	—	—	—	—	—	—	—	43	36
Birth Injuries	3	1	7	1	2	1	1	1	—	—	—	—	13	4	—	—	—	—	—	—	—	—	13	4
Atelectasis	5	2	—	1	—	—	—	—	—	—	—	—	5	3	—	—	—	—	—	—	—	—	5	3
Other Diseases — first year of life	—	1	—	3	—	2	—	—	—	—	—	—	—	6	—	—	—	—	—	—	—	—	—	6
Infanticide	1	—	—	—	—	1	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	1	1
Accidental Burns	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	2
Accidental Drowning	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	2	—
Lack of care of newborn	—	—	2	—	—	—	—	1	—	—	—	—	2	1	—	—	—	—	—	—	—	—	2	1
Unknown causes	1	—	—	—	—	—	—	1	1	1	1	—	3	2	2	1	—	—	—	—	—	—	5	3
TOTAL	24	15	39	20	35	47	32	24	37	30	73	54	240	190	76	76	14	20	6	12	5	4	341	302
ASIATICS.																								
Diarrhoea and Enteritis	—	—	—	—	2	—	—	—	—	1	2	—	4	1	—	1	—	—	—	—	—	—	4	2
Tuberculosis (Central Nervous System	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	2
Broncho Pneumonia	—	—	—	—	1	1	—	—	—	—	1	1	2	2	—	—	—	—	—	—	—	—	2	2

Table No. 3—(*Continued*).

DEATHS OF NON-EUROPEAN CHILDREN UNDER 5 YEARS OF AGE FOR THE YEAR ENDING 30th JUNE, 1950—(*Continued*)

	24 Hours and under.		Over 24 hours to 1 week.		Over 1 week to 1 month.		Over 1 month to 3 months.		Over 3 months to 6 months.		Over 6 months, under 12 months.		Total infantile mortality.		1 Year to 2 years.		Over 2 years to 3 years.		Over 3 years to 4 years.		Over 4 years to 5 years.		Total under 5 years.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Lobar Pneumonia ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Prematurity	—	1	1	1	—	1	—	—	—	—	—	—	1	3	—	—	—	—	—	—	—	—	1	3
Tuberculosis (Acute Miliary)	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	1	—
Birth Injuries	—	—	—	1	—	1	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	2
Atelectasis	1	—	—	—	—	1	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	1	1
Pneumonia, unspecified	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Pneumococcal Meningitis	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Malnutrition	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
TOTAL	1	1	1	2	3	4	—	—	2	1	4	1	11	9	2	2	—	—	—	1	—	—	13	12
EURAFRICANS.																								
Broncho Pneumonia ..	—	—	—	—	—	—	—	1	—	—	1	1	1	2	—	2	—	—	—	—	—	—	1	4
Melaena Neonatorum	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Pneumonia, unspecified	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	1	—	—	—	—	—	—	1	1
Diarrhoea and Enteritis	—	—	—	—	—	—	—	1	1	—	2	1	3	2	1	1	—	—	—	—	—	—	4	3
Birth Injury	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Natural Causes	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Other Tumours ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Pellagra	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Tuberculosis (Central Nervous System) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Tuberculosis Respiratory System)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Whooping Cough ..	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	1	—
Malnutrition	—	—	—	—	—	—	—	1	—	—	—	—	—	1	2	—	—	—	—	—	—	—	2	1
Premature Birth ..	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Tuberculosis (Acute Miliary)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
TOTAL	—	1	1	1	—	—	—	3	1	1	5	2	7	8	5	5	1	1	—	1	—	—	13	15

Table No. 4

DEATHS OF EUROPEANS, 5 YEARS OF AGE AND OVER, WITHIN THE MUNICIPALITY FOR THE YEAR ENDED 30th JUNE, 1950.

	5–10 Years.		—15 Years.		—20 Years.		—25 Years.		—30 Years.		—40 Years.		—50 Years.		—60 Years.		—70 Years.		—80 Years.		Over 80 Years.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Infectious and Parasitic Diseases	2	1	1	—	1	—	—	1	—	1	2	1	2	—	6	1	2	2	4	1	—	—	20	8
Malignant and other Tumours	—	—	—	—	—	—	—	—	1	2	3	3	3	7	9	12	14	16	23	10	8	2	61	52
Diseases of Nutrition of Endocrine and other General Diseases	—	—	—	—	—	—	—	—	—	1	—	1	1	1	1	—	—	2	3	2	—	—	5	7
Diseases of the Blood and Blood Forming Organs	2	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	2	—	—	3	4
Diseases of the Nervous System and Sense Organs	—	1	—	—	—	—	—	—	2	1	—	—	3	1	2	3	10	8	6	17	4	14	27	45
Diseases of the Circulatory System	—	—	—	—	—	1	2	1	1	—	5	1	10	7	19	11	28	21	30	20	7	9	102	71
Diseases of the Respiratory System	—	—	—	—	—	1	1	—	1	—	—	3	4	6	7	4	8	4	7	9	8	6	36	33
Diseases of the Digestive System	1	—	—	—	—	2	—	—	—	—	1	—	2	1	4	2	2	—	3	—	2	2	15	7
Non Venereal Genito-Urinary System and Annexa	—	1	—	—	—	—	1	3	2	—	1	—	1	1	4	4	9	4	7	2	4	3	29	18
Diseases of the Bone and Organs of Movement	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Senility — Old Age	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	2	4	9	11	12	15
Suicide	—	—	—	—	—	1	2	1	1	1	2	—	—	2	1	—	—	—	1	—	—	—	7	5
Homicide	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Accident	5	—	2	—	1	2	5	1	1	2	7	—	4	2	2	—	4	2	1	—	—	—	32	9
Unstated or Ill-defined Cause	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	1	1	—	2	2
TOTAL	10	3	3	1	2	7	11	8	9	8	21	9	30	29	55	38	80	59	87	69	43	47	351	278

Table No. 5.

DEATHS OF NATIVES, 5 YEARS OF AGE AND OVER, WITHIN THE MUNCIPAL AREA FOR THE YEAR ENDED 30th JUNE, 1950.

	5–10 Years.		—15 Years.		—20 Years.		—25 Years.		—30 Years.		—40 Years.		—50 Years.		—60 Years.		—70 Years.		—80 Years.		Over 80 Years.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Infectious and Parasitic Diseases	2	4	1	2	3	5	6	5	4	9	10	5	19	7	10	3	4	1	—	—	1	—	60	41
Malignant and other Tumours	1	—	—	—	—	—	—	—	—	—	3	—	4	1	3	1	1	1	—	—	—	—	12	3
Diseases of Nutrition and Endocrine Glands	—	—	—	—	—	—	—	—	—	1	2	—	1	—	1	—	—	—	—	1	—	1	4	3
Diseases of the Blood and Blood Forming Organs	—	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—	—	1	—	—	—	3	1
Diseases of the Nervous System and Sense Organs	—	—	—	—	—	—	—	—	—	—	2	1	2	—	2	1	3	3	1	3	—	—	10	8
Diseases of the Circulatory System	—	—	1	—	1	2	—	1	1	—	5	3	1	4	3	10	4	3	2	1	—	2	18	26
Diseases of the Respiratory System	5	10	—	2	—	3	2	2	7	3	9	5	11	3	10	2	10	4	6	2	5	3	65	39
Diseases of the Digestive System	2	3	—	—	1	1	—	—	1	2	2	2	2	2	2	1	1	4	1	—	—	—	12	15
Non-Venereal Diseases of the Genito-Urinary System	—	—	—	—	—	2	1	1	—	1	—	—	5	1	5	2	2	1	—	2	1	1	14	11
Diseases of Pregnancy and Puerperal State	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Diseases of the Skin and Allular Tissue	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	1	1
Diseases of the Bones and Organs of Movement	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Senility — Old Age	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	2	2	2	2	5	4
Suicide	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	2	—
Homicide	—	—	—	—	—	1	3	—	1	—	4	1	—	—	—	—	—	—	—	—	—	—	8	2
Accident	—	1	1	—	3	—	2	—	3	3	18	—	12	—	2	1	1	—	—	—	—	—	42	5
Unstated or Ill-defined Cause	—	1	—	—	—	—	—	1	—	1	3	1	1	2	—	1	—	3	—	—	—	—	4	10
TOTAL	10	19	3	4	8	14	14	11	17	20	60	19	61	21	38	23	27	20	13	11	9	9	260	171

Table No. 6.

INFANTILE MORTALITY, EUROPEAN: CAUSES OF DEATH AND MORTALITY RATES FOR YEAR ENDED 30th JUNE, 1950.

	Infectious Diseases.		Diarrhoeal Diseases.		Bronchitis & Pneumonia.		Congenital Causes.		Other Causes.		Prematurity.		Injury at birth.		Total Deaths.		Total Births.		Mortality rates per 1,000 live births.		Total rates.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Central Area	—	—	2	1	2	3	—	—	—	2	5	—	5	3	14	9	254	238	55·12	37·82	46·75
Pretoria West	—	—	1	—	1	1	2	1	—	1	6	3	1	—	11	6	278	332	39·57	18·07	27·87
Leper and Mental Hospitals and Defence Reserves	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	9	—	—	—
Salvokop	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18	19	—	—	—
Roberts Heights ..	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	47	37	21·28	—	11·90
Eastern Suburbs ..	—	—	1	—	1	—	2	1	3	1	5	—	—	—	12	2	321	324	37·38	6·17	21·71
Northern Suburbs ..	—	1	3	3	3	2	—	—	7	2	7	2	2	2	22	12	518	513	42·47	23·33	32·98
Hercules	—	—	2	—	3	2	2	—	1	1	5	2	—	2	13	7	236	216	55·85	32·41	44·24
TOTAL MALES ..	—		9		10		6		12		28		8		73		1,682		43·40		
TOTAL FEMALES ..		1		4		8		2		7		7		7		36		1,688		21·33	32·34

Table No. 7.

INFANTILE MORTALITY, ALL NON-EUROPEAN RACES: DISTRICT INCIDENCE FOR THE YEAR ENDED 30th JUNE, 1950.

	Infectious Diseases.		Diarrhoeal Diseases.		Bronchitis & Pneumonia.		Congenital Causes.		Other Causes.		Prematurity.		Injury at birth.		Total Deaths.		Total Births.		Mortality rates per 1,000 live births.		Total rates.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
NATIVE.																					
Marabas	—	—	—	3	—	1	2	—	—	1	—	1	1	1	3	7	19	20	157·89	350·00	256·41
Bantule	3	3	5	3	7	4	1	1	4	2	3	1	3	2	26	16	87	79	298·85	202·53	253·01
Atteridgeville	1	—	3	2	5	7	1	2	1	1	6	5	2	2	19	19	158	140	120·25	135·71	127·52
Hercules	1	1	55	35	50	31	15	21	16	12	23	18	6	5	166	123	756	805	219·58	152·80	185·14
Town	—	3	6	2	—	3	5	1	1	4	12	12	2	—	26	25	143	156	181·82	160·26	170·57
TOTAL MALES ..	5		69		62		24		22		44		14		240		1,163		206·36		
TOTAL FEMALES ..		7		45		46		25		20		37		10		190		1,200		158·33	181·97
ASIATIC.																					
Location	1	—	3	1	2	2	—	—	1	—	1	3	—	1	8	7	72	72	111·11	97·22	104·17
Hercules	—	—	—	—	—	—	—	—	—	—	1	—	—	1	1	1	19	33	52·63	30·30	38·46
Town	—	—	1	—	1	—	—	—	—	1	—	—	—	—	2	1	33	36	60·60	27·78	43·48
TOTAL MALES ..	1		4		3		—		1		2		—		11		124		88·71		
TOTAL FEMALES ..		—		1		2		—		1		3		2		9		141		63·83	75·47
EURAFRICAN.																					
Location	1	—	—	1	1	—	—	—	—	1	—	—	1	1	3	3	39	35	76·92	85·71	81·08
Hercules	—	—	3	1	1	2	—	—	—	1	—	1	—	—	4	5	43	43	93·02	116·28	104·65
Town	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL MALES ..	1		3		2		—		—		—		1		7		82		85·37		
TOTAL FEMALES ..		—		2		2		—		2		1		1		8		78		102·56	93·75
ALL NON-EUROPEAN.																					
Location	6	3	11	10	15	14	4	3	6	5	10	10	7	7	59	52	375	346	157·33	150·29	153·95
Hercules	1	1	58	36	51	33	15	21	16	13	24	19	6	6	171	129	818	881	209·05	146·12	176·57
Town	—	3	7	2	1	3	5	1	1	5	12	12	2	—	28	26	176	192	159·09	135·42	146·74
TOTAL MALES ..	7		76		67		24		23		46		15		258		1,369		188·46		
TOTAL FEMALES ..		7		48		50		25		23		41		13		207		1,419		145·88	166·79

Table No. 8.

DEATHS IN INSTITUTIONS OF PERSONS NOT RESIDENT IN PRETORIA FOR THE YEAR ENDED 30th JUNE, 1950.

	0–1 Year.		1–5 Years.		5–10 Years.		10–20 Years.		20–40 Years.		Over 40 Years.		Total Europeans.		Total Non-Europeans.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
PRETORIA AND OTHER HOSPITALS.																
Europeans	30	18	8	6	1	3	6	8	14	9	122	75	181	119	—	—
Non-European	56	45	42	43	14	4	12	14	72	43	108	21	—	—	304	170
MENTAL HOSPITAL.																
European	—	—	—	—	—	—	—	—	1	—	15	14	16	14	—	—
Non-European	—	—	—	—	—	—	—	—	16	3	22	7	—	—	38	10
LEPER ASYLUM.																
European	—	—	—	—	—	—	—	—	1	—	2	1	3	1	—	—
Non-European	2	6	—	—	—	—	1	2	6	1	9	4	—	—	18	13
PRISONS.																
European	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—
Non-European	—	—	—	—	—	—	—	—	20	—	9	—	—	—	29	—
VISITORS.																
European	—	—	—	—	—	—	—	—	2	—	7	5	9	5	—	—
Non-European	9	9	—	3	—	—	—	—	1	1	1	1	—	—	11	14
TOTAL EUROPEAN	30	18	8	6	1	3	6	8	18	9	147	95	210	139	—	—
TOTAL NON-EUROPEAN	67	60	42	46	14	4	13	16	115	48	149	33	—	—	400	207

Table No. 9.

NOTIFICATION OF INFECTIOUS DISEASES: LOCAL CASES: ALL RACES, FOR THE YEAR ENDED 30th JULY, 1950.

	0–1 Year.		1–5 Years.		5–10 Years.		10–20 Years.		20–40 Years.		Over 40 Years.		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
EUROPEANS.														
Typhoid Fever	—	—	—	2	1	—	1	2	1	5	3	1	6	10
Malta Fever	—	—	—	—	—	—	—	—	1	—	—	—	1	—
Smallpox	1	—	2	—	1	—	1	—	2	1	—	—	7	1
Scarlet Fever	—	—	40	42	67	44	13	17	2	2	—	—	122	105
Diphtheria	—	2	10	11	9	14	1	6	2	1	1	1	23	35
Erysipelas	—	—	—	1	—	—	—	—	2	—	1	4	3	5
Poliomyelitis	—	—	2	1	6	—	1	—	1	—	—	—	10	1
Infective Encephalitis	—	—	—	1	—	1	—	—	—	1	—	—	—	3
Cerebro-Spinal Meningitis	—	—	—	3	2	1	1	1	—	1	—	—	3	6
Tuberculosis	1	2	2	—	2	—	1	2	5	8	10	4	21	16
NON-EUROPEANS.														
Typhoid Fever	—	—	2	1	3	5	4	6	18	3	—	3	27	18
Smallpox	—	1	2	2	2	2	1	—	7	2	1	1	13	8
Scarlet Fever	—	—	—	—	—	—	—	—	1	—	—	—	1	—
Diphtheria	—	2	5	14	5	6	1	2	1	3	—	—	12	27
Leprosy	—	—	—	—	—	—	—	—	1	—	—	—	1	—
Infective Encephalitis	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Cerebro-Spinal Meningitis	—	—	—	—	4	—	5	1	9	2	—	1	18	4
Tuberculosis	4	5	9	14	2	3	8	5	38	30	40	10	101	67
Ophthalmia Neonatorum	1	2	—	—	—	—	—	—	—	—	—	—	1	2
Trachoma	—	—	—	—	—	—	—	—	3	4	—	1	3	5
Puerperal Fever	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Gonococcal Ophthlamia	—	1	1	—	—	—	—	—	—	—	—	—	1	1

Table No. 10.

NOTIFICATION OF INFECTIOUS DISEASES: IMPORTED CASES: ALL RACES, FOR THE YEAR ENDED 30th JUNE, 1950.

	0–1 Year.		1–5 Years.		5–10 Years.		10–20 Years.		20–40 Years.		Over 40 Years.		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
EUROPEANS.														
Typhoid	—	—	—	—	1	1	8	3	2	5	—	2	11	11
Malta Fewer	—	—	—	—	—	—	—	—	1	—	—	—	1	—
Malaria	—	—	—	—	—	—	1	—	3	—	1	1	5	1
Scarlet Fever	—	—	3	3	—	3	1	—	1	—	—	—	5	6
Diphtheria	—	1	12	10	7	4	—	3	—	1	—	—	19	19
Erysipelas	—	—	—	—	—	—	—	—	1	—	—	3	1	3
Poliomyelitis	—	—	1	—	1	1	—	2	—	—	—	—	2	3
Cerebro-Spinal Meningitis	—	—	1	—	1	1	3	2	—	—	—	1	5	4
Tuberculosis	—	—	1	1	—	—	—	—	10	7	11	3	22	11
Puerperal Fever	—	—	—	—	—	—	—	—	—	1	—	—	—	1
NON-EUROPEANS.														
Typhoid Fever	—	—	3	3	9	11	17	14	21	11	2	—	52	39
Malaria	—	—	—	—	—	—	—	1	1	—	—	—	1	1
Smallpox	—	—	1	—	—	1	1	2	4	8	1	—	7	11
Diphtheria	1	1	4	11	2	3	1	4	—	—	—	—	8	19
Erysipelas	—	—	—	—	—	—	—	—	1	1	—	—	1	1
Cerebro-Spinal Meningitis	—	—	2	—	1	1	4	—	6	1	—	—	13	2
Tuberculosis	1	—	4	3	2	2	2	6	29	11	16	7	54	29
Trachoma	—	—	—	—	—	1	—	—	1	4	—	—	1	5
Puerperal Fever	—	—	—	—	—	—	—	—	—	2	—	—	—	2
Gonococcal Ophthalmia	—	—	—	1	—	—	—	—	—	—	—	—	—	1

Table No. 11.

DISTRICT DISTRIBUTION OF NOTIFIED INFECTIOUS DISEASES FOR THE YEAR ENDED 30th JUNE, 1950.

DISTRICT.	RACE.	Infective Encephalitis.		Cerebro-Spinal Meningitis.		Gonococcal Ophthalmia.		Tuberculosis.		Trachoma.		Ophthalmia Neonatorum.		Typhoid Fever.		Malta Fever.		Diphtheria.		Scarlet Fever.		Erysipelas		Poliomyelitis.		Smallpox.		Leprosy.		Puerperal Fever.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Central Area ..	E.	—	—	—	2	—	—	5	3	—	—	—	—	2	1	—	—	3	3	24	18	2	—	2	—	—	—	—	—	—	—
	N.E.	—	—	1	—	—	—	3	—	—	2	—	—	—	—	—	—	—	4	1	—	—	—	—	1	—	—	—	—	—	—
Pretoria West ..	E.	—	1	2	—	—	—	2	1	—	—	—	—	—	3	1	—	1	7	20	21	—	1	1	—	—	—	—	—	—	—
	N.E.	—	—	1	—	—	—	1	2	—	—	—	—	3	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—
Leper and Mental Hospitals, Prison and Defence Reserves ..	E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—
	N.E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Roberts Heights	E.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	4	1	—	—	1	1	—	—	—	—	—	—
	N.E.	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Eastern Suburbs	E.	—	2	—	—	—	—	3	1	—	—	—	—	1	1	—	—	7	8	34	21	—	2	3	—	1	1	—	—	—	—
	N.E.	—	—	1	—	—	—	5	5	2	1	—	—	2	2	—	—	—	2	—	—	—	—	—	—	1	2	—	—	—	—
Salvokop ..	E.	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	2	2	2	4	—	—	—	—	—	—	—	—	—	—
	N.E.	—	—	—	—	—	—	3	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Northern Suburbs ..	E.	—	—	—	4	—	—	7	9	—	—	—	—	1	3	—	—	5	9	29	35	—	1	1	—	5	—	—	—	—	—
	N.E.	—	—	—	—	—	—	2	2	—	—	—	—	2	4	—	—	1	—	—	—	—	—	—	—	2	2	—	—	—	—
Hercules and Lady Selborne	E.	—	—	1	—	—	—	3	2	—	—	—	—	2	1	—	—	5	5	7	5	1	1	2	—	1	—	—	—	—	—
	N.E.	—	—	10	3	—	—	50	24	1	1	—	1	15	10	—	—	7	15	—	—	—	—	—	—	4	4	1	—	—	1
Marabas	N.E.	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bantule	N.E.	—	—	1	—	—	—	10	15	—	1	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Atteridgeville ..	N.E.	1	—	1	—	—	—	8	13	—	—	—	—	1	1	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—
Asiatic Bazaar..	N.E.	—	—	—	1	—	—	5	—	—	—	1	1	—	—	—	—	1	3	—	—	—	—	—	—	1	—	—	—	—	—
Cape Location..	N.E.	—	—	—	—	—	—	8	5	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	2	—	—	—	—	—
Municipal Compound and Hospital ..	N.E.	—	—	3	—	—	—	6	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—

Table No. 12.

INCIDENCE OF INFECTIOUS DISEASES FOR THE YEAR ENDED 30th JUNE, 1950.

		Typhoid Fever.	Malta Fever.	Malaria.	Smallpox.	Scarlet Fever.	Diphtheria.	Erysipelas.	Poliomyelitis.	Infective Encephalitis.	Cerebro-Spinal Meningitis.	Tuberculosis.	Ophthalmia Neonatorum.	Trachoma.	Puerperal Fever.	Leprosy.	Gonorrhoeal Ophthalmia.
July—																	
European	Resident	—	—	—	3	26	7	—	1	1	1	4	—	—	—	—	—
	Imported	—	1	—	—	2	8	1	1	—	1	6	—	—	—	—	—
Non-European	Resident	1	—	—	3	—	2	—	—	—	2	14	—	—	—	—	—
	Imported	10	—	2	5	—	—	—	—	—	1	11	—	—	—	—	1
August																	
European	Resident	2	—	—	—	21	7	—	3	—	1	6	—	—	—	—	—
	Imported	2	—	2	—	2	5	1	—	—	2	7	—	—	—	—	—
Non-European	Resident	1	—	—	5	—	2	—	—	—	5	13	2	—	—	—	—
	Imported	—	—	—	3	—	2	—	—	—	6	16	—	—	—	—	—
September—																	
European	Resident	—	—	—	—	18	—	1	2	1	2	1	—	—	—	—	—
	Imported	—	—	1	—	2	2	—	—	—	1	3	—	—	1	—	—
Non-European	Resident	—	—	—	—	—	2	—	—	—	6	14	—	—	—	—	—
	Imported	4	—	—	6	—	1	—	—	—	5	10	—	—	—	—	—
October—																	
European	Resident	1	—	—	5	31	2	1	2	—	—	4	—	—	—	—	—
	Imported	—	—	1	—	1	1	—	1	—	—	2	—	—	—	—	—
Non-European	Resident	1	—	—	7	—	1	—	—	—	1	13	—	—	—	1	—
	Imported	3	—	—	2	—	1	—	—	—	—	5	—	—	—	—	—
November—																	
European	Resident	2	—	—	—	14	8	1	—	—	—	4	—	—	—	—	—
	Imported	—	—	—	—	1	—	—	1	—	1	—	—	—	—	—	—
Non-European	Resident	4	—	—	3	—	1	—	—	—	1	13	—	—	1	—	—
	Imported	4	—	—	—	—	3	1	—	—	1	5	—	—	—	—	—
December—																	
European	Resident	—	—	—	—	10	5	—	2	—	—	2	—	—	—	—	—
	Imported	4	—	—	—	—	1	—	—	—	1	1	—	—	—	—	—
Non-European	Resident	2	—	—	—	—	1	—	—	—	—	7	—	—	—	—	—
	Imported	9	—	—	2	—	1	—	—	—	1	3	—	1	—	—	—
January—																	
European	Resident	1	—	—	—	13	8	2	2	—	1	3	—	—	—	—	—
	Imported	3	—	—	—	—	2	—	1	—	1	5	—	—	—	—	—
Non-European	Resident	3	—	—	—	—	9	—	—	—	1	14	—	—	—	—	1
	Imported	6	—	—	—	—	2	—	—	—	—	10	—	—	—	—	—
February—																	
European	Resident	2	1	—	—	24	6	1	—	—	—	2	—	—	—	—	—
	Imported	4	—	—	—	1	5	1	—	—	—	—	—	—	—	—	—
Non-European	Resident	10	—	—	3	—	2	—	—	1	—	14	—	1	—	—	—
	Imported	8	—	—	—	—	4	1	—	—	—	9	—	—	—	—	—
March—																	
European	Resident	5	—	—	—	17	5	—	—	—	1	4	—	—	—	—	—
	Imported	7	—	—	—	—	4	—	—	—	—	1	—	—	—	—	—
Non-European	Resident	12	—	—	—	—	3	—	—	—	1	15	1	—	—	—	—
	Imported	14	—	—	—	—	4	—	—	—	—	4	—	—	2	—	—
April—																	
European	Resident	1	—	—	—	23	6	1	—	—	—	2	—	—	—	—	—
	Imported	1	—	1	—	—	6	—	—	—	1	3	—	—	—	—	—
Non-European	Resident	4	—	—	—	—	5	—	—	—	1	24	—	3	—	—	—
	Imported	17	—	—	—	—	4	—	—	—	—	2	—	—	—	—	—
May—																	
European	Resident	2	—	—	—	14	3	—	—	—	—	2	—	—	—	—	—
	Imported	1	—	—	—	—	4	—	—	—	1	2	—	—	—	—	—
Non-European	Resident	4	—	—	—	1	6	—	—	—	1	9	—	3	—	—	—
	Imported	9	—	—	—	—	1	—	—	—	—	5	—	—	—	—	—
June—																	
European	Resident	—	—	1	—	16	1	1	—	1	3	3	—	—	—	—	—
	Imported	—	—	—	—	2	—	1	1	—	1	3	—	—	—	—	—
Non-European	Resident	3	—	—	—	—	5	—	—	—	3	18	—	1	—	—	—
	Imported	7	—	—	—	—	4	—	—	—	1	3	—	4	—	—	—